1

# NASHIK MUNICIPAL CORPORATION

**Name of Work:-** Development of from Janardan Swami Math (Ch. Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (ghat approach/Sadhugram connect)

Prepared By

CIVIL TECH INDIA PVT. LTD.

4300024 73
B200182 13

# नाशिक महानगरपालिका, नाशिक

NOTING

## कार्यवाही - अनुक्रमणिका

| अ.क्र. | तपशील (का) | दिनांक | पा. नं. (का) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

NOTING

# नाशिक महानगरपालिका, नाशिक

## कार्यवाही - अनुक्रमणिका

| अ.क्र. | तपशील (का) | दिनांक | पा. नं. (का) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

# NASHIK MUNICIPAL CORPORATION-::NASHIK
## Estimate Summary Budget Codewise

| STATUS | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| DATE | | | | | | 05.12.2025 |

4097
S420409707 SINHASTHA KUMBHMELA - 2027

| | |
|---|---|
| Estimate No.<br>1820016213 | Work Name: Development of road from Jananrdhan Swami Math ( Chatrapati Sambhaji Nagar road ) to Laxminarayan Mandir Bride to Dream City Chowk ( Ghat Approach / Sadhugram connect) |
| Prabhag No.<br>GNR | Nature of Work - CAPITAL EXPENDITURE |

| Sno. | Particuars | Amount in Rs. |
|---|---|---|
| 1. | Current Year's Budget Provision (FY2025-26) | 32,775,800,000.00 |
| 2. | Expenditure Till Date | 0.00 |
| 3. | Amount of Workorders Issued | 0.00 |
| 4. | Amount of Tenders Sanction | 0.00 |
| 5. | Amount of Administrative Approvals Given | 1,482,553,108.00 |
| 6. | Amount of Administrative Approvals Pending | 6,559,469,812.00 |
| 7. | Totals of Expenditures and Liabilities ( 2+3+4+5+6 ) | 8,042,022,920.00 |
| 8. | Budget Provision Available ( 1-7 ) | 24,733,777,080.00 |
| 9. | Proposed Current Estimate | 149,985,937.00 |

Junior Engineer

Deputy Engineert

Executive Engineer

City Engineer/Superintendent Engineer/H.O.D.

Junior Accountant / Deputy Accountant

Senior Accountant

Deputy C.A.O.

C.A.O.

सविनय सादर दिनांक

**कामाचेनाव — नाशिक महानगरपालिका हद्दीतील जनार्दन स्वामीमठ ( छ.संभाजीनगर रोड) ते लक्ष्मी नारायण मंदिर पूल ते ड्रीमसिटी चौका पावेतो (घाटाकडे जाणारा रस्ता/ साधूग्रामला जोडणारा रस्ता) रस्ता विकसित करणे.**

**प्रशासकीय मंजुरी:**-सिंहस्थ कुंभमेळा २०२७-२८साठी मनपा अर्थसंकल्पात पा.क्र. ९२ वर संगणक कोड २९४५अंतर्गत ३०००.०० लक्ष इतकी तरतुद करण्यात आलेली आहे

**प्रस्तावना:-** नाशिक हे महाराष्ट्रातील सुवर्ण त्रिकोणातील मुंबई-पुणे नाशिक मधील महत्वाचे औद्योगिक धार्मिक व सांस्कृतिक शहर वसलेले असुन नाशिक शहरामधुन वाहणारी गोदावरी नदी पंचवटी येथे दक्षिण वाहिणी होत असुन, सदर गोदावरी नदी दक्षिण वाहिनी होत असल्याने धार्मिक दृष्टया अत्यंत महत्व प्राप्त झालेले आहे. सदर गोदावरी नदी किनारी दर १२ वर्षानी सिंहस्थ कुंभमेळा भरतो. तसेच नाशिक शहरालगत शिर्डी, त्र्यंबकेश्वर, वणी, कावणाई, इ. महत्वाचे धार्मिक स्थळे व सिन्नर, ओझर, दिंडोरी, इगतपुरी इ. औद्योगिक वसाहती विकसित झालेल्या आहेत.

सन २०२७-२८ मध्ये होणाया आगामी सिंहस्थ कुंभमेळा मध्ये मोठया प्रमाणात संपुर्ण भारतातुन व देश- विदेशातुन भाविक व साधुमंहत, **सिंहस्थ कुंभमेळा** काळात स्नान व इतर धार्मिक विधीसाठी येणार आहेत. तरी सदर येणाया भाविकांसाठी सोई सुविधा पुरविण्या बाबत वेळोवेळी झालेल्या आढावा बैठकीत मा. मुख्यमंत्री व मा. अतिरिक्त मुख्य सचिव व मा. कुंभमेळा मंत्री व नाशिक- त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाचे अध्यक्ष तथा मा. विभागीय आयुक्त, नाशिक यांनी नियोजन करणे बाबत आदेशित केलेले आहे.

सदर नियोजना अंतर्गत नाशिक शहरातील मनपा हद्दीतील विविध रस्ते विकसित करण्याबाबत मा. कुंभमेळा समिती व मा. विभागीय आयुक्त महोदय यांचेकडे वेळोवेळी झालेल्या चर्चेनुसार रस्त्यांची यादी निश्चित करण्यात आलेले आहेत. तसेच याबाबत मा. आयुक्त मनपा व मा. पोलीस आयुक्त, नाशिक शहर यांचे विभागांची संयुक्त बैठकीनुसार मा. पोलीस आयुक्त नाशिक शहर यांचेकडील पत्र जा.क्र. १३५ दि. २९/०७/२०२५ अन्वये आवश्यक रस्ते व त्याचा प्राधान्यक्रमाची यादी कळविलेली आहे. **या यादीतील प्रस्तावित 'अ' प्राधान्यातील रस्ता क्र.** १० नुसार **लक्ष्मी नारायण मंदिर पूल ते ड्रीमसिटी चौका पावेतो (घाटाकडे जाणारा रस्ता/ साधूग्रामला जोडणारा रस्ता)** या रस्त्याचा अंर्तभाव आहे. सदर रस्ता मनपाच्या मंजूर विकास आराखडयात ३०मी. दर्शविलेला असुन सिंहस्थ काळात भाविकांना नाशिक पुणेरोड वरुन साधुग्रामकडे जाणेसाठी मुख्यमार्ग आहेत तसेच व्दारका सर्कल येथील वाहतुक कोंडी कमी करण्यासाठी सदर रस्ता वाहतुक वळविणे करीता अत्यंत महत्वाचा आहे. सदर रस्त्याची एकुण लांबी ३२९३ मीटरआहे.

## १.१ जनार्दन स्वामीमठ ते लक्ष्मी नायण पुल चौक

➢ **रस्त्याची सद्य:स्थीती:-**

सदर रस्ता हा मंजुर विकास आराखडयानुसार 30 मी. विकास योजना रस्ता आहे. सदर रस्ता हा डांबरी असून सद्यस्थितीत सुमारे 900 मी. लांबी व सुमारे 15.00 मी. रुंदीचा जुना डाबरी रस्ता आहे. सदरील रस्त्याचा पृष्ठभाग मोठया प्रमाणात खराब झालेला असून बऱ्याच ठिकाणी खड्डे पडलेले आहेत. बऱ्याच ठिकाणी नागरिकांनी नळ कनेक्शन, गटार, पाणी जोडणी करीता रस्त्यामध्ये ओघळया केलेल्या आहेत. जागेवर पाहणी करुन आवश्यकते प्रमाणे अस्तित्वातील रस्त्याची रुंदी खुपच कमी आहे. सदर रस्त्यावर नागरिकांच्या वाहनांची नेहमी वर्दळ असते. तसेच आगामी सिंहस्थ कुंभ मेळयादरम्यान मोठया प्रमाणात वाहतुक वाढणार आहे. तसेच , पावसाळी पाण्याचा निचरा करणे , फुटपाथ या बाबी देखील करणे अत्यंत आवश्यक आहे. सदर रस्त्याचे अस्तरीकरण व रुंदीकरण केल्यास साधुग्रामसाठी चांगली सोय उपलब्ध हेाणार आहे.

➢ **प्रस्तावित कामाचा वाव-**

सदर रस्त्याचे **मिलिंग** करुन डांबरीकरण करणे या अंतर्गत फुटपाथ साठी एम-१५ ग्रेडचे कॉक्रीटीकरण करणे पेव्हर ब्लॉक बसविणे फुटपाथसाठी, कर्बस्टोन बसविणे अस्तरीकरणासाठी टॅककोट, संपुर्ण क्षेत्रावर 4.5% DBM, 6.25% BC, करणे व रोड फर्निचर, इ. अनुषगिक बाबींचा समावेश आहे.

## १.2 लक्ष्मीनारायण चौक लक्ष्मीनारायण पुल

➢ **रस्त्याची सद्य:स्थीती:-**

सदर रस्ता हा डांबरी पृष्ठभाग असून सुमारे 355 मीटर लांब व 9मीटर रुंदीचा आहे. तथापी सदर स्त्याची जागेवर १८मीटर रुंदी आहे. सद्यस्थितीत काही ठिकाणी सदर चारस्त्याचा पृष्ठभाग खराब झालेला असुन खड्डे पडण्यास सुरुवात झालेली आहे.

➢ **प्रस्तावित कामाचा वाव-**

सदर रस्त्याचे **मिलिंग** करुन डांबरीकरण करणे या अंतर्गत अस्तरीकरणाठी टॅककोट, संपुर्ण क्षेत्रावर 4.5% DBM, 6.25% BC, करणे व रोड फर्निचर, इ. अनुषगिक बाबींचा समावेश आहे.

## १.३ लक्ष्मीनारायण पुल ते मारुती व्हेपर्स चौक

➢ **रस्त्याची सद्य:स्थीती:-**

सदर रस्ता हा डांबरी पृष्ठभाग असून सुमारे **१९०** मीटर लांब व **९** मीटर रुंदीचा आहे. सद्यस्थितीत काही ठिकाणी सदर स्त्याचा पृष्ठभाग खराब झालेला असुन खड्डे पडण्यास सुरुवात झालेली आहे.

➢ **प्रस्तावित कामाचा वाव-**

सदर रस्त्याचे **मिलिंग** करुन डांबरीकरण करणे या अंतर्गत अस्तरीकरणा साठी टॅककोट, संपुर्ण क्षेत्रावर 4.5% DBM, 6.25% BC, करणे व रोड फर्निचर, इ. अनुषगिक बाबींचा समावेश आहे.

**१.४ मारुती व्हेपर्स चौक ते जय शंकर चौक**

➢ **रस्त्याची सद्य:स्थीती:-**

सदर रस्ता हा डांबरी पृष्ठभाग असून सुमारे **४२०** मीटर लांब व **२०** मीटर रुंदीचा आहे. सद्यस्थितीत काही ठिकाणी सदर स्त्याचा पृष्ठभाग खराब झालेला असुन खड्डे पडण्यास सुरुवात झालेली आहे.

➢ **प्रस्तावित कामाचा वाव-**

सदर रस्त्यातुन पावसाळी पाण्याचे निचरा होणेसाठी ४५० एम.एम. व्यासाची पावसाळी गटार लाईन टाकणे व डांबरीकरण करणे या अंतर्गत अस्तरीकरणा साठी टॅककोट व प्रोफाईल करेक्शनसाठी आवश्येतेनुसार ३.५% BM चा थर तसेच संपुर्ण क्षेत्रावर 4.5% DBM, 6.25% BC, करणे व रोड फर्निचर, इ. अनुषगिक बाबींचा समावेश आहे.

**१.५ जय शंकर चौक ते नंदिनी नदी पुल**

➢ **रस्त्याची सद्य:स्थीती:-**

सदर रस्ता हा डांबरी पृष्ठभाग असून सुमारे **६४५** मीटर लांब व **१५** मीटर रुंदीचा आहे. सद्यस्थितीत काही ठिकाणी सदर स्त्याचा पृष्ठभाग खराब झालेला असुन खड्डे पडण्यास सुरुवात झालेली आहे.

➢ **प्रस्तावित कामाचा वाव-**

सदर रस्त्यातुन पावसाळी पाण्याचे निचरा होणेसाठी ४५० एम.एम. व्यासाची पावसाळी गटार लाईन टाकणे व डांबरीकरण करणे या अंतर्गत अस्तरीकरणा साठी टॅककोट व प्रोफाईल करेक्शनसाठी आवश्येतेनुसार ३.५% BM चा थर तसेच संपुर्ण क्षेत्रावर 4.5% DBM, 6.25% BC, करणे व रोड फर्निचर, इ. अनुषगिक बाबींचा समावेश आहे.

**१.५ नंदिनी नदी पुल ते ड्रिम सिटी चौक**

➢ **रस्त्याची सद्य:स्थीती:-**

सदर रस्ता हा डांबरी पृष्ठभाग असून सुमारे **७८३** मीटर लांब व **२०** मीटर रुंदीचा आहे. सद्यस्थितीत काही ठिकाणी सदर स्त्याचा पृष्ठभाग खराब झालेला असुन खड्डे पडण्यास सुरुवात झालेली आहे.

➢ **प्रस्तावित कामाचा वाव-**

सदर रस्त्याचे डांबरीकरण करणे या अंतर्गत अस्तरीकरणा साठी टॅककोट तसेच संपुर्ण क्षेत्रावर 4.5% DBM, 6.25% BC, करणे व रोड फर्निचर, इ. अनुषगिक बाबींचा समावेश आहे.

(५)

त्याअनुषंगाने विषयांकित रस्त्याचे कामाचे प्राकलन जिल्हा दरसुची सन २०२२-२०२३ नुसार तयार केले असता सदर कामासाठी प्राकलन र.रु. १४,९९,८५,९३७/- (अक्षरी चौदा कोटी, नव्यानव्व लक्ष, पंच्याऐशी हजार, नऊशे सदोतीस मात्र) इतका खर्च अपेक्षित आहे. सदरचे काम ई निविदा मागवुन करण्यात येईल.

सदर रस्त्याच्या कामातील मुख्य वाहतुक मार्गात येणारे विविध प्रकारचे वृक्ष काढणे अथवा स्थलांतरीत करणे, दुभाजकात शोभेची झाडे लावणे व देखभाल दुरुस्ती करण्याची कामे तसेच इतर तद्अनुषंगिक कामे ही मनपाच्या उद्यान विभागामार्फत करण्यात येणार असल्यामुळे उपरोक्त बाबींचा अंतर्भाव सदर प्रस्तावात घेतलेला नाही.

सदर काम हे महाराष्ट्र महानगरपालिका अधिनियम प्रकरण ६ कलम ६३ ( ४ ) अन्वये प्राप्त अधिकारानुसार प्रस्तावित करण्यात येत आहे सदर कामास सन २०२५-२०२६ च्या मनपा अंदाजपत्रकात **"सिंहस्थ कुंभमेळा सन २०२७-२८ अंतर्गत"** (संगणक कोड नं. २९४५) या लेखाशिर्षका अंतर्गत करण्यात येईल. तरी सदर कामाचे प्राकलन र.रु. १४,९९,८५,९३७/- (अक्षरी चौदा कोटी नव्यानव्व लक्ष पंच्याऐशी हजार नऊशे सदोतीस मात्र) यास प्रशासकीय व अर्थिक मंजूरी मिळणेस व ई निविदा मागवून करण्यास मंजूरीस्तव सादर.

डी.पी. जाधव,क.अभियंता, साबांवि, ना. पूर्व

निलेश साळी उप अभियंता, साबांवि, ना. पूर्व

दिपक मालवाल, उप अभियंता (प्रकल्प)

दि. 15/09/2025

विषयाधीन कामाचे प्राकलन PWD SSR year 2022-23 wef dt. 25/7/2022, MJP SSR year 2023-24 wef dt. 20/6/2023 व विभागाने सोबत जोडलेल्या दरपृथक्करण नुसार तपासले पुढील योग्य कार्यवाहीसाठी निर्णयास्तव सादर.

उप अभियंता (प्र.)

मा. कार्यकारी अभियंता -

- उपरोक्त प्रस्तावात मा. प्राधिकरण त्यांचेमार्फत प्रशासकीय मान्यता (दि 14/09/2025) मिळालेली आहे. सदर प्रस्तावाचे स्थापत्य विषयक तांत्रिक मान्यता Technical sanction मंजूरी घेण्यात आलेली आहे

on next page -

— Development of from Janardan Swami math ( ch. sambhar nagar )
to Laxminarad mandir Bridge to Dream City chowk.
( Ghat Approach / sadhuguru canu.

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तरी सदाची नस्ती मुलेश व लेखा विभागाकडे पुढील कार्यवाहीसाठी

सादा

मा. २१६८ आयुक्त [illegible]

मा. मुख्य [illegible]

विषय:- नाशिक शहरातील जनार्दन स्वामी मठ (छ संभाजी नगर रोड) ते लक्ष्मीनारायण मंदिर पूल ते ड्रीम सिटी चौका पावेतो (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) विकसित करणे

**(प्राकलन र.रु. १४,९९,८५,९३७/-)**

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(नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि.१४.९.२०२५ रोजीच्या प्र.मा. आदेशातील अ.क्र. १९ चे काम)

सविनय सादर,

१. सद्यस्थितीत नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या आदेशानुसार प्रशासकीय मान्यता मिळाली असल्याने "सिहंस्थ कुंभमेळा कामे २०२७" संगणक कोड क्र. "४०९७" या लेखाशिर्षातून खर्च करणेकामी कार्यकारी विभागाने आवश्यक ती उचित कार्यवाही करावी.

२.नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या प्रशासकीय मान्यता आदेशातील नमुद अ. क्र. १९ नुसार सदर कामास र.रु. १५.०० कोटीच्या खर्चास प्रशासकीय मान्यता देणेत आलेली आहे त्यानुसार प्राप्त प्रशासकीय मान्यतेनुसार शासन निधीतुन कामासाठी उपलब्ध तरतुदीच्या मर्यादेत सदर कामाचा खर्च करण्याची जबाबदारी कार्यकारी विभागाची राहील.

३. कार्यकारी विभागाने नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या प्रशासकीय मान्यता आदेशातील अटी व शर्ती क्र. १ ते ३० चे पालन करणे आवश्यक राहील.

४. मा.आयुक्त यांचे परिपत्रक जा.क्र./आस्वीस /वशि / ४८७ / २०१९ दि.२४/१२/२०१९,जा.क्र./मनपा/ लेखा / २२०/२०२१ दि. २४/०२/२०२१ व परिपत्रक जा.क्र./आस्वीस/वशि/१११/२०२४ दि.६/६/२०२४ अन्वये कार्यवाही करण्याची करण्याची विभागाने नोंद घ्यावी.

५. मा. आयुक्त सो. यांचे सन २०२५-२६ च्या अंदाजपत्रकातील "सिहंस्थ कुंभमेळा कामे २०२७" संगणक कोड क्र. "४०९७" या लेखाशिर्षात कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या आदेशानुसार सदर कामास तरतुद उपलब्ध करून देणेत आलेली आहे.

६. सदर कामाची तांत्रिक मान्यता सार्व. बांधकाम विभागाने र.रु. १४,९९,८५,९३७/- इतक्या रकमेची सक्षम प्राधिकरणाने प्रमाणित करून दिलेली आहे.

७. निविदा अटी/शर्ती मध्ये केलेल्या कामाचे काम करतांनाचे जिओ टॅगिंग फोटो जोडण्यात यावे, देयक अदायगीचे वेळेस फोटो सादर करावे व ते कार्यकारी विभागाच्या उपअभियंता यांनी प्रमाणित करावे.

८. आगामी अंदाजपत्रकात "सिहंस्थ कुंभमेळा कामे २०२७" संगणक कोड क्र. "४०९७" या लेखाशिर्षामधुन हाती घेण्यात येणाऱ्या कामांचा समावेश करून त्यासाठी मनपा हिस्स्यापोटी येणाऱ्या खर्चासाठी तरतूद करणेची दक्षता कार्यकारी विभागाने घ्यावी.

९.नाशिक मनपा मार्फत सिंहस्थच्या दृष्टीने विविध प्रशासकीय विभागा अंतर्गत केंद्र व राज्य योजनांमध्ये जसे की अमृत २.० (मलनि:स्सारण व पाणीपुरवठा), UCF इ. अंतर्गत निधी उपलब्ध होण्याच्या अनुषंगाने, महत्वाचे विविध भांडवली कामांचे प्रकल्प हाती घेण्यात आले आहेत. त्यामुळे नाशिक मनपा हिस्साकरीता करावा लागणारा निधी हा म्युनिसिपल बॉण्डद्वारे रु. २००.०० कोटी व ग्रीन बॉण्डद्वारे र.रु. २००.०० कोटी असे एकूण र.रु. ४००.०० कोटी व उर्वरित मनपा स्वनिधी मधून उभारण्याची कार्यवाही सुरु आहे. सदर बॉण्ड उभारणी करतांना विशिष्ठ प्रकल्प हाती घेणे आवश्यक आहे. त्यामुळे सिंहस्थ आराखडा २०२७ च्या अंतर्गत, नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत नाशिक मनपास विविध विकास कामांसाठी प्राप्त होणाऱ्या एकूण निधी हा, सिंहस्थच्या दृष्टीने आवश्यक असलेल्या प्रकल्पांमध्ये नाशिक मनपाने केलेला खर्च हा कामनिहाय हिस्सा न पकडता, एकत्रितरित्या मनपा हिस्सा म्हणून समायोजित करणे आवश्यक आहे याबाबत वरिष्ठ अधिकाऱ्यांचे शासन स्तरावर विचार विनिमय चालू आहे.

**विषय**:- नाशिक शहरातील जनार्दन स्वामी मठ (छ संभाजी नगर रोड) ते लक्ष्मीनारायण मंदिर पूल ते ड्रीम सिटी चौका पावेतो (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) विकसित करणे

**(प्राकलन र.रु. १४,९९,८५,९३७/-)**

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सबब सदर बाबतीत कार्यकारी विभागाने प्रमाणित करून प्रस्तावित केलेप्रमाणे येणारा खर्च र.रु. १४,९९,८५,९३७/- **(अक्षरी र.रु. चौदा कोटी नव्याण्णव लक्ष पंच्याऐंशी हजार नऊशे सदोतीस मात्र)** या खर्चास शासन अनुदान प्राप्त होण्याच्या अधीन व निधी उपलब्धतेनुसार महाराष्ट्र महानगरपालिका अधिनियम कलम ७३ (क) अन्वये सक्षम प्राधिकरण म्हणून मा. महासभेची प्रशासकीय मान्यता घेऊन ई-निविदा राबविणेकामी सक्षम प्राधिकरणाच्या उचित निर्णयार्थ सादर.

(अजय कमोद)
उप लेखापाल -

(गुलाब वा.गावित)
उपमुख्य लेखाधिकारी -

(दत्तात्रय ज्ञा.पाथरूट)
मा. मुख्य लेखा व वित्त अधिकारी -

मा.मुलेप

सविनय सादर,

(19)

प्रस्ताव City Engineer यांच्याकडून सादर

विषय:- DEVELPPMENT OF FROM JANRDN SAWAMI MATH ECT.निवीदा काढणे व प्रशासकिय मंजुरी बाबत आहे.

1)प्राकलन र. रू.14,99,85937,/-इतकेआहे.यास दि.१४/०९/२०२५ अनुवे नाशिक त्रबेक्षेश्वर कुभामेला प्राधीकरण सामित्यीची मानेता आहे,व आदेशात नमूदकेल्या प्रमाणे विभागाने कार्यवाही करणेआवश्यक आहे.

२) विभागाने कामाची निकड पृष्ठ क्र.1 ते 06 वर नमुद केली आहे.

3) सदर कामाचे प्राकलनातील रक्कम व प्राकलनातील बाबीचे तांत्रिक विभागाने तपासणी करून प्रमाणित केलेआहे.

4) लेखा व वित्तविभागाचा पृष्ठ क्र.7,8 वरील अभिप्राया नुसार कार्यवाही होणे आवश्यक आहे.

5) शिल्लक तरतुद व दायीत्वा बाबत विभागानेअभिप्राय नमुद करणेआवश्यकआहे.

6) मंजुर तरतुदीच्याआत खर्च होईल याबाबत विभागा दक्षता घेण्यात यावी.

7) मा.आयुक्त सोयां चे कडील 111 दिनांक 06/06/2024 चे परिपत्रका नुसार कार्यवाही करणे बाबत विभागाने दक्षता घ्यावी

8) सदरचे काम दुबार होणार नाही या बाबत विभागाने दक्षता घेणेत यावी.

9) मा. आयुक्त यांचे कडील दिनांक 02/6/01/2025 चे परिपत्रका नुसार कार्यवाही करणे बाबत विभागानेदक्षताघ्यावी

10) सदरचे काम जाहिर निविदेव्दारे करणेत यावे.

11) विभागाने शिखर समिची मानेता घेणे आवश्यक आहे या बाबत विभागाने दक्षता घेणेत यावी.

12)The Maharastra Stamp Duty Act 1958 Amended by Mah.act 20 of 2025 Dt 01/04/2055,Mah .Act. act No,9 of2025 DT. 1.1.2025 And Mah.Act,No,32 of2024 dt 31.07.2024 Section 34 (Penalty) बाबत विभागाने दक्षता घेणेत यावी.

विभागाने प्रस्तावित केलेनुसार व शिफारशीनुसार प्रस्ताव प्रशासकिय मंजुरिच्या पुढील निर्णयास्तव सादर

वलेप-कृष्णाआर. पडोळ

मा.उपमुले ( प्र) किरण धारणकर

दि. ०१/१२/२०१६ रोजीच्या शासन निर्णयाप्रमाणे नियमोचित कार्यवाहीच्या पुढील निर्णयास्तव सादर

मा.मुख्य लेखापरिक्षक (बी. जे. गायकवाड )

मा City Engineer

दै लोकमत दि २१/९/२०२५

## नाशिक महानगरपालिका, नाशिक
मध्यवर्ती ई- टेंडर सेल विभाग

**सिंहस्थ कामे- ई- निविदा सूचना क्र.०३ (सन २०२५-२६)**

नाशिक महानगरपालिका, नाशिक सार्वजनिक बांधकाम विभागाच्या १८ कामांची ई-निविदा सूचना क्रमांक ०३ (सन २०२५-२६) दिनांक २२/०९/२०२५ पासून दिनांक ०६/१०/२०२५ रोजी दुपारी ३.०० वाजेपावेतो मा. शासनाचे www.mahatenders.gov.in या संकेतस्थळावर उपलब्ध असेल. निविदा स्वीकृतीची अंतिम दिनांक ०६/१०/२०२५ राहील.

टीप - यापुढील सर्व आवश्यक सूचना/शुध्दीपत्रक हे Online website वर प्रसिध्द करणेत येतील.

Sd/-XXX
कार्यकारी अभियंता (टेंडर सेल)
नाशिक महानगरपालिका, नाशिक

Sd/-XXX
अतिरिक्त आयुक्त (२)
नाशिक महानगरपालिका, नाशिक

जनसंपर्क /जा. क्र./२६०/२०२५ दिनांक २०/०९/२०२५

दै सकाळ दि २१/९/२०२५

## नाशिक महानगरपालिका, नाशिक
मध्यवर्ती ई-टेंडर सेल विभाग

**सिंहस्थ कामे- ई-निविदा सुचना क्र. ०३ (सन २०२५-२६)**

नाशिक महानगरपालिका, नाशिक सार्वजनिक बांधकाम विभागाच्या १८ कामांची ई-निविदा सुचना क्रमांक ०३ (सन २०२५-२६) दिनांक २२/०९/२०२५ पासुन दिनांक ०६/१०/२०२५ रोजी दुपारी ३.०० वाजेपावेतो मा.शासनाचे www.mahatenders.gov.in या संकेतस्थळावर उपलब्ध असेल. निविदा स्विकृतीची अंतिम दिनांक ०६/१०/२०२५ राहील.

टीप - यापुढील सर्व आवश्यक सुचना / शुध्दीपत्रक हे Online website वर प्रसिध्द करणेत येतील.

Sd/-xxx
कार्यकारी अभियंता (टेंडर सेल)
नाशिक महानगरपालिका, नाशिक

sd/-xxx
अतिरिक्त आयुक्त (२)
नाशिक महानगरपालिका, नाशिक

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गाजा प्रदूषण टाळा, भविष्य संभाळा.

दै. पुण्यनगरी दि २१/९/२०२५

## नाशिक महानगरपालिका, नाशिक
मध्यवर्ती ई-टेंडर सेल विभाग

**सिंहस्थ कामे- ई-निविदा सुचना क्र. ०३ (सन २०२५-२६)**

नाशिक महानगरपालिका, नाशिक सार्वजनिक बांधकाम विभागाच्या १८ कामांची ई-निविदा सुचना क्रमांक ०३ (सन २०२५-२६) दिनांक २२/०९/२०२५ पासुन दिनांक ०६/१०/२०२५ रोजी दुपारी ३.०० वाजेपावेतो मा.शासनाचे www.mahatenders.gov.in या संकेतस्थळावर उपलब्ध असेल. निविदा स्विकृतीची अंतिम दिनांक ०६/१०/२०२५ राहील.

टीप - यापुढील सर्व आवश्यक सुचना / शुध्दीपत्रक हे Online website वर प्रसिध्द करणेत येतील.

Sd/-xxx
कार्यकारी अभियंता (टेंडर सेल)
नाशिक महानगरपालिका, नाशिक

sd/-xxx
अतिरिक्त आयुक्त (२)
नाशिक महानगरपालिका, नाशिक

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गाजा प्रदूषण टाळा, भविष्य संभाळा.

दै. पुढारी दि २१/९/२०२५

## नाशिक महानगरपालिका, नाशिक
मध्यवर्ती ई- टेंडर सेल विभाग

**सिंहस्थ कामे - ई- निविदा सुचना क्र.०३ (सन २०२५-२६)**

नाशिक महानगरपालिका, नाशिक सार्वजनिक बांधकाम विभागाच्या १८ कामांची ई- निविदा सुचना क्रमांक ०३ ( सन २०२५-२६) दिनांक २२/०९/२०२५ पासुन दिनांक ०६/१०/२०२५ रोजी दुपारी ३.०० वाजेपावेतो मा.शासनाचे www.mahatenders.gov.in या संकेतस्थळावर उपलब्ध असेल. निविदा स्विकृतीची अंतिम दिनांक ०६/१०/२०२५ राहील.

टीप - यापुढील सर्व आवश्यक सुचना / शुध्दीपत्रके हे Online website वर प्रसिध्द करणेत येतील.

सही/-xxx
कार्यकारी अभियंता (टेंडर सेल)
नाशिक महानगरपालिका, नाशिक

सही/-xxx
अतिरिक्त आयुक्त (२)
नाशिक महानगरपालिका, नाशिक

जनसंपर्क/जा. क्र./२६०/२०२५ दिनांक २०/०९/२०२५

दै प्रात: काल दि २१/९/२०२५

## NASHIK MUNICIPAL CORPORATION, NASHIK
E-Tender Cell Department

**Sinhastha Work - E-Tender Notice No.03 (2025-26)**

Nashik Municipal Corporation, Nashik Public Works Department vide E-Tender Notice No. 03 (Year 2025-26) invites bids for 18 number of works which will be displayed on the website www.mahatenders.gov.in. from dt.22/09/2025 to 06/10/2025 up to 3.00 pm. Last date for acceptance of tender will be dt.06/10/2025.

Note - All further necessary notices/clarifications will be published on the online website.

Sd/-xxx
Executive Engineer
(Tender Cell)
Nashik Municipal Corporation

Sd/-xxx
Additional Commissioner(2)
Nashik Municipal
Corporation

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गाजा प्रदूषण टाळा, भविष्य स

दै. लोकमत टाइम्स दि २५/९/२०२५

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**NASHIK MUNICIPAL CORPORATION, NASHIK**
**E-Tender Cell Department**
**Sinhastha Work - E-Tender Notice No.03 (2025-26)**

Nashik Municipal Corporation, Nashik Public Works Department vide E-Tender Notice No. 03 (Year 2025-26) invites bids for 18 number of works which will be displayed on the website www.mahatenders.gov.in. from dt.22/09/2025 to 06/10/2025 up to 3.00 pm. Last date for acceptance of tender will be dt.06/10/2025.

**Note** - All further necessary notices/clarifications will be published on the online website.

| | |
|---|---|
| Sd/-xxx | Sd/-xxx |
| Executive Engineer | Additional Commissioner(2) |
| (Tender Cell) | Nashik Municipal |
| Nashik Municipal Corporation | Corporation |

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गोदा प्रदूषण टाळा, भविष्य संभाळा.

दै. टाइम्स ऑफ इंडिया दि २५/९/२०२५

**NASHIK MUNICIPAL CORPORATION, NASHIK**
**E-Tender Cell Department**
**Sinhastha Work - E-Tender Notice No.03 (2025-26)**

Nashik Municipal Corporation, Nashik Public Works Department vide E-Tender Notice No. 03 (Year 2025-26) invites bids for 18 number of works which will be displayed on the website www.mahatenders.gov.in. from dt.22/09/2025 to 06/10/2025 up to 3.00 pm. Last date for acceptance of tender will be dt.06/10/2025.

**Note** - All further necessary notices/clarifications will be published on the online website.

| | |
|---|---|
| Sd/-xxx | Sd/-xxx |
| Executive Engineer | Additional Commissioner(2) |
| (Tender Cell) | Nashik Municipal |
| Nashik Municipal Corporation | Corporation |

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गोदा प्रदूषण टाळा, भविष्य संभाळा.

दै. हिंदुस्थान टाइम्स दि २५/९/२०२५

**NASHIK MUNICIPAL CORPORATION, NASHIK**
**E-Tender Cell Department**
**Sinhastha Work - E-Tender Notice No.03 (2025-26)**

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| | |
|---|---|
| Sd/-xxx | Sd/-xxx |
| Executive Engineer | Additional Commissioner(2) |
| (Tender Cell) | Nashik Municipal |
| Nashik Municipal Corporation | Corporation |

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गोदा प्रदूषण टाळा, भविष्य संभाळा.

दै mint टाइम्स

**NASHIK MUNICIPAL CORPORATION, NASHIK**
**E-Tender Cell Department**
**Sinhastha Work - E-Tender Notice No.03 (2025-26)**

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**Note** - All further necessary notices/clarifications will be published on the online website.

| | |
|---|---|
| Sd/-xxx | Sd/-xxx |
| Executive Engineer | Additional Commissioner(2) |
| (Tender Cell) | Nashik Municipal |
| Nashik Municipal Corporation | Corporation |

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गोदा प्रदूषण टाळा, भविष्य संभाळा.

दै. नवभारत दि २५/९/२०२५

**NASHIK MUNICIPAL CORPORATION, NASHIK**
**E-Tender Cell Department**
**Sinhastha Work - E-Tender Notice No.03 (2025-26)**

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**Note** - All further necessary notices/clarifications will be published on the online website.

| | |
|---|---|
| Sd/-xxx | Sd/-xxx |
| Executive Engineer | Additional Commissioner(2) |
| (Tender Cell) | Nashik Municipal |
| Nashik Municipal Corporation | Corporation |

जनसंपर्क/जा.क्र/२६०/२०२५ दि.२०/०९/२०२५ गोदा प्रदूषण टाळा, भविष्य संभाळा.

मागे →

दै. नवभारत दि १६/१०/२०२५

**Nashik Municipal Corporation, Nashik**
Public Health Engineering Department (Sewerage)
Rajiv Gandhi Bhavan, Sharanpur Road, Nashik- 422 002
Ph. (0253) 2575631/32, 2579119 Fax: 2577936
**E-Tender Notice No. 03/ 2025-26**

Nashik Municipal Corporation, invites bids vide e-Tender No-03/(2025-26) for 01 works. The Detailed Tender Notice & Tender documents will be available on www.mahatenders.gov.in. from Dt. 17/10/2025 to Dt. 03/11/2025.

Sd/xxx
Superintending Engineer
Public Health Engineering
Department (Sew)
Nashik Municipal
Corporation, Nashik

Sd/xxx
Commissioner &
Administrator
Nashik Municipal
Corporation, Nashik

जनसंपर्क/जा.क्र/२९४/२०२५ दि.१५/१०/२०२५

गोदा प्रदूषण टाळा, भविष्य संभाळा.

दै. पोस्टमन ऑफ इंडिया दि १६/१०/२०२५

**Nashik Municipal Corporation, Nashik**
Public Health Engineering Department (Sewerage)
Rajiv Gandhi Bhavan, Sharanpur Road, Nashik- 422 002
Ph. (0253) 2575631/32, 2579119 Fax: 2577936
**E-Tender Notice No. 03/ 2025-26**

Nashik Municipal Corporation, invites bids vide e-Tender No-03/(2025-26) for 01 works. The Detailed Tender Notice & Tender documents will be available on www.mahatenders.gov.in. from Dt. 17/10/2025 to Dt. 03/11/2025.

Sd/xxx
Superintending Engineer
Public Health Engineering
Department (Sew)
Nashik Municipal
Corporation, Nashik

Sd/xxx
Commissioner &
Administrator
Nashik Municipal
Corporation, Nashik

जनसंपर्क/जा.क्र/२९४/२०२५ दि.१५/१०/२०२५

गोदा प्रदूषण टाळा, भविष्य संभाळा.

दै. हिंदुस्थान टाईम्स दि १६/१०/२०२५

**Nashik Municipal Corporation, Nashik**
Public Health Engineering Department (Sewerage)
Rajiv Gandhi Bhavan, Sharanpur Road, Nashik- 422 002
Ph. (0253) 2575631/32, 2579119 Fax: 2577936
**E-Tender Notice No. 03/ 2025-26**

Nashik Municipal Corporation, invites bids vide e-Tender No-03/(2025-26) for 01 works. The Detailed Tender Notice & Tender documents will be available on www.mahatenders.gov.in. from Dt. 17/10/2025 to Dt. 03/11/2025.

Sd/xxx
Superintending Engineer
Public Health Engineering
Department (Sew)
Nashik Municipal
Corporation, Nashik

Sd/xxx
Commissioner &
Administrator
Nashik Municipal
Corporation, Nashik

जनसंपर्क/जा.क्र/२९४/२०२५ दि.१५/१०/२०२५

गोदा प्रदूषण टाळा, भविष्य संभाळा.

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सविनय सादर,

दिनांक : २४/०९/२०२५

विषय : सार्वजनिक बांधकाम विभागामार्फत करावयाच्या कामांची ई-निविदा नोटीसचे शुद्धीपत्रक प्रसिध्द करणे बाबत.

संदर्भ : १) अध्यक्ष ,नाशिक –त्र्यंबकेश्वर कुंभमेळा प्राधिकरण तथा विभागीय आयुक्त सो. यांचे कडील दि.१४/०९/२०२५ रोजीची प्रशासकीय मान्यता.
२) सिंहस्थ कामे ई-निविदा सु.क्र.०३ सन २०२५-२६

उपरोक्त संदभ क्र.१ अन्वये अध्यक्ष ,नाशिक –त्र्यंबकेश्वर कुंभमेळा प्राधिकरण तथा विभागीय आयुक्त सो. यांचे कडील दि.१४/०९/२०२५ रोजीची प्रशासकीय मान्यता मिळाल्यानुसार, संदर्भ क्र.-२ अन्वये सिंहस्थ अंतर्गत रस्त्यांच कामांची ई-निविदा सु.क्र.०३ सन २०२५-२६ वर्तमान पत्रात प्रसिद्ध करण्यात आली होती. सदर निविदा संच विक्रीचा कालावधी हा दि.२२/०९/२०२५ ते दि.०६/१०/२०२५ असा होता. परंतु तांत्रिक अडचणीमुळे ऑनलाईन निविदा अपलोड करण्यास विलंब झाला आहे. त्यामुळे सदर निविदेचा विक्री कालावधी दि.२५/०९/२०२५ ते दि.१०/१०/२०२५ रोजी पर्यंत वाढविण्यास व तसे शुध्दीपत्रक ऑनलाईन प्रसिध्द करणेस मंजुरी मिळणेस विनंती.

क.लिपीक
(राहुल पोरजे)

कार्यकारी अभियंता (रविंद्र बागुल) | कार्यकारी अभियंता (नवनीत भामरे) | कार्यकारी अभियंता (रविंद्र पाटील) | कार्यकारी अभियंता (संदेश शिंदे) | कार्यकारी अभियंता (प्रशांत पगार)

मा.शहर अभियंता
(संजय अग्रवाल)

मं मान्य करण्यास हरकत नाही.

(प्रदिप चौधरी)
मा.अतिरीक्त आयुक्त सो.

(मनिषा खत्री)
मा.आयुक्त तथा प्रशासक सो.

नाशिक महानगरपालिका,नाशिक
मध्यवर्ती ई-टेंडर सेल विभाग
सिंहस्थ कामे ई- निविदा सुचना क्र.०३ चे शुद्धीपत्रक (सन २०२५-२६)

नाशिक महानगरपालिकेच्या सार्वजनिक बांधकाम विभागाच्या खालील नमुद केलेल्या कामा करीता महाराष्ट्र शासन अथवा केंद्र शासनाच्या अथवा निमशासकीय संस्थेकडे योग्य वर्गातील पंजीकृत व काम करण्याचा अनुभव असलेल्या मक्तेदाराकडून ई-टेंडर (ऑनलाईन) निविदा मागवित आहोत.

| अ.क्र | कामाचे नाव | प्राकलन र.रु |
|---|---|---|
| १) | गंगापूर रोड बारदान फाटा ते सुला चौक (बाह्य वाहनतळ ते अंतर्गत वाहनतळाना जोडणारा/त्र्यंबकरोड जोडरस्ता) | ५६,८५,७८,४९७/- |
| २) | त्र्यंबक रोड पपया नर्सरी सिग्नल ते एक्स.लो. जंक्शन (बाह्य वाहनतळ / रेल्वे स्थानक-त्र्यंबकरोड- मुंबई महामार्ग जोडरस्ता / वाहतूक नियोजन) | ७७,३२,७५,३४३/- |
| ३) | एक्सलो चौक ते गरवारे चौकपावेतो (बाह्य वाहनतळ / रेल्वे स्थानक त्र्यंबकरोड मुंबई महामार्ग जोडरस्ता / वाहतूक नियोजन) | ७१,९८,७४,७१०/- |
| ४) | वडनेर गेट ते विहितगाव (लॅम रोड) (रेल्वे स्थानक त्र्यंबकरोड जोडरस्ता वाहतूक नियोजन) | ३१,९९,९९,७४०/- |
| ५) | विहितगाव (लॅम रोड) ते बिटको चौक ते जेलरोड-गोदावरी नदी पर्यंत (घाटाकडे जाणारा रस्ता) | ६५,५०,०१,८०३/- |
| ६) | नांदूर पूल ते जत्रा हॉटेल (घाटाकडे जाणारा रस्ता) | ७१,२०,०४,८९५/- |
| ७) | लेखा नगर NH३-कलानगर चौक- वडाळागाव रविशंकर मार्ग-विजय ममता चौक (घाटाकडे जाणारा रस्ता / वाहतुक नियोजन) | ३८,४९,७५,८१२/- |
| ८) | संगम पूल ते मिर्ची हॉटेल चौक ते अमृतधाम चौक ते गुंजाळ बाबा चौक तारवाला चौक ते मार्केट सिग्नल ते मखमलाबाद रोड (घाटाकडे जाणारा रस्ता / साधुग्राम पोहोच रस्ता) | ८३,२६,४७,५०९/- |
| ९) | के.टी.एच.एम. पूल ते जुना गंगापूर नाका ते शरणपूर पोलीस चौकी, बॉश (मायको) सर्कल ते चांडक सर्कल ते महामार्ग बस स्टॅन्ड (घाटाकडे जाणारा रस्ता / वाहनतळ जोडणारा) | ४८,०८,०९,४०७/- |
| १०) | विजय ममता चौक-टाकळी गाव-संगम पूल (घाटाकडे जाणारा रस्ता/ साधुग्राम पोहोच रस्ता) | २२,१९,८७,६९४/- |
| ११) | अशोक स्तंभ ते जेहान सर्कल (गंगापूर रोड) रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/वाहनतळ जोडणारा) | ३७,८१,००,०३९/- |
| १२) | गंगापूर रोड - जेहान सर्कल ते गंगापूर गाव मनपा हद्द पावेतो रस्ता विकसित करणे. (वाहनतळ जोडणारा रस्ता) | ४९,३४,६०,३४८/- |
| १३) | खडकाळी सिग्नल ते त्र्यंबक नाका ते आयटीआय सिग्नल (त्रंबक रोड) पर्यंतचा रस्ता विकसित करणे. (नाशिक त्रंबक कुंभमेळा दोन्ही ठिकाणी जोडणारा ररता / वाहनतळ जोडणारा रस्ता) | ५१,०५,१६,७५०/- |

| अ.क्र | कामाचे नाव | प्राकलन र.रु |
|---|---|---|
| १४) | त्र्यंबक रोड आय.टी.आय. सिग्नल ते पिंपळगाव बहुला मनपा हद्द रस्ता विकसित करणे. (नाशिक त्रंबक कुंभमेळा दोन्ही ठिकाणी जोडणारा रस्ता /वाहनतळ जोडणारा रस्ता) | ४९,२८,६८,७२७/- |
| १५) | निमाणी चौक ते मनपा हद्द पावेतोचा दिंडोरी रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता /वाहनतळ जोडणारा) | ५९,५६,९९,४६५/- |
| १६) | पेठ रोड कालवा ते मेहेरधाम पेठ रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता / वाहनतळ जोडणारा) | ७६,४९,०९,२७३/- |
| १७) | पुणे रोड- दत्त मंदिर चौक ते सिन्नर फाटा (रेल्वे स्थानक जोड रस्ता) | १७,७४,८१,९८२/- |
| १८) | जनार्दन स्वामी गठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) | १४,९९,८५,९३७/- |
| उपरोक्त नमुद अ.क्र.१ ते१८ चे कामांसाठी निविदा फी र.रु.३६३१/- इतकी राहील | | |

अटीशर्ती-

१) सविस्तर निविदा नोटीस मा. राज्य शासनाचे संकेत स्थळ (Website) www.mahatenders.gov.in वर प्रसिध्द केली आहे त्याचे अवलोकन करावे.

२) सदर कामासाठी ऑनलाईन निविदा संच विक्री दि.२५/०९/२०२५ ते दि.१०/१०/२०२५ या कालावधी मध्ये केली जाईल.

३) सदर कामासाठी निविदापुर्व बैठक दि. ०१/१०/२०२५ रोजी दु.४.०० वाजता ऑनलाईन पध्दतीने घेण्यात येईल, त्याची लिंक निविदा दस्तामध्ये दिलेली आहे.

४) सदर कामांसाठी ऑनलाईन सादरी करणाची अंतिम मुदत दि.१०/१०/२०२५ रोजी दु.३.०० वाजे पर्यंत राहील.

५) सदर कामासाठी ऑनलाईन सादर केलेल्या निविदा दि.११/१०/२०२५ रोजी दु.३.०० वाजेनंतर (शक्य झाल्यास) कार्यकारी अभियंता (टेंडर सेल) यांचे समक्ष उघडण्यात येतील.

६) कोणतेही कारण न देता निविदा स्विकारणे अथवा नाकारणे याबाबतचे अंतिम अधिकार मा.आयुक्त सो. तथा प्रशासक नाशिक मनपा यांचे राहतील.

Sd xxx/-
कार्यकारी अभियंता (टेंडर सेल)
नाशिक महानगरपालिका, नाशिक

Sd xxx/-
अतिरिक्त आयुक्त (२)
नाशिक महानगरपालिका, नाशिक

(29)

दिनांक : ०९/१०/२०२५

सविनय सादर,

**विषय** : ई-निविदा सु.क्र.०३ सन २०२५-२६ या कामास मुदतवाढ मिळणे बाबत.

**संदर्भ** : १) अध्यक्ष ,नाशिक –त्र्यंबकेश्वर कुंभमेळा प्राधिकरण तथा विभागीय आयुक्त सो. यांचे कडील दि.१४/०९/२०२५ रोजीची प्रशासकीय मान्यता.

२) सिंहस्थ कामे ई-निविदा सु.क्र.०३ सन २०२५-२६

उपरोक्त संदभ क्र.१ अन्वये अध्यक्ष ,नाशिक –त्र्यंबकेश्वर कुंभमेळा प्राधिकरण तथा विभागीय आयुक्त सो. यांचे कडील दि.१४/०९/२०२५ रोजीची प्रशासकीय मान्यता मिळाल्यानुसार, संदर्भ क्र.-२ अन्वये सिंहस्थ अंतर्गत रस्त्यांच कामांची ई-निविदा सु.क्र.०३ सन २०२५-२६ वर्तमान पत्रात प्रसिद्ध करण्यात आली होती. सदर कामाची निविदा सादरीकरणाची अंतीम मुदत ही दि.१०/१०/२०२५ रोजी पावेतो आहे. सदर कामाची ऑनलाईन पध्दतीने निविदापुर्व बैठक दि.०१/१०/२०२५ रोजी घेण्यात आली. सदर बैठक व मक्तेदार यांच्या कडील लेखी मुद्दे यास अनुसरुन Modified Clause नुसार अर्टी/ शर्ती बाबत CSD Common set of Deviation / Addendum / Corrigendum प्रसिध्द करावयाचे आहे. त्यानंतर मक्तेदार यांना निविदा सादर करण्यासाठी पुरेसा कालावधी मिळावा यासाठी सदर निविदेस मुदतवाढ देणे आवश्यक आहे. त्यामुळे सदर निविदेस दि.१७/१०/२०२५ रोजी पावेतो मुदतवाढ मिळणेस विनंती.

क.लिप्रीक
(राहुल पोरजे)

| कार्यकारी अभियंता | कार्यकारी अभियंता | कार्यकारी अभियंता | कार्यकारी अभियंता | कार्यकारी अभियंता |
|---|---|---|---|---|
| (रविंद्र बागुल) | (नवनीत भामरे) | (रविंद्र पाटील) | (संदेश शिंदे) | (प्रशांत पगार) |

मा.शहर अभियंता
(संजय अग्रवाल)

(प्रदिप चौधरी)
मा.अतिरीक्त आयुक्त सो. – रजेवर.

(मनिषा खत्री)
मा.आयुक्त तथा प्रशासक सो.

मा. कार्यकारी अभियंता (निविदा कक्ष) :- "A" प्रमाणे कार्यवाही करण्यात आले आहे.

सा. शहर अभियंता :-

(51)

नाशिक महानगरपालिका,नाशिक
मध्यवर्ती ई- टेंडर सेल विभाग

सिंहस्थ कामे- ई- निविदा सुचना क्र.०३ शुध्दीपत्रक-१ (सन २०२५-२६)

नाशिक महानगरपालिका,नाशिक सार्वजनिक बांधकाम विभागाच्या १८ कामांची ई-निविदा सुचना क्रमांक.०३ (सन २०२५-२६) दिनांक २५/०९ /२०२५ पासुन दिनांक १७/१०/२०२५ रोजी दुपारी ३.०० वाजेपावेतो मा.शासनाचे www.mahatenders.gov.in या संकेतस्थळावर उपलब्ध असेल.निविदा स्विकृतीची अंतिम दिनांक १७/१०/२०२५ राहील.

टीप - यापुढील सर्व आवश्यक सुचना/शुध्दीपत्रक हे Online website वर प्रसिध्द करणेत येतील.

स्वाक्षरीत/-
कार्यकारी अभियंता (टेंडर सेल)
नाशिक महानगरपालिका, नाशिक

**Nashik Municipal Corporation, Nashik**
**E-Tender Cell Department**

**Sinhastha Work** - E-Tender Notice No.03 Corigendum-1 (2025-26)

Nashik Municipal Corporation, Nashik Public Works Department vide E-Tender Notice No. 03 (Year 2025-26) invites bids for 18 number of works which will be displayed on the website www.mahatenders.gov.in. from dt.25/09/2025 to 17/10/2025 up to 3.00 pm Last date for acceptance of tender will be dt.17/10 /2025.

**Note** - All further necessary notices/clarifications will be published on the online website.

Sd/-
Executive Engineer (Tender Cell)
Nashik Municipal Corporation

3

03/18(SF)

# नाशिक महानगरपालिका,नाशिक

सार्वजनिक बांधकाम विभाग,मुख्यालय

## दिनांक ०१/११/२०२५ रोजीच्या निविदा समितीच्या बैठकिचे इतिवृत्त

**संदर्भ** - १. मा.आयुक्त सो,यांचेकडीलआदेश जा.क्र./आस्विस/वशि/१५६/२०१६ दि.१०/१०/२०१६
२.निविदा सुचना क्रमांक०३ अ.क्र.१८ सन २०२५-२०२६
३. कार्यकारी अभियंता मध्यवर्ती निविदा कक्ष प्रमुख यांचे दि.०१/११/२०२५रोजीचा निविदा तपासणी अहवाल

उपरोक्त संदर्भ क्र.२ अन्वये निविदा सुचना क्रमांक ०३ अन्वये अ.क्र.१८ कामाची निविदा सुचना प्रसिध्द करण्यात आली होती. सदर कामासाठी प्राप्त झालेल्या निविदेतील तांत्रिक कागदपत्रांची पडताळणी कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांनी करुन संदर्भ क्र.०३ अन्वये पडताळणी अहवाल सादर केला आहे. त्यावर निर्णय घेण्यासाठी निविदा समितीची बैठक दिनांक०१/११/२०२५ रोजी सकाळी ११.०० वाजता मा.अतिरिक्तआयुक्त -२ सो,यांचे दालनात संपन्न झाली सदर बैठकिस खालील सदस्य उपस्थित होते.

| अ.क्र. | पदनाम | पद |
|---|---|---|
| १. | अतिरिक्त आयुक्त-२ | अध्यक्ष |
| २. | शहर अभियंता | सदस्य सचिव |
| ३. | मुख्य लेखा व वित्तअधिकारी | सदस्य |
| ४. | मुख्य लेखापरिक्षक | सदस्य |
| ५. | कार्यकारी अभियंता (सार्व.बांधकाम) | सदस्य |

त्यावर सार्वजनिक बांधकाम विभागामार्फत करावयाच्या निविदा सुचनेतील कामासाठी तांत्रिक मान्यता व सक्षम प्राधिकरणाची प्रशासकिय मान्यता घेऊन ई-निविदा प्रसिध्द करुन निविदा देकार मागविण्यात आलेले आहेत. कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांचेकडून प्राप्त निविदांच्या तांत्रिक पडताळणी अहवालानुसार पुढील निर्णय घेण्यात आला.

## निविदा सुचना क्रमांक ०३ अ.क्र.१८

| अ.नं | कामाचे नाव | प्राकलन र.रु. | एकुण प्राप्त निविदा |
|---|---|---|---|
| ०३/१८ | जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदीर पुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधूग्राम जोडणारा रस्ता) विकसीत करणे. | १४,९९,८५,९३७/- | ११ |

खालील नमुद केलेली कागदपत्रे तांत्रिक लिफाफयात सादर केलेली नसल्याचे निदर्शनास आलेलेअसल्याबाबत कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांच्या अहवालात नमूद केले आहे.

| अ.क्र. | मक्तेदाराचे नांव | तांत्रिक लिफाफयात सादर न केलेले कागदपत्रे |
|---|---|---|
| 1. | Kakad Engineers | 1.1 Eligibility criteria<br>A -Similar completed work not fulfilling PQ criteria.<br>B- Satisfactorily executed minimum quantities –<br>-Similar executedQuantities not fulfilling PQ criteria.<br>a)1. Batch Mix Plant –<br>- SCADA not seen.<br>2. Hydraulic Paver-<br>- Not satisfying the PQ criteria, SCADA not seen.<br>3. Mechanical Bituminous sprayer –<br>- - SCADA not seen.<br>4. Vibratory Roller-<br>- Not satisfying the PQ criteria, SCADA not seen.<br>5. Truck/ Tipper-<br>- Not satisfying the PQ criteria, SCADA not seen.<br>2- Affidavit, Declaration, Undertaking, Bank Certificate etc<br>- Not seen<br>2- f- EPF not seen<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 2. | M/s. T G Toradmal | Eligibility criteria<br>b) Satisfactorily executed following minimum quantities -<br>3. DBM -<br>-Similar executedQuantities not fulfilling PQ criteria.<br>a)4. Vibratory road roller<br>- Inadequate quantity not matching PQ criteria, SCADA not seen.<br>5. Static roller<br>- Inadequate quantity not matching PQ criteria<br>6. Truck / Tipper<br>-SCADA not mentioned<br>7. Motor grader - Not submitted |

| | | |
|---|---|---|
| | | 2) - Affidavit, Declaration, Undertaking, Bank Certificate etc Not seen<br>3.1.1 Technical bid: -<br>xi) Common set of deviation -NotSubmitted<br>2.4.1.<br>1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 3. | Gajanan Construction | 1.1 Eligibility criteria<br>B- 3. DBM<br>- Similar executed quantities in one single year not seen.<br>2.4.1.<br>1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 4. | M S B S Chopra | C-6. Truck / Tipper<br>SCADA not seen.<br>7. Motor Grader-<br>- Documents showing ownership not seen.<br>2) Important Condition of Contract – Affidavit, Declaration, bank Certificate etc. Not seen.<br>2.5) Declaration of the Contractor – Not Submitted<br>3.1.1 (iii) Bank Certificate – Not Submitted<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 5. | Swastik Infralogic | 5. Static Roller<br>Required- 02 owned<br>Submitted- Not Submitted<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 6. | Vinod Luthra and Associates | 1.1 Eligibility criteria<br>B- Satisfactorily executed following minimum quantities –<br>3.DBM - Not fulfiing the PQ criteria<br>4. Vibratory road roller ---<br>- Inadequate quantity and SCADA not seen.<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 7. | M/s. S. R. Thombre | B- Batch mix plant-<br>- SCADA not seen.<br>4. Vibratory road roller ---<br>- Inadequate quantity and SCADA not seen.<br>6. Truck / Tipper –<br>- SCADA not seen.<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |

| | | |
|---|---|---|
| 8. | Mahalaxmi Construction | b) Satisfactorily executed quantities<br>1.WBM+GSB+WMM-<br>2.BM - - Similar executed quantities in one single year not seen.<br>3. DBM30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>4. BC/AC 30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>a) 3.Mechanical truck-mounted or towed type bituminous pressure sprayer<br>SCADA not mentioned<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 9. | B R Goyal | 1.1 Eligibility criteria<br>Similar completed work not fulfilling PQ criteria.<br>B-Satisfactorily executed following minimum quantities –<br>1.WBM+GSB+WMM<br>- Similar executed quantities in one single year not seen.<br>2.BM - Not submitted<br>a) 1. Batch Mix Plant –<br>- Documents are not readable, SCADA not seen.<br>2. Hydraulic paver finisher –<br>- SCADA not seen.<br>3. Mechanical truck-mounted or towed type bituminous pressure sprayer- - SCADA not seen.<br>4. Vibratory road roller ---<br>- Documents are not readable, SCADA not seen.<br>5. Static roller –<br>- Not submitted<br>6. Truck / Tipper –<br>- SCADA not seen.<br>7. Motor Grader-<br>- Document not readable<br>2.4.1. 1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 10. | P D Infraproject | Eligibility criteria<br>1.WBM+GSB+WMM30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>2.BM30% Qty. of Schedule 'B'<br>-Quantities not seen.<br>3. DBM 30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>4. BC/AC 30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>a) 1. Batch Mix Plant<br>SCADA not seen. |

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| | | 2. Hydraulic paver finisher<br>SCADA not seen.<br>3. Mechanical truck-mounted or towed type bituminous pressure sprayer<br>SCADA not seen.<br>4. Vibratory road roller<br>SCADA not seen, & Need MORTH Certificate<br>5. Static roller<br>- Not seen.<br>6. Truck / Tipper<br>-SCADA not seen.<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. |
| 11. | Suyog Infrastructure | C 3. Mechanical truck-mounted or towed type bituminous pressure sprayer-<br>- Appropriate document confirming ownership not seen.<br>4. Vibratory road roller ---<br>- - Appropriate document confirming ownership not seen.<br>5. Static roller –<br>- - Appropriate document confirming ownership not seen.<br>6. Truck / Tipper –<br>- - Appropriate document confirming ownership not seen.<br>7. Motor Grader<br>-Appropriate document confirming ownership not seen.<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.<br>1.Authorized Contractor: Declaration for theelectrification work not submitted. |

उपरोक्त नुसार तांत्रिक तपासणी अहवालाचे अवलोकन केले असता, एकुण अकरा (११) निविदा प्राप्त झालेल्या असुन एकाही निविदा धारकांचे दस्तऐवज परिपुर्ण नसल्याचे निदर्शनास येत आहे.

शासन निर्णय,क्रमांक: सीएसटी/२०१७/प्र.क्र.०८/इमा-२ दिनांक २७/०९/२०१८ मधील नियम ४.५.२ मधील तरतुदीनुसार निविदा उघडणाऱ्या सक्षम अधिकाऱ्यांनी (कार्यकारी अभियंता/अधीक्षक अभियंता/शहर अभियंता) संबंधीत निविदाधारकास पात्र/अपात्र ठरविण्यापुर्वी त्यांचे बरोबर लिखित स्वरुपात पत्रव्यवहार करावा व कंत्राटदाराकडुन लिखित स्वरुपात स्पष्टीकरण घेऊन ते पडताळावे. किरकोळ व महत्व नसलेल्याअटीमुळे निविदाधारकास अपात्र करण्यात येऊ नये,अशा बाबतीत कंत्राटदारा कडुन लेखी स्पष्टीकरण घ्यावे व अटी नुसार दुरुस्त कागदपत्रे प्राप्त करुन निविदा समिती समोर ठेवुन त्याची छाननी करुन कंत्राटदाराच्या निविदा पात्रता/अपात्रते विषयी निर्णय घ्यावा. याबाबतचे सर्व अभिलेख धारिकेत व

संकेतस्थळावर ठेवावे व निविदा स्विकृतीसाठी सादर करण्याच्या प्रस्तावात या सर्व पडताळणी पध्दतीचा स्पष्ट उल्लेख करावा.अशी तरतुदआहे.

विषयांकित कामाचे पात्रतेबाबत दिनांक ०१/११/२०२५ रोजी मा.आयुक्त सो. यांच्या समवेत झालेल्या चर्चेनुसार निकोप स्पर्धा होणेचे दृष्टीने प्रथमत: वर नमुद यादीतील किरकोळ कारणास्तव अपात्र ठरणा-या निविदाधारकांना प्रथमत: लेखी स्वरुपात पुर्तता करणे बाबत लेखी/संकेतस्थळावरुन कळविणे, व त्यानुसार अपुर्ण कागदपत्रांची पुर्तता करणेकामी निविदा धारकांना दिनांक ११/११/२०२५ पावेतोची मुदत देऊन त्यानंतर पुढील नियोमोचित कार्यवाही करावी, असे समितीने सुचित केले.

त्यानुसार सविस्तर चर्चेअंती तांत्रिक कागदपत्रांच्या छाननी अहवालानुसार वरिल कामासाठी पुरेशा प्रमाणात व स्पर्धात्मक दर प्राप्त होण्याच्या दृष्टीने सदर कामासाठी तांत्रिकदृष्टया अपुर्ण कागदपत्रांसाठी प्रथमत: मक्तेदार यांना लेखी पत्र देऊन व ऑनलाईन शॉर्टफॉल देऊन पुर्तता करणेची संधी देणेआवश्यकअसल्यामुळे विभागाने नियमानुसार कार्यवाही करणेच्या सुचना निविदा समितीने दिल्या.

उपरोक्त प्रमाणे बैठकित निर्णय होऊन बैठक संपल्याचे मा.अतिरिक्तआयुक्त-२ यांनी जाहीर केले.

मा.कार्यकारी अभियंता

मा.कार्यकारी अभियंता

मा.शहर अभियंता

मा.मुख्यलेखा व वित्तअधिकारी

मा.मुख्य लेखापरिक्षक

मा.अतिरिक्तआयुक्त -२

मा.आयुक्त तथा प्रशासक सो,

03/18(F)

# नाशिक महानगरपालिका,नाशिक

सार्वजनिक बांधकाम विभाग,मुख्यालय

**दिनांक १२/११/२०२५ रोजीच्या निविदा समितीच्या बैठकिचे इतिवृत्त**

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**विषय** - निविदा सुचना क्रमांक ०३ सन २०२५-२६ मधील अ.क्र.१८ चा आर्थिक देकार उघडणेबाबत..

**संदर्भ** - १.मा.आयुक्त सो,यांचेकडील आदेश जा.क्र./आस्विस/वशि/१५६/२०१६ दिनांक १०/१०/२०१६
२.शासन निर्णय क्रमांक:सीएसटी-/२०१७/प्र.क्र.०८/इमा-२ दिनांक २७/०९/२०१८
३.निविदा सुचना क्रमांक ०३ अ.क्र.१८ सन २०२५-२०२६
४. कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांचा निविदा तपासणी अहवाल.
५. मा.अति.आयुक्त सो.(२) यांचा दालनात दि. ०१/११/२०२५ रोजीची निविदा समितीचे बैठकीचे इतिवृत्त
६. कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांचा अंतिम तपासणी अहवाल

नाशिक महानगरपालिका,सार्वजनिक बांधकाम विभागामार्फत करावयाच्या कामांची ई-निविदा सुचना क्रमांक ०३ (२०२५-२६) अन्वये अ.क्र.१८ या कामांची वर्तमानपत्रात निविदा नोटीस www.mahatender.gov.in या संकेतस्थळावर प्रसिध्द करण्यात आली होती. सदर कामासाठी प्राप्त झालेल्या निविदांची तांत्रिक कागदपत्रांची पडताळणी कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांनी करुन संदर्भ क्र.०४ व ०६ अन्वये पडताळणी अहवाल सादर केला आहे. संदर्भ क्र.०४ चा पडताळणी अहवालनुसार एकुण **अकरा (११)** निविदा प्राप्त झाल्याचे व त्यापैकी **अकरा (११)** मक्तेदाराकडुन पात्रता निकष पुर्ण केल्याचे त्यांचा पडताळणी तक्तावरुन दिसुन येत नाही. त्यावर निर्णयासाठी निविदा समितीची **दिनांक ०१/११/२०२५** रोजी बैठक पार पडली, त्यानुसार कागदपत्रांचा पुर्ततेसाठी शॉर्टफॉल देऊन पुर्तता करुन घेणेबाबत निर्णय घेणेत आला. सदर निर्णयानुसार **दिनांक ११/११/२०२५** रोजी पावेतो ऑनलाईन कागदपत्रे सादर करणेकामी निविदा कक्षाकडुन शॉर्टफॉल देण्यात आला.

संदर्भ क्र.०६ अन्वये निविदा कक्षाकडुन पुर्नपडताळणी अहवाल प्राप्त झाला आहे. त्यावर **अकरा (११)** निविदा धारकांपैकी **दहा (१०)** निविदा धारकांनी शॉर्टफॉल संबंधीचे दस्त सादर केले आहेत.

वरील प्रमाणे सार्वजनिक बांधकाम विभागाकडील कामासाठी प्राप्त निविदांबाबत निर्णय घेणेसाठी दिनांक १२/११/२०२५ रोजी सकाळी ११.०० वाजता मा.अतिरिक्त आयुक्त (२) सो,यांचे दालनात निविदा समितीची बैठक संपन्न झाली सदर बैठकिस खालील सदस्य उपस्थित होते.

## निविदा सुचना क्रमांक ०३ अ.क्र.१८

| अ.नं | कामाचे नाव | प्राकलन र.रु. | एकुण प्राप्त निविदा |
|---|---|---|---|
| ०३/१८ | जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदीर पुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधूग्राम जोडणारा रस्ता) विकसीत करणे. | १४,९९,८५,९३७/- | ११ |

खालील नमुद केलेली कागदपत्रे तांत्रिक लिफाफयात सादर केलेली नसल्याचे निदर्शनास आलेले आहे.

| अ.क्र. | मक्तेदाराचे नांव | तांत्रिक लिफाफयात सादर न केलेले कागदपत्रे | शेरा |
|---|---|---|---|
| 1. | Kakad Engineers | 1.1 Eligibility criteria<br>A -Similar completed work not fulfilling PQ criteria.<br>B- Satisfactorily executed minimum quantities –<br>-Similar executedQuantities not fulfilling PQ criteria.<br>a)1. Batch Mix Plant –<br>- SCADA not seen.<br>2. Hydraulic Paver-<br>- Not satisfying the PQ criteria, SCADA not seen.<br>3. Mechanical Bituminous sprayer –<br>- - SCADA not seen.<br>4. Vibratory Roller-<br>- Not satisfying the PQ criteria, SCADA not seen.<br>5. Truck/ Tipper-<br>- Not satisfying the PQ criteria, SCADA not seen.<br>2- Affidavit, Declaration, Undertaking, Bank Certificate etc<br>- Not seen<br>2- f- EPF not seen<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती कागदपत्रे सादर केलेले आहेत.<br>परंतु निविदा अटीशर्तीनुसार similar works & quantities Certificate व मशिनरी बाबत स्वमालकिचे कागदपत्र सादर केलेले नाही<br>**अपात्र** |

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| 2. | M/s. T G Toradmal | Eligibility criteria<br>b) Satisfactorily executed following minimum quantities -<br>3. DBM -<br>-Similar executedQuantities not fulfilling PQ criteria.<br>a)4. Vibratory road roller<br>- Inadequate quantity not matching PQ criteria, SCADA not seen.<br>5. Static roller<br>- Inadequate quantity not matching PQ criteria<br>6. Truck / Tipper<br>-SCADA not mentioned<br>7. Motor grader - Not submitted<br>2) - Affidavit, Declaration, Undertaking, Bank Certificate etc Not seen<br>3.1.1 Technical bid: -<br>xi) Common set of deviation - NotSubmitted<br>2.4.1.<br>1.Authorized Contractor: Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती कोणतेही कागदपत्रे सादर केलेले नाही<br>**अपात्र** |
| 3. | Gajanan Construction | 1.1 Eligibility criteria<br>B- 3. DBM<br>- Similar executed quantities in one single year not seen.<br>2.4.1.<br>1.Authorized Contractor: Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती कागदपत्रे सादर केलेले आहेत.<br>परंतु निविदा अटीशर्तीनुसार Quantities Certificate बाबतचे कागदपत्र सादर केलेले नाही<br>**अपात्र** |
| 4. | M S B S Chopra | C-6. Truck / Tipper SCADA not seen.<br>7. Motor Grader-<br>- Documents showing ownership not seen.<br>2) Important Condition of Contract – Affidavit, Declaration, bank Certificate etc. Not seen.<br>2.5) Declaration of the Contractor – Not Submitted<br>3.1.1 (iii) Bank Certificate – Not Submitted<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती सर्व कागदपत्रे सादर केलेले आहे<br>**पात्र** |

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| 5. | Swastik Infralogic | 5. Static Roller<br>Required- 02 owned<br>Submitted- Not Submitted<br>2.4.1.1.Authorized Contractor:<br>Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती सर्व कागदपत्रे सादर केलेले आहे<br>**पात्र** |
| 6. | Vinod Luthra and Associates | 1.1 Eligibility criteria<br>B- Satisfactorily executed following minimum quantities –<br>3.DBM - Not fulfiing the PQ criteria<br>4. Vibratory road roller ---<br>- Inadequate quantity and SCADA not seen.<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.1.Authorized Contractor:<br>Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती कागदपत्रे सादर केलेले आहेत.<br>परंतु निविदा अटीशर्तीनुसार Quantities Certificate बाबतचे कागदपत्र सादर केलेले नाही<br>**अपात्र** |
| 7. | M/s. S. R. Thombre | B- Batch mix plant-<br>- SCADA not seen.<br>4. Vibratory road roller ---<br>- Inadequate quantity and SCADA not seen.<br>6. Truck / Tipper –<br>- SCADA not seen.<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.1.Authorized Contractor:<br>Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती सर्व कागदपत्रे सादर केलेले आहे<br>**पात्र** |
| 8. | Mahalaxmi Construction | b) Satisfactorily executed quantities<br>1.WBM+GSB+WMM-<br>2.BM - - Similar executed quantities in one single year not seen.<br>3. DBM30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>4. BC/AC 30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>a) 3.Mechanical truck-mounted or towed type bituminous pressure sprayer<br>SCADA not mentioned<br>2. Annexture, Declaration, Affidavit etc | निविदाधारक यांनी शॉर्टफॉल अंती सर्व कागदपत्रे सादर केलेले आहे<br>**पात्र** |

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| | | not seen<br>2.4.1.1.Authorized Contractor:<br>Declaration for the electrification work not submitted. | |
| 9. | B R Goyal | 1.1 Eligibility criteria<br>Similar completed work not fulfilling PQ criteria.<br>B-Satisfactorily executed following minimum quantities –<br>1.WBM+GSB+WMM<br>- Similar executed quantities in one single year not seen.<br>2.BM - Not submitted<br>a) 1. Batch Mix Plant –<br>- Documents are not readable, SCADA not seen.<br>2. Hydraulic paver finisher –<br>- SCADA not seen.<br>3. Mechanical truck-mounted or towed type bituminous pressure sprayer- -<br>SCADA not seen.<br>4. Vibratory road roller ---<br>- Documents are not readable, SCADA not seen.<br>5. Static roller –<br>- Not submitted<br>6. Truck / Tipper –<br>- SCADA not seen.<br>7. Motor Grader-<br>- Document not readable<br>2.4.1. 1.Authorized Contractor:<br>Declaration for the electrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती कागदपत्रे सादर केलेले आहेत.<br>परंतु निविदा अटीशर्तीनुसार Quantities Certificate बाबतचे कागदपत्र सादर केलेले नाही<br>**अपात्र** |
| 10. | P D Infraproject | Eligibility criteria<br>1.WBM+GSB+WMM30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>2.BM30% Qty. of Schedule 'B'<br>-Quantities not seen.<br>3. DBM 30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>4. BC/AC 30% Qty. of Schedule 'B'<br>- Similar executed quantities in one single year not seen.<br>a) 1. Batch Mix Plant<br>SCADA not seen. | निविदाधारक यांनी शॉर्टफॉल अंती सर्व कागदपत्रे सादर केलेले आहे<br>**पात्र** |

| | | | |
|---|---|---|---|
| | | 2. Hydraulic paver finisher<br>SCADA not seen.<br>3. Mechanical truck-mounted or towed type bituminous pressure sprayer<br>SCADA not seen.<br>4. Vibratory road roller<br>SCADA not seen, & Need MORTH Certificate<br>5. Static roller<br>- Not seen.<br>6. Truck / Tipper<br>-SCADA not seen.<br>2.4.1.1.Authorized Contractor: Declaration for the electrification work not submitted. | |
| 11. | Suyog Infrastructure | C 3. Mechanical truck-mounted or towed type bituminous pressure sprayer-<br>- Appropriate document confirming ownership not seen.<br>4. Vibratory road roller ---<br>- - Appropriate document confirming ownership not seen.<br>5. Static roller –<br>- - Appropriate document confirming ownership not seen.<br>6. Truck / Tipper –<br>- - Appropriate document confirming ownership not seen.<br>7. Motor Grader<br>-Appropriate document confirming ownership not seen.<br>2. Annexture, Declaration, Affidavit etc not seen<br>2.4.1.<br>1.Authorized Contractor: Declaration for theelectrification work not submitted. | निविदाधारक यांनी शॉर्टफॉल अंती कागदपत्रे सादर केलेले आहेत.<br>परंतु निविदा अटीशर्तीनुसार Mechanical truck, Vibratory road roller, Truck / Tipper बाबतचे स्काडा बाबतचे कागदपत्र सादर केलेले नाही<br>**अपात्र** |

उपरोक्त नुसार तांत्रिक तपासणी अहवालाचे अवलोकन केले असता, एकुण **अकरा (११)** निविदा प्राप्त असुन त्यापैकी **पाच (०५)** निविदाधारकांचे दस्तऐवज पुर्ण असल्याचे निदर्शनास येत आहे.

कार्यकारी अभियंता, मध्यवर्ती निविदा कक्ष यांनी केलेल्या तांत्रिक कागदपत्रांचा छाननी अहवाल व शिफारशीची पडताळणी केली असुन सविस्तर चर्चेअंती तांत्रिक कागदपत्रांच्या छाननी अहवाला नुसार वरिल

कामांसाठी तांत्रिकदृष्टया पात्र ठरलेल्या निविदांसंदर्भात नियमानुसार पुढील कार्यवाही करणेस निविदा समिती शिफारस करित आहे.

उपरोक्त प्रमाणे बैठकित निर्णय होऊन बैठक संपल्याचे मा.अतिरिक्त आयुक्त (२) यांनी जाहीर केले.

मा.कार्यकारी अभियंता

मा.कार्यकारी अभियंता

मा.शहर अभियंता

मा.मुख्यलेखा व वित्तअधिकारी

मा.मुख्य लेखापरिक्षक

मा.अतिरिक्तआयुक्त -२

मा.आयुक्त तथा प्रशासक सो,

(33)

eProcurement System Government of Maharashtra
Created By: SANDESH SHINDE
Created Date/Time: 29-Nov-2025 01:53 PM
Tender Title: Development of road from Janardan Swami Math (Ch.Sambhaji Nagar Road) to Laxminarayan Mandir Bridge toDream City Chowk (Ghat Approach/Sadhugram Connect)
Tender ID: 2025_NMC_1221768_18

Tender Inviting Authority: Executive Engineer

Name of Work: Development of road from Janardan Swami Math (Ch.Sambhaji Nagar Road) to Laxminarayan Mandir Bridge toDream City Chowk (Ghat Approach/Sadhugram Connect)

Contract No: NMC/E-tender Cell/03/18/2025-26

SCHEDULE OF WORK / ITEM(S)

| Sl.No | Bidder Name | Estimated Rate | Quoted Percentage | Quoted Rate in Figures and Words (Iteration 0) | | |
|---|---|---|---|---|---|---|
| | | | | Rate | Amount | |
| 1.00 | M S B S CHOPRA AND ASSOCIATES (GSTN-27AANFB1894N1ZR) BID ID -6931182 | 124725011.000 | -9.000 | **113499760.010** | **Eleven Crore Thirty Four Lakh Ninty Nine Thousand Seven Hundred and Sixty** | |
| 2.00 | M/S.S.R.THOMBRE (GSTN-27ADZFS9837R1ZD) BID ID -6931932 | 124725011.000 | -4.510 | **119099913.004** | **Eleven Crore Ninty Lakh Ninty Nine Thousand Nine Hundred and Thirteen** | |
| 3.00 | P. D. Infraproject Pvt Ltd (GSTN-27AAFCP0887N1ZS) BID ID -ò932349 | 124725011.000 | -15.320 | **105617139.315** | **Ten Crore Fifty Six Lakh Seventeen Thousand One Hundred and Thirty Nine** | |
| 4.00 | SWASTIK INFRALOGICS PRIVATE LIMITED (GSTN-NA) BID ID -6931235 | 124725011.000 | -16.500 | **104145384.185** | **Ten Crore Fourty One Lakh Fourty Five Thousand Three Hundred and Eighty Four** | |
| 5.00 | Mahalaxmi Construction (GSTN-NA) BID ID -6932287 | 124725011.000 | -14.310 | **106876861.926** | **Ten Crore Sixty Eight Lakh Seventy Six Thousand Eight Hundred and Sixty One** | |
| | | | | | | |
| | | | | | | |
| Lowest Amount Quoted BY: SWASTIK INFRALOGICS PRIVATE LIMITED(104145384.185) | | | | | | |

Executive Engineer
E-Tender Cell
Nashik Municipal Corporation, Nashik

**BOQ Summary Details**

**Tender Title: Development of road from Janardan Swami Math (Ch.Sambhaji Nagar Road) to Laxminarayan Mandir Bridge toDream City Chowk (Ghat Approach/Sadhugram Connect)**

**Tender ID: 2025_NMC_1221768_18**

| Sheet Name | Sl.No | Bidder Name | Amount | Bid Rank |
|---|---|---|---|---|
| BoQ1 | 1 | SWASTIK INFRALOGICS PRIVATE LIMITED (BID ID -6931235) | 104145384.185 | L1 |
| | 2 | P. D. Infraproject Pvt Ltd (BID ID -6932349) | 105617139.315 | L2 |
| | 3 | Mahalaxmi Construction (BID ID -6932287) | 106876861.926 | L3 |
| | 4 | M S B S CHOPRA AND ASSOCIATES (BID ID -6931182) | 113499760.010 | L4 |
| | 5 | M/S.S.R.THOMBRE (BID ID -6931932) | 119099913.004 | L5 |

# NASHIK MUNICIPAL CORPORATION::NASHIK
## TENDER PROCESS REPORT
## AS ON 14.12.2025

## File/Work Name - Development of road from Jananrdhan Swami Math ( Chatrapati Sambhaji Nagar road ) to Laxminarayan Mandir Bride to Dream City Chowk ( Ghat Approach / Sadhugram connect)

**Nature of the Work-CAPITAL EXPENDITURE** **Prabhag No. GNR**
**Estimate No.-1820016213 NMC Tender No.-1221768-18 ERP Tender No.-20251293236 Op Date-25.09.2025**

**Line Item No.- 10**

| STATUS | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Date | | | 29.11.2025 | 25.09.2025 | 04.09.2025 | 16.09.2025 |
| Spill Amount | | | | | | |

**Budget/Comp Code** 4097 **ERP BUDGET CODE** S420409707

**Account Head-**

| | Approving Body | Approval No. | Approval Date | Approval Amount |
|---|---|---|---|---|
| Technical Approval | Supretendent Eng[HOD] | 18 | 16.09.2025 | 149,985,937.00 |
| Admin Approval | GB Resol No | 321 | 04.09.2025 | 149,985,937.00 |
| Financial Approval | | | | |

| | Contractor No. | Contractor Name | Bidding Amount | 1st Negotiation | 2nd Negotiation | Final Tender Amount |
|---|---|---|---|---|---|---|
| | 2902330 | SWASTIK INFRALOGICS PVT LTD | 104,145,384.18 | 104,145,384.18 | 0.00 | 125,701,976.73 |

**Contractor Selected for Tender - SWASTIK INFRALOGICS PVT LTD**
**PAN- AANCS5446E** **GST- 27AANCS5446E1Z3**

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# NASHIK MUNICIPAL CORPORATION::NASHIK
## TENDER PROCESS REPORT
## AS ON 14.12.2025

| Sno. | Particulars | Amount in Rs. |
|---|---|---|
| 1 | Budgetary Provision (2025-2026) | 32775800,000.0 |
| 2 | Current Estimate | 149,985,937.00 |
| 3 | Royalty Amount | 2,810,423.40 |
| 4 | GST Amount | 22,450,502.04 |
| 5 | Architecture Fee Amount | 0.00 |
| 6 | Net Estimate (2 - (3 + 4 + 5)) | 124,725,011.56 |
| 7 | Tender % | 16.5000 % BELOW |
| 8 | Tender Amount(Excl. Royalty + Final GST + Arch. Fee) | 104,145,384.18 |
| 9 | Royalty Amount | 2,810,423.40 |
| 10 | Final GST Amount | 18,746,169.15 |
| 11 | Architecture Fee Amount | 0.00 |
| 12 | Final Tender Amt (Incl. Royalty + Final GST + Arch. Fee) | 125,701,976.73 |
| 13 | Outstanding Tender Amount | 5,239,046,489.00 |
| 14 | Total Outstanding (12 + 13) | 5,364,748,465.73 |
| 15 | Current Year Payments | 0.00 |
| 16 | Balance Budget (1-(14+15)) | 27411051,534.27 |

Junior Engineer

Deputy Engineer

Executive Engineer

City Engineer/Superintdent Engineer/H.O.D

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Junior Accountant / Deputy Accountant

Senior Accountant

Deputy C.A.O.

C.A.O.

दिनांक :  /  /२०२५

सविनय सादर,

**विषय** : जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता)

**संदर्भ** : १) मा.महासभा ठराव क्रमांक.३२१ दिनांक. ०४ /०९ /२०२५
२) ई- निविदा सु.क्र.०३/१८ (सन २०२५-२६)
३) नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचाकडील प्रशासकीय मान्यता आदेश दि.१४/०९/२०२५.

नाशिक-त्र्यंबकेश्वर येथे सन-२०२७ होणारा सिंहस्थ कुंभमेळा पुर्व तयारी दृष्टीकोनातुन वाहतुक व्यवस्था सुधारणे आदी दृष्टीकोनातुन रस्त्याचा कामाची यादी तयार करुन त्यानुसार निधी मागणीसाठी प्रस्ताव सादर करण्यास मा.महासभा ठराव क्र.३२१ दि.०४/०९/२०२५ अन्वये मान्यता प्राप्त झाली आहे. त्यापुर्वी नाशिक महानगरपालिके मार्फत दि.०२/०७/२०२४ अन्वये र.रु.१५१७२.४२ कोटी रक्कमेचा आराखडा मंजुरीसाठी पाठविण्यात आला होता. त्याचप्रमाणे दि.०४/०६/२०२५, दि.१७/०७/२०२५, दि.१०/०७/२०२५, दि.०९/०९/२०२५, दि.०३/१०/२०२५, दि.२४/१०/२०२५ अन्वये वारंवार निधी मंजुरीसाठी पाठपुरावा करण्यात आला. त्याचप्रमाणे पोलिस विभागाने त्याचाकडील दि.२८/०७/२०२५ व दि.०९/०९/२०२५ चा पत्रान्वये प्रधान्यक्रम कळविला आहे. त्यास अनुसरुन नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणा मार्फत दि.१४/०९/२०२५ व दि.२२/०९/२०२५ अन्वये प्रशासकीय मान्यता प्राप्त झालेली आहे. तसेच नं.NMC/PWD/TS/१८/२०२५ दिनांक १६/०९/२०२५ अन्वये मा.शहर अभियंता सो, यांनी तांत्रिक मान्यता दिलेली आहे.

सदर कामाचे स्थापत्य विषयक **र.रु.१४,९९,८५,९३७/-** जीएसटी, टेस्टींग चार्जेस, रॉयल्टी चार्जेस सह (**अक्षरी** - चौदा कोटी नव्याण्णव लक्ष पंच्याऐंशी हजार नऊशे सदोवतीस मात्र ) इतके झालेले आहे.

त्यानुसार सदर कामाची **ई-निविदा सुचना क्र.०३/१८** (२०२५-२६) दि. २१/०९/२०२५ अन्वये दै.लोकमत, दै.दिव्य मराठी, दै.सकाळ, दै.लोकमत टाईम्स, दै.टाईम्स ऑफ इंडिया, दै.मिन्ट टाईम्स, दै.हिदुस्तान टाईम्स, दै.नवभारत, दै.प्रात:काल, दै.फ्रिप्रेस जरनल, या वर्तमान पत्रात निविदा प्रसिध्द करुन ऑनलाईन निविदा मागविल्या असता अंतिम मुदतीत एकुण अकरा (११) निविदाधारकांनी निविदा सादर केलेल्या आहेत. सदर प्राप्त निविदांच्या तांत्रिक कागदपत्रांची छाननी केली असता पाच (०५) निविदा तांत्रिकदृष्ट्या पात्र ठरल्या असून दि.२९/११/२०२५ रोजी आर्थिक देकार उघडण्यात आले आहेत. त्यानुसार **मक्तेदार मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** यांची निविदा प्राकलन दरापेक्षा **१६.५०० % कमी** दराची तुलनात्मकदृष्ट्या सर्वात कमी दराची प्राप्त झालेली आहे. असा अहवाल मध्यवर्ती निविदा कक्षाकडुन प्राप्त झाला असुन तो सोबत जोडला आहे.

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**मक्तेदार मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** यांना लेखी पत्र देऊन वाटाघाटी व दरपृथ्थकरण सादर करणेबाबत विचारणा केली असता, मक्तेदार यांनी लेखी पत्र देऊन सदरचे काम प्राकलन दरापेक्षा **१६.५०० % कमी** दर रास्त असुन त्याच दराने प्रस्ताव मंजुर करणेची विनंती केली आहे. तसेच मक्तेदार यांनी अतिरिक्त सुरक्षा अनामत रक्कमेपोटी बॅक ऑफ इंडिया या बँकेची FD. No.011656110008239 दि.०५/१२/२०२५ र.रु.१,३५,००,०००/- सादर केलेली आहे. सोबत न्युनतम मक्तेदार यांची तांत्रिक कागदपत्रे जोडले आहे.

विषयांधीन कामास संदर्भ क्र.३ अन्वये नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाची प्रशासकीय मंजुरी प्राप्त झाली असुन, प्रशासकीय मान्यता **रक्कम रु.१५.०० कोटी** आहे. शासन निधीतुन कामासाठी उपलब्ध तरतुदी मधुन सदरचा खर्च करण्यात येईल.

सदर प्रशासकीय मान्यतेनुसार न्युनतम निविदाधारक **मक्तेदार मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** यांचेकडून प्राकलन दरापेक्षा **१६.५०० % कमी** दराने र.रु.१०,४१,४५,३८४/- अधिक (र.रु.१,८७,४६,१६९/- जी.एस.टी. + र.रु.२८,१०,४२३/- रॉयल्टी व टेस्टींग चार्जेस सह) अशी **एकुण र.रु.१२,५७,०१,९७७** /- (अक्षरी र.रु.बारा कोटी सत्तावन्न लाख एक हजार नऊशे सत्याहत्तर मात्र ) पावेतोच्या खर्चास मंजुरी मिळणेस व करारनामा करणेस स्थायी समितीच्या मंजुरीसाठी सोबत डॉकेट तयार करुन जोडले असून मान्य असल्यास त्यावर स्वाक्षरी होणेस विनंती.

(रविंद्र बागुल)
कार्यकारी अभियंता (बांध)

(संजय अग्रवाल)
मा. शहर अभियंता

मुख्य लेखा व वित्त अधिकारी

नाशिक महानगरपालिका
लेखा विभाग
जावक क्र.- ७१२
दिनांक - १२/१/२०२५
स्वाक्षरी -

## सिंहस्थ शासन निधी

**विषय**:- जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रिम सिटी चौक (घाटाकडे जाणारा रस्ता/साधुग्राम जोडणारा रस्ता)

(प्राकलन र.रु. १४,९९,८५,९३७/-)

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(नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडीलदि.१४.०९.२०२५ रोजीच्या प्र.मा. आदेशातील **अ.क्र. १९** चे काम)

**सविनय सादर,**

१. सद्यस्थितीत नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या आदेशानुसार प्रशासकीय मान्यता मिळाली असल्याने "सिहंस्थ कुंभमेळा कामे २०२७" संगणक कोड क्र. "४०९७" या लेखाशिर्षातून खर्च करणेकामी कार्यकारी विभागाने आवश्यक ती उचित कार्यवाही करावी.

२.नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या प्रशासकीय मान्यता आदेशातील नमुद **अ. क्र. १९** नुसार सदर कामास **र.रु. १५.००** कोटीच्या खर्चास प्रशासकीय मान्यता देणेत आलेली आहे त्यानुसार प्राप्त प्रशासकीय मान्यतेनुसार शासन निधीतुन कामासाठी उपलब्ध तरतुदीच्या मर्यादेत सदर कामाचा खर्च करण्याची जबाबदारी कार्यकारी विभागाची राहील.

३. कार्यकारी विभागाने नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचेकडील दि. १४.०९.२०२५ रोजीच्या प्रशासकीय मान्यता आदेशातील अटी व शर्ती क्र. १ ते ३० चे पालन करणे आवश्यक राहील.

४. मा.आयुक्त यांचे परिपत्रक जा.क्र./आस्वीस /वशि / ४८७ / २०१९ दि.२४/१२/२०१९,जा.क्र./मनपा/ लेखा /२२०/२०२१ दि. २४/०२/२०२१ व परिपत्रक जा.क्र./आस्वीस/वशि/१११/२०२४ दि.६/६/२०२४ अन्वये कार्यवाही करण्याची करण्याची विभागाने नोंद घ्यावी.

५. सदर कामाची तांत्रिक मान्यता सार्व. बांधकाम विभागाने **र.रु. १४,९९,८५,९३७/-** इतक्या रकमेची सक्षम प्राधिकरणाने प्रमाणित करून दिलेली आहे.

६. विषयांकित कामाचे प्राकलन र.रु. १४,९९,८५,९३७/- निविदा मागविली असता अंतिम मुदतीत ११ निविदाधारकांनी निविदा सादर केलेल्या आहेत सदर प्राप्त निविदांच्या तांत्रिक कागदपत्रांची छाननी केली असता ५ निविदा तांत्रिकदृष्टया पात्र ठरल्या असुन त्यातील L-१ **मे.स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि., नवी मुंबई** यांची निविदा प्राकलन दरापेक्षा **१६.५००% कमी दराने** प्राप्त झाल्याचे विभागाने नमुद केले आहे.

७. प्रस्तावित प्रकरणी प्राकलन रक्कमेपेक्षा निविदा रक्कम **१६.५००% कमी** असल्याकारणाने बँक ऑफ इंडिया या बँकेची अतिरिक्त सुरक्षा अनामत B.G.NO.०११६५६११०००८२३९ दि.०५.१२.२०२५ अन्वये र.रु.१,३५,००,०००/- समवेत सादर केलेली आहे.

८. सदर कामाबाबत मक्तेदाराने मुद्रांक शुल्क (stamp duty) भरलेची पावती सादर केल्यानंतरच कार्यादेश देण्याची कार्यवाही विभागाने करावी.

९. निविदा अटी/शर्ती मध्ये केलेल्या कामाचे पूर्वीचे व कामानंतरचे जिओ टॅगिंग फोटो जोडण्यात यावे, देयक अदायगीचे वेळेस फोटो सादर करावे व ते कार्यकारी विभागाच्या उपअभियंता यांनी प्रमाणित करावे.

१०. आगामी अंदाजपत्रकात "सिहंस्थ कुंभमेळा कामे २०२७" संगणक कोड क्र. "४०९७" या लेखाशिर्षामधुन हाती घेण्यात येणाऱ्या कामांचा समावेश करून त्यासाठी मनपा हिस्स्यापोटी येणाऱ्या खर्चासाठी तरतूद करणेची दक्षता कार्यकारी विभागाने घ्यावी.

११.नाशिक मनपा मार्फत सिंहस्थच्या दृष्टीने विविध प्रशासकीय विभागा अंतर्गत केंद्र व राज्य योजनांमध्ये जसे की अमृत २.० (मलनि:स्सारण व पाणीपुरवठा), UCF इ. अंतर्गत निधी उपलब्ध होण्याच्या अनुषंगाने, महत्वाचे विविध भांडवली कामांचे प्रकल्प हाती घेण्यात आले आहेत. त्यामुळे नाशिक मनपा हिस्साकरीता करावा लागणारा निधी हा म्युनिसिपल बॉण्डद्वारे रु. २००.०० कोटी व ग्रीन बॉण्डद्वारे र.रु. २००.०० कोटी असे एकूण र.रु. ४००.०० कोटी व उर्वरित मनपा स्वनिधी मधून उभारण्याची कार्यवाही सुरु आहे. सदर बॉण्ड उभारणी करतांना विशिष्ठ प्रकल्प हाती घेणे आवश्यक आहे. त्यामुळे सिंहस्थ आराखडा २०२७ च्या अंतर्गत, नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत नाशिक मनपास विविध विकास कामांसाठी प्राप्त होणाऱ्या एकूण निधी हा, सिंहस्थच्या दृष्टीने आवश्यक असलेल्या

प्रकल्पांमध्ये नाशिक मनपाने केलेला खर्च हा कामनिहाय हिस्सा न पकडता, एकत्रितरित्या मनपा हिस्सा म्हणून समायोजित करणे आवश्यक आहे याबाबत वरिष्ठ अधिकाऱ्यांचे शासन स्तरावर विचारविनिमय चालू आहे.

उपरोक्त प्रमाणे विभागाने प्रस्तावित व प्रमाणित केल्यानुसार मक्तेदार **मे.स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि., नवी मुंबई** यांची निविदा प्राकलन दरापेक्षा **१६.५००% कमी दराने र.रु.१२,५७,०१,९७७/-** (अक्षरी र.रु.बारा कोटी सत्तावन्न लक्ष एक हजार नऊशे सत्याहत्तर मात्र) इतक्या रक्कमेपर्यंत काम करुन घेणेस व करारनामा करणेस महाराष्ट्र महानगरपालिका अधिनियम कलम ७३ (क) अन्वये वित्तीय मान्यता मा.स्थायी समितीची घेण्यास हरकत नाही असे लेखा विभागाचे मत आहे. नस्ती पुढील कार्यवाहीस्तव लेखापरिक्षण विभागास पाठविण्यास सादर.

व.लेखापाल (एच.आर.वर्मा)-

प्र.उपमुख्यलेखाधिकारी (साहेबराव पाटील )-

मा.मु.ले.व वित्त अधिकारी सो. (दत्तात्रय झा.पाथरूट ) -

मा.मुलेप

नाशिक महानगरपालिका
लेखा विभाग
जावक क्र.- १७९९
दिनांक - २२/११/२०२४
स्वाक्षरी -

(41)

नाशिक मनपा हद्दीतील जनार्दन स्वामी मठ छ. संभाजी रोड ते लक्ष्मी नारायण मंदिर पुलते ड्रीमसिटी चौक पावेतो (घाटाकडे जाणरा रस्ता/साधुग्राम पोहोच रस्ता ) साधुग्राम जोडणारा रस्ता विकसीत करणे निविदा दर मान्यतेचा प्रस्ताव आहे.

| | | |
|---|---|---|
| 1 | कामाचे नांव | नाशिक मनपा हद्दीतील जनार्दन स्वामी मठ छ. संभाजी रोड ते लक्ष्मी नारायण मंदिर पुलते ड्रीमसिटी चौक पावेतो (घाटाकडे जाणरा रस्ता/साधुग्राम पोहोच रस्ता ) साधुग्राम जोडणारा रस्ता विकसीत करणे प्राकलन र. रू. 14,99,85,937/- |
| 2 | प्रशासकिय मान्यता | मा. महसभा ठ. क्र. 321 दि. 04/09/2025 अन्वये प्रशासकिय मान्यता |
| 3 | तांत्रिक मान्यता | city Engineer |
| 4 | लेखाशिर्ष | सिहंस्थ कुंभमेळा 2027 (संगणक कोड 24097) |
| 5 | निविदा/दरपत्रक प्रकार | ई निविदा र. रू. 22,19,87,694/- |
| 6 | जाहिरात (वृत्तपत्र व दिनांक) | निविदा प्रसिध्द दिनांक 25/09/2025 दै. सकाळ,सामना, नवाकाळ, प्रिप्रेस व ऑनलाईन |
| 7 | निविदा विक्री | दिनांक 25/09/2025 ते 17/1/2025 |
| 8 | निविदा उघडल्याचा दि. | दिनांक :- 11/11/2025 |
| | प्राप्त निविदा | अकरा (11) |

1) दिनांक 5/09/2025 रोजीच्या मागविण्यात आलेल्या निविदेत मुदतीत अकरा (11) निविदे पैकी पात्र ठरविण्यात आलेल्या पाच निविदेपैकी मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.ली. नवी मुंबई यांची प्राकलन रक्कम रू. 14,99,85,937/-पेक्षा 16.500% कमी इतकी न्युनतम दराची निविदा प्राप्त झाली आहे.

2) प्राप्त झालेले निविदा दर बाजारभावाशी सुसंगत असल्याचे विभागाने प्रमाणीत करणे आवश्यक आहे.

3) निविदा कमी दराची प्राप्त झाली असल्याने विभागाने कामाच्या गुणवत्ता दर्जा बाबत दक्षात घेण्यात यावी. कमी दराचे दर पृथ्थ:करण घेणे आवश्यक आहे.

4) आर्थिक तरतुदी बाबत लेखा व वित्त विभागाने पृष्ठ क्र. टी- वर अभिप्राय दिला आहे.

5) उपलब्ध असलेल्या तरतुदीपेक्षा जादा खर्चाचा प्रस्ताव असल्याने सदर कामास कामास पुरेसा निधी उपलब्ध करण्याची जबाबादारी विभागाची राहिल. आवश्यकता असल्यास सक्षम मान्यता घेण्यात यावी.

6) प्रस्तावित कामाची तांत्रिक व्यवहार्यता, दरांची अचुकता (शासन मान्य नियमांनुसार) अंदाजपत्रकीय तरतुद, राबविण्यात आलेली निविदा पध्दती, निविदेत नमुद करण्यात आलेल्या अटी-शर्ती व निधिची उपलब्धता इत्यादी बाबींची संपुर्ण जबाबदारी विभागाची राहिल.

7) मा. आयुक्त सो. यांचे जा. क्र. /मनपा/लेखा/487/2019 दि. 29/12/2019 व जा. क्र. /मनपा / लेखा / 111 / 2024 दि. 06/06/2024 रोजीच्या आदेशान्वये कार्यावाही अनुसरण्यात यावी.

प्राप्त झालेली मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.ली. नवी मुंबई यांची प्राकलन रक्कम रू. 14,99,85,937/-पेक्षा 16.500% कमी इतक्या न्युनतम दराची निविदा सक्षम प्राधिकरणाच्या वित्तिय मान्यतेने पुढील उचित कार्यवाही करणेस पुढील आदेशार्थ सादर .

व. ले. प. (रामु पडोळ )

उप मु.ले. प.(प.) ( किरण धारणकर)

मा.मुख्यलेखापरिक्षक (बी. जे. गायकवाड सो)

विषयाधीन प्रस्तावास लेखा व लेखापरिक्षण विभागाची मान्यता, तपासणी झाली आहे. मक्तेदार व मक्तेदाराचा दर मंजुरी तसेच करारनामा करणेस मंजुरीसाठी मा. स्थायी समितीची मंजुरी आवश्यक असुन यासाठी मान्यतेसाठी सादर.

मा. शहर अभियंतासो

मा. अति. आयुक्त सो

मा. आयुक्त सो

A

भारतीय गैर-न्यायिक

भारत INDIA

रु. 500 FIVE HUNDRED RUPEES

पाँच सौ रुपये Rs. 500

सत्यमेव जयते

INDIA NON JUDICIAL

महाराष्ट्र MAHARASHTRA ◑ 2025 ◑ DN 763593

10 DEC 2025

**AGREEMENT**

**For**

# Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

Between

**NASHIK MUNICIPAL CORPORATION (NMC)**

Tilak Wadi, Jejurkar Wadi, Sharanpur, Nashik, Maharashtra 422002

and

**M/s.Swastik Infralogics Pvt. Ltd. Navi, Mumbai**

SWASTIK INFRALOGICS PRIVATE LIMITED

जोडपत्र क्र.2

| | |
|---|---|
| दस्ताचा प्रकार/अनुच्छेद | टेंडर |
| दस्त नोंदणी करणार आहात का ? | - |
| नोंदणी होणार असल्यास दुय्यम निबंधक कार्यालयाचे नाव | - |
| मिळकतीचे वर्णन | - |
| मुद्रांक विकत घेणाऱ्याचे नाव | स्वस्तिक इन्फ्रॉलॉजिकल प्रा.लि. ५ प्रोसिस अदणायक सवन स्टोटेजस वाशी नवी मुंबई |
| दुसऱ्या पक्षकारांचे नाव | म.न.पा. नाशिक |
| हस्ते असल्यास त्याचा नाव व पत्ता | अनिल दिगंबर वर्गे मानाजीनगर नर पुणे |
| मुद्रांक शुल्क रक्कम | ५००/-(५००००) |
| मुद्रांक विक्री नोंद वही क्रमांक व दिनांक | २२६०६ - १५/१२/२०२५ |
| मुद्रांक विकत घेणार्याची सही | |
| परवानाधारक मुद्रांक विक्रेत्यांची सही व परवाना क्रमांक तसेच मुद्रांक विक्रीचे ठिकाण/पत्ता | संजय मुरलीधर गांगुर्डे (मुद्रांक विक्रेता) परवाना क्र.83/2001, शिवाजीरोड, सि.बी.एस. नाशिक |

SWASTIK INFRALOGICS PRIVATE LIMITED

AGREEMENT

This AGREEMENT (hereinafter called "the **Agreement**") is made on the 12 day of the month of December, 2025, between, on the one hand, the **Nashik Municipal Corporation (NMC)** acting through **Executive Engineer, Nashik Municipal Corporation** (Hereinafter called "the **Authority**" which expression shall include its respective successors and permitted assignees, unless the context otherwise requires) and, on the other hand **M/s.Swastik Infralogics Pvt. Ltd. Navi, Mumbai** having its registered office at 5th Floor, Proxima , Arunachal Bhavan, Plot No.30A, Vasi, Navi Mumbai , Mumbai (hereinafter called "**the Contractor**" which expression shall include their respective successors and permitted assignees).

**WHEREAS**

1. As the said work is at the top priority considering the upcoming Kumbhmela 2027 and shall be funded by Nashik-Trimbakeshwar Kumbh Mela 2027 Nidhi and shall be rooted through Nashik-Trimbakeshwar Kumbhmela Pradhikaran (NTKMA). NTKMA has granted Administrative Approval to the expenditure of this work on 14/09/2025. The conditions mentioned in the administrative approval from Nashik-Trimbakeshwar Kumbhamela Pradhikarn dated 14/09/2025 are part and parcel of this agreement and binding on both the parties.
2. The Authority has invited sealed tender in B-1 form, vide Tender Notice No.7 dated 22/09/2025, published in daily newspapers Hindustan Times, Times of India, Navbharat, Lokmat,Sakal, Punyanagari, Divymarath, Pratakal and on the Maharashtra e-tender portal, from the companies/contractors fulfilling the terms and conditions of tender document with experience of similar type of works for '**Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.'**
3. The work invited was for '**Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.'** with an estimated cost of ₹.14,99,85,937/-
4. The date of issue of blank tender form was from 25/09/2025 to 10/10/2025. The pre-bid meeting for the same was held on 01/10/2025, common set of deviation and minutes of meeting with addendum was published on Maharashtra e-tender portal and , the date of submission of bids was extended to 17/10/2025.
5. Total 11 bids have been received during the specified period, out of which 5 were technically qualified. Tender Evaluation Committee of NMC decided to open the financial bids of the technically qualified bidders, which were opened on 29/11/2025.

   The offer of M/s.Swastik Infralogics Pvt. Ltd, Navi Mumbai of 16.500% below the estimated cost was found to be the lowest. As per Clause No. XX of the tender, a negotiation letter No.252 dated 01/12/2025 was issued for further negotiation by NMC, initially **M/s.Swastik Infralogics Pvt. Ltd. Navi, Mumbai** , Nashik. expressed their inability for negotiation through a letter with inward no 2512012 dated 05/12/2025 however, later submitted a revised negotiated offer of 16.500% below the estimated cost through a letter inward no. Dated-

SWASTIK INFRALOGICS PRIVATE LIMITED

7. NMC issued a letter to M/s.Swastik Infralogics Pvt. Ltd, Navi Mumbai for submission of Performance Security Deposit as per clause no.13 of the Tender , M/s.Swastik Infralogics Pvt. Ltd, Navi Mumbai complied with a Bank Guarantee of Rs- 1,35,00,000/- from Nationalized Bank – Bank of India ,Belapur ,Mumbai branch, with Fixed Deposit / Bank Guarantee Reference No.011656110008239 , dated 05/12/2025 valid for 05/08/2027 with a validity of 18 months from the date of issuance complying with clause 13-b of detailed tender notice.
8. The proposal is then forwarded for further approval to Standing Committee of Nashik Municipal Corporation; grated approval vide SCR no 460 Dated 12/12/2025.

**Security Deposit**

The Contractor undertakes to execute the said work with due reliability, maintaining the required quality and standards, and to complete the work within the stipulated time period.

As per the approval of Standing Committee M/s.Swastik Infralogics Pvt. Ltd, Navi Mumbai submitted a Term Deposit of Rs 6,29,000/- from HDFC Bank , Vashi , as compliance to the details mentioned in the MEMORANDUM Towards Security Deposit, the Contractor has agreed to deposit 1.00% of the accepted contract amount (₹.12,58,000/-), out of which:

1. 0.50% amounting to ₹ 6,29,000/- has been deposited through F.D. No. 50301262186522 dated 12/01/2025, and
2. The remaining 0.50% amounting to ₹ 6,29,000/- shall be recovered at the rate of 1% from the Contractor's running bills, till full recovery of total 1% security deposit amount.
3. The contractor has submitted a Performance Bank Guarantee /Fixed Deposit dated 05/12/2025 valid for 18 months after the end of contract issued by HDFC of, Vashi, Navi Mumbai branch for INR 1,35,00,000/- with reference No.011656110008239 , dated 05/12/2025 Valid upto 05/08/2027 this date.
4. The total contract/agreement period shall be 31/3/2027 Months effective from 12/12/2025 (date).

**Contract Documents**

The following documents shall form an integral and binding part of this Agreement:

1. Tender Notice No 03 Dated 22/09/2025.
2. Detailed Tender Notice and Addenda,
3. Complete tender set including Tender Form (B-1),Price Variation Clause, Star Rate clause, Arbitration Clause, Clause 38 of GCC.Schedule–B and its supplementary terms,
4. Common Set of Deviation dated 10/10/2025
5. Technical and Financial Proposal
6. Negotiation letter and its response by the bidder
7. Performance Security Deposit
8. Standing Committee Resolution No 460 Dated.12/12/2025.
9. Initial security Deposit
10. Administrative Approval from Nashik Trimabakeshwar Kembhmela Pradhikaran vide letter Dated -14/09/2025.
11. The declaration by the bidder
12. The proforma agreeing to the General Conditions of Contract
13. General Specifications,
14. MORTH Specifications for additional works,
15. Special Conditions,

16. Contractor's Guarantee and Declaration,
17. Work Order,
18. Approved Drawings and any revised drawings issued by the Municipal Corporation from time to time.

The Contractor agrees to execute the entire work in conformity with the above documents, the directions of the City Engineer, and as per the approved specifications. Any increase or decrease in quantities shall be carried out as per revised drawings and measurements.

The Contractor shall maintain the required quality and shall complete the entire work within 18 months from the date of issue of Work Order.

**Payment**

NMC shall make payments to the Contractor from time to time for the work done, subject to quality and satisfactory execution, in accordance with the terms and conditions of the Agreement, and as per the compliance from contractor to the satisfaction of NMC and NTKMA..

1. The mutual rights and obligations of the Client and the Contractor shall as set forth in the Contract, in particular:

i. The contractor shall carry out the work in accordance with the provisions of the Contract, and

ii. The Client shall make payments to the Contract in accordance with the provisions of the Contract

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed and sealed in their respective names as of the day and year first above written.

| **On behalf of the M/s.Swastik Infralogics Pvt. Ltd. Navi, Mumbai** | **On behalf of Authority** |
|---|---|
| | |
| **Owner/ Proprietor of M/s.Swastik Infralogics Pvt. Ltd. Navi, Mumbai** | **Executive Engineer, Nashik Municipal Corporation** |

This Agreement is executed between Nashik Municipal Corporation (hereinafter referred to as the "Corporation") and **M/s.Swastik Infralogics Pvt. Ltd. Navi, Mumbai** (hereinafter referred to as the "Contractor"), and has been sealed with the official seal of the Corporation in the presence of:

- _____ (Deputy Commissioner , NMC)
- _____ (Deputy Commissioner , NMC)

For and on behalf of Nashik Municipal Corporation

Executive Engineer,( NMC)

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED

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# Nashik Municipal Corporation, Nashik.

**Public Works Department**

*Face sheet*

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. No. | Component | Particulars | Length in m | Area in Sq.m | Amount |
|---|---|---|---|---|---|
| 1 | A | Total Civil Cost | | | 14,99,85,937 |
| | | | | | |
| | | **Total Project Cost A+B =** | | | **14,99,85,937** |
| | | **Total Civil Cost in Cr.** | | | **15.00** |

Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED

Executive Engineer (Works)
Nashik Municipal Corporation



# Nashik Municipal Corporation, Nashik.

**Public Works Department**

*Face sheet*

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. No. | Component | Particulars | Length in m | Area in Sq.m | Amount | Rate | Unit |
|---|---|---|---|---|---|---|---|
| 1 | A | Dismantling | | | 11,34,644.09 | | |
| 2 | B | Strom Water / Service line / Utility Duct | | | 80,49,933.83 | | |
| 3 | C | Road Work (Construction of Bituminious or Concrete Road Items) | | | 10,68,43,777.41 | | |
| 4 | D | Miscellaneous Items for Reparing Work | | | 26,90,414.68 | | |
| 5 | E | Road Furniture | | | 37,58,613.94 | | |
| 6 | F | Providing Public Utilities | | | 2,57,084.10 | | |
| 7 | G | Add Water Supply | | | 1990543.32 | | |
| | | **Civil Work- Total** | **3293** | **53280** | **12,47,25,011.36** | **2,340.93** | **Sq.m** |
| | | 18 % GST | 18% | | 2,24,50,502.04 | | |
| | | **Total Cost with GST** | | **53280** | **14,71,75,513.40** | **2,762.30** | **Sq.m** |
| | | Royalty | | | 9,27,803.40 | | |
| | | Quality Control Testing Charges | | | 18,82,620.00 | | |
| | | **Total Civil Cost** | | **53280** | **14,99,85,937** | **2,815.05** | **Sq.m** |
| | | **Amount in Cr.** | | | **15.00** | | |

Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED

Executive Engineer
PWD East, NMC Nashik.

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH INDIA PVT LTD

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| G | Water Supply Lines | | | | | |
| 1 | R.A. | Providing Dl Pipes (push on joints pressure pipes of Dl of following class & Dia meters confirming to the lndian Standard Specification inclusive cost of jointing materials (Rubber Gasket of EPDM Quality) including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, Third Party lnspection charges of TPI agency approved by the MJP including transit insurance, Railway freight, unloading from railway wagon, loading in to the truck, transportation to departmental store / site of work, unloading, stacking etc. completed as directed by Engineer-in-Charge (lS:1536:2001 for pipes & IS:158:1969 & 15:12820:1989 or latest edition / revision with amendments for rubber gaskets). (lS:8329:2000 latest version) MJP DSR Page no 53 Sr No 3 | | | | |
| | | SECTION-I(I) C.I./D.I. PIPES (69) | | | | |
| | | D.I. K – 7 | | | | |
| | | 100 mm Dia. | 120.00 | 1209.00 | Rmt | 145080.00 |
| | | 150 mm Dia. | 140.00 | 1686.00 | Rmt | 236040.00 |
| | | 200 mm Dia. | 50.00 | 2236.00 | Rmt | 111800.00 |
| | | 250 mm Dia. | 30.00 | 2906.00 | Rmt | 87180.00 |
| | | 300 mm Dia. | 50.00 | 3571.00 | Rmt | 178550.00 |
| | | 350 mm Dia. | 30.00 | 4465.00 | Rmt | 133950.00 |
| | | 400 mm Dia. | 40.00 | 5328.00 | Rmt | 213120.00 |
| | | 450 mm Dia. | 10.00 | 6346.00 | Rmt | 63460.00 |
| 2 | R.A. | Providing and supplying ISI standard CI flanged / S& S specials including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, railway freight, insurance, unloading from railway wagon, loading into truck transport to departmental store /site, unloading stacking etc. complete. MJP DSR Page no 72 Sr No 6 (a) | | | | |
| | | SECTION-I(I) C.I./D.I. PIPES (70) | | | | |
| | | D/F specials up to 300 mm | 600.00 | 88.00 | kg | 52800.00 |
| | | Above 350 mm upto 600 mm dia. | 500.00 | 94.00 | kg | 47000.00 |

SWASTIK INFRALOGICS PRIVATE LIMITED

R.A.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 3 | R.A. | Supply of C. I. Mechanical Compression Flanged / Socket Tail piece(Popularly known as I TM Flanged / Socket Tailpiece) suitable for making flanged connection with the plain barrel of C. I. Spun Pipes ( as per - IS - 1536 /2001) and D. I. Pipes ( as per IS: 8329 / 2000).The Tailpiec to be supplied complete with sealing rubber gasket of S.B.R,.C.I.. Follower Glands and M.S. Nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993. The rates are inclusive of cost of material, forwarding charges,including all statutary duties and taxes such as GST levied by GoI and GoM in all respect, loading, transportation and unloading at departemental store etc. complete as directed. Consignee but exclusive of octroi. MJP DSR Page No. 143 Sr.No. 1 | | | | |
| | | SECTION-I(XIII) MECHANICLA JOINTS/ | | | | |
| | | 80 mm Dia. | 4.00 | 1311.00 | No | 5244.00 |
| | | 100 mm Dia. | 10.00 | 1430.00 | No | 14300.00 |
| | | 125 mm Dia. | 10.00 | 1800.00 | No | 18000.00 |
| | | 150 mm Dia. | 15.00 | 2574.00 | No | 38610.00 |
| | | 200 mm Dia. | 5.00 | 3335.00 | No | 16675.00 |
| | | 250 mm Dia. | 2.00 | 5031.00 | No | 10062.00 |
| | | 300 mm Dia. | 4.00 | 5632.00 | No | 22528.00 |
| | | 350 mm Dia. | 2.00 | 7427.00 | No | 14854.00 |
| | | 400mm Dia. | 4.00 | 9694.00 | No | 38776.00 |
| | | 450mm Dia. | 2.00 | 11380.00 | No | 22760.00 |
| 4 | R.A. | Supply of C.I. mechanical compression collar coupling suitable for C.I. spun pipes (as per IS-1536/2001) and complete with sealing rubber gasket of SBR, C.I., follower glands and M.S. nut bolts. The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538/1993) including all statutary duties and taxes such as GST levied by GoI and GoM in all respect,MJP DSR Page No. 143 Sr.No. 2 | | | | |
| | | SECTION-I(XIII) MECHANICLA JOINTS / FITTING (161) | | | | |
| | | 80 mm Dia. | 7.00 | 826.00 | No | 5782.00 |
| | | 100 mm Dia. | 15.00 | 886.00 | No | 13290.00 |
| | | 125 mm Dia. | 4.00 | 1181.00 | No | 4724.00 |
| | | 150 mm Dia. | 15.00 | 1593.00 | No | 23895.00 |
| | | 200 mm Dia. | 10.00 | 1818.00 | No | 18180.00 |
| | | 250 mm Dia. | 6.00 | 2914.00 | No | 17484.00 |
| | | 300 mm Dia. | 10.00 | 3729.00 | No | 37290.00 |
| | | 350 mm Dia. | 4.00 | 4597.00 | No | 18388.00 |
| | | 400 mm Dia. | 6.00 | 7154.00 | No | 42924.00 |
| | | 450 mm Dia. | 4.00 | 8033.00 | No | 32132.00 |

SWASTIK INFRALOG PRIVATE LIMITED

# NASHIK MUNICIPAL CORPORATION

CIVIL TECH INDIA PVT LTD

## ABSTRACT SHEET

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 5 | R.A. | Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete. MJP DSR Page No. 34 Sr No. 1 | | | | |
| | | SECTION-EXCAVATION (40) | | | | |
| | | | 300.00 | 93.45 | Bhp/hr | 28035.00 |
| 6 | R.A. | Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra & Mahindra make) from inside and outsideincluding all statutory duties & taxes such as GST levied by GOI & GOM in all respect, inspection charges, transportation to stores / site, and stacking, etc. complete. MJP DSR Page no 72 Sr No 7 (d) | | | | |
| | | SECTION-I(I) C.I./D.I. PIPES (70) | | | | |
| | | D/F of all diametors | 300.00 | 95.00 | kg | 28500.00 |
| 7 | R.A. | Providing and making flanged joints to flanged C.I./M.S. pipes of all classes/specials etc. including cost of all jointing materials (rubber packing, nut bolts, etc.), labour, hydraulic testing etc. complete. MJP DSR Page No. 56 Sr No. 8 | | | | |
| | | SECTION-I(I)C.I./D.I.PIPES (71) | | | | |
| | | 80 mm Dia. | 4.00 | 331.80 | Joint | 1327.20 |
| | | 100 mm Dia. | 10.00 | 571.20 | Joint | 5712.00 |
| | | 150 mm Dia. | 15.00 | 1146.60 | Joint | 17199.00 |
| | | 200 mm Dia. | 5.00 | 1188.60 | Joint | 5943.00 |
| | | 250 mm Dia. | 2.00 | 1703.10 | Joint | 3406.20 |
| | | 300 mm Dia. | 4.00 | 1769.25 | Joint | 7077.00 |
| | | 450 mm Dia. | 2.00 | 3508.05 | Joint | 7016.10 |
| | | 600 mm Dia. | 4.00 | 3898.65 | Joint | 15594.60 |
| 8 | R.A. | Providing and making Mechanical joints to flanged C.I./M.S. pipes of all classes/specials etc. including cost of , labour, hydraulic testing etc. complete. MJP DSR Page No. Sr No. | | | | |
| | | SECTION-I(I)C.I./D.I.PIPES (71) | | | | |
| | | 80 mm Dia. | 15.00 | 265.44 | Joint | 3981.60 |
| | | 100 mm Dia. | 25.00 | 456.96 | Joint | 11424.00 |
| | | 150 mm Dia. | 30.00 | 917.28 | Joint | 27518.40 |
| | | 200 mm Dia. | 10.00 | 950.88 | Joint | 9508.80 |
| | | 300 mm Dia. | 15.00 | 1415.40 | Joint | 21231.00 |
| | | 450 mm Dia. | 10.00 | 2806.44 | Joint | 28064.40 |
| | | 600 mm Dia. | 6.00 | 3118.92 | Joint | 18713.52 |
| 9 | R.A. | Cutting and champhering of pipes of following diameters including cost of all materials and labour involved, etc. complete as directed by Engineer-in-charge (for all class of pipes). MJP DSR Page No. 137 Sr.No. 20 | | | | |

SWASTIK INFRALOGICS PRIVATE LIMITED

# NASHIK MUNICIPAL CORPORATION

## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| | | SECTION-I(XII) PIPES APPURTENANCES (156) | | | | |
| | | 80 mm Dia. | 30.00 | 52.50 | No. | 1575.00 |
| | | 100 mm Dia. | 50.00 | 60.90 | No. | 3045.00 |
| | | 150 mm Dia. | 50.00 | 94.50 | No. | 4725.00 |
| | | 200 mm Dia. | 20.00 | 118.65 | No. | 2373.00 |
| | | 300 mm Dia. | 20.00 | 202.65 | No. | 4053.00 |
| | | 450 mm Dia. | 20.00 | 306.60 | No. | 6132.00 |
| | | 600 mm Dia. | 6.00 | 447.30 | No. | 2683.80 |
| 10 | R.A. | Lowering laying and jointing with SBR ruber gaskets C.I. S/S pipes of various classes with CI / MS specials of following diameter in proper position, grade and alignment as directed by Engineer-in-charge including conveyance of material from stores to site of work, including cost of jointing materials and rubber rings labour, etc. complete. MJP DSR Page No. 54 Sr No. 2 | | | | |
| | | SECTION-I(I)C.I./D.I.PIPES (68) | | | | |
| | | 80mm | 20.00 | 61.95 | Rmt | 1239.00 |
| | | 100mm | 80.00 | 75.60 | Rmt | 6048.00 |
| | | 150mm | 120.00 | 100.80 | Rmt | 12096.00 |
| | | 200mm | 50.00 | 133.35 | Rmt | 6667.50 |
| | | 300mm | 30.00 | 189.02 | Rmt | 5670.60 |
| | | 450mm | 20.00 | 283.50 | Rmt | 5670.00 |
| | | 600mm | 8.00 | 429.45 | Rmt | 3435.60 |
| | **G** | **Water Supply Lines** | | **Total Rs** | | **1990543.32** |

SWASTIK INFRALOGICS PRIVATE LIMITED

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| A | **Dismantling** | | | | | |
| 1 | 1.15 | Detailed survey of road in plain country including chaining and levelling with cross sections at every two chains inclusive of closing of survey each day. | 3.29 | 6830.30 | Km | 22492.18 |
| 2 | 3.1 | Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately. By Mechanical Means etc. complete. | 673.50 | 451.50 | Cum | 304085.25 |
| 3 | 3.11 | Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately etc. complete. | 5.00 | 1454.30 | Cum | 7271.50 |
| 4 | 7.25 | Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 metres and stacking the serviceable and unserviceable material separately | 1.00 | 389.60 | No | 389.60 |
| 5 | 46.09 | Dismantling brick masonry in lime or cement mortar and stacking the materils as directed with all leads, lifts etc. | 10.00 | 351.80 | Cum | 3518.00 |
| 6 | 46.11 | Dismantling stone masonry in lime or cement mortar including stacking the materils as directed with all leads, lifts etc. | 15.00 | 399.00 | Cum | 5985.00 |
| 7 | 46.12 | Removing lime or lean cement concrete including stacking the spoils as directed with all leads, lifts etc, complete | 0.00 | 585.90 | Cum | 0.00 |
| 8 | 46.13 | Removing rich mix cement concrete including stacking the spoils as directed with all leads, lifts etc, complete | 10.00 | 976.50 | Cum | 9765.00 |
| 9 | 46.19 | Removing cement tiles, or marble or polished shahabad floor or dado without bed concrete including stacking the materials as directed with all leads, lifts etc. complete | 95.52 | 47.30 | Sqm | 4518.10 |
| 10 | 46.25 | Removing wire fencing with iron/ C.C. fencing post and stacking the materials as directed with all leads, lifts etc. complctc. | 75.54 | 70.30 | Rmt | 5310.46 |
| 11 | 51.134 | Milling of existing bituminous surface to specified depth of bituminous layer including disposal of removed material with all lift and lead upto 1000 m etc complete. Using machine like Writgen (W100) or equivalent | 16695.00 | 46.20 | Sqm | 771309.00 |
| | **A** | **Dismantling** | | **Total Rs** | | **1134644.09** |
| **B** | **Strom Water / Service line / Utility Duct** | | | | | |
| 12 | MJP-1 a | Carrying out detailed/final location survey for drainage schemes with chain and compass, levels, theodolite and other essential instruments including staking of final center line, locating curves, establishing B.M. and taking L section, cross section, fly leveling etc. complete in plain area. Spec. No. : As directed by Engineer in charge | 1220.00 | 2.00 | Rmt | 2440.00 |
| 13 | MJP-8 | Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, manual dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-1,4, ) | | | | |
| | | Lift upto 0.0 to 1.50 m depth | 1301.40 | 181.50 | Cum | 236204.10 |
| | | Lift upto 1.50 to 3.0 m depth | 0.00 | 198.00 | Cum | 0.00 |
| 14 | MJP-10 | Excavation for foundation / pipe trenches in hard murum and boulders, W.B.M. road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatreing, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-3,4, ) | | | | |
| | | Lift upto 0.0 to 1.50 m depth | 480.90 | 232.10 | Cum | 111616.89 |

SWASTIK INFRALOGCS PRIVATE LIMITED

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| | | Lift upto 1.50 to 3.0 m depth | 0.00 | 248.60 | Cum | 0.00 |
| 15 | MJP-11 | Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material upto a distance of 50 M beyond area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-5,9, ) | | | | |
| | a | Lift upto 0.0 to 1.50 m depth | 561.05 | 691.90 | Cum | 388190.50 |
| | b | Lift upto 1.50 to 3.0 m depth | 0.00 | 722.70 | Cum | 0.00 |
| | c | Lift up to 3.0 to 4.5 m depth | 0.00 | 753.50 | Cum | 0.00 |
| 16 | MJP-12 | Excavation for foundation / pipe trenches in hard rock and concrete road by chiselling, wedging, line drilling, by mechanical means or by all means other than blasting including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means. (MJP,DSR 2023-24, Section-E-7,9 ) | | | | |
| | a | Lift upto 0.0 to 1.50 m depth | 27.00 | 1230.90 | Cum | 33234.30 |
| | b | Lift upto 1.50 to 3.0 m depth | 93.23 | 1261.70 | Cum | 117621.98 |
| | c | Lift up to 3.0 to 4.5 m depth | 0.00 | 1292.50 | Cum | 0.00 |
| 17 | MJP-14a | Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15cm to 20cm layers including watering and compaction complete.(MJP,DSR 2023-24, Section-E-16 ) | 2463.58 | 96.60 | Cum | 237981.35 |
| 18 | MJP-19 B&C | Providing, Lowering & Laying ISI standard R.C.C. pipes in standard lengths of following class and diameter suitable for either collar/ spigot & socket joints or rubber ring joints, including all cost of rubber ring joints, excluding GST levied by GOI & GOM in all respect including inspection charges, transport to departmental stores, unloading and stacking etc. complete as per IS-458/1988, lowering & Laying and giving satisfactory Hydraulic testing of the laid pipe line and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar,) including cost of conveyance from stores to site of work, cost of jointing material, labour, etc. complete as directed by Engineerin- charge (For all class of pipes.) as per IS- 783- 1985. as specified and directed by Engineer in charge etc. complete. (MJP, DSR 2023-24, Sec.-I(VI)RCC Pipes,1d,e,f,2)Page No. 94,95,96 | | | | |
| | b | R.C.C.NP-III Class (MJP, SSR 2023-24,Sec-I-(VI)-1-e,) | | | | |
| | | i) for 150 mm dia | 0.00 | 509.80 | Rmt | 0.00 |
| | | ii)for 200 mm dia | 0.00 | 581.10 | Rmt | 0.00 |
| | | iii) for 250 mm dia | 0.00 | 788.60 | Rmt | 0.00 |
| | | iv)for 300 mm dia | 430.00 | 1078.00 | Rmt | 463540.00 |
| | | vii) for 450 mm dia | 1270.00 | 2005.60 | Rmt | 2547112.00 |
| | | ix) for 600 mm dia | 30.00 | 2886.20 | Rmt | 86586.00 |
| | c | R.C.C.NP-IV Class (MJP, SSR 2023-24,Sec-I-(VI)-1-e,) | | | | |
| | | xii) for 900 mm dia | 0.00 | 5323.00 | Rmt | 0.00 |
| | | xiii) for 1000 mm dia | 0.00 | 5875.30 | Rmt | 0.00 |
| | | xiv)for 1200 mm dia | 0.00 | 11138.30 | Rmt | 0.00 |
| 19 | MJP-21 A1 | Providing and constructing on sewer,Fly Ash Brick masonry circular manhole concentric cone 0.9 M dia. at bottom and 0.5 M dia. at top and upto a depth of 1.00 M, with 15cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 1.0 M with 0.23m. thk. BM in CM 1:6 proportion with 12 mm thick inside & 20 mm thick on outer- side plaster with fine cement smooth finish in CM 1:4, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered), 15cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.As per Rate Analysis.( For both side plaster Use natural sand & For other work VSI(Vertical Shaft Impact) sand finely washed etc.) | 25.00 | 17055.30 | No | 426382.50 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 20 | MJP-21 B1 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.2 M dia. at bottom and 0.5 M dia. at top and upto a depth of 2.00 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.00 M with 0.23 M thick in CM 1:4 proportion excluding excavation with 12 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered),,15cm thk C.C.1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in- charge.(MJP, SSR 2021-22, SEC-I(XX)-6, ) ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 49.00 | 30138.60 | No | 1476791.40 |
| 21 | MJP-21 C1 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 5.0 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.0M with 0.23m thk & 3.0 M depth of Vertical Cylinder with 0.35 M thick Fly Ash Brick masonry in CM 1:4 proportion with 20 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:2, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered),,15cm thk 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.(MJP, SSR 2021-22, SEC-I(XX)-7, )( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 2.00 | 82847.30 | No | 165694.60 |
| 22 | MJP-21 F1 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole with concentric cone 1.80 M dia. at bottom and 0.5 M dia. at top and upto a depth of 9.0 M with 25 cm thick CC 1:2:4 bed concrete,& Fly Ash Brick masonry with 23 cm brick work in conical shape upto depth of 2.50 M from top and balance in cylindrical shape 35 cm thick brick work for depth of 2.35 M depth upto 5.0 M, with M:20 Concrete for RCC Beam size of 350x150mm thk.with reinfocement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 350mm thk. brick work, and 45 cm thick brick work 3.85m.for remaining depth upto 9.00 M with M:20 Concrete for RCC Beam size of 450x150mm thk.with reinfocement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 450mm thk. brick work, in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3 proportion excluding excavation, including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical. (Staggered),, 15cm thk 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.As per Rate Analysis.( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 0.00 | 273164.60 | No | 0.00 |
| 23 | MJP-21 S1 | Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 450 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 450 mm etc. complete as directed by Engineer-in-charge. (MJP, SSR 2023-24,Sec-I(XX)-3-A ) (Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 5.00 | 10326.40 | No | 51632.00 |

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CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 24 | MJP-21 T1 | Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 900 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 900 mm etc. complete as directed by Engineer-in-charge. As per Rate Analysis. (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 27.00 | 16803.50 | No | 453694.50 |
| 25 | MJP-22 a1 | Constructing additional depth/ Rebate for Manhole of 900mm Dia. & above/below 1000 mm. depth to cover variations with 230mm.thick Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered) As per Rate Analysis. (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 15.85 | 12238.90 | Rmt | 193986.57 |
| 26 | MJP-22 b 1 | Constructing additional depth or Manhole of 1200mm Dia. & above / Rebate 2000 mm. depth with 230mm.thick Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered), (MJP, SSR 2023-24, Sec-I (XX)-6-a,) (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 0.50 | 7549.90 | Rmt | 3774.95 |
| 27 | MJP-22 c 1 | Constructing additional / Rebate depth for Manhole of 1500mm Dia. & below 5000 mm. depth with 350mm.thick Fly Ash Brick masonry work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered), (MJP, SSR 2023-24, Sec- I(XX)-7-a,) (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 2.50 | 16411.90 | Rmt | 41029.75 |
| 28 | MJP-22 f 1 | Constructing additional / Rebate depth for Manhole of 1800mm Dia. & below 9000 mm. depth with 450mm.thick Fly Ash Brick masonry work up to 2.50m in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered),As per Rate Analysis. ( For both side plaster Use natural sand & For other work VSI sand finely washed etc.) | 2.50 | 35216.60 | Rmt | 88041.50 |
| 29 | MJP-22 s 1 | Constructing additional depth or Manhole of 450x600x900 above 900 mm. depth with 230mm. Fly Ash Brick masonry work.in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3. (MJP, SSR 2023-24, Sec-I(XX)-3-A-a,) ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 5.00 | 5208.70 | Rmt | 26043.50 |
| 30 | MJP-22 t 1 | Constructing additional depth or Manhole of 900x600x900 above 900 mm. depth with 230mm. Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, As per Rate Analysis. ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 10.50 | 13415.60 | Rmt | 140863.80 |
| 31 | MJP-37 | Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete. | 2463.58 | 96.60 | Cum | 237981.35 |
| 32 | MJP-32 | Providing and fixing in position steel fiber reinforced concrete (S.F.R.C.) frame and covers of approved make including loading, unloading, transportation, all taxes, etc. complete as directed by Engineer-in-charge (20 tones capacity) | | | | |
| | | (MJP, SSR 2023-24, Sec-I(XX)-17,) | | | | |
| | | i) 540 Dia. | 20.00 | 3665.60 | No | 73312.00 |
| | | ii) 560 Dia. | 20.00 | 4797.50 | No | 95950.00 |
| | | iii) 90x45 cm | 10.00 | 3665.60 | No | 36656.00 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| | | iv) 90x60 cm | 40.00 | 3973.20 | No | 158928.00 |
| | | v) 60 x 60 cm | 0.00 | 3628.80 | No | 0.00 |
| | | vi) 60 x 45 cm | 10.00 | 3144.80 | No | 31448.00 |
| 33 | MJP-34 | Cleaning or Desilting B.B.M. of various dia chamber on sewer including removing matarial upto a distance of 50.0M for all lifts as directed by Engineer-in-charge.etc. complete | 0.64 | 234.20 | Cum | 149.30 |
| 34 | MJP-35 | Cleaning the R.C.C. choked up pipes of diameter from 200 mm to 450 mm including removing matarial upto adistance of 50.0M for all lifts as directed by Engineer-in-charge. | 1.00 | 54.50 | Rmt | 54.50 |
| 35 | MJP-36 | Cleaning the R.C.C. choked up pipes by using **bucket machine and rodding machine** including removing matarial upto adistance of 50.0M for all lifts in different places during cleaning operation all labour and safety precaution should be taken by maintainance contractor himself (i.e. suitable gas masks, gas detection driving prompt etc.) during cleaning operation in any damages done by the contractor shall be repaired by the contractor with his own cost. To clean the existing drain line bucket and rodding machine will not be given by department & if machinary provided by department charges will recovered from bill. Diversion of sewerage water any necessary excavation if necessary should be done by the contractor at his cost during the work necessary action for cleaning line traffic permission and proper precautions should be taken by contractorafter completion of a cleaning operation by contractor has to test the line in precence of enginreer- in- charge. (As per Rate Analysis) | | | | |
| | a) | For 200mm to 600mm dia RCC drain line | 775.00 | 158.70 | Rmt | 122992.50 |
| | b) | For above 600mm to 1000mm dia RCC drain line | 0.00 | 238.10 | Rmt | 0.00 |
| | c) | For above 1000mm dia RCC drain line | 0.00 | 317.40 | Rmt | 0.00 |
| | **B** | **Strom Water / Service line** | | **Total Rs** | | **80,49,933.83** |
| **C** | **Road Work** | **(Construction of Bituminious or Concrete Road Items)** | | | | |
| 36 | 2.11 | Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. | 5343.75 | 125.00 | Cum | 667968.75 |
| 37 | 2.13 | Excavation for roadway in hard murum and boulder including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m.and spreading for embankment or stacking as directed | 25.00 | 145.90 | Cum | 3647.50 |
| 38 | 2.14 | Excavation for roadway in soft rock, including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. And spreading or stacking as directed. | 15.00 | 185.80 | Cum | 2787.00 |
| 39 | 2.16 | Excavation for roadway in hard rock by wedging and chiselling or line drilling including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. | 10.00 | 1490.00 | Cum | 14900.00 |
| 40 | 2.18 | Excavation for catch / side water gutter in all sorts of soils to the specified section including stacking the excavated stuff in a regular bund and disposing of unsuitable or excess stuff as directed all sorts of soils. | 100.00 | 125.00 | Cum | 12500.00 |
| 41 | C-483 | Conveying materials obtained from road cutting upto lead of 5 .00 km including all lifts, laying in layers, breaking clods, dressing to the required lines, curves, grades and section from the site of excava-tion to the site of deposition as directed . | 5493.75 | 264.80 | Cum | 1454745.00 |
| 42 | 2.23 | Providing Earth work in embankment with approved material ob-tained from Govt. land with 50 m lead, by using laying in lay-ers, breaking clods, dressing to required lines curves grade, and section watering and compaction complete. (a) 95% proctor densi-ty. Spec.No. : M.O.S.T. 1995 Cl.No.305 | 5.00 | 236.30 | Cum | 1181.50 |

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CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 43 | 2.28 | Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete ( Material obtained from Other sources) | 5.00 | 1263.40 | Cum | 6317.00 |
| 44 | 2.29 | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | 1802.77 | 925.10 | Cum | 1667745.52 |
| 45 | 2.3 | Spreading hard murum for side width etc. complete | 1802.77 | 83.00 | Cum | 149630.18 |
| 46 | 2.31 | Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete. | 8519.00 | 22.10 | Sqm | 188269.90 |
| 47 | 3.01 | Construction of granular subbase by providing close graded Material,mixing in a mechanical mixplant at OMC,carriage of mixed Material to work site, spreading in uniform layers with motor grader/Paver on prepared surface and compacting with vibratory roller to achieve the desired density,complete as per clause 401 -- Plant Mix Method and Grading - I Material | 920.00 | 2740.50 | Cum | 2521260.00 |
| 48 | 3.18 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading I (Using Screening Type A (13.2) mm Aggregate) | 100.00 | 3059.60 | Cum | 305960.00 |
| 49 | 3.2 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading II (Using Screening Type B (11.2 mm) Aggregate) | 25.00 | 3005.60 | Cum | 75140.00 |
| 50 | 3.23 | Wet Mix Macadam -- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver. | 845.00 | 2765.50 | Cum | 2336847.50 |
| 51 | 14.58 | Providing and laying in PCCM 15 grade leveling course below approach slab complete with fully automatic micro process or PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (panmixer) as per drawing sand Technical specifications etc.complete with fine agreegates of required specifications ( VSI sand finely washed | 945.00 | 6924.80 | Cum | 6543936.00 |
| 52 | 5.13 | Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, , cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant/ Weigh batch mixer, transported to site with all leads and lifts, laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge , compacting with vibratory roller, finishing, curing and including preparation of sub-grade surface if required etc. complete. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 1.00 | 4492.00 | Cum | 4492.00 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 53 | 25.50 | Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite/quartzite/ gneissmetal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/ pumping, compaction and roughening the surface if special finish is to be provided and curing etc.complete. (Excluding reinforcement and structural steel). with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Panmixer) etc. complete.Withfine aggregate (Crushed sand VSI Grade) | 5.00 | 13505.60 | Cum | 67528.00 |
| 54 | 26.33 | Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. | 0.50 | 94188.10 | MT | 47094.05 |
| 55 | 5.19 | Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet confirming to IS 3395 : 1997 below concrete pavement including all materials and labour complete. | 0.00 | 31.50 | Sqm | 0.00 |
| 56 | 5.06 | Providing and laying in-situ M40 Grade un-reinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 1.00 | 8974.80 | Cum | 8974.80 |
| 57 | 5.14 | Providing and fixing in position TMT FE 500, 32 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete | 0.00 | 564.90 | No | 0.00 |
| 58 | 5.15 | Providing and fixing in position TMT FE 500, 25 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete | 0.00 | 413.70 | No | 0.00 |
| 59 | 5.17 | Cutting transverse contraction joints 3 to 4 mm wide and depth 60mm. .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etc. complete including subsequent widening of the groove 8 to 10 mm. wide at top having depth of 15 mm. as directed by Engineer incharge. | 0.00 | 79.80 | Rmt | 0.00 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 60 | 5.18 | Providing to contraction joints polysuphide sealent (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealent reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (appraox. 25% larger than the initial 3 mOne Metric Tonneo 4 mm. joint) overlaid with bond breaking tape as per detailed drawing. Item includes cleaning the joints with water jet / air compressor and allowing joint to become thoroughly dry before sealent is applied and applying primer. (A) Contraction and longitudinal joints (15 mm. deep x 8 mm.wide) | 0.00 | 326.60 | Rmt | 0.00 |
| 61 | 14.33 | Providing expansion joints with 25mm thick bituminous pad as per detailed drawings etc. complete. | 0.00 | 1140.30 | Sqm | 0.00 |
| 62 | 7.03 | Providing and casting insitu or precast tapering R.C.C.M-20 Mountable type Kerb without gutter ( asper IRC861983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2 including the required excavation in any strataand removing the excavated stuff anywhere incity and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant | 0.00 | 516.60 | Rmt | 0.00 |
| 63 | R.A. | P/L and fixing precast Cement concrete M-20 grade kerb stone of following sizes grade concrete including manufacturing, supplying to the site, fixing in position, with prepared bed of,packing by surrounding pcc upto 100 mm ht with M-10 PCC 80mm thick, filling joints with cement, coloring with one coat primer & flat oil paint in two coats as per directed by engineer in charge etc complete (As per R.A.) | | | | |
| | a | Size- Length 300 mm, Height 750mm, Top Width 125 mm, Bottom width 200 mm, Chamfer Height 300 mm | 100.00 | 1618.50 | Rmt | 161850.00 |
| | b | Size- Length 400 mm, Height 450mm, Width 125mm, Chamfer Height 125 mm | 3600.00 | 788.00 | Rmt | 2836800.00 |
| 64 | 33.51 | Providing and fixing factory made Rubber Moulded Mechanically vibrated and compacted precast inter locking cement concrete cobble paving blocks 60MM thick in M-30 grade of approved size and shape for City streets, small /medium market roads, low volume roads, utility cuts s or on arterial roads etc. as specified and as per IS 15658:2006 including cost of all materials, manufacturing, curing, transportation of blocks to work site including loading, unloading and stacking as directed, laying paving blocks in position and pattern as directed by engineer in-charge over prepared bed of natural sand / crushed sand of 50 mm thickness including necessary excavation in all stratas, spreading blindge of fine sand/cement slurry over the prepared bed, compacting blocks by plate vibrator etc. complete. | 12600.00 | 978.60 | Sqm | 12330360.00 |
| 65 | 33.52 | Providing and fixing factory made Rubber Moulded Mechanically vibrated and compacted precast inter locking cement concrete cobble paving blocks 80MM thick in M-30 grade of approved size and shape for City streets, small /medium market roads, low volume roads, utility cuts s or on arterial roads etc. as specified and as per IS 15658:2006 including cost of all materials, manufacturing, curing, transportation of blocks to work site including loading, unloading and stacking as directed, laying paving blocks in position and pattern as directed by engineer in-charge over prepared bed of natural sand / crushed sand of 50 mm thickness including necessary excavation in all stratas, spreading blindge of fine sand/cement slurry over the prepared bed, compacting blocks by plate vibrator etc. complete. | 100.00 | 1238.00 | Sqm | 123800.00 |

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## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 66 | 3.35 | Providing and laying 75mm thick compacted Modified Pentration Macadam with VG-30 bitumen over existing WBM surface including picking the road metalled surface, thoroughly cleaning the WBM surface by using mechanical broom or approved equipment, spreading 40mm size metal ( 30% Crushed metal +70% Hand broken ) by brining blasted rubble on site of work) at the rate of 0.09Cum/Sqm Compacting metal with roller and bitumen is them spread at rate of 2kg/ sqm. Spreading 12mm metal at rate of 0.018 Cum,/Sqm The surface shall be lightly rolled so that metal pieces ge embeded in the bitumen layer and rolling shall continre until entire surface is throughly compacted etc. complete. ( With Vibratory Roller including diversion road ) Spec. No. As directed bty Engineer- in - charge. | 10.00 | 362.60 | Sqm | 3626.00 |
| 67 | 3.36 | Providing and laying 75mm thick compacted Modified Pentration Macadam with VG-30 bitumen over existing BT surface including picking the road metalled surface, thoroughly cleaning the BT surface by using mechanical broom or approved equipment, spreading 40mm size metal ( 30% Crushed metal +70% Hand broken ) by brining blasted rubble on site of work) at the rate of 0.09Cum/Sqm Compacting metal with roller and bitumen is them spread at rate of 2kg/ sqm. Spreading 12mm metal at rate of 0.018 Cum,/Sqm The surface shall be lightly rolled so that metal pieces ge embeded in the bitumen layer and rolling shall continre until entire surface is throughly compacted etc. complete. ( With Vibratory Roller including diversion road ) Spec. No. As directed bty Engineer- in - charge. | 100.00 | 361.20 | Sqm | 36120.00 |
| 68 | | Providing and applying tack coat on the prepared surface heating by fames in Boiler and spraying bitumen set footed in bitumen boller on B.T. surface 5 kg/10 sqm. (VG 30 bulk bitumen rates are considered to arrive at rates) Spec.Rd.47.3.3 Page No. 224 | 121400.00 | 33.60 | Sqm | 4079040.00 |
| 69 | 3.29 | Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 10.0 kg/sqm using mechanical means. | 3380.00 | 60.80 | Sqm | 205504.00 |
| 70 | 3.4 | BITUMINOUS MACADAM 3.00 % : Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 3.00 % using specified grade of Bitumen. -- USING batch Mix type hot mix plant with SCADA, Sensor Paver, vibratory roller. (VG30 bulk bitumen rates are considered to arrive at rates) | 1.00 | 8496.20 | Cum | 8496.20 |
| 71 | 3.41 | BITUMINOUS MACADAM 3.50 %: Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 3.50 % VG-30 Bitumen. - USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V- Sat attachment. | 635.70 | 9095.60 | Cum | 5782072.92 |
| 72 | 3.44 | DENSE BITUMINOUS MACADAM 4.50%: Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 4.50 % VG-30 Bitumen. - USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V- Sat attachment. | 3196.80 | 11105.50 | Cum | 35502062.40 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 73 | 3.49 | BITUMINOUS CONCRETE 6.25 %:- Providing and laying bituminous concrete using crushed aggregates of grading 2, premixed with bituminous binder @ 6.25 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for30/40 mm compacted thickness with VG-30 Bitumen,Excluding prime / tack coat. For Bitumen VG-30 bulk -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V-Sat attachment with Stone Dust filler Spec No.: MOST 1995 Cl.No.511 | 2131.20 | 13468.80 | Cum | 28704706.56 |
| 74 | 50.47 (SSR) | Supplying and adding Organosilane Nanotechnology Additive (such as Zycotherm or approved equivalent) to the bitumen binder at the Hot Mix Asphalt (HMA) plant at a dosage of 0.1% by weight of bitumen to achieve enhanced chemical bonding, complete aggregate coating, improved moisture resistance, and consistent compaction in various bituminous mixes such as Bituminous Macadam (BM), Dense Bituminous Macadam (DBM), Bituminous Concrete (BC) etc., including supply, transportation, storage, uniform blending with bitumen, testing, and all incidental operations complete in all respects as per manufacturer's specifications, relevant IRC and MORTH guidelines, and as directed and with prior approval by the Engineer-in-Charge. | 672.39 | 1470.00 | kg | 988414.62 |
| | C | **Road Work** | | | | |
| **D** | **Miscellaneous Items for Reparing Work** | | | **Total Rs** | | **10,68,43,777.41** |
| 75 | | Providing and fixing on walls/ ceiling/ floor mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete. | | | | |
| | 42.55 | 15 mm | 25.00 | 279.30 | Rmt | 6982.50 |
| | 42.57 | 25 mm | 25.00 | 393.80 | Rmt | 9845.00 |
| | 42.58 | 32 mm | 10.00 | 452.60 | Rmt | 4526.00 |
| | 42.59 | 40 mm | 10.00 | 566.00 | Rmt | 5660.00 |
| | 42.60 | 50mm | 10.00 | 778.00 | Rmt | 7780.00 |
| 76 | 42.72 | Providing and making ISI Mark ferrule connection of 15 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete. | 20.00 | 1310.40 | No | 26208.00 |
| 77 | 42.77 | Providing and making ISI Mark ferrule connection of 50mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete | 20.00 | 9391.20 | No | 187824.00 |
| 78 | | Providing , laying and fixing ,jointing Eco- drain mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. | | | | |
| | 43.30 | 110mm | 25.00 | 343.40 | Rmt | 8585.00 |
| | 43.31 | 160mm | 25.00 | 533.40 | Rmt | 13335.00 |
| 79 | 27.12 | Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. Complete | 10.00 | 7917.10 | Cum | 79171.00 |
| 80 | 28.09 | Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external walls of plinth including bailing out water manually , striking joints inside and raking out joints from outside and watering etc.complete | 5.00 | 13152.80 | Cum | 65764.00 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 81 | 28.01 | Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete. | 5.00 | 6140.90 | Cum | 30704.50 |
| 82 | 26.23 | Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/ pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) | 5.00 | 8172.60 | Cum | 40863.00 |
| 83 | 32.07 | Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:4 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete. | 20.00 | 438.30 | Sqm | 8766.00 |
| 84 | 32.11 | Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete. | 10.00 | 722.00 | Sqm | 7220.00 |
| 85 | 35.21 | Providing and applying priming coat on concrete/ masonary/ Asbestos Cement plastered surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required etc. complete. | 1620.00 | 37.80 | Sqm | 61236.00 |
| 86 | 35.26 | Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary and watering the surface for two days etc complete. NOTE: For Item One Number 15 to 18 prior approval of Superintending Engineer will be necessary | 10.00 | 309.80 | Sqm | 3098.00 |
| 87 | 35.09 | Providing and applying two coats of flat oil paint of approved colour to the old structural steel work and iron work previously painted in building including scaffolding, if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. | 10.00 | 89.30 | Sqm | 893.00 |
| 88 | 35.11 | Providing and applying two coats (exterior quality) of flat oil paint of approved colour and shade to the plastered surface in buildings and workshops including scaffolding if necessary, cleaning the surface and preparing surface etc. complete. (excluding primer coat) | 2515.20 | 92.40 | Sqm | 232404.48 |
| 89 | 33.24 | Providing and laying matt finish ceramic tiles of having size 30 cm x 30 cm confirming to .S.15622/2006 (group D II-A) and 7 to 8 mm thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete. | 10.00 | 1251.90 | Sqm | 12519.00 |
| 90 | 40.05 | Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe ( Rezan/ concentiDeleted ire 0.75 mm dia ) with hot dip and G.I. coated hooks as per drawing supported on M.S. angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete. | 25.00 | 962.90 | Rmt | 24072.50 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 91 | 7.09 | Providing and fixing Guard Railing of 1000mm height as per Type D Drg. No. 15 dt. 20-4-79, and fixed in 40 x 40 x 6mm iron, angle embedded in 1:2:4 cement concrete bedding patti as per detailed drawing, with 3 coats of approved of yellow and black paint. | 45.00 | 2936.80 | Rmt | 132156.00 |
| 92 | 14.49 | Providing railing of cast in situ R.C.C posts with (M-20) cement concrete trap / granite / quartzite / gneiss metal size 150 mm x 150 mm x 1.240 mm and horizantal 3 nos. at distance 370 mm C/C and bottom bar 150 mm above kerb as per the detailed drawings (including cost of reinforcement) scaffolding,steel centering, plywood/steel formwork etc. complete. The C.M. 1:3 plaster is considered for renderinguneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering/formwork will not be allowed). | 15.00 | 2623.90 | Rmt | 39358.50 |
| 93 | 11.25 | Providing and laying in situ / ready mix M20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab including compacting, finishing, curing etc. complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural/ VSI standard Artificial Sand, cement6.40 bags/cumt) | 5.00 | 8236.30 | Cum | 41181.50 |
| 94 | 23.01 | Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. | 1.00 | 106936.20 | MT | 106936.20 |
| 95 | 21.38 | Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. | 5.00 | 2049.00 | Cum | 10245.00 |
| 96 | 5.01 | Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement over a prepared subbas with 43 grade cement ,coarse and fine aggregate (natural sand/VSI grade finely washed crushed sand) conforming to IS383, using fine and coarse aggregates combined gradation asper Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/non tilting mixer and Weigh batcher as per approved mix design,admixtures, transporting to suring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. with fully automaticmicro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 5.00 | 8584.20 | Cum | 42921.00 |
| 97 | 33.68 | Providing and laying telephone black / Amba White / Cadburybrown / Ruby red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing/moulding the sharp edges wherever necessary, curing, etc. complete | 5.00 | 4616.10 | Sqm | 23080.50 |
| 98 | 17.33 | Providing and laying in situ / readymixM-25 controlled reinforcedcement concrete of trap metal for raft slab including "V"haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant /pan mixer with fine agreegates of required specifications ( VSI sand finely washed etc ) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) . | 10.00 | 7176.20 | cum | 71762.00 |
| 99 | 17.29 | Providing cast in situ / ready mix M-20 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural / VSI standard Artificial Sand | 5.00 | 10857.50 | cum | 54287.50 |

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# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 100 | 14.15 | Providing and laying in situ/ ready mix M-25 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work ins olid/ deckslabetc. including ramming, vibrating, curing, formwork, centering and finishing incement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine agreegates of required specifications (VSI sand finely washed etc)<br>i)Height up to 5 m, normal rate.<br>ii)Height 5 to 7.50 m, add 5percent extra over basic rate.<br>iii) Height 7.50 to 10 m, 7.50 percent extra.<br>iv)Over 10m Height, add 10 percent extra for every 2.50m rise | 5.00 | 12189.90 | cum | 60949.50 |
| 101 | 38.24 | Removing and resetting Mangalore tiles from roof including refixing loose battens etc. complete | 12600.00 | 100.80 | sqm | 1270080.00 |
| | **D** | **Miscellaneous Items for Reparing Work** | | **Total Rs** | | **2690414.68** |
| E | **Road Furniture** | | | | | |
| 102 | 6.12 | Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete. | 2404.10 | 699.30 | Sqm | 1681187.13 |
| 103 | 6.09 | Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer. | 4482.00 | 384.30 | No | 1722432.60 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 104 | 6.17 (From SSR 2020-2021) | Supplying of Solar Raised Pavement Markers made of polycarbonate molded body with circular shape, solar powered, LED self illumination in active mode, 360 degree illumination and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face in passive mode. The marker shall support a load of 20000 kg tested in accordance to ASTM D 4280. The marker should be resistant to dust and water ingress according to IP 65 standards and should withstand temperatures in the range of 0 C to 70 C. Color of lighting could be provided in red or yellow (amber) as per requirement and typical frequency of blinking is 1 Hz. There should be current losses of less than 20 micro-amperes at 2.4 V in sleep-charging mode to enhance the life of the marker and a full charge should provide for a minimum autonomy of 50 hours. The height, width and length of the marker shall not be less than 10 mm x 100 mm x 100 mm. Also, the surface diameter of the marker shall not be less than 100 mm respectively. The weight of the marker shall not exceed 0.5 Kilograms. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retroreflectance of the reflecting panel, to the Engineer. | 25.00 | 4189.50 | No | 104737.50 |
| 105 | 6.10 | Providing and Fixing of Median Marker that are made of tough, high impact resistant, injection-molded, thermoplastic body with an isosceles trapezoidal structure of length, width and height not less than 15cm, 10cm and 10cm respectively and thickness not less than 1.8mm, the body structure shall be rounded at its acute angle, all the corners and edges. The plastic used for molding the Median Marker shall have a minimum Notched Izod Impact strength value of 600 J/m at room temperature, when tested in accordance with ASTM D256 and shall retain at least 70% of this value when subjected to accelerated weathering for 1000hrs as per ASTM G155 or UL746C. The logo of the manufacturer shall be embossed on either side of the body in the injection molding process. The Median Marker shall have rectangular-shaped, fluorescent yellow color retro- reflective sheeting of size not less than 8.5cm*8.5cm and with fully reflective micro prismatic cube corners as its retro-reflective elements as per IRC 67 2010 and ASTM D4956 type XI specifications reflectivity values. The retro-reflective sheeting shall be one or both sides of the Median Marker and shall be edge protected with no exposed edges which will prevent edge lifting, vandalism, sheeting damage, etc. The Median Marker shall be fixed by a combination of epoxy adhesive and grouting. | 10.00 | 480.90 | No | 4809.00 |
| 106 | 6.15 | Road Delineators: Supplying and installation of delineators (Roadway Indicators, Hazard markers, Object markers) 80 to 100 cm high above ground level, painted black and white in 15 cm wide strips, fitted with 80x100mm rectangular or 75mm dia. Circular reflectorised panels at the top, buried or pressed into the ground and confirming to I.R.C. 79 and the drawings | 18.00 | 863.10 | No | 15535.80 |
| 107 | 6.16 | Providing and fixing steel pipe delineators of 10 cm. in diameter and total height of 130 cm, provided with 2 strips of white retroreflective sheeting of size 5 cm. x 32.5 cm. each fixed horizontally and 2 strips of red retroreflective sheeting each having size 5 cm. x 32.5 cm. fixed horizontally at top, with M.S. round cap having diameter 11 cm. and wire mesh at top (10 guage thick) and height of wire mesh 15 cm, M.S. hold fast 6 mm thick with 35 cm. in length, fixing the delineators in C.C. 1:4:8 concrete block of size 25 cm. x 25 cm. x 45 cm. with necessary excavation etc. complete. | 5.00 | 1056.30 | No | 5281.50 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 108 | 6.28 | Providing and fixing Mandatory/Regulatory sign boards in circular shape of____ mm dia made out of ____aluminum sheet bonded with white retro reflective sheeting of Class C ( Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67- 2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C ( Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier. | | | | |
| | b | 600 mm dia made out of 3mm aluminum composite material | 6.00 | 5665.80 | No | 33994.80 |
| | d | 750 mm dia made out of 4mm aluminum composite material | 1.00 | 7519.10 | No | 7519.10 |
| 109 | 6.30 | Providing and fixing Cautionary/Warning sign boards in Equilateral Triangle size of ___mm made out of____ mm aluminum sheet bonded with white retro reflective sheeting of Class C ( Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67- 2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. ClassC ( Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier | | | | |
| | b | 600 mm made out of 3mm aluminum composite material | 16.00 | 4524.40 | No | 72390.40 |
| | d | 750 mm made out of 4mm aluminum composite material | 2.00 | 5205.90 | No | 10411.80 |
| | f | 900 mm made out of 4mm aluminum composite material | 2.00 | 6647.60 | No | 13295.20 |

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 110 | 6.33 | Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area less than 0.9 One Square Meterr made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class __ ( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on one no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity microprismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the | | | | |
| | d | 4mm aluminum composite material Class C | 2.40 | 13891.50 | Sqm | 33339.60 |
| 111 | 6.34 | Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area greater than 0.9 square meter made out of__aluminum sheet bonded with white retro reflective sheeting of Class ____ ( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity microprismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued | | | | |
| | d | 4mm aluminum composite material Class C | 2.16 | 16722.30 | Sqm | 36120.17 |

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## ABSTRACT SHEET

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| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 112 | 6.35 | Providing and erecting Overhead signs made out of __aluminum sheet bonded with white retro reflective sheeting of Class ___( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012, with designed back support frame of mild steel angle with vertical and lateral clearance given in clause 801 and 802, duly painted on back side with two coats of grey stove enamel paint and installed as per clause 802.6 over a designed support system of structural steel work trestles and trusses of sections and type as per structural design requirements and approved plans including painting with one coat of epoxy primer and two coats of epoxy finish paint.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in | | | | |
| | d | 4mm aluminum composite material Class C | 1.62 | 10839.10 | Sqm | 17559.34 |
| | E | **Road Furniture** | | **Total Rs** | | **3758613.94** |
| F | **Providing Public Utilities** | | | | | |
| 113 | 51.44 | Public Seating Chair. - 3 Seater<br>Providing and Fixing 3 seater Public seating chair made of complete metal with Legs in Crome finish and seates in silver powder coating finish. | 2.00 | 18958.80 | No | 37917.60 |
| 114 | 49.28 | Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S 304) | 10.00 | 21916.65 | No | 219166.50 |
| | F | **Providing Public Utilities** | | **Total Rs** | | **257084.10** |
| | G | **Water Supply** | | | | **1990543.32** |
| | | **Total Rs** | | **A+B+C+D+E+G** | | **12,47,25,011.36** |
| | | | Add GST | 18% | Rs | 2,24,50,502.04 |
| | | **Total Rs With GST Road work** | | | | **14,71,75,513.40** |
| 113 | | Royalty charges for murum dubber should be paid by the contractor regularly to the government and contractor should produce delivery challon, payment receipt, pakka bill etc. complete alongwith every R.A. bill \ final bill as applicable.(It is entirely responsibility of contractor to pay Royalty charges to the Government) | | | | |
| | A | for murum / Rubble / | 4290.90 | 216.18 | Cum | 927606.38 |
| | B | for sand | 0.83 | 237.37 | Cum | 197.02 |
| | | | | **Total Rs** | | **927803.40** |
| | | | | **Total Rs** | | |
| | | **Total Rs. With GST and Royalty** | | | **Rs** | **14,81,03,316.80** |
| | | | | **Say Rs** | | **148103317.00** |

**I am / We are ready to do the work at 16.500% Below the Estimated Rates**

SWASTIK INFRALOGICS PRIVATE LIMITED

**Contractor**

**Witness**

**Executive Engineer (Works)**
**Nashik Municipal Corporation, Nashik**

6

(17)

*Ref No: CORP/NMC/HO/STEM/2512055*
*Date: 12/12/2025*

swastik
ENGINEERING EMERGENCE

**To,**
**The Executive Engineer,**
Public Works Department,
Nashik Municipal Corporation,
Rajiv Gandhi Bhavan, Nashik 422002

**Subject:** Development of road from Janardan Swami Math (Ch.Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (Ghat Approach/Sadhugram Connect). **Reg- Submission of Initial Security Deposit & Stamp Duty (e-SBTR).**

**Ref:** 1. Tender Notice No. 03/18 (2025-26)
2. Your Letter No: PWD/Desk-8/21/2025, Dated: 11.12.2025

Sir,

Greetings from Swastik,
With reference to the above subject and your letter under Ref. 2, we hereby submit the Initial Security Deposit in the form of Fixed Deposit Receipt (FDR) along with Stamp Duty (e-STBR) of Rs.3,77,000.00 in accordance with the tender conditions.

**Details of the Fixed Deposit Receipt are as follows:**

| Sr. No. | FDR Number | Amount | Bank Name | Date of Expiry |
|---|---|---|---|---|
| 1 | 50301262186522 | Rs. 6,29,000/- | HDFC Bank | 12/01/2029 |

We remain in anticipation of your support and with assurance of our sincere service at all times.

Thanking you,

Yours Faithfully,
**For Swastik Infralogics Pvt. Ltd.**

SWASTIK INFRALOGICS PRIVATE LIMITED

**Srikanth Raghavraju**
**Managing Director**

*Attachments:*
1) *Original Fixed Deposit Receipt*
2) *Original* Stamp Duty (e-STBR)
3) *Cort Fee Stamp of Rs.20.00*

SWASTIK INFRALOGICS PRIVATE LIMITED

# नाशिक महानगरपालिका,नाशिक.

राजीव गांधी भवन, शरणपुररोड नाशिक -422002

www.nmc.gov.in

Email-ce@nmc.gov.in

जा.क्र.साबांवि/डेस्क-८/२१ /२०२५
दि.११/१२/२०२५

प्रति
मे.स्वस्तिक इन्फ्रा.लॉजिक्स प्रा.लि
नाशिक

विषय- **जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता)**

संदर्भ- १) सिंहस्थ कुंभमेळा प्राधिकरणाची दि. १४/०९ /२०२५ रोजीची प्रशासकीय मान्यता .

उपरोक्त कामास दि. /१०/२०२४ अन्वये मंजुर झालेले असल्याने सदरचे पत्र मिळाले पासून २ दिवसांचे आत कागदपत्रांची पुर्तता करावी.

१. रक्कम रुपये ६,२९,००० /- (१.०० पैकी उर्वरीत ०.५० टक्का सुरक्षा अनामत) म्हणून नॅशनलाईज बँकेची एफ.डी.आर./बँक गॅरंटी ३७ महिने मुदतीची सादर करावी.
२. रक्कम रुपये ३,७७,०००/- स्टॅम्प पेपर व रुपये २०/- रुपये चे कोर्ट फी स्टॅम्प फी सादर करावी.

वरील कागदपत्रांची करारनामा करणे कामी त्वरीत पुर्तता करावी, मुदतीत पुर्तता न केल्यास आपणास काम करावयाचे नाही असे समजुन पुढील कार्यवाही करण्यात येईल याची नोंद घ्यावी.

कार्यकारी अभियंता
सार्वजनिक बांधकाम विभाग
नाशिक महानगरपालिका,नाशिक

Received
Mr. Bangera

SWASTIK INFRALOGICS PRIVATE LIMITED

HDFC BANK

# DEPOSIT CONFIRMATION/ RENEWAL ADVICE

THE COMMISSIONER, NASHIK MUNICIPAL CORPORATION

**Customer Name:** M/S. SWASTIK INFRALOGICS PRIVATE LIMITED
**Address:** 5TH FLOOR PROXIMA ARUNACHAL BHAVAN
PLOT NO 19 SECTOR 30A VASHI

NAVI MUMBAI-400614 INDIA

**Joint 1:**
**Joint 2:**

**Nominee:** Not Registered

**Deposit Account:** 50301262186522
**Cust ID of 1st Applicant:** 74810937
**Branch Name:** VASHI SECTOR 17
**Deposit Currency:** INR
**Deposit Type:** REINVEST. DEPOSIT

**PAN:** AANCS5446E

| Deposit Amount | Deposit Start Date | Period of Deposit | Rate of Interest (%p. a) | Maturity Date | Maturity Amount |
|---|---|---|---|---|---|
| 6,29,000.00 | 12 Dec 2025 | 37 Month(s) | 6.4 | 12 Jan 2029 | 7,65,119.00 |

**Deposit Amount (in words):** RUPEES SIX LAKH TWENTY NINE THOUSAND ONLY

**Maturity Amount (in words):** RUPEES SEVEN LAKH SIXTY FIVE THOUSAND ONE HUNDRED NINETEEN ONLY

**Maturity Instruction:** RENEW PRINCIPAL AND INTEREST

**Interest Payment Frequency:** AT MATURITY

**Mode of Operation:** As per debit account

## DEPOSIT LIQUIDATION REQUEST / CHANGE OF MATURITY INSTRUCTION

**For office use only:**

Liquidation Instruction: ☐ On Maturity ☐ Premature Withdrawal

Credit Account Number: | | | | | | | | | | | | | | |

☐ Issue Pay Order ☐ NEFT(Only for non-account holders)

Date of Liquidation: _____

New Maturity Instruction: _____ Signature(s): _____

Thank you for banking with us.

This is a system generated Advice and hence does not require any Signature.

**Generated by:** S71580 **Generated on:** 12/12/2025 20:32:46 **Branch Code:** 540



Kindly refer overleaf for detailed Terms and Conditions

SWASTIK INFRALOGICS PRIVATE LIMITED

# महाराष्ट्र शासन
# GOVERNMENT OF MAHARASHTRA
## ई-सुरक्षित बँक व कोषागार पावती
## e-SECURED BANK & TREASURY RECEIPT (e-SBTR)

24713307168677

Bank/Branch: IBKL - 6910705/Vashi
Pmt Txn id : 766240433
Pmt DtTime : 15-DEC-2025@15:47:46
ChallanIdNo: 69103332025121550807
District : 5101-NASHIK

Stationery No: 24713307168677
Print DtTime : 15-DEC-2025 15:48:21
GRAS GRN : MH013476074202526S
Office Name : IGR312-NSK2_NASHIK 2 JO
GRN Date : 15-Dec-2025@15:47:48

StDuty Schm: 0030046401-75/STAMP DUTY
**StDuty Amt : R 3,77,000/- (Rs Three, Seven Seven, Zero Zero Zero only)**

RgnFee Schm: 0030063301-70/Registration Fees
**RgnFee Amt : R 0/- (Rs Zero only)**

Article : 63--Work Contract
Prop Mvblty: N.A. Consideration: R 12,57,01,976/-
Prop Descr : Development of Road Janardan Swami Math to Laxminarayan Mandir

Duty Payer: PAN-AANCS5446E,Swastik Infralogics Private Limited

Other Party: TAN-NSKN00121C,Nashik Municipal Corporation

Bank official1 Name & Signature

Bank official2 Name & Signature

--- --- Space for customer/office use - - - Please write below this line --- ---

SWASTIK INFRALOGICS PRIVATE LIMITED

e-SBTR IS VALID UPTO SIX MONTHS FROM THE DATE OF PAYMENT.

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टि-१

दि. /१०/२०२५

मा.सादर

विषय- सिंहस्थ कुंभमेळा-२०२७ चे अनुषंगाने निविदा सुचना क्र.३ मधील १८ कामांचे Common Set of Deviation प्रसिध्द करणे बाबत.

सिंहस्थ कुंभमेळा-२०२७ चे अनुषंगाने नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचे दि.१४/९/२०२५ एकूण २१ कामंना प्रशासकीय मंजुरी प्राप्त झाली असून त्यापैकी १८ कामांच्या निविदा प्रसिध्द सुचना क्र.३ (२०२५-२६) अन्वये प्रसिध्द करणेत आल्या आहेत. त्याअनुषंगाने दि.२६/०९/२०२५ रोजी ऑन लाईन पध्दतीने निविदा पुर्व बैठक आयोजित करणेत आली होती. सदर बैठकीच्या अनुषंगाने प्राप्त हरकती / सुचना यास अनुसरून परिशिष्ट-अ तयार करण्यात आले असून त्यामध्ये सर्व हरकती / सुचना व त्यावर नाशिक महानगरपालिकेचा खुलासा तयार केलेला आहे. त्यास मान्यता मिळणेस विनंती.

उपरोक्त खुलासा मान्य झाल्सास त्यास अनुसरून प्रसिध्द करावयाच्या CSD (Commons Set of Deviation ) सोबत परिशिष्ट-ब जोडले आहे. त्याचे अवलोकन होऊन त्यास मान्यतेस्तव व संकेतस्थळावर प्रसिध्द करणेच्या कार्यवाहीस्तव सादर.

"A"

कार्यकारी अभियंता (बांध)

मा.शहर अभियंता सो.

मा. अति. आयुक्त मे

मा. आयुक्त मे

मा. कार्यकारी अभियंता (निविदा कक्ष) :- "A" प्रमाणे कार्यवाही करण्यात आले आहे

कार्यकारी अभियंता (बांधकाम) :-

SWASTIK INFRALOGICS PRIVATE LIMITED

परिशिष्ट-अ

Road Tenders

| Sr. No. | Name of Agency | Clause Details | Queries | Response |
|---|---|---|---|---|
| 1 | B.T. Kadlag Construction Pvt. Ltd. | As per Tender Document Submission date is 10/10/2025 Up to15.00 hrs. | Extend the tender submission time upto 5.00 Pm<br>Because Bank transaction time is upto 4.00 Pm.<br>So, Consider it. | Refer CSD |
| | | **As per Tender Document 1.1 Eligibility Criteria**<br><br>**1) Asphalt Batch Mix Plant & Concrete Batch Mix Plant distance within 30 km from the Nashik Municipal headquarters.**<br>**2) Both plants arrange shift and install after 45 days from the date of LOA.** | 1. It is our earnest request to Consider the Asphalt Batch Mix Plant and Concrete Batch Mix Plants which are ready in existence within 30 kms from the Nashik Municipal headquarters.<br>2. The arrangement shifting and installation both plants after 45 days of LOA clause should deleted. | As per NIT |
| | | **As per Tender Document 1.1 Eligibility Criteria Sr. no. 2 Hydraulic Paver Finisher 9m Width** | Paver of width 5.5m should be considering for 80 TPH plant as given by you. Paver of 9m is used for plant of 120-160 TPH.<br>So please allow Sensor Paver width is 5.5m. For bitumen work and also allow 9m width Sensor Paver is hired agreement. | Refer CSD |
| | | **As per Tender Document 1.1 Eligibility Criteria 2 for Asphalt Work required machinery Sr. no. 5**<br>**Static Roller/Smooth Wheeled Roller - 2 Nos.** | Pleased consider Vibratory Compactor Roller instead of static roller for better sub grade Bitumen compaction. | As per NIT |
| | | **As per Tender Document 1.3 Eligibility criteria financial turnover and bid capacity calculation applied base year FY-2024-25.** | Please Consider financial year 2023-24 for calculating turnover and bid capacity and other related calculations because financial reports and audit reports not yet submitted to IT department it is work in progress date of final IT Return Submission date upto 31stOct. 2025. If it is mandatory to calculate every thing on the basis of FY 2024-25 then our Un-Audited Balance sheet should be considered. | Refer CSD |
| | | **As per Tender Document 2) Important condition of contract) Point D - Availability of funds & E- Continue work in any condition.** | If the payment is irregular, then please consider the Star Rate because there is a variation of bitumen price in every 15 days. Consider Escalation as per PWD Department.<br><br>PRICE VARIATION CLAUSE-If during the operative Period of the Contract as defined in condition below, there shall be any variation in the Consumer Price Index (New Series) for Industrial Workers for Nashik Center as per the Labour Gazette published by the Commissioner of Labour. Government of Maharashtra and/or in the Whole-sale 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 lubricants and major construction materials like bitumen,cement, steel, various types of metal pipes<br>etc. | As per NIT |
| 2 | CKA Birla Group | **2.4 General conditions for electrical Contractor**<br>**List Of approved makes for Electrical Items** | Kindly Consider Orient Electric Ltd (OEL) a CKA Birla Group company which is Indian's one of the leading brands as an approved make under LED fittings, Decorative Pole, High mast and octagonal poles (Brand<br>approval letter with credentials is attached for reference.) | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

परिशिष्ट-अ

Road Tenders

| Sr. No. | Name of Agency | Clause Details | Queries | Response |
|---|---|---|---|---|
| | | Electrical BOQ<br><br>Supplying and erecting integrated LED streetlight fitting 70-75W IP65 & IK08 classhaving single piece pressure die-cast aluminium housing, having system lumens output of Min. 7700 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K,THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, etc complete. | Please give clear range of CCT required. | As per NIT |
| | | Electrical BOQ<br><br>Supplying and erecting integrated LED street light fitting 160-170W IP65 & IK08 classhaving single piece pressure diecast aluminium housing, having system lumens output of Min. 19000 Lumens, etc complete | Please give detailed specifications of Street Light with CCT, CRI, THD, PF and other specifications | As per NIT |
| | | Electrical BOQ<br><br>Supplying and erecting 7 m long decorative pole with cap, base plate, foundation bolt etccomplete in provided foundation. | Please give Design and GTP of decorative pole along with its complete technical specifications | As per NIT |
| | | Electrical BOQ<br><br>Supplying and erecting decorative integral post top lantern LED fixtures of 50 W consisting with accessories on provided pole /bracket | Please give design and GTP and detailed technical specification of Post top Fitting | As per NIT |
| | | Electrical BOQ<br><br>Supplying and erecting decorative integral hanging LED fixtures of 72 W consisting with accessories on provided pole /bracket | Please give design and detailed Technical specification of Decorative Fitting | As per NIT |
| | | Electrical BOQ<br><br>Item no C 18 Supplying and erecting 8 m long decorative pole with cap, base plate, foundation bolt etc complete in provided foundation | Please give Design and GTP of decorative pole along with its complete techical specifications | As per NIT |
| | | Electrical BOQ<br><br>Item No C 20 Supplying and erecting decorative double arm bracket for 7/8 m decorative pole etc complete | Please give Design and GTP of decorative pole along with its complete techical specifications | As per NIT |
| | | Electrical BOQ<br><br>Item No C 17 Supplying and erecting decorative integral hanging LED fixtures of 120 W consisting with accessories on provided pole /bracket | Please give design and detailed Technical specification of Decorative Fitting | As per NIT |
| | | Electrical BOQ<br><br>Item No C 15 Supplying and erecting 8 m long decorative pole with cap, base plate, foundation bolt etc complete in provided foundation. | Please give Design and GTP of decorative pole along with its complete techical specifications | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

R.A.

| Road Tenders | | | | |
|---|---|---|---|---|
| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 3 | Forcon Infra Pvt. Ltd. | **Clause 1.3 Financial Turnover and Bid Capacity, B) Bid Capacity C) Supporting Documentation, P.No 13**<br>**A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant and countersigned by the Engineer-in-Charge not below the rank of Executive Engineer or equivalent.** | We kindly request that the statement showing the value of existing commitments and ongoing works for the next three years be accepted only if it is certified by a Chartered Accountant.<br><br>and<br><br>The condition requiring countersignature by an Engineer not below the rank of Executive Engineer or equivalent may kindly be deleted. | Refer CSD |
| | | **Clause 1.1 Eligibility Criteria: Machinery,**<br>**2 - Machinery**<br>**Hydraulic Paver Finisher with Automatic Electrical Sensor Device (SCADA enabled): The Electronic Sensor Paver Finisher shall be equipped with an electronic sensing device and shall conform to clause 504.3.5 of the MORTH Standard Specification. The Machine shall have a screed of minimum 9.00 meters width and shall be capable of laying bituminous layers with minimum lift thickness of 75mm. – (1 No. Owned)** | We kindly request that the Sensor Paver, whether owned or hired, be considered acceptable. Alternatively, we kindly request that a paver with a capacity of 5.50 meters be considered acceptable in place of the currently stipulated 9.00-meter capacity. | Refer CSD |
| 4 | N.M. Pekhale Infra Pvt. Ltd. | **Clause 1.1 Eligibility Criteria: Machinery,** Each Tenderer / Bidder should further demonstrate the availability of the following key and critical equipment exclusively for this work at the time of submission of tender. Mode of Availability - Owned | We kindly request you to allow a modification stating that the required machinery for this work may be either owned or hired. | As per NIT |
| | | Clause 1.1 Eligibility Criteria: Machinery, | In the tender, there is a 45-day condition to install the batch mix plant after the LOA. We kindly request you to apply this condition to the remaining machinery as well. | As per NIT |
| | | **Clause: A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant and countersigned by the Engineer-in-Charge not below the rank of Executive Engineer or equivalent.** | We kindly request that the statement showing the value of existing commitments and ongoing works for the next three years be accepted only if it is certified by a Chartered Accountant.<br>And the condition requiring countersignature by an engineer not below the rank of Executive Engineer or equivalent may kindly be deleted. | As per NIT |
| | | **1 Detailed Tender Notice, Point 11, Page No 7**<br>Joint venture Agreement in any form shall not be allowed. | We request you to grant permission to enter into a joint venture agreement. | As per NIT |
| | | **5.7 Conditions of Contract, Clause – 57 There is no provision for Price variation, Star rate for this work.** | Permission should be granted to sublet the work.<br>Since the payment for the work depends on the availability of funds, star rates or price variation should be granted. | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
|---|---|---|---|---|
| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 5 | ssss | 1.1 eligibility Criteria - c)-2. | About availability of Machinery, it is said that contractor should own Slip form Hydraulic Concrete Paver (With SCADA)-01 No. conforming to clause 602 of MORTH and IRC:SP:64 with automatic electronic sensor for line, level and thickness capable of laying CC Pavement upto 7.5 m width and 300 mm thickness in a single pass equipped with vibrator for full compaction. Concrete road in this Tender Notice are in Urban area and it involves many obstacles and utilities like Chembers/Manholes/Trees etc. and 7.5 Mtr width hydraulic Concrete Paver is practically not feasible for this type of works.<br>Hence we request you to consider the Slip form Concrete Paver of 5 Mtr width. | Refere CSD |
| | | Clause: 1.1 Eligibility criteria, machinery | Hydraulic Concrete Paver costs 15-18 Cr and can not be made compulsory for works costing only 70-80 Cr.<br>Hence we request you to consider condition of Hire of Hydraulic Concrete Paver.<br>It will also facilitate healthy competition and will benefit NMC. | As per NIT |
| | | Clause:<br>In Para 1.1 eligibility Criteria - c)-3. | Concrete Transit Mixture with SCADA- of 6 m3 capacity – 07 Nos. is given. As there is condition of distance Certificate within 45 days after issue of LOA of having Plant within 30 Km of NMC headquarter hence condition of 07 No. of Transit mixture is unnecessary. Considering the volume and location of works only 4 to 5 Nos of Transit Mixtures are enough for single work. Condition of having 07 No. of TM will not allow competition.<br>Hence we request you to modify this condition and allow owner of 4 to 5 Transit Mixture. | Refer CSD |
| 6 | Pawar Patkar Constructions Pvt. Ltd. | Clause:<br>Certificate of work experience in private sector, joint ventures, and unofficial sub-contracts will not be consider. | Kindly requested all certificate of work experience in Joint Venture should be considered.<br><br>This procedure to considering experience in joint venture work done certificate. Work completed in joint venture the proportionate cost and experience will be considered as single work. (In proportionate to his % contribution in joint venture agreement)<br><br>Recently tenders in PWD for Simhasta, joint venture work done allowed for work experience proportionate % contribution. | Refer CSD |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
|---|---|---|---|---|
| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 7 | SGM Buildcon | 1.1 eligibility Criteria, machinery | The conditions of all tenders specify that the Hydraulic paver machine should be up to 7.5 meters in width. However, the width of roads varies across project sites. While a machine with a width of up to 7.5 meters is suitable for broader roads, it is requested that for narrower roads, consideration be given to allowing the use of smaller-sized Hydraulic paver machines.<br><br>This flexibility will help ensure efficient and appropriate execution according to site conditions. And also encourage more competent bidders to participate. | Refer CSD |
| | | **1.1 eligibility Criteria, machinery** | Hydraulic Concrete Paver maximum cost 10-12 Cr and cannot be made compulsory for works costing only 15-80 Cr. Most companies may not own such high-grade machines, despite having extensive experience in executing similar works with proven quality. Therefore, it is kindly requested that such companies be permitted to acquire the required machines on a rental basis. The rental agreement documents may be submitted at the time of the bidding process.<br><br>This provision will encourage wider participation of competent bidders and ensure quality outcomes in the execution of the work. | Refer CSD |
| | | **In Para 1.1 eligibility Criteria - c)-3- Concrete Transit Mixture with SCADA- of 6 m3 capacity – 07 Nos. is given.** | As there is condition of distance Certificate within 45 days after issue of LOA of having Plant within 30 Km of NMC headquarter hence condition of 07 No. of Transit mixture is unnecessary. Considering the volume and location of works only 4 to 5 Nos of Transit Mixtures are enough for single work. Condition of having 07 No. of TM will not allow competition.<br><br>Hence, we request you to modify this condition and allow owner of 5 Transit Mixture. | Refer CSD |
| 8 | RE Infra Pvt Ltd. | **Page No.13 Important Conditions Contract 2.i**<br>All Tenderer/bidder must note that after completion of tender procedure the successful Tenderer/ bidder shall<br>take out necessary Insurance Policy / Policies so as to provide adequate insurance cover for execution of the<br>awarded contract work from the "Directorate of Insurance, Maharashtra State Mumbai" only. It's Postal address | Insurance cover to be permitted from private insurers also. | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | **Page No.15 Important Conditions Contract 2.3**<br>2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road<br>works are of critical importance and are time-bound in view of the forthcoming SimhastaKumbhamela 2027.<br>The Simhasta Kumbhamela Road Development Project has received formal approval from the<br>Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below,<br>stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor. In certain<br>stretches of the proposed works, delays or difficulties may arise in acquisition of land,obtaining right-ofway,or<br>securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground<br>conditions, review the proposed alignment, and take into account land availability, right-of-way constraints and<br>all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not<br>made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes<br>changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned<br>length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate<br>arrangements, as may be decided by the Competent Authority.In all such circumstances, no claim, demand,<br>compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor.<br>Tenderers shall be deemed to have factored in all such risks,dependencies, | Proportionate Extention of time Limit to be granted on account of delays in site handover and Third Party obstructions | As per NIT |
| | | **Page No.59 Important Conditions Contract 69**<br>**6.42 Deviation limit**<br>**Quantities shown in the Tender are approximate and no claim shall be entertained for quantities of work**<br>**executed being either more or less than those entered in the tender or estimate, to any extent** | Deviation Limit to be Fixed 5% of contract sum and 25 % in Individual Items | As per NIT |
| | | **Page No.69 & 70 Important Conditions Contract 6.69.i**<br>**6.69.1 MINIMUM CEMENT CONSUMPTION:**<br>Minimum cement consumption per cubic meter of concrete for the different grades of concrete shall be as<br>follows | Cement Consumption for various Grade of concrete to be permitted as per mix design attaining Desired Strength as per revelant IS Codes /MORTH specifications. | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 9 | SBD Infra Tech Pvt.Ltd | Detailed Tender Notice, P.No 4<br>1. Earnest Money Deposit<br>Rs. 0.5% of Cost put to tender<br>EMD will be accepted in the form of Online Payment only by net banking only.<br>Tenderer must submit online EMD receipt along with technical document. | Allow EMD to be submitted in the form of Bank Guarantee | |
| 10 | Surya Total Lighting Solutions | Clause 2.4, Conditions of Electrical Work, P.No 18,19<br>List of Approved makes | Sr. No. 6 – LED Fittings<br>Sr. No. 7 – High Mast & Octagonal Poles<br>Sr. No. 9 – Decorative Lighting<br>request the inclusion or regularization of the Surya brand under the above items | As per NIT |
| 11 | Karyesh Constrowell | Clause 1.1 Eligibility Criteria (Machinery), P.No 8<br>Sr. No 1 | Kindly consider the erection of Plant within 60 days from LOA for the fair market competition. It will be more than sufficient time to procure all the materials and erection work. | Refer CSD |
| 12 | gaurishankar purohit | Clause 1.1 eligibility Criteria, Machinery<br>Hydraulic paver machine should be up to 7.5 meters in width | it is requested that for narrower roads, consideration be given to allowing the use of smaller-sized Hydraulic paver machines. | Refer CSD |
| | | Sr. No. 2.Hydraulic Concrete Paver (With SCADA) - Owned | it is kindly requested that such companies be permitted to acquire the required machines on a rental basis. The rental agreement documents may be submitted at the time of the bidding process. | Refer CSD |
| | | Sr. No 3 Concrete Transit Mixer (With SCADA) - No. 7, Owned | We request you to modify this condition and allow owner of 5 Transit Mixture. | Refer CSD |
| 13 | N.K.Varma | Clause 1.1 Eligibility Criteria, Machinery (Page No 8)<br>Sr. No. 1. After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, meets the required capacity and standards, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for. | 1.we sincerely request that only those Asphalt Hot Mix plants and RMC Plants which are already established and functional within 30km from NMC should be considered eligible | As per NIT |
| | | | 2. Lead Charges for Quarry material<br>It is requested that the lead charges for quarries be considered up to 20km as included in the tender estimate<br>If the approved quarry by the Engineer in charge is located beyond 20km, then the additional lead charges as per actual distance may kindly be borne by NMC | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | | 3. Star Rate and escalation clause<br>it is requested to kindly clarify the provision regarding star rates and escalation appilcable during the execution period of the work.<br>It is suggested that<br>a) star rates for materials not covered in the schedule(DTP/SSR)be approved by the engineer-in-charge, based on prevailing market rates at the time of execution.<br>b) In case of delay not attibutable to the contractor, or in case of variation in material/labour costs. the escalation clause as(price adjustment) as per standard PWD/MJP/CPWD practice may be made applicable | As per NIT |
| | | | 4. Provision for price escalation and star rate difference<br>as the allocation of project funds has not been clearly specified, it is requested that in accordance with the GoM GR on price escalation, suitable provisions for price escalation and star rate differences for materials such as cement and steel be incorporated in the tender conditions | As per NIT |
| | | Schedule B (Item no 47) | 5. Clarification regarding use of Grader/Paver for GSB Work (Item no 47)<br>it is requested to kindly clarify whether the use of a mechanical paver is mandatory for the constuction of Granular Sub base (GSB) as per item no.47 of tender No.1 or other similar works, whether the same work can be carried out using a motor grader equipped with appropriate controls and compaction by vibratory roller<br><br>as per standard MoRTH Clause 401, both paver and grader methods are permissible depending on site conditions and layer uniformity requirements. Hence it is requested that the tender condition may be suitably relaxed to allow the use of either a motor grader or paver for laying GSB material, ensuring compliance with the required density and grading compliances | As per NIT |
| | | | 6. On Scope and responsibilities<br>kindly confirm whether the corporation will provide the approved list of quarries in advance, or the contractor is expected to identify and obtain approvals independently. | As per NIT |
| | | | 7. Clarification regarding validity and issuing authority of distance certificate<br>it is requested to kindly clarify whether a distance certificate already issued by the Executive Engineer, PWD for Asphalt plant and RMC plant, valid for a period of one year and certified by the Assistant Engineer(mechanical) shall be accepted for this tender.<br>since the said certificate is issued by a competent government authority and is valid for the specified period, we request that the same be considered sufficient and that bidders may not be required to obtain a fresh distance certificate from the executive engineer, quality control department, NMC | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | 1.3 Financial Turnover and Bid Capacity, page No 11 | 8. Application of Multiplication factors for work executed<br>it is requested to kindly clarify that the escalation (multiplication) factors prescribed in the tender document (for financial year 2020-21 to 2024-25) should be applicable not only for turnover calculations but also for the value of work executed during the corresponding years<br><br>applying the same factors uniformly to both turnover and executed work value will ensure a fair assessment of the contractor 's financial and technical capacity, in line with the provisions of the GoM GR updated 27/09/2018 (CAT/2017/Pra.Kra-08/इमा -2) | Refer CSD |
| | | 1 Detailed Tender Notice, Point 11, Page No 7 | 9. Joint Venture Participation<br>JV shall be allowed amongst existing asphalt plant (min 80 TPH capacity) and ready mix concrete plant (min 60 cu.m/hr capacity) holders for work experience and quantity experience for the required quntities in the tender possessing distance certificates within a 30km radius from the head office | As per NIT |
| | | | 10. Acceptance of security bonds for performance security and initial security deposit<br>It is requested that the department may kindly allow submission of security bonds (insurance Surety Bond) in place of bank guarantee cash or fixed deposit receipts towards :<br>1. performance security<br>2. Initial security deposit<br><br>as per the latest GoM and Ministry of Finance guidelines permitting insurance surety bonds as acceptable instruments for tender security and performance guarantees | Refer CSD |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 14 | Lokmanya Enterprises | | In that civil tender electrical works are also included In this tender information there is no technical criteria mentioned / asked for electrical works. As per government norms it is compulsory that, all electrical works should be carried out by Govt. Licensed Electrical contractor only.<br><br>Also in tender Document Defect liability period for Electrical Work is 5 Years with onsite 5 years comprehensive Maintance. Hence we are trying taking your attention that the meaning of comprehensive Maintance is "Comprehensive maintenance refers to an all-inclusive maintenance contract that covers both routine preventive work and unplanned repairs, including the cost of labor and replacement spare parts, and often provides emergency service and remote support" & this is when the system is in operation & Maintance Contract like Annual Maintance Contract.<br><br>In the above situation after completion of work, it is handed to NMC Elect. Dept. & then system is operated by NMC (Electrical) Dept. & third party Contractor TATA Project. In this situation comprehensive Maintance criteria should not be imposed as due to negliance of operating dept. the system may be failed. Hence the tender condition under General Condition Clause No-11 of onsite 5 years comprehensive Maintance should be cancelled for all items except LED , as for LED fittings Manufacturer is giving the 5 years warranty with their terms conditions. Hence it is our humble request you to kindly remove the Electrical works from the above mention 18 civil works and please published separate tender for electrical work for all locations. | As per NIT |
| 15 | Anand Construwell Pvt. Ltd | C) Supporting Documentation: Bid capacity<br>A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant and countersigned by the Engineer in-Charge not below the rank of Executive Engineer or equivalent. | "We kindly request that the statement showing the value of existing commitments and ongoing works for the next three years be accepted only if it is certified by a Chartered Accountant. and "The condition requiring countersignature by an Engineer not below the rank of Executive Engineer or equivalent may kindly be deleted." | Refer CSD |
| | | 1.1.a Machinery (1)<br>Asphalt / RMC Batch Mix Plant : Above said plant shall be located within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from issuance of LOA, the bidder shall be submit certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation | It is our earnest request to consider the Asphalt and RMC plants, which are already in existence within 30 Kms from the Nashik Municipal headquarters, at the time of submission of tenders may only be considered eligible for the tendering process. | As per NIT |
| | | Clause 57, (Note), Page No. 49<br>As per the guidelines dated 27/09/2018, there is no provision for Price variation, Star rate for this work | Since the fund allocation is not clear, its requested to incorporate price variation clause or star rate | As per NIT |
| 16 | Aiwani Infrastructure Pvt.Ltd | Clause 6.34 Mobilization Advance- No mobilization advance shall be paid under this contract | We request you to consider payment of 10% interest free mobilization advance and 10% interest free machinery advance of the contract price to augment the cash flow of the contract | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | 2 Important Condition of contract<br>d) Payments of the work shall be made subject to availability of fund | We request you to specify the source of funds and confirm the assured availability of funds for the subject work. Since timely payments are critical for smooth execution, clarity on fund allocation and disbursement mechanism will help bidders to assess financial risk and quote competitively | As per NIT |
| | | Detailed tender notice<br>Time limit: upto 31st March 2027 | please specify the exact completion period (In months/days)instead of mentioning "upto 31st march 2027" the exact duration is essential for bidders to:<br>1. calculate bid capacity as per tender conditions<br>2. prepare realistic work programmes and resource planning | As per NIT |
| | | Clause 2.3 Land availability, alignment clearance and tender process implications | Encumbrances are existing in the ROW defined in the tender. You are requested to confirm whether 100% ROW is free of encumbrance will be handed over prior to start of the work | As per NIT |
| | | Allotment of works | to ensure wider participation, timely completion and fair distribution of works among multiple bidders, we request the authority to incorporate a clause restricting the allotment of a maximum of 2 works to a single bidder, even if the bidder emerges as L-1 in more than two works.<br>this will avoid concentration of multiple works with a single agency and will safeguard NMC from the risk of failure of completion before March 2027. | As per NIT |
| | | Detailed tender notice, P.No 8<br>a) for concrete road work costing more than 4cr Sr.1 Clause a),b) and c)<br><br>Page 20 - Clause 3.1.1 all documents as required vide this notice including but not limited to list given below<br>vii. Scanned copy of verification certificate of Executive Engineer regarding plant location given in tender document | There is an ambiguity.Page 8 states that the certificate regarding plant location is to be obtained and submitted within 45 days of LOA, while at page 20 indicates that the same certificate is to be submitted along with the bid. These two conditions contradict each other.<br>To avoid ambiguity, it is requested to kindly amend the clause No vii at page 20 as "Bidders shall provide an undertaking regarding assurance of arrangement of an Asphalt Batch mix plant as per tender requirements on award of work" | As per NIT |
| 17 | G.R Constructions | Hydraulic Paver Finisher with Automatic -<br>1 No. Owned | Hydraulic Paver Finisher with Automatic -<br>1 No. Owned / Hire | As per NIT |
| | | Satisfactorily executed following minimum quantities of the items in one single year from works completed in last Seven years.<br>1) BC/AC 30% Qty. of Schedule ' B' | Satisfactorily executed following minimum quantities of the items in one single year from works completed in last Seven years.<br>1) BC/AC/Mastic 30% Qty. of Schedule ' B' | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 18 | B.S.Chopra and associates | Clause 1.1 Eligibility Criteria, Machinery (Page No 8)<br>Sr. No. 1. After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, meets the required capacity and standards, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for. | 1) Distance Certificate<br>Eligibility for this tender is strictly limited to contractors who possess established and operational Asphalt Batch Mix Plants and Ready Mix Concrete (RMC) Plants located within a 30-kilometer radius of the Nashik Municipal Corporation Headquarters (Rajiv Gandhi Blavan)<br>Limiting participation to contractors with readily available, nearby facilities ensures higher material quality, guarantees on-time project completion, and minimizes logistical and transportation complicationsvvv | As per NIT |
| | | | 2) Availbility of Machinery and Staff during Defect Liability Period (DLP)<br>Please clarify whether the contractor is obligated to maintain a local, stationed presence of essential machinery and technical personnel throughout the DLP for timely handling of maintenance and repair work.<br>This will ensure timely response to any defects observed during the DLP and maintain the desired quality and serviceability of the executed work | As per NIT |
| | | | 3) Provision for Price Escalation and Star Rate Difference<br>As the allocation of project funds has not been clearly specified, it is requested that, in accordance with the Government of Maharashtra GR on Price Escalation, suitable provisions for price escalation and star rate differences for materials such as cement and steel be incorporated in the tender cond tions.<br>This will ensure financial fairness to the contractor in case of increase in material and labour costs during the execution period, and will help maintain the c lity and timely completion of the work as per government norms | As per NIT |
| | | | 4) Clarification Regarding Use of Grader / Paver for GSB Work (Item No. 47)<br>We request clarification: Is a mechanical paver mandatory for GSB work (Tender Item<br>47), or can the process be substituted by using a controlled motor grader for; spreading and a vibratory roller for compaction<br>As per standard MoRTH Clause 401, both paver and grader methods are permissible depending on site conditions and layer uniformity requirements. Hence, it is requested that the tender condition may be suitably relaxed to allow the use of either a motor grader or paver for laying GSB material, ensuring compliance with the required density and grading specifications. | As per NIT |

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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | | 5) On Scope & Responsibilities<br>•Kindly confirm whether the Corporation will provide the approved list of quarries in advance, or the Contractor is expected to identify and obtain approvals independently. | As per NIT |
| | | | 6) On Risk & Liability<br>•We seek clarification on whether the liability for material-rel*ed defects (like pavement failure) rests solely with the Contractor, or if the Corporation assumes shared responsibility, since the materials were officially sanctioned by them.?<br>•Please clarify whether approvals once granted can be revoked mid-project, and what compensation (if any) will be payable to the Contractor. | As per NIT |
| | | | 7) Clarification Regarding Validity and Issuing Authority of Distance Certificate<br>Please clarify if the tender will recognize a valid, one-year Distance Certificate for the Asphalt and RMC Plants, provided it was formally issued by the PWD Executive Engineer and authenticated by the Assistant Engineer (Mechanical) Given that the current certificate is valid and issued by a recognized government authority, we ask that you waive the requirement for bidders to secu. a fresh Distance Certificate from the NMC Quality Control Department | As per NIT |
| | | | 8) Lead Charges for Quarry Material<br>We request that the calculation of lead charges for quarry materials be uniformly restricted to a maximum distance of 20 kilometres, consistent with the distance specified in the original tender estimate<br>Should the Engineer-in-Charge mandate the use of an approved quarry situated beyond the 20-kilometre lead distance, the Nashik Municipal Corporation is kindly requested to reimburse the additional transportation (lead) charges based on the actual distance.<br>The adjustment ensures both financial fairness for contractors and operational practicality for the project, aligning compensation with actual site-specific requirements. | As per NIT |

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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | | 9) Star Rate and Escalation Clause<br>We kindly request a clear provision regarding the application of Star Rates and Price Escalation throughout the work execution period. Please confirm that the relevant guidelines specified in the PWD Government Resolution will be strictly implemented for these financial adjustments.<br>Since the tender is based on current market rates, it is suggested that:<br>•Star Rates for materials not covered in the schedule (DTP/SSR) be approved by the Engineer-in-Charge, based on prevailing market rates at the time of execution.<br>•In case of delay not attributable to the contractor, or in case of variation in material/labour costs, the escalation clause (price adjustment) as per standard PWD /<br>MJP / CPWD practice may be made applicable. | As per NIT |
| | | | 10) Availability of Machinery and Equipment<br>We request confirmation that all necessary movable equipment for the project (e.g., paver, roller, grader, tipper) can be sourced through either contractor ownership or verified rental/lease agreements. This flexibility should apply to all machinery other than the mandatory Asphalt Batch Mix Plant."<br>Allowing equipment to be rented or leased will boost competition by encouraging wider participation from qualified contractors, all while ensuring compliance with our project's technical requirements and quality standards. | Refere CSD |
| | | | 11) Eligibility Criteria<br>We request confirmation that the financial escalation factors provided in the tender document (covering FY 2020-21 to 2024-25) must be uniformly applied to both the contractor's annual turnover and the corresponding value of work executed. This application is intended to align the evaluation process with the Government of Maharashtra GR dated 27/09/2018.<br>This uniform application aligns the assessment of the contractor's financial and technical capacity with the standards set forth in the Government of Maharashtra GR dated 27/09/2018, ensuring an equitable evaluation.<br>The aim is to uphold clarity and fairness in assessing each contractor's capacity to undertake the project | Refer CSD |

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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 19 | Alson Electricals | | It is mandatory to that, all electrical works should be done by Electrical Licensed contractor only.<br>As per tender DTP the DLP period given for all electrical material is 60 Months. Actually in other tenders 60 months DLP period is to be considered only for LED Street light fittings.<br>So we request you to consider the regular DLP period Le. 12 months for other electrical item like Cable, Pole Transformer, Conductor etc.<br>It is our humble request you to remove the Electrical works from the above mention 18 civil works and please published separate tender for electrical work for all locations. | As per NIT |
| 20 | SGA Electric Corporation | | Electrical works should be carried out by Govt. Licensed Electrical contractor only. | As per NIT |
| | | General Condition Clause No-11 | "Comprehensive maintenance refers to an all-inclusive maintenance contract that covers both routine preventive work and unplanned repairs, including the cost of labor and replacement spare parts, and often provides emergency service and remote support & this is when the system is in operation & Maintance Contract like Annual Maintance Contract."<br>In the above situation after completion of work, it is handed to NMC Elect. Dept. & then system is operated by NMC (Electrical) Dept. & third party Contractor TATA Project. In this situation comprehensive Maintance criteria should not be imposed as due to negliance of operating dept the system may be failed. Hence the tender condition under General Condition Clause No-11 of onsite 5 years comprehensive Maintance should be cancelled for all items except LED, as for LED fittings Manufacturer is giving the 5 years warranty with their terms conditions. | As per NIT |
| | | | Kindly remove the Electrical works from the above mention 18 civil works and please published separate tender for electrical work for all locations. | As per NIT |
| 21 | Jaquar Group | | Brand name Jaquer is missing In LED Fittings category. Kindly request to incorporate Jaquar brand in it | As per NIT |
| 22 | Suyog Infra | | Kindly remove the Electrical works from the above mention 18 civil works and please published separate tender for electrical work for all locations. | As per NIT |
| | | | 1. Eligibility Criteria (Machinery List): In point no. 2, the requirement specifies "Hydraulic Paver Finisher<br>(with minimum screed width 9 metres)". We request you to kindly relax this condition to "Hydraulic Paver Finisher (with | Refer CSD |
| | | | 2. Price Escalation: Considering the large quantities of bitumen and cement involved in the tender, and their<br>fluctuating market rates, we request you to allow Star Rate/Price Escalation provisions. | As per NIT |
| | | | 3. Bid Capacity: The formula for calculating bid capacity has not been mentioned in tender document | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 23 | RPS Infraprojects | **1. Tender Clause Page No.13 Important Conditions Contract 2.i** All Tenderer/bidder must note that after completion of tender procedure the successful Tenderer/ bidder shall take out necessary Insurance Policy / Policies so as to provide adequate insurance cover for execution of the awarded contract work from the "Directorate of Insurance, Maharashtra State Mumbai" only. It's Postal address | We must be permitted to take insurance cover from reputed pvt Insurers also | As per NIT |
| | | **2. Tender Clause Page No.15 Important Conditions Contract 2.3** 2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road works are of critical importance and are time-bound in view of the forthcoming SimhastaKumbhamela 2027. The Simhasta Kumbhamela Road Development Project has received formal approval from the Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below, stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor. In certain stretches of the proposed works, delays or difficulties may arise in acquisition of land,obtaining right-ofway,or securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground conditions, review the proposed alignment, and take into account land availability, right-of-way constraints and all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate arrangements, as may be decided by the Competent Authority.In all such circumstances, no claim, demand, compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor. Tenderers shall be deemed to have factored in all such risks,dependencies, and conditionalities while preparing and submitting their bids. | Extention of time Limit to be granted in proportion to delays in site handover and local hindrances in R.O.W | As per NIT |
| | | **3. Tender Clause Page No.59 Important Conditions Contract 69** 6.42 Deviation limit<br>Quantities shown in the Tender are approximate and no claim shall be entertained for quantities of work<br>executed being either more or less than those entered in the tender or estimate, to any extent. | Total devisation limit should be fixed at maximum 5% of contract sum.Individual item variation can be to any extent based on site conditions. | As per NIT |
| | | **4. Tender Clause Page No.69 & 70 Important Conditions Contract 6.69.i** 6.69.1 MINIMUM CEMENT CONSUMPTION:<br>Minimum cement consumption per cubic meter of concrete for the different grades of concrete shall be as<br>follows | Cement Consumption for various Grade of concrete to be allowed as per relevant IS codes. | As per NIT |

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| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | **5. Tender Clause-2.3 Page No.15 Important Conditions Contract 2.3** 2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road works are of critical importance and are time-bound in view of the forthcoming Simhasta Kumbhamela 2027. The Simhasta Kumbhamela Road Development Project has received formal approval from the Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below, stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor.In certain stretches of the proposed works, delays or difficulties may arise in acquisition of land, obtaining right-ofway,or securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground conditions, review the proposed alignment, and take into account land availability, right-of-way constraints,and all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate arrangements, as may be decided by the Competent Authority. In all such circumstances, no claim, demand, compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor. Tenderers shall be deemed to have factored in all such risks, dependencies, | We have to erect plant at 30 km from Rajiv Gandhi Bhavan as mandated in tender.NMC to arrange suitable land for the same | As per NIT |
| | | **6. Tender Clause no.1.1 C a) Page no.11** b) After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shifl, and install his own stationary/mobile Concrete Batch Mix Plant of the above specification and minimum 60 Cu.m. per hour capacity with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period. is owned outright by the tenderer/bidder and is located within the specified 30 km limit. | Time for erection and operation of Asphalt plant to be 60 Days From L.O.A | Refer CSD |
| | | 7. Royalty charges to be Paid by Contractor 2(viii) on page no 13 | Royalty charges on minor mineral consumed in work to be reimbursed as per Govt norms. | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 24 | Shah & Parikh Engineer | **1. Tender Clause Page No.13 Important Conditions Contract 2.i.** All Tenderer/bidder must note that after completion of tender procedure the successful Tenderer/ bidder shall take out necessary Insurance Policy / Policies so as to provide adequate insurance cover for execution of the | We must be permitted to take insurance cover from reputed pvt Insurers also | As per NIT |
| | | **2. Tender Clause Page No.15 Important Conditions Contract 2.32.3** Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road works are of critical importance and are time-bound in view of the forthcoming SimhastaKumbhamela 2027. The Simhasta Kumbhamela Road Development Project has received formal approval from the Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below, stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor. In certain stretches of the proposed works, delays or difficulties may arise in acquisition of land,obtaining right-ofway,or securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground conditions, review the proposed alignment, and take into account land availability, right-of-way constraints and all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes changes in the overall treatment, modifies the Administrat ve Approval amount, or reduces the sanctioned length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate arrangements, as may be decided by the Competent Authority.In all such circumstances, no claim, demand, compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor. Tenderers shall be deemed to have factored in all such risks,dependencies, and conditionalities | Extention of time Limit to be granted in proportion to delays in site handover and local hindrances in R.O.W | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | **3.Tender Clause-2.3 Page No.15 Important Conditions Contract 2.3**<br>2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road works are of critical importance and are time-bound in view of the forthcoming Simhasta Kumbhamela 2027.<br>The Simhasta Kumbhamela Road Development Project has received formal approval from the Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below, stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor.In certain stretches of the proposed works, delays or difficulties may arise in acquisition of land, obtaining right-ofway,or securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground conditions, review the proposed alignment, and take into account land availability, right-of-way constraints,and all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate arrangements, as may be decided by the Competent Authority. In all such circumstances, no claim, demand, compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor. Tenderers shall be deemed to have factored in all such risks, dependencies, and conditionalities | We have to erect plant at 30 km from Rajiv Gandhi Bhavan as mandated in tender.NMC to arrange suitable land for the same. | As per NIT |
| | | **4.Tender Clause no.1.1 C a) Page no.11**<br>b) After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shifl, and install his own stationary/mobile Concrete Batch Mix Plant of the above specification and minimum 60 Cu.m. per hour capacity with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder and is located within the specified 30 km limit. | Time for erection and operation of Asphalt plant to be 60 Days From L.O.A | Refer CSD |
| | | 5. Royalty charges to be Paid by Contractor 2(viii) on page no 13 | Royalty charges on minor mineral consumed in work to be reimbursed as per Govt norms. | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | 6.Asphalt batch mix plant to be owned clause no page no | i) Assured access to Asphalt plant through confirmed lease agreement<br>ii)To permit successful tenderer to procure and install Asphalt plant within 60 days after L.O.A | Refer CSD |
| 25 | saket Infra | 1. Tender Clause Page No.13 Important Conditions Contract 2.i .<br>. All Tenderer/bidder must note that after completion of tender procedure the successful Tenderer/ bidder shall<br>take out necessary Insurance Policy / Policies so as to provide adequate insurance cover for execution of the<br>awarded contract work from the "Directorate of Insurance, Maharashtra State Mumbai" only. It's Postal address | Insurance cover to be permitted from private insurers also | As per NIT |
| | | 2. Tender Clause Page No.15 Important Conditions Contract 2.3 2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road<br>works are of critical importance and are time-bound in view of the forthcoming SimhastaKumbhamela 2027.<br>The Simhasta Kumbhamela Road Development Project has received formal approval from the<br>Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below,<br>stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor. In certain<br>stretches of the proposed works, delays or difficulties may arise in acquisition of land,obtaining right-ofway,or<br>securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground<br>conditions, review the proposed alignment, and take into account land availability, right-of-way constraints and<br>all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not<br>made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes<br>changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned<br>length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate<br>arrangements, as may be decided by the Competent Authority.In all such circumstances, no claim, demand,<br>compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor.<br>Tenderers shall be deemed to have factored in all such risks,dependencies, | Proportionate Extention of time Limit to be granted on account of delays in site handover and Third Party obstructions | As per NIT |
| | | 3. Tender Clause Page No.59 Important Conditions Contract 69 6.42 Deviation limit<br>Quantities shown in the Tender are approximate and no claim shall be entertained for quantities of work<br>executed being either more or less than those entered in the tender or estimate, to any extent. | Deviation Limit to be Fixed 5% of contract sum and 25 % in Individual Items | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | 4. Tender Clause Page No.69 & 70 Important Conditions Contract 6.69.i 6.69.1 MINIMUM CEMENT CONSUMPTION: Minimum cement consumption per cubic meter of concrete for the different grades of concrete shall be as follows | Cement Consumption for various Grade of concrete to be permitted as per mix design attaining Desired Strength as per revelant IS Codes /MORTH specifications. | As per NIT |
| | | **5. Tender Clause-2.3 Page No.15 Important Conditions Contract 2.3** 2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works) The proposed road works are of critical importance and are time-bound in view of the forthcoming Simhasta Kumbhamela 2027. The Simhasta Kumbhamela Road Development Project has received formal approval from the Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below, stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor.In certain stretches of the proposed works, delays or difficulties may arise in acquisition of land, obtaining right-ofway,or securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine theground conditions, review the proposed alignment, and take into account land availability, right-of-way constraints,and all related challenges prior to submission of their bids. Furthermore, in the event that: the required land is not made available, alignment or right-of-way clearance is notgranted, or the Competent Authority proposes changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned length of work, then the tender process may be withheld, cancelled,withdrawn, or reassigned under separate arrangements, as may be decided by the Competent Authority. In all such circumstances, no claim, demand, compensation, or financial liability of any nature whatsoever shall beentertained from any bidder or contractor. Tenderers shall be deemed to have factored in all such risks, dependencies, | Adequate Land for RMC/Asphalt Plant And Temporary Facilities to be made available within 30 kms fromat Rajiv Gandhi bhawan as mandated in tender | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | 6.Tender Clause no.1.1 C a) Page no.11 b) After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shifl, and install his own stationary/mobile Concrete Batch Mix Plant of the above specification and minimum 60 Cu.m. per hour capacity with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder and is located within the specified 30 km limit. | Time for erection and operation of RMC /Asphalt plant to be 60 Days From L.C.A | Refere CSD |
| | | 7.Royalty charges to be Paid by Contractor 2(viii) on page no 13 | Royalty charges on minor mineral consumed in work to be reimbursed as per Govt norms. | As per NIT |
| 26 | Aakar Constructions, Nashik | **1.1.a Machinery (1)** Asphalt / RMC Batch Mix Plant : Above said plant shall be located within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from issuance of LOA, the bidder shall be submit certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation | It is our earnest request to consider the Asphalt and RMC plants, which are already in existence within 30 Kms from the Nashik Municipal headquarters, at the time of submission of tenders may only be considered eligible for the tendering process. | As per NIT |
| | | **1.1.a Machinery (2)** Hydraulic Paver Finisher with Automatic Electronic Sensor Device (SCADA enabled) : Width : 9.00 mtr Mode of availability : Owned | Please allow hire agreement for said machinery (9.00m width) instead of owned paver. | Refer CSD |
| | | **Hydraulic Concrete Paver (with SCADA) :** Width : 7.5 mtr Mode of availability : Owned | Please allow hire agreement for said machinery (7.50m width) instead of owned paver. | Refer CSD |
| | | **1.1.a Machinery (5)** Static roller 8 to 10 Tonne/ smooth wheeled power roller | Please permit to use vibratory road roller instead of static roller. Or Please allow hire agreement for said machinery instead of owned. | As per NIT |
| | | **1.3 - B BID CAPACITY** A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant and countersigned by the Engineer-in-Charge not below the rank of Executive Engineer or equivalent. | Please request that the statement showing the value of existing commitments and ongoing works for the next three years be accepted only if it is certified by a Chartered Accountant. and The condition requiring counter signature by an Engineer not below the rank of Executive Engineer or equivalent may kindly be deleted. | Refer CSD |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | **Clause 57, (Note), Page No. 49**<br>As per the guidelines dated 27/09/2018, there is no provision for Price variation, Star rate for this work | Since the fund allocation is not clear, its requested to incorporate price variation clause or star rate. | As per NIT |
| 27 | Mahalaxmi Constructions | **Clause 1.1 Eligible Critera, Point 1.2**<br>Satisfactorily executed 30% quantity of following items in one single year in last seven years :<br>1)WBM+GSB+WMM<br>2)BM<br>3)DBM<br>4)BC/AC | as per earlier tender qualification criteria of NMC there are BM+DBM quantities consider for tender like WBM+GSB+WMM. we hereby request to allow BM+DBM quantities for fare and genuine competition | As per NIT |
| 28 | Kranti Constructions | **Detailed E Tender Notice 11), P.No7**<br>Joint Venture: Joint Venture agreement in any form shall not be allowed | Considering the cost & quantum of the work it is requested you to allow the joint venture | |
| 29 | Vinod Luthra & Associates | | 1. Exclusion of Electrical Work<br>The scope of the work includes electrical works along with bituminous road works. We humbly request that the electrical portion be excluded from this tender, as we do not possess adequate expertise in electrical execution. Getting the same executed through sub-contracting will be a challenging task for us.<br>If the electrical works are floated separately, the Nashik Municipal Corporation will benefit from greater competition among qualified electrical contractors across India. This will not only ensure better service, quality, and workmanship but also result in an approximate saving of 15-20% of the electrical contract value. | As per NIT |
| | | | 2. Aggregate Quality and Mix Design<br>You are aware of the varying quality of stone aggregates available in Nashik district. Hence, we request that a mix design be prepared for every aggregate source from different<br>quarries. The percentage of bitumen required for DBM, AC, and DM layers may accordingly be determined and applied. | As per NIT |
| | | | 3. Lead Charges for Aggregates<br>We request that lead charges for aggregates be paid as per actuals, duly certified by the Engineer-in-Charge and approved by Quality Control. | As per NIT |
| | | | 4. Bank Guarantee / Security Bond<br>As per PWD-GR manual and practice, instead of insisting on a bank guarantee, it is requested that the same be replaced with a Security Bond, which will reduce the financial burden on Plot | As per NIT |
| | | **Clause 6.34 Mobilisation advance –** no mobilisation advance shall be paid under this<br>contract. | 5. Mobilization Advance<br>Provision of mobilization advance may kindly be incorporated in the tender form to facilitate smooth commencement of work. | As per NIT |
| | | | 6. Release of Payment and Security Deposit<br>We request that immediately upon completion of work, the total payment be released without deduction of 10% towarsd security deposit. This will improve cash flow and ease financial stress on contractors. | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | | 7 Chartered Accountant Certification<br>Once a certificate is issued by the Executive Engineer, in such cases only acertificate from a Chartered Accountant may be accepted, and no further conditions may be imposed. | As per NIT |
| | | | 8. Work Balance Certificate<br>We submit these suggestions for your kind consideration in the interest of improving quality, transparancy, and economy of the work. | As per NIT |
| | | Clause 1.1 Eligibility Criteria, Machinery (Page No 8)<br>Sr. No. 1. After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, meets the required capacity and standards, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for. | 9. Distance Certificate - Requesting that Asphalt and RMC plants within 30 km of Nashik Municipal HQ. be considered valid for tender eligibility. | As per NIT |
| | | Clause 57, (Note), Page No. 49<br>As per the guidelines dated 27/09/2018, there is no provision for Price variation, Star rate for this work | 10. Price Escalation / Star Rate Difference -Asking for provisions in line with Maharashtra Government GR to cover rising costs of cement, steel, labour, etc as there is no provision of funds with NMC for these works. | As per NIT |
| | | Schedule B (Item no 47) | 11. Use of Grader / Paver for GSB Work - Seeking clarification if Item 47 (GSB construction) must use a paver, or whether a grader with proper compaction is acceptable (as per MoRTH 401). | As per NIT |
| | | 1.1 Eligibility criteria Page no 8 | 12. Machinery & Equipment - Requesting flexibility to allow contractors to use owned or rented machinery (except Asphalt Batch Mix Plant, which is mandatory) movable machinery like grader & 9 miter paver will be provided during work execution or allow 5.5 miter Sencer paver. | As per NIT except TM |
| | | 1.3 Financial Turnover and Bid Capacity Page no 11 | 13. Additional Point for Consideration: Application of Financial Multiplication Factors (PWD GR)<br>As per the Government of Maharashtra PWD Government Resolution, for bringing financial figures to a common base value, completed works from previous years are to be multiplied by prescribed factors — 1.10 for 1st year, 1.21 for 2nd year, 1.23 for 3rd year, 1.46 for 4th year, and 1.61 for 5th year.<br>In the tender form, this factor has presently been applied only for the annual turnover. However, as per the said Government Resolution, the same multiplication factor is also required to be applied for the executed amount of work completed. | As per CSD |

SWASTIK INFRALOGICS PRIVATE LIMITED

R. Nath

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| | | | As per the PWD Government Resolution and norms, the escalation factor is applicable not only to the turnover but also to the work executed amount. However, in the present tender form, it appears that due to a typographical error or oversight, the words WORK "executed amount" to be considered for escalation have not been included.<br><br>We therefore request you to kindly rectify this and include the WORK executed amount for application of the escalation factor and index, in line with PWD norms & G.R. | As per NIT |
| 30 | ST Kundariya | | Dear Madam,<br>In view of the above reference, I, M.S.T. Kundariya, (Electrical Contractor), Nashik, hereby submit that we have the experience of completing the electrical works in Simhasthata in the past in a timely and satisfactory manner. However, since the electrical works have been published in the Simhasthata Works M.N.P. Nashik Construction E-Tender Notice No. 3 for the year 2025-26 (Work No. 1 to 18), the electrical contractor will be the one to complete the electrical works in the said Simhasthata.<br><br>Please kindly request you that all electrical works of Simhastha Works M.N.P. Nashik Construction E-Tender Notice No.3 Year 2025-26 (Work No. 1 to 18) and onwards should be published as separate tenders by M.N.P. Nashik Electricity Department as usual. Therefore. Electrical contractors and their dependent employees will get employment opportunities and since they are local workers, it will be easy to carry out electrical works and carry out maintenance and repair on time/expeditiously. This is a humble request to get justice from you. | As per NIT |
| 31 | F.C.Rodrigues | **Detailed E Tender Notice 11), P.No7**<br>Joint Venture: Joint Venture agreement in any form shall not be allowed | Permission of Joint Venture | As per NIT |
| | | **Clause 57, (Note), Page No. 49**<br>As per the guidelines dated 27/09/2018, there is no provision for Price variation, Star rate for this work | **Inclusion of price escalation star rate clause**<br>Given the volatility in the market prices of materials (Such as cement, steel, fuel, bitumen)and labor which may prevail over the contract period, we strongly request the inclusion of a suitable price escalation star rate clause | As per NIT |
| | | **6.70 Bituminous Works b) Plant and Machinery, Asphalt Batch mix plant Clarification Regarding Validity and Issuing Authority of Distance Certificate** | **Point for the distance certificate**<br>It is our earnest request to consider the Asphalt and RMC plants, which are already in existance within 30 kms from the NMC at the time of submission of tenders may only be considered eligible for the tendering process | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

| Road Tenders | | | | |
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| Sr. No. | Name of Agency | Clause Details | Queries | Response |
| 32 | JB Infrastructure | | Firstly, we would like to request exemption from pre-qualification criterion regarding ownership of an asphalt Batch mix Plant as our company has well experience asphalt road work and capable of executing similar quantum of asphalt road work. As per the tender condition in this regard it is requested to accept our MOU signed with the local Asphalt plant owner before starting the work.<br>We believe our expertise and resources make us a suitable candidate for this project,and we would appreciate consideration for exemption from this requirement. | As per NIT |
| | | Schedule B | Item No B6 of tender no-03/05 -Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra & Mahindra make) from inside and outside including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, inspection charges, transportation to stores / site, and stacking, etc. complete. MJP DSR Page no 72 Sr No 7 (d)<br>0.00<br>SECTION-I(I) C.I./D.I. PIPES (70)<br>Unit of quantity -killometre(Please clarify) | As per NIT |
| | | | Item no.D-15 of tender no-03/08 Supplying, fitting and fixing in position true to line and level Elastomeric Bearing including all accessories as per drawing and technical specifications and IRC:83 (Pt-II) section IX and clause 2005 of MoRTH specifications etc. complete.(SSR Item Nc-13.07) | As per NIT |
| | | | Can we work during monsoon?<br>Time Period of payment after submission of bills. | As per NIT |
| 33 | M.G.Nair | Eligibility criteria, machinery | 1)Hydraulic paver finisher machine of 6mt wide may be allowed for simhasta project | Refer CSD |
| | | | 2) motor grader should be allowed on hire basis | As per NIT |
| 34 | M.T.Patil | 1.3 Certificate of work experience in private sector, joint ventures, and unofficial sub-contracts will not be consider. | Kindly requested all certificate of work experience in Joint Venture should be considered. This procedure to considering experience in joint venture work done certificate. Work completed in joint venture the proportionate cost and experience will be considered as single work. (In proportionate to his % contribution in joint venture agreement) Recently tenders in PWD for Simhasta, joint venture work done allowed for work experience proportionate % contribution. | Refer CSD |
| 35 | Rushabh Construction | | 1. Earnest Money Deposit: We request you to kindly permit the payment of EMD in the form of a Bank Guarantee.<br>minimum screed width up to 5.5 metres)" for wider participation. | As per NIT |

SWASTIK INFRALOGICS PRIVATE LIMITED

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Road Tenders

| Sr. No. | Name of Agency | Clause Details | Queries | Response |
|---|---|---|---|---|
| 35 | Rushabh Construction | | 1. Earnest Money Deposit: We request you to kindly permit the payment of EMD in the form of a Bank Guarantee. minimum screed width up to 5.5 metres)" for wider participation. | As per NIT |
| | | | 2. Eligibility Criteria (Machinery List): In point no. 2, the requirement specifies "Hydraulic Paver Finisher (with minimum screed width 9 metres)". We request you to kindly relax this condition to "Hydraulic Paver Finisher (with | Refer CSD |
| | | | 3. Price Escalation: Considering the large quantities of bitumen and cement involved in the tender, and their fluctuating market rates, we request you to allow Star Rate/Price Escalation provisions. | As per NIT |
| | | | 4. Bid Capacity: The formula for calculating bid capacity has not been mentioned in tender document | As per NIT |
| 36 | Electrical Contractors Association of Maharshtra | | For simhasta 2027 electrical work tenders shall be published on e-tender by electrical department NMC instead of PWD NMC | As per NIT |
| 37 | Rajson Electrons | | In that civil tender near about 33.25 Cr electrical works are included. Further in tender DTP there is no technical criteria mentioned / asked for electrical works. as per government norms it is mandatory to that, all electrical works should be done by Electrical Licensed contractor only. As per tender DTP the DLP period given for all electrical material is 60 Months. Actually in other tenders 60 months DLP period is to be considered only for LED Street light fittings. So we request you to consider the regular DLP period i.e. 12 months for other electrical item like Cable, Pole. Transformer, Conductor etc. It is our humble request you to remove the Electrical works from the above mention 18 civil works and please published separate tender for electrical work for all locations. | As per NIT |

Executive Engineer (Works)
Nashik Municipal Corporation, Nashik

Executive Engineer (Works)
Nashik Municipal Corporation, Nashik

SWASTIK INFRALOGICS PRIVATE LIMITED

R. A.

## Nashik Municipal Corporation – Tender Notice No. 03 (2025-26)

## Pre-Bid Meeting and Issuance of Addendum/Corrigendum

**Nashik Municipal Corporation has invited bids for eight (18) works under Tender Notice No. 03 (2025-26). A Pre-Bid Meeting for the same was conducted online on 01/10/2025 at 16:00 hours. The meeting was attended by the following bidders:**

| | | | | | |
|---|---|---|---|---|---|
| 1 | B.T. Kadlag Construction Pvt. Ltd. | 13 | N. K. Varma | 25 | saket Infra |
| 2 | CKA Birla Group | 14 | Lokmanya Enterprises | 26 | Aakar Constructions, Nashik |
| 3 | Forcon Infra Pvt. Ltd. | 15 | Anand Construwell Pvt. Ltd | 27 | Mahalaxmi Constructions |
| 4 | N.M. Pekhale Infra Pvt. Ltd. | 16 | Ajwani Infrastructure Pvt.Ltd | 28 | Kranti Constructions |
| 5 | Rajaram Constructions | 17 | G.R Constructions | 29 | Vinod Luthra & Associates-2 |
| 6 | Pawar Patkar Constructions Pvt. Ltd. | 18 | B. S. Chopra and associates | 30 | ST Kundariya |
| 7 | SGM Buildcon | 19 | Alson Electricals | 31 | F. C. Rodrigues |
| 8 | RE Infra Pvt Ltd. | 20 | SGA Electric Corporation | 32 | JB Infrastructure |
| 9 | SBD Infra Tech Pvt.Ltd | 21 | Jaquar Group | 33 | M.G Nair |
| 10 | Surya Total Lighting Solutions | 22 | Suyog Infra | 34 | M. T. Patil |
| 11 | Karyesh Construwell | 23 | RPS Infraprojects | 35 | Rushabh Construction |
| 12 | Gaurishankar Purohit | 24 | Shah & Parikh Engineer | 36 | Electrical Contractor Association of Maharashtra |
| | | | | 37 | Rajson electron |

**Pursuant to discussions during the meeting, the following documents have been issued and shall form an integral part of the tender document:**

- **Common Set of Deviations (CSD) – containing clarifications, amendments, and decisions arising from the Pre-Bid Meeting.**

SWASTIK INFRALOGICS PRIVATE LIMITED

# Nashik Municipal Corporation

परिशिष्ट-ब

## COMMON SET OF DEVIATION / CORRIGENDUM / ADDENDUM
### For Works Under Tender Notice No:-3 (2025-2026)

<table>
<tr><th>Sr.No</th><th>CLAUSE</th><th>ORIGINAL CLAUSE DETAILS</th><th>SHALL BE READ AS</th></tr>
<tr><td>1</td><td>Detailed Tender Notice, Sr. No.6, Date of Submission of :- Tender</td><td>The bids shall be submitted online through the e-tendering system on www.mahatender.gov. in for above work on or before date 10/10/2025 upto 15.00 hrs.</td><td>The bids shall be submitted online through the e-tendering system on www.mahatender.gov. in for above work on or before date 17/10/2025 upto 17.00 hrs.</td></tr>
<tr><td>2</td><td>Eligibility Criteria</td><td>Certificates of work experience in private sector, joint ventures, and unofficial sub-contracts will not be considered.</td><td>Official joint ventures experience in proportionate to percentage contribution in JV agreement will be considered however, certificates of work experience in private sector, and unofficial sub-contracts will not be considered.</td></tr>
<tr><td>3</td><td>1.3 Financial Turnover and Bid Capacity, A) Financial Turnover</td><td>iii) Escalation factors shall be applied to bring all figures to a common base year, as under:
<table>
<tr><th>Year before</th><th>Financial Year</th><th>Multiplication Factor</th></tr>
<tr><td>One</td><td>2024–25</td><td>1.10</td></tr>
<tr><td>Two</td><td>2023–24</td><td>1.21</td></tr>
<tr><td>Three</td><td>2022–23</td><td>1.33</td></tr>
<tr><td>Four</td><td>2021–22</td><td>1.46</td></tr>
<tr><td>Five</td><td>2020–21</td><td>1.61</td></tr>
</table></td><td>Note: Escalation factors shall be applied to bring all figures related to similar types of work and financial turnover to a common base year, as under:
<table>
<tr><th>Year before</th><th>Financial Year</th><th>Multiplication Factor</th></tr>
<tr><td>One</td><td>2024–25</td><td>1.10</td></tr>
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<tr><td>Five</td><td>2020–21</td><td>1.61</td></tr>
</table></td></tr>
<tr><td>4</td><td>1.3 Financial Turnover and Bid Capacity, C) Supporting Documentation</td><td>A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant and countersigned by the Engineer-in-Charge not below the rank of Executive Engineer or equivalent.</td><td>A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant. Such existing commitments and ongoing works, work done certificates and work orders for such works shall also be submitted along with the certificate certified by a Chartered Accountant.</td></tr>
<tr><td>5</td><td>5.7 Conditions of Contract</td><td>General Provision<br>Clause – 1 : The person / persons whose tender may be accepted (herein-after called the contractor, which expression shall unless exceeded by or repugnant to the context include his hires, executors, administrators and (assigns) shall within 10 days (which may be extended by the Executive Engineer/ City</td><td>General Provision<br>Clause – 1: The person / persons whose tender may be accepted (herein-after called the contractor, which expression shall unless exceeded by or repugnant to the context include his hires, executors, administrators and assigns) shall</td></tr>
</table>

SWASTIK INFOLOGICS PRIVATE LIMITED

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| | | Engineer/ or The Commissioner conceded up to 1month/ 2 months/ 3 months respectively if the Executive Engineer/ City Engineer/ or The Commissioner thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Nashik Municipal Corporation in Cash or Govt. securities endorsed to the Commissioner, Nashik Municipal Corporation (if deposited for more than 12 months ) of sum sufficient which will make up the full security deposit specified in the tender or<br>(A) Permit Corporation at the time of making any payment to him for work done under the contract to deduct such as will amount to the percentage mentioned in detailed tender notice of all moneys so payable such deductions to be held by Nashik Municipal Corporation 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 the percentage mentioned in detailed tender notice, of the total estimated cost of the work it shall be lawful for Nashik Municipal Corporation at the time of making any payment to the contractor for work done under the contract to make up the full amount of the percentage mentioned in detailed tender notice, 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 Nashik Municipal Corporation 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 there from, or from any sums which may be due or may become due by Nashik Municipal Corporation 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 10 days thereafter, make good in cash or | (A) within 10 days (which may be extended by the Executive Engineer/ City Engineer/ or The Commissioner conceded up to 1month/ 2 months/ 3 months respectively if the Executive Engineer/ City Engineer/ or The Commissioner thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Nashik Municipal Corporation in **Cash/DD/ Cheque to the Commissioner, Nashik Municipal Corporation of sum sufficient which will make up the full security deposit specified in the tender** or<br>(B) Permit Corporation at the time of making any payment to him for work done under the contract to deduct such as will amount to the percentage mentioned in detailed tender notice of all moneys so payable such deductions to be held by Nashik Municipal Corporation 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 the percentage mentioned in detailed tender notice, of the total estimated cost of the work it shall be lawful for Nashik Municipal Corporation at the time of making any payment to the contractor for work done under the contract to make up the full amount of the percentage mentioned in detailed tender notice, 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 Nashik Municipal Corporation 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 Nashik Municipal Corporation 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 10 days thereafter, make good in cash or Govt. 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 interest bearing securities provided that depositor has expressly desired this in writing. If the amount of the security |

SWASTIK INFRALOGICS PRIVATE LIMITED

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| | | Govt. 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 interest bearing securities provided that depositor has expressly desired this in writing. If the amount of the security deposit to be paid in a lumpsum within the period specified at (A) above the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts.<br>Security deposit lodged by a contractor shall be refunded as per the details mentioned in Detailed Tender Notice. In the event of the contractor failing or neglecting to complete rectification work within the period up to which the contractor has agreed to maintain the work in good order, then subject to provisions of Clauses 17 & 20 hereof the amount of Security Deposit retained by Nashik Municipal Corporation shall be adjusted towards the cost incurred by department on rectification work. | deposit to be paid in a lumpsum within the period specified at (A) above the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts.<br>Security deposit lodged by a contractor shall be refunded as per the details mentioned in Detailed Tender Notice. In the event of the contractor failing or neglecting to complete rectification work within the period up to which the contractor has agreed to maintain the work in good order, then subject to provisions of Clauses 17 & 20 hereof the amount of Security Deposit retained by Nashik Municipal Corporation shall be adjusted towards the cost incurred by department on rectification work. |
| 6 | **6.24 Subletting of Work** | Not allowed | 1. **For civil works subletting of work is not allowed.**<br>2. For electrical works, If the construction contractor does not have a license to carry out electrical work and fulfilling all the conditions mentioned as per clause 2.4 (Conditions of Electrical work) in such cases, the construction contractor may enter into subcontract with an electrical contractor holding a license, as per the conditions mentioned in NIT . Such works shall be executed in consultation with Electrical Department, NMC. |
| 7 | **2.4 Conditions for Electrical Work** | List Of Approved Makes for Electrical Works<br>Sr. No 1 to 21 | In addition to List of Approved Makes for Electrical Works Sr. No 1 To 21, Sr. No 22. Added as: - Octagonal Pole- Bajaj / Valmont /Crompton/ Vakrangee. |
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SWASTIK INFRALOGICS PRIVATE LIMITED

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| **Asphalt Roads** | | | |
| 8 | Eligibility Criteria, - **Sr No 1 – (b)** | **Asphalt Batch Mix Plant**<br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA. The tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for. | **Asphalt Batch Mix Plant**<br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. **Within 50 days from the date of LOA**. The tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for.<br><br>**Note: Already approved distance certificate up to validity period are valid for these tenders.** |
| 9 | Eligibility Criteria, **Sr. no. 2, Hydraulic Paver Finisher with Automatic Electronic Sensor Device (SCADA enabled):** | **Hydraulic Paver Finisher with Automatic Electronic Sensor Device (SCADA enabled):** The Electronic Sensor Paver Finisher shall be equipped with an electronic sensing device and shall conform to Clause 504.3.5 of the MORTH Standard Specifications. The machine shall have a minimum 9.00 metres width and shall be capable of laying bituminous layers with a minimum lift thickness of 75 mm. | **Hydraulic Paver Finisher with Automatic Electronic Sensor Device (SCADA enabled):** The Electronic Sensor Paver Finisher shall be equipped with an electronic sensing device and shall conform to Clause 504.3.5 of the MORTH Standard Specifications. The machine shall have paving capacity of **minimum basic 5.5 meter width with extendable arrangement beyond 5.5 meter** in single operation and shall be capable of laying bituminous layers with a minimum lift thickness of 75 mm. |
| **Concrete Roads** | | | |
| 10 | Eligibility Criteria, - **Sr No 1 – (b)** | **Concrete Batch Mix Plant**<br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Concrete Batch Mix Plant of the above specification and minimum 60 Cu.m. per hour capacity with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming | **Concrete Batch Mix Plant**<br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Concrete Batch Mix Plant of the above specification and minimum 60 Cu.m. per hour capacity with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. **Within 50 days from the date of LOA**, the tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned |

SWASTIK INFRALOGICS PRIVATE LIMITED

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| | | that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for compliance. | outright by the tenderer/bidder and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for compliance.<br><br>**Note: Already approved distance certificate up to validity period are valid for these tenders.** |
| 11 | Eligibility Criteria, **Sr. no. 2, Hydraulic Concrete Paver (with SCADA):** | **Hydraulic Concrete Paver (with SCADA):**<br>The slip form paver shall conforming to Clause 602 of MORTH and IRC:SP:64, with automatic electronic sensor control for line, level, and thickness. It shall be capable of laying CC pavement up to 7.5 m width and 300 mm thickness in a single pass, equipped with vibrators for full compaction. | Hydraulic Concrete Paver: The slip form paver shall confirming to Clause 602 of MORTH and IRC: 15/2017, with automatic electronic sensor control for line, level, and thickness with DBI, TBI and TCM. It shall be capable of laying CC pavement **of minimum 5.5 meter width with extendable arrangement and 300 mm thickness** in a single operation, equipped with vibrators for full compaction. |
| 12 | Eligibility Criteria, **Machinery** | **Concrete Transit Mixer (with SCADA): 07 Nos, Owned**<br>The Transit Mixer shall be truck-mounted, with a minimum capacity of 6 $m^3$, conforming to relevant IS standards. It shall be equipped with a water dosing system, revolution counter, and control for monitoring operational parameters such as rotation speed, drum revolutions, transit time, and temperature of concrete, ensuring proper mixing, uniformity, and quality during transportation and placement. | **Concrete Transit Mixer (with SCADA): 07 Nos (05 Owned + 02 hired)**<br>The Transit Mixer shall be truck-mounted, with a minimum capacity of 6 $m^3$, conforming to relevant IS standards. It shall be equipped with a water dosing system, revolution counter, and control for monitoring operational parameters such as rotation speed, drum revolutions, transit time, and temperature of concrete, ensuring proper mixing, uniformity, and quality during transportation and placement. |
| **Asphalt + Concrete Roads** | | | |
| 13 | Eligibility Criteria, - **Sr No 1 – (b)** | **Asphalt Batch Mix Plant**<br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA. The tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or | **Asphalt Batch Mix Plant**<br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. **Within 50 days from the date of LOA**. The tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for. |

SWASTIK INFRALOGICS PRIVATE LIMITED

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| | | affidavit shall be accepted, and no extension of time shall be granted for. | **Note: Already approved distance certificate up to validity period are valid for these tenders.** |
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SWASTIK INFRALOGICS PRIVATE LIMITED

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| 17 | Eligibility Criteria, **Machinery** | **Concrete Transit Mixer (with SCADA): 07 Nos, Owned** The Transit Mixer shall be truck-mounted, with a minimum capacity of 6 $m^3$, conforming to relevant IS standards. It shall be equipped with a water dosing system, revolution counter, and control for monitoring operational parameters such as rotation speed, drum revolutions, transit time, and temperature of concrete, ensuring proper mixing, uniformity, and quality during transportation and placement. | **Concrete Transit Mixer (with SCADA): 07 Nos (05 Owned + 02 hired)** The Transit Mixer shall be truck-mounted, with a minimum capacity of 6 $m^3$, conforming to relevant IS standards. It shall be equipped with a water dosing system, revolution counter, and control for monitoring operational parameters such as rotation speed, drum revolutions, transit time, and temperature of concrete, ensuring proper mixing, uniformity, and quality during transportation and placement. |
| 18 | Tender Notice No. 03 | 13. Development of Trimbak road from Khadkali Signal to Trimbak Naka to ITI Signal (connects both Nashik and Trimbak Kumbha Mela sites/parking)<br>14. Development of Trimbak Road from ITI Signal to Pimpalgaon Bahula up to NMC limits (connects both Nashik and Trimbak Kumbha sites/parking) | The Tender Process for these Two works has been cancelled. |

Note :- The Last date of Tender Submission is being extended till dt. /10/2025.

The Common Set of Deviations (CSD) shall form the part and parcel of the Tender document. The contents of CSD papers will supersede all other conditions what so ever mentioned elsewhere. The bidder should submit these papers of CSD duly signed by authorized person along with tender document as a token of acceptance and scanned copy to upload online in Technical bid. All other terms and conditions remain unchanged.

Executive Engineer
Municipal Corporation

Executive Engineer
Nashik Municipal Corporation

City Engineer
Nashik Municipal Corporation

Additional Commissioner
Nashik Municipal Corporation

Commissioner
Nashik Municipal Corporation

NASHASTIK INFRALOGICS PRIVATE LIMITED

दि.  /१०/२०२५

मा.सादर

विषय- सिंहस्थ कुंभमेळा-२०२७ चे अनुषंगाने निविदा सुचना क्र.३ मधील १८ कामांचे Corrigendum / Addendum प्रसिध्द करणे बाबत.

सिंहस्थ कुंभमेळा-२०२७ चे अनुषंगाने नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचे दि.१४/९/२०२५ एकूण २१ कामंन्रा प्रशासकीय मंजुरी प्राप्त झाली असून त्यापैकी १८ कामांच्या निविदा प्रसिध्द सुचना क्र.३ (२०२५-२६) अन्वये प्रसिध्द करणेत आल्या आहेत. त्याअनुषंगाने दि.२६/०९/२०२५ रोजी ऑन लाईन पध्दतीने निविदा पुर्व बैठक आयोजित करणेत आली होती. सदर बैठकीच्या अनुषंगाने प्राप्त हरकती / सुचना यास अनुसरून परिशिष्ट-अ तयार करण्यात आले असून त्यामध्ये सर्व हरकती / सुचना व त्यावर नाशिक महानगरपालिकेचा खुलासा नुसार CSD (Commons Set of Deviation ) प्रसिध्द करणेत आले होते.

तथापी सदर कामाच्या निविदा अटी शर्ती मध्ये मा.आयुक्त सो. यांनी दुरुस्ती करणे बाबत सुचित केल्याने त्यानुसार सिंहस्थ कुंभमेळा-२०२७ चे अनुषंगाने निविदा सुचना क्र.३ मधील १८ कामांचे Corrigendum / Addendum प्रसिध्द करणेस मंजुरी मिळणेस विनंती.

कार्यकारी अभियंता (बांध)

ना. पश्चिम/सातपूर  पंचवटी  ना. रोड  ना. पूर्व

नवीन नाशिक

मा.शहर अभियंता सो.

मा. सहा. आयुक्त/सो.

SWASTIK INFRALOGICS PRIVATE LIMITED

मा. आयुक्त

# NASHIK MUNICIPAL CORPORATION, NASHIK
## CORRIGENDUM / ADDENDUM

**For All Works Under Tender Notice No:-3 (2025-2026)**

Nashik Municipal Corporation has invited bids for eighteen (18) works under Tender Notice No. 03 (2025-26). A Pre-Bid Meeting for the same was conducted online on 1/10/2025 at 16:00 hours. The meeting was attended by the following bidders:

Pursuant to discussions during the meeting, a common set of deviation was issued on 10/10/2025. It is necessary to issue a addendum/ corrigendum to the CSD for the following clause.

**STAR RATE FOR BASIC MATERIALS:-**

The basic rates (star rates) for **cement, steel, and bitumen** are as given below. For any increase or decrease in these basic rates during the operative period of the contract,the difference between the basic rate and the prevailing market rate shall be paid to or recovered from the Contractor, as applicable.

For determining the rate difference of cement, steel, and bitumen for the quantities used as per work done,the Contractor shall produce sufficient proof of purchase in the form of:

- Manufacturer's authorised challan/gate pass,
- Excise challan mentioning quantity, grade, and date of delivery,
- GST-paid receipts,
- Or refinery's authentic challan (for bitumen).

The Contractor must produce authentic purchase vouchers from the manufacturing company, supported by matching vouchers of the authorised dealer of the same brand and lot,bearing the same date.

The decision of the **Engineer-in-Charge** regarding the authenticity of documents and the determination of the **lowest market operative price** of cement, steel, or refinery rate of bitumen shall be **final and binding** on the Contractor.

No claim shall be entertained for materials purchased from unauthorised dealers or on the basis of unverified or incomplete documents.

### (I) Formula for Bitumen Component

$$V1 = QB \times (B1 - Bo)$$

Where:

- **V1** = Amount of cost variation in Rupees for bitumen component
- **QB** = Quantity of bitumen (grade) in metric tonnes used in the works during the period
- **B1** = Current ex-refinery price per metric tonne of bitumen (excluding GST) during the relevant period
- **Bo** = Star rate (basic rate) of bitumen = **₹49,862/- per MT (VG-30 Bulk)**

SWASTIK INFRALOGICS LIMITED

## (II) Formula for Cement Component

$$V2 = \frac{Co \times (CI1 - CIo)}{CIo} \times T$$

Where:

- **V2** = Amount of cost variation in Rupees for cement component
- **Co** = ₹6,000/- per MT (basic rate)
- **CI1** = Average Cement Index (RBI Bulletin) for the quarter under consideration
- **CIo** = Average Cement Index (RBI Bulletin) for the quarter preceding the last date of tender submission
- **T** = Tonnage of cement used in permanent works for the quarter under consideration

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## (III) Formula for TMT Steel (Other Plant) Component

$$V3 = \frac{So \times (SI1 - SIo)}{SIo} \times T$$

Where:

- **V3** = Amount of cost variation in Rupees for TMT steel
- **So** = ₹61,000/- per MT (basic rate)
- **SI1** = Average Steel Index (RBI Bulletin) for the quarter under consideration
- **SIo** = Average Steel Index (RBI Bulletin) for the quarter preceding the last date of tender submission
- **T** = Tonnage of steel used in permanent works for the quarter under consideration

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## Additional Conditions

### i) Operative Period:

The operative period of the contract shall commence from the date of issue of the Work Order and end on the date of completion of the work as per the contract period, including any extensions of time granted by the Engineer (except where delay is due to the Contractor's default).The decision of the Engineer-in-Charge regarding the operative period shall be **final and binding**.

If compensation for delay or inadequate progress is levied under the relevant clause, the **price adjustment** for the balance of work from the date of levy of such compensation shall be worked out by **pegging indices (L1, M1, C1, P1, B1, S1, C1)** to the level corresponding to the date from which such compensation is levied.

### ii) Frequency of Adjustment:

Cost variation shall be determined **quarterly** as per the above formulas.

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iii) **Extra Items:**

Price adjustment under this clause shall **not apply** to extra items executed during the course of the work.

iv) **Operative Both Ways:**

This clause shall operate both ways-If variation is on the plus side, payment shall be made to the Contractor; if on the minus side, recovery shall be effected by NMC from the Contractor.

v) **Full Compensation Clause:**

To the extent that full compensation for any rise or fall in cost is not covered under this or other clauses,the unit rates and prices quoted by the Contractor shall be **deemed to include contingencies** for such other actual rises or falls in cost.

All bidders are mandatorily required to upload a signed copy of the Common Set of Deviations (CSD), Addendum, Corrigendum along with their bid as a token of acceptance. Bids submitted without a signed copy of the CSD shall be considered invalid and will be summarily rejected.

City Engineer
Nashik Municipal Corporation,
Nashik

SWASTIK INFRALOGICS PRIVATE LIMITED

NASHIK MUNICIPAL CORPORATION, NASHIK

CORRIGENDUM / ADDENDUM - 3

**For All Works Under Tender Notice No:-3 (2025-2026)**

Nashik Municipal Corporation has invited bids for eighteen (18) works under Tender Notice No. 03 (2025-26). A Pre-Bid Meeting for the same was conducted online on 1/10/2025 at 16:00 hours.

Pursuant to discussions during the meeting, a common set of deviation was issued on 10/10/2025. It is necessary to issue a addendum/ corrigendum to the CSD for the following.

| Sr.No | CLAUSE | ORIGINAL CLAUSE DETAILS | SHALL BE READ AS |
|---|---|---|---|
| 1 | Detailed Tender Notice, Sr. No.6, Date of Submission of :-Tender | The bids shall be submitted online through the e-tendering system on www.mahatender.gov. in for above work on or before date 10/10/2025 upto 15.00 hrs. | The bids shall be submitted online through the e-tendering system on www.mahatender.gov. in for above work on or before date **17/10/2025 upto 15.00 hrs.** |

All bidders are mandatorily required to upload a signed copy of the Common Set of Deviations (CSD), Addendum, Corrigendum along with their bid as a token of acceptance. Bids submitted without a signed copy of the CSD shall be considered invalid and will be summarily rejected.

Executive Engineer
Nashik Municipal Corporation

City Engineer
Nashik Municipal Corporation

Additional Commissioner
Nashik Municipal Corporation

Commissioner
Nashik Municipal Corporation

SWASTIK INFRALOGICS PRIVATE LIMITED

8

NASHIK MUNICIPAL CORPORATION

Tender Notice No. 03/18 (2025-26)

# Tender Document for

# Development of road from Janardan Swami Math (Ch. Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (Ghat Approach/Sadhugram Connect)

**September 2025**


**CITY ENGINEER**

Public Works Department

Nashik Municipal Corporation

**EXECUTIVE ENGINEER**

Public Works Department

Nashik Municipal Corporation

Rajiv Gandhi Bhavan, Sharanpur Road, Nashik - 422 002

Tel no. 0253 - 2575631 / 32, 2317366 / Fax no. 0253 - 2573151


SWASTIK INFRALOGICS PRIVATE LIMITED

## Disclaimer

This tender document for **Development of road from Janardan Swami Math (Ch. Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (Ghat Approach/Sadhugram Connect)** (hereinafter referred to as the "Project") contains brief information about the scope of work and qualification criteria for the selection of Agency. The purpose of the tender Document is to provide the Agencies (hereinafter referred to as "Agency/s") with information to assist the formulation of their proposals (hereinafter referred to as the "Proposal/s")

This tender is not an agreement and is neither an offer by Nashik Municipal Corporation (hereinafter referred to as the "Client" or "NMC") to the prospective Agency or any other person. The purpose of this tender is to provide interested parties with information that may be useful to them in making their Financial Bids pursuant to this tender. While all efforts have been made to ensure the accuracy of information contained in this tender Document, this document does not purport to contain all the information required by the Agencies. The Agencies should conduct their own independent assessment, investigations and analysis and should check the reliability, accuracy, and completeness of the information at their end and obtain independent advice from relevant sources as required before submission of their Proposal. Client or any of its employees or existing advisors shall incur no liability under any law, statute, rules, or regulations as to the accuracy or completeness of the tender Document. The Client reserves the right to change any or all conditions/ information set in this tender Document by way of revision, deletion, updating or annulment through issuance of appropriate addendum as the Client may deem fit without assigning any reason thereof.

The Client reserves the right to accept or reject any or all Proposals without giving any reasons thereof. The Client will not entertain or be liable for any claim for costs and expenses in relation to the preparation of the Proposals to be submitted in response to this tender Document.

Information provided in this tender to the Agency(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Client accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

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Signature of Contractor

SWASTIK PARALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

# 1 Detailed Tender Notice

**DETAILED E- TENDER NOTICE No. 03/18**

**COMMISSIONER, NASHIK MUNICIPAL CORPORATION, NASHIK**, invites sealed tender in B-1 form, from the companies / contractors fulfilling the terms and conditions of tender document with experience of similar type of works for the development of roads in Nashik city.

| S.No. | Name of Work | Cost put to tender (RS) | Time Limit |
|---|---|---|---|
| 1. | Construction of Asphalt Road: Development of road from Janardan Swami Math (Ch. Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (Ghat Approach/Sadhugram Connect) | 14,99,85,937.00 | Upto 31 March 2027 |

| | | |
|---|---|---|
| 1) | **EARNEST MONEY DEPOSIT:-** | Rs. 0.5% of Cost put to tender<br>EMD will be accepted in the form of Online Payment only by net banking only.<br>Tenderer must submit online EMD receipt along with technical document. |
| 2) | **TIME LIMIT :-** | As per Above Table |
| 3) | **Pre-bid Meeting :-** | Pre-bid meeting will be held on 01/10/2025 at 4.00 pm in online mode only.<br>Google Meet link: https://meet.google.com/fzs-qzby-jys<br>All the bidders shall submit their queries if any before 4.00 pm on 01/10/2025 on the mail ID: nmc_pwd_tenders@nmc.gov.in<br>Outcome of pre-bid meeting i.e. common set of deviation (CSD) issued, if any shall form part & parcel of tender document and the bidder/ tenderer shall upload a signed copy as a token of acceptance of CSD.<br>The queries received after 4.00 pm on 01/10/2025 shall not be entertained. |
| 4) | **Date of Issue of Blank :-Tender Documents** | Tender form is available online for purchase on GoM website www.mahatender.gov.in in from dt. 25/09/2025 to 10/10/2025 upto 3.00 pm. |

Signature of Contractor

SWASTIK INFRALOGIS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

| | | |
|---|---|---|
| 5) | **Cost of blank tender :- document** | Contract document may be purchased/downloaded from www.mahatender.gov.in for non-refundable fee of Rs. 3631/- in the form of online payment only by net banking. |
| 6) | **Date of Submission of :- Tender** | The bids shall be submitted online through e-tendering system on www.mahatender.gov.in for above work on or **before date 10/10/2025 upto 15.00 hrs.** |
| 7) | **SECURITY DEPOSIT: -** | SECURITY DEPOSIT: - Total 1.00% of cost put to Tender.<br>(a) Initial Security Deposit:- 50% of the total security deposit of approved tender cost in favor of Commissioner, Nashik Municipal Corporation, Nashik and can be paid either in the form of -<br>i) Cash deposited in Nashik Municipal Corporation.<br>ii) Demand Draft in favour of the Commissioner Nashik Municipal Corporation.<br>iii) FDR / Bank Guarantee from any Nationalized/ Scheduled banks those are approved as per GR (संकीर्ण २०२२/प्र.क्र.१२३/२२/कोष-प्रशाप्र दिनांक १६ जाने २०२५): in prescribed form in favor of the Commissioner Nashik Municipal Corporation, valid upto after 1 year of successful completion of the work.<br>(b) Remaining amount of Security Deposit: - 50% of the total Security Deposit, as per the cost put to tender, shall be recovered through Running Account (R.A.) bills at the rate of 1% from each R.A. bill until the full balance amount of Security Deposit is recovered, as required under the Work Order. |



SWASTIK INFRALOGICS PRIVATE LIMITED

| | | |
|---|---|---|
| | | (C ) The entire Security Deposit, amounting to 1% of the tender cost, shall be released as under:<br><br>The amount of the security deposit lodged by a contractor shall be refunded 90% amount after two years completion of work which has DLP more than two years. if the date up to which the contractor has agreed to maintain the work in good order is over. The amount of security deposit lodged by a contractor shall be refunded 90% amount of total Security Deposit only after 2 years from date of completion of work (which has DLP period is more than two years.). The amount of the security deposit retained by the NMC shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. 10% amount of Security Deposit shall be in the form of Nationalised Bank DD/ FDR / BG which mentioned period of one month after the DLP. In the event of the contractor failing or neglecting to complete rectification work within the period up to which the contractor<br><br>has agreed to maintain the work in good order, then, subject to<br><br>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. (As per Govt. Resolution dtd. 29.01.2019) |
| 8) | **DEFECT LIABILITY PERIOD: -** | Defect liability period for the work is Thirty-six (36) Calendar months from the date of completion of the work. |
| 9) | **DATE OF OPENING OF: - TENDER** | The received online bids will be opened on 11/10/2025 at 15.00 hrs (If possible), for scrutiny of qualification of bidders as per eligibility criteria mentioned in of detailed tender notice in the office of Tender Cell, Nashik Municipal Corporation. Rajiv Gandhi Bhavan, Sharanpur Road, Nashik. |

Signature of Contractor

SWASTIK INFRALOGISTICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

| | | |
|---|---|---|
| 10) | **VALIDITY OF OFFER: -** | The offer shall remain valid for one hundred and Twenty (120) days from the date of submission of tender, these offers are considered as valid thereafter till contractor withdraws his offer in writing. |
| 11) | **JOINT VENTURE: -** | Joint Venture Agreement in any form shall not be allowed. |



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## 1.1 Eligibility criteria

1. The tenderer/ bidder must have eligibility in term of work experience as follows:
   1.1. Experience of having successfully completed similar works during last Five years ending last day of month previous to the one in which applications are invited should be either of the following:
      1.1.1. Three similar completed works costing not less than the amount equal to 40% of estimated cost each

      OR

      1.1.2. Two similar completed works costing not less than the amount equal to 50% of estimated cost each

      OR

      1.1.3. One similar completed works costing not less than the amount equal to 80% of estimated cost each

      "Similar works" means Construction of WBM/GSB/WMM and asphalting roads with allied works.

   1.2. Satisfactorily executed following minimum quantities of the items in one single year from works completed in last Seven years.

| | | |
|---|---|---|
| 1 | WBM+GSB+WMM | 30% Qty. of Schedule ' B' |
| 2 | BM | 30% Qty. of Schedule ' B' |
| 3 | DBM | 30% Qty. of Schedule ' B' |
| 4 | BC/AC | 30% Qty. of Schedule ' B' |

   1.3. Certificates of work experience in private sector, joint ventures, and unofficial sub-contracts will not be considered.

2. Each tenderer/bidder should further demonstrate the availability of the following key and critical equipment exclusively for this work at the time of submission of tender. (information is to be uploaded in Statement)

**For Asphalt works costing <u>more than 4 Crores.</u> –**

| Sr. No | Machinery | No of Machinery | Mode of Availability |
|---|---|---|---|
| 1 | Considering the upcoming Kumbhmela in Nashik, the balance period for completion of work and considering the importance and emergency nature of work -<br><br>At the time of bidding the tenderer/bidder must have his owned, Asphalt Batch mix Stationary / mobile Plant having minimum Capacity of 80 | | |



SWASTIK INFRALOGICS PRIVATE LIMITED

| | | | |
|---|---|---|---|
| | TPH with SCADA, operational anywhere in India, is eligible for bidding.<br><br>After issuance of the Letter of Acceptance (LOA), it shall be compulsory for the tenderer/bidder to arrange, shift, and install his own stationary/mobile Asphalt Batch Mix Plant having a minimum capacity of 80 TPH with SCADA within 30 km of Rajiv Gandhi Bhavan, Nashik. Within 45 days from the date of LOA. The tenderer/bidder shall submit a certificate issued by the Executive Engineer, Quality Control Department, Nashik Municipal Corporation, confirming that the said plant has been installed within the stipulated period, is owned outright by the tenderer/bidder, and is located within the specified 30 km limit. No arrangement through rent, lease, joint venture, tie-up, or affidavit shall be accepted, and no extension of time shall be granted for.<br><br>After issuance of LOA it is also compulsory for the tenderer/Bidder to submit, scanned original copy of Plant Verification certificate meeting the required capacity and standards valid for one year certified by Assistant Chief Engineer (Mechanical) P.W.D. Region Nashik for Batch Mix Plant, within 45 days after issue of LOA.<br><br>In the event of failure to produce either the Distance Certificate or the Plant Verification Certificate within the stipulated time, the Earnest Money Deposit (EMD) shall be forfeited and appropriate action shall be taken by the Competent Authority. The work shall thereafter be offered to the subsequent eligible bidders (L2, L3, L4, etc.) in order of their ranking, subject to their willingness to execute the work at the rates quoted by the L1 bidder. In the event that none of the subsequent bidders agree to match the L1 bidder's rates, the tender shall be recalled. | 01 | Owned |
| 2 | Hydraulic Paver Finisher with Automatic Electronic Sensor Device (SCADA enabled): | 01 | Owned |



SWASTIK INFRALOGICS PRIVATE LIMITED

| | | | |
|---|---|---|---|
| | The Electronic Sensor Paver Finisher shall be equipped with an electronic sensing device and shall conform to Clause 504.3.5 of the MORTH Standard Specifications. The machine shall have a screed of minimum 9.00 metres width and shall be capable of laying bituminous layers with a minimum lift thickness of 75 mm. | | |
| 3 | Mechanical truck-mounted or towed type bituminous pressure sprayer, with a minimum capacity of 3 MT, equipped with SCADA control system. | 01 | Owned |
| 4 | Vibratory road roller as per IRC SP97:2013 with amplitude and frequency of vibration desired for Bituminous works with SCADA | 02 | Owned |
| 5 | Static roller 8 to 10 Tonne/ smooth wheeled power roller | 02 | Owned |
| 6 | Truck / Tripper of minimum 10 MT capacity fitted with SCADA | 06 | Owned |
| 7 | Motor grader is essential | 01 | Owned |

2.1. The tenderer/bidder shall upload scanned copy of valid certificate as a compliance required as per latest M.O.R.T.H. & specification from Assistant Chief Engineer (Mechanical) of PWD department (Govt. of. Maharashtra) for batch mix plant, sensor paver, vibratory roller equipped with SCADA system, mechanical bitumen sprayer with SCADA.

2.2. Certificate from PWD authority regarding fitness and location of Asphalt plant as per the terms mentioned at sr.no.1 above.

2.3. All the uploaded scanned copies of the necessary certificates shall be readable. Non readable uploaded scanned copies shall not be considered.

2.4. All these uploaded statement/ form shall be filled in correctly and signed properly. If these forms are found incompletely filled or wrongly filled, contractor's Financial Bid will not be opened.

3. Tenderer/Bidder must submit Distance Certificate of batch mix plant from Executive Engineer, Quality Control Department, Nashik Municipal Corporation, certifying that their plant is situated within 30 km from Rajiv Gandhi Bhavan, within 45 days after issue of LOA.

Signature of Contractor

SWASTIK INFRA... PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

## 1.2 Technical Staff

| Contractors Technical Staff | Min Qualification needed | Number of Tech. Staff Person |
|---|---|---|
| Full Time Technical Staff on site required | | |
| 1. Project Manager | B.E. / B tech Civil with minimum experience of 7 years. | 1 |
| 2. Resident Engineer (Daily) | B.E. / B tech Civil with minimum experience of 5 years. | 1 |
| 3. Site Engineer (daily) | Diploma Civil with minimum experience of 3 years. | 2 |
| 4. Plant /SCADA System supervisor (daily) | Diploma / Degree with minimum experience of 7 years. | 1 |
| 5. Quality Engineer | B.E. / B tech Civil with minimum experience of 5 years. | 1 |
| 6. Other key personnel with adequate experience as required. | Information to be uploaded in Statement | |

B) Successful Tenderer/ bidder must submit the staff details such with their Name, Designation, Qualification and experience before executing agreement for work order.

## 1.3 Financial Turnover and Bid Capacity

The average annual financial turnover during the last three financial years, ending on 31st March of the previous financial year, shall be at least 30% of the cost put to tender.

ii) The turnover shall be certified by a Chartered Accountant (C.A.) on the basis of audited balance sheets.

iii) Escalation factors shall be applied to bring all figures to a common base year, as under:

| Year before | Financial Year | Multiplication Factor |
|---|---|---|
| One | 2024–25 | 1.10 |
| Two | 2023–24 | 1.21 |
| Three | 2022–23 | 1.33 |
| Four | 2021–22 | 1.46 |
| Five | 2020–21 | 1.61 |



SWASTIK INFRALOGICS PRIVATE LIMITED

B) Bid Capacity

i) A tenderer shall be considered qualified only if the assessed Available Bid Capacity is greater than or equal to the estimated cost of the work.

ii) The Bid Capacity shall be calculated strictly based on the Online Bid Capacity Certificate submitted by the bidder.

C) Supporting Documentation

i) Bidders shall furnish bid capacity calculations with supporting documents duly certified by a Chartered Accountant.
ii) An Online Bid Capacity Certificate shall be uploaded as per prevailing Government guidelines.
iii) A statement showing the value of existing commitments and ongoing works (for the next three years) shall be certified by a Chartered Accountant and countersigned by the Engineer-in-Charge not below the rank of Executive Engineer or equivalent.
iv) All prescribed forms/statements shall be properly filled in, signed, and uploaded. Incomplete, unsigned, or incorrectly filled forms will result in disqualification, and Envelope No. 2 (Financial Bid) shall not be opened.

D) Disqualification and Verification

i) Submission of false, fabricated, or misleading information shall lead to immediate rejection and blacklisting as per Government norms.
ii) Even if a bidder meets the above criteria, they are liable to disqualification in case of:
iii) Misrepresentation of facts or fraudulent submissions,
iv) Record of poor performance (abandonment, failure to complete, delays, unsatisfactory quality),
v) Adverse litigation history or proven financial failure.
vi) All certificates submitted towards turnover, similar nature of works, executed quantities, and work completion shall be subject to scrutiny and verification by the Tender Committee.

## 2 Important condition of contract

a) All Tenderer/bidder must note that after completion of tender procedure the successful Tenderer/ bidder shall take out necessary Insurance Policy / Policies so as to provide adequate insurance cover for execution of the awarded contract work from the "Directorate of Insurance, Maharashtra State Mumbai" only. It's Postal address for correspondence is "264, MHADA, First Floor Opp. Kalanagar, Bandra (East), Mumbai - 400051." Insurance policy/ policies taken out from any other Company will not be accepted. However, if the contractors desire to effect insurance with any of the local officer of any insurance Company, they should be under the coinsurance- cum-servicing arrangement approved by the Directorate of Insurance. If the policy taken out by the contractors is not on coinsurance basis, i.e. G.I.F 60% and insurance Company 40%, the same will not be accepted and the amount of premium calculated by the Directorate of Insurance will be recovered directly from the amount payable to the Contractors for the executed contract work which may please be noted.

   If the above condition regarding insurance policy is not complied, then recovery at the rate 1% of tender amount shall be made through R.A. Bills.

b) All Tenderer must note that after tender procedure completion the successful tenderer has to pay cess of 1% of the tender amount as per "Building and other Construction Act- 1998" in the specified bank account.

c) G.S.T will be paid on contract value as per latest circulars or notification of government.

d) Payments of the work shall be made subject to availability of fund.

e) In the event of delay in intermediate payment, the contractor/ agency shall not delay /stop work; and the work shall be completed in the stipulated time period.

f) As per rule of Employment Provident fund (EFP) Regulation act. 1952, bidder should submit valid PF Registration Certificate. The EPF Registration as per employment provident fund (EPF) Regulation act.1952 is mandatory. Without valid EPF Registration tender will not be considered for opening of financial bid.

g) Royalty Charges should be paid as per circular of revenue & forest department by the contractor regularly to the Government. Contractor should produce the delivery chalan, payment receipt, pakka bill etc. complete along with every RA bill /Final bill as applicable (It is entire responsibility of the contractor to pay the royalty charges to the Govt.)

h) As per Government Resolution No. संकीर्ण 2008/1338/Pr.Kr.171/08/Navi-20 dated 02 March 2009 and Government Resolution No. संकीर्ण -2016/Pr.Kr.335/Navi-33 dated 28 March 2018, it shall be mandatory for the contractor to carry out Third Party Technical Audit through an independent agency at their own cost, unless specifically mentioned in schedule-B.

i) NMC will not bear any expenses other than the cost quoted.

j) All tenderers/bidders shall go through the ordinance and Nashik Trimbakeshwar Kumbhamela Pradhikaran Act, 2025 which are available online. The rules and regulations mentioned therein related to contract are applicable.

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED

## 2.1 Approval

i) All work shall be carried out as per the specifications contained in the standard specification published by public works and housing department, Govt. of Maharashtra. In case of the discrepancy decision of the Engineer-In-Charge will be Final.

ii) All type of testing shall be done as per the specification in the presence of representative of NMC & NMC approved third party inspection.

## 2.2 Additional Security Deposit.

In case of contractors offer is less than 10% of the updated estimate cost.

1) As per the Govt. G.R. No. CAT/2017/PK08/EMA-2 dated - 26/11/2018 the Additional Performance Security Deposit is to be submitted by L-1 bidders to concerned Executive Engineer strictly within 8 days after opening of envelop no.2

2) If the L-1 bidder fails to deposit the Additional Performance Security Deposit within the stipulated period of 8 days, the offer of L-2, L-3, and subsequent bidders may be considered, provided they are willing to execute the work at the rates quoted by the L-1 bidder.

3) Performance Security Deposit shall be as follows.

   1. Up to 10% -- 1% PSD
   2. Up to 15% --- (15% -10%=5%) = 5% PSD= 1+5=6%
   3. If the offer is less than 15% then it will be twice the remaining offer

      For e.g.

      19 - 15=4%

      4 x 2 = 8%

      And total PSD will be 1 + 5 + 8 = 14%

If the lowest bidder's offer is more than 10% below the estimated cost of the tender, tender calling authority should call of for the written explanation from this bidder with respect to the planning and execution of work as the rate quoted by him. Tender calling authority should assure itself about the feasibility of planning submitted by the bidder with respect to the quoted rates. Submission/Return of PSD Demand Draft / Bank guarantees to be adopted as follow.

a) The FDR / Demand draft / Bank guarantee should be in the name of The Commissioner NMC.
b) FDR / Demand Draft / Bank guarantee should exclusively of Nationalized bank / Scheduled bank as per GR (संकीर्ण २०२२/प्र.क्र.१२३/२२/कोष-प्रशा५ दिनांक १६ जाने २०२५) as per GR 07/03/2019
c) The period of demand draft should be minimum 3 months beyond the date of submission of tender.
d) The bidder should submit the original copy of FDR / demand draft / Bank guarantee in the office of City Engineer.
e) The Demand draft should inclusive of MICR number & IFSC code of the bank.

f) Submission of false/misleading demand drafts / Bank guarantee of any bidder will result in forfeiting of EMD & liable for further action against such bidder.
g) The Executive Engineer shall issue the work order to the successful bidder only after encashment of demand draft / the Bank guarantee of Performance Security deposit. Bank guarantee must be valid for the period of DLP plus one month.
h) The performance security and additional PSD of the successful bidder may be returned after a period of three months from the, satisfactory completion of the work as per tender specifications.
4) The bidder must submit affidavit on Rs. 500/- Stamp Paper stating submitted documents are true, correct & complete. (Annexure I)

**(Please Note : Govt. Circular No. CAT/2017/प्र.क्र.127/Building-2, Dt. 28/11/2018)**

5) Nashik Municipal Corporation has developed a repository system in collaboration with ICICI Bank. Accordingly, if the lowest bidder is required to submit a Security Deposit or Performance Security Deposit (PSD) in the form of a Bank Guarantee, it is mandatory to mention the IFSC code ICIC0000027. Bank Guarantee without this IFSC code will not be accepted.

## 2.3 Land Availability, Alignment Clearance, and Tender Process Implications (Road Works)

The proposed road works are of critical importance and are time-bound in view of the forthcoming Simhasta Kumbhamela 2027. The Simhasta Kumbhamela Road Development Project has received formal approval from the Nashik–Trimbakeshwar Kumbhamela Pradhikaran vide letter dated 14/09/2025 and all conditions given below, stipulated in the said letter of the Administrative Approval shall be binding on the tenderer/contractor.

In certain stretches of the proposed works, delays or difficulties may arise in acquisition of land, obtaining right-of-way, or securing alignment clearance. Accordingly, all tenderers are strictly advised to visit the site, examine the ground conditions, review the proposed alignment, and take into account land availability, right-of-way constraints, and all related challenges prior to submission of their bids.

Furthermore, in the event that: the required land is not made available, alignment or right-of-way clearance is not granted, or the Competent Authority proposes changes in the overall treatment, modifies the Administrative Approval amount, or reduces the sanctioned length of work, then the tender process may be withheld, cancelled, withdrawn, or reassigned under separate arrangements, as may be decided by the Competent Authority.

In all such circumstances, no claim, demand, compensation, or financial liability of any nature whatsoever shall be entertained from any bidder or contractor. Tenderers shall be deemed to have factored in all such risks, dependencies, and conditionalities while preparing and submitting their bids.

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

अटी व शर्ती:-

१. संबंधित कार्यान्वयीन यंत्रणेला शासनाच्या, संबंधित विभागांच्या आणि इतर सक्षम प्राधिकाऱ्यांच्या (उदा. केंद्रीय सतर्कता आयोग) यांनी वेळोवेळी निर्गमित केलेल्या मार्गदर्शक सूचनांचे पालन करावे लागेल.
२. नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण आणि जिल्हास्तरीय सिंहस्थ कुंभमेळा कार्यकारी समिती, नाशिक यांचे मार्फत वेळोवेळी दिलेल्या निर्देशांचे पालन संबंधित कार्यान्वयीन यंत्रणेला करावं लागेल.
३. नाशिक त्र्यंबकेश्वर कुंभमेळा अधिनियम 2025 मधील सर्व तरतूदी या कामाला लागू राहतील.
४. सदर कामावर नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत निर्देशित केल्यानुसार कामाच्या जागेवर माहिती दर्शविणारा फलक लावावा लागेल.
५. सदर काम किंवा त्याचा कोणताही घटक इतर कोणत्याही योजनेत मान्य झाले नाही अथवा करण्यात आले नाही याची खात्री कार्यान्वयीन यंत्रणेने करावी.
६. सदर काम पूर्ण झाल्यावर त्याचा केवळ सार्वजनिक वापर होणार असून कोणत्याही स्वरुपाचा खाजगी वापर होणार नाही याची दक्षता कार्यान्वयीत यंत्रणेने घ्यावी.

७. कार्यान्वयीन यंत्रणा ही सदर कामाचा वापर करणारी आणि देखभाल दुरुस्ती करणारी यंत्रणा नसल्यास, सदर काम पूर्ण झाल्यावर वापर करणारी आणि देखभाल/ दुरुस्ती करणाऱ्या यंत्रणेने काम गुणवत्तापूर्ण झाले आहे किंवा कसे याची खात्री करून ते ताब्यात घ्यावे.
८. खरेदीच्या कामांबाबत शासनाने वेळोवेळी निर्गमित केलेल्या निर्देशांचे पालन करावे. तसेच वस्तुंची अथवा इतर बाबींची खरेदी शासनाच्या GeM पोर्टलवरुन अथवा शासनाच्या इतर मार्गदर्शक सूचनांनुसारच करावी.
९. मंजूर अनुदानापेक्षा (प्रशासकीय मान्यता रकमेपेक्षा) जास्त खर्च करता येणार नाही. तसेच कामाचे भाग पाडून काम करता येणार नाही.
१०. वर दर्शविण्यात आलेली काम पूर्ण करण्याची मुदत ही अंतिम मुदत असून शक्य असल्यास यापेक्षा लवकर काम पूर्ण करण्याचे नियोजन करावे आणि तशी अंमलबजावणी करावी. त्यानुसार निविदा प्रक्रिया राबवावी.
११. सर्व कामांच्या जागांचे कामाचे काम सुरु करण्यापूर्वी कोणतीही जागा सुटणार नाही अशाप्रकारे दिनांक नमूद करून व्हिडिओ शूटिंग करावे आणि जियो स्टॅम्प्ड आणि जियो टॅग्ड फोटो काढावेत. त्याचप्रमाणे प्रत्येक कामाचे जास्तीत जास्त एक महिना किंवा त्यापेक्षा कमी या कालावधीमधे अशा प्रकारचे व्हिडिओ आणि फोटो पुन्हा काढावेत हे सर्व जतन करून ठेवावेत जेणेकरुन याला भविष्यात योग्य त्या संकेतस्थळावर जाहीररित्या प्रदर्शित करता येईल.
१२. नियोजन विभागाच्या दिनांक 09 जून 2025 रोजीच्या शासन निर्णयानुसार प्रत्येक पायाभूत विकास प्रकल्पांसाठी युनिक पायाभूत सुविधा आयडी पोर्टल (Infra ID Portal) कार्यान्वित करणे बाबत दिलेल्या सूचनांचे कार्यान्वयीन यंत्रणेने पालन करावे व त्यानुसार कार्यवाही करावी.
१३. प्रकल्प व्यवस्थापनाच्या दृष्टीने वेळोवेळी दिलेल्या निर्देशानुसार आवश्यक ती माहिती नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाला सादर करावी.
१४. मंजूर करण्यात येत असलेल्या वरील कामांची भविष्यातील देखभाल दुरुस्तीचा खर्च कार्यान्वयीन यंत्रणेने स्वत:च्या निधीतून करावा अथवा हस्तांतरण करुन घेणाऱ्या यंत्रणेने करावे.
१५. सदर कामांचा कोणत्याही उपांगांचे काम इतर कोणत्याही शीर्ष अथवा योजनेतून प्रस्तावित नाही आणि/ किंवा झाले नाही याची खात्री कार्यान्वयीन यंत्रणेने काम सुरु करण्यापूर्वी करावी.
१६. सदर कामांचे सक्षम प्राधिकाऱ्याकडून तांत्रिक मान्यता घेणे बंधनकारक आहे.
१७. सदर कामाचे पर्यवेक्षण आणि नियंत्रण संबंधित कार्यान्वयीन यंत्रणेने करावे.
१८. सदर कामाचा दर्जा/ गुणवत्ता आणि वेग तपासण्यासाठी, त्याचप्रमाणे कार्यान्वयीन यंत्रणेच्या कामकाजाचे मूल्यमापन करण्यासाठी त्रयस्थ यंत्रणांमार्फत/ यंत्रणांना वेळोवेळी तपासणी आणि मूल्यमापन करण्यात येईल. यासाठीचा येणारा खर्च या कामाच्या अंदाजपत्रकीय रकमेतून नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत थेट संबंधित यंत्रणांना अदा केला जाईल.
१९. थर्ड पार्टी इन्स्पेक्शन बाबत आवश्यक ती तरतुद अंदाजपत्रकात करावी.
२०. निविदा प्रक्रियेमध्ये सर्वसाधारण पात्रते (eligibility) संबंधात निकष सर्वसाधारणपणे त्या त्या विभागाचे नेहमीचे जशी असतात त्या पद्धतीने ठेवावे जेणेकरून स्पर्धा चांगली होईल, तथापि दर्जा उत्तम राखण्यासाठी दंडात्मक (penalty च्या) तरतुदी अधिक कठोर करायचे असल्यास तशी मुभा संबंधित विभागाला राहील.
२१. कामे हाती घेताना शासनाच्या संबंधित विभागाच्या / कार्यालयांच्या मार्गदर्शक सूचना विचारात घ्याव्यात (उदा. अग्नीशमन सेवा संचालनालय, वैद्यकीय शिक्षण व संशोधन संचालनालय, इ.), तसेच याबाबत इतर मोठ्या शासकीय व निमशासकीय संस्था (उदा. राज्य शासनाचे संबंधित विभाग, केंद्र शासनाचे संबंधित विभाग, मोठ्या महानगरपालिका/ महामंडळे, इ.) यांनी वेळोवेळी निर्गमित केलेल्या मार्गदर्शक सूचना, खरेदी धोरण व निविदांचा देखील अभ्यास निष्पक्षपणे व सखोलपणे करावा. त्याचप्रमाणे या क्षेत्रातील सर्वोत्तम कार्यपद्धतीचा (best practices) चा विचार करावा. तसेच आवश्यकतेनुसार त्या क्षेत्रातील तज्ञ / सल्लागार यांच्या सेवा घ्याव्यात. या प्रकारे पूर्ण काळजी घेवून अशा कामांबाबत/ प्रकल्पांबाबत कार्यवाही करावी. सदरची कामे/ प्रकल्प वेळेत

Signature of Contractor

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Executive Engineer, Nashik Municipal Corporation

## 2.4 Conditions For Electrical Work

After getting work order from Civil department, the Contractor should submit Subcontract agreement on a bond paper of Rs. 500/- with Electrical Contractor and inform to electrical department in writing within 15 days. electrical contractor should have fulfilling following terms.

| | |
|---|---|
| 1) | Name of electrical sub-contractor |
| 2) | Certificate as a registered contractor in electrical category with Maharashtra PWD as class A. |
| 3) | Valid Electrical contractor's license by Govt. of Maharashtra. |
| 4) | Valid PAN & GST registration certificate. |
| 5) | Valid registration certificate under profession tax act. |
| 6) | Valid P.F and ESIC Registration certificate. |
| 7) | Experience Certificate of having Successfully Installation /shifting of HT LT line, HT cable, HT transformer, street light, substation, etc in single work not less than the amount 50 Lakhs. The certificate issued from officer not below rank of Executive Engineer of Govt. /Semi Govt. organization. |

Photocopies of all the above documents must be submitted to the Electricity Department.

**General conditions for electrical Contractor**

| | |
|---|---|
| 1) | All work shall be carried out as per the standard specifications given in the tender. In case of the discrepancy decision of the Engineer-In-Charge will be final. |
| 2) | The Quantity mentioned in schedule 'B' is tentative and may vary as per site condition, MSEDCL site survey, sanction and the same will be paid as per actual quantity measured. The bill amount should not cross the sanctioned amount of electrical work. |
| 3) | The Contractor shall do Liaisoning works in coordination with Electrical Inspection Department & MSEDCL for required permission, sanctioning and testing, any other approval like drawings. |
| 4) | NMC will pay MSEDCL quotation charges for 1.3% supervision. |
| 5) | The Contractor should submit equipment, foundation drawings along with specifications for approval and get approved. |
| 6) | The Contractor should get approved sample of decorative poles from Engineer-in-charge. |
| 7) | The Contractor shall submit the material testing certificate. |
| 8) | The Contractor should arrange third party inspection of material as per specifications in the presence of representatives of NMC and NMC approved third party inspection agency at his own cost. |



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| | |
|---|---|
| 9) | The Contractor shall co-ordinate with MSEDCL Officials for shut downs & other related work and also with any related dept. of NMC, Nashik for required road map & line out. |
| 10) | Old dismantled material should be handed over to NMC Godown as per instruction of Engineer-in-charge. Transportation charges will not be paid. |
| 11) | Defect liability period for all Electrical work will be 60 Calendar months (5 Year) from the date of completion certificate. (with on site 5 years comprehensive maintenance) |
| 12) | Payment will be released after actual work done and as per availability of funds. |

| LIST OF APPROVED MAKES FOR ELECTRICAL WORK | | |
|---|---|---|
| **SR.NO** | **MATERIAL** | **MAKE** |
| 1. | WIRES:1100V/660V GRADEFRLS | FINOLEX / POLYCAB / KEI / VISHAL |
| 2. | POWER CABLES 1100V/660V GRADE | FINOLEX / POLYCAB / KEI / VISHAL |
| 3. | MCB's | LEGRAND / SIEMENS / POLYCAB |
| 4. | HT/ LT CABLE | POLYCAB / FINOLEX / KEI / VISHAL |
| 5. | SWITCHGEARS | SCHNEIDER / L&K / SIEMENS |
| 6. | LED FITTINGS | PHILIPS / CROMPTON / BAJAJ /HAVELLS/ OSRAM |
| 7. | HIGHMAST | BAJAJ / VALMONT |
| 8. | HRC SWITCH FUSE UNITS | L&K / SIEMENS /SCHNEIDER |
| 9. | DECORATIVE POLES | KLITE / SUNCITY / VSTP / JAQUAR / CROMPTON / BAJAJ |
| 10. | GI PIPES | TATA / JINDAL / SURYA PRAKASH /APPOLLO |
| 11. | HRC FUSES | L&K / SIMENS / BUSSMANN |
| 12. | FRP BOX | SINTEX / AJAY / NATIONAL |
| 13. | ROLLED STEEL JOIST POLE | NANDAN / SARTHAK / PRIME |
| 14. | FEEDER PILLAR PANELS | MSEDCL APPROVED |
| 15. | TRANSFORMER | MSEDCL APPROVED |
| 16. | CT/PT | HUPHEN / KOYANA / PRASANNA |
| 17. | HT BREAKER | CROMPTON /ABB / SIEMENS / LUCY |
| 18. | AB SWITCH | RUMA / TRITECH / NATIONAL |
| 19. | DO SET | RUMA / TRITECH / NATIONAL |
| 20. | TERMINATION KIT | VCHEM / XYCON / USSEAL |
| 21. | DWC PIPE | FINOLEX / KETRON / ASTRAL |

Signature of Contractor

SWASTIK INFRALOGIC PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

## 2.5 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, sand etc.) and labour on which I/ We have based my / our rates for this work. The specifications, conditions and lead of materials of this work have been carefully studied and understood by me/ us before submitting this tender. I/ We undertake to use only the best materials complying to schedule B and detailed specifications of said items, and approved by the Engineer in charge, Nashik Municipal Corporation, Nashik or his duly authorized assistant before starting the work and to abide by the decision.

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

# 3 Method of submission of tender

## 3.1 Method of submission:-

The tenderers desirous of tendering for these works are required to submit their offers online on www.mahatender.gov.in

**Technical bid:- All documents as required vide this notice including but not limited to list given below.**

i) Scanned from original copy of Registration of firm, partnership deed and Power of Attorney, in case of a registered firm tendering for work.

ii) For private firm (Having no registration in PWD or elsewhere) fulfilling the tender conditions and must not be a black-listed contractor anywhere in execution of any type of work. Affidavit of declaration of this be produced by tenderer.

iii) Form of Bid, Undertaking, Affidavit, Bank Certificate, Declaration etc. be submitted.

iv) Scanned from original copy of affidavit regarding completeness, correctness and truthfulness of documents submitted on Rs. 500/- Stamp paper.

v) Scanned from original copy of Professional Tax Clearance Certificate up-to-date.

vi) Scanned copy of ownership of batch mix plant and other related machinery as stated in Statement.

vii) Scanned copy of verification certificate of Executive Engineer regarding plant Locations given in tender document.

viii) Earnest Money in the form as prescribed in section (1) of this notice.

ix) GST registration certificate.

x) Updated Employee's Provident fund registration certificate.

xi) Common set of deviation conditions/ stipulations issued by this Corporation after the Pre Bid conference duly signed in token of acceptance.

xii) Papers showing eligibility of tenderer as mentioned in section of this notice

a) similar kind of work, b) turnover certificates, c) Bid Capacity, d)certificate of quantities executed.

b) Details of Technical personnel on the roll of the bidder.

xiii) Details of Machinery & Infrastructure available with bidder with name, qualification, designation and experience etc.

If the various documents contained in this envelope do not meet the requirements as stated above, a note will be recorded accordingly by the tender opening authority and the Financial Bid of such Tenderer will not be considered for further action and the same will be rejected. Also tender will be liable for rejection if bidder mention his commercial offer anywhere in the Technical Bid.

The original documents of Technical bid shall be verified before opening financial bid.

Please note that Technical bid & Financial bid both shall be uploaded ONLINE only as specified.

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

## 3.2 Opening of tenders:-

On the date specified in the Tender Schedule, following procedure will be adapted for opening of the tender.

### 3.2.1 Technical Bid (Envelop no. 1)

**Technical bid will be submitted online and one hard copy in envelop no. 1.**

1. First of all Envelope No.1 of the tender will be opened online to verify its contents as per requirements. Contractor has to procure original documents for verification as required. If the various documents contained in the envelope do not meet the requirements of the tender document, a note will be recorded accordingly by the tender opening authority and the said tenderers' financial bid will not be considered for further action and the same will be rejected.
2. The necessary experience mentioning cost and quantities certificate as mentioned in qualification criteria are required to be obtained from the officer not below the rank of Executive Engineer. In the absence of these certificates financial bid shall not be opened.
3. All must be note that uploading be done one day prior to the date of mentioned to avoid problem in uploading tender documents. No any grievance will be entertained regarding uploading of tender document as it is the official web site and not the Nashik Municipal website.

### 3.2.2 Financial Bid :- (Envelop No. 2)

**Financial Bid will be submitted online only.**

The financial bid of technically qualified bidders shall be opened online. The financial bid shall contain the offer based on scope of work, rates, specifications of the items in the tender & shall be inclusive of all taxes, levies, duties & all other charges- expenses **(Excluding GST and Royalty Charges)**. Bidder should not quote the offer anywhere directly or indirectly in Technical bid.

**Note :** Commissioner Nashik Municipal Corporation reserves full rights to reject any or all tenders without assigning any reason and the same shall be at the entire discretion of Commissioner, NMC and commissioner's decision in this respect shall be final and binding.

Sd/-xxx

**Executive Engineer,**

**Public Works Department**

**Nashik Municipal Corporation, Nashik**



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# 4 Notice of tender and instruction to tenderers

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 security deposit without prejudice any other rights and powers of the corporation hereunder, or in law, corporation shall be entitled to forfeit the full amount of earnest money deposited by him.

## 4.1 Acceptance of Tender

1. The Corporation is not bound to accept the lowest or any tender. The corporation reserves the right to reject any or all tenders received, without assigning any reason whatsoever and reserves the right of accepting the whole or any part of the tender and tenderer shall be bound to perform the same at the amount / percentage quoted.

## 4.2 Visit to Site by Tenderer

1. Tenderers are advised to visit the site sufficiently in advance of the date fixed for receipt of tenders. The tenderers shall be deemed to have full knowledge of all the relevant documents, samples, site conditions etc. whether they inspect them or not.

## 4.3 Submission of tender :

1. Submission of quoted Tender by a tenderer implies that he had read this notice and all other contract documents and has made himself aware of (I) scope and specifications of the work to be done (ii) local conditions and other factors having any bearing whatsoever in execution of the works.
2. A Tenderer shall submit the tender which satisfies each and every conditions laid down in this tender, failing which, it is liable to be rejected.
3. Notice of tender and these instructions shall form part of the contract.
4. The successful tenderer will be required to produce to the satisfaction of the Municipal Commissioner, NMC a valid and concurrent license, issued in his favour under the provisions of the labour contract before starting the work. On failure to do so, the acceptance of the tender shall be liable to be withdrawn and also the earnest money and initial security deposit shall stand absolutely forfeited.
5. Land required for housing of labour, contractor's and client office, stacking of materials, equipment, casting yard etc. should be indicated in sqm. Office space for Engineer – in – charge and his staff should also be indicated. However, corporation may provide land, if available, at per sqm per month rent. If land is not available with the corporation / less than required is available, then contractor to make his own arrangement at no extra cost to corporation.

## 4.4 Contractor's All Risk (C.A.R) Policy :

1. The successful contractor shall take out a C.A.R. policy for the entire works covering the entire period of construction (Including all extensions) and also covering the entire defects liability period. The same shall be jointly in the name of NMC and contractor and shall be produced to the Engineer. All amounts / charges towards premium, etc. on this account shall be borne by the contractor.
2. NMC may appoint consultant to assist NMC Engineers of work and advise on all matters pertaining to this project, including tender evaluation and supervision of works including scrutiny of design, quality control



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etc. during the entire project. NMC may also appoint proof consultant, if required, for expert advice on specifications and quality control etc. connected with the project.

3. The tenderer is advised to get himself fully acquainted with site conditions as well as with the relevant NMC rules and regulations before submitting the offer. If he desires to have any further information in regard to this project, he may contact the Executive Engineer, NMC, Nashik.



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# 5 General conditions of contract and technical specifications.

## 5.1 Additional instructions to persons tendering

1. Persons tendering for the work concerned by the schedule will be required to complete the work tendered for in the period and the dates specified below.

| Sr. No | Name of work | To start (date or order to start the works | To complete (Within the period mentioned in the work order) |
|---|---|---|---|
| | **As per schedule 'B'** | | |

## 5.2 Competency of Tenders

The contract will be awarded only to responsible bidders capable of performing the class of work contemplated before award of the contract. Any bidder may be required to show that he has the necessary experience, ability and financial resources to perform the work in a satisfactory manner within the time stipulated. Contractor may require to furnish the department with formal statements as to their experience and their financial status.

The contractor shall make his own arrangements for the work yard/site required for depositing materials, and shall acquire such additional sites and areas as may be necessary for temporary purposes at his own cost.

## 5.3 Payment

a. The Tenderer must clearly understand that the rates quoted are for the complete and finished work, and shall be deemed to include all costs towards labour, scaffolding,plant, supervision, services, power, etc.
b. The rates shall also cover all contingencies, including night work and work during rains, whenever required.



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c. No claim for additional payment beyond the quoted rates shall be entertained under any circumstances.
d. The Tenderer shall not be entitled to make any subsequent claim on the grounds of misrepresentation, or on the basis of having been supplied with information, or given any promise or guarantee by the Nashik Municipal Corporation (N.M.C.) or by any person (whether a Councilor or in the employment of N.M.C. or otherwise).
e. The failure of the Tenderer to obtain all necessary information for the purpose of preparing the tender and fixing rates shall not relieve him of any risks, responsibilities, or liabilities arising out of, or consequent upon, the submission of the tender.

## 5.4 Tender Forms:

1. Every blank space in the form of tender and the schedule must be filled by the tenderer and must return all the documents with the tender form.
2. Tenderers are hereby informed that no erasures or alterations in the text of the documents issued herewith shall be permitted, and any such erasures or alterations will be disregarded. In the event of any error in writing, overwriting shall not be allowed. Instead, the incorrect word or figure should be struck out neatly and the correct word or figure written above or adjacent to it in an unambiguous manner. Each such correction must be duly initialled by the Tenderer

## 5.5 Acceptance

The intimation of acceptance of the tender shall be communicated by a letter of acceptance

## 5.6 FORM B (1)

**NASHIK MUNICIPAL CORPORATION, NASHIK PERCENTAGE RATE**

**TENDER AND CONTRACT FOR WORKS**

**General Rules and Directions for the Guidance of Contractors**

1. All works proposed to be executed will be also published in newspapers and also on Maha tender website.

   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, additional performance security deposit, the amount of security deposit to be deposited by the successful tenderer and the percentage, if any to be deducted from bills. Copies of the specifications and estimated rates, scheduled rates and any other information shall be available in the office of the City Engineer during office hours.

   Where the works are proposed to be executed according to the specifications recommended by a contractor and approved by a competent authority on behalf of



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the Municipal Corporation of Nashik, such specification with designs and drawings shall form part of the accepted tender.

2. In the event of the tender being submitted by a partnership firm, it shall be signed separately by each partner thereof. In the absence of any partner, the tender may be signed on his behalf by a person duly authorised under a Power of Attorney empowering him to do so.

3. If, after submitting the tender, the Contractor withdraws his offer or modifies the same or if after the acceptance of this tender the Contractor fails or neglects to furnish the additional performance security deposit or security deposit, without prejudice to any other rights and powers of the Corporation or any law, N.M.C.shall be entitled to forfeit the full amount of the earnest money deposited by him. In such circumstances the offer of L-2, L-3, and subsequent bidders may be considered, provided they are willing to execute the work at the rates quoted by the L-1 bidder.

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

4. The Commissioner or his duly authorised officer shall open tenders in the presence of Contractors who have submitted tenders or their representatives who may be present at the time.

5. The officer competent to dispose off the tenders shall have the right of rejecting all or any of the tender, and the Tenderer shall have no claim whatsoever in this regard.

6. No receipt for any payment alleged to have been made by a Contractor in regard to any matter relating to the tender or the contract shall be valid and binding on N.M.C. unless it is signed by the Engineer-in-charge.

7. All works shall be measured by standard measurements and in accordance with the rules and practices of the N.M.C., without reference to any local customs.

8. Under any circumstances, Contractor shall not be entitled to claim enhanced rates for any items in this contract.

9. All corrections and additions or pasted slips should be initiated

10. The measurements of work shall be taken in accordance with the usual method in practice in the N.M.C., and no proposal for adopting any alternative method shall be entertained. The decision of the Executive Engineer regarding the method in use in the N.M.C. shall be final and binding.

11. The contractor will have to construct a shed for storing controlled and valuable material at the work site having double locking arrangement.

Signature of Contractor

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Executive Engineer, Nashik Municipal Corporation

12. The tendering Contractor shall furnish a declaration along with a tender showing all works for which he is already in the contract and the value of the work that remains to be executed in each contract.

13. Every tenderer shall submit along with the tender, information regarding the income-tax circle or ward of district in which he is assessed to income tax. The reference No. of the assessment and his assessment year.

### 5.6.1 TENDER FOR WORKS

I/We hereby tender for the execution, for the N.M.C. Nashik of the work specified in the underwritten memorandum within the time specified in such memorandum at* (———

——) ————————————————————————

———————————————————————— 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, drawing and instructions in writing referred to in Rule 1 hereof and in clause 12 of the annexed conditions of the contract and agree that when materials for the work are provided by the N.M.C., such materials and the rate to be paid for them shall be as provided in Schedule 'A' hereto.

Signature of Contractor

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Executive Engineer, Nashik Municipal Corporation

**5.6.2 MEMORANDUM**

**A. Name of Work –**

**B.** Estimated cost ... Rs. /-

**C.** Earnest Money ... Rs. /-

**D.** Security Deposit

* In figures as well as in words.

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

b) The amount of earnest money to be deposited shall be in accordance with the provisions of paras 206 and 207 of the M.P.W. Manual.

c) This deposit shall be in accordance with paras 213 and 214 of the M.P.W. Manual

i) Cash (not less than the amount of earnest money) Rs

ii) To be deducted from current bills. .. Rs.

Total Rs.

d) 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, as measured by the costs, is done. 1 (one) %

e) Time allowed for the work from the date of written order to commence

f) This percentage where no security deposit is taken, will vary from 5 % to10 % according to the requirement of the case where security deposit is taken. see note Clause1 of the Conditions of contract.

Give Schedule where necessary showing dates by which the various items are to be completed.

Signature of Contractor

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Executive Engineer, Nashik Municipal Corporation

Receipt No. dated from The N.M.C. in respect of the sum Rs.

**Contractor** : # _____

_____

**Address** : _____

_____

**Dated** : The _____ day of _____200 _____

**(Witness)** : $ _____

_____

**Address** :

_____

(Occupation):

_____

_____

Amount to be specified in words and figures.

# Signature of Contractor before submission of tender

$ Signature of witness to Contractor's signature

**The above tender is hereby accepted by me for and on behalf of the N.M.C.**

Signature of officer by whom accepted.

Executive Engineer

Nashik Municipal Corporation (or his duly authorized Assistant )

Dated _____day of_____200

Signature of Contractor



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2. I/We agree that the offer shall remain open for acceptance for a minimum period of 120 days from the date fixed for opening the same 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. N.M.C.

Receipt No. ----------

------- date ----------Deposit Call Receipt ----------

In respect to the sum of Rs. 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 N.M.C. should I/We fail to (1) abide by the stipulation to keep the offer open for the period mentioned above or (2) sign and complete the contract documents as required by the Engineer and furnish the security deposit, as specified in item (d) of the memo 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. Should this tender be accepted I/we hereby agree to abide by & fulfil all the terms and provisions of the conditions of contract annexed hereto so far applicable, and in default thereof to forfeit and pay to N.M.C., the sums of money mentioned in the said conditions.

## 5.7 Conditions of Contract

**Security Deposit Provision given in special conditions of contract shall apply**

**Clause – 1:** The person / persons whose tender may be accepted (herein-after called the contractor, which expression shall unless exceeded by or repugnant to the context include his hires, executors, administrators and assigns) shall within 10 days (which may be extended by the Executive Engineer/ City Engineer/ or The Commissioner conceded up to 1month/ 2 months/ 3 months respectively if the Executive Engineer/ City Engineer/ or The Commissioner thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Nashik Municipal Corporation in Cash or Govt. securities endorsed to the Commissioner, Nashik Municipal Corporation (if deposited for more than 12 months ) of sum sufficient which will make up the full security deposit specified in the tender or

(A) Permit Corporation at the time of making any payment to him for work done under the contract to deduct such as will amount to the percentage mentioned in detailed tender notice of all moneys so payable such deductions to be held by Nashik Municipal Corporation 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 the percentage mentioned in detailed tender notice, of the total estimated cost of the work it shall be lawful for Nashik Municipal Corporation at the time of making any payment to the contractor for work done under the contract to make up the full amount of the percentage mentioned in detailed tender notice, 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 Nashik Municipal Corporation under the terms of his contract may be deducted from or



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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 Nashik Municipal Corporation 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 10 days thereafter, make good in cash or Govt. 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 interest bearing securities provided that depositor has expressly desired this in writing. If the amount of the security deposit to be paid in a lumpsum within the period specified at (A) above the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts.

Security deposit lodged by a contractor shall be refunded as per the details mentioned in Detailed Tender Notice. In the event of the contractor failing or neglecting to complete rectification work within the period up to which the contractor has agreed to maintain the work in good order, then subject to provisions of Clauses 17 & 20 hereof the amount of Security Deposit retained by Nashik Municipal Corporation shall be adjusted towards the cost incurred by the department on rectification work.

**Compensation for delay**

**Clause – 2:** 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 throughout stipulated period of the contract be proceeded with, with all due diligence (time being deemed to be of the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one per cent or such smaller amount as the City Engineer (whose decision in writing shall be final) may decide, of the amount of the estimated cost of the whole work as 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

**25% of the work in 1/4 of the time**

**50% of the work in 1/2 of the time**

**75% of the work in 3/4 of the time**

**Full of the work in full of the time**

**Full work will be completed within the period as mentioned in the detailed tender notice.**

**Note**: The quantity of the work to be done within the particular time to be specified above shall be fixed and inserted in the blank space kept for the purpose by the Officer competent to accept the contracts after taking into consideration the circumstances of each case and abide by the programme of detailed progress laid down by the City Engineer. In the event of the contractor failing to comply with this



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conditions he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the City 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 tender.

**Action when whole of security deposit is forfeited**

**Clause – 3:** In any case in which under any clause or clauses of this whole 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 installments,) or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause, the Engineer, on behalf of the Governor of Maharashtra, shall have power to adopt of the following courses, as he may deem best suited to the interest of Nashik Municipal Corporation.

a) To rescind the contract (for which rescission notice in writing to the contractor under the hand of City 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 Corporation.

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 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 City 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 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 be completed, in which case all expenses incurred on advertisement for fixing a new contractor agency, additional supervisory staff including the cost of work charged establishment and cost of the work charge 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 has been carried out by the contractor under the terns of his contract. The certificate of the City Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work so done shall be final and conclusive against 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 City Engineer shall have certified in writing the performance of the such work and the amount payable to him in respect and he shall only be entitled to be paid the amount so certified. In the event of either of the course referred to in clauses (b) or (c) being adopted and the cost of the work



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executed departmentally or through the new contractor and other allied expenses exceeding the value if such work credited to the contractors the amount to excess shall be deducted from balance due to the contractor by N.M.C. under the contract or otherwise however or from the Security deposit or the sale proceeds thereof provided., however, that the work/contract shall have no claim against N.M.C. even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work & allied expenses provided always the whichever of the three course mentioned in clause(a) (b) or (c) is adopted by the City Engineer, the contractor shall have no claim to compensation for any loss sustained by him reason of him having purchased, & procured materials or entered into any engagements, or made any advances on account of or with a view to the execution of the work or the performance of the contract.

**Action when the progress of any portions of the work is unsatisfactory**

**Clause No. 4:** If the progress of any particular portion of the work is unsatisfactory, the City Engineer shall not withstanding that the general progress of the work is in accordance with the condition mentioned in clause 2, be entitled to take action under clause 3 (b) after giving the contractor 10 days notice in writing. The contractor will have no claim for compensation, or any loss sustained by him owing to such action.

**Contractor remains liable to pay compensation if action not taken under Clause 3 and 4**

**Clause No. 5:** In any case in which any of the powers conferred upon the Executive Engineer by clauses 3 and 4 hereof shall have become exercisable and the same shall not have been exercised the non-exercise thereof shall not constitute a 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,

**Power to take possession of or require removal of/or sell contractor's plant.**

if he so desires, take possession of all or any tool and plant, materials and stores in or upon the works or 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 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 authorised 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 expense of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.



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**Extension of time**

**Clause No. 6:** 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 ever and the Executive Engineer, may, with prior approval of the respective authority component to accept the tender if in his opinion, there are reasonable ground for granting an extension, grant such extension as he thinks necessary or proper the decision of the Executive Engineer in this matter shall be final.

**Final Certificate**

**Clause No. 7:** On completion of the work the contractor shall be furnished with a certificate by the Executive Engineer (hereinafter called 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 of the dirt from all wood work, doors, windows, walls, floor or other parts of any building in or upon which the work has been executed, or of which he/they may have had possession for the purpose of executing the work, nor until the works shall have been measured by the Engineer-in- charge or where the measurements have been taken by his subordinate until they received the approval of the Engineer-in- charge, the said measurements being binding and concessive 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 off 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 of the same as he thinks fit and clean of such dirt as aforesaid; and the contractor shall forthwith pay the amount of all expenses as incurred but shall have no claim in respect of any such scaffolding or surplus material as aforesaid except for any sum actually realized by the sale thereof.

**Payment on intermediate certificate to be regarded as advances**

**Clause No. 8 :** No payment shall be made for any work estimated to cost less than rupees one thousand till after the whole of 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 thereof as entitled to receive payment proportionate to the part of the work then 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 All such shall be regarded as payments by way of advance against the final payments only and not as payments for work actually done and completed and shall not preclude the Engineer-in-charge from requiring any bad, unsound imperfect or unskilful 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



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part thereof in any respect or the occurring of any claim nor shall it conclude, determine or effect 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 effect 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's certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.

**Payment at reduced rates on account of item of work not accepted as completed, to be at the discretion of the Engineer- in-charge.**

**Clause No. 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 case where the items of work are not accepted as so completed, the Engineer-in- charge may make payment on account of such items at reduced rates as he may consider reasonable in the preparation of final or on account bills.

**Bills to be submitted monthly**

**Clause No. 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, & the claim , so far as it is admissible, shall be adjusted, if possible within ten days from the presentation of the bills, if the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a sub-ordinate to measure up the said work in the presence of the contractor or his duly authorised agent whose counter signature to the measurement list shall be sufficient warrant and the Engineer- in-charge may prepare a bill from such list which shall be binding on the contractor in all respect.

**Bills to be on printed form**

**Clause No. 11:** The contractor shall submit his bills on his own the printed form. The manner of preparation of bills should be according to the routine official procedure.

**Clause No. 12 :** If the specification or estimate of the works provides for the use of any special description of materials to be supplied from the store of the Corporation or if it is required that, the contractor shall use certain stores to be provided by the Engineer-in-charge (such materials) and stores, and the prices to be charged therefore as hereinafter mentioned being so far as practicable for convenience of the contractor but not so as in any way to control the meaning or effect of this contractor 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 the 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



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the contract, or otherwise, or from the Security Deposit or the proceeds of sale thereof, if the Security Deposit is held in NMC securities, the same or a sufficient portion thereof shall in that case be held for the purpose. All materials supplied to the contractor shall remain the absolute property of NMC and shall on no account be removed from the site of the work, and shall at all times be open to inspection by the Engineer-in-charge. Any such materials unused and in perfectly good condition at time of completion or determination of the contract shall be returned to the N.M.C. store. If the Engineer-in-charge requires by a notice in writing given under his hand, by 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.

**Work to be executed in accordance with specification drawings orders etc.**

**Clause No. 13 :** The contractor shall execute the whole and every part of the work in the most substantial and workman like manner, and both as regards materials and in every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instruction 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 work during office hours.

**Clause No. 13 (a):** The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of accepted tender alongwith the work order free of cost. Further copies of contract drawings and working drawings if required by him shall be supplied at the rate of Rs. 300 per set of contract drawing and Rs. 150/- per working drawing except where otherwise specified.

**Alteration in specifications and designs not to invalidate contract**

**Clause No. 14 :** The Engineer-in-charge shall have power to make any alterations in or additions to the original specifications, drawings designs and instructions that may appear to him to be a necessary or admissible 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 Engineer-in-charge and such alterations should 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 condition in all respects on which he agreed to do the main work and at the same rates as are specified in the tender of main work.

***Rates for works not entered for schedule of rates of the district.***

And if the additional and altered work includes any class of work for which no rate is specified in this contract such class of work shall be carried out at the sanctioned rates of the D.S.R. If the additional or altered work for which no rate is entered in the schedule of rates the Division is ordered to be carried out before the rates are agreed upon then the contractor shall, within 7 days of the date of receipt by him



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of the order to carry out the work, inform the Engineer-in-charge of the rate which 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 to carry out such class of work, and arrange to carry out in such manner as he may consider advisable, provided always that the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been mentioned as lastly herein before 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 rates or rate as shall be fixed by the Engineer-in-charge. In the event of dispute, the decision of Commissioner will be final. Where, however the work is to be executed according to the designs drawings and specification 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.

***Extensions of time in consequence of additions or alterations.***

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

**No Claim to any payments or compensation for alteration In/or restriction of work**

**Clause No. 15 :**

1) If at any time after the execution of the contract documents the Engineer shall for any reason whatsoever (about default on the part of the contractor for which he is entitled to rescind the contract) desire 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 the part as required after having due regarded to the appropriate stage at which the work should be stopped or suspended so as not cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the Engineer-in-charge as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the Contractor. The contractor shall have no claim or any payment or compensation what so ever by reason of or in pursuance of any notice as aforesaid on account of any suspension stoppage or curtailment expect to the extent specified hereinafter.

2) Where the total suspension of work ordered as aforesaid for a continuous period exceeding 90 days the contractor shall be at liberty to with-draw from the contractual obligations under the contract so far it pertains to the unexecuted part of the work by giving a 10 day's prior notice in writing to Engineer, within 30 days of the expire of the said period of 90 days of such intention and requiring the Engineer to record the final measurements of the work already done and requiring the Engineer to



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record the final bill. Upon giving such notice the Contractor shall be deemed to have been discharged from his obligation to complete the remaining unexecuted work under this contract, On receipt of such notice the Engineer shall proceed to complete the measurement and such payment 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 required the contractor to suspend 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 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 to wages of or 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 first 30 days whether consecutive or in the aggregate of such suspension or in what ever consecutive in the aggregate of such suspension or in whatever in the aggregate of such suspension or in respect of any suspension whatever 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.

**No claim to compensation on account of loss due to delay in supply of materials by N.M.Corporation**

**Clause No. 15 (A):** The contractor shall not be entitled to claim any compensation from Nashik Municipal Corporation for the loss suffered by him on account of delay by Nashik Municipal Corporation in the supply of materials entered in Schedule A, where such delay is caused by:

a) Difficulties relating to the supply of railway wagons.

b) Force majeure.

c) Act of God.

d) Act of enemies of the State or any other reasonable cause beyond the control of Nashik Municipal Corporation.

In case of such delay in the supply of materials N.M.C shall grant such extension of time for the completion of the works as shall appear to the City Engineer to be reasonable in accordance with the circumstances of the case. The decision of the City Engineer as to the extension of time shall be accepted as final by the Contractor.

**Time limit for unforeseen claim**

**Clause 16 :** Under no circumstances whatever shall the contractor be entitled to any compensation from N.M.C. 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.



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**Action and compensation payable in case of bad work**

**Clause 17 :** If any time before security deposit or any part thereof is refunded to the contractor it shall appear to the Engineer-in-charge or his sub-ordinate in charge of the work, that any work has been executed with unsound, imperfect or unskillful 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 the contract, it shall be lawful for the Engineer-in-charge to intimate this fact in writing to the contractor and then notw ithstanding the fact that The work, materials or articles complained or may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove any 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 provided other proper and suitable materials or articles at his own charges and cost. In the event of his failing to do so within a period to be specified by the Engineer - in - charge in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of one per cent on the amount of the estimate for everyday not exceeding ten 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 contractor, 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 desecration to accept the same at such reduced rates as he may fix therefore.

**Work to be open to inspection. Contractor or responsible agent to be present**

**Clause 18 :**All works under or in course of execution in pursuance of the contract shall at all-time be open to the inspection & supervision of 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 responsible notice of the intention of the Engineer-in-charge or his subordinate to visit the work shall have been given to the contractor either himself be present to receive orders & instructions or have a responsible agent duly accredited in writing present for that purpose. Orders g i v e n to the contractor's duly authorised agent shall be considered to have to same force and effect as if they had been given to the contractor himself.

**Notice be given before works is covered up**

**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 placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement 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



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same shall be uncovered at the contractor's expense and default thereof payments or allowance shall be made for such work or for the materials with which the same was executed.

**Contractor liable for damage done and for imperfections**

**Clause 20** : If during the defect liability period as mentioned in detailed tender notice, from the date of completion as certified by the Engineer-in-charge pursuant to Clause - 7 of the contract or defect liability period after commissioning the work, whichever is earlier in the opinion of the City Engineer, the said work is defective in any manner, whatsoever, the contractor shall forth-with on receipt of notice in that behalf from the City Engineer, duly commence execution and completely carry out at his costs 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 City 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 City Engineer, shall 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 shall forth with on demand pay to the Nashik Municipal Corporation the amount of such costs, charges and expenses sustained or incurred by the Nashik Municipal Corporation of which the certificate of the City Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of property Tax, and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the Nashik Municipal Corporation, the same may be recovered from the contractor as arrears of Property Tax. The Nashik Municipal Corporation shall also be entitled to deduct the same form any amount which may then be payable, or which may thereafter become payable by the Nashik Municipal Corporation to the contractor either in respect of the said work or any other work whatsoever or from the amount of security Deposit retained by the Nashik Municipal Corporation.

**Contractor to supply plant, ladders, scaffolding etc and is liable for damages arising from non- provisions of lights fencing etc**

**Clause 21:** The contractor shall supply at his own cost all materials, (except such special material, if any as may in accordance with the contract, supplied from the N.M.C.Stores), plant, tools, appliances, implements, ladder cordage, tackle, scaffolding and temporary work, requisite or proper for the proper execution of the work, whether in the the original, altered or substituted form and whether included in the specifications or other documents forming part of the contract or referred or 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 carriage therefor to & 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, weighting and assisting in the measurement or



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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 proceeds 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 or defence of every suit action or other legal proceedings that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and costs which may be awarded in and such suit, action or proceeding by any such person, or which may with the 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 connection therewith.

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

**(b)** A scaffold shall not be taken down or substantially altered except.

- (i) Under the supervision of a competent and responsible person and.
- (ii) As far as possible by competent worker possessing adequate experience in this kind of work.

(c) All scaffolds and appliances connected there with, and all ladders shall.

- (i) be of sound material.
- (ii) be of adequate strength having to the loads and strains to which they will be subjected and.
- (iii) Be maintained in proper condition.

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

**(e)** Scaffolds shall not be overloaded and so far as practicable shall be taken on ensure the strength and stability of the scaffolding.

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

**(g)** Scaffolds 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 regulation herein specified.

**(i)** Working platforms, gangways and stairways shall.

- (i) Be so constructed that no part thereof can sag unduly or unequally.
- (ii) Be so constructed maintained, having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping and.



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(iii) Be kept free from any unnecessary obstruction

(j) In the case of working platforms, gangways, working places and stairways at a height exceeding 4 meters (to be specified)

(i) Every working platform and every gangway shall have 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 suitably fenced.

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

(l) When persons are employed on a roof where there is a danger of falling from a height exceeding 4 meters suitable precautions shall be taken to prevent the fall of persons or material. (to be prescribed).

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

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

**Clause No. 21 B.** (a) The contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him.

Hoisting machines and tackle, including their attachments, anchorages and supports shall.

be of good mechanical construction, sound materials and adequate strength and free patent defect; and

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 defects.

(c) Hosting machines 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 Engineer – in – charge.

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

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

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



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

(h) Every hoisting machine and all gear referred to in proceeding regulation shall be plainly marked with the safe working load.

(i) In the case of a hoisting machine having variable safe working and each safe working load and the conditions under which it is applicable shall be clearly indicated.

(j) No part of any hoisting machine or any gear referred to in regulation (7) above shall be loaded beyond the safe working load except for the purpose of testing.

(k) Motors, gearing, transmissions, electric wiring and other dangerous parts of hoisting appliance shall be provided with efficient safeguards.

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

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

**Measures for prevention of fire**

**Clause No. 22:** The contractor shall not set fire to any standing jungle trees brushwood or grass without a written permit from the City 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 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 labor employed by him.

**Liability of contractor for any damage done in or outside work area**

**Clause 23:** Compensation for all damage 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 commissioner N.M.C. 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 damage in the manner prescribed in clause for reduced by the Engineer-in-charge from any sums that may be due or become due in Government to the contractor under his contract court in or otherwise.

The contractor shall bear the expenses of defending any action or other legal proceedings that may be brought by any person 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.

**Employment of female labour**

**Clause 24:** The employment of female labourers on works in the neighbourhood of soldiers barracks should avoided as far as possible.

**Clause 25:** No work shall be done on a Sunday without the sanction in writing of the Engineer-in-charge.

Deleted

**Work not to be sublet**

**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 to do so or become insolvent or commence any proceeding to get himself adjudicated and

Deleted

**Contract may be rescinded and security deposit forfetid for subletting it without approval of for bribing a public officer or if contractor becomes insolvent**

The contract shall not be insolvent of make & composition with his creditors, or attempts so to do or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise shall either directly or indirectly be given, promised, offered by the contractor or any of his servants or agents or agent to any public officer or person in the employment of N.M.C. in any way for 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 there upon stand forfeited and be absolutely at the disposal of N.M.C. 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 there for actually performed under the contract.

**Sum payable by way of compensation to be considered as reasonable compensation without reference to actual loss**

**Clause 27:** All sum payable by a contractor by way of compensation under any of these condition shall be considered as a reasonable compensation to be applied to the use of N.M.C. without reference to the actual loss or damage sustained and whether any damage has or not been sustained.

**Charges in the constitution of firm to be notified**

**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. The power of attorney shall vest in the name of the same person until the work is completed.

**Works to be under direction of the Commissioner of N.M.C.**

**Clause 29** – All work to the executed under the contract shall be executed under the direction and subject to the approval in all respects of the commissioner for the time being, who shall be entitled to direct at what point or point and in what manner they are to be commenced, and from time to time carried on.



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**Decision of the Commissioner of N.M.C. to be final**

**Clause 30 (1):** Except where otherwise specified in the contract and subject to the powers delegated to him by N.M.C. under the code, rules then in force. The decision of the City Engineer of N.M.C. for the time being shall be final, conclusive, and binding on all parties to the contract upon all question relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work, or as to any other question claim, right, matter or things whatsoever, if any way arising out of, relating to the contract, designs, drawings, specifications estimates, instructions, orders or these conditions, or otherwise concerning the work, 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 30 days of receipt by him of any order passed by the City Engineer of the NMC as aforesaid appeal against it to the Additional Commissioner, concerned with the contract, work or project provided that-

(a) The accepted value of the contract exceeds Rs.10 Lakhs (Rs. 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 Additional Commissioner as aforesaid the contractor may, within thirty days of receipt by him of any such order, appeal against it to the Commissioner, Nashik Municipal Corporation who's decision is final and binding.

**Stores of European or American manufacture to be obtained from N.M.C.**

**Clause 31 –** The contractor shall obtain from the N.M.C. stores and articles of European or American manufacture which may be required for the work, or any part thereof or in making up any article required therefor or in connection herewith unless he has obtained permission in writing from the Engineer-in-charge to obtain such stores and articles elsewhere. The value of such store and article 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.

**Lump sums in estimates**

**Clause 32 –** When the estimate on which a tender is made includes lump sums in respect of parts of the work the contractor shall be entitled to payment in respect of their items of works in evolved or the part of the work in question at the same rates as are payable under this contract for each items, or if the part of work in question is not in the opinion of the Engineer-in-charge capable of measurement Engineer-in-charge may at his discretion pay the lumpsum amount entered in the estimate and the certificate in



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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.

**Action where no specification**

**Clause 33** – In the case of any work for which there is no such specification as is mentioned in Rule 1 such work shall be carried out in accordance with the Divisional Specifications then and in the event of there being no Divisional Specifications, and in the event of there being no Divisional Specifications, then in such case the work shall be carried out as per directions of the Engineer-in-charge.

**Definition of work**

**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.

**Contractor's percentage whether applied to net or gross amounts of bill**

**Clause 35** – The percentage referred to in the tender shall be deducted from or added to the gross amount of the bill before deduction the value of any stock issued.

**Quarry fees and royalties**

**Clause 36 -** All quarry fees, royalties and ground rent for stacking materials, if any, should be paid by the contractor. No claim will be entertained by N.M.C.

**Compensation under the workmen's compensation Act.**

**Clause 37** – The contractor shall be responsible for and shall pay any 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 compensation is payable/paid by N.M.C. as principal under subsection (1) of section 12 of the said Act on behalf of the contractor, it shall be recoverable by N.M.C. 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 accident. If such expenses are incurred by Government the same shall be recoverable from the contractor forthwith and deducted without prejudice to any other remedy of Government/ NMC from any amount due to the contractor.

**Clause 37 B** – The contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site shall maintain the same



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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 proper use of the equipment by those concerned.

**b)** When work is carried out in proximity to any place where there is a 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 nay 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 there under 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 the said the said rule.

Signature of Contractor

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Executive Engineer, Nashik Municipal Corporation

**Clause 38 – (1) Employment or famine labour etc**

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 specifications prescribing a different percentage of permissible variation, the quantities of the items 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 Contractor NO. of Correction Executive Engineer 88 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.

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

(Ref. : 1) Govt. Circular No. संकीर्ण -2004/प्र.क्र. 85/रस्ते -1दि. 11.06.2004 /03.08.2018 2) Govt. Circular No. CAT/2017 / प्र.क्र..8/ ईमा.-२ दि. २२.१०.२०१८.

**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.

**Claims for com pension for delay in starting the work.**

**Clause 40** - No compensation shall be allowed for any delay caused in the starting of the work on account of land acquisition, encroachment removal, tree cutting, alignment issues, court matters/stay orders, clearance of works, or delay in according to sanction to estimates, or for any other reasons beyond the control of Nashik Municipal Corporation.

**Claims for compensation for delay in execution of work**

**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, hard or cracked soil, excavations in mud, sub-soil water,



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encroachment removal, tree cutting, alignment issues, court matters/stay orders, or land acquisition. The rates are inclusive of all such contingencies and no claim for an extra rate shall be entertained unless otherwise expressly specified.

**Entering upon or commencing any portion of work.**

**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 his subordinate in charge of the work Failing such authority the contractor shall have no claim to ask for measurement of work or payment of work.

**Minimum age of person employed the employment of donkey and/ or other animals and the payment of fair wages.**

**Clause 43** – Sub-clause VI The contractor shall provide drinking water facilities to the workers.

(i) No contractor shall employ any person who is under age of 12 years.

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

(iii) No animal suffering from stores, lame ness or emaciation or which is immature shall be employed on the work.

(iv) The Engineer-in-charge or his Agent is authorised to remove from the work any person or animal found working which does not satisfy these condition and no responsibility shall be accepted by N.M.C. for any delay caused in 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 he grounds that the wages paid are not fair and reasonable the dispute shall be referred with out delay to the Executive Engineer (p) shall decide the same. The decision of the Executive Engineer (P) who shall be conclusive and binding on the contractor but such decision shall not in any way affect the condition of the contract regarding the payments to be made by N.M.C. at the sanctioned tender rates.

(vi) contractor shall provide drinking water facilities to the workers.

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

**Method of payment**

**Clause 44** – Payment to contractors shall be made by cheque drawn on any treasury provided the amount exceeds Rs.10/- Amount not exceeding Rs.10 will be paid in cash.

**Acceptance of conditions compulsory before tendering for work.**

**Clause 45:** Any contractor who does not accept these conditions shall not allowed to tender for works.

Employment of scarcity labour.



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**Clause 46:** If Government declares a 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 persons 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 contractor 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 the 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 with the controlled price on the permissible under the Hoarding and Profiteering Prevention Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

**Clause 47 A** – The Rates of Items in schedule "B"/ (BOQ) of NIT are exclusive of Taxes, in respect of sale by transfer of property in goods involved in the execution of a Works Contract under the provision of rule 51 of the Maharashtra Goods and Services Act. 2017.

**Clause 48** – GST shall be payable on the accepted contract value at prevailing rates seperately. Contractor shall quote his rates excluding GST.

• Amount of GST @2% i.e.1% C.G.S.T. + 1% S.G.S.T. will be deducted at source (TDS)

**Clause 49 -** In case of materials that may 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 sales tax and the sales tax be recovered on such sale.

**Clause - 50:** The contractor shall employ unskilled labour to be employed by him on the said work only from locally available labours and shall give preference to those persons enrolled under Maharashtra Government and Self Employment Department's Scheme. Provided, however, that if the required unskilled labour are not available locally, the contractor shall in the first instance employ such number of 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 his requirement of unskilled labour from outside the above scheme.

**Clause - 51:** Wages to be paid to the skilled and unskilled labours engaged by the contractor. The contractor shall pay the labours skilled and unskilled according to the wages prescribed by the Minimum Wages Act 1948 applicable to the area in which the work of the contractor is located.

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

**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 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 the advances have been given by the Government to the contractor shall be deemed to be Arrears of Land Revenue and the Government may without prejudice to any other rights and remedies of the Government recover 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 statutes and statutory provision 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 works shall be deemed to be an arrears of land revenue and Government shall be entitled or deduct the same from the amount payable by the Govt. to the contractor here under or from any other amounts payable to him by the Government.

**Clause - 54:** The Contractor shall engage apprentices such as bricks layers, carpenters, wiremen, plumber as well as black-smith as recommended by the State Apprenticeship Advisor, Director of Technical Education, Dhobi Talao, Mumbai-1 on the construction work.

**Clause - 55:** (A) The antimalaria and other health measures shall be as directed by the Joint Director (Malaria and Filaria) of Health Services, Pune.

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

**(C)** Contractor shall carry out anti- malaria measures in the area as per guidelines prescribed under National Malaria Eradication Programme and as directed by the Joint Director (M & F) of Health Services, Pune.

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

(E) RELATION WITH PUBLIC AUTHORITIES:

Signature of Contractor

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Executive Engineer, Nashik Municipal Corporation

The contractor shall make sufficient arrangement for draining away the sullage 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 number of sweepers. The contractor shall comply with all rules regulation, byelaws and direction given 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.

**Clause 56: - INSURANCE OF CONTRACT WORK**

i) Contractor shall take out necessary Insurance Policy / Policies (viz. Contractor's All Risks Insurance Policy. Erection All Risks Insurance Policy etc. as decided by the Directorate 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 " Its postal address for correspondence is " 264, MHADA, First Floor, Opp. Kalanagar, Bandra (E), Mumbai-400 051". (Telephone Nos. 2659 0403/ 2659 0690 and Fax Nos. 2659 2461/ 2659 0403). Similarly all workmen's appointed to complete the contract work are required to be insured 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, Mumbai. The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.

ii) The Contractor shall produce the work insurance policy, the same will be reimbursed to the contractor. If contractor fails to produce the work insurance policy, Concerned Executive Engineer shall draw the policy, the amount two times amount of expenditure incurred for drawing the policy shall be recovered from the 1st R.A. Bill of the contractor as penalty to the contractor.

iii) If completion period of work is Extended, then period of work Insurance must be renewed / Extended as per requirement.

**Clause 57:** As per building and other construction workers (Resolution of employment and condition of service) Act 1996 and the Building and other construction workers welfare cess Act 1996 and Government of Maharashtra GR. No. BCA 2009/C.No.108/Labour A dt. 17.6.2010 cess of 1% on cost of work shall be recovered from bills payable to the contractor.

Note: As per the guidelines dated 27/09/2018, there is no provision for Price variation, Star rate for this work.

# 6 Additional General Conditions and Specifications

## 6.1 Contractor's obligations:

The work shall be performed at the place named over the head of the specification or near such place as may be approved by the Engineer and the contractor shall unless in cases other than specially approved, make any payments at his own expense for supervision and labour which the Engineer may consider necessary for the execution of the work and for performing obligations of the contract under the contract of which the NMC would have and to take, do or supply, had they themselves carried over the construction of the work.

## 6.2 Inspection of the work:

The contractor shall inform, by writing in advance to the Engineer-in- charge, if he wants that work should be inspected by the Engineer-in-charge, or if he wants some decision, checking, clarification etc. from Engineer-in-charge.

The instructions on site by Engineer-in-charge shall be recorded in appropriate visit register. The compliance along with the note shall be brought up in the office documents of the work.

Notwithstanding anything contained in the article, the Engineer-in-charge is empowered to visit, inspect the work without giving notice to the contractor at any time (surprise visit or so) for which the contractor shall not take any objection. All the compliance, rectification, repair etc. shall be done by the contractor, as soon as they are brought to his notice, unless which the payment shall not be made (of the items concerned)

## 6.3 Information regarding labour:

The contractor shall submit daily reports to the Engineer-in-charge regarding the strength of labour employed by him in both skilled and unskilled category in the prescribed statement supplied by the Engineer-in- charge from time to time. The contractor if directed by the Engineer-in- charge shall increase the strength of both skilled and unskilled labour.

## 6.4 Programme:

The Engineer-in-charge may at any time give directions as to the order and manner in which the several parts of work shall be carried out and the contractor shall at all times subject to the approval of the Engineer, strictly observe such directions.



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## 6.5 Indemnity:

The contractor shall indemnify the NMC of all actions, suits, claims and demands brought or made against NMC in respect of any matter or thing done or omitted and being done by the Contractor and loss or damage to the NMC covering consequences of any action or suits being brought against the information of the works of this contract.

## 6.6 Methods for carrying out the work:

The contractor shall furnish for the approval of the Engineer-in-charge a schedule giving the programme of the works giving details of the method of execution proposed to be adopted. No work shall be carried out by any other method except that approved by the Engineer-in-charge. The Engineer-in-charge may suggest suitable modifications in the programme and method prepared by the Contractor. Additional any such changes will not entitle the contractor for claiming any extra rate.

## 6.7 Relations with public authorities:

The contractor shall abide by all proper and legal orders and directions given from time to time by any local or public authorities and shall pay money, fees or charges to which he may be liable.

## 6.8 Explosives:

The contractor shall at his own expenses construct and maintain magazines if such are required for the storage of explosive for use in connection with the works, such magazines being suitably constructed and maintained in accordance with the Govt. rules applicable.

The contractor shall at his own expenses obtain such license or licenses as may be necessary for storing and using explosives. The NMC shall not incur any responsibility whatsoever in connection with the stores and use of explosive on the site or any accident or occurrence whatsoever which shall is be at the risk of the contractor and on his sole responsibility and the contractor shall give the NMC absolute indemnity in respect thereof.

## 6.9 Damage by floods and accidents:

The contractor shall take all precautions against damages by flood or from accidents. No compensation will be allowed to the contractor for his plant and materials, centering for R.C.C. works etc. lost or damaged by floods or from any other cause. The contractor shall be liable to make good any plant or materials belonging to NMC lost or damaged by floods or from any other cause while in charge of the

contractor. Correcting and repairing any damage which may be suffered from floods or any other natural calamity or accident at any part of the site during construction shall not be paid to the contractor.

### 6.10 Treasure trove:

In the event of the discovery by the contractor or by his employees during the progress of the work of any treasure minerals or other articles, or other things of interest, the Contractor shall give immediate notice thereof to the Engineer-in-charge and forthwith hand-over the Engineer-in-charge such treasure or other articles which shall be the property of the Corporation.

### 6.11 Returns:

The Contractors shall furnish to the Engineer-in-charge every week during the progress of the work classified weekly returns of the number of the people employed on the work during the work.

a) A weekly medical report showing the health of contract labour, the number or persons ill and the nature of their illness.

b) A report within 24 hours of its occurrence of any accident on site.

### 6.12 Trespass:

The Contractor shall at all times, be responsible for any damages trespasses committed by his agent and works-people in carrying out of work, unless such damage or trespasses is authorized by the Engineer-in- charge in writing.

### 6.13 Occupation of additional lands:

In cases where it becomes necessary, for the due fulfillment of the contract, for the Contractor to occupy land either within or outside the N.M.C. limits for temporary purposes such as work sites, yards, storage, or other ancillary requirements, the Contractor shall make his own arrangements with the respective landowners and shall pay such fees, rents, or charges as may be mutually agreed between them.

The N.M.C. shall not be responsible for acquiring land on behalf of the Contractor. However, the Corporation will provide all reasonable assistance to enable the Contractor to obtain such land for temporary use.



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### 6.14 Police protection:

If special protection of his camp of workpeople is asked for by the contractor, the NMC will arrange for such protection as far as possible from the authorities concerned and the full cost of such protection shall be debited to the contractor and recovered from his bills.

### 6.15 Controlled materials:

i. The N.M.C. will supply materials as mentioned in Schedule 'A' only required for the construction of the work in question to the contractor. The rates at which these materials will be charged to the contractor the places where they will be delivered to the contractor have been mentioned in the schedule 'A' of B-2 form attached in the tender documents.

ii. As regards controlled materials NMC will issue only permits to the contractor for the same and will be co-operated with the contractor in obtaining the material. NMC does not accept any responsibility for any delay or loss on account of delay caused for in obtaining the materials.

iii. The contractor shall submit monthly returns in the prescribed form as to the receipt of any actual quantities used for to central charge at the close of every calendar month.

iv. The contractor shall permit the engineer-in-charge or his representative to inspect the stock of the controlled materials stored by him at any time whenever Engineer-in-charge or his representative desires.

### 6.16 Permits and licences:

The contractor shall secure at his own expenses all permits and licenses and pay all charges and fees and give all notices necessary and due in connection with the lawful execution of the work.

### 6.17 Returned devices, material and progress:

Whenever the contractor desires to use any design device, material or processes covered by letters of patent or copyright, the right and the name shall be secured by suitable legal agreement with the patentee or owner. Copy or their agreement shall be filed with Engineer-in-charge.

### 6.18 Temporary quarters:

The contractor shall be required to make his own arrangement for the housing of all his staff on work. The contractor shall maintain at his own expenses, efficient supervising staff as may be



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required by the Engineer-in-charge. Suitable fire prevention measures to the satisfaction of the Engineer, shall be taken by the contractor.

## 6.19 Plant:

The contractor must fulfil the condition as mentioned in detailed tender notice at his own expenses, the contractor shall also install the plant for other material to perform the work within the time agreed into the contract and keep it in working condition. He must also at his own expenses extend or improve it, when required by written request of the Engineer-in-charge.

All unused material and all tents and implements not removed by the contractor within two months of the completion date shall become the property of NMC and the contractor shall respect thereof.

## 6.20 Medical and sanitary arrangement:

Conditions regarding medical and sanitary arrangement to be provided for labour employed in the construction of the work by the contractor.

1. The contractor shall provide supply of pure and wholesome water for the use of labour. This provision shall be at the rate of not less than 50 liters per head. No provision may be made where there is suitable flowing nalla, river or well within 500 meters of the camp.
2. The contractor shall construct trench of semi-permanent latrines for the use of the labour. Such latrines shall be on the scale of not less than five per hundred persons in the camp. Separate latrines shall be provided for men and women.The labour may at their option be allowed to use either trench system or the latrine system.
3. Hutments:

Contractor shall build a sufficient number of huts on suitable plot in land for the use of the labour according to the following specification-

i. Huts of bamboo and grass may be constructed.
ii. A good site shall be selected on high ground removed from jungle, but well provided with trees. Whenever it is available the neighborhood of jungle grass or weeds should be particularly avoided. Camps should not be established close to large cuttings or earthwork.
iii. The lines of huts shall have spaces of at least 10 yards between two rows. When a good natural site cannot be provided, particular attention should be given to the drainage.

iv. There should be no over crowding, floor space at the rate of 30 Sq. Ft. per head shall be provided. Care should be taken to see that huts are kept clean and in good order.

v. The contractor must find his own land and if he wants Municipal land he should apply for and pay assessment for it.

4. The contractor shall construct a sufficient number of bathing places. One unit per 20 person shall be provided. Such bathing place should be suitably screened and separate places should be provided for the purpose of washing clothes.

5. The contractor shall engage a medical officer with a mobile dispensary for a camp of 500 persons, if there is no municipal or other private dispensary situated within one kilometer from the camp.

6. The contractor shall make sufficient arrangement for draining sewage water from the bathing or washing place, and shall dispose off wastewater in such a way as not to cause nuisance.

7. The contractor shall provide the necessary staff for effecting satisfactory conservancy and clean lines of the camp upto the satisfaction of the Corporation's Engineer. At least one sweeper per two hundred persons should be engaged.

8. M.O.H. of NMC shall be consulted before opening a labour camp and as per his instructions on the matter such as the water supply, sanitary convenience at the campsite, accommodation and food supply to be followed by the contractor.

9. The contractor shall make arrangements for all ultimate measures to be provided for the labour employed on the work. The anti-malaria measures shall be taken as directed by the Asstt. Director of Public Health.

## 6.21 Wages to be paid to the skilled and unskilled labour:

The contractor or his representative shall pay the labour, skilled and unskilled, according to the wages prescribed by the Minimum Wages Act applicable to the area in which the work of the contractor is in progress.

## 6.22 Books of reference:

The work included in this contract shall be carried out in accordance with the specifications, rules and regulations laid down in the books mentioned below in order of the priority.

i) Ministry of Road Transport & Highways - specifications for Road & Bridge works



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ii) Indian Road Congress Specification

iii) Codes of Indian standard Institute

iv) Standard Specifications- Vol. I. & Vol – II published by Public Works Department, Govt. of Maharashtra

v) British Standard Specifications

vi) American Standard Specifications

vii) P.W.D. Hand Book of Govt. of Maharashtra

viii) Any Other Standard Specifications approved by the Engineer or as directed by the Engineer .

If the reference books quoted above are short for the items quoted in the Schedule of this contract, reference shall be made to the higher authorities and decision of whom shall be final. It will be presumed that the contractor has tendered for the work full knowledge of the terms, conditions and specifications mentioned. The std. specifications, the plans and the special provision and all supplementary documents are essential parts of the contract.

## 6.23 Contract drawings:

The Contractor shall execute the whole of the work in the most substantial and workmen like manner and both as regards materials and in every other respects in strict accordance with specifications. The Contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work sites 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 work during office hours. The Contractor will be entitled to received three sets of scrutinized and certified drawings.

## 6.24 Subletting of work: Not allowed

## 6.25 Foreman, watchman and workman:

The Contractor shall employ only competent and experienced foremen, watchmen, and workmen for the execution of the work. The Engineer of the Corporation shall, at all times, have the authority to order the removal from the site of any foreman, watchman, or workman whose

conduct, behavior, or lack of competence is, in the opinion of the Engineer, unsatisfactory or detrimental to the progress and quality of the work. The Contractor shall be bound to replace such persons immediately at his own cost without any claim against Corporation.

### 6.26 Examination plans and locations:

Statements as to the conditions under which the work is to be performed including plans, survey measurements, dimensions, calculations, estimates, bearing etc. are made solely to furnish basis of comparison of tenders and the Corporation does not guarantee or represent that they are even approximately correct. The contractor must satisfy himself by his own investigation and research regarding all conditions affecting the work to be done and labour and materials needed and make his bid in sole reliance thereon.

### 6.27 Co- ordination of specifications, plans and special provisions

The standard specifications, plans, special provisions, and all supplementary documents shall be deemed essential parts of the contract, and each requirement therein shall be as binding as if fully set forth in all. These documents are intended to be complementary and shall be read together to ensure the execution of a complete and proper work. In case of any discrepancy or disagreement: The Plans shall prevail over the standard specifications. The Special Provisions shall prevail over both the Plans and the standard specifications. Written figures and dimensions shall prevail over scaled dimensions. Any such discrepancies or variations shall be finally resolved by the Engineer-in-Charge, whose decision shall be binding on the the Engineer-in-charge.

### 6.28 Inspection of work and materials:

1. The Engineer and other authorized employees of the Corporation shall have the right, at any time and for any purpose, to enter upon the work site and any premises used by the Contractor. The Contractor shall provide all necessary, safe, and proper facilities to enable such entry.
2. Inspection of works or of payments made to workers shall not relieve the Contractor of his full responsibility and obligation to perform the works in accordance with the terms of the Contract, the approved Plans, Specifications, and all other prescribed conditions.
3. The Contractor shall provide the Engineer-in-Charge or his authorized representative with all reasonable facilities and assistance to ascertain whether the works are being executed in accordance with the requirements and instructions of the Plans and

Specifications. If so directed, the Contractor shall, at any stage before or after execution, uncover, dismantle, or remove any portion of the completed work for inspection at his own cost. After inspection, the Contractor shall reinstate such work in conformity with the Specifications at his own cost.

4. The Contractor shall, in writing, furnish the Engineer-in-Charge with details of the regional sources of supply and the date of manufacture of all materials procured or manufactured outside the work site.
5. To ensure proper scheduling and timely inspection/approval, such information shall generally be furnished four weeks in advance, and in no case later than two weeks prior to the proposed use or incorporation of such materials in the works.

## 6.29 Samples and tests:

Tests of materials shall be carried out regularly as per specifications, and also whenever specifically directed by the Engineer or the Quality Control Department of NMC. The Contractor shall provide all necessary facilities required by the Engineer for collection, handling, and forwarding of samples. The Contractor shall not make use of, or incorporate in the works, any material represented by such samples until the required tests have been conducted and the materials are duly accepted.

The Contractor shall, in all cases, furnish the required samples free of charge and shall also bear the full cost of testing, including conveyance of samples to and from the approved laboratory, unless otherwise specifically provided in Schedule–B. The directions, certification, or approval of the Quality Control Department of NMC shall be binding in this regard.

## 6.30 Testing of materials:

All materials to be used in the works, such as cement, aggregates, concrete, mild steel reinforcement, structural steel, TOR steel, etc., shall strictly comply with the requirements of the Engineer-in-Charge and the Quality Control Department of NMC. Such materials shall be subject to tests and analysis as required by the Engineer-in-Charge, in accordance with the relevant specifications of the Indian Roads Congress (IRC), Indian Standards (IS), or other recognized and authorized specifications, as applicable.

The Contractor shall, at his own risk and cost, make all necessary arrangements and provide all facilities as may be required by the Engineer-in-Charge or the Quality Control Department for



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collecting, preparing, and forwarding the required number of samples for testing or analysis, at such times and to such laboratories or places as directed.

The Contractor shall, whenever required, submit representative samples of materials proposed to be used in the works. If so directed, he shall not use or incorporate any such material in the works until the prescribed tests or analysis have been completed and the material has been duly approved by the Engineer-in-Charge.

The site of the proposed work is indicated on the drawings. The exact position shall be set out and aligned by the Contractor at his own cost, to the satisfaction of the Engineer-in-Charge, prior to the commencement of work. Such reference points shall be carefully preserved by the Contractor throughout the execution of the works.

## 6.31 Character of site:

Section of the ground including trial pit (or bore) results as indicated on the drawings are approximate and cannot be guaranteed nor can it be promised that the ground (or water level) will be as at present shown when the work is started.

The Contractor before tendering should visit the site and satisfy himself as to the nature of the ground etc. and also carry out and ascertain the subsoil strata for working and also under ground water.

## 6.32 Testing of superstructure:

If there are reasonable doubts as to the quality of workmanship or of materials in the construction, the City Engineer, on the recommendation of the Engineer-in-charge may order the Contractor to satisfy the Corporation by carrying out suitable load test or tests of the structure parts hereof in the manner as may be approved by him. In the event of insufficiency being noticed as the load test or tests and dismantling and reconstruction or strengthening where necessary as above shall be carried out by the Contractor entirely at his risk and cost and to the entire satisfaction of the Engineer-in-charge and till then the work shall not be considered to have been completed.

## 6.33 Rate analysis

Contractor shall supply the rate analysis when the question of E.I.R.L. arises. In case of extra items the Contractor shall invariably supply rate analysis based on labour and materials along with quotations in support of the rates if called for and start the work of extra items only after the work is approved by the competent authority.

## 6.34 Mobilisation advance – No Mobilisation advance shall be paid under this contract.

## 6.35 Material and works specification

All the materials to be used and works to be executed under this contract shall confirm to **"SPECIFICATIONS FOR ROAD WORKS"** (latest revision ) issued by the Ministry of Road Transport and highways published by Indian Road congress.

Where reference is made in the contract to specific standards codes to be met by the materials, plant and other supplies to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards as on date of tender and codes in effect shall apply, unless, otherwise expressly stated in the contract.

## 6.36 Access:

The Contractor should verify the site details including access to work site, the place where water and electrical energy is energy is available, the places for dumping stores and materials and places for erection of site offices. The contractors are deemed to have considered for all contingencies connected with work site and access to it. The contractors are deemed to have considered for all contingencies connected in access for operation and movement of machinery to be used for this project viz. Sensor pavers, pneumatic – vibratory rollers, bitumen sprayers, JCB, Poclain, Motor graders, transit mixer etc. the contractors shall provide approaches to the site of works at their own cost and maintain till completion of the work. No claim whatsoever shall be entertained on this account.

## 6.37 Bills and payments:

Normally, one running, payment will be allowed monthly. Two running payments in a month may be permitted depending on the progress of work executed and as decided by the Executive Engineer. Printed copies of the bill forms as per this format shall be arranged by the contractor at his cost. The bills in five copies shall be submitted to the concerned Engineer in the standard Proforma only.

## 6.38 Production of vouchers

The contractor shall, when required by the Engineer, produce all quotations, invoices, challans, royalty charges challan, vouchers and accounts or receipts etc. to prove that the materials supplied by him are in conformity with the specification laid down in the contract.



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## 6.39 No interest for delayed payment

No claim for interest or damage will be entertained by the Municipal Corporation with respect to any money, or balances which may be in his hands owing to any dispute or difference, or misunderstanding between the Corporation's offices on one hand and the contractor on the other, or with respect to any delay on the part of the Municipal Corporation in making periodical or final payments, or in any other respect whatever.

Any interim certificate given relating to work done or material delivered may be modified or corrected by any subsequent interim certificate or by the final certificate. No certificate of the Engineer supporting an interim payment shall if itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract.

## 6.40 Payment of final bill

The contractor shall submit the final bill within three months from the date of issue of the Completion Certificate. After submission, no further claims shall be entertained, and all such claims shall be deemed to have been waived and extinguished.

Payment shall be made for all undisputed items in the bill, and for disputed items to the extent of quantities and rates as approved by the City Engineer, NMC, within a reasonable period necessary for verification and certification.

Payment of the final bill shall be deemed as full and final settlement of all dues and claims under the contract, except for such items as the contractor may specifically dispute in writing within ninety (90) days from the date of payment. Any claims not raised in this manner and within this period shall be treated as extinguished and shall not be admissible thereafter.

## 6.41 Alterations, additions and omissions

a. The Engineer shall make any variation of the form , quality or quantity of the works of any part thereof that may in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the contractor to do and the contractor shall do any of the following.

   i. Increase or decrease the scope of work included in the contract,

   ii. Omit any such work (but not if the omitted work is to be carried out by the Corporation)

   iii. Change the character or quality or kind of any such work,

   iv. Change the levels, lines, position and dimensions of any part of the works,



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v. Execute additional work of any kind necessary for the completion of the works.

vi. Change any specified sequence or timing of construction of any part of the works.

No such variation shall in any way vitiate or invalidate the contract, but the effect, if any, of all such variations shall be valued in accordance with the relevant clause of General conditions of contract / special conditions of contract / additional special conditions of contract.

## 6.42 Deviation limit

Quantities shown in the Tender are approximate and no claim shall be entertained for quantities of work executed being either more or less than those entered in the tender or estimate, to any extent.

## 6.43 Disputes

Disputes (if any) raised is subject to jurisdiction of Civil court of Nashik only.

## 6.44 Completion certificate:

The work shall not be deemed complete under this contract until the Engineer has, in writing, certified it to be so. Any approval, acceptance, or inspection of materials, workmanship, or portions of the work during execution shall not bind the Engineer, nor shall it prevent him from subsequently rejecting the work, in whole or in part, if found unsatisfactory.

The Engineer shall be fully empowered to withhold the Certificate of Completion until all alterations, modifications, or reconstructions as directed by him have been carried out by the Contractor, entirely at the Contractor's cost, to the satisfaction of the Corporation. The Contractor shall have no claim for completion or payment until such certification is issued.

## 6.45 Defect liability period and maintenance liability

The contractor shall be responsible for rectification of defects for a period as mentioned in detailed tender notice from the certified date of completion by the Corporation. This period shall be known as defects liability period, subsequent to taking over of the works and after it has been in use, its (their) maintenance would be the responsibility of the contractor. Any defects or failures during this period shall be rectified by the contractor within reasonable time notified in writing by the corporation. If the same is not carried out in the stipulated time, corporation shall have the right to get it repaired departmentally or through any other agency. The direct and

indirect cost incurred as decided by NMC shall be recovered from the any payment due to the contractor towards NMC or from security deposit.

### 6.46 Performance/ maintenance guarantee:

The contractors shall be required to execute an indemnity bond for satisfactory performance / maintenance of entire project, on a stamp paper of requisite value as per the format in tender. This indemnity bond shall remain in force till completion of defect liability period after completion of the project.

### 6.47 Electric supply :

No electrical power connection shall be provided by Corporation. The contractor shall make his own arrangement for electrical power as may be required.

### 6.48 Quarries:

The contractor shall arrange for quarrying of metal, sand, earth etc. at his own cost including royalties from quarries approved by NMC.

Only approved materials from these quarries shall be used on work. The test results of these materials should satisfy the requirements as per specifications. The responsibility for arranging and obtaining the land for borrowing or exploitation in any other way shall rest with the contractor, who shall ensure smooth and uninterrupted supply of material of the required quality and quantity during construction period.

### 6.49 General arrangement of traffic during construction

The contractor shall carry out work creating least interference to the flow of traffic. The road work area will be made available to the contractor by the department. The contractor shall take prior approval of the Engineer regarding traffic arrangements during construction. For diversion of traffic, contractor also has to take necessary approval from the City Traffic Police department. The contractor shall have to prepare a detailed traffic diversion plan as per the requirement of traffic authorities and get it approved from the traffic authorities. The contractor shall have to carry out the modifications in the traffic diversion at various stages of work as required. The contractor will have to maintain liaison with the City Traffic Police authorities so as to ensure smooth flow of traffic at all stages of the work without causing inconvenience to the traffic.

The contractor shall take necessary precautions for the safety of traffic during construction by providing, erecting and maintaining traffic barricading, fencing, signs, blinkers, flasher boards, rotors, directive boards, red flags etc. Necessary phased programme of construction, if required shall be drawn and got approved from the engineer. Following scheme is suggested.

The contractor may adopt a suitable scheme for construction which shall be got approved from the traffic Department, etc. The responsibility of obtaining the permissions for scheme to be adopted from concerned authorities e.g. traffic shall be that of the contractor.

## 6.50 Road barricading:

The contractor to provide the barricades, fencing erected on either side of the portion of carriageway closed to traffic and also to cordon off the working area shall be strong to resist vibration and painted with alternate black and white oil painted sufficient numbers of stripes, Blinkers or flashers either electrically operated or battery operated shall be provided on the barricades to have nighttime warning to the vehicle operators. The type of barricades and drawings, i.e. M.S. collapsible barricades, M.S. fencing, M.S. / G.I. pipe railing shall be as approved by the Engineer.

## 6.51 Traffic signs of boards:

Traffic sings and traffic regulatory boards shall be reflectorised and shall be in accordance with IRC-67 The traffic cautionary and regulatory boards shall be prepared as per the approved drawings and as directed by the Engineer. These signs and boards shall be fixed in position at the places shown by engineer in cement concrete and shall be suitably braced. The traffic signs and boards shall be proposed on the basis of MOST clause No. 801 and in accordance with relevant IS & IRC codes. On each approach at least two signs and cautionary boards shall be fixed, One at close to the point where transition of carriageway begins and other at about 100 m away.

## 6.52 Road delineators:

Road Delineators as per IRC 79 and as per the relevant drawing and as directed by the Engineer shall be fixed at suitable intervals to have a suitable guidance to the road user at the night time to follow the passage. Delineators shall be fixed firmly in the ground. In addition to above, contractor shall provide red flags at suitable intervals on the barricades and also fix cat eyes along the barricading to have night time guidance. Contractor shall also make an



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alternative arrangements and providing red lanterns on the barricading in case of failure of electricity or failure of batteries provided to blinkers, flashers etc.

## 6.53 Maintenance of traffic safety and control devices:

Traffic signs, cautionary and mandatory boards, blinkers, flashers, barricading, fencing, and retro reflectors shall be provided and maintained in satisfactory condition until completion of the work or as directed by the Engineer.

The Contractor shall have to do all excavation with great care by providing shoring and strutting wherever necessary. The excavated material shall not be dumped on the road surface. The contractor shall take all care to plan the stages of work in such a manner that the work shall be brought to safe level before onset of monsoon, so that the traffic will not be jeopardized during monsoon. The contractor shall immediately bring to the notice of the Engineer or his authorized agent at site, if any service line (eg. Telephone cables, electric cables, water supply pipe lines, sewerage lines etc.) is met with during the course of excavation.

The traffic could be plying through the stretch of road during the progress of construction. The suitable arrangement for diversion of traffic avoiding the use of area under construction shall be made by the contractor. The work will have to be phased accordingly by the contractor.

## 6.54 Avoidance of damage to roads:

The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the site from being damaged or injured by any traffic of the contractor or any of his subcontractors and in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, plant, contractor's Equipment or Temporary works from and to the site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such roads and bridges.

It is necessary for the contractor to move one or more loads of heavy constructional plant and equipment, materials or pre constructed units or parts of units of work over roads, highways, bridges on which such oversized and overweight items are not normally allowed to be moved, the contractor shall obtain prior permission from the concerned authorities. Payment for complying with the requirements, if any, for protection of or strengthening of the roads, highways or bridges



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shall be made by the contractor and such expenses shall be deemed to be included in his tender rates, and/or contract price.

### 6.55 Transport of materials or plant

If, during the execution of the works or at any time thereafter, the concerned authorities make any claim in respect of damage or injury to roads, highways, or bridges arising out of transport of materials or plant to the contractor or corporation, then the contractor shall settle the claim forthwith. In case of failure of the contractor in settling the claim, and in case the corporation is held responsible for payment to the authorities, then the corporation shall settle the claim and the corporation's expenses in this regard, as certified by the Engineer, shall be deducted from the contractor's dues.

### 6.56 Services:

Various utility service lines such as water supply, sewerage, electric cables, street light cables, traffic signal cables, gas, coaxial, petroleum pipes, water pipes, telephone etc. running parallel to the road or across the road either underground or overground may exist at the site of work. Arrangements for shifting of telephone lines, street light cables, electric supply lines which could be easily and conveniently rehabilitated before starting the work have been made. Some service lines will have to be shifted / rehabilitated during the progress of the work only. Taking these facts into account due care will have to be taken not to damage any service line in the process of excavation. If during the course of execution of the work, any such service lines is met with, then the contractor shall execute work as per the modified working system to avoid shifting of the utility or he shall shift the utility as directed by the Engineer.

The contractor should co-ordinate with concerned Authorities in consolation with the Engineer in case the existing utility service lines are required to be shifted.

### 6.57 Inspection by statutory authorities and approvals / permission etc.

The contractor shall also give facility to the authorised representative of statutory agencies to inspect the works whensoever required and shall observe and abide by any instructions given by the Engineer in regard to the use of plant, equipment and temporary works whether in respect of fire hazards or general safety and to any restrictions on smoking or the use of naked lights by persons employed by the contractor. Compliance of such requirements shall not be used as the basis of claim against corporation.



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Before commencing the execution of work, the contractor shall obtain at his own cost all information required for obtaining statutory sanctions/ approvals / permissions etc. which has a bearing on the quoted rates vis-à- vis completion. Neither extension of time limit nor revision in rates shall be permissible for any delay on this account.

## 6.58 Works of corporation and others

The ordinary business and works of the corporation and others as carried out on/ in the vicinity of the site will be continued during the construction, completion and maintenance of the works and the contract shall be conducted in such a way so as to avoid interference with traffic of every kind and with any other works in progress in the vicinity.

## 6.59 Work to the satisfaction of engineer:

The contractor shall execute and maintain the works in strict accordance with the provisions of the Contract, to the complete satisfaction of the Engineer. The Contractor shall comply with and strictly adhere to all instructions and directions issued by the Engineer on any matter connected with the works, whether explicitly stated in the contract or not.

All materials shall be tested in the site laboratory to the satisfaction of the Engineer. Tests which cannot be carried out in the site laboratory shall be conducted at approved institutions such as MERI–Nashik, Government Polytechnic, College of Engineering Pune, Quality Control Department of NMC, or any other laboratory approved by the Engineer-in-charge.

The testing of materials and works shall be carried out strictly in accordance with the frequency and standards specified in MoRTH Specifications, IRC Codes, IS Codes, and other relevant specifications. The Contractor shall also fully cooperate with inspections and testing to be undertaken by the Quality Control Department of NMC, Third Party Quality Check agencies, Third Party Quality Auditors, and/or Independent Testing Firms (ITF) as may be appointed by the Corporation, Kumbhmela Pradhikaran. Their directions, findings, and certifications shall be final and binding.

All facilities, arrangements, manpower, and samples required for testing shall be provided by the Contractor at his own risk and cost. The Contractor shall also bear the entire cost of such testing and quality checks unless otherwise specifically provided in Schedule–B.

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## 6.60 Programme of works:

**a. PERT / CPM CHART**

The contractor shall submit to the Engineer for his approval a programme in the form of detailed Bar/ CPM/ PERT chart inclusive of resources (materials, labours, equipments and machineries) showing the order and procedure in which he proposed to carry out the works. The contractor shall whenever required by the Engineer also provide in writing for his information a general description of the arrangements and methods which the contractor proposed to adopt for the execution of works. The periods of completion of various items shall tally with the periods indicated in the bar chart.

**b. Revised Programme**

If at any time it should appear to the Engineer that the actual progress of the works does not conform to the approved programme referred to in sub-clause (a) of this clause, the contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to the approved programme necessary to ensure completion of the works within the stipulated time for completion of the works including programme for procurement of materials required at site for the work.

The submission to and approval by the Engineer of such programmes or the furnishing of such particulars shall not relieve the contractor of any of his duties, responsibilities and all obligations under the contract.

The contractor shall seek the Engineer's permission to do any work at night or on Sundays, such permission shall not be unreasonably refused.

**c. Progress Report:**

The contractor shall submit to the Engineer on the first day of each week a progress report of the preceding week showing up-to-date progress during the previous period of all important items of each section or portion of the works.

## 6.61 Quality assurance and maintenance manual

1. To ensure the specified quality of work which will also include necessary surveys, temporary work etc. the contractor shall engage a qualified and an experienced senior engineer with team of supporting Engineers on the work who shall prepare a quality assurance plan and get the same approved from the Engineer within one month, from the date of work



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order. For this, the contractor shall submit an organisation chart of his technical personnel to be employed on the work alongwith their qualifications, 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 instrumentation which he proposes to be used for the construction and for testing in the field and/or in the laboratory and monitoring. The contractor shall modify and supplement the organisation chart and the list of machinery, equipment etc. as per directions of the Executive Engineer 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 these approved from the Engineer. The quality of the work shall be properly documented through certificates, records, checklists and logbooks of results etc. such records shall be compiled from the beginning of the work and be continuously updated and supplemented and this will be the responsibility of the contractor. The forms should be got approved from the concern Executive Engineer.

2. No equipment and personnel will be removed from the site without the permission of the Engineer – in – charge.
3. The contractor shall also prepare and submit a maintenance manual giving procedure for maintenance with the periodicity of maintenance works including inspection, tools and equipment to be used, means of accessibility for all parts of the structure etc. he shall also include in the manual, the specification for maintenance works. The maintenance work of road will be carried out in conformity with the manual for maintenance of Roads" And ' Code of practice for maintenance for bituminous surfaces of highways, IRC 82 – 1982,and section 3000 of M.O.R.T & H specification. Any damage to the wearing coat will be repaired with the bituminous concrete layer and any potholes to the road surface will be repaired with the bituminous macadam followed by bituminous concrete layer etc. Wherever the specification is not clear, good engineering practice shall be adopted in the maintenance of roads to the specification of the Engineer – in – charge. The contractor is fully responsible for their pairs and rectification to all those changes / defects of the road surface coursed during the defect liability period except damages caused by the works, prior permission of NMC. After repair of road surface above during defect liability period if aesthetics look of road surface gets disagree at it will be binding on contractor to relay wearing coat to full width so such an extent that over all look of road will be harmony &



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homogeneity look and required roughness index must be provided. In this regards the decision of City Engineer will be binding. This manual shall be submitted within the contract period.

### 6.62 Site office for the client and engineer.

The Contractor shall provide separate & independent site office of semi-permanent type structure with attached toilet, with electric & water supply, etc.

### 6.63 Field laboratory

The contractor shall provide and maintain adequately equipped as mentioned below field laboratory is required for site control on the quality of materials and the works. It shall have adequate area and shall be provided with amenities like water supply, electrical supply etc. The contractor shall engage a well experienced lab – in – charge (bio data to be approved by Engineer – in – charge for conducting day - to –day test as per MoRT & H. All the equipment should be calibrated to the latest date.

| S.No. | Description | Unit | Specification | Qty |
|---|---|---|---|---|
| | Site Laboratory | | | |
| | A) General Equipment | Nos. | | |
| 1. | Balance ordinary, 10 kg with weights | Nos. | | 2 |
| 2. | Balance ordinary, 20 kg with weights | Nos. | | 2 |
| 3. | Electronic balance 5kg. | Nos. | | 1 |
| 4. | Thermometer (Dial Type) | Nos. | | 2 |
| 5. | Hot plate | Nos. | | 2 |
| 6 | Glassware, spatulas, wire gauges, steel scales, measuring tape etc. | Nos. | | 1 |
| 7 | Set of IS sieve | Nos. | | |
| 7-a | GI sieve, 450 mm dia 125mm, 100mm, 90 mm, 80mm, 63mm, 53mm, 50mm, 40 mm, 37.5mm, 26.5mm, 25mm, 22.4mm, 20mm, 19mm, 13.2 mm, 11.2mm. 9.50mm, 4.75mm, 4.25mm, 6.3 mm, 6mm, with lid and pan. | Nos. | | 1 set of 23 units |

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| | | | | |
|---|---|---|---|---|
| 7-b | Brass sieves, 200 mm dia 2.8mm, 2.36mm, 1.18mm, 0.60mm, 0.30mm, 0.15mm, 0.075mm, 425 micron, 300 micron, 150 micron, 90 micron, 75 micron with lid and pan. | Nos. | | 1 set of 13 units |
| 8 | Dry bulk density test apparatus (sand pouring cylinder, tray, can etc) | | | |
| 8-a. | Sand replacement method, 100mm, dia. Cylinder tray with hole & calibration equipment | Nos. | | 2 |
| 8-b. | Sand replacement method, 200mm, dia. Cylinder tray with hole & calibration equipment | Nos. | | 2 |
| 9 | Speedy moisture meter | Nos. | | 2 |
| 10 | Core cutter apparatus with doly & rammer | Nos. | | 1 |
| 11 | Flakiness and elongation gauage | Nos. | | 1 |
| 12 | Standard measures of 30, 15 and 3 liters | Nos. | | 1 |
| 13 | Centrifuge type bitumen extractor hand operated complete with commercial benzene | Nos. | | 1 |
| 14 | Field density basket with cutting tray, chisel, hammer and standard sand. | Nos. | | 1 |
| 15 | Camber plate | Nos. | | 2 |
| | **for cement and cement concrete** | | | |
| 16 | Slump testing apparatus | Nos. | | 3 |
| 17 | Needle vibrator 40 mm & 60 mm | Nos. | | 1 |
| 18 | Sieve shaker, electrically operated for 20cms & 45 cms sieves. | Nos. | | 1 |
| 19 | Concrete cube moulds 150 x 150 x 150 | Nos. | | 18 |

**Note:** It shall be mandatory for the Contractor to obtain the Mix Design from an approved laboratory/engineering college, as approved by the Engineer-in-Charge of N.M.C. It shall further be mandatory for the Contractor to get the said Mix Design verified and approved by the Engineer in charge of N.M.C. prior to commencement of actual execution. The entire cost of obtaining and verifying the Mix Design shall be borne by the Contractor, unless a separate provision for such payment is specifically made in Schedule 'B.

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## 6.64 Samples:

The Contractor shall furnish to the Engineer, for approval, adequate samples of all materials proposed to be used in the work and shall permit such tests and examinations thereof as may be required. All materials used in the work shall strictly conform to the approved samples. The choice and approval of materials, as best suited for the work, shall rest with the Corporation unless otherwise specified. Further, whenever deemed necessary, the Contractor shall also obtain quarry approval from the Engineer in charge of N.M.C., and no materials from any quarry shall be used without such approval. The entire cost of furnishing samples, conducting tests, and obtaining approvals, including quarry approval, shall be borne by the Contractor unless a separate provision for such payment is specifically made in Schedule 'B'.

## 6.65 Inspection and testing of materials:

1. All Materials and workmanship shall be subject to such tests as are specified in the MORTH Specifications, relevant IRC Standards, or as the Engineer may direct. All materials, except those which must necessarily be tested at the works of the Contractor or manufacturers, shall be delivered to the site sufficiently in advance of their use to enable the Engineer to have such tests made as may be considered necessary.
2. The samples of cement, steel, bitumen, bituminous mixes, paving blocks, kerb/median stones, R.C.C. pipes, aggregates, sand, road metal, precast water table stones, or any other material of each consignment shall be got tested from a laboratory approved by the Engineer or from the Quality Control Department of N.M.C., as directed.
3. The frequency and type of tests on various materials and completed items shall be as per MORTH specifications. The sub-workwise testing requirements are detailed in the tender documents.The contractor shall furnish all information as to quality, weight, constituent substances, dimensions, levels, strength and description of the materials and works and give the Engineer such other particulars as may be required.
4. The Contractor shall give the Engineer written notice of the workshops, factories, or places where work is being or about to be prepared, or from which materials or manufactured articles are being or are to be supplied. The Contractor shall also keep the Engineer informed of the times when such materials will be ready for inspection so that such inspection may take place without delaying dispatch of the materials to the site. Such notices shall be given at such times as will permit inspection during all stages of manufacture, not merely upon completion of materials for dispatch.



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5. The Engineer shall be entitled to attend all works of the manufacturers and subcontractors to test materials and workmanship. Every facility shall be provided by the Contractor for such inspections and tests. The Quality Control Department of N.M.C. may also carry out inspection and testing as deemed necessary.
6. All expenses towards such visits, inspections, and testing shall be borne by the Contractor, at his own cost, unless a separate provision for such payment is specifically made in Schedule–B.

## 6.66 Quality of materials and workmanship

1. The whole of materials and workmanship of the works shall be in accordance with the contract documents , conform to the dimensions specified or shown on the drawings, of best standard and quality of their respective kinds, passing all the specified tests and they shall at all times be subject to the approval of the Engineer who shall have the right to inspect, test and reject if necessary and order the removal, replacement and reconstruction of the materials and work at every stage of the progress of works.
2. The Contractor shall guarantee the strength and quality of all materials and workmanship, and he shall not be relieved of his obligations with respect to the sufficiency of the materials or workmanship by reason of no objection having been thereto during the progress of the operation by the Engineer although the same may have been inspected by them in regular course.

## 6.67 Testing charges:

Testing of material procured by the Contractor shall be arranged by him at his own cost and at the required frequency as specified in the MORTH / IRC Specifications and as directed by the Engineer. Testing shall be carried out in the presence of the authorised representative of the Engineer at the field laboratory, at the nearest approved laboratory, or at the factory itself, wherever such testing facilities are available.

If additional testing, other than that prescribed in the specifications, is ordered, the testing charges shall be borne by the Corporation if the test results are found satisfactory, and by the Contractor if the test results are not satisfactory.

The Quality Control Department of N.M.C. shall have the authority to carry out or verify such tests as and when found necessary. All such testing, inspections, or verifications shall be at the cost of the Contractor, unless a separate provision for payment is specifically made in Schedule-B.

## 6.68 Cement concrete:

10. The contractor shall carry out all preliminary tests to work out grading and proportioning of aggregates in order to obtain and maintain uniform quality of work. The contractor shall supply all materials, labour and bear charges for preparing and testing samples as required by the Engineer, unless otherwise specified in the detailed item wise specifications. The minimum frequency of sampling of concrete of each grade shall be as per clause No. 1716 of MOST specifications for road & bridge works ($4^{th}$ revision, 2001) subject to a minimum of six test cubes per day of concrete. The contractor shall make field arrangements for silt content, moisture content, sieve analysis, slump test, density and bulkage testing and also prepare concrete cube 15cm x 15 cm x 15cm for testing compressive strength at his cost. The cubes shall be got tested at approved laboratory and the test result shall not fall below those prescribed in the relevant codes or as laid done in the specification. The cost of cubes and testing charges shall be entirely borne by the contractor.
11. For controlled concrete work tests shall be taken accordance with relevant code specifications.
12. The concrete shall be mechanically vibrated for proper compaction by the method approved by the Engineer. The precast kerb/ median stones should be manufactured by mechanically vibrated plat form to receive the finish as good as factory finish.
13. The concrete shall be cured only by fresh potable water upto the minimum period specified in the relevant code, after the time of its placement or as may be directed by the Engineer.
14. Only fresh potable water duly tested shall be used for concrete works.

## 6.69 Mix design

Contractor shall have to submit for all concrete mixes having a strength of M–20 (200 kg/cm²) and above. Every mix design shall be repeated twice during each working season, or as directed by the Engineer.

The mix design shall be carried out through an approved laboratory / engineering college / testing institute, and the same shall be checked and approved by the Engineer in charge of N.M.C. before commencement of actual execution. The entire cost of preparing, testing, checking, and obtaining approval of mix designs shall be borne by the Contractor, unless a separate provision for such payment is specifically made in Schedule-B.



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### 6.69.1 Minimum cement consumption:

Minimum cement consumption per cubic meter of concrete for the different grades of concrete shall be as follows

| Grade | R.C.C. |
|---|---|
| M-10 | 220 |
| M-15 | 305 |
| M-20 | 360 |
| M-25 | 425 |
| M-30 | 460 |
| M-35 | 475 |
| M-40 | 490 |
| M-45 | 510 |

### 6.69.2 Admixture:

Calcium / chloride shall not be used. Air-entraining agents, workability aids and retarding agents may be used if permitted by the Engineer provided that suitable precautions are taken and it can be shown by test that the product to be added will produce the required effect without in any way changing the other qualities required in the concrete or damaging the steel.

### 6.69.3 Form work

The formwork used shall be made by steel/ marine plywood properly stiffened such as DOKA /PERI Type.

## 6.70 Bituminous works

The contractor should strictly follow the following conditions:

a) Materials

i) The contractor shall make his own arrangement for supply of materials including bitumen VG10, VG30, VG 40, Emulsion and RCC pipes, collars. The contractor shall be responsible for all transportation and storage of the materials at 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.

ii) The contractor shall keep an accurate record of use of materials like bitumen VG10, VG30, VG 40, emulsion, cement, steel and the other required material used in the works in a manner prescribed by the Engineer as per IRC, MOT&H specifications and relevant IS code.

iii) After receiving the bitumen, the authorized challan / gate pass should be obtained from the refinery mentioning the quantity of bitumen, grade of bitumen, date and time of delivery etc. and its should be handed over to Department for each consignment.



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iv) Bitumen of required category shall be procured only from Hindustan Petroleum corporation Ltd., (HPCL), Bharat Petroleum corporation Ltd. (BPCL) and Indian Oil Corporation Ltd. (IOC) refinery only.

v) If there is any doubt regarding the materials received the same should be got tested from the Govt. laboratory at the cost of the contractor and if the results are substandard, the materials or the work executed with such materials will be rejected.

vi) The day – to – day record of the receipt / utility / balance of materials should be kept by the contractor at plant site / site of work / store and the same will be checked by the Engineer – in – charge or authorized Engineer at any time.

vii) The minimum frequency of sampling and testing of bituminous work of each type shall be as per section 900 of MORT & H specifications for road. The testing charges shall be borne by the contractor.

viii) The contractor shall obtain prior approval of all materials from the Engineer-in-Charge and shall use such materials only after satisfactory Job Mix Formula (JMF) results have been obtained. For preparation of the job mix, representative samples shall be collected through an approved sampling system. The samples for job mix shall be taken directly from the bins of the batch mix plant by operating the plant without addition of asphalt, so as to ensure accurate and uncontaminated material representation.

ix) The source of aggregates shall be approved by the Engineer-in-Charge prior to use. In the event of any variation in the required properties of aggregates, the contractor shall immediately notify the Engineer-in-Charge and obtain approval for an alternate source. Aggregates shall be tested on a daily basis for water absorption and other specified properties to ensure compliance with the required standards.

b) Plant and Machinery

All the bituminous work shall be carried out with the help of following machineries

i) **Asphalt Batch mix plant**:

Considering the upcoming Kumbhmela in Nashik, the balance period for completion of work and considering the importance and emergency nature of work

A) It is compulsory to have, Asphalt Batch mix Plant having minimum Capacity of 80 TPH with SCADA.

B) Tenderer/Bidder must submit Distance Certificate of batch mix plant from Executive Engineer, Quality Control Department, Nashik Municipal Corporation, certifying that their plant is situated within 30 km from Rajiv Gandhi Bhavan, within 45 days after issue of LOA.

C) In the event of failure to produce the distance certificate, the EMD will be forfeited and action deemed fit will by the appropriate authority and the work be allotted to subsequent L2,L3,L4, - - - bidders, if he is ready with the L1 bidder's offer. In the event if none of the



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subsequent bidders are ready to negotiate at L1 bidder's offer then the tender will be recalled.

ii) **Mechanical Sprayer:** Truck mounted or towed type bituminous pressure sprayer of minimum 3 M.T. capacity with SCADA.

iii) Hydraulic Paver Finisher with Automatic Electronic Sensor Device (SCADA enabled): The Electronic Sensor Paver Finisher shall be equipped with an electronic sensing device and shall conform to Clause 504.3.5 of the MORTH Standard Specifications. The machine shall have a screed of minimum 9.00 metres width and shall be capable of laying bituminous layers with a minimum lift thickness of 75 mm, should be used.

iv) **Vibratory Tandem Roller:** of 8 to 10 tonne static weight with amplitude and frequency of vibration desired for bituminous & other work.

v) **Pneumatic Tyred roller (PTR) –** (For bituminous work only) operting wight not less than 8 ton, minimum 8 tyres with self-inflating system

vi) **W.M.M. Mixing plant (Pug Mill)** – 200 Ton per hrs.

vii) **W, M.M. Paver** – hydraulic screed with 4.5 Mtr. wide & 250 mm lift.

viii) **Motor Grader** – Engine output above 150 kw.

ix) Truck and Tipper- The material carring vehical (trucks, tippers) with min 10 MT capacity with SCADA enabled.

x) Mechanical broomer, air jet pressure compressor, asphalt saw cutting machine shall be used.

All equipments provided should be of proven efficiency and shall be operated and maintained at all times in a manner acceptable to the engineer.

## 6.71 Subletting of works:

The Contractor shall not assign, transfer, or sublet the whole or any portion of the works under this contract to any Subcontractor, firm, or individual. Engagement of subcontractors of any kind shall be strictly prohibited.

## 6.72 Roll of P.M.C. / Consultants / Third party

1. **Project Management Consultants, Third Party Inspection & Audit**

NMC may, at its sole discretion, appoint Project Management Consultants (PMC) to assist NMC Engineers in all matters pertaining to this project, including but not limited to tender evaluation, supervision of works, quality control, quantity measurement, verification of records, and certification of bills during the entire execution period.

2. NMC may also, at any stage, engage independent experts, Third Party Inspection (TPI) agencies, Third Party Technical Auditors (TPA), Independent Testing Firms (ITF), or any



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other agency as directed by the Kumbhmela Pradhikaran for scrutiny, inspection, supervision, or quality/technical audit of the works.

3. All decisions, remarks, observations, and directions issued by such PMC/experts/TPI/TPA/ITF or other agencies shall be binding upon the Contractor, who shall be fully responsible for compliance without delay or dispute.
4. The intermediate payments and final bill of the work shall be routed through the PMC/Consultant for verification and approval, and payments will only be released after such approvals are obtained.
5. The cost of PMC shall be borne by Nashik Municipal Corporation. However, all expenses related to TPI, TPA, ITF, third-party testing, or quality audits shall be borne entirely by the Contractor and deemed to be included in the quoted rates. No separate claim on this account shall be entertained.
6. If the Contractor fails to carry out the prescribed third-party inspections, tests, or audits within the stipulated time, NMC shall have the right to get the same conducted at the Contractor's risk and cost. The actual expenses incurred shall be recovered from the Contractor's running or final bills without any objection or dispute.
7. The Programme for inspection for inspection and testing shall be fixed by mutual discussions between contractor and testing agency well in advance and shall be intimated to Engineer – in – charge.

# 7 General conditions

1. The rates quoted by the Contractor include clearance of site prior to commencement of work and at its close, in all respect and whole good for work under all conditions, site, moisture, weather etc.

2. The demarcation or fixing of alignment etc. shall at all times be done by the contractor and he shall provide all labour and material for such demarcation, checking it at all time till the completion of the work. This shall be done at the contractor's cost.

3. The Contractor shall have to make all necessary arrangements for regulating traffic day and night during the period of the construction. The contractor shall have to provide necessary caution boards, barricades, flag red lights, night watchman, traffic regulators etc. so as to comply with the latest motor vehicles rules and regulations. The Contractor shall make his own arrangements to construct and maintain the diversion to facilitate the passage of traffic as per instruction of the Engineer-in-charge, if not provided in the tender separately.

4. Before starting of any important item, the contractor should take prior permission in writing at least four days before from the Engineer-in-charge.

5. A work order book shall be maintained at the work site by the Contractor and the Contractor, or his authorized representative will see the order book and sign it when the instructions are given. Failure to see the order book, or to sign, will be no excuse for not attending to the order or remarks. Non- compliance of remarks to the satisfaction of the Engineer-in-charge, who gave in writing orders or remarks, shall lead to total rejection of work and the payment being suspended arbitrarily and shall not be modified by any subsequent representations against the action.

6. Watering will be carried through daytime without any break during lunch break and to the entire satisfaction of the Engineer-in-charge or supervision staff. All tools and plants required for proper watering to any height will be used by the Contractor without any extra charges for the same.

## 7.1 Insurance policy

Contractor shall take out necessary insurance policy / policies so as to provide adequate insurance cover for execution of the awarded contract work from the "Director of Insurance,

Maharashtra State, Mumbai" only. (Its address is '264, MHADA, First Floor, opp. Kalanagar, Bandra (East), Mumbai 400 051. Insurance policy / policies taken out from any other company shall not be accepted. However if the contractor desires to effect insurance with any of the local offices of any insurance company, it should be under the co-insurance-cum-servicing agreement approved by the Directorate of Insurance. If the policy taken out by the contractor is not on the co-insurance basis, i.e. G. I. F. 60% and Insurance Company 40%, the same will not be accepted and the amount of premium calculated by the Directorate of Insurance shall be recovered directly from the amount payable to the contractor for executed contract work.

## 7.2 Additional general specifications for ordinary high grade and prestressed concrete

a) The work included in this contract shall be carried out in addition to the specification detailed therein, in accordance with the specification, rates and regulation as laid down in the latest revisions of following standard specification.

| | |
|---|---|
| IS: 269 –1958 | Specification for ordinary, rapid hardening & low heat Portland cements |
| IS: 383 -1963 | Specification for coarse and fine aggregates from natural sources for concrete. |
| IS: 432-1990 - | Specification for mild steel and high tensile bars and hard drawn steel wire for concrete reinforcement. |
| IS: 456-1978 - | Code of practice for plain and reinforced concrete for general building construction (Revised). |
| IS: 1343 -1960 | Code of practice for pre-stressed concrete for Indian Standard record in the above Indian Standards. |

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED

If the standard specifications quoted above fall short for the item quoted in the schedules of this contract, references shall be made to the latest British Standard Specifications, if any. If the items of this contract do no fall in reference quoted above, the decision and specifications as directed by the Engineer shall be final.

b) The Contractor shall establish a field laboratory to carry out all preliminary tests to work out grading and proportioning of aggregates in order to obtain and maintain uniform quality of work. The Contractor shall supply all materials, labour and testing machine for preparing and testing samples as required by the Engineer. Unless otherwise specified in the detailed item- wise specifications. Number of cubes to the taken and tested shall be as per IRC: 21-2000, Code of Practice for Road Bridges, Section III, for R.C.C. and IRC: 18-2000, Design Criteria for Pre-stressed Concrete, for P.S.C. work.

Note: These are to apply as additional instructions and conditions, unless otherwise already provided for contract elsewhere in this contract.

## 7.3 Definitions

Definitions: Unless excluded by or repugnant to the context.

a) The expression ***Corporation*** as used in the tender papers shall mean the Nashik Municipal Corporation.

b) The ***Commissioner*** means the Commissioner of NMC

c) The expression ***Engineer*** or ***Engineer-in-Charge*** as used in the tender papers shall mean the Corporation's authorized "Engineer-in-Charge" of the work for the time being.

d) The expression ***Contractor*** as 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.

e) The term ***Contract*** as used in the tender papers shall mean the deed of contract together with its original accompaniments and those later incorporated in it by mutual consent.

f) Expression ***Plant*** as used in the tender papers shall mean, every temporary and accessory means necessary or considered necessary by the Engineer to execute, construct, complete and maintain the works and used in altered, modified, substituted



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and additional work ordered in the time and the manner herein provided and all temporary materials and special and other articles, appliance of every sort, kind and description whatsoever intended or used therefore.

*g)* ***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 furnished or approved in writing by the Engineer.

*h)* ***Engineer's Representative*** shall mean an assistant of the Engineer notified in writing to the Contractor by the Engineer.

*i)* ***Provisional*** Sum or ***Provisional Lump-Sum*** shall mean a lump sum included by the Corporation in the Tender documents and shall represent the estimated value of work for which details are not available at the time of issue of tender.

*j)* ***Provisional Items*** shall mean items of which approximate quantities have been included in the tender documents.

## 7.4 General conditions and specifications to be observed by the contractor

1. The Contractor should quote his lump sum cost inclusive of all leads, taxes, royalties, town duties etc.

2. The Contractor will make his own arrangements for quarries of rubble stone, murum, sand lime etc.

3. De-watering of foundations during excavation and construction of foundation masonry or required shall be made by the Contractor without claiming extra cost.

4. The contractor will abide by the (P. W. & H.) Department Contractor Labour Regulation.

5. The Contractor shall be required to pay compensation for any loss of physical damage received by a labour disabling him permanently as per Workman's Compensation Act.



SWASTIK INFRALOGICS PRIVATE LIMITED

## Schedule 'A'

**Name of work :**

| Sr.No. | Particular | Quantity | Rate | Unit | Amount |
|---|---|---|---|---|---|
| | | | | | |
| | | **NIL** | | | |
| | | | | | |

Note : The person or firm submitting tender should see that the rates in the above schedule are filled up by Corporation Engineer, on the issue of the form prior to the submission of the tender.

1) All materials in Schedule 'A' as may be required for the work shall be taken from the Department only. Outside materials in lieu of those mentioned in schedule 'A' shall not be allowed partially or full prior to approval of the Corporation Engineer.

2) The contractor shall have to construct a shed for storing controlled and valuable materials issued to him, under schedule 'A' of agreement on work site having double locking arrangement. The material will be taken for the use in presence of Department persons. No material will be allowed to be removed from the site of the work.

3) Unused controlled material shall be returned by the contractor on completion of work subject to prior approval of the corporation Engineer in items of clause No. 2 of the agreement. In case of failure to do so the contractor shall pay cost of unused



SWASTIK INFRALOG LIMITED

controlled materials at double rates at which these materials were issued to him. And the contractor shall be liable to pay sales and general tax as applicable on the value of such surplus materials to this corporation.

4) All materials will be available for the delivery during hours to be arranged mutually by contractor between himself and the store keeper or the corporation's Engineer from time to time.

5) The contractor must give an account of all materials used by him. The materials that cannot be accounted for will be recovered from him as per rates decided by competent authority.

6) The quantities noted in Schedule 'A' are only approximate and may vary accordingly to actual and bonafide use.

7) The contractor shall furnish account of material issued and consumed by replacing further demands from the corporation and furnish full account of materials issued to him. On completion of the work he shall return all surplus materials to the corporation. In case of failure of returning recovery at the rate of twice the rate will be effected from the contractor.

8) Sales Tax and general Tax as per Government rates shall be recovered from the contractor over the cost of the surplus materials unreturned.

9) Issue rate of the material are inclusive of sales tax and general tax.

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

## SCHEDULE 'B'

**Memorandum showing items of work to be carried out**

| Item No. | Quantities estimated but maybe more or less | Item of work | Estimated rates | | Unit | Total amount according to quantities |
|---|---|---|---|---|---|---|
| | | | In figures | In words | | |
| | | **SEPARATELY ATTACHED** | | | | |

Note 1 : All work shall be carried out as per Maharashtra Public Works Department Handbook and other specifications as directed.

Note 2 : All the columns in the schedule be filled in ink and the total of the entries in the last column should be struck by the contractor under his signature.

Note 3 : Rates quoted included clearance of site (prior to commencement of work and at its close) in all respects and hold good for work under all conditions, site moisture weather etc.

Note 4 : To be continued on additional sheets if found necessary.

Signature of Contractor

SWASTIK PHARALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

### 7.4.1 Additional special specifications

In addition to the detailed specifications, following general specifications are also applicable wherever required without giving additional payment.

1) The sand to be used on the work shall necessarily be free of silt (washed if required) and stored on platform before using in the work.

2) The platform for mixing of mortar shall be non-absorbing and shall be covered with a shed.

3) All metal aggregates shall be wetted before using in concrete.

4) Vertical pin headers should be provided for RCC walls thicker than '60' cm.

5) The basic drawing shows general arrangements and layout. For specifications and requirements of item tender paper may be referred to.

6) The pointing should not be spread on the large area of the stones, but should be cut to the specified thickness of the joints.

7) The measurements and quantities shown on the General Arrangement Plan and given in the estimate are approximate and are likely to vary during the execution for various reasons as below :

a) The dimensions (length & breadth) may vary as per requirement or as directed.

b) The average depth is calculated by taking few levels of the existing ground. However before execution levels shall be taken at closer intervals whereby the depth is least likely to vary.

c) The classification of the strata and the depths of foundations have been ascertained by taking trial pits. However the same are likely to vary.

d) To achieve suitable strata, the depths of concrete, masonry items and other items are likely to vary.

e) Due to change in design and drawing in the sanctioned Plans and estimates the



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quantities are likely to vary.

f) In view of the above facts or due to any other reason or reasons coming to notice during the execution, the quantity of the tender items are likely to increase, decrease for which no extra claims shall be entertained on any account.

g) The basic drawing shows general arrangements and layout for specifications and requirements of item tender paper may be referred to

**7.4.2 Statement showing the availability of Machinery for the work**

| Sr. No. | Name of Machinery | Hire Rate | Remarks |
|---|---|---|---|
| | NIL | | |

## SCHEDULE – B

| | | |
|---|---|---|
| | | |

I am / we are ready to execute the work ..... % (.....

... .....percent ) above / below the estimated rates entered in Schedule 'B'

(The offer quoted in percentage excludes item of Royalty charges )

**Contractors Seal**

Signature of Contractor

SWASTIK MINERALOGICS PRIVATE LIMITED

# 8 Annexures

**ANNEXURE-I**
**Affidavit**
**(On Rs. 500/-)**

Name of Work :

I _____ age _____ Address _____ (Authorized signatory to sign the contract), hereby submit, vide this affidavit in truth, that I am the owner of the contracting firm _____ / authorized signatory and I am submitting the document in envelope no. 1 for the purpose of scrutiny of the contract. I hereby agree to the condition mentioned below:-

1. I am liable for action under Indian Penal Code for submission of any false / fraudulent paper / information submitted in envelope no. 1.
2. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information, false bill of purchases supporting proof of purchase, proof of testing submitted by my staff, submitting company or any by myself, I will be liable for action under Indian Penal Code.
3. I am liable for action under Indian Penal Code if any paper is found false / fraudulent during contract period and even after the completion of contract (Finalization of Final bill).

(Signature of Contractor)

(Seal of Company)

## ANNEXURE-II

## STATEMENT SHOWING QUANTITIES OF WORK EXECUTED IN ANY ONE YEAR DURING LAST SEVEN YEARS

(i.e. 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, 2024-25)

| Sr. No. | Name of Work | Year | Work Done Certificate No. & Date | Quantity of work Performed | | | | | Remarks (Indicate contract Reference) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 9 |
| | | 2018-19 | | | | | | | |
| | | 2019-20 | | | | | | | |
| | | 2020-21 | | Sample Form | | | | | |
| | | 2021-22 | | | | | | | |
| | | 2022-23 | | | | | | | |
| | | 2023-24 | | | | | | | |
| | | 2024-25 | | | | | | | |

**Note - The Contractor must upload supporting documents showing above executed quantities.**

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES

**BANK CERTIFICATE**

This is to certify that M/s. _____ is a reputed company with a good financial standing.

If the contract for the work, namely _____ is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs _____ to meet their working capital requirements for executing the above contact during the contract period.

_____ (Signature)

Name of Bank

Senior Bank Manager

Address of the Bank

***(Not required for works costing less than Rs. 5 Crores)***

Signature of Contractor

SWASTIK INFRALOGICS



Executive Engineer, Nashik Municipal Corporation

## AFFIDAVIT

1) I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2) The undersigned also hereby certifies that neither our firm M/s---------- -- have abandoned any work on Building/Bridges/Roads etc. nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.
3) The undersigned hereby authorize (s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4) The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department, Project implementing agency.

---

***(Signed by an Authorised Officer of the Firm)***

---------- ***Title of Officer***

---

***Name of Firm***

---

***DATE***

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal Corporation

## UNDERTAKING

**Name of Work :.**

1. I, the undersigned do hereby undertake that our firm M/s. _____ _____ agree to abide by our offer which is valid for one hundred and twenty (120) days from the date of submission of tender or till we withdraw the offer in writing after 120 days of submission of tender.

_____

(Signed by an Authorized Officer of the Firm)

_____

Title of Officer

_____

Name of Firm

_____

DATE

Signature of Contractor

SWASTIK INFRASTRUCTURE LIMITED



Executive Engineer, Nashik Municipal Corporation

## PERFORMANCE BANK GUARANTEE

To,

_____ [Name of Employer]

_____ [Address of Employer]

WHEREAS, _____ [Name and Address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____, to execute the work of _____ [Name of Contract and brief description of Works] (hereinafter called "the Contract").

AND WHEREAS, we _____ [Name and Address of Bank] have agreed to furnish a Performance Bank Guarantee in favour of the Employer.

NOW THEREFORE, we hereby irrevocably affirm and undertake that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total sum of _____ [Amount of Guarantee in figures and words], such sum being payable in the currency(ies) in which the Contract Price is payable.

We further undertake to pay you, upon your first written demand and without demur, reservation, contest, recourse, or protest, and without reference to the Contractor, any sum or sums within the limits of _____ [Amount of Guarantee] as aforesaid, without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby expressly waive the necessity of your demanding the said debt from the Contractor before



SWASTIK INFRALOGICS PRIVATE LIMITED

presenting us with the demand.

We further agree that no change, addition, or modification of the terms of the Contract, or of the Works to be performed thereunder, or of any of the Contract documents, which may be made between you and the Contractor, shall in any way release us from any liability under this Guarantee, and we hereby expressly waive notice of any such change, addition, or modification.

This Guarantee shall remain valid up to 28 (twenty-eight) days beyond the expiry of the Defect Liability Period stipulated under the Contract.

IN WITNESS WHEREOF, this Guarantee has been executed on this ____ day of _____, 20.

Signature and Seal of the Guarantor: _____

Name of Bank: _____

Address: _____

Date: _____

Note: The Guarantee amount shall represent the percentage of the Contract Price specified in the Contract (including any additional security for unbalanced bids, if applicable), and shall be denominated in Indian Rupees

## DECLARATION

I/We hereby declare that I/We have thoroughly acquainted myself/ourselves with the local conditions relating to availability of materials, labour, and all other factors on which I/We have based the rates quoted in this tender. I/We have carefully studied and understood the specifications, drawings, and lead statements pertaining to this work before submitting the tender.

I/We further undertake to use only the best quality materials, duly approved by the Engineer-in-Charge or his authorised representative, during the execution of the work, and to abide by their decisions and directions in all respects.

Signature of Contractor

SWASTIK INFRALOGISTICS LIMITED

I/We also agree and confirm that no claim whatsoever shall be made by me/us at any later stage on account of lack of knowledge of site conditions, specifications, or any other circumstances affecting the execution of the work.

Place: _____

Date: _____

Signature of the Tenderer/Authorized Signatory

(With Seal/Stamp)

Name: _____

Designation: _____

Address: _____

Signature of Contractor

SWASTIK INFRALOGICS PRIVATE LIMITED

# 9 Proforma of submission of tender & proforma for agreeing to G.C.C.

## PROFORMA OF SUBMISSION OF TENDER

Ref No. Dated :

**The Commissioner,**

**Nashik Municipal Corporation,**
**Rajiv Gandhi Bhavan, Sharanpur Road,**

**Nashik**

**Sub : (Name of work.)**

Dear Sir,

1. Having obtained tender documents for the work under reference and having examined specifications and conditions of contract, we hereby offer to perform, provide, execute, complete the work in conformity with the Tender notice, instructions to the tenderer, General Conditions of Contract, Special Conditions of contract, Technical Specifications, drawings, CSD and the price-bid/ amount as quoted in the tender documents, within the stipulated time.
2. We have satisfied ourselves as to the location of the site and working conditions examined the requirements of NMC and have obtained all the information necessary for the successful timely completion of the work.
3. We also agree to submit a detailed work programme to complete the work in stipulated period
4. We have deposited earnest money deposit with you, which shall not to bear any interest. We hereby agree that this amount shall stand forfeited in the event of our tender being acceptance and our failure t to execute the contract when called upon to do so within stipulated time. During the validity period of offer, if we withdraw or modify our offer, then Corporation (NMC) would be at liberty to forfeit Earnest Money deposited by us. We also hereby agree to treat the sum as a part of security deposit on our signing the contract.

Signature of Contractor

Corporation

SWASTIK INFRALOGISTICS PRIVATE LIMITED

100 Executive Engineer, Nashik Municipal

5. We understand you are not bound to accept the lowest tender or are you required to assign any reasons for rejection of our tender. We understand that our offer is valid for one hundred and twenty (120) days from the date of submission of tender or till we withdraw the offer in writing after 120 days of submission of tender.

Thanking you,
Yours faithfully

Date :

---

Signature of Tenderer With seal and address

Signature of Contractor
Corporation

SWASTIK INFRALOGICS PRIVATE LIMITED



Executive Engineer, Nashik Municipal

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# नाशिक महानगरपालिका, नाशिक

NOTING

## कार्यवाही - अनुक्रमणिका

| अ.क्र. | तपशील (का) | दिनांक | पा. नं. (का) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

NOTING

# नाशिक महानगरपालिका, नाशिक

## कार्यवाही - अनुक्रमणिका

| अ.क्र. | तपशील (का) | दिनांक | पा. नं. (का) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |




# वि-भा-ज-क

## नाशिक महानगरपालिका

महाराष्ट्र शासन
नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण
मध्यवर्ती प्रशासकिय इमारत, नाशिक रोड, नाशिक - 422101
दुरध्वनी क्र. 0253-2461909 Email- kumbhmela.2027@mah.gov.in

दिनांक: स्वाक्षरीखाली नमूद आहे.

**प्रशासकीय मान्यता आदेश:-**

विषय:- नाशिक त्र्यंबकेश्वर सिंहस्थ कुंभमेळ्यासाठी रस्त्यांच्या कामांना प्रशासकीय मान्यता देणे बाबत.

संदर्भ:- 1. नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाची बैठक दिनांक 28/07/2025 ठराव क्रमांक 04.
2. या कार्यालयाचे पत्र दिनांक 29/07/2025.
3. शासनाचे पत्र क्रमांक कुंभमे-2025/प्र.क्र.235/ नवि-25 दिनांक 29/08/2025.
4. आयुक्त, नाशिक महानगरपालिका, नाशिक यांचे पत्र क्रमांक जा.क.सावबंवि/डेस्क-8/994/2025 दिनांक 10/07/2025.
5.आयुक्त, नाशिक महानगरपालिका, नाशिक यांचे पत्र क्रमांक जा.क.सावबंवि/डेस्क-8/994/2025 दिनांक 09/09/2025.

वाचा - नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण अधिनियम, 2025 चे कलम 7 (1) (ग).

कार्यान्वयीन यंत्रणा नाशिक महानगरपालिका यांनी विनंती केल्यानुसार नाशिक त्र्यंबकेश्वर सिंहस्थ कुंभमेळा 2027-28 च्या आयोजनासाठीच्या दृष्टीने आवश्यक असणाऱ्या खालील कामांना नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण अधिनियम 2025 चे कलम 7 (1) (ग) नुसार नमूद केलेल्या अटी शर्तीच्या अधीन राहून खालील प्रमाणे प्रशासकीय मान्यता देण्यात येत आहे.

| अ. क्र. | कामांचे नाव | प्रशासकीय मान्यता रक्कम (रुपये कोटी) | काम पूर्ण करण्याची मुदत | कार्यान्वयीन यंत्रणा |
|---|---|---|---|---|
| 1 | गंगापूर रोड बारदान फाटा ते सुला चौक (बाह्य वाहनतळ ते अंतर्गत वाहनतळाना जोडणारा/ त्र्यंबकरोड जोडरस्ता) | 56.86 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 2 | त्र्यंबक रोड पपया नर्सरी सिग्नल ते एक्स.लो. जंक्शन (बाह्य वाहनतळ/ रेल्वे स्थानक- त्र्यंबकरोड- मुंबई महामार्ग जोडरस्ता/ वाहतूक नियोजन) | 77.33 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 3 | एक्सलो चौक ते गरवारे चौकपावेतो (बाह्य वाहनतळ / रेल्वे स्थानक- त्र्यंबकरोड- मुंबई महामार्ग जोडरस्ता / वाहतूक नियोजन) | 71.99 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |

| अ. क्र. | कामांचे नाव | प्रशासकीय मान्यता रक्कम (रुपये कोटी) | काम पूर्ण करण्याची मुदत | कार्यान्वयीन यंत्रणा |
|---|---|---|---|---|
| 4 | वडनेर गेट ते विहितगाव (लॅम रोड) (रेल्वे स्थानक- त्र्यंबकरोड जोडरस्ता/ वाहतूक नियोजन) | 32.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 5 | विहितगाव (लॅम रोड) ते बिटको चौक ते जेलरोड-गोदावरी नदी पर्यंत (घाटाकडे जाणारा रस्ता) | 65.50 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 7 | नांदूर पूल ते जत्रा हॉटेल (घाटाकडे जाणारा रस्ता) | 71.20 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 8 | लेखा नगर NH3 -कलानगर चौक -वडाळागाव रविशंकर मार्ग- विजय ममता चौक (घाटाकडे जाणारा रस्ता/ वाहतुक नियोजन) | 38.50 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 9 | संगम पूल ते मिर्ची हॉटेल चौकते अमृतधाम चौक ते गुंजाळ बाबा चौक तारवाला चौक ते मार्केट सिग्नल ते मखमलाबाद रोड (घाटाकडे जाणारा रस्ता/ साधुग्राम पोहोच रस्ता) | 83.26 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 10 | के.टी.एच.एम. पूल ते जुना गंगापूर नाका ते शरणपूर पोलीस चौकी, बॉश (मायको) सर्कल ते चांडक सर्कल ते महामार्ग बस स्टॅन्ड (घाटाकडे जाणारा रस्ता / वाहनतळ जोडणारा) | 48.08 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 11 | विजय ममता चौक-टाकळी गाव -संगम पूल (घाटाकडे जाणारा रस्ता/ साधुग्राम पोहोच रस्ता) | 22.20 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 12 | अशोक स्तंभ ते जेहान सर्कल (गंगापूर रोड) रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/ वाहनतळ जोडणारा) | 37.81 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 13 | गंगापूर रोड - जेहान सर्कल ते गंगापूर गाव मनपा हद्द पावेतो रस्ता विकसित करणे. (वाहनतळ जोडणारा रस्ता) | 49.35 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 14 | खडकाळी सिग्नल ते त्र्यंबक नाका ते आयटीआय सिग्नल (त्रंबक रोड) पर्यंतचा रस्ता विकसित करणे. (नाशिक त्रंबक कुंभमेळा दोन्ही ठिकाणी जोडणारा रस्ता / वाहनतळ जोडणारा रस्ता) | 51.05 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 15 | त्र्यंबक रोड आय.टी.आय. सिग्नल ते पिंपळगाव बहुला मनपा हद्द रस्ता विकसित करणे. (नाशिक त्रंबक कुंभमेळा दोन्ही ठिकाणी जोडणारा रस्ता / वाहनतळ जोडणारा रस्ता) | 49.29 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 16 | निमाणी चौक ते मनपा हद्द पावेतोचा दिंडोरी रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/ वाहनतळ जोडणारा) | 59.57 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |

| अ. क्र. | कामांचे नाव | प्रशासकीय मान्यता रक्कम (रुपये कोटी) | काम पूर्ण करण्याची मुदत | कार्यान्वयीन यंत्रणा |
|---|---|---|---|---|
| 17 | पेठ रोड कालवा ते मेहेरधाम पेठ रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/ वाहनतळ जोडणारा) | 76.49 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 18 | पुणे रोड- दत्त मंदिर चौक ते सिन्नर फाटा (रेल्वे स्थानक जोड रस्ता) | 17.75 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 19 | जनार्दन स्वामी मठ (छ.संभाजी नगर रोड) ते लक्ष्मीनारायण मंदिरपूल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) | 15.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 20 | अमृत मिरवणूक मार्ग (जाणारा व परतीचा) देखभाल दुरुस्ती (अमृत मिरवणूक मार्ग) | 5.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 21 | नवीन प्रस्तावित कपिला संगम घाटाकडे जाणारे पोहोच रस्ते तयार करणे. लक्ष्मी नारायण घाटाकडे जाणारा महत्वाचा रस्ता | 2.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| एकूण | | 930.23 | | |

महाराष्ट्र राज्य पायाभूत सुविधा विकास महामंडळामार्फत नाशिक शहराच्या रिंगरोडचे काम प्रस्तावित आहे. सदरचे काम मंजूर झाल्यास नाशिक मुंबई महामार्ग ते नाशिक पुणे महामार्ग या पट्ट्यातील दोन महामार्गांना जोडणारा, नाशिकच्या विकास आराखड्यात दर्शविलेला रिंगरोड मंजूर होण्याची शक्यता आहे. असा रिंगरोड मंजूर झाल्यास, वर अनुक्रमांक चार वर नमूद वडनेर गेट ते विहितगाव (लॅम रोड) (रेल्वे स्थानक- त्र्यंबकरोड जोडरस्ता/ वाहतूक नियोजन) या रस्त्याची कुंभमेळ्याकरिता आवश्यकता राहणार नाही. यामुळे सदरचे काम सुरू करण्यापूर्वी महाराष्ट्र राज्य पायाभूत विकास महामंडळाकडून त्यांचे रिंगरोडचे काम कुंभमेळ्यापूर्वी पूर्ण होणार नाही, याची खात्री करावी आणि त्यानंतरच कार्यारंभ आदेश द्यावा.

अटी व शर्ती:-

१. संबंधित कार्यान्वयीन यंत्रणेला शासनाच्या, संबंधित विभागांच्या आणि इतर सक्षम प्राधिकाऱ्यांच्या (उदा. केंद्रीय सतर्कता आयोग) यांनी वेळोवेळी निर्गमित केलेल्या मार्गदर्शक सूचनांचे पालन करावे लागेल.
२. नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण आणि जिल्हास्तरीय सिंहस्थ कुंभमेळा कार्यकारी समिती, नाशिक यांचे मार्फत वेळोवेळी दिलेल्या निर्देशांचे पालन संबंधित कार्यान्वयीन यंत्रणेला करावं लागेल.
३. नाशिक त्र्यंबकेश्वर कुंभमेळा अधिनियम 2025 मधील सर्व तरतूदी या कामाला लागू राहतील.
४. सदर कामावर नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत निर्देशित केल्यानुसार कामाच्या जागेवर माहिती दर्शविणारा फलक लावावा लागेल.
५. सदर काम किंवा त्याचा कोणताही घटक इतर कोणत्याही योजनेत मान्य झाले नाही अथवा करण्यात आले नाही याची खात्री कार्यान्वयीन यंत्रणेने करावी.
६. सदर काम पूर्ण झाल्यावर त्याचा केवळ सार्वजनिक वापर होणार असून कोणत्याही स्वरुपाचा खाजगी वापर होणार नाही याची दक्षता कार्यान्वयीत यंत्रणेने घ्यावी.

७. कार्यान्वयीन यंत्रणा ही सदर कामाचा वापर करणारी आणि देखभाल दुरुस्ती करणारी यंत्रणा नसल्यास, सदर काम पूर्ण झाल्यावर वापर करणारी आणि देखभाल/ दुरुस्ती करणाऱ्या यंत्रणेने काम गुणवत्तापूर्ण झाले आहे किंवा कसे याची खात्री करून ते ताब्यात घ्यावे.

८. खरेदीच्या कामांबाबत शासनाने वेळोवेळी निर्गमित केलेल्या निर्देशांचे पालन करावे. तसेच वस्तुंची अथवा इतर बाबींची खरेदी शासनाच्या GeM पोर्टलवरुन अथवा शासनाच्या इतर मार्गदर्शक सूचनांनुसारच करावी.

९. मंजूर अनुदानापेक्षा (प्रशासकीय मान्यता रकमेपेक्षा) जास्त खर्च करता येणार नाही. तसेच कामाचे भाग पाडून काम करता येणार नाही.

१०. वर दर्शविण्यात आलेली काम पूर्ण करण्याची मुदत ही अंतिम मुदत असून शक्य असल्यास यापेक्षा लवकर काम पूर्ण करण्याचे नियोजन करावे आणि तशी अंमलबजावणी करावी. त्यानुसार निविदा प्रक्रिया राबवावी.

११. सर्व कामांच्या जागांचे कामाचे काम सुरु करण्यापूर्वी कोणतीही जागा सुटणार नाही अशाप्रकारे दिनांक नमूद करून व्हिडिओ शूटिंग करावे आणि जियो स्टॅम्प्ड आणि जियो टॅग्ड फोटो काढावेत. त्याचप्रमाणे प्रत्येक कामाचे जास्तीत जास्त एक महिना किंवा त्यापेक्षा कमी या कालावधीमधे अशा प्रकारचे व्हिडिओ आणि फोटो पुन्हा काढावेत हे सर्व जतन करून ठेवावेत जेणेकरुन याला भविष्यात योग्य त्या संकेतस्थळावर जाहीररित्या प्रदर्शित करता येईल.

१२. नियोजन विभागाच्या दिनांक 09 जून 2025 रोजीच्या शासन निर्णयानुसार प्रत्येक पायाभूत विकास प्रकल्पांसाठी युनिक पायाभूत सुविधा आयडी पोर्टल (Infra ID Portal) कार्यान्वित करणे बाबत दिलेल्या सूचनांचे कार्यान्वयीन यंत्रणेने पालन करावे व त्यानुसार कार्यवाही करावी.

१३. प्रकल्प व्यवस्थापनाच्या दृष्टीने वेळोवेळी दिलेल्या निर्देशानुसार आवश्यक ती माहिती नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाला सादर करावी.

१४. मंजूर करण्यात येत असलेल्या वरील कामांची भविष्यातील देखभाल दुरुस्तीचा खर्च कार्यान्वयीन यंत्रणेने स्वत:च्या निधीतून करावा अथवा हस्तांतरण करुन घेणाऱ्या यंत्रणेने करावे.

१५. सदर कामांचा कोणत्याही उपांगांचे काम इतर कोणत्याही शीर्ष अथवा योजनेतून प्रस्तावित नाही आणि/ किंवा झाले नाही याची खात्री कार्यान्वयीन यंत्रणेने काम सुरु करण्यापूर्वी करावी.

१६. सदर कामांची सक्षम प्राधिकाऱ्याकडून तांत्रिक मान्यता घेणे बंधनकारक आहे.

१७. सदर कामाचे पर्यवेक्षण आणि नियंत्रण संबंधित कार्यान्वयीन यंत्रणेने करावे.

१८. सदर कामाचा दर्जा/ गुणवत्ता आणि वेग तपासण्यासाठी, त्याचप्रमाणे कार्यान्वयीन यंत्रणेच्या कामकाजाचे मूल्यमापन करण्यासाठी त्रयस्थ यंत्रणांमार्फत/ यंत्रणांना वेळोवेळी तपासणी आणि मूल्यमापन करण्यात येईल. यासाठीचा येणारा खर्च या कामाच्या अंदाजपत्रकीय रकमेतून नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत थेट संबंधित यंत्रणांना अदा केला जाईल.

१९. थर्ड पार्टी इन्स्पेक्शन बद्दल आवश्यक ती तरतूद अंदाजपत्रकात करावी.

२०. निविदा प्रक्रियेमध्ये सर्वसाधारण पात्रते (eligibility) संबंधात निकष सर्वसाधारणपणे त्या त्या विभागाचे नेहमीचे जशी असतात त्या पद्धतीने ठेवावे जेणेकरून स्पर्धा चांगली होईल. तथापि दर्जा उत्तम राखण्यासाठी दंडात्मक (penalty च्या) तरतुदी अधिक कठोर करायचे असल्यास तशी मुभा संबंधित विभागाला राहील.

२१. कामे हाती घेताना शासनाच्या संबंधित विभागाच्या / कार्यालयांच्या मार्गदर्शक सूचना विचारात घ्याव्यात (उदा. अग्नीशमन सेवा संचालनालय, वैद्यकीय शिक्षण व संशोधन संचालनालय, इ.). तसेच याबाबत इतर मोठ्या शासकीय व निमशासकीय संस्था (उदा. राज्य शासनाचे संबंधित विभाग, केंद्र शासनाचे संबंधित विभाग, मोठ्या महानगरपालिका/ महामंडळे, इ.) यांनी वेळोवेळी निर्गमित केलेल्या मार्गदर्शक सूचना, खरेदी धोरण व निविदांचा देखील अभ्यास निष्पक्षपणे व सखोलपणे करावा. त्याचप्रमाणे या क्षेत्रातील सर्वोत्तम कार्यपद्धतींचा (best practices) चा विचार करावा. तसेच आवश्यकतेनुसार त्या क्षेत्रातील तज्ञ / सल्लागार यांच्या सेवा घ्याव्यात. या प्रकारे पूर्ण काळजी घेवून अशा कामांबाबत/ प्रकल्पांबाबत कार्यवाही करावी. सदरची कामे/ प्रकल्प वेळेत

आणि गुणवत्तेनुसार पार पाडण्याची जबाबदारी संबंधित कार्यान्वयीन यंत्रणेच्या कार्यालय प्रमुखाची राहील याची नोंद घ्यावी.

२२. सदर कामांची प्रस्तावित रक्कम ही कामे पूर्ण करुन ती कुंभमेळ्यासाठी प्रत्यक्षात उपयोगाला येण्याच्या दृष्टीने आणि कार्यान्वित होण्याच्या दृष्टीने परिपूर्ण प्रकारे प्रस्तावित केली आहे, असे गृहीत धरण्यातून ही प्रक्रिया करण्यात येत आहे. उदा. एखाद्या कामासाठी भूसंपादन किंवा तिथे पोहचण्यासाठी अप्रोच रोड किंवा फर्निचर/ विद्युतीकरण ते या कामाचा भाग आहे, असे गृहीत धरण्यात येत आहे. तसेच कामाशी निगडीत नसलेली कामे घेतलेले नाही (उदा. कार्यालयीन गाड्यांचे भाडे) असे गृहीत धरण्यात येत आहे याची नोंद कार्यान्वयीन यंत्रणेने घ्यावी.

२३. सदर कामाचे आवश्यक ते अभिलेखे तयार करण्याची आणि अभिलेख जतन करण्याची जबाबदारी संबंधित कार्यान्वयीन यंत्रणेची राहील.

२४. या कामाबाबत उद्भवणाऱ्या न्यायालयीन, कायदेशीर आणि लेखापरीक्षण विषयक बाबींसाठी संबंधित कार्यान्वयीन यंत्रणा जबाबदार आहे.

२५. काम पूर्ण झाल्यानंतर कामाच्या पूर्णत्वाचा दाखला व कामावर केलेल्या खर्चाचे उपयोगीता प्रमाणपत्र 30 दिवसात सादर करावे.

२६. या कामांवर होणारा खर्चाचा हिशेब स्वतंत्रपणे ठेवण्यात यावा. तसेच कामावर झालेला खर्च वजा जाता शिल्लक रक्कम या कार्यालयाकडे 15 दिवसात वर्ग करावी. कामावर झालेली बचत इतर कामांवर वळती करण्यात येवू नये.

२७. सदर कामासाठी आवश्यक असलेली जागा कायदेशीररित्या ताब्यात घेण्याची जबाबदारी संबंधित कार्यान्वयीन यंत्रणेची राहील.

२८. सदर काम करीत असताना आवश्यक असणाऱ्या केंद्र शासन, राज्य शासन, स्थानिक स्वराज्य संस्था किंवा कोणत्याही प्राधिकाऱ्याच्या आवश्यक असणाऱ्या, कायदेशीर व इतर परवानग्या प्राप्त करून घेण्याची जबाबदारी संबंधित कार्यान्वित यंत्रणेची राहील.

२९. सदरचा प्रशासकीय मान्यतेचा आदेश नगर विकास विभागाच्या मागणी क्र.एफ-2, मुख्य लेखाशिर्ष 2217B357, 191, स्थानिक संस्था, महानगरपालिका, नगरविकास प्राधिकरणे, शहर सुधार मंडळे, इत्यादींना सहाय्य, 31 सहायक अनुदाने (वेतनेतर) (00) (00) (97) सिंहस्थ कुंभमेळ्याचे नियोजन व अंमलबजावणी यावरील खर्चाकरिता सहायक अनुदान (कार्यक्रम) कुंभमेळा निधी संबंधित शीर्षातून देण्यात येत आहे. तथापि शासनस्तरावर किंवा प्राधिकरणात इतर शीर्षातून किंवा योजनेतून सदरचा खर्च करण्याचा निर्णय झाल्यास त्याप्रमाणे निधी उपलब्ध केला जाईल.

३०. नाशिक महानगरपालिकेने कुंभमेळा संबंधित कामांवर त्यांच्या निधीतील किती टक्के वाटा उचलायचा हे ठरलेले नाही. याबाबत शासनस्तरावर होणारा निर्णय महानगरपालिकेला बंधनकारक राहील आणि त्यानुसार तसा वाटा त्यांना उचलणे बंधनकारक राहील.

Signed by
Praveen Nilkanthrao Gedam
Date: 14-09-2025 22:39:39
(डॉ. प्रवीण गेडाम)
अध्यक्ष, नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण तथा,
विभागीय आयुक्त, नाशिक

प्रति,

आयुक्त, नाशिक महानगरपालिका, नाशिक.

# Nashik Municipal Corporation, Nashik.

**Public Works Department**

*Face sheet*

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. No. | Component | Particulars | Length in m | Area in Sq.m | Amount |
|---|---|---|---|---|---|
| 1 | A | Total Civil Cost | | | 149,985,937 |
| | | | | | |
| | | **Total Project Cost A+B =** | | | **149,985,937** |
| | | **Total Civil Cost in Cr.** | | | **15.00** |

# Nashik Municipal Corporation
## East Division
### Public Works Department

**Fund Head :-**

**ESTIMATE Prepared by Jr/Asst/Sec. Engineer :-** **Mr. D.P Jadhav**

**Deputy Engineer :-** **Mr. Nilesh Sali**

**Executive Engineer :-** **Mr. Ravindra Bagul**

**Name of Work:- Proposed Developing of 30 m DP Road from Janardan Swami Math-Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

**Estimate Cost :-** **14,99,85,937.00**

**Note:- The Estimate is prepared on the basis of MJP DSR 2023-2024 & PWD**

**Jr. Engineer**
**Nashik Municipal Corporation**

**Dy. Engineer**
**Nashik Municipal Corporation**

**Executive Engineer**
**Nashik Municipal Corporation**

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## Technical Sanction

DE/~~Jr.~~ **Engineer (Project)**
**Nashik Municipal Corporation**

**Dy. Engineer (Project)**
**Nashik Municipal Corporation**

**Technically sanctioned for** Rs. 14,99,85,937/-

**In Words** fourteen Crore ninety nine lakh eighty five thousand-nine hundred thirty Seven only.

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**Vide No.NMC/PWD/** TS /18/2025 **Dt:-** 16/09/2025

**APPROVED**

**City Engineer**
**Nashik Municipal Corporation**

# Nashik Municipal Corporation, Nashik.

**Public Works Department**

*Face sheet*

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. No. | Component | Particulars | Length in m | Area in Sq.m | Amount | Rate | Unit |
|---|---|---|---|---|---|---|---|
| 1 | A | Dismantling | | | 11,34,644.09 | | |
| 2 | B | Strom Water / Service line / Utility Duct | | | 80,49,933.83 | | |
| 3 | C | Road Work (Construction of Bituminious or Concrete Road Items) | | | 10,68,43,777.41 | | |
| 4 | D | Miscellaneous Items for Reparing Work | | | 26,90,414.68 | | |
| 5 | E | Road Furniture | | | 37,58,613.94 | | |
| 6 | F | Providing Public Utilities | | | 2,57,084.10 | | |
| 7 | G | Add Water Supply | | | 19,90,543.32 | | |
| | | **Civil Work- Total** | **3293** | **53280** | **12,47,25,011.36** | **2,340.93** | **Sq.m** |
| | | 18 % GST | 18% | | 2,24,50,502.04 | | |
| | | **Total Cost with GST** | | **53280** | **14,71,75,513.40** | **2,762.30** | **Sq.m** |
| | | Royalty | | | 9,27,803.40 | | |
| | | Quality Control Testing Charges | | | 18,82,620.00 | | |
| | | **Total Civil Cost** | | **53280** | **14,99,85,937** | **2,815.05** | **Sq.m** |
| | | **Amount in Cr.** | | | **15.00** | | |

DPR Consultant

Authorized Signatory
CivilTech India Pvt. Ltd

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

NASHIK MUNICIPAL
CORPORATION




# ABSTRACT

# SHEET

CIVIL TECH INDIA PVT. LTD.

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| A | Dismantling | | | | | |
| 1 | 1.15 | Detailed survey of road in plain country including chaining and levelling with cross sections at every two chains inclusive of closing of survey each day. | 3.29 | 6830.30 | Km | 22492.18 |
| 2 | 3.1 | Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately. By Mechanical Means etc. complete. | 673.50 | 451.50 | Cum | 304085.25 |
| 3 | 3.11 | Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately etc. complete. | 5.00 | 1454.30 | Cum | 7271.50 |
| 4 | 7.25 | Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 metres and stacking the serviceable and unserviceable material separately | 1.00 | 389.60 | No | 389.60 |
| 5 | 46.09 | Dismantling brick masonry in lime or cement mortar and stacking the materils as directed with all leads, lifts etc. | 10.00 | 351.80 | Cum | 3518.00 |
| 6 | 46.11 | Dismantling stone masonry in lime or cement mortar including stacking the materils as directed with all leads, lifts etc. | 15.00 | 399.00 | Cum | 5985.00 |
| 7 | 46.12 | Removing lime or lean cement concrete including stacking the spoils as directed with all leads, lifts etc, complete | 0.00 | 585.90 | Cum | 0.00 |
| 8 | 46.13 | Removing rich mix cement concrete including stacking the spoils as directed with all leads, lifts etc, complete | 10.00 | 976.50 | Cum | 9765.00 |
| 9 | 46.19 | Removing cement tiles, or marble or polished shahabad floor or dado without bed concrete including stacking the materials as directed with all leads, lifts etc. complete | 95.52 | 47.30 | Sqm | 4518.10 |
| 10 | 46.25 | Removing wire fencing with iron/ C.C. fencing post and stacking the materials as directed with all leads, lifts etc. complete. | 75.54 | 70.30 | Rmt | 5310.46 |
| 11 | 51.134 | Milling of existing bituminous surface to specified depth of bituminous layer including disposal of removed material with all lift and lead upto 1000 m etc complete. Using machine like Writgen (W100) or equivalent | 16695.00 | 46.20 | Sqm | 771309.00 |
| | A | **Dismantling** | | **Total Rs** | | **1134644.09** |
| | | | | | | |
| B | **Strom Water / Service line / Utility Duct** | | | | | |
| 12 | MJP-1 a | Carrying out detailed/final location survey for drainage schemes with chain and compass, levels, theodolite and other essential instruments including staking of final center line, locating curves, establishing B.M. and taking L section, cross section, fly leveling etc. complete in plain area. Spec. No. : As directed by Engineer in charge | 1220.00 | 2.00 | Rmt | 2440.00 |
| 13 | MJP-8 | Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, manual dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP.DSR 2023-24, Section-E-1.4, ) | | | | |
| | | Lift upto 0.0 to 1.50 m depth | 1301.40 | 181.50 | Cum | 236204.10 |
| | | Lift upto 1.50 to 3.0 m depth | 0.00 | 198.00 | Cum | 0.00 |
| 14 | MJP-10 | Excavation for foundation / pipe trenches in hard murum and boulders, W.B.M. road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatreing, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP.DSR 2023-24, Section-E-3.4, ) | | | | |
| | | Lift upto 0.0 to 1.50 m depth | 480.90 | 232.10 | Cum | 111616.89 |

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| | | Lift upto 1.50 to 3.0 m depth | 0.00 | 248.60 | Cum | 0.00 |
| 15 | MJP-11 | Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material upto a distance of 50 M beyond area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-5,9, ) | | | | |
| | a | Lift upto 0.0 to 1.50 m depth | 561.05 | 691.90 | Cum | 388190.50 |
| | b | Lift upto 1.50 to 3.0 m depth | 0.00 | 722.70 | Cum | 0.00 |
| | c | Lift up to 3.0 to 4.5 m depth | 0.00 | 753.50 | Cum | 0.00 |
| 16 | MJP-12 | Excavation for foundation / pipe trenches in hard rock and concrete road by chiselling, wedging, line drilling, by mechanical means or by all means other than blasting including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means. (MJP,DSR 2023-24, Section-E-7,9 ) | | | | |
| | a | Lift upto 0.0 to 1.50 m depth | 27.00 | 1230.90 | Cum | 33234.30 |
| | b | Lift upto 1.50 to 3.0 m depth | 93.23 | 1261.70 | Cum | 117621.98 |
| | c | Lift up to 3.0 to 4.5 m depth | 0.00 | 1292.50 | Cum | 0.00 |
| 17 | MJP-14a | Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15cm to 20cm layers including watering and compaction complete.(MJP,DSR 2023-24, Section-E-16 ) | 2463.58 | 96.60 | Cum | 237981.35 |
| 18 | MJP-19 B&C | Providing, Lowering & Laying ISI standard R.C.C. pipes in standard lengths of following class and diameter suitable for either collar/ spigot & socket joints or rubber ring joints, including all cost of rubber ring joints, excluding GST levied by GOI & GOM in all respect including inspection charges, transport to departmental stores, unloading and stacking etc. complete as per IS-458/1988, lowering & Laying and giving satisfactory Hydraulic testing of the laid pipe line and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar,) including cost of conveyance from stores to site of work, cost of jointing material, labour, etc. complete as directed by Engineerin- charge (For all class of pipes.) as per IS- 783- 1985. as specified and directed by Engineer in charge etc. complete. (MJP, DSR 2023-24, Sec.-I(VI)RCC Pipes,1d,e,f,2)Page No. 94,95,96 | | | | |
| | b | R.C.C.NP-III Class (MJP, SSR 2023-24,Sec-I-(VI)-1-e,) | | | | |
| | | i) for 150 mm dia | 0.00 | 509.80 | Rmt | 0.00 |
| | | ii)for 200 mm dia | 0.00 | 581.10 | Rmt | 0.00 |
| | | iii) for 250 mm dia | 0.00 | 788.60 | Rmt | 0.00 |
| | | iv)for 300 mm dia | 430.00 | 1078.00 | Rmt | 463540.00 |
| | | vii) for 450 mm dia | 1270.00 | 2005.60 | Rmt | 2547112.00 |
| | | ix) for 600 mm dia | 30.00 | 2886.20 | Rmt | 86586.00 |
| | c | R.C.C.NP-IV Class (MJP, SSR 2023-24,Sec-I-(VI)-1-e,) | | | | |
| | | xii) for 900 mm dia | 0.00 | 5323.00 | Rmt | 0.00 |
| | | xiii) for 1000 mm dia | 0.00 | 5875.30 | Rmt | 0.00 |
| | | xiv)for 1200 mm dia | 0.00 | 11138.30 | Rmt | 0.00 |
| 19 | MJP-21 A1 | Providing and constructing on sewer.Fly Ash Brick masonry circular manhole concentric cone 0.9 M dia. at bottom and 0.5 M dia. at top and upto a depth of 1.00 M. with 15cm thick CC 1:2:4 bed concrete. Fly Ash Brick masonry in Conical shape for 1.0 M with 0.23m. thk. BM in CM 1:6 proportion with 12 mm thick inside & 20 mm thick on outer- side plaster with fine cement smooth finish in CM 1:4. providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered). 15cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.As per Rate Analysis.( For both side plaster Use natural sand & For other work VSI(Vertical Shaft Impact) sand finely washed etc.) | 25.00 | 17055.30 | No | 426382.50 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 20 | MJP-21 B1 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.2 M dia. at bottom and 0.5 M dia. at top and upto a depth of 2.00 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.00 M with 0.23 M thick in CM 1:4 proportion excluding excavation with 12 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered),,15cm thk C.C.1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in- charge.(MJP, SSR 2021-22, SEC-I(XX)-6, ) ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 49.00 | 30138.60 | No | 1476791.40 |
| 21 | MJP-21 C1 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 5.0 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.0M with 0.23m thk & 3.0 M depth of Vertical Cylinder with 0.35 M thick Fly Ash Brick masonry in CM 1:4 proportion with 20 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:2, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered),,15cm thk 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.(MJP, SSR 2021-22, SEC-I(XX)-7, )( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 2.00 | 82847.30 | No | 165694.60 |
| 22 | MJP-21 F1 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole with concentric cone 1.80 M dia. at bottom and 0.5 M dia. at top and upto a depth of 9.0 M with 25 cm thick CC 1:2:4 bed concrete,& Fly Ash Brick masonry with 23 cm brick work in conical shape upto depth of 2.50 M from top and balance in cylindrical shape 35 cm thick brick work for depth of 2.35 M depth upto 5.0 M, with M:20 Concrete for RCC Beam size of 350x150mm thk.with reinfocement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 350mm thk. brick work, and 45 cm thick brick work 3.85m.for remaining depth upto 9.00 M with M:20 Concrete for RCC Beam size of 450x150mm thk.with reinfocement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 450mm thk. brick work, in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3 proportion excluding excavation, including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical. (Staggered),, 15cm thk 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.As per Rate Analysis.( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 0.00 | 273164.60 | No | 0.00 |
| 23 | MJP-21 S1 | Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 450 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 450 mm etc. complete as directed by Engineer-in-charge. (MJP, SSR 2023-24.Sec-I(XX)-3-A ) (Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 5.00 | 10326.40 | No | 51632.00 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 24 | MJP-21 T1 | Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 900 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 900 mm etc. complete as directed by Engineer-in-charge. As per Rate Analysis. (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 27.00 | 16803.50 | No | 453694.50 |
| 25 | MJP-22 a1 | Constructing additional depth/ Rebate for Manhole of 900mm Dia. & above/below 1000 mm. depth to cover variations with 230mm.thick Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered) As per Rate Analysis. (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 15.85 | 12238.90 | Rmt | 193986.57 |
| 26 | MJP-22 b 1 | Constructing additional depth or Manhole of 1200mm Dia. & above / Rebate 2000 mm. depth with 230mm.thick Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered), (MJP, SSR 2023-24, Sec-I (XX)-6-a,) (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 0.50 | 7549.90 | Rmt | 3774.95 |
| 27 | MJP-22 c 1 | Constructing additional / Rebate depth for Manhole of 1500mm Dia. & below 5000 mm. depth with 350mm.thick Fly Ash Brick masonry work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered), (MJP, SSR 2023-24, Sec- I(XX)-7-a,) (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | 2.50 | 16411.90 | Rmt | 41029.75 |
| 28 | MJP-22 f 1 | Constructing additional / Rebate depth for Manhole of 1800mm Dia. & below 9000 mm. depth with 450mm.thick Fly Ash Brick masonry work up to 2.50m in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered),As per Rate Analysis. ( For both side plaster Use natural sand & For other work VSI sand finely washed etc.) | 2.50 | 35216.60 | Rmt | 88041.50 |
| 29 | MJP-22 s 1 | Constructing additional depth or Manhole of 450x600x900 above 900 mm. depth with 230mm. Fly Ash Brick masonry work.in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3. (MJP, SSR 2023-24, Sec-I(XX)-3-A a,) ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 5.00 | 5208.70 | Rmt | 26043.50 |
| 30 | MJP-22 t 1 | Constructing additional depth or Manhole of 900x600x900 above 900 mm. depth with 230mm. Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3. As per Rate Analysis. ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | 10.50 | 13415.60 | Rmt | 140863.80 |
| 31 | MJP-37 | Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete. | 2463.58 | 96.60 | Cum | 237981.35 |
| 32 | MJP-32 | Providing and fixing in position steel fiber reinforced concrete (S.F.R.C.) frame and covers of approved make including loading, unloading, transportation, all taxes, etc. complete as directed by Engineer-in-charge (20 tones capacity) | | | | |
| | | (MJP, SSR 2023-24, Sec-I(XX)-17.) | | | | |
| | | i) 540 Dia. | 20.00 | 3665.60 | No | 73312.00 |
| | | ii) 560 Dia. | 20.00 | 4797.50 | No | 95950.00 |
| | | iii) 90x45 cm | 10.00 | 3665.60 | No | 36656.00 |

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| | | iv) 90x60 cm | 40.00 | 3973.20 | No | 158928.00 |
| | | v) 60 x 60 cm | 0.00 | 3628.80 | No | 0.00 |
| | | vi) 60 x 45 cm | 10.00 | 3144.80 | No | 31448.00 |
| 33 | MJP-34 | Cleaning or Desilting B.B.M. of various dia chamber on sewer including removing matarial upto a distance of 50.0M for all lifts as directed by Engineer-in-charge.etc. complete | 0.64 | 234.20 | Cum | 149.30 |
| 34 | MJP-35 | Cleaning the R.C.C. choked up pipes of diameter from 200 mm to 450 mm including removing matarial upto adistance of 50.0M for all lifts as directed by Engineer-in-charge. | 1.00 | 54.50 | Rmt | 54.50 |
| 35 | MJP-36 | Cleaning the R.C.C. choked up pipes by using **bucket machine and rodding machine** including removing matarial upto adistance of 50.0M for all lifts in different places during cleaning operation all labour and safety precaution should be taken by maintainance contractor himself (i.e. suitable gas masks, gas detection driving prompt etc.) during cleaning operation in any damages done by the contractor shall be repaired by the contractor with his own cost. To clean the existing drain line bucket and rodding machine will not be given by department & if machinary provided by department charges will recovered from bill. Diversion of sewerage water any necessary excavation if necessary should be done by the contractor at his cost during the work necessary action for cleaning line traffic permission and proper precautions should be taken by contractorafter completion of a cleaning operation by contractor has to test the line in precence of enginreer- in- charge. (As per Rate Analysis) | | | | |
| | a) | For 200mm to 600mm dia RCC drain line | 775.00 | 158.70 | Rmt | 122992.50 |
| | b) | For above 600mm to 1000mm dia RCC drain line | 0.00 | 238.10 | Rmt | 0.00 |
| | c) | For above 1000mm dia RCC drain line | 0.00 | 317.40 | Rmt | 0.00 |
| | **B** | **Strom Water / Service line** | | **Total Rs** | | **8,049,933.83** |
| | | | | | | |
| **C** | **Road Work** | **(Construction of Bituminious or Concrete Road Items)** | | | | |
| 36 | 2.11 | Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. | 5343.75 | 125.00 | Cum | 667968.75 |
| 37 | 2.13 | Excavation for roadway in hard murum and boulder including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m.and spreading for embankment or stacking as directed | 25.00 | 145.90 | Cum | 3647.50 |
| 38 | 2.14 | Excavation for roadway in soft rock, including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. And spreading or stacking as directed. | 15.00 | 185.80 | Cum | 2787.00 |
| 39 | 2.16 | Excavation for roadway in hard rock by wedging and chiselling or line drilling including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. | 10.00 | 1490.00 | Cum | 14900.00 |
| 40 | 2.18 | Excavation for catch / side water gutter in all sorts of soils to the specified section including stacking the excavated stuff in a regular bund and disposing of unsuitable or excess stuff as directed all sorts of soils. | 100.00 | 125.00 | Cum | 12500.00 |
| 41 | C-483 | Conveying materials obtained from road cutting upto lead of 5 .00 km including all lifts, laying in layers, breaking clods, dressing to the required lines, curves, grades and section from the site of excava-tion to the site of deposition as directed . | 5493.75 | 264.80 | Cum | 1454745.00 |
| 42 | 2.27 | Providing Earth work in embankment with approved material ob-tained from Govt. land with 50 m lead, by using laying in lay-ers, breaking clods, dressing to required lines curves grade, and section watering and compaction complete. (a) 95% proctor densi-ty. Spec.No. : M.O.S.T. 1995 Cl.No.305 | 5.00 | 236.30 | Cum | 1181.50 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 43 | 2.28 | Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete ( Material obtained from Other sources) | 5.00 | 1263.40 | Cum | 6317.00 |
| 44 | 2.29 | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | 1802.77 | 925.10 | Cum | 1667745.52 |
| 45 | 2.3 | Spreading hard murum for side width etc. complete | 1802.77 | 83.00 | Cum | 149630.18 |
| 46 | 2.31 | Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete. | 8519.00 | 22.10 | Sqm | 188269.90 |
| 47 | 3.01 | Construction of granular subbase by providing close graded Material,mixing in a mechanical mixplant at OMC,carriage of mixed Material to work site, spreading in uniform layers with motor grader/Paver on prepared surface and compacting with vibratory roller to achieve the desired density,complete as per clause 401 -- Plant Mix Method and Grading - I Material | 920.00 | 2740.50 | Cum | 2521260.00 |
| 48 | 3.18 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading I (Using Screening Type A (13.2) mm Aggregate) | 100.00 | 3059.60 | Cum | 305960.00 |
| 49 | 3.2 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading II (Using Screening Type B (11.2 mm) Aggregate) | 25.00 | 3005.60 | Cum | 75140.00 |
| 50 | 3.23 | Wet Mix Macadam -- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver. | 845.00 | 2765.50 | Cum | 2336847.50 |
| 51 | 14.58 | Providing and laying in PCCM 15 grade leveling course below approach slab complete with fully automatic micro process or PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (panmixer) as per drawing sand Technical specifications etc.complete with fine agreegates of required specifications ( VSI sand finely washed | 945.00 | 6924.80 | Cum | 6543936.00 |
| 52 | 5.13 | Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS: 383. the size of coarse aggregate not exceeding 25 mm. . cement content not to be less than 150 kg/ cum. optimum moisture content to be determined during trial length construction. concrete strength not to be less than 10 Mpa at 7 days. mixed in a batching plant/ Weigh batch mixer. transported to site with all leads and lifts. laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge . compacting with vibratory roller. finishing. curing and including preparation of sub-grade surface if required etc. complete. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 1.00 | 4492.00 | Cum | 4492.00 |

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 53 | 25.50 | Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite/quartzite/ gneissmetal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/ pumping, compaction and roughening the surface if special finish is to be provided and curing etc.complete. (Excluding reinforcement and structural steel). with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Panmixer) etc. complete.Withfine aggregate (Crushed sand VSI Grade) | 5.00 | 13505.60 | Cum | 67528.00 |
| 54 | 26.33 | Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. | 0.50 | 94188.10 | MT | 47094.05 |
| 55 | 5.19 | Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet confirming to IS 3395 : 1997 below concrete pavement including all materials and labour complete. | 0.00 | 31.50 | Sqm | 0.00 |
| 56 | 5.06 | Providing and laying in-situ M40 Grade un-reinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 1.00 | 8974.80 | Cum | 8974.80 |
| 57 | 5.14 | Providing and fixing in position TMT FE 500, 32 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete | 0.00 | 564.90 | No | 0.00 |
| 58 | 5.15 | Providing and fixing in position TMT FE 500, 25 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete | 0.00 | 413.70 | No | 0.00 |
| 59 | 5.17 | Cutting transverse contraction joints 3 to 4 mm wide and depth 60mm. .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etc. complete including subsequent widening of the groove 8 to 10 mm. wide at top having depth of 15 mm. as directed by Engineer incharge. | 0.00 | 79.80 | Rmt | 0.00 |

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 60 | 5.18 | Providing to contraction joints polysuphide sealent (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealent reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (appraox. 25% larger than the initial 3 mOne Metric Tonneo 4 mm. joint) overlaid with bond breaking tape as per detailed drawing. Item includes cleaning the joints with water jet / air compressor and allowing joint to become thoroughly dry before sealent is applied and applying primer. (A) Contraction and longitudinal joints (15 mm. deep x 8 mm.wide) | 0.00 | 326.60 | Rmt | 0.00 |
| 61 | 14.33 | Providing expansion joints with 25mm thick bituminous pad as per detailed drawings etc. complete. | 0.00 | 1140.30 | Sqm | 0.00 |
| 62 | 7.03 | Providing and casting insitu or precast tapering R.C.C.M-20 Mountable type Kerb without gutter ( asper IRC861983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2 including the required excavation in any strataand removing the excavated stuff anywhere incity and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant | 0.00 | 516.60 | Rmt | 0.00 |
| 63 | R.A. | P/L and fixing precast Cement concrete M-20 grade kerb stone of following sizes grade concrete including manufacturing, supplying to the site, fixing in position, with prepared bed of,packing by surrounding pcc upto 100 mm ht with M-10 PCC 80mm thick, filling joints with cement, coloring with one coat primer & flat oil paint in two coats as per directed by engineer in charge etc complete (As per R.A.) | | | | |
| | a | Size- Length 300 mm, Height 750mm, Top Width 125 mm, Bottom width 200 mm, Chamfer Height 300 mm | 100.00 | 1618.50 | Rmt | 161850.00 |
| | b | Size- Length 400 mm, Height 450mm, Width 125mm, Chamfer Height 125 mm | 3600.00 | 788.00 | Rmt | 2836800.00 |
| 64 | 33.51 | Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 60 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete | 12600.00 | 978.60 | Sqm | 12330360.00 |
| 65 | 33.52 | Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 80 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete | 100.00 | 1238.00 | Sqm | 123800.00 |
| 66 | 3.35 | Providing and laying 75mm thick compacted Modified Pentration Macadam with VG-30 bitumen over existing WBM surface including picking the road metalled surface, thoroughly cleaning the WBM surface by using mechanical broom or approved equipment, spreading 40mm size metal ( 30% Crushed metal +70% Hand broken ) by brining blasted rubble on site of work) at the rate of 0.09Cum/Sqm Compacting metal with roller and bitumen is them spread at rate of 2kg/ sqm. Spreading 12mm metal at rate of 0.018 Cum./Sqm The surface shall be lightly rolled so that metal pieces ge embeded in the bitumen layer and rolling shall continre until entire surface is throughly compacted etc. complete. ( With Vibratory Roller including diversion road ) Spec. No. As directed bty Engineer- in - charge. | 10.00 | 362.60 | Sqm | 3626.00 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 67 | 3.36 | Providing and laying 75mm thick compacted Modified Pentration Macadam with VG-30 bitumen over existing BT surface including picking the road metalled surface, thoroughly cleaning the BT surface by using mechanical broom or approved equipment, spreading 40mm size metal ( 30% Crushed metal +70% Hand broken ) by brining blasted rubble on site of work) at the rate of 0.09Cum/Sqm Compacting metal with roller and bitumen is them spread at rate of 2kg/ sqm. Spreading 12mm metal at rate of 0.018 Cum,/Sqm The surface shall be lightly rolled so that metal pieces ge embeded in the bitumen layer and rolling shall continre until entire surface is throughly compacted etc. complete. ( With Vibratory Roller including diversion road ) Spec. No. As directed bty Engineer- in - charge. | 100.00 | 361.20 | Sqm | 36120.00 |
| 68 | | Providing and applying tack coat on the prepared surface heating by fames in Boiler and spraying bitumen set footed in bitumen boller on B.T. surface 5 kg/10 sqm. (VG 30 bulk bitumen rates are considered to arrive at rates) Spec.Rd.47.3.3 Page No. 224 | 121400.00 | 33.60 | Sqm | 4079040.00 |
| 69 | 3.29 | Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 10.0 kg/sqm using mechanical means. | 3380.00 | 60.80 | Sqm | 205504.00 |
| 70 | 3.4 | BITUMINOUS MACADAM 3.00 % : Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 3.00 % using specified grade of Bitumen. -- USING batch Mix type hot mix plant with SCADA, Sensor Paver, vibratory roller. (VG30 bulk bitumen rates are considered to arrive at rates) | 1.00 | 8496.20 | Cum | 8496.20 |
| 71 | 3.41 | BITUMINOUS MACADAM 3.50 %: Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 3.50 % VG-30 Bitumen. - USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V- Sat attachment. | 635.70 | 9095.60 | Cum | 5782072.92 |
| 72 | 3.44 | DENSE BITUMINOUS MACADAM 4.50%: Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 4.50 % VG-30 Bitumen. - USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V- Sat attachment. | 3196.80 | 11105.50 | Cum | 35502062.40 |
| 73 | 3.49 | BITUMINOUS CONCRETE 6.25 %:- Providing and laying bituminous concrete using crushed aggregates of grading 2, premixed with bituminous binder @ 6.25 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for30/40 mm compacted thickness with VG-30 Bitumen.Excluding prime / tack coat. For Bitumen VG-30 bulk -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V-Sat attachment with Stone Dust filler Spec No.: MOST 1995 Cl.No.511 | 2131.20 | 13468.80 | Cum | 28704706.56 |

CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 74 | 50.47 (SSR) | Supplying and adding Organosilane Nanotechnology Additive (such as Zycotherm or approved equivalent) to the bitumen binder at the Hot Mix Asphalt (HMA) plant at a dosage of 0.1% by weight of bitumen to achieve enhanced chemical bonding, complete aggregate coating, improved moisture resistance, and consistent compaction in various bituminous mixes such as Bituminous Macadam (BM), Dense Bituminous Macadam (DBM), Bituminous Concrete (BC) etc., including supply, transportation, storage, uniform blending with bitumen, testing, and all incidental operations complete in all respects as per manufacturer's specifications, relevant IRC and MORTH guidelines, and as directed and with prior approval by the Engineer-in-Charge. | 672.39 | 1470.00 | kg | 988414.62 |
| | C | **Road Work** | | **Total Rs** | | **106,843,777.41** |
| D | **Miscellaneous Items for Reparing Work** | | | | | |
| 75 | | Providing and fixing on walls/ ceiling/ floor mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete. | | | | |
| | 42.55 | 15 mm | 25.00 | 279.30 | Rmt | 6982.50 |
| | 42.57 | 25 mm | 25.00 | 393.80 | Rmt | 9845.00 |
| | 42.58 | 32 mm | 10.00 | 452.60 | Rmt | 4526.00 |
| | 42.59 | 40 mm | 10.00 | 566.00 | Rmt | 5660.00 |
| | 42.60 | 50mm | 10.00 | 778.00 | Rmt | 7780.00 |
| 76 | 42.72 | Providing and making ISI Mark ferrule connection of 15 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete. | 20.00 | 1310.40 | No | 26208.00 |
| 77 | 42.77 | Providing and making ISI Mark ferrule connection of 50mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete | 20.00 | 9391.20 | No | 187824.00 |
| 78 | | Providing , laying and fixing ,jointing Eco- drain mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. | | | | |
| | 43.30 | 110mm | 25.00 | 343.40 | Rmt | 8585.00 |
| | 43.31 | 160mm | 25.00 | 533.40 | Rmt | 13335.00 |
| 79 | 27.12 | Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. Complete | 10.00 | 7917.10 | Cum | 79171.00 |
| 80 | 28.09 | Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external walls of plinth including bailing out water manually , striking joints inside and raking out joints from outside and watering etc.complete | 5.00 | 13152.80 | Cum | 65764.00 |
| 81 | 28.01 | Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete. | 5.00 | 6140.90 | Cum | 30704.50 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 82 | 26.23 | Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/ pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) | 5.00 | 8172.60 | Cum | 40863.00 |
| 83 | 32.07 | Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:4 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete. | 20.00 | 438.30 | Sqm | 8766.00 |
| 84 | 32.11 | Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete. | 10.00 | 722.00 | Sqm | 7220.00 |
| 85 | 35.21 | Providing and applying priming coat on concrete/ masonary/ Asbestos Cement plastered surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required etc. complete. | 1620.00 | 37.80 | Sqm | 61236.00 |
| 86 | 35.26 | Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary and watering the surface for two days etc complete. NOTE: For Item One Number 15 to 18 prior approval of Superintending Engineer will be necessary | 10.00 | 309.80 | Sqm | 3098.00 |
| 87 | 35.09 | Providing and applying two coats of flat oil paint of approved colour to the old structural steel work and iron work previously painted in building including scaffolding, if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. | 10.00 | 89.30 | Sqm | 893.00 |
| 88 | 35.11 | Providing and applying two coats (exterior quality) of flat oil paint of approved colour and shade to the plastered surface in buildings and workshops including scaffolding if necessary, cleaning the surface and preparing surface etc. complete. (excluding primer coat) | 2515.20 | 92.40 | Sqm | 232404.48 |
| 89 | 33.24 | Providing and laying matt finish ceramic tiles of having size 30 cm x 30 cm confirming to .S.15622/2006 (group D II-A) and 7 to 8 mm thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete. | 10.00 | 1251.90 | Sqm | 12519.00 |
| 90 | 40.05 | Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe ( Rezan/ concentiDeleted ire 0.75 mm dia ) with hot dip and G.I. coated hooks as per drawing supported on M.S. angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete. | 25.00 | 962.90 | Rmt | 24072.50 |
| 91 | 7.09 | Providing and fixing Guard Railing of 1000mm height as per Type D Drg. No. 15 dt. 20-4-79, and fixed in 40 x 40 x 6mm iron, angle embedded in 1:2:4 cement concrete bedding patti as per detailed drawing, with 3 coats of approved of yellow and black paint. | 45.00 | 2936.80 | Rmt | 132156.00 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 92 | 14.49 | Providing railing of cast in situ R.C.C posts with (M-20) cement concrete trap / granite / quartzite / gneiss metal size 150 mm x 150 mm x 1.240 mm and horizantal 3 nos. at distance 370 mm C/C and bottom bar 150 mm above kerb as per the detailed drawings (including cost of reinforcement) scaffolding,steel centering, plywood/steel formwork etc. complete. The C.M. 1:3 plaster is considered for renderinguneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering/formwork will not be allowed). | 15.00 | 2623.90 | Rmt | 39358.50 |
| 93 | 11.25 | Providing and laying in situ / ready mix M20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab including compacting, finishing, curing etc. complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural/ VSI standard Artificial Sand, cement6.40 bags/cumt) | 5.00 | 8236.30 | Cum | 41181.50 |
| 94 | 23.01 | Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. | 1.00 | 106936.20 | MT | 106936.20 |
| 95 | 21.38 | Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. | 5.00 | 2049.00 | Cum | 10245.00 |
| 96 | 5.01 | Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement over a prepared subbas with 43 grade cement ,coarse and fine aggregate (natural sand/VSI grade finely washed crushed sand) conforming to IS383, using fine and coarse aggregates combined gradation asper Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/non tilting mixer and Weigh batcher as per approved mix design,admixtures, transporting to suring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. with fully automaticmicro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 5.00 | 8584.20 | Cum | 42921.00 |
| 97 | 33.68 | Providing and laying telephone black / Amba White / Cadburybrown / Ruby red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing/moulding the sharp edges wherever necessary, curing, etc. complete | 5.00 | 4616.10 | Sqm | 23080.50 |
| 98 | 17.33 | Providing and laying in situ / readymixM-25 controlled reinforcedcement concrete of trap metal for raft slab including "V"haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant /pan mixer with fine agreegates of required specifications ( VSI sand finely washed etc ) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) . | 10.00 | 7176.20 | cum | 71762.00 |
| 99 | 11.29 | Providing cast in situ / ready mix M-20 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural / VSI standard Artificial Sand | 5.00 | 10857.50 | cum | 54287.50 |

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 100 | 14.15 | Providing and laying in situ/ ready mix M-25 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work ins olid/ deckslabetc. including ramming, vibrating, curing, formwork, centering and finishing incement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine agreegates of required specifications (VSI sand finely washed etc)<br>i)Height up to 5 m, normal rate.<br>ii)Height 5 to 7.50 m, add 5percent extra over basic rate.<br>iii) Height 7.50 to 10 m, 7.50 percent extra.<br>iv)Over 10m Height, add 10 percent extra for every 2.50m rise | 5.00 | 12189.90 | cum | 60949.50 |
| 101 | 38.24 | Removing and resetting Mangalore tiles from roof including refixing loose battens etc. complete | 12600.00 | 100.80 | sqm | 1270080.00 |
| | **D** | **Miscellaneous Items for Reparing Work** | | **Total Rs** | | **2690414.68** |
| | | | | | | |
| **E** | **Road Furniture** | | | | | |
| 102 | 6.12 | Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete. | 2404.10 | 699.30 | Sqm | 1681187.13 |
| 103 | 6.09 | Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer. | 4482.00 | 384.30 | No | 1722432.60 |

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 104 | 6.17 (From SSR 2020-2021) | Supplying of Solar Raised Pavement Markers made of polycarbonate molded body with circular shape, solar powered, LED self illumination in active mode, 360 degree illumination and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face in passive mode. The marker shall support a load of 20000 kg tested in accordance to ASTM D 4280. The marker should be resistant to dust and water ingress according to IP 65 standards and should withstand temperatures in the range of 0 C to 70 C. Color of lighting could be provided in red or yellow (amber) as per requirement and typical frequency of blinking is 1 Hz. There should be current losses of less than 20 micro-amperes at 2.4 V in sleep-charging mode to enhance the life of the marker and a full charge should provide for a minimum autonomy of 50 hours. The height, width and length of the marker shall not be less than 10 mm x 100 mm x 100 mm. Also, the surface diameter of the marker shall not be less than 100 mm respectively. The weight of the marker shall not exceed 0.5 Kilograms. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retroreflectance of the reflecting panel, to the Engineer. | 25.00 | 4189.50 | No | 104737.50 |
| 105 | 6.10 | Providing and Fixing of Median Marker that are made of tough, high impact resistant, injection-molded, thermoplastic body with an isosceles trapezoidal structure of length, width and height not less than 15cm, 10cm and 10cm respectively and thickness not less than 1.8mm, the body structure shall be rounded at its acute angle, all the corners and edges. The plastic used for molding the Median Marker shall have a minimum Notched Izod Impact strength value of 600 J/m at room temperature, when tested in accordance with ASTM D256 and shall retain at least 70% of this value when subjected to accelerated weathering for 1000hrs as per ASTM G155 or UL746C. The logo of the manufacturer shall be embossed on either side of the body in the injection molding process. The Median Marker shall have rectangular-shaped, fluorescent yellow color retro- reflective sheeting of size not less than 8.5cm*8.5cm and with fully reflective micro prismatic cube corners as its retro-reflective elements as per IRC 67 2010 and ASTM D4956 type XI specifications reflectivity values. The retro-reflective sheeting shall be one or both sides of the Median Marker and shall be edge protected with no exposed edges which will prevent edge lifting, vandalism, sheeting damage, etc. The Median Marker shall be fixed by a combination of epoxy adhesive and grouting. | 10.00 | 480.90 | No | 4809.00 |
| 106 | 6.15 | Road Delineators: Supplying and installation of delineators (Roadway Indicators, Hazard markers, Object markers) 80 to 100 cm high above ground level, painted black and white in 15 cm wide strips, fitted with 80x100mm rectangular or 75mm dia. Circular reflectorised panels at the top, buried or pressed into the ground and confirming to I.R.C. 79 and the drawings | 18.00 | 863.10 | No | 15535.80 |
| 107 | 6.16 | Providing and fixing steel pipe delineators of 10 cm. in diameter and total height of 130 cm. provided with 2 strips of white retroreflective sheeting of size 5 cm. x 32.5 cm. each fixed horizontally and 2 strips of red retroreflective sheeting each having size 5 cm. x 32.5 cm. fixed horizontally at top. with M.S. round cap having diameter 11 cm. and wire mesh at top (10 guage thick) and height of wire mesh 15 cm. M.S. hold fast 6 mm thick with 35 cm. in length. fixing the delineators in C.C. 1:4:8 concrete block of size 25 cm. x 25 cm. x 45 cm. with necessary excavation etc. complete. | 5.00 | 1056.30 | No | 5281.50 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 108 | 6.28 | Providing and fixing Mandatory/Regulatory sign boards in circular shape of____ mm dia made out of ____aluminum sheet bonded with white retro reflective sheeting of Class C ( Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67- 2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C ( Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier. | | | | |
| | b | 600 mm dia made out of 3mm aluminum composite material | 6.00 | 5665.80 | No | 33994.80 |
| | d | 750 mm dia made out of 4mm aluminum composite material | 1.00 | 7519.10 | No | 7519.10 |
| 109 | 6.30 | Providing and fixing Cautionary/Warning sign boards in Equilateral Triangle size of ___mm made out of____ mm aluminum sheet bonded with white retro reflective sheeting of Class C ( Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67- 2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. ClassC ( Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier | | | | |
| | b | 600 mm made out of 3mm aluminum composite material | 16.00 | 4524.40 | No | 72390.40 |
| | d | 750 mm made out of 4mm aluminum composite material | 2.00 | 5205.90 | No | 10411.80 |
| | f | 900 mm made out of 4mm aluminum composite material | 2.00 | 6647.60 | No | 13295.20 |

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 110 | 6.33 | Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area less than 0.9 One Square Meterr made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class __ ( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on one no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity microprismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the | | | | |
| | d | 4mm aluminum composite material Class C | 2.40 | 13891.50 | Sqm | 33339.60 |
| 111 | 6.34 | Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area greater than 0.9 square meter made out of__aluminum sheet bonded with white retro reflective sheeting of Class ____ ( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity microprismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued | | | | |
| | d | 4mm aluminum composite material Class C | 2.16 | 16722.30 | Sqm | 36120.17 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 112 | 6.35 | Providing and erecting Overhead signs made out of __aluminum sheet bonded with white retro reflective sheeting of Class ___( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012, with designed back support frame of mild steel angle with vertical and lateral clearance given in clause 801 and 802, duly painted on back side with two coats of grey stove enamel paint and installed as per clause 802.6 over a designed support system of structural steel work trestles and trusses of sections and type as per structural design requirements and approved plans including painting with one coat of epoxy primer and two coats of epoxy finish paint.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in | | | | |
| | d | 4mm aluminum composite material Class C | 1.62 | 10839.10 | Sqm | 17559.34 |
| | **E** | **Road Furniture** | | **Total Rs** | | **3758613.94** |
| | | | | | | |
| **F** | **Providing Public Utilities** | | | | | |
| 113 | 51.44 | Public Seating Chair. - 3 Seater<br>Providing and Fixing 3 seater Public seating chair made of complete metal with Legs in Crome finish and seates in silver powder coating finish. | 2.00 | 18958.80 | No | 37917.60 |
| 114 | 49.28 | Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304) | 10.00 | 21916.65 | No | 219166.50 |
| | **F** | **Providing Public Utilities** | | **Total Rs** | | **257084.10** |
| | G | **Water Supply** | | | | **1990543.32** |
| | | | | | | |
| | | **Total Rs** | | **A+B+C+D+E+G** | | **124,725,011.36** |
| | | | | | | |
| | | | Add GST | 18% | Rs | 22,450,502.04 |
| | | | | | | |
| | | **Total Rs With GST Road work** | | | | **147,175,513.40** |
| 113 | | Royalty charges for murum dubber should be paid by the contractor regularly to the government and contractor should produce delivery challon, payment receipt, pakka bill etc. complete alongwith every R.A. bill \ final bill as applicable.(It is entirely responsibility of contractor to pay Royalty charges to the Government) | | | | |
| | A | for murum / Rubble / | 4290.90 | 216.18 | Cum | 927606.38 |
| | B | for sand | 0.83 | 237.37 | Cum | 197.02 |
| | | | | **Total Rs** | | **927803.40** |
| | | | | **Total Rs** | | |
| | | | | | | |
| | | **Total Rs. With GST and Royalty** | | | **Rs** | **148,103,316.80** |
| | | | | **Say Rs** | | **148103317.00** |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

# NASHIK MUNICIPAL CORPORATION
# MESURMENT SHEET

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| A | **Dismantling** | | | | | | | |
| 1 | Detailed survey of road in plain country including chaining and levelling with cross sections at every two chains inclusive of closing of survey each day. | | | | | | | |
| | | | 1 | 3293.000 | | | 3.293 | Km |
| | | | | | **Total Qty** | | **3.293** | **Km** |
| 2 | Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately. By Mechanical Means etc. complete. | | | | | | | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | 1 | 1 | 290.00 | 7.00 | 0.150 | 304.50 | |
| | for Storm water 450 mm | | 1 | 1220.00 | 1.00 | 0.150 | 183.00 | |
| | For Footpath Kerb stone | 1 | 2 | 0.00 | 0.35 | 0.200 | 0.00 | |
| | for service line | 2 | 3 | 30.00 | 1.00 | 0.200 | 36.00 | |
| | For Cross Pipes 18 m Dp Road | 1 | 0 | 0.00 | 1.00 | 0.200 | 0.00 | |
| | For Cross Pipes 30 m DP Road | 1 | 0 | 30.00 | 1.00 | 0.200 | 0.00 | |
| | Catch pit Pipe 300mm | 1 | 25 | 30.00 | 1.00 | 0.200 | 150.00 | |
| | | | | | | | **673.50** | **Cum** |
| 3 | Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately etc. complete. | | | | | | | |
| | for exeeceting footpath Desmantaling Provisinal Qty | | | | | | | |
| | For Provisional Qty | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| 4 | Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 metres and stacking the serviceable and unserviceable material separately | | | | | | | |
| | For Provisional Qty | | | | | | 1.00 | |
| | | | | | **Total Qty** | | **1.00** | **No** |
| 5 | Dismantling brick masonry in lime or cement mortar and stacking the materils as directed with all leads, lifts etc. | | | | | | | |
| | For Provisional Qty | | | | | | 10.00 | |
| | | | | | **Total Qty** | | **10.00** | **Cum** |
| 6 | Dismantling stone masonry in lime or cement mortar including stacking the materils as directed with all leads, lifts etc. | | | | | | | |
| | For Provisional Qty | | | | | | 15.00 | |
| | | | | | **Total Qty** | | **15.00** | **Cum** |
| 7 | Removing lime or lean cement concrete including stacking the spoils as directed with all leads, lifts etc, complete | | | | | | | |
| | | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **Cum** |
| 8 | Removing rich mix cement concrete including stacking the spoils as directed with all leads, lifts etc, complete | | | | | | | |
| | 0.00 | | | | | | 10.00 | |
| | | | | | **Total Qty** | | **10.00** | **Cum** |

# NASHIK MUNICIPAL CORPORATION
# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 9 | Removing cement tiles, or marble or polished shahabad floor or dado without bed concrete including stacking the materials as directed with all leads, lifts etc. complete | | | | | | | |
| | 0.00 | | | | | | 95.52 | |
| | | | | | **Total Qty** | | **95.52** | **Sqm** |
| | | | | | | | | |
| 10 | Removing wire fencing with iron/ C.C. fencing post and stacking the materials as directed with all leads, lifts etc. complete. | | | | | | | |
| | for Provisional Qty . | | | | | | 75.54 | |
| | | | | | **Total Qty** | | **75.54** | **Rmt** |
| | | | | | | | | |
| 11 | Milling of existing bituminous surface to specified depth of bituminous layer including disposal of removed material with all lift and lead upto 1000 m etc complete. Using machine like Writgen (W100) or equivalent | | | | | | | |
| | Jandardhan Swami Math to Laxminayarayan Temple Chowk | | | | | | 13500.00 | |
| | Laxminayarayan Temple Chowk to Laxminarayan Bridge | | | | | | 3195.00 | |
| | | | | | **Total Qty** | | **16695.00** | **Sqm** |
| **B** | **Strom Water / Service line / Utility Duct** | | | | | | | |
| 12 | Carrying out detailed/final location survey for drainage schemes with chain and compass, levels, theodolite and other essential instruments including staking of final center line, locating curves, establishing B.M. and taking L section, cross section, fly leveling etc. complete in plain area. Spec. No. : As directed by Engineer in charge | | | | | | | |
| | for strom water line | 1 | 1 | 1220.00 | | | 1220.00 | |
| | | | | | | | **1220.00** | **Rmt** |
| | | | | | | | | |
| 13 | Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, manual dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-1,4, ) | | | | | | | |
| | Lift upto 0.0 to 1.50 m depth | | | | **avg w** | | | |
| | | | | | | | 0.00 | |
| | for chowks | 0 | 0 | 0.00 | 1.00 | 0.300 | 0.00 | |
| | for Catpits | 2 | 20 | 15.00 | 1.00 | 0.300 | 180.00 | |
| | | 0 | 0 | 0.00 | 1.00 | 0.900 | 0.00 | |
| | For Cross Pipes | 1 | 0 | 30.00 | 1.00 | 0.900 | 0.00 | |
| | for strom water line 450 mm dia | | | | | | | |
| | for 450 mm dia | 1 | 1 | 1220.00 | 1.00 | 0.900 | 1098.00 | |
| | for 600 mm dia | 1 | 1 | 20.00 | 1.30 | 0.900 | 23.40 | |
| | for 900 mm dia | 1 | 0 | 0.00 | 1.60 | 0.300 | 0.00 | |
| | for 1000 mm dia | 1 | 0 | 0.00 | 1.70 | 0.300 | 0.00 | |
| | for 1200 mm dia | 1 | 0 | 0.00 | 1.75 | 0.300 | 0.00 | |
| | | | | | | | **1301.40** | **Cum** |
| | Lift upto 1.50 to 3.0 m depth | | | | | | | |
| | | 1 | 0 | 0.00 | 1.45 | 0.300 | 0.00 | |
| | | | | | | | **0.00** | **Cum** |
| | | | | | | | | |
| 14 | Excavation for foundation / pipe trenches in hard murum and boulders, W.B.M. road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatreing, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-3,4, ) | | | | | | | |
| | Lift upto 0.0 to 1.50 m depth | | | | | | | |
| | for service line | 0 | 0 | 0.00 | 1.00 | 0.300 | 0.00 | |
| | for Catpits | 2 | 12 | 15.00 | 1.00 | 0.300 | 108.00 | |
| | | | | | | | | |
| | for strom water line 450 mm dia | 1 | 1 | 1220.00 | 1.00 | 0.300 | 366.00 | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | for strom water line 600 mm dia | 1 | 1 | 20.00 | 1.15 | 0.300 | 6.90 | |
| | | 0 | 0 | 0.00 | 1.15 | 0.300 | 0.00 | |
| | For Cross Pipes 30 m DP Road | 1 | 0 | 30.00 | 1.15 | 0.300 | 0.00 | |
| | | | | | | | **480.90** | **Cum** |
| | Lift upto 1.50 to 3.0 m depth | | | | | | | |
| | | 1 | 0 | 0.00 | 1.70 | 0.350 | 0.00 | |
| | | | | | | | **0.00** | **Cum** |
| | | | | | | | | |
| 15 | Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material upto a distance of 50 M beyond area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (MJP,DSR 2023-24, Section-E-5,9, ) | | | | | | | |
| | Lift upto 0.0 to 1.50 m depth | | | | | | | |
| | for service line | 0 | 0 | 0.00 | 1.00 | 0.350 | 0.00 | |
| | for Catpits | 2 | 12 | 15.00 | 1.00 | 0.350 | 126.00 | |
| | For strom water line 450 mm dia | 1 | 1 | 1220.00 | 1.00 | 0.350 | 427.00 | |
| | For strom water line 600 mm dia | 1 | 1 | 20.00 | 1.15 | 0.350 | 8.05 | |
| | | 0 | 0 | 0.00 | 1.15 | 0.300 | 0.00 | |
| | For Cross Pipes 30 m DP Road | 1 | 0 | 30.00 | 1.15 | 0.300 | 0.00 | |
| | | | | | | | **561.05** | **Cum** |
| | Lift upto 1.50 to 3.0 m depth | | | | | | | |
| | | | | | | | | |
| | | 1 | 0 | 0.00 | 1.70 | 0.300 | 0.00 | |
| | | | | | | | **0.00** | **Cum** |
| | Lift up to 3.0 to 4.5 m depth | | | | | | | |
| | For provisinal Qty | 1 | 0 | 0.00 | 2.30 | 0.100 | 0.00 | |
| | | | | | | | **0.00** | **Cum** |
| | | | | | | | | |
| 16 | Excavation for foundation / pipe trenches in hard rock and concrete road by chiselling, wedging, line drilling, by mechanical means or by all means other than blasting including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means. (MJP,DSR 2023-24, Section-E-7,9 ) | | | | | | | |
| | Lift upto 0.0 to 1.50 m depth | | | | | | | |
| | for service line | 0 | 0 | 0.00 | 1.00 | 0.100 | 0.00 | |
| | for Catpits | 2 | 12 | 3.75 | 1.00 | 0.30 | 27.00 | |
| | Crossings | 1 | 1 | 0.00 | 1.15 | 0.300 | 0.00 | |
| | | | | | | | **27.00** | **Cum** |
| | Lift upto 1.50 to 3.0 m depth | | | | | | | |
| | | | | | | | | |
| | For strom water line 450 mm dia | 1 | 1 | 305.00 | 1.00 | 0.300 | 91.50 | |
| | For strom water line 600 mm dia | 1 | 1 | 5.00 | 1.15 | 0.300 | 1.73 | |
| | | | | | | | **93.23** | **Cum** |
| | Lift up to 3.0 to 4.5 m depth | | | | | | | |
| | | 1 | 0 | 0.00 | 2.30 | 0.100 | 0.00 | |
| | | | | | | | **0.00** | **Cum** |
| | | | | | | | | |
| 17 | Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15cm to 20cm layers including watering and compaction complete.(MJP,DSR 2023-24, Section-E-16 ) | | | | | | | |
| | Qty As Per Item No 12+13+14+15 | | | | | | 2463.58 | |
| | | | | | | | **2463.58** | **Cum** |
| | | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 18 | Providing, Lowering & Laying ISI standard R.C.C. pipes in standard lengths of following class and diameter suitable for either collar/ spigot & socket joints or rubber ring joints, including all cost of rubber ring joints, excluding GST levied by GOI & GOM in all respect including inspection charges, transport to departmental stores, unloading and stacking etc. complete as per IS-458/1988, lowering & Laying and giving satisfactory Hydraulic testing of the laid pipe line and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar,) including cost of conveyance from stores to site of work, cost of jointing material, labour, etc. complete as directed by Engineerin- charge (For all class of pipes.) as per IS- 783- 1985. as specified and directed by Engineer in charge etc. complete. (MJP, DSR 2023-24, Sec.-I(VI)RCC Pipes,1d,e,f,2)Page No. 94,95,96 | | | | | | | |
| | i) for 150 mm dia | | | | | | | |
| | | 1 | 0 | 0.00 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | ii)for 200 mm dia | | | | | | | |
| | | 1 | 1 | 0.00 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | iii) for 250 mm dia | | | | | | | |
| | | 1 | 0 | 0.00 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | iv)for 300 mm dia | | | | | | | |
| | service line | 0 | 0 | 0.00 | | | 0.00 | |
| | for drainage provisional Qty | 1 | 2 | 35.00 | | | 70.00 | |
| | catch pit | 2 | 12 | 15.00 | | | 360.00 | |
| | | | | | | | **430.00** | **Rmt** |
| | vii) for 450 mm dia | | | | | | | |
| | For storm line | 1 | 1 | 1220.00 | | | 1220.00 | |
| | For Crossing Pipe | 0 | 0 | 0.00 | | | 0.00 | |
| | For Crossing Pipe | 1 | 0 | 30.00 | | | 0.00 | |
| | for drainage provisional Qty | 1 | 1 | 20.00 | | | 20.00 | |
| | catch pit | 1 | 1 | 30.00 | | | 30.00 | |
| | | | | | | | **1270.00** | **Rmt** |
| | ix) for 600 mm dia | | | | | | | |
| | For storm line | 1 | 1 | 30.00 | | | 30.00 | |
| | | | | | | | **30.00** | **Rmt** |
| | xii) for 900 mm dia | | | | | | | |
| | | 1 | 1 | 0 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | xiii) for 1000 mm dia | | | | | | | |
| | | 1 | 1 | 0 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | xiv)for 1200 mm dia | | | | | | | |
| | | 1 | 1 | 0 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| 19 | Providing and constructing on sewer,Fly Ash Brick masonry circular manhole concentric cone 0.9 M dia. at bottom and 0.5 M dia. at top and upto a depth of 1.00 M, with 15cm thick CC 1:2:4 bed concrete. Fly Ash Brick masonry in Conical shape for 1.0 M with 0.23m. thk. BM in CM 1:6 proportion with 12 mm thick inside & 20 mm thick on outer- side plaster with fine cement smooth finish in CM 1:4, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered), 15cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.As per Rate Analysis.( For both side plaster Use natural sand & For other work VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 25 | | | | 25.00 | |
| | | | | | | | **25.00** | **No** |
| | | | | | | | | |
| 20 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.2 M dia. at bottom and 0.5 M dia. at top and upto a depth of 2.00 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.00 M with 0.23 M thick in CM 1:4 proportion excluding excavation with 12 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered),,15cm thk C.C.1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in- charge.(MJP, SSR 2021-22, SEC-I(XX)-6, ) ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 49 | | | | 49.00 | |
| | | | | | | | **49.00** | **No** |
| | | | | | | | | |
| 21 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 5.0 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.0M with 0.23m thk & 3.0 M depth of Vertical Cylinder with 0.35 M thick Fly Ash Brick masonry in CM 1:4 proportion with 20 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:2, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered),,15cm thk 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.(MJP, SSR 2021-22, SEC-I(XX)-7, )( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 2 | | | | 2.00 | |
| | | | | | | | **2.00** | **No** |
| | | | | | | | | |
| 22 | Providing and constructing on sewer, Fly Ash Brick masonry circular manhole with concentric cone 1.80 M dia. at bottom and 0.5 M dia. at top and upto a depth of 9.0 M with 25 cm thick CC 1:2:4 bed concrete,& Fly Ash Brick masonry with 23 cm brick work in conical shape upto depth of 2.50 M from top and balance in cylindrical shape 35 cm thick brick work for depth of 2.35 M depth upto 5.0 M, with M:20 Concrete for RCC Beam size of 350x150mm thk.with reinfocement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 350mm thk. brick work, and 45 cm thick brick work 3.85m.for remaining depth upto 9.00 M with M:20 Concrete for RCC Beam size of 450x150mm thk.with reinfocement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 450mm thk. brick work, in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3 proportion excluding excavation, including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical. (Staggered),, 15cm thk 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.As per Rate Analysis.( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 0 | 0 | | | | 0.00 | |
| | | | | | | | **0.00** | **No** |
| | | | | | | | | |
| 23 | Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 450 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 450 mm etc. complete as directed by Engineer-in-charge. (MJP, SSR 2023-24,Sec-I(XX)-3-A ) (Use VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 5 | | | | 5.00 | |
| | | | | | | | **5.00** | No |
| | | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 24 | Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 900 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 900 mm etc. complete as directed by Engineer-in-charge. As per Rate Analysis. (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | For service Lin | 4 | 0 | | | | 0.00 | |
| | Catch pit | 1 | 12 | | | | 12.00 | |
| | For new | 1 | 15 | | | | 15.00 | |
| | | | | | | | **27.00** | **No** |
| | | | | | | | | |
| 25 | Constructing additional depth/ Rebate for Manhole of 900mm Dia. & above/below 1000 mm. depth to cover variations with 230mm.thick Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered) As per Rate Analysis. (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 25.00 | 0.25 | | | 6.25 | |
| | | 2 | 16.00 | 0.30 | | | 9.60 | |
| | | | | | | | **15.85** | **Rmt** |
| | | | | | | | | |
| 26 | Constructing additional depth or Manhole of 1200mm Dia. & above / Rebate 2000 mm. depth with 230mm.thick Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered), (MJP, SSR 2023-24, Sec-I (XX)-6-a,) (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 2.00 | 0.25 | | | 0.50 | |
| | | | | | | | **0.50** | **Rmt** |
| | | | | | | | | |
| 27 | Constructing additional / Rebate depth for Manhole of 1500mm Dia. & below 5000 mm. depth with 350mm.thick Fly Ash Brick masonry work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered), (MJP, SSR 2023-24, Sec- I(XX)-7-a,) (Use VSI (Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 10.00 | 0.25 | | | 2.50 | |
| | | | | | | | **2.50** | **Rmt** |
| 28 | Constructing additional / Rebate depth for Manhole of 1800mm Dia. & below 9000 mm. depth with 450mm.thick Fly Ash Brick masonry work up to 2.50m in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, providing C.I. dapuri type steps at every 40cm c/c horizontal & vertical (Staggered),As per Rate Analysis. ( For both side plaster Use natural sand & For other work VSI sand finely washed etc.) | | | | | | | |
| | | 1 | 10.00 | 0.25 | | | 2.50 | |
| | | | | | | | **2.50** | **Rmt** |
| | | | | | | | | |
| 29 | Constructing additional depth or Manhole of 450x600x900 above 900 mm. depth with 230mm. Fly Ash Brick masonry work.in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3. (MJP, SSR 2023-24, Sec-I(XX)-3-A-a,) ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 20.00 | 0.25 | | | 5.00 | |
| | | | | | | | **5.00** | **Rmt** |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 30 | Constructing additional depth or Manhole of 900x600x900 above 900 mm. depth with 230mm. Fly Ash Brick masonry work in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, As per Rate Analysis. ( Use VSI(Vertical Shaft Impact) sand finely washed etc.) | | | | | | | |
| | | 1 | 30.00 | 0.25 | | | 7.50 | |
| | | 1 | 10.00 | 0.30 | | | 3.00 | |
| | | | | | | | **10.50** | **Rmt** |
| | | | | | | | | |
| 31 | Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete. | | | | | | | |
| | Qty.As Per excavation item | | | | | | 2463.58 | |
| | | | | | | | **2463.58** | **Cum** |
| | | | | | | | | |
| 32 | Providing and fixing in position steel fiber reinforced concrete (S.F.R.C.) frame and covers of approved make including loading, unloading, transportation, all taxes, etc. complete as directed by Engineer-in-charge (20 tones capacity) | | | | | | | |
| | (MJP, SSR 2023-24, Sec-I(XX)-17,) | | | | | | | |
| | i) 540 Dia. | 1 | 20 | | | | 20.00 | No |
| | ii) 560 Dia. | 2 | 10 | | | | 20.00 | No |
| | iii) 90x45 cm | 1 | 10 | | | | 10.00 | No |
| | iv) 90x60 cm | 2 | 20 | | | | 40.00 | No |
| | v) 60 x 60 cm | 0 | 0 | | | | 0.00 | No |
| | vi) 60 x 45 cm | 1 | 10 | | | | 10.00 | No |
| | | | | | | | | |
| 33 | Cleaning or Desilting B.B.M. of various dia chamber on sewer including removing matarial upto a distance of 50.0M for all lifts as directed by Engineer-in-charge.etc. complete | | | | | | | |
| | | 1 | 5 | 0.50 | 0.30 | 0.85 | 0.64 | |
| | | | | | | | **0.64** | **Cum** |
| | | | | | | | | |
| 34 | Cleaning the R.C.C. choked up pipes of diameter from 200 mm to 450 mm including removing matarial upto adistance of 50.0M for all lifts as directed by Engineer-in-charge. | | | | | | | |
| | | 1 | 1 | 0.00 | | | 1.00 | |
| | | | | | | | **1.00** | **Rmt** |
| | | | | | | | | |
| 35 | Cleaning the R.C.C. choked up pipes by using bucket machine and rodding machine including removing matarial upto adistance of 50.0M for all lifts in different places during cleaning operation all labour and safety precaution should be taken by maintainance contractor himself (i.e. suitable gas masks, gas detection driving prompt etc.) during cleaning operation in any damages done by the contractor shall be repaired by the contractor with his own cost. To clean the existing drain line bucket and rodding machine will not be given by department & if machinary provided by department charges will recovered from bill. Diversion of sewerage water any necessary excavation if necessary should be done by the contractor at his cost during the work necessary action for cleaning line traffic permission and proper precautions should be taken by contractorafter completion of a cleaning operation by contractor has to test the line in precence of enginreer- in- charge. (As per Rate Analysis) | | | | | | | |
| a) | For 200mm to 600mm dia RCC drain line | | | | | | | |
| | | 1 | 1 | 775.00 | | | 775.00 | |
| | | | | | | | **775.00** | **Rmt** |
| b) | For above 600mm to 1000mm dia RCC drain line | | | | | | | |
| | | 1 | 1 | 0.00 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| c) | For above 1000mm dia RCC drain line | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 1 | 0.00 | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | | | | | | | | |
| C | **Road Work (Construction of Bituminious or Concrete Road Items)** | | | | | | | |
| 36 | Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. | | | | | | | |
| | For Storm Water Lines | | 1 | 1220 | 1.0 | 0.75 | 915.00 | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | | 1 | 290.00 | 7.00 | 1.050 | 2131.50 | |
| | For Road Side Berms Maruti Vafers-Dream City Chowk CH1255-3293 deduction Nandini River Bridge Lenghth For Roadside Berms | | 2 | 1983.00 | 1.50 | 0.250 | 1487.25 | |
| | For Tree Cutting Portion Repairing | | 20 | 4.00 | 5.00 | 0.600 | 240.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | 0.600 | 570.00 | |
| | | | | | | | **5343.75** | **Cum** |
| | | | | | | | | |
| 37 | Excavation for roadway in hard murum and boulder including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m.and spreading for embankment or stacking as directed | | | | | | | |
| | For Provisinal Qty | | | | | | 25.00 | |
| | | | | | **Total Qty** | | **25.00** | **Cum** |
| | | | | | | | | |
| 38 | Excavation for roadway in soft rock, including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. And spreading or stacking as directed | | | | | | | |
| | For Provisinal Qty | | | | | | 15.00 | |
| | | | | | **Total Qty** | | **15.00** | **Cum** |
| | | | | | | | | |
| 39 | Excavation for roadway in hard rock by wedging and chiselling or line drilling including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. | | | | | | | |
| | For Provisinal Qty | | | | | | 10.00 | |
| | | | | | **Total Qty** | | **10.00** | **Cum** |
| | | | | | | | | |
| 40 | Excavation for catch / side water gutter in all sorts of soils to the specified section including stacking the excavated stuff in a regular bund and disposing of unsuitable or excess stuff as directed all sorts of soils. | | | | | | | |
| | for Provisinal Qty | | | | | | 100.00 | |
| | | | | | | | **100.00** | **Cum** |
| 41 | Conveying materials obtained from road cutting upto lead of 5 .00 km including all lifts, laying in layers, breaking clods, dressing to the required lines, curves, grades and section from the site of excava-tion to the site of deposition as directed . | | | | | | | |
| | Quatity from Item No.36 | | 1 | 5343.75 | | | 5343.75 | |
| | Quatity from Item No.37 | | 1 | 25.00 | | | 25.00 | |
| | Quatity from Item No.38 | | 1 | 15.00 | | | 15.00 | |
| | Quatity from Item No.39 | | 1 | 10.00 | | | 10.00 | |
| | Quatity from Item No.40 | | 1 | 100.00 | | | 100.00 | |
| | | | | | | | **5493.75** | **Cum** |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 42 | Providing Earth work in embankment with approved material ob-tained from Govt. land with 50 m lead, by using laying in lay-ers, breaking clods, dressing to required lines curves grade, and section watering and compaction complete. (a) 95% proctor densi-ty. Spec.No. : M.O.S.T. 1995 Cl.No.305 | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| 43 | Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete ( Material obtained from Other sources) | | | | | | | |
| | For longittudnal correction | | | | | | 5.00 | |
| | | | | | **Total Qty** | | **5.00** | **Cum** |
| 44 | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | | | | | | | |
| | Storm Water For Casing | | 1 | 1220 | 1.0 | 0.28 | 341.77 | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | | 1 | 290.00 | 7.00 | 0.450 | 913.50 | |
| | Maruti Vafers-Dream City Chowk CH1255-3293 deduction Nandini River Bridge Lenghth For Roadside Berms | | 0 | 0.00 | 0.00 | 0.000 | 0.00 | |
| | For Tree Cutting Portion Repairing | | 20 | 4.00 | 5.00 | 0.300 | 120.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | 0.450 | 427.50 | |
| | | | | | | | **1802.77** | **Cum** |
| 45 | Spreading hard murum for side width etc. complete | | | | | | | |
| | | | | Qty as per Item No. 42 | | | **1802.77** | **Cum** |
| 46 | Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete. | | | | | | | |
| | Storm Water For Casing | | 1 | 1220.00 | 1.0 | | 1220.00 | |
| | For Road Side Berms Maruti Vafers-Dream City Chowk CH1255-3293 deduction Nandini River Bridge Lenghth For Roadside Berms | | 2 | 1983.00 | 1.50 | | 5949.00 | |
| | For Tree Cutting Portion Repairing | | 20 | 4.00 | 5.00 | | 400.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | | 950.00 | |
| | | | | | | | **8519.00** | **Sqm** |
| 47 | Construction of granular subbase by providing close graded Material,mixing in a mechanical mixplant at OMC,carriage of mixed Material to work site, spreading in uniform layers with motor grader/Paver on prepared surface and compacting with vibratory roller to achieve the desired density,complete as per clause 401 -- Plant Mix Method and Grading - I Material | | | | | | | |
| | | | | | | avg | | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | 1 | 1 | 290.00 | 7.00 | 0.200 | 406.00 | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | for Storm Water | 1 | 1 | 1220.00 | | 0.200 | 244.00 | |
| | For Tree Cutting Portion Repairing | 1 | 20 | 4.00 | 5.00 | 0.200 | 80.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | 1 | 2 | 95.00 | 5.00 | 0.200 | 190.00 | |
| | | | | | | | **920.00** | **Cum** |
| | | | | | | | | |
| 48 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading I (Using Screening Type A (13.2) mm Aggregate) | | | | | | | |
| | | | | Grade (I) | | | | |
| | for Provisional Qty | | | | | | 100.00 | |
| | | | | | | | **100.00** | **Cum** |
| | | | | | | | | |
| 49 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading II (Using Screening Type B (11.2 mm) Aggregate) | | | | | | | |
| | for Provisional Qty | | | | | | 25.00 | |
| | | | | | | | **25.00** | **Cum** |
| 50 | Wet Mix Macadam -- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver. | | | | | | | |
| | For Tree Cutting Portion Repairing | 1 | 20 | 4.00 | 5.00 | 0.250 | 100.00 | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | 1 | 1 | 290.00 | 7.00 | 0.250 | 507.50 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | 0.250 | 237.50 | |
| | | | | | | | **845.00** | **Cum** |
| | | | | | | | | |
| 51 | Providing and laying in PCCM 15 grade leveling course below approach slab complete with fully automatic micro process or PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (panmixer) as per drawing sand Technical specifications etc.complete with fine agreegates of required specifications ( VSI sand finely washed etc ) | | | | | | | |
| | | | | 12600.00 | | 0.075 | 945.00 | |
| | | | | | | | **945.00** | **Cum** |
| | | | | | | | | |
| 52 | Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, , cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant/ Weigh batch mixer, transported to site with all leads and lifts, laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge , compacting with vibratory roller, finishing, curing and including preparation of sub-grade surface if required etc. complete. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | | | | | | | |
| | | | | | | | 1.00 | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **1.00** | **Cum** |
| | | | | | | | | |
| 53 | Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite/quartzite/ gneissmetal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/ pumping, compaction and roughening the surface if special finish is to be provided and curing etc.complete. (Excluding reinforcement and structural steel). with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Panmixer) etc. complete.Withfine aggregate (Crushed sand VSI Grade) | | | | | | | |
| | For Provisional Qty. | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| | | | | | | | | |
| 54 | Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. | | | | | | | |
| | For Provisional Qty. | 1 | 1 | 5.00 | 100 | kg per Cun | 500.00 | Kg |
| | | | | | | | **0.50** | **MT** |
| | | | | | | | | |
| 55 | Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet confirming to IS 3395 : 1997 below concrete pavement including all materials and labour complete. | | | | | | | |
| | | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **Sqm** |
| | | | | | | | | |
| 56 | Providing and laying in-situ M40 Grade un-reinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | | | | | | | |
| | Provisional quantity | | | | | | 1.00 | |
| | | | | | **Total Qty** | | **1.00** | **Cum** |
| | | | | | | | | |
| 57 | Providing and fixing in position TMT FE 500, 32 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete | | | | | | | |
| | Provisional quantity | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **No** |
| | | | | | | | | |
| 58 | Providing and fixing in position TMT FE 500, 25 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete | | | | | | | |
| | Provisional quantity | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **No** |
| | | | | | | | | |
| 59 | Cutting transverse contraction joints 3 to 4 mm wide and depth 60mm. .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etc. complete including subsequent widening of the groove 8 to 10 mm. wide at top having depth of 15 mm. as directed by Engineer incharge. | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | Provisional quantity | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **Rmt** |
| | | | | | | | | |
| 60 | Providing to contraction joints polysuphide sealent (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealent reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (appraox. 25% larger than the initial 3 mOne Metric Tonneo 4 mm. joint) overlaid with bond breaking tape as per detailed drawing. Item includes cleaning the joints with water jet / air compressor and allowing joint to become thoroughly dry before sealent is applied and applying primer. (A) Contraction and longitudinal joints (15 mm. deep x 8 mm.wide) | | | | | | | |
| | Provisional quantity | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **Rmt** |
| | | | | | | | | |
| 61 | Providing expansion joints with 25mm thick bituminous pad as per detailed drawings etc. complete. | | | | | | | |
| | Provisional quantity | | | | | | 0.00 | |
| | | | | | **Total Qty** | | **0.00** | **Sqm** |
| | | | | | | | | |
| 62 | Providing and casting insitu or precast tapering R.C.C.M-20 Mountable type Kerb without gutter ( asper IRC861983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2 including the required excavation in any strataand removing the excavated stuff anywhere incity and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant | | | | | | | |
| | | | | | | | 0.00 | |
| | | | | | | | **0.00** | **Rmt** |
| | | | | | | | | |
| 63 | P/L and fixing precast Cement concrete M-20 grade kerb stone of following sizes grade concrete including manufacturing, supplying to the site, fixing in position, with prepared bed of,packing by surrounding pcc upto 100 mm ht with M-10 PCC 80mm thick, filling joints with cement, coloring with one coat primer & flat oil paint in two coats as per directed by engineer in charge etc complete (As per R.A.) | | | | | | | |
| a | Size- Length 300 mm, Height 750mm, Top Width 125 mm, Bottom width 200 mm, Chamfer Height 300 | | | | | | | |
| | For Repairs | 1 | 2 | 50.00 | | | 100.00 | |
| | | | | | **Total Qty** | | **100.00** | **Rmt** |
| | | | | | | | | |
| b | Size- Length 400 mm, Height 450mm, Width 125mm, Chamfer Height 125 mm | | | | | | | |
| | For Footpath | 1 | 4 | 900.00 | | | 3600.00 | |
| | | | | | **Total Qty** | | **3600.00** | **Rmt** |
| | | | | | | | | |
| 64 | Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 60 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete | | | | | | | |
| | for Footpath | 1 | 1 | 12600 | | | 12600.00 | |
| | | | | | | | **12600.00** | **Sqm** |
| | | | | | | | | |
| 65 | Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 80 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete | | | | | | | |
| | For Provisional Qty. | | | | | | 100.00 | |
| | | | | | **Total Qty** | | **100.00** | **Sqm** |
| | | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 66 | Providing and laying 75mm thick compacted Modified Pentration Macadam with VG-30 bitumen over existing WBM surface including picking the road metalled surface, thoroughly cleaning the WBM surface by using mechanical broom or approved equipment, spreading 40mm size metal ( 30% Crushed metal +70% Hand broken ) by brining blasted rubble on site of work) at the rate of 0.09Cum/Sqm Compacting metal with roller and bitumen is them spread at rate of 2kg/ sqm. Spreading 12mm metal at rate of 0.018 Cum,/Sqm The surface shall be lightly rolled so that metal pieces ge embeded in the bitumen layer and rolling shall continre until entire surface is throughly compacted etc. complete. ( With Vibratory Roller including diversion road ) Spec. No. As directed bty Engineer- in - charge. | | | | | | | |
| | For Provisional Qty. | | | | | | 10.00 | |
| | | | | | | | **10.00** | **Sqm** |
| 67 | Providing and laying 75mm thick compacted Modified Pentration Macadam with VG-30 bitumen over existing BT surface including picking the road metalled surface, thoroughly cleaning the BT surface by using mechanical broom or approved equipment, spreading 40mm size metal ( 30% Crushed metal +70% Hand broken ) by brining blasted rubble on site of work) at the rate of 0.09Cum/Sqm Compacting metal with roller and bitumen is them spread at rate of 2kg/ sqm. Spreading 12mm metal at rate of 0.018 Cum,/Sqm The surface shall be lightly rolled so that metal pieces ge embeded in the bitumen layer and rolling shall continre until entire surface is throughly compacted etc. complete. ( With Vibratory Roller including diversion road ) Spec. No. As directed bty Engineer- in - charge. | | | | | | | |
| | | | | | | | **100.00** | **Sqm** |
| 68 | Providing and applying tack coat on the prepared surface heating by fames in Boiler and spraying bitumen set footed in bitumen boller on B.T. surface 5 kg/10 sqm. (VG 30 bulk bitumen rates are considered to arrive at rates) Spec.Rd.47.3.3 Page No. 224 | | | | | | | |
| | For Chember Correction Maruti vafers To JayShanakar Chowk 1495-2210 | 1 | 1 | 420.00 | 20.00 | | 8400.00 | |
| | Jayshankar Chowk To Sonje Bridge Profile Correction (CH-2021-2445) | 1 | 1 | 645.00 | 6.00 | | 3870.00 | |
| | for DBM | 1 | 1 | 53280.00 | | | 53280.00 | |
| | for BC | 1 | 1 | 53280.00 | | | 53280.00 | |
| | for Storm Water | 1 | 1 | 1220.00 | 1.00 | | 1220.00 | |
| | For Tree Cutting Portion Repairing | 1 | 20 | 4.00 | 5.00 | | 400.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | 1 | 2 | 95.00 | 5.00 | | 950.00 | |
| | | | | | | | **121400.00** | **Sqm** |
| 69 | Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 10.0 kg/sqm using mechanical means. | | | | | | | |
| | For Tree Cutting Portion Repairing | 1 | 20 | 4.00 | 5.00 | | 400.00 | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | 1 | 1 | 290.00 | 7.00 | | 2030.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | | 950.00 | |
| | | | | | | | **3380.00** | **Sqm** |

# NASHIK MUNICIPAL CORPORATION
# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 70 | BITUMINOUS MACADAM 3.00 % : Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 3.00 % using specified grade of Bitumen. -- USING batch Mix type hot mix plant with SCADA, Sensor Paver, vibratory roller. (VG30 bulk bitumen rates are considered to arrive at rates) | | | | | | | |
| | | | | | | | 1.00 | |
| | | | | | | | **1.00** | **Cum** |
| | | | | | | | | |
| 71 | BITUMINOUS MACADAM 3.50 %: Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 3.50 % VG-30 Bitumen. - USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V- Sat attachment. | | | | | | | |
| | For Chember Correction Maruti vafers To JayShanakar Chowk 1495-2210 | 1 | 1 | 290.00 | 20.00 | 0.0600 | 348.00 | |
| | Jayshankar Chowk To Sonje Bridge Profile Correction (CH-2021-2445) | 1 | 1 | 645.00 | 6.00 | 0.0600 | 232.20 | |
| | For Tree Cutting Portion Repairing | 1 | 20 | 4.00 | 5.00 | 0.0600 | 24.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | 1 | 2 | 75.00 | 3.50 | 0.0600 | 31.50 | |
| | | | | | | | **635.70** | **Cum** |
| | | | | | | | | |
| 72 | DENSE BITUMINOUS MACADAM 4.50%: Proving and laying bituminous macadam using crushed aggregates of Grading 2, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50/75 mm compacted thickness with 4.50 % VG-30 Bitumen. - USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V-Sat attachment. | | | | | | | |
| | for DBM | 1 | 1 | 53280.00 | | 0.0600 | 3196.80 | |
| | | | | | | | **3196.80** | **Cum** |
| | | | | | | | | |
| 73 | BITUMINOUS CONCRETE 6.25 %:- Providing and laying bituminous concrete using crushed aggregates of grading 2, premixed with bituminous binder @ 6.25 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for30/40 mm compacted thickness with VG-30 Bitumen,Excluding prime / tack coat. For Bitumen VG-30 bulk -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V-Sat attachment with Stone Dust filler Spec No.: MOST 1995 Cl.No.511 | | | | | | | |
| | for BC | 1 | 1 | 53280.00 | | 0.0400 | 2131.20 | |
| | | | | | | | **2131.20** | **Cum** |
| | | | | | | | | |
| 74 | Supplying and adding Organosilane Nanotechnology Additive (such as Zycotherm or approved equivalent) to the bitumen binder at the Hot Mix Asphalt (HMA) plant at a dosage of 0.1% by weight of bitumen to achieve enhanced chemical bonding, complete aggregate coating, improved moisture resistance, and consistent compaction in various bituminous mixes such as Bituminous Macadam (BM), Dense Bituminous Macadam (DBM), Bituminous Concrete (BC) etc., including supply, transportation, storage, uniform blending with bitumen, testing, and all incidental operations complete in all respects as per manufacturer's specifications, relevant IRC and MORTH guidelines, and as directed and with prior approval by the Engineer-in-Charge. | | | | | | | |
| | QTY Against | | | Constant | Qty | | | |
| | BM - 3.0% | | | 0.0660 | 1.00 | | 0.07 | |
| | BM - 3.5% | | | 0.0770 | 635.70 | | 48.95 | |

# NASHIK MUNICIPAL CORPORATION
# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | DBM - 4.5% | | | 0.0990 | 3196.80 | | 316.48 | |
| | BC - 6.25% | | | 0.1440 | 2131.20 | | 306.89 | |
| | | | | | | | **672.39** | **kg** |
| | | | | | | | | |
| **D** | **Miscellaneous Items for Reparing Work** | | | | | | | |
| 75 | Providing and fixing on walls/ ceiling/ floor mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete. | | | | | | | |
| | | | | | | | | |
| A | 15 mm Dia | | 1 | | 25.00 | | 25.00 | Rmt |
| | | | | | | | | |
| B | 25 mm Dia | | 1 | | 25.00 | | 25.00 | Rmt |
| | | | | | | | | |
| C | 32 mm Dia | | 1 | | 10.00 | | 10.00 | Rmt |
| | | | | | | | | |
| D | 40 mm Dia | | 1 | | 10.00 | | 10.00 | Rmt |
| | | | | | | | | |
| E | 50 mm Dia | | 1 | | 10.00 | | 10.00 | Rmt |
| | | | | | | | | |
| | | | | | | | | |
| 76 | Providing and making ISI Mark ferrule connection of 15 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete | | | | | | | |
| | | 1 | 1 | | 20.00 | | 20.00 | |
| | | | | | **Total Qty** | | **20.00** | **No** |
| | | | | | | | | |
| 77 | Providing and making ISI Mark ferrule connection of 50mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete | | | | | | | |
| | | 1 | 1 | | 20.00 | | 20.00 | |
| | | | | | **Total Qty** | | **20.00** | **No** |
| | | | | | | | | |
| 78 | Providing , laying and fixing ,jointing Eco- drain mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. | | | | | | | |
| A | 110 mm Dia | 1 | 1 | | 25.00 | | **25.00** | **Rmt** |
| | | | | | | | | |
| B | 160 mm Dia | 1 | 1 | | 25.00 | | **25.00** | **Rmt** |
| | | | | | | | | |
| 79 | Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. Complete | | | | | | | |
| | MISC Exi. Chamber Repairing | | | | | | 10.00 | |
| | | | | | **Total Qty** | | **10.00** | **Cum** |
| | | | | | | | | |
| 80 | Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external walls of plinth including bailing out water manually , striking joints inside and raking out joints from outside and watering etc.complete | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | **Total Qty** | | **5.00** | **Cum** |
| | | | | | | | | |
| 81 | Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete. | | | | | | | |
| | | | | | | | 5.00 | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | | | | | Total Qty | | 5.00 | Cum |
| | | | | | | | | |
| 82 | Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/ pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | Total Qty | | 5.00 | Cum |
| | | | | | | | | |
| 83 | Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:4 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete. | | | | | | | |
| | | | | | | | 20.00 | |
| | | | | | Total Qty | | 20.00 | Sq.m |
| | | | | | | | | |
| 84 | Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete. | | | | | | | |
| | | | | | | | 10.00 | |
| | | | | | Total Qty | | 10.00 | Sqm |
| | | | | | | | | |
| 85 | Providing and applying priming coat on concrete/ masonary/ Asbestos Cement plastered surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required etc. complete. | | | | | | | |
| | For Footpath | 2 | 2 | 900.00 | | 0.45 | 1620.00 | |
| | for Existing Road Divder | 1 | 2 | 490.00 | | 0.60 | 588.00 | |
| | for Existing Road Divder | 1 | 2 | 373.00 | | 0.60 | 447.60 | Sqm |
| | | | | | | | 1620.00 | |
| 86 | Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary and watering the surface for two days etc complete. NOTE: For Item One Number 15 to 18 prior approval of Superintending Engineer will be necessary | | | | | | | |
| | | | | | Provisinal Qty | | 10.00 | |
| | | | | | Total Qty | | 10.00 | Sqm |
| | | | | | | | | |
| 87 | Providing and applying two coats of flat oil paint of approved colour to the old structural steel work and iron work previously painted in building including scaffolding, if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. | | | | | | | |
| | | | | | Provisinal Qty | | 10.00 | |
| | | | | | Total Qty | | 10.00 | Sqm |
| | | | | | | | | |
| 88 | Providing and applying two coats (exterior quality) of flat oil paint of approved colour and shade to the plastered surface in buildings and workshops including scaffolding if necessary, cleaning the surface and preparing surface etc. complete. (excluding primer coat) | | | | | | | |
| | For Footpath | 2 | 2 | 900.00 | | 0.45 | 1620.00 | |
| | for Existing Road Divder | 1 | 2 | 490.00 | | 0.60 | 447.60 | |
| | for Existing Road Divder | 1 | 2 | 373.00 | | 0.60 | 447.60 | |
| | | | | | Total Qty | | 2515.20 | Sqm |
| | | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 89 | Providing and laying matt finish ceramic tiles of having size 30 cm x 30 cm confirming to .S.15622/2006 (group D II-A) and 7 to 8 mm thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete. | | | | | | | |
| | for Provisional Qty | | | | | | 10.00 | |
| | | | | | **Total Qty** | | **10.00** | **Sqm** |
| 90 | Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe ( Rezan/ concentiDeleted ire 0.75 mm dia ) with hot dip and G.I. coated hooks as per drawing supported on M.S. angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete. | | | | | | | |
| | for Provisional Qty | | | | | | 25.00 | |
| | | | | | **Total Qty** | | **25.00** | **Rmt** |
| 91 | Providing and fixing Guard Railing of 1000mm height as per Type D Drg. No. 15 dt. 20-4-79, and fixed in 40 x 40 x 6mm iron, angle embedded in 1:2:4 cement concrete bedding patti as per detailed drawing, with 3 coats of approved of yellow and black paint. | | | | | | | |
| | for Provisional Qty | | | | | | 45.00 | |
| | | | | | **Total Qty** | | **45.00** | **Rmt** |
| 92 | Providing railing of cast in situ R.C.C posts with (M-20) cement concrete trap / granite / quartzite / gneiss metal size 150 mm x 150 mm x 1.240 mm and horizantal 3 nos. at distance 370 mm C/C and bottom bar 150 mm above kerb as per the detailed drawings (including cost of reinforcement) scaffolding,steel centering, plywood/steel formwork etc. complete. The C.M. 1:3 plaster is considered for renderinguneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering/formwork will not be allowed). | | | | | | | |
| | for Provisional Qty | | | | | | 15.00 | |
| | | | | | **Total Qty** | | **15.00** | **Rmt** |
| 93 | Providing and laying in situ / ready mix M20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab including compacting, finishing, curing etc. complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural/ VSI standard Artificial Sand, cement6.40 bags/cumt) | | | | | | | |
| | for provisinal Qty | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| 94 | Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. | | | | | | | |
| | for provisinal Qty | | | | | | 1000.00 | kg |
| | | | | | | | **1.00** | MT |
| 95 | Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 96 | Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement over a prepared subbas with 43 grade cement ,coarse and fine aggregate (natural sand/VSI grade finely washed crushed sand) conforming to IS383, using fine and coarse aggregates combined gradation asper Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/non tilting mixer and Weigh batcher as per approved mix design,admixtures, transporting to suring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. with fully automaticmicro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| | | | | | | | | |
| 97 | Providing and laying telephone black / Amba White / Cadburybrown / Ruby red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing/moulding the sharp edges wherever necessary, curing, etc. complete | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Sqm** |
| | | | | | | | | |
| 98 | Providing and laying in situ / readymixM-25 controlled reinforcedcement concrete of trap metal for raft slab including "V"haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant /pan mixer with fine agreegates of required specifications ( VSI sand finely washed etc ) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) . | | | | | | | |
| | | | | | | | 10.00 | |
| | | | | | | | **10.00** | **Cum** |
| | | | | | | | | |
| 99 | Providing cast in situ / ready mix M-20 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural / VSI standard Artificial Sand | | | | | | | |
| | | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| | | | | | | | | |
| 100 | Providing and laying in situ/ ready mix M-25 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work ins olid/ deckslabetc. including ramming, vibrating, curing, formwork, centering and finishing incement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine agreegates of required specifications (VSI sand finely washed etc)<br>i)Height up to 5 m, normal rate.<br>ii)Height 5 to 7.50 m, add 5percent extra over basic rate.<br>iii) Height 7.50 to 10 m, 7.50 percent extra.<br>iv)Over 10m Height, add 10 percent extra for every 2.50m rise | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| | | | | | | | | |
| 101 | Removing and resetting Mangalore tiles from roof including refixing loose battens etc. complete | | | | | | | |
| | Removing For Existing Footpath Paver Block | | | 12600.00 | | | 12600.00 | |
| | | | | | | | **12600.00** | **Sqm** |
| | | | | | | | | |
| E | **Road Furniture** | | | | | | | |
| 102 | Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete. | | | | | | | |
| | Divider Line | 1 | 2 | 3293 | 0.15 | | 987.90 | |
| | footpath/ Edge line | 1 | 2 | 3293 | 0.15 | | 987.90 | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | center line 1 m c/c | 1 | 2 | 1647 | 0.10 | | 329.30 | |
| | Zebra | 4 | 12 | 3.00 | 0.50 | | 72.00 | |
| | stop line | 4 | 2 | 11.25 | 0.30 | | 27.00 | |
| | | | | | | | **2404.10** | **Sqm** |
| | | | | | | | | |
| 103 | Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer. | | | | | | | |
| | 3 m c/c | 1 | 2 | 1098.00 | | | 2196.00 | |
| | foothpath / Edge line | 1 | 2 | 1098.00 | | | 2196.00 | |
| | at zebra stop line | 4 | 2 | 11.25 | | | 90.00 | |
| | | | | | | | **4482.00** | **No** |
| | | | | | | | | |
| 104 | Supplying of Solar Raised Pavement Markers made of polycarbonate molded body with circular shape, solar powered, LED self illumination in active mode, 360 degree illumination and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face in passive mode. The marker shall support a load of 20000 kg tested in accordance to ASTM D 4280. The marker should be resistant to dust and water ingress according to IP 65 standards and should withstand temperatures in the range of 0 C to 70 C. Color of lighting could be provided in red or yellow (amber) as per requirement and typical frequency of blinking is 1 Hz. There should be current losses of less than 20 micro-amperes at 2.4 V in sleep-charging mode to enhance the life of the marker and a full charge should provide for a minimum autonomy of 50 hours. The height, width and length of the marker shall not be less than 10 mm x 100 mm x 100 mm. Also, the surface diameter of the marker shall not be less than 100 mm respectively. The weight of the marker shall not exceed 0.5 Kilograms. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retroreflectance of the reflecting panel to the Engineer | | | | | | | |
| | for road side | | | | | | 25 | |
| | | | | | **Total Qty** | | **25.00** | **No** |
| | | | | | | | | |
| 105 | Providing and Fixing of Median Marker that are made of tough, high impact resistant, injection-molded, thermoplastic body with an isosceles trapezoidal structure of length, width and height not less than 15cm, 10cm and 10cm respectively and thickness not less than 1.8mm, the body structure shall be rounded at its acute angle, all the corners and edges. The plastic used for molding the Median Marker shall have a minimum Notched Izod Impact strength value of 600 J/m at room temperature, when tested in accordance with ASTM D256 and shall retain at least 70% of this value when subjected to accelerated weathering for 1000hrs as per ASTM G155 or UL746C. The logo of the manufacturer shall be embossed on either side of the body in the injection molding process. The Median Marker shall have rectangular-shaped, fluorescent yellow color retro- reflective sheeting of size not less than 8.5cm*8.5cm and with fully reflective micro prismatic cube corners as its retro-reflective elements as per IRC 67 2010 and ASTM D4956 type XI specifications reflectivity values. The retro-reflective sheeting shall be one or both sides of the Median Marker and shall be edge protected with no exposed edges which will prevent edge lifting, vandalism, sheeting damage, etc. The Median Marker shall be fixed by a combination of epoxy adhesive and grouting. | | | | | | | |
| | | 1 | 10 | | | | 10.00 | |
| | | | | | **Total Qty** | | **10.00** | **No** |
| | | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 106 | Road Delineators: Supplying and installation of delineators (Roadway Indicators, Hazard markers, Object markers) 80 to 100 cm high above ground level, painted black and white in 15 cm wide strips, fitted with 80x100mm rectangular or 75mm dia. Circular reflectorised panels at the top, buried or pressed into the ground and confirming to I.R.C. 79 and the drawings | | | | | | | |
| | | 1 | 10 | | | | 10.00 | |
| | | 1 | 8 | | | | 8.00 | |
| | | | | | **Total Qty** | | **18.00** | **No.** |
| 107 | Providing and fixing steel pipe delineators of 10 cm. in diameter and total height of 130 cm, provided with 2 strips of white retroreflective sheeting of size 5 cm. x 32.5 cm. each fixed horizontally and 2 strips of red retroreflective sheeting each having size 5 cm. x 32.5 cm. fixed horizontally at top, with M.S. round cap having diameter 11 cm. and wire mesh at top (10 guage thick) and height of wire mesh 15 cm, M.S. hold fast 6 mm thick with 35 cm. in length, fixing the delineators in C.C. 1:4:8 concrete block of size 25 cm. x 25 cm. x 45 cm. with necessary excavation etc. complete. | | | | | | | |
| | | 1 | 5 | | | | 5.00 | |
| | | | | | **Total Qty** | | **5.00** | **No.** |
| 108 | Providing and fixing Mandatory/Regulatory sign boards in circular shape of____ mm dia made out of ____aluminum sheet bonded with white retro reflective sheeting of Class C ( Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67- 2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C ( Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier. | | | | | | | |
| b | 600 mm dia made out of 3mm aluminum composite material | 1 | 1 | | 6.00 | | 6.00 | **No.** |
| d | 750 mm dia made out of 4mm aluminum composite material | 1 | 1 | | 1.00 | | 1.00 | **No.** |
| 109 | Providing and fixing Cautionary/Warning sign boards in Equilateral Triangle size of ___mm made out of____ mm aluminum sheet bonded with white retro reflective sheeting of Class C ( Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67- 2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. ClassC ( Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier | | | | | | | |
| b | 600 mm made out of 3mm aluminum composite material | 1 | 2 | | 8.00 | | 16.00 | **No.** |
| d | 750 mm made out of 4mm aluminum composite material | 1 | 2 | | 1.00 | | 2.00 | **No.** |
| f | 900 mm made out of 4mm aluminum composite material | 1 | 2 | | 1.00 | | 2.00 | **No.** |

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## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 110 | Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area less than 0.9 One Square Meterr made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class __ ( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on one no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity microprismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the | | | | | | | |
| d | 4mm aluminum composite material Class C | | | | | | | |
| | | 1 | 2 | 1.20 | 1.00 | | 2.40 | |
| | | | | | **Total Qty** | | **2.40** | **Sqm** |
| | | | | | | | | |
| 111 | Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area greater than 0.9 square meter made out of__aluminum sheet bonded with white retro reflective sheeting of Class ____ ( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity microprismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued | | | | | | | |
| d | 4mm aluminum composite material Class C | | | | | | | |
| | | 1 | 2 | 1.20 | 0.90 | | 2.16 | |
| | | | | | **Total Qty** | | **2.16** | **Sqm** |
| | | | | | | | | |
| 112 | Providing and erecting Overhead signs made out of __aluminum sheet bonded with white retro reflective sheeting of Class ___( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012, with designed back support frame of mild steel angle with vertical and lateral clearance given in clause 801 and 802, duly painted on back side with two coats of grey stove enamel paint and installed as per clause 802.6 over a designed support system of structural steel work trestles and trusses of sections and type as per structural design requirements and approved plans including painting with one coat of epoxy primer and two coats of epoxy finish paint.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in | | | | | | | |
| d | 4mm aluminum composite material Class C | | | | | | | |
| | | | 1 | 1.20 | 0.90 | | 1.08 | |
| | | | 1 | 0.90 | 0.60 | | 0.54 | |
| | | | | | | **Total Qty** | **1.62** | **Sqm** |
| | | | | | | | | |
| F | Providing Public Utilities | | | | | | | |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 113 | Public Seating Chair. - 3 Seater<br>Providing and Fixing 3 seater Public seating chair made of complete metal with Legs in Crome finish and seates in silver powder coating finish. | | | | | | | |
| | For Roads | 2 | | | | | 2.00 | |
| | | | | | | | **2.00** | **No** |
| | | | | | | | | |
| 114 | Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304) | | | | | | | |
| | Four Chowks | 1 | | 10.00 | | | 10.00 | |
| | | | | | | | **10.00** | **No** |
| | | | | | | | | |
| 113 | Royalty charges for murum dubber should be paid by the contractor regularly to the government and contractor should produce delivery challon, payment receipt, pakka bill etc. complete alongwith every R.A. bill \ final bill as applicable.(It is entirely responsibility of contractor to pay Royalty charges to the Government) | | | | | | | |

| I. No. | Item | | | Qty | | Constant | Total Qty | |
|---|---|---|---|---|---|---|---|---|
| a | for murum / Rubble / | | Item no.80 | 5.00 | | 1.160 | 5.80 | |
| b | Earth work Embankment | | Item no. 42, 43 | 10.00 | | 1.250 | 12.50 | |
| c | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | | Item 44, 17 | 4266.35 | | 1.000 | 4266.35 | |
| d | for Rubble | | Item no.95 | 5.00 | | 1.250 | 6.25 | |
| | | | | | | | **4290.90** | **Cum** |
| | | | | | | | | |
| e | for Sand | | Sr. No.83 | 20.00 | | 0.025 | 0.50 | |
| | for Sand | | Sr. No.84 | 10.00 | | 0.033 | 0.33 | |
| | | | | | | | **0.83** | **Cum** |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

me of Work:- Proposed Developing of 30 m DP Road from Janardhan Swami Math To Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nash

## QUALITY CONTROL

**Frequency of Quality Control Tests As specified in S.S.R. and MORT&H: 2013, Section 900**

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 6 | Providing earthwork Departmental Land. | 5.00 | Cubic Metre | Earth | 1.00000 | 5.00 | 31 | SOIL / MURUM Compaction Test (Proctor Density). | 1 | 1955.00 | 1955.00 |
| | | | | | 0.0000 | 0.00 | 33 | SOIL / MURUM C.B.R. test (Field determination test) | 1 | 2730.00 | 2730.00 |
| | | | | | 0.0000 | | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 1 | 1230.00 | 1230.00 |
| | | | | | | | 32 | SOIL / MURUM C.B.R. Test (Lab) with compaction test. | 1 | 7250.00 | 7250.00 |
| 7 | Providing earthwork from Other sources. | 5.00 | Cubic Metre | Earth | 1.00000 | 5.00 | 31 | SOIL / MURUM Compaction Test (Proctor Density). | 1 | 1955.00 | 1955.00 |
| | | | | | 0.0000 | 0.00 | 33 | SOIL / MURUM C.B.R. test (Field determination test) | 1 | 2730.00 | 2730.00 |
| | | | | | 0.0000 | | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 1 | 1230.00 | 1230.00 |
| | | | | | | | 32 | SOIL / MURUM C.B.R. Test (Lab) with compaction test. | 1 | 7250.00 | 7250.00 |
| 8 | Supplying Hard Murum | 2868.90 | Cubic Metre | | 0.0000 | 0.00 | 29 | SOIL / MURUM Sieve Analysis test. | 22 | 725.00 | 15950.00 |
| | | | | Murum | 1.0000 | 8536.95 | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 22 | 1230.00 | 27060.00 |
| | | | | | | | 32 | SOIL / MURUM C.B.R. Test (Lab) with compaction test. | 22 | 7250.00 | 159500.00 |
| 11 | G.S.B. with Gr I close graded Material by Plant Mix Method | 920.00 | Cubic Metre | | 0.0000 | 0.00 | 8 | G.S.B. Mix Design test. | 1 | 17065.00 | 17065.00 |
| | | | | Cr.Metal | 1.2800 | 8302.72 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 17 | 725.00 | 12325.00 |
| | | | | | 0.0000 | | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 17 | 1230.00 | 20910.00 |
| | | | | | | | 31 | SOIL / MURUM Compaction Test (Proctor Density). | 44 | 1955.00 | 86020.00 |
| | | | | | | | 32 | SOIL / MURUM C.B.R. Test (Lab) with compaction test. | 10 | 7250.00 | 72500.00 |
| | | | | | | | 33 | SOIL / MURUM C.B.R. test (Field determination test) | 84 | 2730.00 | 229320.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| 12 | W.B.M. with Grading-I Using Screening Type-A | 25.00 | Cubic Metre | Murum | 0.08000 | 8.00 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 1 | 2730.00 | 2730.00 |
| | | | | Cr.Metal | 0.2700 | 27.00 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 1 | 725.00 | 725.00 |
| | | | | | 0.0000 | | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index | 1 | 895.00 | 895.00 |
| | | | | Metal | 1.2100 | 121.00 | 29 | SOIL / MURUM Sieve Analysis test. | 1 | 725.00 | 725.00 |
| | | | | | | | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 1 | 1230.00 | 1230.00 |
| 13 | W.B.M with Grading-II Using Screening Type-B. | 25.00 | Cubic Metre | Murum | 0.08000 | 8.00 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 1 | 2730.00 | 2730.00 |
| | | | | Cr.Metal | 0.2400 | 24.00 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 1 | 725.00 | 725.00 |
| | | | | | 0.0000 | | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index | 1 | 895.00 | 895.00 |
| | | | | Metal | 1.2100 | 121.00 | 29 | SOIL / MURUM Sieve Analysis test. | 1 | 725.00 | 725.00 |
| | | | | | | | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 1 | 1230.00 | 1230.00 |
| 14 | Wet Mix Macadam | 845.00 | Cubic Metre | | 0.0000 | 0.00 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 2 | 2730.00 | 5460.00 |
| | | | | Cr.Metal | 1.2100 | 1455.86 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 8 | 725.00 | 5800.00 |
| | | | | | 0.0000 | | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 3 | 895.00 | 2685.00 |
| | | | | | 0.0000 | | 9 | Wet Mix Macadam Mix Design test. | 1 | 17065.00 | 17065.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| | | | | | | | 30 | SOIL / MURUM Liquid limit & plastic Limit test. | 1 | 1230.00 | 1230.00 |
| | | | | | | | 33 | SOIL / MURUM C.B.R. test (Field determination test) | 9 | 2730.00 | 24570.00 |
| 15 | Providing and laying in PCCM 15 grade leveling course below approach slab complete with fully automatic micro process or PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (panmixer) as per drawing sand Technical specifications etc complete with fine agreegates of required specifications ( VSI sand finely washed etc ) | 945.00 | Cubic Metre | Cement | 0.30000 | 536.76 | 19 | CONCRETE Compressive Strength OF Cement Concrete Cube (Set of 3 cubes) test. | 39 | 725.00 | 28275.00 |
| | | | | Sand | 0.4400 | 787.25 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 8 | 725.00 | 5800.00 |
| | | | | | 0.0000 | | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 8 | 895.00 | 7160.00 |
| | | | | | | | 10 | FINE AGGREGATES. Fineness Modulus (Sieve Analysis),Silt & Clay Content test. | 1 | 1450.00 | 1450.00 |
| | | | | | | | 1 | BASIC TEST OF CEMENT.Standard Consistancy Fineness, Specific Gravity, Setting Time ( Initial & Final ), Compressive Strength and Soundness test. | 4 | 3960.00 | 15840.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| 15 | Dry Lean Cement Concrete | 1.00 | Cubic Metre | Cement | 0.22000 | 0.00 | 19 | CONCRETE Compressive Strength OF Cement Concrete Cube (Set of 3 cubes) test. | 0 | 725.00 | 0.00 |
| | | | | | | | 10 | FINE AGGREGATES. Fineness Modulus (Sieve Analysis),Silt & Clay Content test. | 1 | 1450.00 | 1450.00 |
| 16 | M-20 for R.C.C. beams and lintels with natural/ V.S.I. sand | 5.00 | Cubic Metre | Cement | 0.35000 | 1.75 | 19 | CONCRETE Compressive Strength OF Cement Concrete Cube (Set of 3 cubes) test. | 0 | 725.00 | 0.00 |
| | | | | Sand | 0.4250 | 2.13 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 1 | 725.00 | 725.00 |
| | | | | | 0.0000 | | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 1 | 895.00 | 895.00 |
| | | | | | | | 10 | FINE AGGREGATES. Fineness Modulus (Sieve Analysis),Silt & Clay Content test. | 1 | 1450.00 | 1450.00 |
| 17 | TMT FE:-500 bar reinforcement for R.C.C. | 0.50 | Metric Tonne | Steel | 1.00000 | 0.50 | 72 | STEEL BAR TESTING Upto 16 mm (Set of 3 Bars) | 1 | 1340.00 | 1340.00 |
| | | | | | 0.0000 | 0.00 | 73 | STEEL BAR TESTING Above 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress,Weight-Per Meter, Bend / Rebend Test, Proof Stress). | 1 | 1675.00 | 1675.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| 18 | Providing and laying in-situ M-40 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (Natural Sand/ VSI grade finely washed Crushed Sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying, compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound/ by providing cement vata in cement Mortar 1:8 of 0.6 metre x 0.6 metre centre to centre, admeasuring 80 milimetre at bottom and 40 milimetre at top with depth of 75 milimetre and maintaining the same throughout curing period/ by any other method approved by Engineer-in- | 1.00 | Cubic Metre | Cement | 0.42500 | 2.13 | 19 | CONCRETE Compressive Strength OF Cement Concrete Cube (Set of 3 cubes) test. | 0 | 725.00 | 0.00 |
| | | | | Sand | 0.4000 | 2.00 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 1 | 725.00 | 725.00 |
| | | | | | 0.0000 | | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 1 | 895.00 | 895.00 |
| | | | | | | | 10 | FINE AGGREGATES. Fineness Modulus (Sieve Analysis),Silt & Clay Content test. | 1 | 1450.00 | 1450.00 |
| | | | | | | | 21 | CONCRETE Flexural strength of Beam test. | 2 | 780.00 | 1560.00 |
| 21 | Coloured Paving Blocks 60 mm thick | 12600.00 | Square Metre | | 0.0000 | 0.00 | 26 | CONCRETE PAVING BLOCKS Compressive Strength,Water Absorption test (Set of 8 Blocks). | 25 | 2620.00 | 65500.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| 22 | Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 80 milimetre thickness of having a strength of 300 kilogram per square centimetre of approved quality and shape on a bed of crushed sand of 25 to 30 milimetre thick including skirting joints and cleaning etc. complete | 100.00 | Square Metre | | 0.0000 | 0.00 | 26 | CONCRETE PAVING BLOCKS Compressive Strength,Water Absorption test (Set of 8 Blocks). | 2 | 2620.00 | 5240.00 |
| 23 | 75 mm M.P.M. on W.B.M. with 70% Hand Broken Metal | 10.00 | Square Metre | Bitumen | 0.00200 | 1.00 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 1 | 2730.00 | 2730.00 |
| | | | | Cr.Metal | 0.0450 | 22.50 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 2 | 725.00 | 1450.00 |
| | | | | Metal | 0.0630 | 31.50 | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 1 | 895.00 | 895.00 |
| | | | | | | | 6 | BASIC TEST OF AGGREGATE. Stripping Value test. | 1 | 780.00 | 780.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 1 | 3290.00 | 3290.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 1 | 2005.00 | 2005.00 |
| 24 | 75 mm M.P.M. on B.T. with 70% Hand Broken Metal. | 100.00 | Square Metre | Bitumen | 0.00230 | 51.34 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 1 | 2730.00 | 2730.00 |
| | | | | Cr.Metal | 0.0450 | 1004.40 | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 26 | 725.00 | 18850.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| | | | | Metal | 0.0630 | 1406.16 | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 13 | 895.00 | 11635.00 |
| | | | | | | | 6 | BASIC TEST OF AGGREGATE. Stripping Value test. | 1 | 780.00 | 780.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 6 | 3290.00 | 19740.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 6 | 2005.00 | 12030.00 |
| 25 | Tack Coat using Bitumen VG-30 at 2.50 Kg /10 Sq.m | 121400.00 | Square Metre | Bitumen | 0.00025 | 33.74 | | | 0 | 0.00 | 0.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 6 | 3290.00 | 19740.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 6 | 2005.00 | 12030.00 |
| 26 | Primer coat at the rate of 0.60 kg/sqm on Granular Base | 3380.00 | Square Metre | | 0.0000 | 0.00 | | | 0 | 0.00 | 0.00 |
| 27 | B.M. Gr-I with Batch Mix SCADA with 3.0% Bitumen VG-30 | 100.00 | Cubic Metre | Bitumen | 0.07260 | 7.26 | 47 | B.M.Job Mix Design with all Tests on aggregate and bitumen. | 1 | 11155.00 | 11155.00 |
| | | | | Cr.Metal | 1.4100 | 141.00 | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 1 | 895.00 | 895.00 |
| | | | | | 0.0000 | | 6 | BASIC TEST OF AGGREGATE. Stripping Value test. | 1 | 780.00 | 780.00 |
| | | | | Bituminous Mix | 1.4100 | 141.00 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 1 | 2730.00 | 2730.00 |
| | | | | | | | 51 | Density test of Bituminous Core. | 4 | 665.00 | 2660.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 1 | 3290.00 | 3290.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 1 | 2005.00 | 2005.00 |
| | | | | | | | 43 | BITUMEN Extraction Test. | 2 | 1675.00 | 3350.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| | | | | | | | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 2 | 725.00 | 1450.00 |
| | | | | | | | 44 | Extraction & Sieve analysis of Bituminous mix (2 Samples of extraction for one sieve analysis including extraction for BM/DBM/BC) | 2 | 4125.00 | 8250.00 |
| 28 | B.M. Gr-1 3.5% PLC Batch Mix SCADA, VTS, Sensor Paver with VG 30. | 1638.57 | Cubic Metre | Bitumen | 0.07260 | 118.96 | 47 | B.M.Job Mix Design with all Tests on aggregate and bitumen. | 1 | 11155.00 | 11155.00 |
| | | | | Cr.Metal | 1.4100 | 2310.38 | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 7 | 895.00 | 6265.00 |
| | | | | | 0.0000 | | 6 | BASIC TEST OF AGGREGATE. Stripping Value test. | 1 | 780.00 | 780.00 |
| | | | | Bituminous Mix | 1.4100 | 2310.38 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 12 | 2730.00 | 32760.00 |
| | | | | | | | 51 | Density test of Bituminous Core. | 60 | 665.00 | 39900.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 12 | 3290.00 | 39480.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 12 | 2005.00 | 24060.00 |
| | | | | | | | 43 | BITUMEN Extraction Test. | 20 | 1675.00 | 33500.00 |
| | | | | | | | 3 | BASIC TEST OF AGGREGATE. Sieve Analysis test. | 2 | 725.00 | 1450.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | | | | | |
| | | | | | | | 44 | Extraction & Sieve analysis of Bituminous mix (2 Samples of extraction for one sieve analysis including extraction for BM/DBM/BC) | 2 | 4125.00 | 8250.00 |
| 29 | D B M Gr-1 SCADA Batch Mix with VG-30 and Stone Dust Filler. | 3155.37 | Cubic Metre | Bitumen | 0.10350 | 326.58 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 14 | 2730.00 | 38220.00 |
| | | | | Cr.Metal | 1.5280 | 4821.41 | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 14 | 895.00 | 12530.00 |
| | | | | | 0.0000 | | 44 | Extraction & Sieve analysis of Bituminous mix (2 Samples of extraction for one sieve analysis including extraction for BM/DBM/BC) | 2 | 4125.00 | 8250.00 |
| | | | | | | | 51 | Density test of Bituminous Core. | 91 | 665.00 | 60515.00 |
| | | | | | | | 46 | Job Mix Design with all Tests on aggregate and bitumen for DBM/SDBC/BC/SMA. | 1 | 20355.00 | 20355.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 33 | 3290.00 | 108570.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 33 | 2005.00 | 66165.00 |
| | | | | | | | 43 | BITUMEN Extraction Test. | 18 | 1675.00 | 30150.00 |
| | | | | | | | 45 | Marshall Stability & Flow measurement test. (Set of 3 moulds). | 18 | 1170.00 | 21060.00 |
| 30 | B.C Gr-1 Batch Mix SCADA, VTS, Sensor Paverwith 6.25% VG 30. | 2131.20 | Cubic Metre | Bitumen | 0.12960 | 272.62 | 2 | BASIC TEST OF AGGREGATE. Water Absorption, Specific Gravity,Impact Value Crushing Value test. | 10 | 2730.00 | 27300.00 |
| | | | | Cr.Metal | 1.5720 | 3306.83 | 5 | BASIC TEST OF AGGREGATE. Flakiness Index/ Elongation Index test. | 10 | 895.00 | 8950.00 |
| | | | | | 0.0000 | | 44 | Extraction & Sieve analysis of Bituminous mix (2 Samples of extraction for one sieve analysis including extraction for BM/DBM/BC) | 2 | 4125.00 | 8250.00 |

| Item No. | Item in brief | Estimated | | Material | Standard Consumption | Utilised Quantity of Ingradients | V.Q.C. D.S.R. Item No. | Tests | Required Tests | Rate of Each Test | Amount of Q.C.Testing Charges |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Unit | | | | 51 | Density test of Bituminous Core. | 61 | 665.00 | 40565.00 |
| | | | | | | | 46 | Job Mix Design with all Tests on aggregate and bitumen for DBM/SDBC/BC/SMA. | 1 | 20355.00 | 20355.00 |
| | | | | | | | 40 | BITUMEN Penetration, Softening Point, Flash & Fire Point and Specific Gravity test. | 28 | 3290.00 | 92120.00 |
| | | | | | | | 41 | BITUMEN Viscosity test. | 28 | 2005.00 | 56140.00 |
| | | | | | | | 43 | BITUMEN Extraction Test. | 12 | 1675.00 | 20100.00 |
| | | | | | | | 45 | Marshall Stability & Flow measurement test. (Set of 3 moulds). | 12 | 1170.00 | 14040.00 |
| 32 | Road Marking with Hot Applied Thermoplastic Compound | 1525.60 | Square Metre | | 0.0000 | 0.00 | 75 | PAINT / THERMO-PLASTIC PAINT Glass bead contents & grading analysis Test. | 1 | 4070.00 | 4070.00 |
| | | | | | 0.0000 | 0.00 | 76 | PAINT / THERMO-PLASTIC PAINT Reflectance & yellowness index Test. | 1 | 1170.00 | 1170.00 |
| | | | | | 0.0000 | | 77 | PAINT / THERMO-PLASTIC PAINT Flowability (Percentage residue) Test. | 1 | 1170.00 | 1170.00 |
| | | | | | 0.0000 | | 78 | PAINT / THERMO-PLASTIC PAINT Softening Point (Ring & ball method) Test. | 1 | 1060.00 | 1060.00 |
| | | | | | | | 79 | PAINT / THERMO-PLASTIC PAINT Drying Time Test. | 1 | 835.00 | 835.00 |
| | | | | | | | | **Total Quality Control Testing Charges** | | | **Rs.1,882,620.00** |
| | | | | | | | | | | | |
| | | | | | | | | **Total Quality Control Testing Charges with** | | | **Rs.1,882,620.00** |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| G | Water Supply Lines | | | | | |
| 1 | R.A. | Providing Dl Pipes (push on joints pressure pipes of Dl of following class & Dia meters confirming to the Indian Standard Specification inclusive cost of jointing materials (Rubber Gasket of EPDM Quality) including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, Third Party Inspection charges of TPI agency approved by the MJP including transit insurance, Railway freight, unloading from railway wagon, loading in to the truck, transportation to departmental store / site of work, unloading, stacking etc. completed as directed by Engineer-in-Charge (IS:1536:2001 for pipes & IS:158:1969 & 15:12820:1989 or latest edition / revision with amendments for rubber gaskets). (IS:8329:2000 latest version) MJP DSR Page no 53 Sr No 3 | | | | |
| | | SECTION-I(I) C.I./D.I. PIPES (69) | | | | |
| | | D.I. K – 7 | | | | |
| | | 100 mm Dia. | 120.00 | 1209.00 | Rmt | 145080.00 |
| | | 150 mm Dia. | 140.00 | 1686.00 | Rmt | 236040.00 |
| | | 200 mm Dia. | 50.00 | 2236.00 | Rmt | 111800.00 |
| | | 250 mm Dia. | 30.00 | 2906.00 | Rmt | 87180.00 |
| | | 300 mm Dia. | 50.00 | 3571.00 | Rmt | 178550.00 |
| | | 350 mm Dia. | 30.00 | 4465.00 | Rmt | 133950.00 |
| | | 400 mm Dia. | 40.00 | 5328.00 | Rmt | 213120.00 |
| | | 450 mm Dia. | 10.00 | 6346.00 | Rmt | 63460.00 |
| | | | | | | |
| 2 | R.A. | Providing and supplying ISI standard CI flanged / S& S specials including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, railway freight, insurance, unloading from railway wagon, loading into truck transport to departmental store /site, unloading stacking etc. complete. MJP DSR Page no 72 Sr No 6 (a) | | | | |
| | | SECTION-I(I) C.I./D.I. PIPES (70) | | | | |
| | | D/F specials up to 300 mm | 600.00 | 88.00 | kg | 52800.00 |
| | | Above 350 mm upto 600 mm dia. | 500.00 | 94.00 | kg | 47000.00 |
| | | | | | | |

# NASHIK MUNICIPAL CORPORATION

CIVIL TECH INDIA PVT. LTD.

## ABSTRACT SHEET

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 3 | R.A. | Supply of C. I. Mechanical Compression Flanged / Socket Tail piece(Popularly known as I TM Flanged / Socket Tailpiece) suitable for making flanged connection with the plain barrel of C. I. Spun Pipes ( as per - IS - 1536 /2001) and D. I. Pipes ( as per IS: 8329 / 2000).The Tailpiec to be supplied complete with sealing rubber gasket of S.B.R,.C.I.. Follower Glands and M.S. Nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993. The rates are inclusive of cost of material, forwarding charges,including all statutary duties and taxes such as GST levied by GoI and GoM in all respect, loading, transportation and unloading at departemental store etc. complete as directed. Consignee but exclusive of octroi. MJP DSR Page No. 143 Sr.No. 1 | | | | |
| | | SECTION-I(XIII) MECHANICLA JOINTS/ | | | | |
| | | 80 mm Dia. | 4.00 | 1311.00 | No | 5244.00 |
| | | 100 mm Dia. | 10.00 | 1430.00 | No | 14300.00 |
| | | 125 mm Dia. | 10.00 | 1800.00 | No | 18000.00 |
| | | 150 mm Dia. | 15.00 | 2574.00 | No | 38610.00 |
| | | 200 mm Dia. | 5.00 | 3335.00 | No | 16675.00 |
| | | 250 mm Dia. | 2.00 | 5031.00 | No | 10062.00 |
| | | 300 mm Dia. | 4.00 | 5632.00 | No | 22528.00 |
| | | 350 mm Dia. | 2.00 | 7427.00 | No | 14854.00 |
| | | 400mm Dia. | 4.00 | 9694.00 | No | 38776.00 |
| | | 450mm Dia. | 2.00 | 11380.00 | No | 22760.00 |
| | | | | | | |
| 4 | R.A. | Supply of C.I. mechanical compression collar coupling suitable for C.I. spun pipes (as per IS-1536/2001) and complete with sealing rubber gasket of SBR, C.I., follower glands and M.S. nut bolts. The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538/1993) including all statutary duties and taxes such as GST levied by GoI and GoM in all respect,MJP DSR Page No. 143 Sr.No. 2 | | | | |
| | | SECTION-I(XIII) MECHANICLA JOINTS / FITTING (161) | | | | |
| | | 80 mm Dia. | 7.00 | 826.00 | No | 5782.00 |
| | | 100 mm Dia. | 15.00 | 886.00 | No | 13290.00 |
| | | 125 mm Dia. | 4.00 | 1181.00 | No | 4724.00 |
| | | 150 mm Dia. | 15.00 | 1593.00 | No | 23895.00 |
| | | 200 mm Dia. | 10.00 | 1818.00 | No | 18180.00 |
| | | 250 mm Dia. | 6.00 | 2914.00 | No | 17484.00 |
| | | 300 mm Dia. | 10.00 | 3729.00 | No | 37290.00 |
| | | 350 mm Dia. | 4.00 | 4597.00 | No | 18388.00 |
| | | 400 mm Dia. | 6.00 | 7154.00 | No | 42924.00 |
| | | 450 mm Dia. | 4.00 | 8033.00 | No | 32132.00 |

# NASHIK MUNICIPAL CORPORATION

CIVIL TECH INDIA PVT. LTD.

## ABSTRACT SHEET

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 5 | R.A. | Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete. MJP DSR Page No. 34 Sr No. 1 | | | | |
| | | SECTION-EXCAVATION (40) | | | | |
| | | | 300.00 | 93.45 | Bhp/hr | 28035.00 |
| | | | | | | |
| 6 | R.A. | Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra & Mahindra make) from inside and outsideincluding all statutory duties & taxes such as GST levied by GOI & GOM in all respect, inspection charges, transportation to stores / site, and stacking, etc. complete. MJP DSR Page no 72 Sr No 7 (d) | | | | |
| | | SECTION-I(I) C.I./D.I. PIPES (70) | | | | |
| | | | | | | |
| | | D/F of all diametors | 300.00 | 95.00 | kg | 28500.00 |
| | | | | | | |
| 7 | R.A. | Providing and making flanged joints to flanged C.I./M.S. pipes of all classes/specials etc. including cost of all jointing materials (rubber packing, nut bolts, etc.), labour, hydraulic testing etc. complete. MJP DSR Page No. 56 Sr No. 8 | | | | |
| | | SECTION-I(I)C.I./D.I.PIPES (71) | | | | |
| | | 80 mm Dia. | 4.00 | 331.80 | Joint | 1327.20 |
| | | 100 mm Dia. | 10.00 | 571.20 | Joint | 5712.00 |
| | | 150 mm Dia. | 15.00 | 1146.60 | Joint | 17199.00 |
| | | 200 mm Dia. | 5.00 | 1188.60 | Joint | 5943.00 |
| | | 250 mm Dia. | 2.00 | 1703.10 | Joint | 3406.20 |
| | | 300 mm Dia. | 4.00 | 1769.25 | Joint | 7077.00 |
| | | 450 mm Dia. | 2.00 | 3508.05 | Joint | 7016.10 |
| | | 600 mm Dia. | 4.00 | 3898.65 | Joint | 15594.60 |
| | | | | | | |
| 8 | R.A. | Providing and making Mechanical joints to flanged C.I./M.S. pipes of all classes/specials etc. including cost of , labour, hydraulic testing etc. complete. MJP DSR Page No. Sr No. | | | | |
| | | SECTION-I(I)C.I./D.I.PIPES (71) | | | | |
| | | 80 mm Dia. | 15.00 | 265.44 | Joint | 3981.60 |
| | | 100 mm Dia. | 25.00 | 456.96 | Joint | 11424.00 |
| | | 150 mm Dia. | 30.00 | 917.28 | Joint | 27518.40 |
| | | 200 mm Dia. | 10.00 | 950.88 | Joint | 9508.80 |
| | | 300 mm Dia. | 15.00 | 1415.40 | Joint | 21231.00 |
| | | 450 mm Dia. | 10.00 | 2806.44 | Joint | 28064.40 |
| | | 600 mm Dia. | 6.00 | 3118.92 | Joint | 18713.52 |
| | | | | | | |
| 9 | R.A. | Cutting and champhering of pipes of following diameters including cost of all materials and labour involved, etc. complete as directed by Engineer-in-charge (for all class of pipes). MJP DSR Page No. 137 Sr.No. 20 | | | | |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH INDIA PVT. LTD.

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| | | SECTION-I(XII) PIPES APPURTENANCES (156) | | | | |
| | | 80 mm Dia. | 30.00 | 52.50 | No. | 1575.00 |
| | | 100 mm Dia. | 50.00 | 60.90 | No. | 3045.00 |
| | | 150 mm Dia. | 50.00 | 94.50 | No. | 4725.00 |
| | | 200 mm Dia. | 20.00 | 118.65 | No. | 2373.00 |
| | | 300 mm Dia. | 20.00 | 202.65 | No. | 4053.00 |
| | | 450 mm Dia. | 20.00 | 306.60 | No. | 6132.00 |
| | | 600 mm Dia. | 6.00 | 447.30 | No. | 2683.80 |
| | | | | | | |
| 10 | R.A. | Lowering laying and jointing with SBR ruber gaskets C.I. S/S pipes of various classes with CI / MS specials of following diameter in proper position, grade and alignment as directed by Engineer-in-charge including conveyance of material from stores to site of work, including cost of jointing materials and rubber rings labour, etc. complete. MJP DSR Page No. 54 Sr No. 2 | | | | |
| | | SECTION-I(I)C.I./D.I.PIPES (68) | | | | |
| | | 80mm | 20.00 | 61.95 | Rmt | 1239.00 |
| | | 100mm | 80.00 | 75.60 | Rmt | 6048.00 |
| | | 150mm | 120.00 | 100.80 | Rmt | 12096.00 |
| | | 200mm | 50.00 | 133.35 | Rmt | 6667.50 |
| | | 300mm | 30.00 | 189.02 | Rmt | 5670.60 |
| | | 450mm | 20.00 | 283.50 | Rmt | 5670.00 |
| | | 600mm | 8.00 | 429.45 | Rmt | 3435.60 |
| | | | | | | |
| | **G** | **Water Supply Lines** | | **Total Rs** | | **1990543.32** |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

NASHIK MUNICIPAL CORPORATION

# MESURMENT SHEET

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 1 | Providing Dl Pipes (push on joints pressure pipes of Dl of following class & Dia meters confirming to the lndian Standard Specification inclusive cost of jointing materials (Rubber Gasket of EPDM Quality) including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, Third Party lnspection charges of TPI agency approved by the MJP including transit insurance, Railway freight, unloading from railway wagon, loading in to the truck, transportation to departmental store / site of work, unloading, stacking etc. completed as directed by Engineer-in-Charge (lS:1536:2001 for pipes & lS:158:1969 & 15:12820:1989 or latest edition / revision with amendments for rubber gaskets). (lS:8329:2000 latest version) MJP DSR Page no 53 Sr No 3 | | | | | | | |
| | D.I. K – 7 | | | | | | | |
| | 100 mm Dia. | | 1 | 120 | | | 120.00 | Rmt |
| | 150 mm Dia. | | 1 | 140 | | | 140.00 | Rmt |
| | 200 mm Dia. | | 1 | 50 | | | 50.00 | Rmt |
| | 250 mm Dia. | | 1 | 30 | | | 30.00 | Rmt |
| | 300 mm Dia. | | 1 | 50 | | | 50.00 | Rmt |
| | 350 mm Dia. | | 1 | 30 | | | 30.00 | Rmt |
| | 400 mm Dia. | | 1 | 40 | | | 40.00 | Rmt |
| | 450 mm Dia. | | 1 | 10 | | | 10.00 | Rmt |
| | | | | | | | | |
| 2 | Providing and supplying ISI standard CI flanged / S& S specials including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, railway freight, insurance, unloading from railway wagon, loading into truck transport to departmental store /site, unloading stacking etc. complete. MJP DSR Page no 72 Sr No 6 (a) | | | | | | | |
| | SECTION-I(I) C.I./D.I. PIPES | | | | | | | |
| | D/F specials up to 300 mm | | 1 | 600 | | | 600 | kg |
| | Above 350 mm upto 600 mm dia. | | 1 | 500 | | | 500 | kg |
| | | | | | | | **1100.00** | **kg** |
| | | | | | | | | |
| 3 | Supply of C. I. Mechanical Compression Flanged / Socket Tail piece(Popularly known as I TM Flanged / Socket Tailpiece) suitable for making flanged connection with the plain barrel of C. I. Spun Pipes ( as per - IS - 1536 /2001) and D. I. Pipes ( as per IS: 8329 / 2000).The Tailpiec to be supplied complete with sealing rubber gasket of S.B.R,.C.I.. Follower Glands and M.S. Nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993. The rates are inclusive of cost of material, forwarding charges,including all statutary duties and taxes such as GST levied by Gol and GoM in all respect, loading, transportation and unloading at departemental store etc. complete as directed. Consignee but exclusive of octroi. MJP DSR Page No. 143 Sr.No. 1 | | | | | | | |
| | SECTION-I(XIII) MECHANICLA JOINTS/ FITTING (161) | | | | | | | |
| | 80 mm Dia. | | 4 | | | | 4 | No |
| | 100 mm Dia. | | 10 | | | | 10 | No |
| | 125 mm Dia. | | 10 | | | | 10 | No |
| | 150 mm Dia. | | 15 | | | | 15 | No |
| | 200 mm Dia. | | 5 | | | | 5 | No |
| | 250 mm Dia. | | 2 | | | | 2 | No |
| | 300 mm Dia. | | 4 | | | | 4 | No |
| | 350 mm Dia. | | 2 | | | | 2 | No |
| | 400mm Dia. | | 4 | | | | 4 | No |

NASHIK MUNICIPAL CORPORATION

# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | 450mm Dia. | | 2 | | | | 2 | No |
| | | | | | | | | |
| 4 | Supply of C.I. mechanical compression collar coupling suitable for C.I. spun pipes (as per IS-1536/2001) and complete with sealing rubber gasket of SBR, C.I., follower glands and M.S. nut bolts. The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538/1993) including all statutary duties and taxes such as GST levied by GoI and GoM in all respect,MJP DSR Page No. 143 Sr.No. 2 | | | | | | | |
| | SECTION-I(XIII) MECHANICLA JOINTS / FITTING (161) | | | | | | | |
| | 80 mm Dia. | | 7 | | | | 7.00 | No |
| | 100 mm Dia. | | 15 | | | | 15.00 | No |
| | 125 mm Dia. | | 4 | | | | 4.00 | No |
| | 150 mm Dia. | | 15 | | | | 15.00 | No |
| | 200 mm Dia. | | 10 | | | | 10.00 | No |
| | 250 mm Dia. | | 6 | | | | 6.00 | No |
| | 300 mm Dia. | | 10 | | | | 10.00 | No |
| | 350 mm Dia. | | 4 | | | | 4.00 | No |
| | 400 mm Dia. | | 6 | | | | 6.00 | No |
| | 450 mm Dia. | | 4 | | | | 4.00 | No |
| | | | | | | | | |
| 5 | Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete. MJP DSR Page No. 34 Sr No. 1 | | | | | | | |
| | SECTION-EXCAVATION (40) | | | | | | | |
| | | | 1 | 6 | 50 | | **300.00** | **Bhp/hr** |
| | | | | | | | | |
| 6 | Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra & Mahindra make) from inside and outsideincluding all statutory duties & taxes such as GST levied by GOI & GOM in all respect, inspection charges, transportation to stores / site, and stacking, etc. complete. MJP DSR Page no 72 Sr No 7 (d) | | | | | | | |
| | SECTION-I(I) C.I./D.I. PIPES (70) | | | | | | | |
| | | | | | | | | |
| | D/F of all diametors | | 6 | 50 | | | **300.00** | **kg** |
| | | | | | | | | |
| 7 | Providing and making flanged joints to flanged C.I./M.S. pipes of all classes/specials etc. including cost of all jointing materials (rubber packing, nut bolts, etc.), labour, hydraulic testing etc. complete. MJP DSR Page No. 56 Sr.No. 8 | | | | | | | |
| | SECTION-I(I)C.I./D.I.PIPES (71) | | | | | | | |
| | 80 mm Dia. | | 4 | | | | 4.00 | Joint |
| | 100 mm Dia. | | 10 | | | | 10.00 | Joint |
| | 150 mm Dia. | | 15 | | | | 15.00 | Joint |
| | 200 mm Dia. | | 5 | | | | 5.00 | Joint |
| | 250 mm Dia. | | 2 | | | | 2.00 | Joint |
| | 300 mm Dia. | | 4 | | | | 4.00 | Joint |
| | 450 mm Dia. | | 2 | | | | 2.00 | Joint |
| | 600 mm Dia. | | 4 | | | | 4.00 | Joint |
| | | | | | | | | |
| 8 | Providing and making Mechanical joints to flanged C.I./M.S. pipes of all classes/specials etc. including cost of , labour, hydraulic testing etc. complete. MJP DSR Page No. Sr.No. | | | | | | | |

NASHIK MUNICIPAL CORPORATION

# MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| | SECTION-I(I)C.I./D.I.PIPES (71) | | | | | | | |
| | 80 mm Dia. | | 15 | | | | 15.00 | Joint |
| | 100 mm Dia. | | 25 | | | | 25.00 | Joint |
| | 150 mm Dia. | | 30 | | | | 30.00 | Joint |
| | 200 mm Dia. | | 10 | | | | 10.00 | Joint |
| | 300 mm Dia. | | 15 | | | | 15.00 | Joint |
| | 450 mm Dia. | | 10 | | | | 10.00 | Joint |
| | 600 mm Dia. | | 6 | | | | 6.00 | Joint |
| | | | | | | | | |
| 9 | Cutting and champhering of pipes of following diameters including cost of all materials and labour involved, etc. complete as directed by Engineer-in-charge (for all class of pipes). MJP DSR Page No. 137 Sr.No. 20 | | | | | | | |
| | SECTION-I(XII) PIPES APPURTENANCES (156) | | | | | | | |
| | 80 mm Dia. | | 30 | | | | 30.00 | No. |
| | 100 mm Dia. | | 50 | | | | 50.00 | No. |
| | 150 mm Dia. | | 50 | | | | 50.00 | No. |
| | 200 mm Dia. | | 20 | | | | 20.00 | No. |
| | 300 mm Dia. | | 20 | | | | 20.00 | No. |
| | 450 mm Dia. | | 20 | | | | 20.00 | No. |
| | 600 mm Dia. | | 6 | | | | 6.00 | No. |
| | | | | | | | | |
| 10 | Lowering laying and jointing with SBR ruber gaskets C.I. S/S pipes of various classes with CI / MS specials of following diameter in proper position, grade and alignment as directed by Engineer-in-charge including conveyance of material from stores to site of work, including cost of jointing materials and rubber rings labour, etc. complete. MJP DSR Page No. 54 Sr.No. 2 | | | | | | | |
| | SECTION-I(I)C.I./D.I.PIPES (68) | | | | | | | |
| | 80mm | | 20 | | | | 20.00 | Rmt |
| | 100mm | | 80 | | | | 80.00 | Rmt |
| | 150mm | | 120 | | | | 120.00 | Rmt |
| | 200mm | | 50 | | | | 50.00 | Rmt |
| | 300mm | | 30 | | | | 30.00 | Rmt |
| | 450mm | | 20 | | | | 20.00 | Rmt |
| | 600mm | | 8 | | | | 8.00 | Rmt |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

12

NASHIK MUNICIPAL
CORPORATION

# AREA
# STATEMENT

CIVIL TECH INDIA PVT. LTD

NASHIK MUNICIPAL
CORPORATION

# TYPICAL CROSS SECTION

# (TCS)

CIVIL TECH INDIA PVT. LTD

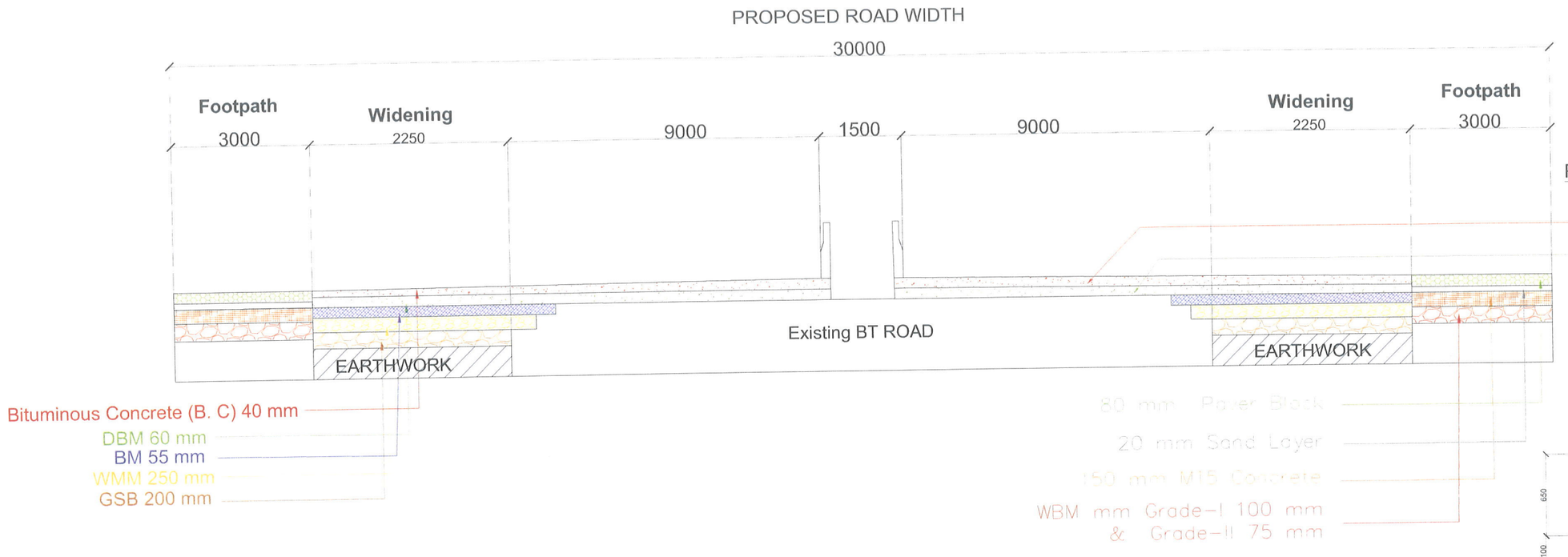
## Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

| | TCS-2 | 30 m | | | | | Existing | | | Proposed | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Sr.No. | Width as per DP | Length (m) | Road Name | Chainage | | Length | Existing Road BT | | | Proposed Ashphalt | | | Proposed Widening Width | | | Proposed. New Footpath | | | Divider | | Strom Water | No of Chowk |
| | | | | From | To | | RHS | LHS | Area | RHS | LHS | Area | RHS | LHS | Area | RHS | LHS | Area | Length | Width | Length | |
| 2 | 30m | 3293.00 | Jandardhan Swami Math to Laxminayarayan Temple Chowk | 0.00 | 900 | 900.00 | 7.5 | 7.5 | 13500 | 7.5 | 7.5 | 13500 | 0 | 0 | 0 | 7 | 7 | 12600 | 0 | 0 | | |
| | | | Laxminayarayan Temple Chowk to Laxminarayan Bridge | 900.00 | 1255 | 355.00 | 4.5 | 4.5 | 3195 | 4.5 | 4.5 | 3195 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | Lakshminaraya Bridge-maruti Vafers | 1255 | 1445 | 190 | 7.5 | 7.5 | 2850 | 7.5 | 7.5 | 2850 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 380 | 1 |
| | | | Maruti Vafers -Jayshankar Chowk | 1445 | 1865 | 420 | 10 | 10 | 8400 | 10 | 10 | 8400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 840 | 2 |
| | | | Jayshankar Chowk-Sonje Bridge | 1865 | 2510 | 645 | 7.5 | 7.5 | 9675 | 7.5 | 7.5 | 9675 | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0 | 0 | | |
| | | | Sonje Bridge-Dream city chowk | 2510 | 3293 | 783 | 10 | 10 | 15660 | 10 | 10 | 15660 | 0 | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | | 1 |
| | | | **Total** | | | **3293.00** | | | **53280** | | | **53280** | | | **0** | | | **12600** | **0** | | **1220** | **4** |
| | | | Add 0% for Fanning Area | 0% | | 0 | | | 0 | | | 0 | | | 0 | | | | | | | |
| | | | **Total Including Fanning Area** | | | **3293** | | | **53280** | | | **53280** | | | **0** | | | | | | | |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

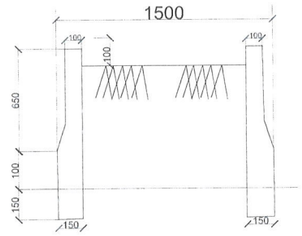
Executive Engineer
PWD East, NMC Nashik.




PROPOSED OVERLAY

B.C - 40 mm

DBM - 60 mm




ROAD MEDIAN CROSS SECTION

## WIDENING PORTION

1) BC - 40 mm
2) DBM - 60 mm
3) BM - 55 mm
4) WMM - 250 mm
5) GSB - 200 mm

## EXISTING PORTION

1) 40mm Bituminous Concrete (B. C)
2) 60mm DBM Layer
3) 50% BM as correction layer

NOTE :- ALL DIMENSIONS ARE IN MM

JE/AE-I/Sect. Engineer,
Public Work Division East
Nashik Muncipal Corpoation,Nashik

Divisional Engineer,
Public Work Division East
Nashik Muncipal Corporation,Nashik

Executive Engineer,
Public Work Division East
Nashik Muncipal Corporation,Nashik

# TCS 1 - For km 0/000 TO 0/620

| REMARK | NO | DATE | REMARK |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

CLIENT:

NASHIK MUNICIPAL CORPORATION
Office Address: Nashik Municipal Corporation
Rajiv Gandhi Bhavan, 3rd Floor, Nashik,
Sharanpur Road, Nashik 422005,Maharashtra

DPR CONSULTANT:

CIVILTECH INDIA PVT.LTD.

Plot No. B-45 , NICE Industrial Area, MIDC, Satpur
NASHIK - 422007
CALL - (0253)3508900,(0253)2575282
MOB - 8600134999

PREPARED BY: TUSHAR S. PAWAR

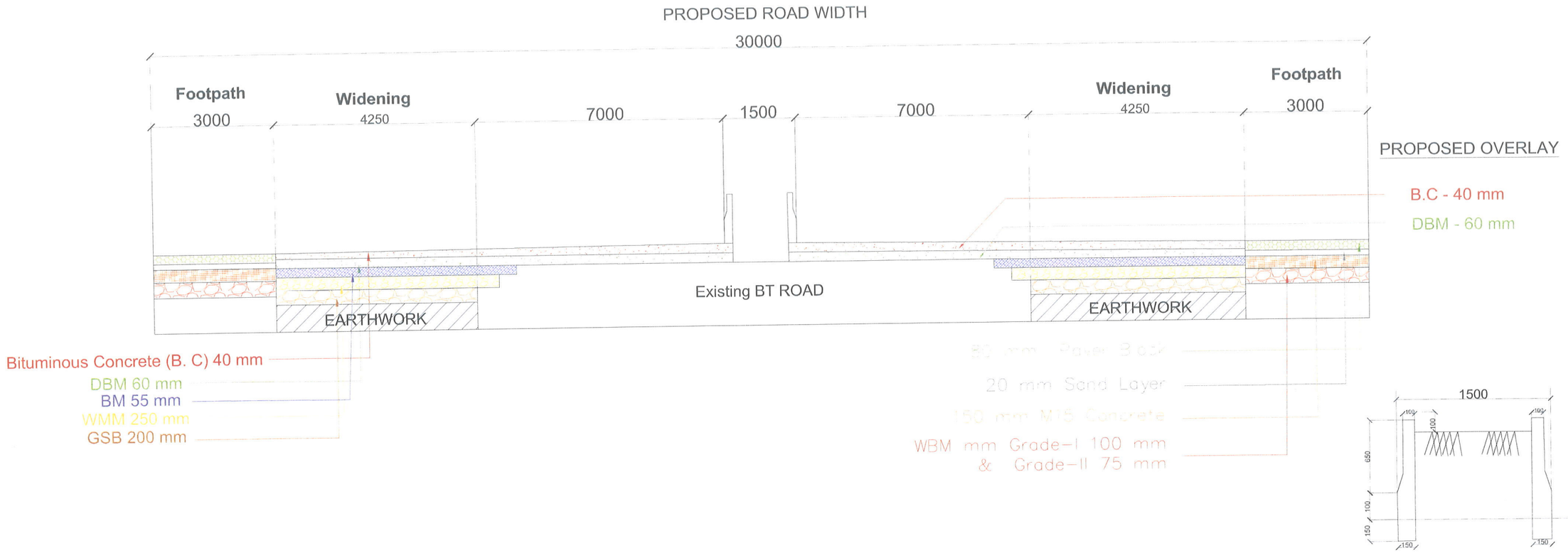
CHECKED BY: MADHUMATI HERAKAL

APPROVED BY:

PROJECT NAME: Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

TITLE: Lakshminaraya Bridge-Jayshankar Chowk
TYPICAL CROSS SECTION

REVISION: R0







ROAD MEDIAN CROSS SECTION

## WIDENING PORTION

1) BC - 40 mm
2) DBM - 60 mm
3) BM - 55 mm
4) WMM - 250 mm
5) GSB - 200 mm

## EXISTING PORTION

1) 40mm Bituminous Concrete (B. C)
2) 60mm DBM Layer
3) 50% BM as correction layer

JE/AE-I/Sect. Engineer,
Public Work Division East
Nashik Muncipal Corpoation,Nashik

Divisional Engineer,
Public Work Division East
Nashik Muncipal Corporation,Nashik

Executive Engineer,
Public Work Division East
Nashik Muncipal Corporation,Nashik

NOTE :- ALL DIMENSIONS ARE IN MM

# TCS 2 - For km 0/620 TO 1/215

| REMARK | NO | DATE | REMARK |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

CLIENT:

NASHIK MUNICIPAL CORPORATION
Office Address: Nashik Municipal Corporation
Rajiv Gandhi Bhavan, 3rd Floor, Nashik,
Sharanpur Road, Nashik 422005,Maharashtra

DPR CONSULTANT:

CIVILTECH INDIA PVT.LTD.
Plot No. B-45 , NICE Industrial Area, MIDC, Satpur
NASHIK - 422007
CALL - (0253)3508900,(0253)2575282
MOB - 8600134999

PREPARED BY: TUSHAR S. PAWAR

CHECKED BY: MADHUMATI HERAKAL

APPROVED BY:

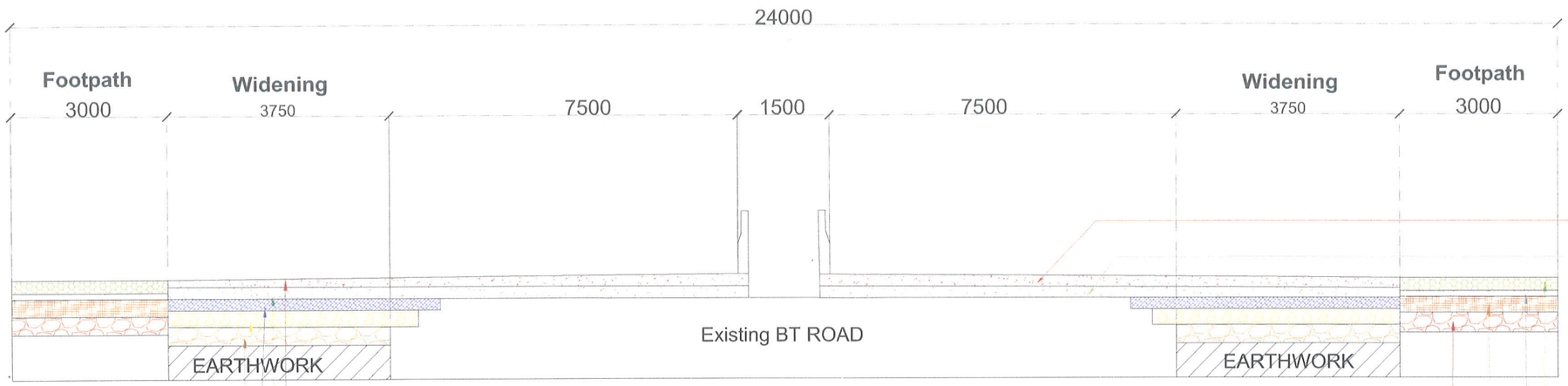
PROJECT NAME: Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

TITLE: Jayshankar Chowk-Sonje Bridge

TYPICAL CROSS SECTION

REVISION: R0

PROPOSED ROAD WIDTH




PROPOSED OVERLAY

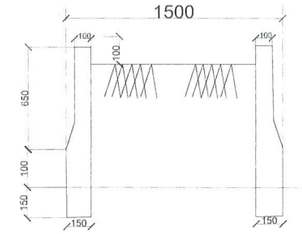
B.C - 40 mm

DBM - 60 mm

Bituminous Concrete (B. C) 40 mm
DBM 60 mm
BM 55 mm
WMM 250 mm

80 mm Paver Block
20 mm Sand Layer
150 mm M15 Concrete
WBM mm Grade-I 100 mm
& Grade-II 75 mm

GSB 200 mm




ROAD MEDIAN CROSS SECTION

## WIDENING PORTION

1) BC - 40 mm
2) DBM - 60 mm
3) BM - 55 mm
4) WMM - 250 mm
5) GSB - 200 mm

## EXISTING PORTION

1) 40mm Bituminous Concrete (B. C)
2) 60mm DBM Layer
3) 50% BM as correction layer

NOTE :- ALL DIMENSIONS ARE IN MM

**TCS 1 - For km 1/265 TO 2/038**

JE/AE-I/Sect. Engineer,
Public Work Division East
Nashik Muncipal Corpoation,Nashik

Divisional Engineer,
Public Work Division East
Nashik Muncipal Corporation,Nashik

Executive Engineer,
Public Work Division East
Nashik Muncipal Corporation,Nashik

| REMARK | NO | DATE | REMARK |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

CLIENT:

NASHIK MUNICIPAL CORPORATION
Office Address: Nashik Municipal Corporation
Rajiv Gandhi Bhavan, 3rd Floor, Nashik,
Sharanpur Road, Nashik 422005,Maharashtra

DPR CONSULTANT:

CIVILTECH INDIA PVT.LTD.
Plot No. B-45 , NICE Industrial Area, MIDC, Satpur
NASHIK - 422007
CALL - (0253)3508900,(0253)2575282
MOB - 8600134999

PREPARED BY: TUSHAR S. PAWAR

CHECKED BY: MADHUMATI HERAKAL

APPROVED BY:

PROJECT NAME: Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

TITLE: Sonje Bridge-Dream city chowk

TYPICAL CROSS SECTION

REVISION

R0

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# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 74 | 50.47 (SSR) | Supplying and adding Organosilane Nanotechnology Additive (such as Zycotherm or approved equivalent) to the bitumen binder at the Hot Mix Asphalt (HMA) plant at a dosage of 0.1% by weight of bitumen to achieve enhanced chemical bonding, complete aggregate coating, improved moisture resistance, and consistent compaction in various bituminous mixes such as Bituminous Macadam (BM), Dense Bituminous Macadam (DBM), Bituminous Concrete (BC) etc., including supply, transportation, storage, uniform blending with bitumen, testing, and all incidental operations complete in all respects as per manufacturer's specifications, relevant IRC and MORTH guidelines, and as directed and with prior approval by the Engineer-in-Charge. | 672.39 | 1470.00 | kg | 988414.62 |
| | **C** | **Road Work** | | **Total Rs** | | **107,918,539.79** |
| **D** | **Miscellaneous Items for Reparing Work** | | | | | |
| 75 | | Providing and fixing on walls/ ceiling/ floor mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete. | | | | |
| | 42.55 | 15 mm | 25.00 | 279.30 | Rmt | 6982.50 |
| | 42.57 | 25 mm | 25.00 | 393.80 | Rmt | 9845.00 |
| | 42.58 | 32 mm | 10.00 | 452.60 | Rmt | 4526.00 |
| | 42.59 | 40 mm | 10.00 | 566.00 | Rmt | 5660.00 |
| | 42.60 | 50mm | 10.00 | 778.00 | Rmt | 7780.00 |
| 76 | 42.72 | Providing and making ISI Mark ferrule connection of 15 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete. | 20.00 | 1310.40 | No | 26208.00 |
| 77 | 42.77 | Providing and making ISI Mark ferrule connection of 50mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete | 20.00 | 9391.20 | No | 187824.00 |
| 78 | | Providing , laying and fixing ,jointing Eco- drain mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete. | | | | |
| | 43.30 | 110mm | 25.00 | 343.40 | Rmt | 8585.00 |
| | 43.31 | 160mm | 25.00 | 533.40 | Rmt | 13335.00 |
| 79 | 27.12 | Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. Complete | 10.00 | 7917.10 | Cum | 79171.00 |
| 80 | 28.09 | Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external walls of plinth including bailing out water manually . striking joints inside and raking out joints from outside and watering etc.complete | 5.00 | 13152.80 | Cum | 65764.00 |
| 81 | 28.01 | Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually . striking joints on un exposed faces and watering etc.complete. | 5.00 | 6140.90 | Cum | 30704.50 |

CIVIL TECH INDIA PVT. LTD.

# Nashik Municipal Corporation, Nashik.

**Public Works Department**

*Face sheet*

**Name of Work:- Proposed Developing of 30 m DP Road from Janaradhan Swami Math To Lakshminarayan Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.**

| Sr. No. | Component | Particulars | Length in m | Area in Sq.m | Amount | Rate | Unit |
|---|---|---|---|---|---|---|---|
| 1 | A | Dismantling | | | 1,134,644.09 | | |
| 2 | B | Strom Water / Service line / Utility Duct | | | 8,049,933.83 | | |
| 3 | C | Road Work (Construction of Bituminious or Concrete Road Items) | | | 107,918,539.79 | | |
| 4 | D | Miscellaneous Items for Reparing Work | | | 1,420,334.68 | | |
| 5 | E | Road Furniture | | | 3,758,613.94 | | |
| 6 | F | Providing Public Utilities | | | 257,084.10 | | |
| 7 | G | Add Water Supply | | | 1990543.32 | | |
| | | **Civil Work- Total** | **3293** | **53280** | **124,529,693.74** | **2,337.27** | **Sq.m** |
| | | 18 % GST | 18% | | 22,415,344.87 | | |
| | | **Total Cost with GST** | | **53280** | **146,945,038.62** | **2,757.98** | **Sq.m** |
| | | Royalty | | | 1,158,278.68 | | |
| | | Quality Control Testing Charges | | | 1,882,620.00 | | |
| | | **Total Civil Cost** | | **53280** | **149,985,937** | **2,815.05** | **Sq.m** |
| | | **Amount in Cr.** | | | **15.00** | | |

DPR Consultant

Authorized Signatory
CivilTech India Pvt. Ltd

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 43 | 2.28 | Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete ( Material obtained from Other sources) | 5.00 | 1263.40 | Cum | 6317.00 |
| 44 | 2.29 | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | 2868.90 | 925.10 | Cum | 2654019.39 |
| 45 | 2.3 | Spreading hard murum for side width etc. complete | 2868.90 | 83.00 | Cum | 238118.70 |
| 46 | 2.31 | Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete. | 8519.00 | 22.10 | Sqm | 188269.90 |
| 47 | 3.01 | Construction of granular subbase by providing close graded Material,mixing in a mechanical mixplant at OMC,carriage of mixed Material to work site, spreading in uniform layers with motor grader/Paver on prepared surface and compacting with vibratory roller to achieve the desired density,complete as per clause 401 -- Plant Mix Method and Grading - I Material | 920.00 | 2740.50 | Cum | 2521260.00 |
| 48 | 3.18 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading I (Using Screening Type A (13.2) mm Aggregate) | 100.00 | 3059.60 | Cum | 305960.00 |
| 49 | 3.2 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Intelligent Compactor with compaction analyzer and V-Sat attachment. to the required density. Grading II (Using Screening Type B (11.2 mm) Aggregate) | 25.00 | 3005.60 | Cum | 75140.00 |
| 50 | 3.23 | Wet Mix Macadam -- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver. | 845.00 | 2765.50 | Cum | 2336847.50 |
| 51 | 14.58 | Providing and laying in PCCM 15 grade leveling course below approach slab complete with fully automatic micro process or PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (panmixer) as per drawing sand Technical specifications etc.complete with fine agreegates of required specifications ( VSI sand finely washed | 945.00 | 6924.80 | Cum | 6543936.00 |
| 52 | 5.13 | Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate ( natural sand/ VSI grade finely washed crushed sand) conforming to IS: 383. the size of coarse aggregate not exceeding 25 mm. . cement content not to be less than 150 kg/ cum. optimum moisture content to be determined during trial length construction. concrete strength not to be less than 10 Mpa at 7 days. mixed in a batching plant/ Weigh batch mixer. transported to site with all leads and lifts. laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge . compacting with vibratory roller. finishing. curing and including preparation of sub-grade surface if required etc. complete. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. | 1.00 | 4492.00 | Cum | 4492.00 |

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 42 | Providing Earth work in embankment with approved material ob-tained from Govt. land with 50 m lead, by using laying in lay-ers, breaking clods, dressing to required lines curves grade, and section watering and compaction complete. (a) 95% proctor densi-ty. Spec.No. : M.O.S.T. 1995 Cl.No.305 | | | | | | | |
| | | | | | | | 5.00 | |
| | | | | | | | **5.00** | **Cum** |
| 43 | Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete ( Material obtained from Other sources) | | | | | | | |
| | For longittudnal correction | | | | | | 5.00 | |
| | | | | | **Total Qty** | | **5.00** | **Cum** |
| 44 | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | | | | | | | |
| | Storm Water For Casing | | 1 | 1220 | 1.0 | 0.30 | 366.00 | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | | 1 | 290.00 | 7.00 | 0.600 | 1218.00 | |
| | Maruti Vafers-Dream City Chowk CH1255-3293 deduction Nandini River Bridge Lenghth For Roadside Berms | | 2 | 1983.00 | 1.50 | 0.100 | 594.90 | |
| | For Tree Cutting Portion Repairing | | 20 | 4.00 | 5.00 | 0.300 | 120.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | 0.600 | 570.00 | |
| | | | | | | | **2868.90** | **Cum** |
| 45 | Spreading hard murum for side width etc. complete | | | | | | | |
| | | | | Qty as per Item No. 42 | | | **2868.90** | **Cum** |
| 46 | Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete. | | | | | | | |
| | Storm Water For Casing | | 1 | 1220.00 | 1.0 | | 1220.00 | |
| | For Road Side Berms Maruti Vafers-Dream City Chowk CH1255-3293 deduction Nandini River Bridge Lenghth For Roadside Berms | | 2 | 1983.00 | 1.50 | | 5949.00 | |
| | For Tree Cutting Portion Repairing | | 20 | 4.00 | 5.00 | | 400.00 | |
| | For EX Road Damaged Portion Between Jayshankar Chowk To Sonje Bridge | | 2 | 95.00 | 5.00 | | 950.00 | |
| | | | | | | | **8519.00** | **Sqm** |
| 47 | Construction of granular subbase by providing close graded Material,mixing in a mechanical mixplant at OMC,carriage of mixed Material to work site, spreading in uniform layers with motor grader/Paver on prepared surface and compacting with vibratory roller to achieve the desired density,complete as per clause 401 -- Plant Mix Method and Grading - I Material | | | | | | | |
| | | | | | | avg | | |
| | Maruti Vafers -Jayshankar Chowk Between CH 1445-1865 | 1 | 1 | 290.00 | 7.00 | 0.200 | 406.00 | |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 100 | 14.15 | Providing and laying in situ/ ready mix M-25 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work ins olid/ deckslabetc. including ramming, vibrating, curing, formwork, centering and finishing incement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine agreegates of required specifications (VSI sand finely washed etc)<br>i)Height up to 5 m, normal rate.<br>ii)Height 5 to 7.50 m, add 5percent extra over basic rate.<br>iii) Height 7.50 to 10 m, 7.50 percent extra.<br>iv)Over 10m Height, add 10 percent extra for every 2.50m rise | 5.00 | 12189.90 | cum | 60949.50 |
| 101 | 38.24 | Removing and resetting Mangalore tiles from roof including refixing loose battens etc. complete | 12600.00 | 100.80 | sqm | 1270080.00 |
| | **D** | **Miscellaneous Items for Reparing Work** | | **Total Rs** | | **1420334.68** |
| | | | | | | |
| **E** | **Road Furniture** | | | | | |
| 102 | 6.12 | Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete. | 2404.10 | 699.30 | Sqm | 1681187.13 |
| 103 | 6.09 | Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer. | 4482.00 | 384.30 | No | 1722432.60 |

# NASHIK MUNICIPAL CORPORATION
## ABSTRACT SHEET

CIVIL TECH

| No. | SSR No. | Description | Qty | Rate | Per | Amount |
|---|---|---|---|---|---|---|
| 112 | 6.35 | Providing and erecting Overhead signs made out of __aluminum sheet bonded with white retro reflective sheeting of Class ___( Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflctive symbols, letters, numerals, arrow as per IRC:67-2012, with designed back support frame of mild steel angle with vertical and lateral clearance given in clause 801 and 802, duly painted on back side with two coats of grey stove enamel paint and installed as per clause 802.6 over a designed support system of structural steel work trestles and trusses of sections and type as per structural design requirements and approved plans including painting with one coat of epoxy primer and two coats of epoxy finish paint.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B ( Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in | | | | |
| | d | 4mm aluminum composite material Class C | 1.62 | 10839.10 | Sqm | 17559.34 |
| | **E** | **Road Furniture** | | **Total Rs** | | **3758613.94** |
| | | | | | | |
| **F** | **Providing Public Utilities** | | | | | |
| 113 | 51.44 | Public Seating Chair. - 3 Seater<br>Providing and Fixing 3 seater Public seating chair made of complete metal with Legs in Crome finish and seates in silver powder coating finish. | 2.00 | 18958.80 | No | 37917.60 |
| 114 | 49.28 | Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S 304) | 10.00 | 21916.65 | No | 219166.50 |
| | **F** | **Providing Public Utilities** | | **Total Rs** | | **257084.10** |
| | G | **Water Supply** | | | | **1990543.32** |
| | | | | | | |
| | | **Total Rs** | | **A+B+C+D+E+G** | | **124,529,693.74** |
| | | | | | | |
| | | | Add GST | 18% | Rs | 22,415,344.87 |
| | | | | | | |
| | | **Total Rs With GST Road work** | | | | **146,945,038.62** |
| 113 | | Royalty charges for murum dubber should be paid by the contractor regularly to the government and contractor should produce delivery challon, payment receipt, pakka bill etc. complete alongwith every R.A. bill \ final bill as applicable.(It is entirely responsibility of contractor to pay Royalty charges to the Government) | | | | |
| | A | for murum / Rubble / | 5357.03 | 216.18 | Cum | 1158081.66 |
| | B | for sand | 0.83 | 237.37 | Cum | 197.02 |
| | | | | **Total Rs** | | **1158278.68** |
| | | | | **Total Rs** | | |
| | | | | | | |
| | | **Total Rs. With GST and Royalty** | | | **Rs** | **148,103,317.30** |
| | | | | **Say Rs** | | **148103318.00** |

JE/AE-I/Sect. Engineer
PWD East. NMC Nashik.

Deputy Engineer
PWD East. NMC Nashik.

Executive Engineer
PWD East. NMC Nashik.

# NASHIK MUNICIPAL CORPORATION
## MESURMENT SHEET

| Sr. | Item | | No. | Length | Breadth | Depth | Quantity | Total |
|---|---|---|---|---|---|---|---|---|
| 113 | Public Seating Chair. - 3 Seater<br>Providing and Fixing 3 seater Public seating chair made of complete metal with Legs in Crome finish and seates in silver powder coating finish. | | | | | | | |
| | For Roads | 2 | | | | | 2.00 | |
| | | | | | | | **2.00** | **No** |
| | | | | | | | | |
| 114 | Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304) | | | | | | | |
| | Four Chowks | 1 | | 10.00 | | | 10.00 | |
| | | | | | | | **10.00** | **No** |
| | | | | | | | | |
| 113 | Royalty charges for murum dubber should be paid by the contractor regularly to the government and contractor should produce delivery challon, payment receipt, pakka bill etc. complete alongwith every R.A. bill \ final bill as applicable.(It is entirely responsibility of contractor to pay Royalty charges to the Government) | | | | | | | |

| I. No. | Item | | | Qty | | Constant | Total Qty | |
|---|---|---|---|---|---|---|---|---|
| a | for murum / Rubble / | | Item no.80 | 5.00 | | 1.160 | 5.80 | |
| b | Earth work Embankment | | Item no. 42, 43 | 10.00 | | 1.250 | 12.50 | |
| c | Supplying hard murum/ kankar at the road site, including conveying and stacking complete. Sp. No. Rd. 23 P.No. 202 | | Item 44, 17 | 5332.48 | | 1.000 | 5332.48 | |
| d | for Rubble | | Item no.95 | 5.00 | | 1.250 | 6.25 | |
| | | | | | | | **5357.03** | **Cum** |
| | | | | | | | | |
| e | for Sand | | Sr. No.83 | 20.00 | | 0.025 | 0.50 | |
| | for Sand | | Sr. No.84 | 10.00 | | 0.033 | 0.33 | |
| | | | | | | | **0.83** | **Cum** |

JE/AE-I/Sect. Engineer
PWD East, NMC Nashik.

Deputy Engineer
PWD East, NMC Nashik.

Executive Engineer
PWD East, NMC Nashik.

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CIVIL TECH INDIA PVT. LTD

# DESIGN OF WHITETOPPING AS PER IRC SP 76-2015

**Proposed Developing of 24 m DP Road from Dwarka Circle-Sarda Circle-Gadkari Chowk Signal, NMC, Nashik Ch. 0+000 To 1+519**

| White Topping - 175 MM |
| --- |
| DBM - 75MM |
| EXT. CRUST |

## Design Parameters

| | | | |
|---|---|---|---|
| 1 | Design Life (Years) | = | 20 |
| 2 | Traffic Growth Rate,r | = | 0.05 |
| 3 | Commercial Traffic (cvpd) | = | 760 |
| 4 | Grade of Concrete | = | M40 |
| 5 | Cumulative Repetitions in 20 Years | = | 760x365[(1+0.05)^20-1]/0.05<br>9172495.668 |
| 6 | Design Traffic (CVPD) | = | 25% of cumulative repetitions<br>**2293123.917** |
| 7 | CBR % | = | 13 |
| 8 | Corresponding k value (kg/cm$^3$) | = | 6.03 |
| 9 | k Value of existing BT surface (kg/cm$^3$) | = | 12.42 |
| 10 | A minimum value of modified modulus of subgrade reaction (kg/cm$^3$) | = | 12.42 |
| 11 | Radius of Relative Stiffness, $l_e$ (cm) | = | 63.51 |
| 12 | Size of Panel (m) | = | 1x1 |

1.1 Percentage of different Axle Loads assumed are given in Table 1

Table 1: Percentage of Axle Load for the Design of TWT

| Single Axle Loads | | Tandom Axle Loads | |
|---|---|---|---|
| Axle Load Class, Tons | % of Axle Loads | Axle Load Class, Tons | % of Axle Loads |
| 15-17 | 0 | 26-30 | 0 |
| 13-15 | 0 | 22-26 | 0 |
| 11-13 | 0.2 | 18-22 | 0.13 |
| 9-11 | 1.35 | 14-18 | 0.15 |
| 7-9 | 1.68 | Less Than 14 | 18.2 |
| Less than 8 | 78.29 | | |
| | 81.52 | | 18.48 |

| | |
|---|---|
| Trial Thickness (cm) | 17.5 |
| Subgrade Modulus ($kg/cm^3$) | 12.42 |
| Design period (Years) | 20 |
| Modulus of Rupture ($kg/cm^3$) | 45 |
| Load Safety Factor | 1 |

1.2 Expected Repetition are given in Table 2

Table 2: Expected Repetition for Axle Loads

| Single Axle Loads | | Tandom Axle Loads | |
|---|---|---|---|
| Axle Load in Tonnes | Expected Repetitions | Axle Load in Tonnes | Expected Repetitions |
| 16 | 0 | 28 | 0 |
| 14 | 0 | 24 | 0 |
| 12 | 4586 | 20 | 2981 |
| 10 | 30957 | 16 | 3440 |
| 8 | 38524 | Less than 16 | 417349 |
| Less than 8 | 1795287 | | 423769 |
| | 1869355 | | |

1.3 Analysis of Fatigue Life Consumption

| Axle Loads, Tonnes | Load Stress, $kg/cm^2$ | Stress Ratio | Expected Repetition | Fatigue Life, N | Fatigue Life Consumed |
|---|---|---|---|---|---|
| 16 | 17.89 | 0.40 | 0 | infinite | 0.00 |
| 14 | 15.65 | 0.35 | 0 | infinite | 0.00 |
| 12 | 13.42 | 0.30 | 4586 | infinite | 0.00 |
| 10 | 11.18 | 0.25 | 30957 | infinite | 0.00 |
| 8 | 8.94 | 0.20 | 38524 | infinite | 0.00 |
| Less than 8 | | | 1795287 | infinite | 0.00 |
| | | | | Total | 0.00 |

| Axle Loads, Tonnes | Load Stress, $kg/cm^2$ | Stress Ratio | Expected Repetition | Fatigue Life, N | Fatigue Life Consumed |
|---|---|---|---|---|---|
| 28 | 19.09 | 0.42 | 0 | infinite | 0.00 |
| 24 | 16.36 | 0.36 | 0 | infinite | 0.00 |
| 20 | 13.64 | 0.30 | 2981 | infinite | 0.00 |
| 16 | 10.91 | 0.24 | 3440 | infinite | 0.00 |
| Less than 16 | | | 417349 | infinite | 0.00 |
| | | | | Total | 0.00 |

The cumulative life consumed both by single and tandem axle is 0 which is less than 1

### 1.4 Temperature Curling Stresses

$\sigma_T = 1.933\text{-}241000(\alpha\,\Delta T) + 1.267(L/l_e)$

$\Delta T$ = - 0.15°C/cm x Thickness of white topping overlay

$\Delta T$ = -2.625 °C

$\alpha$ = $10 \times 10^{-6}$

L = Length of square slab=100 cm

le = Radius of relative stiffness=63.51cm

Thus,

$\sigma_T$ = $1.933\text{-}241000[10x10^{-6}(-2.625)]+1.267(100/63.51)$

= 10.25 $kg/cm^2$

Total flexural stresses due to load and curling= Maximum load stresses+curling stresses

= 19.09+10.25

= 29.34 $kg/cm^2$

This is less than the minimum flexural strength of 45 $kg/cm^2$

Hence, White topping thickness of 17.5 cm is safe.

CIVIL TECH INDIA PVT. LTD

# DESIGN OF WHITETOPPING AS PER IRC SP 76-2015

**Proposed Developing of 24 m DP Road from Sarda Circle-Ganjmal Signal, NMC, Nashik. Ch. 0+000 To 0+835**

| White Topping - 175 MM |
| --- |
| DBM - 75MM |
| EXT. CRUST |

## Design Parameters

| | | | |
|---|---|---|---|
| 1 | Design Life (Years) | = | 20 |
| 2 | Traffic Growth Rate,r | = | 0.05 |
| 3 | Commercial Traffic (cvpd) | = | 760 |
| 4 | Grade of Concrete | = | M40 |
| 5 | Cumulative Repetitions in 20 Years | = | 760x365[(1+0.05)^20-1]/0.05 |
| | | | 9172495.668 |
| 6 | Design Traffic (CVPD) | = | 25% of cumulative repetitions |
| | | | **2293123.917** |
| 7 | CBR % | = | 14.86 |
| 8 | Corresponding k value ($kg/cm^3$) | = | 6.29 |
| 9 | k Value of existing BT surface ($kg/cm^3$) | = | 12.73 |
| 10 | A minimum value of modified modulus of subgrade reaction ($kg/cm^3$) | = | 12.73 |
| 11 | Radius of Relative Stiffness, $l_e$ (cm) | = | 63.90 |
| 12 | Size of Panel (m) | = | 1x1 |

1.1 Percentage of different Axle Loads assumed are given in Table 1

Table 1: Percentage of Axle Load for the Design of TWT

| Single Axle Loads | | Tandom Axle Loads | |
|---|---|---|---|
| Axle Load Class, Tons | % of Axle Loads | Axle Load Class, Tons | % of Axle Loads |
| 15-17 | 0 | 26-30 | 0 |
| 13-15 | 0 | 22-26 | 0 |
| 11-13 | 0.25 | 18-22 | 0.14 |
| 9-11 | 1.25 | 14-18 | 0.16 |
| 7-9 | 1.73 | Less Than 14 | 18.18 |
| Less than 8 | 78.29 | | |
| | 81.52 | | 18.48 |

| | |
|---|---|
| Trial Thickness (cm) | 17.5 |
| Subgrade Modulus ($kg/cm^3$) | 12.73 |
| Design period (Years) | 20 |
| Modulus of Rupture ($kg/cm^3$) | 45 |
| Load Safety Factor | 1 |

1.2 Expected Repetition are given in Table 2

Table 2: Expected Repetition for Axle Loads

| Single Axle Loads | | Tandom Axle Loads | |
|---|---|---|---|
| Axle Load in Tonnes | Expected Repetitions | Axle Load in Tonnes | Expected Repetitions |
| 16 | 0 | 28 | 0 |
| 14 | 0 | 24 | 0 |
| 12 | 5733 | 20 | 3210 |
| 10 | 28664 | 16 | 3669 |
| 8 | 39671 | Less than 16 | 416890 |
| Less than 8 | 1795287 | | 423769 |
| | 1869355 | | |

1.3 Analysis of Fatigue Life Consumption

| Axle Loads, Tonnes | Load Stress, $kg/cm^2$ | Stress Ratio | Expected Repetition | Fatigue Life, N | Fatigue Life Consumed |
|---|---|---|---|---|---|
| 16 | 17.47 | 0.39 | 0 | infinite | 0.00 |
| 14 | 15.29 | 0.34 | 0 | infinite | 0.00 |
| 12 | 13.10 | 0.29 | 5733 | infinite | 0.00 |
| 10 | 10.92 | 0.24 | 28664 | infinite | 0.00 |
| 8 | 8.74 | 0.19 | 39671 | infinite | 0.00 |
| Less than 8 | | | 1795287 | infinite | 0.00 |
| | | | | Total | 0.00 |

| Axle Loads, Tonnes | Load Stress, $kg/cm^2$ | Stress Ratio | Expected Repetition | Fatigue Life, N | Fatigue Life Consumed |
|---|---|---|---|---|---|
| 28 | 18.59 | 0.41 | 0 | infinite | 0.00 |
| 24 | 15.94 | 0.35 | 0 | infinite | 0.00 |
| 20 | 13.28 | 0.30 | 3210 | infinite | 0.00 |
| 16 | 10.62 | 0.24 | 3669 | infinite | 0.00 |
| Less than 16 | | | 416890 | infinite | 0.00 |
| | | | | Total | 0.00 |

The cumulative life consumed both by single and tandem axle is 0 which is less than 1

### 1.4 Temperature Curling Stresses

$\sigma_T = 1.933\text{-}241000(\alpha\,\Delta T) + 1.267(L/l_e)$

$\Delta T$ = - 0.15°C/cm x Thickness of white topping overlay

$\Delta T$ = -2.625 °C

$\alpha$ = $10 \times 10^{-6}$

L = Length of square slab=100 cm

le = Radius of relative stiffness=63.90cm

Thus,

$\sigma_T$ = $1.933\text{-}241000[10x10^{-6}(-2.625)]+1.267(100/63.90)$

= 10.24 $kg/cm^2$

Total flexural stresses due to load and curling= Maximum load stresses+curling stresses

= 18.59+10.24

= 28.83 $kg/cm^2$

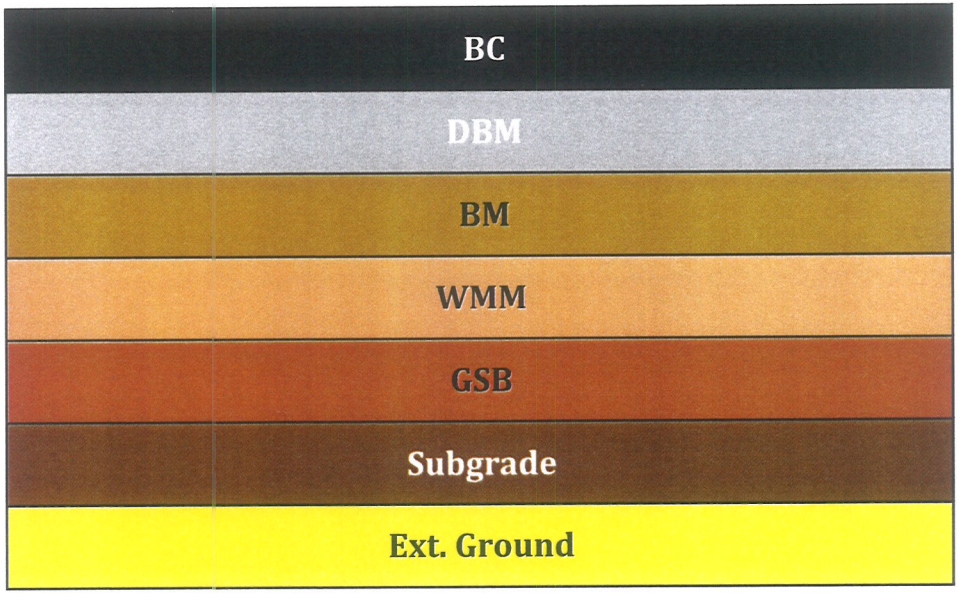
This is less than the minimum flexural strength of 45 $kg/cm^2$

Hence, White topping thickness of 17.5 cm is safe.

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR NEW SECTION

Etc Center- Chan Hotel NH-3 Ch. 4+707 To 4+907

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

**Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 | mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 | mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 3.8 | | |
| 4 | CBR of borrow material (%) | = | 10.5 | | |
| 5 | Elastic modulus of embankment soil | = | 38.00 | Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 79.26 | Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 79.26 MPa and the semi-infinite embankment soil of modulus 38 MPa | | | | |
| | Consider | | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | | |
| 9 | Single wheel load | = | 40000 | N | |
| 10 | Contact pressure (p) | = | 0.56 | Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 | mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.22 | .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.22 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.82 | Mpa | |
| 14 | Effective CBR | = | 8.04 | % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 8.04 % for 66.82 MPa. | | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

- Design Input

| | | | |
|---|---|---|---|
| For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |

- Cumulative Number of standard axles to be catered for in the design, N (msa) = 40 ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018
- Effective CBR of subgrade (%) = 8.00
- Grade of Bitumen = VG40

**Calculation**

- **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** = **66.60** .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018
- Select trial section

| | | | |
|---|---|---|---|
| BC (mm) | = | 40 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| DBM (mm) | = | 60 | |
| BM (mm) | = | 55 | |
| WMM (mm) | = | 250 | |
| GSB (mm) | = | 200 | |
| Total granular thk. (mm) | = | 450 | |

- **Resilient modulus of the granular layer (Mpa), 0.2(h)^0.45*$M_{RSUPPORT}$** = **208.19** .....Refer Eq. 7.1 As per IRC 37:2018
- Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa)

= 0.000390 .....Refer Eq. 3.2 As per IRC 37:2018

- **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

m= 0.37
c= 2.35

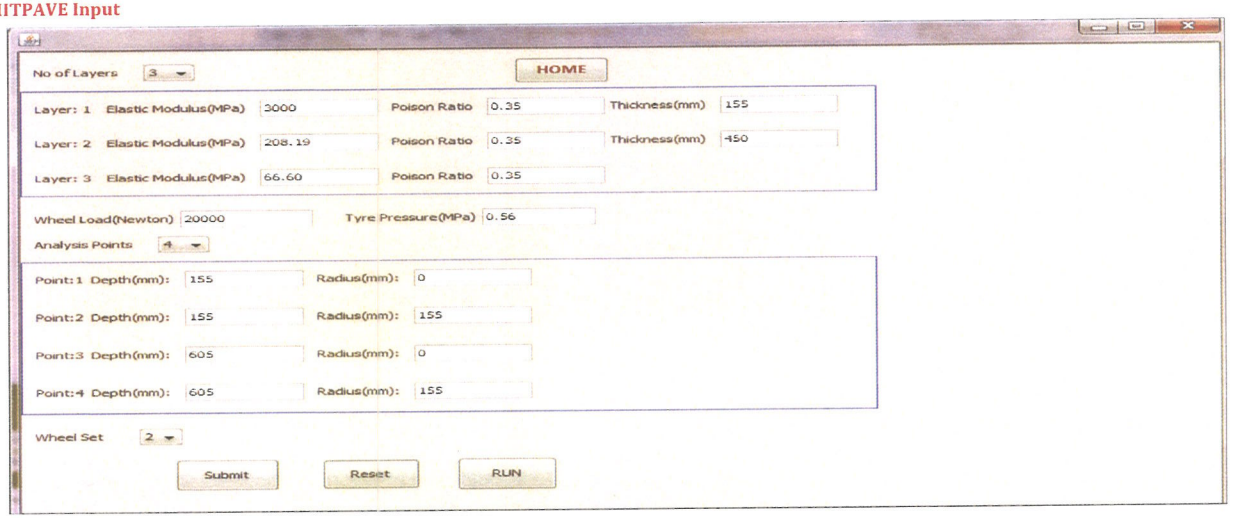
$\varepsilon t$ = 0.000189 .....Refer Eq. 3.4 As per IRC 37:2018

- Analyse the pavement using IITPAVE with the following inputs

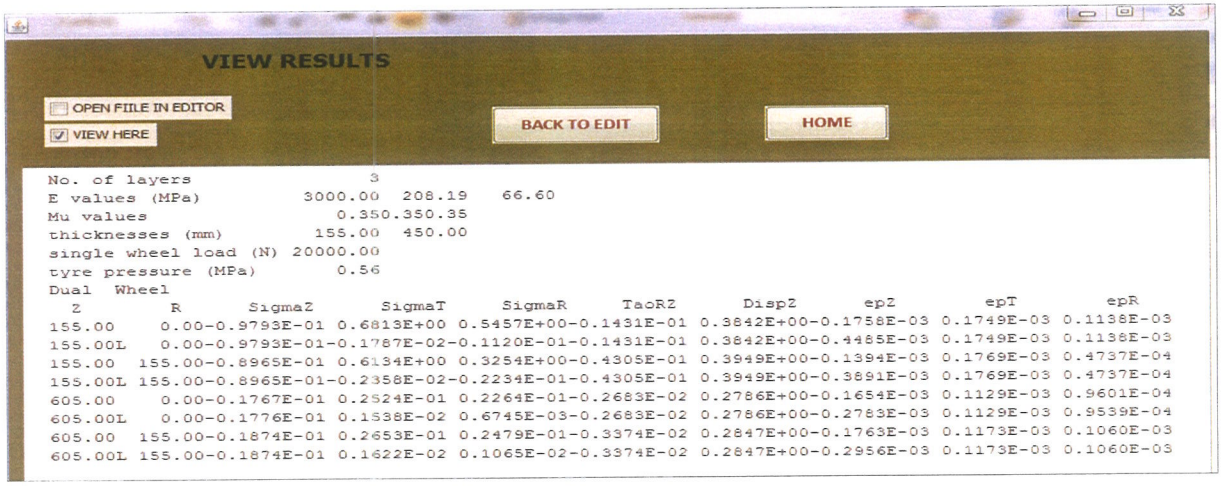
elastic moduli for
BT = 3000
Granular = 208.19
Subgrade = 66.60
Poissons ratio value for all three layers = 0.35
Layer Thicknesses
Crust = 155
Granular = 450

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & $\varepsilon t$) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & $\varepsilon V$) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**




```
No. of layers                3
E values (MPa)          3000.00  208.19   66.60
Mu values                  0.350.350.35
thicknesses (mm)         155.00  450.00
single wheel load (N) 20000.00
tyre pressure (MPa)        0.56
Dual  Wheel
   Z         R       SigmaZ       SigmaT      SigmaR      TaoRZ       DispZ       epZ         epT         epR
155.00     0.00-0.9793E-01 0.6813E+00 0.5457E+00-0.1431E-01 0.3842E+00-0.1758E-03 0.1749E-03 0.1138E-03
155.00L    0.00-0.9793E-01-0.1787E-02-0.1120E-01-0.1431E-01 0.3842E+00-0.4485E-03 0.1749E-03 0.1138E-03
155.00   155.00-0.8965E-01 0.6134E+00 0.3254E+00-0.4305E-01 0.3949E+00-0.1394E-03 0.1769E-03 0.4737E-04
155.00L  155.00-0.8965E-01-0.2358E-02-0.2234E-01-0.4305E-01 0.3949E+00-0.3891E-03 0.1769E-03 0.4737E-04
605.00     0.00-0.1767E-01 0.2524E-01 0.2264E-01-0.2683E-02 0.2786E+00-0.1654E-03 0.1129E-03 0.9601E-04
605.00L    0.00-0.1776E-01 0.1538E-02 0.6745E-03-0.2683E-02 0.2786E+00-0.2783E-03 0.1129E-03 0.9539E-04
605.00   155.00-0.1874E-01 0.2653E-01 0.2479E-01-0.3374E-02 0.2847E+00-0.1763E-03 0.1173E-03 0.1060E-03
605.00L  155.00-0.1874E-01 0.1622E-02 0.1065E-02-0.3374E-02 0.2847E+00-0.2956E-03 0.1173E-03 0.1060E-03
```

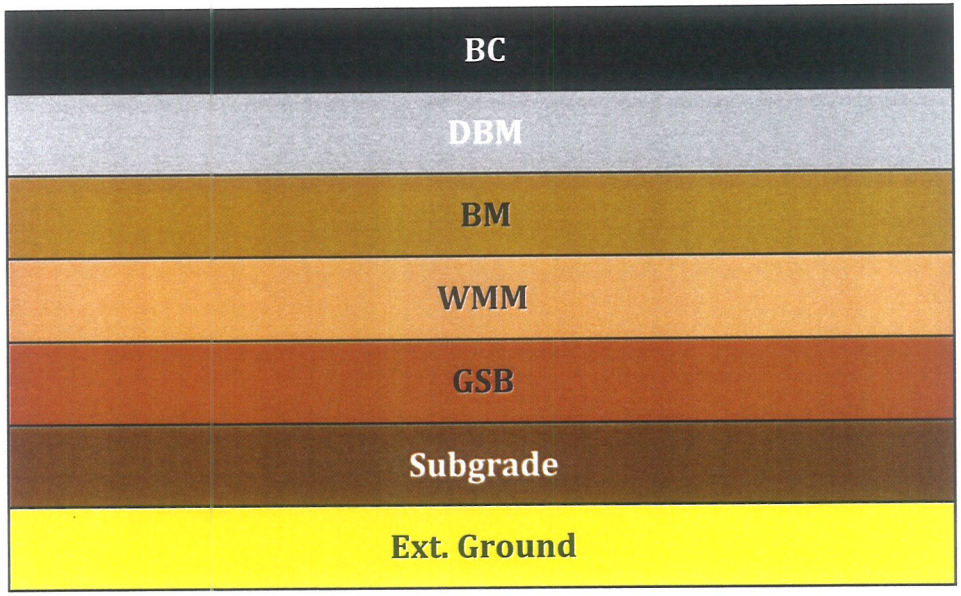
## Pavement Composition as per Design

| | | |
|---|---|---|
| Thickness of BC | 40 | mm |
| Thickness of DBM | 60 | mm |
| Thickness of BM | 55 | mm |
| Thickness of WMM | 250 | mm |
| Thickness of GSB | 200 | mm |
| Thickness of Subgrade (CBR=10.5%) | 500 | mm |
| Ext. Ground | | |

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR WIDENING SECTION

1. Sangam Bridge-Kathe Chouk Ch. 0+000 To 0+610
2. Ashoka marg Vadala road-shiwaji wadi Junction Ch. 3+668 To 3+956
3. Shiwaji wadi Junction-Etc Center Ch. 3+956 To 4+707

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

**Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)**

| | | | | |
|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 3.8 | |
| 4 | CBR of borrow material (%) | = | 10.5 | |
| 5 | Elastic modulus of embankment soil | = | 38.00 Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 79.26 Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 79.26 MPa and the semi-infinite embankment soil of modulus 38 MPa | | | |
| | Consider | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | |
| 9 | Single wheel load | = | 40000 N | |
| 10 | Contact pressure (p) | = | 0.56 Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.22 .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.22 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.82 Mpa | |
| 14 | Effective CBR | = | 8.04 % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 8.04 % for 66.82 MPa. | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

- Design Input

| | | | |
|---|---|---|---|
| For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |

- Cumulative Number of standard axles to be catered for in the design, N (msa) = 40 ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018
- Effective CBR of subgrade (%) = 8.00
- Grade of Bitumen = VG40

**Calculation**

- **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** = **66.60** .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018
- Select trial section

| | | | |
|---|---|---|---|
| BC (mm) | = | 40 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| DBM (mm) | = | 60 | |
| BM (mm) | = | 55 | |
| WMM (mm) | = | 250 | |
| GSB (mm) | = | 200 | |
| Total granular thk. (mm) | = | 450 | |

- **Resilient modulus of the granular layer (Mpa), $0.2(h)^{0.45}*M_{RSUPPORT}$** = **208.19** .....Refer Eq. 7.1 As per IRC 37:2018
- Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa)

= 0.000390 .....Refer Eq. 3.2 As per IRC 37:2018

- **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

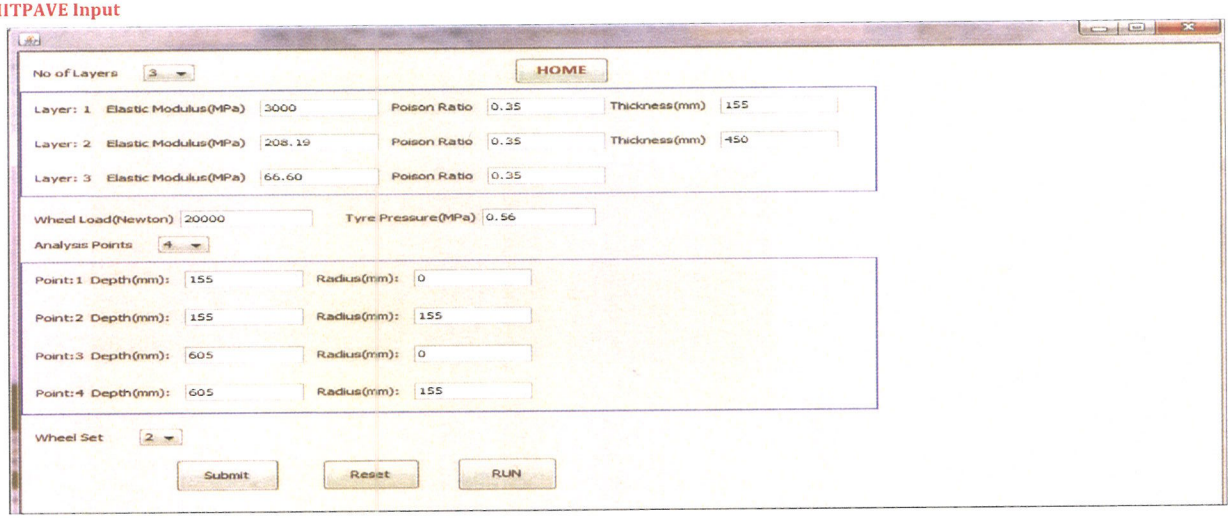
| | | | |
|---|---|---|---|
| m= | 0.37 | | |
| c= | 2.35 | | |
| Et = | 0.000189 | | .....Refer Eq. 3.4 As per IRC 37:2018 |

- Analyse the pavement using IITPAVE with the following inputs

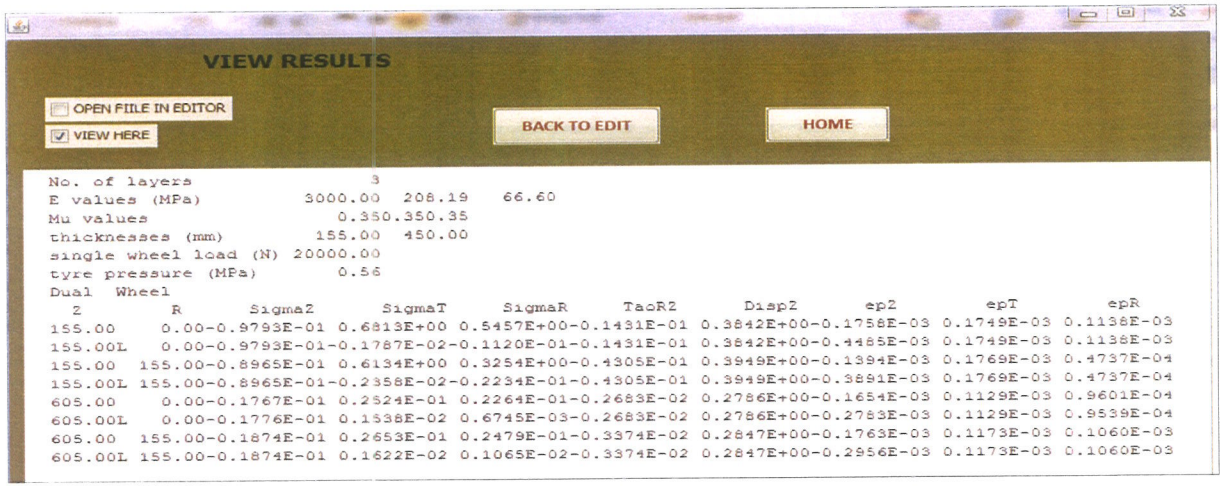
| | | |
|---|---|---|
| elastic moduli for | | |
| BT | = | 3000 |
| Granular | = | 208.19 |
| Subgrade | = | 66.60 |
| Poissons ratio value for all three layers | = | 0.35 |
| Layer Thicknesses | | |
| Crust | = | 155 |
| Granular | = | 450 |

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & Et) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & EV) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**

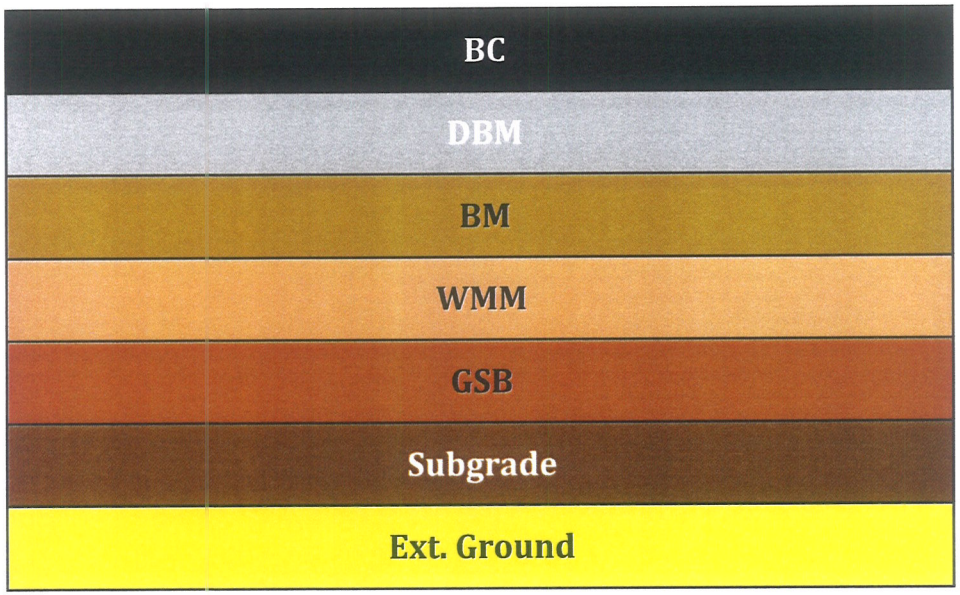



```
No. of layers                    3
E values (MPa)           3000.00  208.19   66.60
Mu values                   0.350.350.35
thicknesses (mm)          155.00  450.00
single wheel load (N) 20000.00
tyre pressure (MPa)         0.56
Dual  Wheel
   Z         R       SigmaZ       SigmaT      SigmaR      TaoRZ       Dispz       epz         epT         epR
155.00     0.00-0.9793E-01 0.6813E+00 0.5457E+00-0.1431E-01 0.3842E+00-0.1758E-03 0.1749E-03 0.1138E-03
155.00L    0.00-0.9793E-01-0.1787E-02-0.1120E-01-0.1431E-01 0.3842E+00-0.4485E-03 0.1749E-03 0.1138E-03
155.00   155.00-0.8965E-01 0.6134E+00 0.3254E+00-0.4305E-01 0.3949E+00-0.1394E-03 0.1769E-03 0.4737E-04
155.00L  155.00-0.8965E-01-0.2358E-02-0.2234E-01-0.4305E-01 0.3949E+00-0.3891E-03 0.1769E-03 0.4737E-04
605.00     0.00-0.1767E-01 0.2524E-01 0.2264E-01-0.2683E-02 0.2786E+00-0.1654E-03 0.1129E-03 0.9601E-04
605.00L    0.00-0.1776E-01 0.1538E-02 0.6745E-03-0.2683E-02 0.2786E+00-0.2783E-03 0.1129E-03 0.9539E-04
605.00   155.00-0.1874E-01 0.2653E-01 0.2479E-01-0.3374E-02 0.2847E+00-0.1763E-03 0.1173E-03 0.1060E-03
605.00L  155.00-0.1874E-01 0.1622E-02 0.1065E-02-0.3374E-02 0.2847E+00-0.2956E-03 0.1173E-03 0.1060E-03
```

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR WIDENING SECTION

1. Lakshminaraya Bridge-Jayshankar Chowk Ch. 0+000 To 0+620
2. Jayshankar Chowk-Sonje Bridge Ch. 0+620 To 1+215
3. Sonje Bridge-Dream city chowk Ch. 1+265 To 2+038

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

**Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)**

| | | | | |
|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 8.8 | |
| 4 | CBR of borrow material (%) | = | 7.9 | |
| 5 | Elastic modulus of embankment soil | = | 70.79 Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 66.07 Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 66.07 MPa and the semi-infinite embankment soil of modulus 70.79 MPa | | | |
| | Consider | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | |
| 9 | Single wheel load | = | 40000 N | |
| 10 | Contact pressure (p) | = | 0.56 Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.21 .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.21 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.97 Mpa | |
| 14 | Effective CBR | = | 8.07 % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 8.07 % for 66.97 MPa. | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

- Design Input

| | | | |
|---|---|---|---|
| For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |

- Cumulative Number of standard axles to be catered for in the design, N (msa) = 40 ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018
- Effective CBR of subgrade (%) = 8.00
- Grade of Bitumen = VG40

**Calculation**

- **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** = **66.60** .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018
- Select trial section

| | | | |
|---|---|---|---|
| BC (mm) | = | 40 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| DBM (mm) | = | 60 | |
| BM (mm) | = | 55 | |
| WMM (mm) | = | 250 | |
| GSB (mm) | = | 200 | |
| Total granular thk. (mm) | = | 450 | |

- **Resilient modulus of the granular layer (Mpa), $0.2(h)^{0.45}*M_{RSUPPORT}$** = **208.19** .....Refer Eq. 7.1 As per IRC 37:2018
- Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa)

  = 0.000390 .....Refer Eq. 3.2 As per IRC 37:2018

- **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

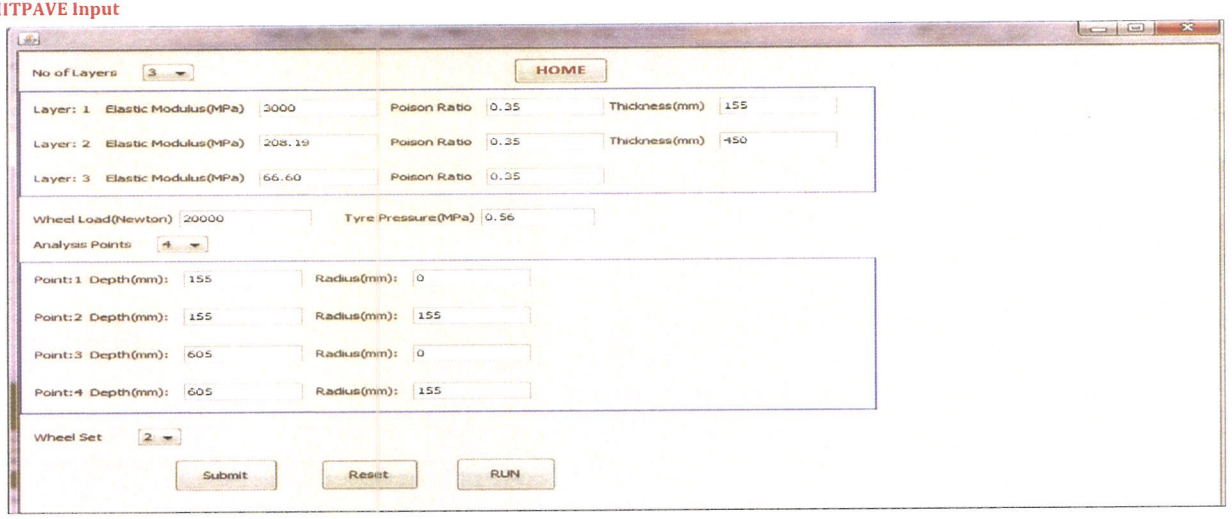
| | | | |
|---|---|---|---|
| m= | 0.37 | | |
| c= | 2.35 | | |
| εt = | 0.000189 | .....Refer Eq. 3.4 As per IRC 37:2018 | |

- Analyse the pavement using IITPAVE with the following inputs

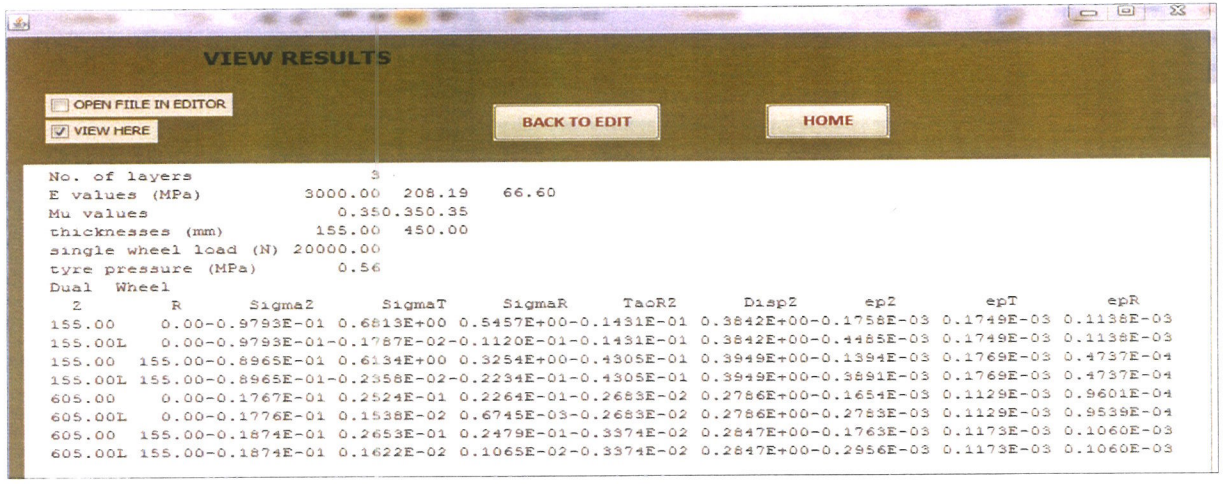
| | | |
|---|---|---|
| elastic moduli for | | |
| BT | = | 3000 |
| Granular | = | 208.19 |
| Subgrade | = | 66.60 |
| Poissons ratio value for all three layers | = | 0.35 |
| Layer Thicknesses | | |
| Crust | = | 155 |
| Granular | = | 450 |

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & Et) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & EV) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**



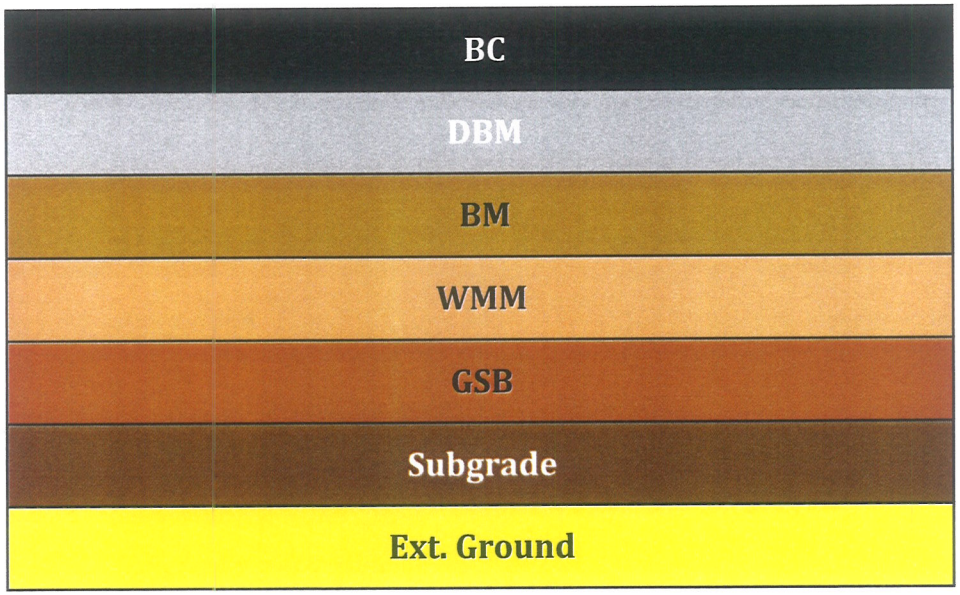
## Pavement Composition as per Design

| | | |
|---|---|---|
| Thickness of BC | 40 | mm |
| Thickness of DBM | 60 | mm |
| Thickness of BM | 55 | mm |
| Thickness of WMM | 250 | mm |
| Thickness of GSB | 200 | mm |
| Thickness of Subgrade (CBR-7.9%) | 500 | mm |
| Ext. Ground | | |

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR WIDENING SECTION

1. Takali Fata to Shankar Nagar chouk Ch. 0+000 To 0+501
2. shanakar nagar chouk to jay Shnakar chouk Ch. 0+501To 0+906
3. Bohari School to Ramdas swami Math Ch. 1+276 To 2+101

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

**Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 | mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 | mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 6.1 | | |
| 4 | CBR of borrow material (%) | = | 8.6 | | |
| 5 | Elastic modulus of embankment soil | = | 55.99 | Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 69.76 | Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 69.76 MPa and the semi-infinite embankment soil of modulus 55.99 MPa | | | | |
| | Consider | | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | | |
| 9 | Single wheel load | = | 40000 | N | |
| 10 | Contact pressure (p) | = | 0.56 | Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 | mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.22 | .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.22 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.79 | Mpa | |
| 14 | Effective CBR | = | 8.04 | % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 8.04 % for 66.79 MPa. | | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

- Design Input

| | | | |
|---|---|---|---|
| For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |

- Cumulative Number of standard axles to be catered for in the design, N (msa) = 40 ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018
- Effective CBR of subgrade (%) = 8.00
- Grade of Bitumen = VG40

Calculation

- **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** = **66.60** .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018
- Select trial section

| | | | |
|---|---|---|---|
| BC (mm) | = | 40 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| DBM (mm) | = | 60 | |
| BM (mm) | = | 55 | |
| WMM (mm) | = | 250 | |
| GSB (mm) | = | 200 | |
| Total granular thk. (mm) | = | 450 | |

- **Resilient modulus of the granular layer (Mpa), 0.2(h)^0.45*$M_{RSUPPORT}$** = **208.19** .....Refer Eq. 7.1 As per IRC 37:2018
- Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa)

  = 0.000390 .....Refer Eq. 3.2 As per IRC 37:2018

- **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

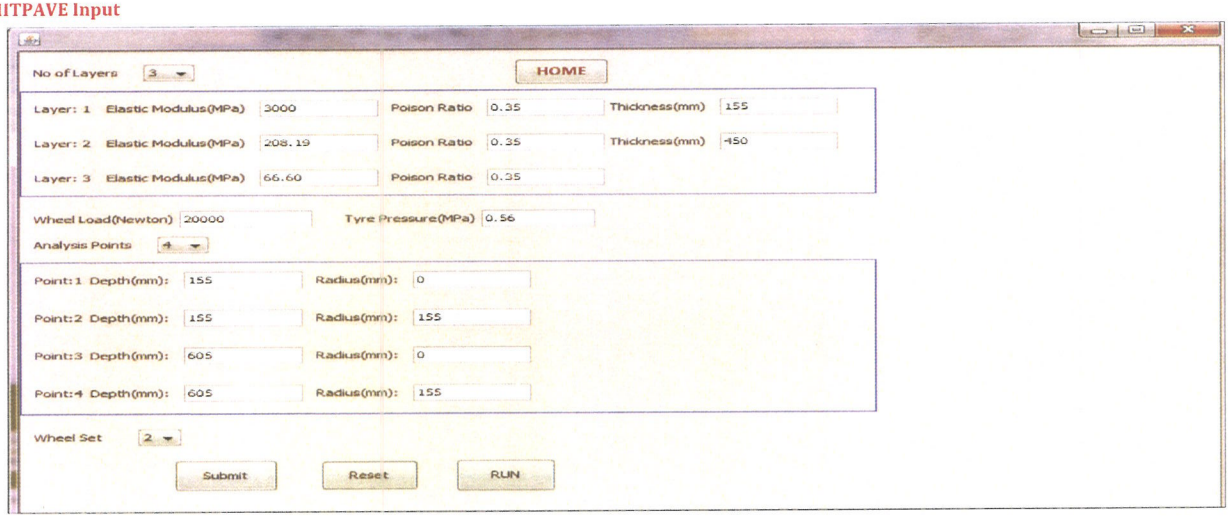
| | | | |
|---|---|---|---|
| m= | 0.37 | | |
| c= | 2.35 | | |
| εt = | 0.000189 | .....Refer Eq. 3.4 As per IRC 37:2018 | |

- Analyse the pavement using IITPAVE with the following inputs

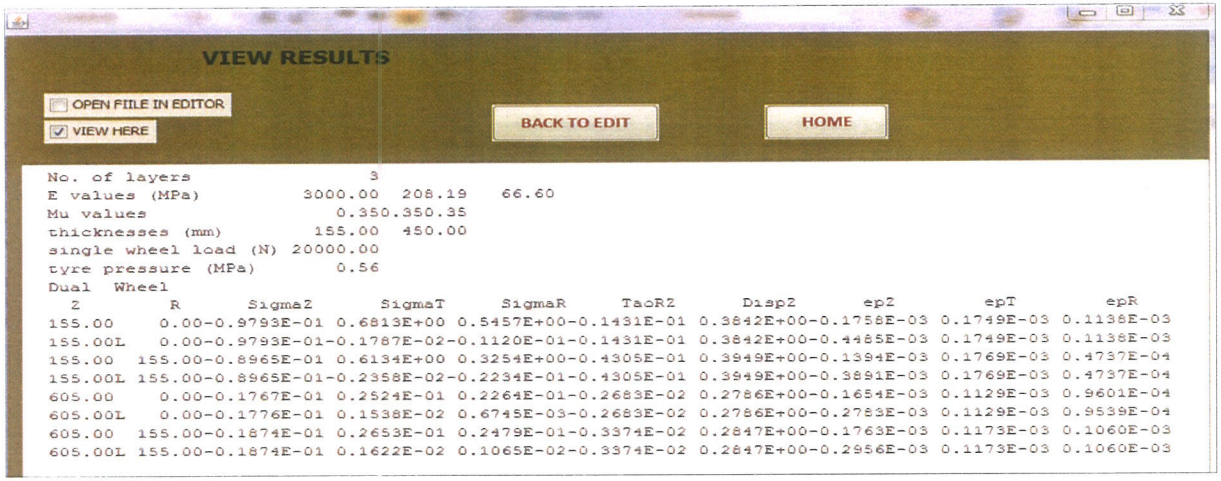
| | | |
|---|---|---|
| elastic moduli for | | |
| BT | = | 3000 |
| Granular | = | 208.19 |
| Subgrade | = | 66.60 |
| Poissons ratio value for all three layers | = | 0.35 |
| Layer Thicknesses | | |
| Crust | = | 155 |
| Granular | = | 450 |

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & Εt) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & ΕV) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**



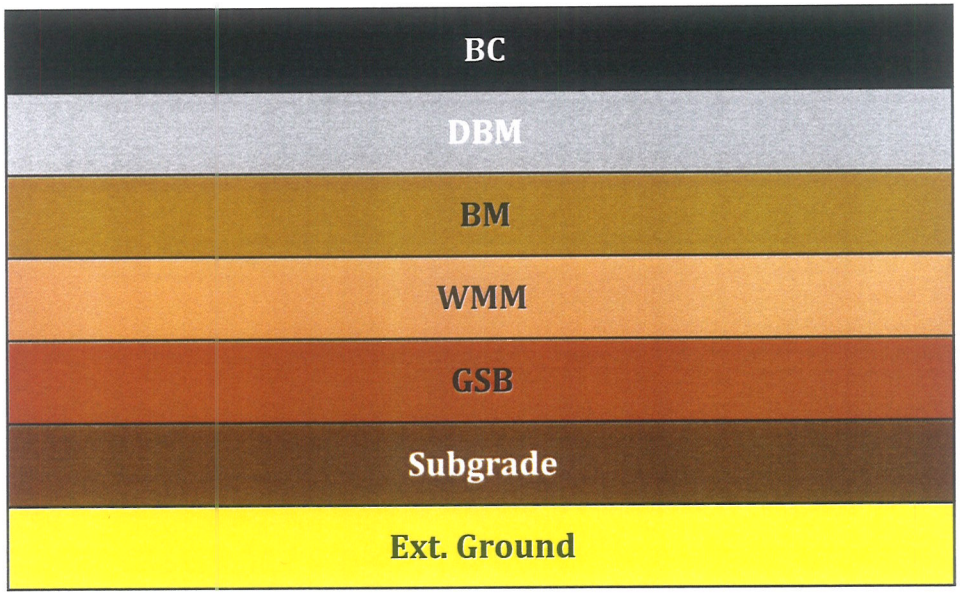
**Pavement Composition as per Design**

| | | |
|---|---|---|
| Thickness of BC | 40 | mm |
| Thickness of DBM | 60 | mm |
| Thickness of BM | 55 | mm |
| Thickness of WMM | 250 | mm |
| Thickness of GSB | 200 | mm |
| Thickness of Subgrade (CBR-8.6%) | 500 | mm |
| Ext. Ground | | |

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR WIDENING SECTION

1. Shriram nagar sahil Lowns - Sainath Nagar Chouk Ch. 1+485 To 1+791
2. Papamiya farm To Viraj Hou. Socity Ch. 3+682 To 3+852
3. Approch Road (Sainath Chowk) Ch. 0+000 To 0+100

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

**Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 | mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 | mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 17.1 | | |
| 4 | CBR of borrow material (%) | = | 7 | | |
| 5 | Elastic modulus of embankment soil | = | 108.30 | Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 61.15 | Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 61.15 MPa and the semi-infinite embankment soil of modulus 108.30 MPa | | | | |
| | Consider | | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | | |
| 9 | Single wheel load | = | 40000 | N | |
| 10 | Contact pressure (p) | = | 0.56 | Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 | mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.21 | .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.23 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.94 | Mpa | |
| 14 | Effective CBR | = | 8.06 | % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 8.06 % for 66.94 MPa. | | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

| | | | | |
|---|---|---|---|---|
| ● | Design Input | | | |
| | For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| | Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |
| ● | Cumulative Number of standard axles to be catered for in the design, N (msa) | = | 40 | ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018 |
| ● | Effective CBR of subgrade (%) | = | 8.00 | |
| ● | Grade of Bitumen | = | VG40 | |
| **Calculation** | | | | |
| ● | **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** | = | **66.60** | .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018 |
| ● | Select trial section | | | |
| | BC (mm) | = | 40 | |
| | DBM (mm) | = | 60 | |
| | BM (mm) | = | 55 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| | WMM (mm) | = | 250 | |
| | GSB (mm) | = | 200 | |
| | Total granular thk. (mm) | = | 450 | |
| ● | **Resilient modulus of the granular layer (Mpa), $0.2(h)^{0.45}*M_{RSUPPORT}$** | = | **208.19** | .....Refer Eq. 7.1 As per IRC 37:2018 |
| ● | Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa) | | | |
| | | = | 0.000390 | .....Refer Eq. 3.2 As per IRC 37:2018 |
| ● | **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$ | | | |

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

m= 0.37
c= 2.35

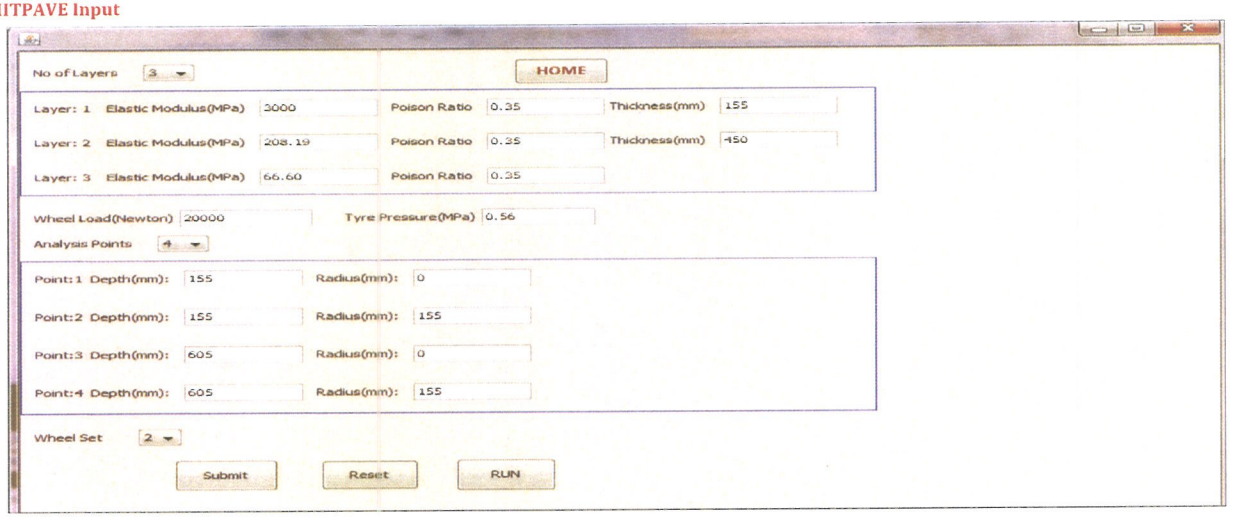
$\varepsilon t$ = 0.000189 .....Refer Eq. 3.4 As per IRC 37:2018

- Analyse the pavement using IITPAVE with the following inputs

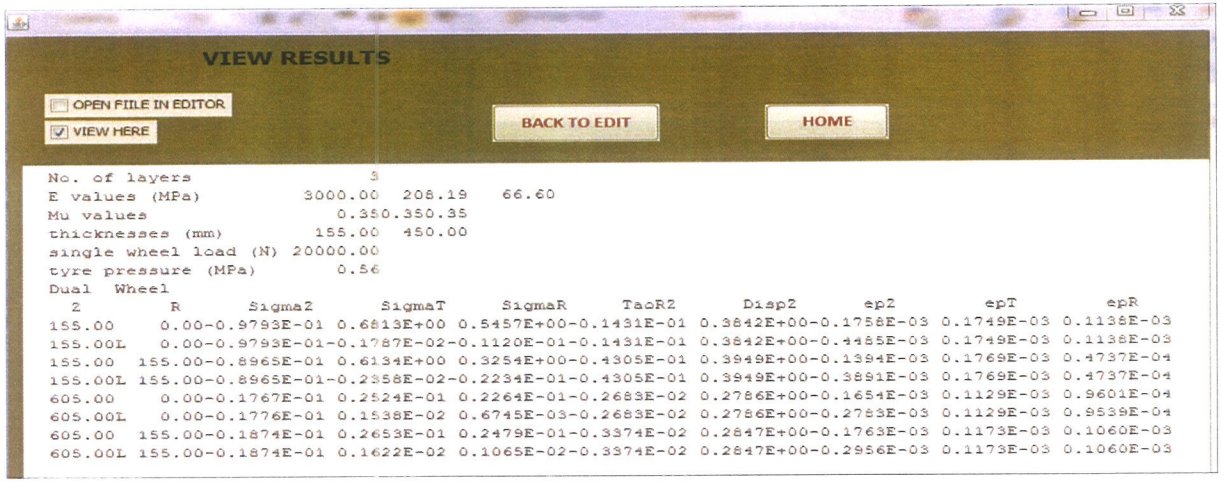
elastic moduli for
BT = 3000
Granular = 208.19
Subgrade = 66.60
Poissons ratio value for all three layers = 0.35
Layer Thicknesses
Crust = 155
Granular = 450

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & $\varepsilon t$) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & $\varepsilon V$) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**



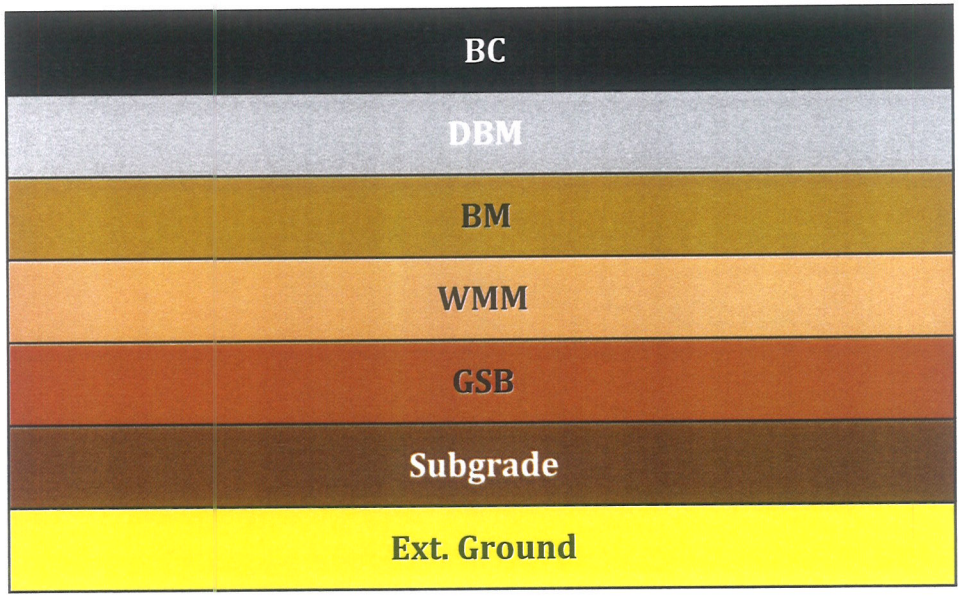
## Pavement Composition as per Design

| | | |
|---|---|---|
| Thickness of BC | 40 | mm |
| Thickness of DBM | 60 | mm |
| Thickness of BM | 55 | mm |
| Thickness of WMM | 250 | mm |
| Thickness of GSB | 200 | mm |
| Thickness of Subgrade (CBR-7%) | 500 | mm |
| Ext. Ground | | |

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR WIDENING SECTION

## 1. Maruti Wafers To Karma Hights Ch. 0+745 To 1+408

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

## Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)

| | | | | |
|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 13.7 | |
| 4 | CBR of borrow material (%) | = | 7.2 | |
| 5 | Elastic modulus of embankment soil | = | 93.98 Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 62.26 Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 62.26 MPa and the semi-infinite embankment soil of modulus 93.98 MPa | | | |
| | Consider | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | |
| 9 | Single wheel load | = | 40000 N | |
| 10 | Contact pressure (p) | = | 0.56 Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.22 .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.22 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.70 Mpa | |
| 14 | Effective CBR | = | 8.02 % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 8.02 % for 66.70 MPa. | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

- Design Input

| | | | |
|---|---|---|---|
| For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |

- Cumulative Number of standard axles to be catered for in the design, N (msa) = 40 ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018
- Effective CBR of subgrade (%) = 8.00
- Grade of Bitumen = VG40

**Calculation**

- **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** = **66.60** .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018
- Select trial section

| | | | |
|---|---|---|---|
| BC (mm) | = | 40 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| DBM (mm) | = | 60 | |
| BM (mm) | = | 55 | |
| WMM (mm) | = | 250 | |
| GSB (mm) | = | 200 | |
| Total granular thk. (mm) | = | 450 | |

- **Resilient modulus of the granular layer (Mpa), $0.2(h)^{0.45}*M_{RSUPPORT}$** = **208.19** .....Refer Eq. 7.1 As per IRC 37:2018
- Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa)

  = 0.000390 .....Refer Eq. 3.2 As per IRC 37:2018

- **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

m= 0.37
c= 2.35

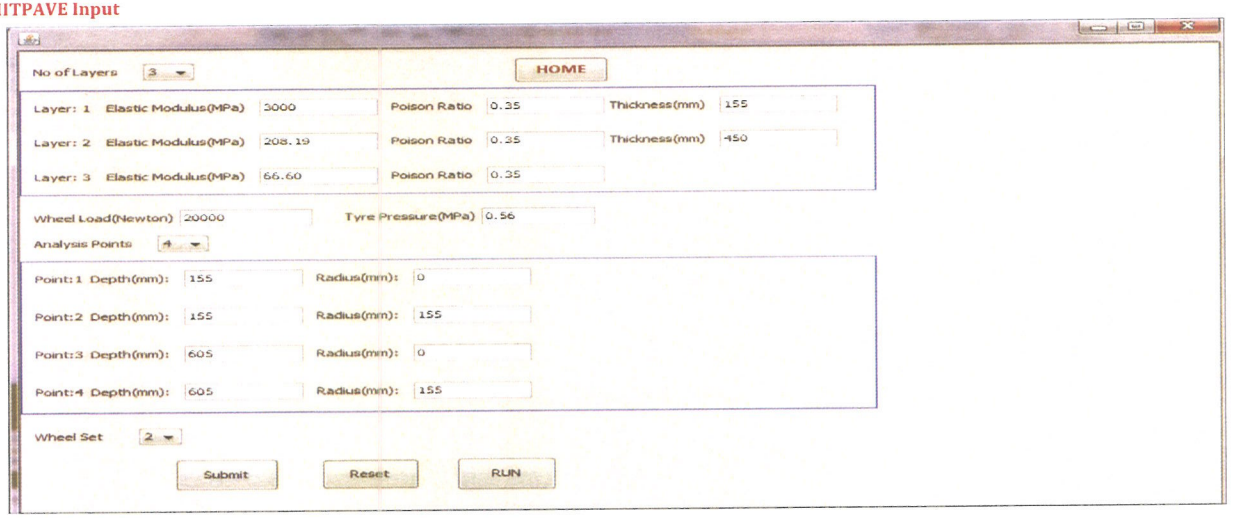
$\varepsilon t$ = 0.000189 .....Refer Eq. 3.4 As per IRC 37:2018

- Analyse the pavement using IITPAVE with the following inputs

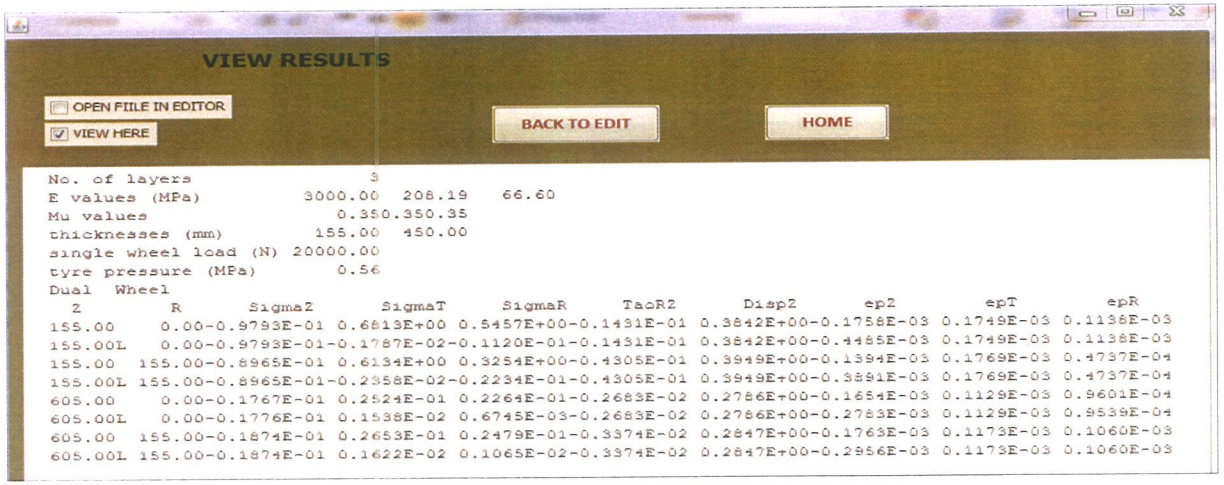
elastic moduli for
BT = 3000
Granular = 208.19
Subgrade = 66.60
Poissons ratio value for all three layers = 0.35
Layer Thicknesses
Crust = 155
Granular = 450

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & Et) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & EV) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**



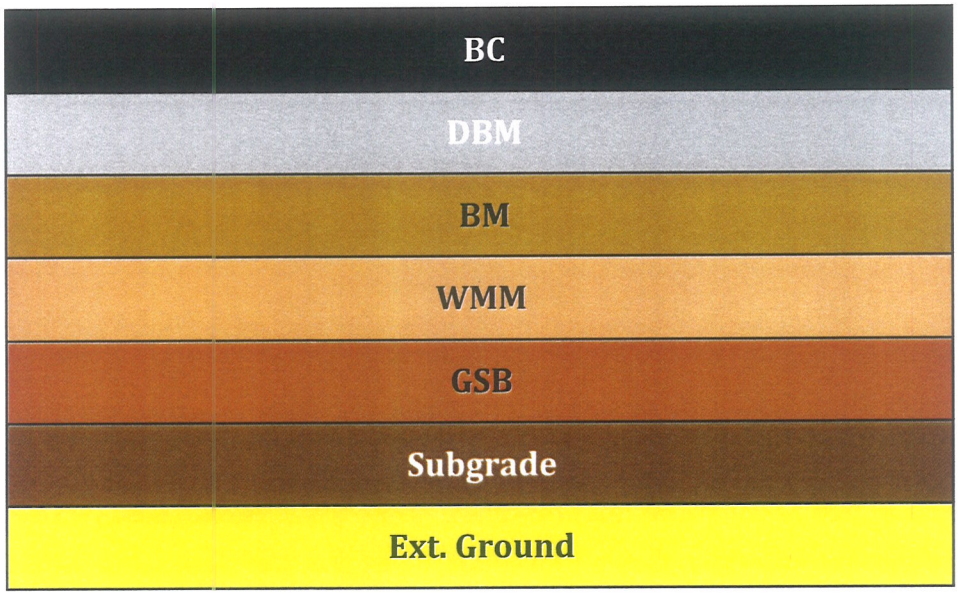
## Pavement Composition as per Design

| | | |
|---|---|---|
| Thickness of BC | 40 | mm |
| Thickness of DBM | 60 | mm |
| Thickness of BM | 55 | mm |
| Thickness of WMM | 250 | mm |
| Thickness of GSB | 200 | mm |
| Thickness of Subgrade (CBR-7.2%) | 500 | mm |
| Ext. Ground | | |

# DESIGN OF FLEXIBLE PAVEMENT AS PER IRC 37-2018 - FOR WIDENING SECTION

1. Pingale Chouk To HDFC Bank Ch. 0+700 To 0+750
2. Khode Mala To Wadala Hospital Ch. 1+497 To 1+742
3. Pioneer Hos. Chouk To Vijay Mamata Chouk Ch. 4+190 To 4+290

**DESIGN LIFE 20 YRS. & 40 MSA**



# Design of Subgrade Layer (As Per IRC:37-2018)

## Input Data Considered For the determination of subgrade CBR (As Per IRC:37-2018 ANNEXURE-II.1)

| | | | | |
|---|---|---|---|---|
| 1 | Thickness of embankment soil (Assume) (mm) | = | 300 mm | (lower layer) |
| 2 | Thickness of borrow material (Assume) (mm) | = | 500 mm | (upper layer) |
| 3 | CBR of embankment soil (%) | = | 11.4 | |
| 4 | CBR of borrow material (%) | = | 7.4 | |
| 5 | Elastic modulus of embankment soil | = | 83.55 Mpa | (lower layer) |
| 6 | Elastic modulus of borrow material | = | 63.36 Mpa | (upper layer) |
| 7 | Consider a two-layer elastic system consisting of 500 mm of select borrow soil of modulus 63.36 MPa and the semi-infinite embankment soil of modulus 83.55 MPa | | | |
| | Consider | | | |
| 8 | Poisson's ratio for both the layers | = | 0.35 | |
| 9 | Single wheel load | = | 40000 N | |
| 10 | Contact pressure (p) | = | 0.56 Mpa | |
| 11 | Radius of circular contact area for this load and contact pressure ($\alpha$) | = | 150.8 mm | |
| 12 | Surface deflection at the centre of the load ($\delta$) | = | 2.23 .....Using IIT PAVE | |
| 13 | For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 2.23 mm for the same load and for a Poisson's ratio of 0.35 = $[2(1-\mu^2)p\alpha]/\delta$ | = | 66.52 Mpa | |
| 14 | Effective CBR | = | 7.98 % | |
| 15 | As per these design guidelines, the effective modulus value will be limited to 100 MPa for design purpose. The corresponding CBR (using equation 6.2 From IRC 37) is 7.98 % for 66.52 MPa. | | | |

## Design of Granullar & BT Layer (As Per IRC:37-2018)

- Design Input

| | | | |
|---|---|---|---|
| For an air void content, $V_a$ (%) | = | 3.5 | ....As per clause 12.3 of IRC 37:2018 |
| Effective bitumen content, $V_{be}$ (%) | = | 11.5 | ....As per clause 12.3 of IRC 37:2018 |

- Cumulative Number of standard axles to be catered for in the design, N (msa) = 40 ....As Per Plate 4 Fig no. 12.4 of IRC 37:2018
- Effective CBR of subgrade (%) = 8.00
- Grade of Bitumen = VG40

**Calculation**

- **Effective resilient modulus of subgrade (Mpa), 17.6*(CBR)^0.64** = **66.60** .....Refer Eq. 6.1 and 6.2 As per IRC 37:2018
- Select trial section

| | | | |
|---|---|---|---|
| BC (mm) | = | 40 | ....Taken from Plate 4 Fig no. 12.4 of IRC 37:2018 |
| DBM (mm) | = | 60 | |
| BM (mm) | = | 55 | |
| WMM (mm) | = | 250 | |
| GSB (mm) | = | 200 | |
| Total granular thk. (mm) | = | 450 | |

- **Resilient modulus of the granular layer (Mpa), 0.2(h)^0.45*$M_{RSUPPORT}$** = **208.19** ..... Refer Eq. 7.1 As per IRC 37:2018
- Use 90% reliability performance models for subgrade rutting and bituminous layer cracking (design traffic>20 msa)

= 0.000390 .....Refer Eq. 3.2 As per IRC 37:2018

- **Allowable vertical compressive strain** on subgrade for a design traffic of 40 msa and for 90% reliability (using equation 3.2), $N_R=1.4100*10^{-08}[1/\varepsilon_V)^{4.5337}$

- **Allowable horizontal tensile strain** at the bottom of bituminous layer for a design traffic of 40 msa, 90% reliability, air void content of 3.5% and effective binder volume of 11.5% (Using equation 3.4), $N_f=0.5161*C*10^{-04}[1/\varepsilon_t]^{3.89}*[1/M_{Rm}]^{0.854}$

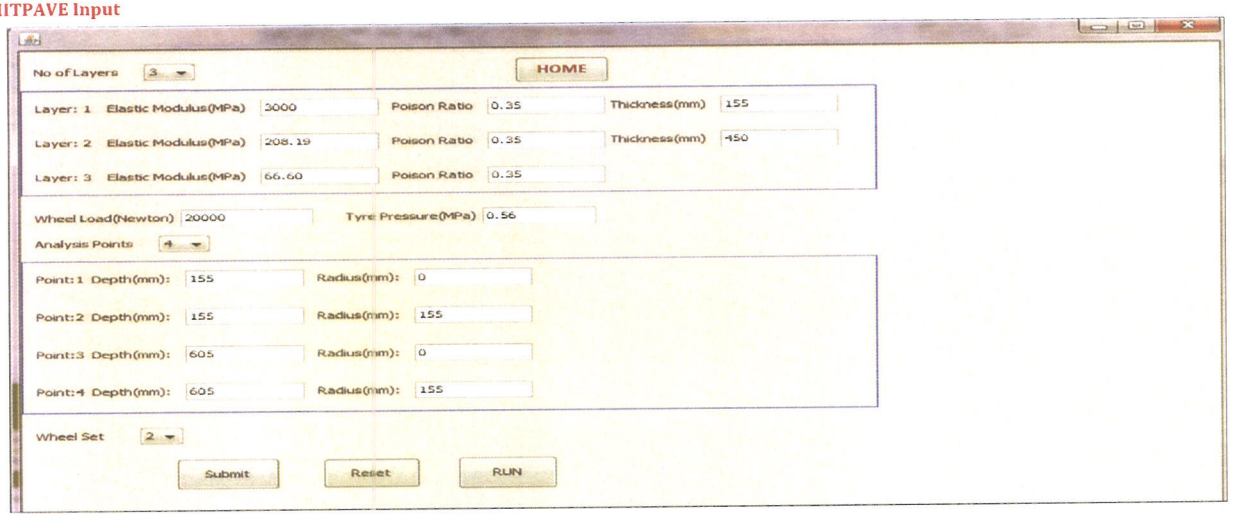
| | | | |
|---|---|---|---|
| m= | 0.37 | | |
| c= | 2.35 | | |
| $\varepsilon t$ = | 0.000189 | .....Refer Eq. 3.4 As per IRC 37:2018 | |

- Analyse the pavement using IITPAVE with the following inputs

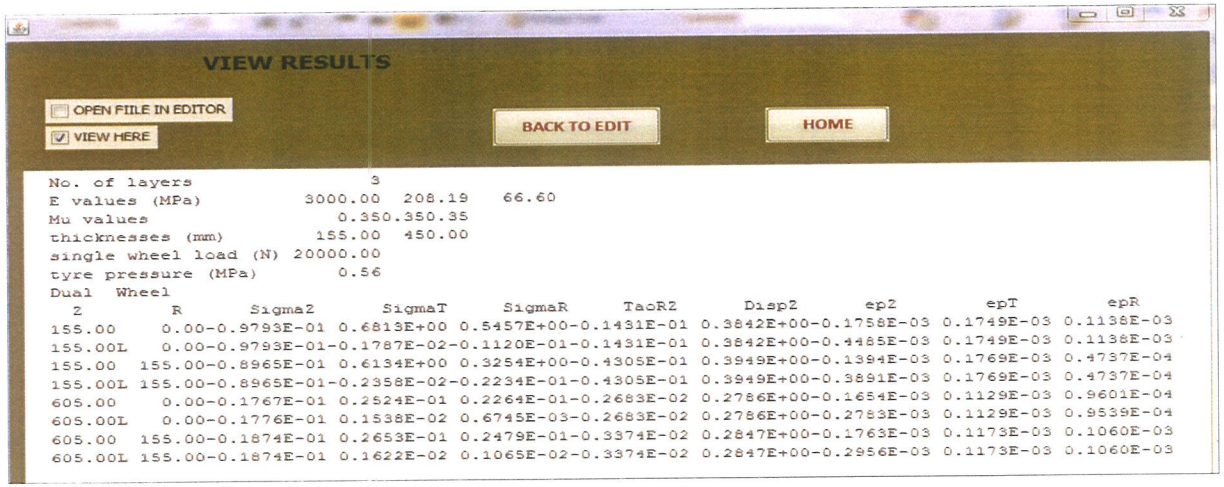
| | | |
|---|---|---|
| elastic moduli for | | |
| BT | = | 3000 |
| Granular | = | 208.19 |
| Subgrade | = | 66.60 |
| Poissons ratio value for all three layers | = | 0.35 |
| Layer Thicknesses | | |
| Crust | = | 155 |
| Granular | = | 450 |

| Computed starian values by IITPAVE | | | | Allowable strain value | |
|---|---|---|---|---|---|
| Horizontal tensile strain (epT & $\varepsilon t$) | = | 0.000177 | < | 0.000189 | ok |
| Vertical compressive strain (epZ & $\varepsilon V$) | = | 0.000296 | < | 0.000390 | ok |

**IITPAVE Input**




**IITPAVE output**




```
No. of layers                    3
E values (MPa)           3000.00  208.19   66.60
Mu values                  0.350.350.35
thicknesses (mm)          155.00  450.00
single wheel load (N) 20000.00
tyre pressure (MPa)        0.56
Dual  Wheel
  Z         R       SigmaZ       SigmaT       SigmaR       TaoRZ        Disp2        ep2          epT          epR
155.00     0.00-0.9793E-01 0.6813E+00 0.5457E+00-0.1431E-01 0.3842E+00-0.1758E-03 0.1749E-03 0.1138E-03
155.00L    0.00-0.9793E-01-0.1787E-02-0.1120E-01-0.1431E-01 0.3842E+00-0.4485E-03 0.1749E-03 0.1138E-03
155.00   155.00-0.8965E-01 0.6134E+00 0.3254E+00-0.4305E-01 0.3949E+00-0.1394E-03 0.1769E-03 0.4737E-04
155.00L  155.00-0.8965E-01-0.2358E-02-0.2234E-01-0.4305E-01 0.3949E+00-0.3891E-03 0.1769E-03 0.4737E-04
605.00     0.00-0.1767E-01 0.2524E-01 0.2264E-01-0.2683E-02 0.2786E+00-0.1654E-03 0.1129E-03 0.9601E-04
605.00L    0.00-0.1776E-01 0.1538E-02 0.6745E-03-0.2683E-02 0.2786E+00-0.2783E-03 0.1129E-03 0.9539E-04
605.00   155.00-0.1874E-01 0.2653E-01 0.2479E-01-0.3374E-02 0.2847E+00-0.1763E-03 0.1173E-03 0.1060E-03
605.00L  155.00-0.1874E-01 0.1622E-02 0.1065E-02-0.3374E-02 0.2847E+00-0.2956E-03 0.1173E-03 0.1060E-03
```

**Pavement Composition as per Design**

| | | |
|---|---|---|
| Thickness of BC | 40 | mm |
| Thickness of DBM | 60 | mm |
| Thickness of BM | 55 | mm |
| Thickness of WMM | 250 | mm |
| Thickness of GSB | 200 | mm |
| Thickness of Subgrade (CBR-7.4%) | 500 | mm |
| Ext. Ground | | |

## 2.1 INTRODUCTION

### 2.1.1 About Civil Tech

**CIVIL TECH** is a future ready company, bringing together all the elements in the field of Civil Engineering, under one roof.



**CIVIL TECH** provides consultancy services for **Architectural Designs, Structural Designs, Project Management Services, Quality Audits, Valuations** and many more such services. All this is backed by cutting edge technology used in its **NABL accredited Advanced Material Testing Laboratory** and Non-Destructive Testing (NDT) facility.



**CIVIL TECH** is the only construction material testing laboratory in North Maharashtra to be accredited by NABL with the prestigious ISO 17025 certification. Which provides both in-house experimental studies and field evaluation. The office is equipped with the latest so ware for structural design and analysis.



**CIVIL TECH** is strategically located at NASHIK- One of the fastest growing cities in Asia. It is also part of the golden triangle of Mumbai -Pune Nashik.

With a team of Experts, who integrate experience and technology with ease, we are ready to cater to the needs of one and all.

**"Quality Leads To Assurance, Assurance Leads To Prosperity And Happiness."**

This Is The Guiding Principle Of Civil Tech.

### 2.1.2 Civil Tech Team

With our qualified and experience team we provide services and results on me with the best management skills. We are always ready to serve you with our determination and vision toward quality.

### 2.1.3 Vision

To be a vibrant organization established to contribute to the infrastructural growth of the nation.

### 2.1.4 Service Offering

A range of services we offer to the clients across the globe include as follows.

- **NABL Accredited Advanced Material Testing Laboratory (Confirming to ISO: 17025)**
  - ✓ Non-Destructive Testing
  - ✓ Construction Material Testing
  - ✓ Concrete mix design
  - ✓ Plate load test
  - ✓ On Site Testing
  - ✓ Chemical Testing Services
  - ✓ Soil Investigation
  - ✓ Pile Load Testing
  - ✓ Pile Integrity Test
  - ✓ Standard Penetration Test
  - ✓ Water Testing
- **NABL Accredited Highway Testing Services (Confirming to ISO: 17025)**
  - ✓ Network Survey Vehicle (NSV)
  - ✓ Falling Weight Deflectometer (FWD)
  - ✓ MIT Dowel Bar Scanner (MIT)
  - ✓ Benkelman Beam Deflection (BBD)
  - ✓ Roughness Index Test
  - ✓ Skid Resistance Test
  - ✓ Retro Reflectometer
  - ✓ Traffic Volume Count
- **Structural Design & Structural Audit**
  - ✓ Bridge Load Test
  - ✓ Slab Load Test
- **Repair Works**
  - ✓ Concrete Road Repairs
  - ✓ Bridge Repairs
  - ✓ Building Rehabilitation and Repairs
- **Proof Checking & Advisory Services**

## 2.2. PROJECT DESCRIPTION

### 2.2.1 General

As part of work "Nashik East Division Road."

In pursuance of the above, **M/s. Civil Tech, Nasik** has been appointed for providing consulting services for testing of the project stretch with Non-Destructive equipment – Falling Weight Deflectometer wide work order.

In line with the work order the work of FWD site testing was scheduled on 26-07-2025 and completed accordingly.

| Sr. No. | Field | Details |
|---|---|---|
| 1. | Project Name | Road 1. Proposed Developing of 24 m DP Road from Dwarka Circle-Sarda Circle-Gadkari Chowk Signal, NMC, Nashik.<br>Road 2. Proposed Developing of 24 m DP Road from Sarda Circle-Ganjmal Signal, NMC, Nashik.<br>Road 3. Proposed Developing of 30 m DP Road from Sangam bridge-Takligaon-Vijaymamta chowk-Ashoka marg-bharat nagar-chan hotel NH-3, NMC, Nashik.<br>Road 4. Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.<br>Road 5. Proposed Developing of 18 m DP Road from Takli phata-NH3-Takli Gaon-Gandhinagar Upnagar Naka NH-50, NMC, Nashik.<br>Road 6. Proposed Developing of 18m & 30 m DP Road from Wadala Naka NH-3-Nasardi Bridge Wadala Road-Sainath Signal-Jagganath Chowk, NMC, Nashik.<br>Road 7. Proposed Developing of 18 m DP Road from NH 3-Tractor House- Karma Heights - (Tigraniya Road) NMC, Nashik.<br>Road 8. Proposed Developing of 30 m DP Road from Lekha nagar- NH3- Kala nagar chowk- Wadala gaon- Ravishankar Marg- Vijaymamta chowk, NMC, Nashik. |
| 2. | Project Stretch | Road 1. Ch. 0.000 To 1.519<br>Road 2. Ch. 0.000 To 0.835<br>Road 3. Ch. 0.000 To 4.907<br>Road 4. Ch. 0.000 To 2.038<br>Road 5. Ch. 0.000 To 4.089<br>Road 6. Ch. 0.000 To 4.552<br>Road 7. Ch. 0.000 To 1.408<br>Road 8. Ch. 0.000 To 4.290 |
| 3. | Survey Date | 26/7/2025. |

Table: 2.2.1 Project Description

### 2.2.2 Scope Of Work

The study has been initiated with the aim of assessing the strength and life of pavement by measuring deflections as per the Indian Codes (IRC)/Standards. To accomplish this purpose, FWD Test was performed along the project stretch.

The scope involves the following:

- Perform the FWD test for selected stretches.
- Assess the service life of the pavement in terms of million standard axles (MSA).




Figure: 2.2.1 On Site Photo

## 2.3. FWD DATA COLLECTION, ANALYSIS AND RESULTS

**Step 1.** Data Collection.

**Step 2.** Flow Chart for FWD Analysis.

**Step 3.** Selecting The Range Of Moduli.

**Step 4.** KGPback Application.

**Step 5.** Correction For Temperature.

**Step 6.** Back Calculation Of Modulies.

**Step 7.** Calculation Of Remaining Life And Overlay Requirement.

### 2.3.1 FWD Data Collection

FWD operated and data of force and deflection is acquired using Deflectometer software using a load cell and geophone respectively.

- Lower the loading plate onto the pavement. The loading plate should be in proper contact with pavement surface.
- Lower the frame holding the displacement transducers (geophones) so that the transducers are in contact with pavement surface
- Raise the mass to a pre-determined height required for producing a target load of 40 KN.
- Drop one seating load. Load and deflection data for seating load drop need not be recorded.
- Raise the mass and drop. Record load and deflection data into the computer through data acquisition system. While peak load and peak deflections at different selected radial positions must be recorded, complete time history of load and deflections can be stored for each load drop if feasible. Repeat this step at least two more times.
- Raise the geophone frame and load plate and move to the next test location.

### 2.3.2 Flow Chart For FWD Analysis

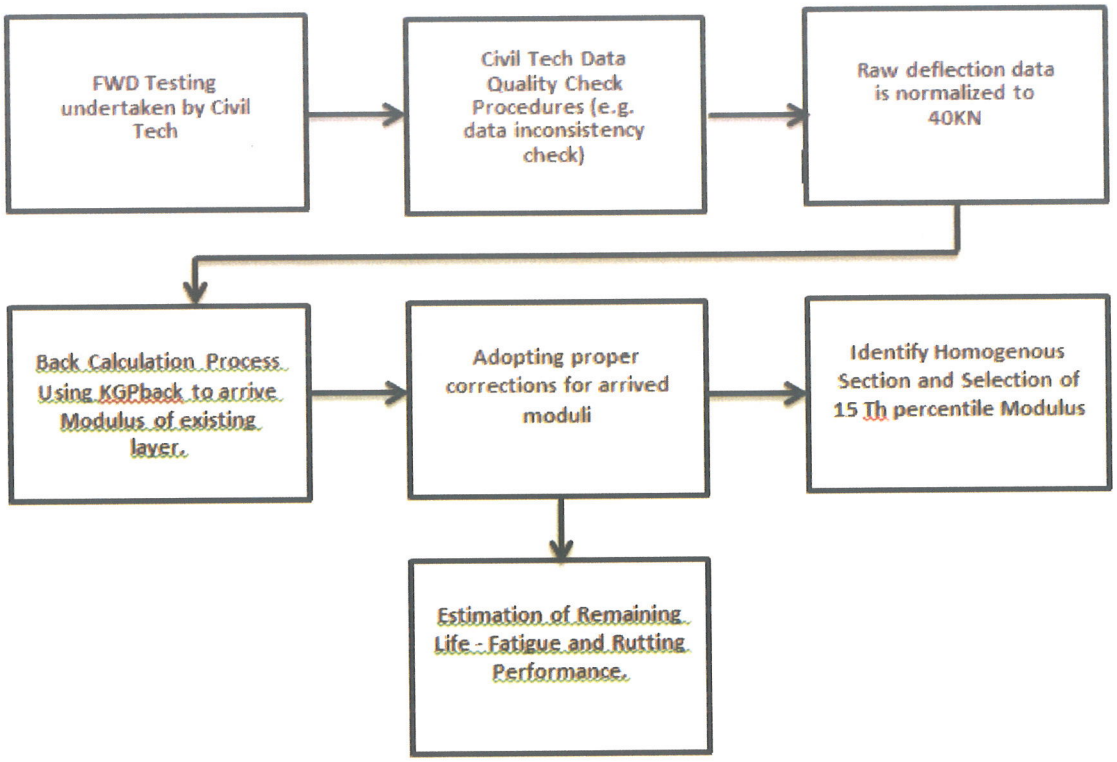



Figure: 2.3.1 Process flow for FWD Analysis

### 2.3.3 Range of Moduli.

| Type of Layer | Lower and Upper Limit (MPa) |
|---|---|
| | |
| **Bituminous** | **IRC 115-2014, Page No. 30.**<br>Thick Layer With Much Cracking<br>For Distress Condition Fair To Poor.<br>Lower Limit : 400 MPa.<br>Upper Limit : 1500 MPa. |
| | |
| **Granular** | **IRC 115-2014, Page No. 30.**<br>For Overlay Construction<br>Lower Limit : MRS : 100 MPa.<br>Upper Limit : MR. GRANULAR : 500 MPa. |
| | |
| **Subgrade** | **IRC 115-2014, Page No. 30.**<br>For Overlay & New/Reconstruction<br>Lower Limit : MR Sub Low : 5*CBR MPa.<br>Upper Limit : MR Sub Max : 20*CBR MPa. |
| | |

Table 2.3.1 Range of Moduli

### 2.3.4 KGPback Application

KGPback is a genetic algorithm-based model for back calculation of layer moduli provided along with IRC 115 publication. It uses linear elastic theory for the analysis of pavement in its forward calculation algorithm.

The procedure provided in Appendix III has been adopted to back calculate the Elastic modulus values of each layer listed below.

- Three-layer system (Bituminous, Granular & Subgrade).
- Data required:
  - Deflections at various radial distances-Normalize the raw deflection values to 40KN
  - Existing layer thickness – the existing layer thicknesses of various stretches have been obtained by taking the core cut and trial pit, necessary soil properties have been provided by the consultant.
  - Layer moduli range – the layer moduli adopted for the analysis is shown in 3.3 section.
  - Poisson's ratio:
    - 1)For Overlay Construction BT-0.5, Granular-0.4, Subgrade-0.4

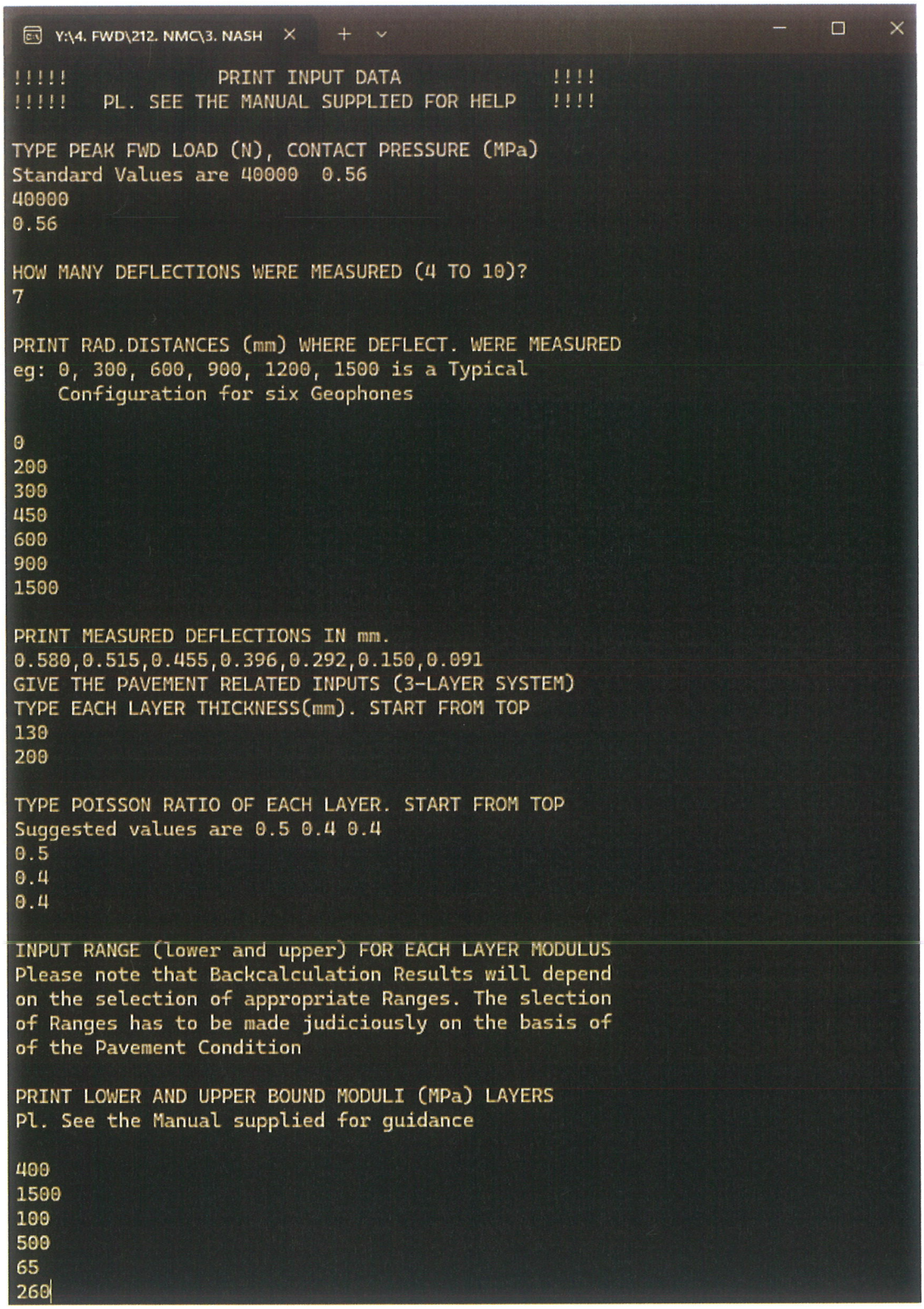



Figure: 2.3.2 KGPback Data Input

backout

File Edit View H1

```
#######################################################
#         !!!  THANKS FOR USING KGPBACK  !!!         #
#             THE RESULTS ARE GIVEN BELOW            #
#######################################################

################
#  INPUT DATA  #
################
No.of Layers                          =  3
FWD Load (N)                          = 40000.00
Contact Pressure (MPa)                =  .56
No.of Deflection points               =  7
Deflections measured using FWD (mm)   =  .58000   .51500   .45500   .39600   .29200   .15000   .09100
Radial distances from centre of load(mm) =    .0  200.0  300.0  450.0   600.0   900.0  1500.0
Layer thickness (mm)                  = 130.00 200.00
Poisson ratio values                  = .50 .40 .40
Layer Modulus (MPa) Ranges Selected :-
(a) Bituminous Surfacing              =  400.0   1500.0
(b) Granular Base                     =  100.0   500.0
(c) Subgrade                          =   65.0   260.0


################
# OUTPUT DATA  #
################

Backcalculated Layer Moduli are:
Surface (MPa)  =    1491.4
Base (MPa)     =     136.8
Subgrade (MPa) =      76.2
```

Figure: 2.3.3 KGPback Data Output

### 2.3.5 Correction for Temperature

The stiffness of bituminous layer is highly susceptible to temperature and hence consequently the surface deflections of a given pavement will vary depending on the temperature of the constituent bituminous layers. If the depth of the BT surface is more than 40mm, then correction factor has to be applied. If the depth is less i.e., if it is a thin bituminous surfacing like premix carpet and surface dressing, then no correction is required. Correction for temperature variation on deflection values measured at temperature other than 35$^0$C should be calculated by the formula provided in IRC 115.

The key points to consider are:

- Pavement temperature range applicable for correction factor – 20$^0$C to 45$^0$C.
- FWD shall not be carried for pavement temperature more than 45$^0$C.
- Temperature correction not required for following cases,
  - Bituminous layers (depth < 40 mm).
  - "Poor" sections.

In accordance with Section 6.4.2 of IRC 115, the calculated modulus values in the Bituminous Layers have been adjusted relative to the standard temperature of 35$^o$C using equation 4 and 5 of IRC 115: 2014.

$E_{T1} = \lambda E_{T2}$ .....Eq 4, IRC115:2014

$\lambda = 1 - 0.238 \ln T1 / 1 - 0.238 \ln T2$.....Eq 5, IRC115:2014

Where,

| | | |
|---|---|---|
| λ | - | Temperature Correction factor. |
| ET1 | - | Back calculated Modulus (MPa) at Temperature T1. |
| ET2 | - | Back calculated Modulus (MPa) at Temperature T2. |

### 2.3.6 Back calculated Moduli

The back calculated and corrected moduli of the all the three layers are presented in the table. However, for BT back calculated moduli are restricted to maximum of 3000 Mpa.

Using these corrected Moduli Values - Homogenous sections are prepared and 15th percentile Moduli values are selected for Design. Here, we have considered each section as one homogenous section.

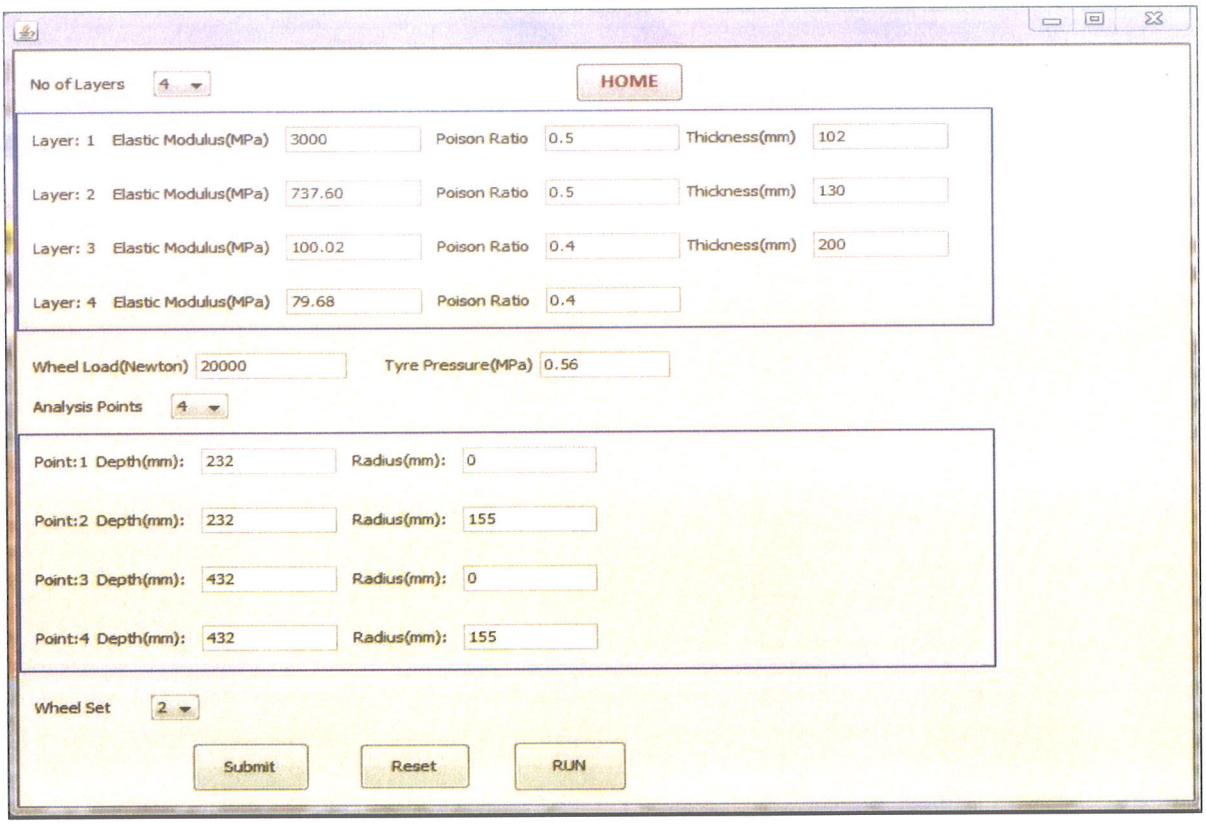



Figure: 2.3.5 IITPAVE Data Input

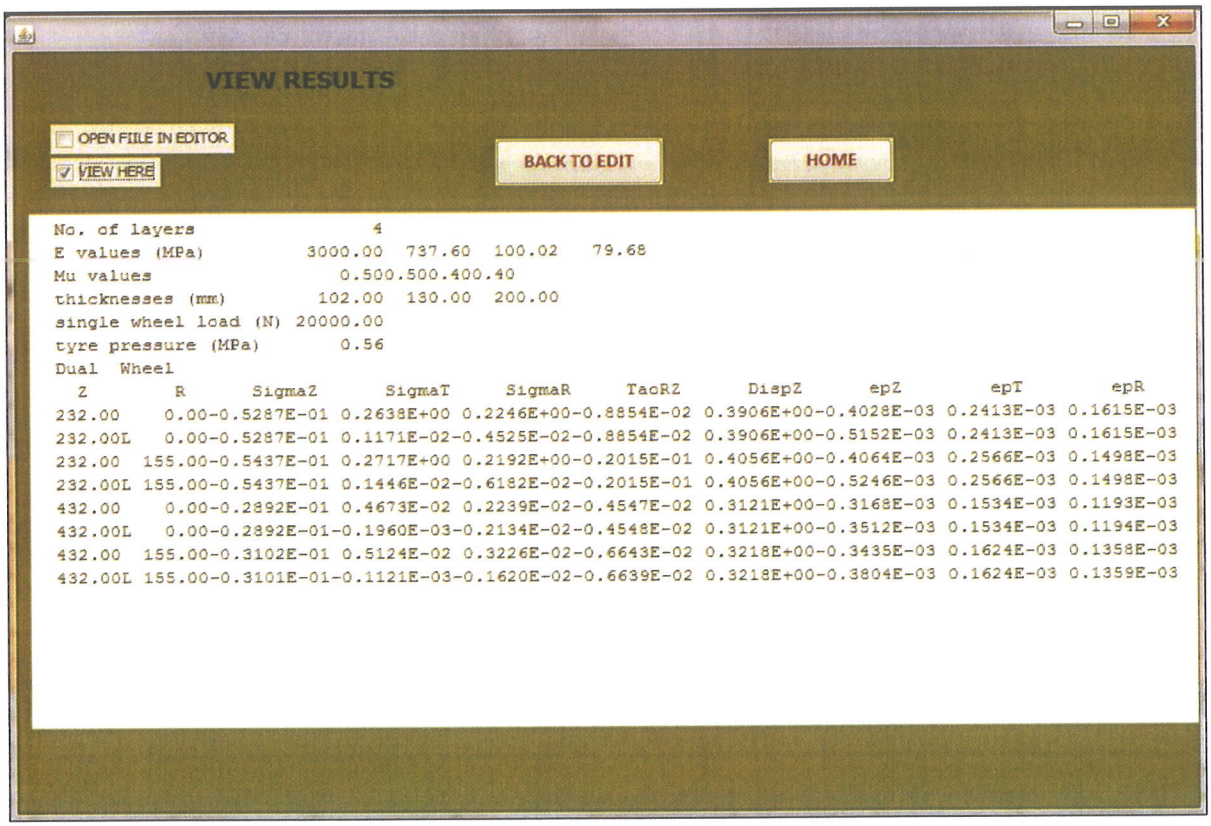



Figure: 2.3.6 IITPAVE Data Output

## 2.4. RESULTS

### 2.4.1 Maximum and Normalized Deflection:

CIVIL TECH'S Falling Weight Deflectometer (FWD) was used to collect pavement strength and stiffness information and these values are reported in mm. The results of the site recorded maximum deflection testing are presented in tabulated form.
In accordance with international best practice and with Section 4.4 of IRC 115, the recorded deflection values have been normalized to the equivalent applied pressure of 40KN to be used for back calculation using KGPBACK application.

### 2.4.2 Modulus values:

Back calculation of modulus of Bitumen and Subgrade is presented in Table below. The values are derived from the process explained in section 6 of the report. As well as normalized deflections, 15 percentile modulies, layer thickness, corrected back calculated modulies, pavement temperature, remaining life/MSA & overlay requirement are also presented in table below.

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| Road No. 1 Dwarka Circle-Sarda Circle-Gadkari Chowk Signal | | | | | | | | |
| | BHS | 0+000 | 1+519 | 130 | 200 | 20 | 40 | VG 40 |
| | | | | | | | | |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMEDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road No. 1 | 0.000 | 1.000 | 0.0005980 | 1.452 | 0.0009515 | 0.705 | 0.0002314 | 58.357 | 0.0003895 | 40.442 | 116 | 120 |
| 2 | Road No. 1 | 1.000 | 1.519 | 0.0005720 | 1.623 | 0.0008155 | 1.419 | 0.0002505 | 40.304 | 0.0003746 | 48.265 | 100 | 100 |
| 3 | Road No. 1 | 1.519 | 1.000 | 0.0006044 | 1.430 | 0.0008365 | 1.264 | 0.0002566 | 40.057 | 0.0003804 | 45.018 | 102 | 105 |
| 4 | Road No. 1 | 1.000 | 0.000 | 0.0006244 | 1.368 | 0.0007267 | 2.393 | 0.0002606 | 40.945 | 0.0003397 | 75.195 | 101 | 105 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 0.580 | 0.515 | 0.455 | 0.396 | 0.292 | 0.150 | 0.091 | 13.0 | 0.5 | 0.4 | 0.4 |
| 2 | 0.000 | 1 | LHS L3 | FAIR | 0.557 | 0.516 | 0.370 | 0.252 | 0.177 | 0.107 | 0.083 | 13.0 | 0.5 | 0.4 | 0.4 |
| 3 | 0.125 | 1 | LHS L2 | FAIR | 0.598 | 0.515 | 0.478 | 0.359 | 0.297 | 0.192 | 0.145 | 13.0 | 0.5 | 0.4 | 0.4 |
| 4 | 0.250 | 1 | LHS L1 | FAIR | 0.588 | 0.513 | 0.448 | 0.366 | 0.296 | 0.189 | 0.140 | 13.0 | 0.5 | 0.4 | 0.4 |
| 5 | 0.250 | 1 | LHS L3 | FAIR | 0.577 | 0.434 | 0.357 | 0.270 | 0.187 | 0.100 | 0.072 | 13.0 | 0.5 | 0.4 | 0.4 |
| 6 | 0.375 | 1 | LHS L2 | FAIR | 0.581 | 0.521 | 0.407 | 0.283 | 0.221 | 0.134 | 0.100 | 13.0 | 0.5 | 0.4 | 0.4 |
| 7 | 0.500 | 1 | LHS L1 | FAIR | 0.600 | 0.556 | 0.463 | 0.416 | 0.331 | 0.201 | 0.153 | 13.0 | 0.5 | 0.4 | 0.4 |
| 8 | 0.500 | 1 | LHS L3 | FAIR | 0.582 | 0.517 | 0.457 | 0.398 | 0.294 | 0.152 | 0.094 | 13.0 | 0.5 | 0.4 | 0.4 |
| 9 | 0.625 | 1 | LHS L2 | FAIR | 0.563 | 0.501 | 0.449 | 0.368 | 0.237 | 0.122 | 0.082 | 13.0 | 0.5 | 0.4 | 0.4 |
| 10 | 0.750 | 1 | LHS L1 | FAIR | 0.561 | 0.431 | 0.349 | 0.218 | 0.157 | 0.104 | 0.080 | 13.0 | 0.5 | 0.4 | 0.4 |
| 11 | 0.750 | 1 | LHS L3 | FAIR | 0.601 | 0.517 | 0.480 | 0.361 | 0.299 | 0.194 | 0.147 | 13.0 | 0.5 | 0.4 | 0.4 |
| 12 | 0.875 | 1 | LHS L2 | FAIR | 0.587 | 0.495 | 0.394 | 0.238 | 0.174 | 0.117 | 0.094 | 13.0 | 0.5 | 0.4 | 0.4 |
| 13 | 1.000 | 1 | LHS L1 | FAIR | 0.474 | 0.352 | 0.218 | 0.149 | 0.065 | 0.047 | 0.039 | 13.0 | 0.5 | 0.4 | 0.4 |
| 14 | 1.000 | 1 | LHS L3 | FAIR | 0.587 | 0.512 | 0.448 | 0.367 | 0.297 | 0.190 | 0.141 | 13.0 | 0.5 | 0.4 | 0.4 |
| 15 | 1.125 | 2 | LHS L2 | FAIR | 0.546 | 0.473 | 0.347 | 0.263 | 0.212 | 0.125 | 0.099 | 13.0 | 0.5 | 0.4 | 0.4 |
| 16 | 1.250 | 2 | LHS L1 | FAIR | 0.539 | 0.435 | 0.288 | 0.190 | 0.102 | 0.061 | 0.039 | 13.0 | 0.5 | 0.4 | 0.4 |
| 17 | 1.250 | 2 | LHS L3 | FAIR | 0.572 | 0.513 | 0.401 | 0.281 | 0.218 | 0.134 | 0.100 | 13.0 | 0.5 | 0.4 | 0.4 |
| 18 | 1.375 | 2 | LHS L2 | FAIR | 0.588 | 0.502 | 0.359 | 0.238 | 0.185 | 0.111 | 0.082 | 13.0 | 0.5 | 0.4 | 0.4 |
| 19 | 1.500 | 2 | LHS L1 | FAIR | 0.478 | 0.371 | 0.293 | 0.210 | 0.112 | 0.075 | 0.039 | 13.0 | 0.5 | 0.4 | 0.4 |
| 20 | 1.500 | 2 | LHS L3 | FAIR | 0.588 | 0.546 | 0.455 | 0.409 | 0.326 | 0.199 | 0.152 | 13.0 | 0.5 | 0.4 | 0.4 |
| 21 | 1.519 | 3 | RHS R1 | FAIR | 0.565 | 0.518 | 0.459 | 0.305 | 0.241 | 0.148 | 0.112 | 13.0 | 0.5 | 0.4 | 0.4 |
| 22 | 1.519 | 3 | RHS R3 | FAIR | 0.592 | 0.566 | 0.420 | 0.278 | 0.199 | 0.120 | 0.083 | 13.0 | 0.5 | 0.4 | 0.4 |
| 23 | 1.394 | 3 | RHS R2 | FAIR | 0.519 | 0.419 | 0.278 | 0.183 | 0.099 | 0.061 | 0.039 | 13.0 | 0.5 | 0.4 | 0.4 |
| 24 | 1.269 | 3 | RHS R1 | FAIR | 0.584 | 0.515 | 0.381 | 0.261 | 0.193 | 0.117 | 0.080 | 13.0 | 0.5 | 0.4 | 0.4 |
| 25 | 1.269 | 3 | RHS R3 | FAIR | 0.581 | 0.505 | 0.476 | 0.313 | 0.231 | 0.142 | 0.107 | 13.0 | 0.5 | 0.4 | 0.4 |
| 26 | 1.144 | 3 | RHS R2 | FAIR | 0.562 | 0.447 | 0.307 | 0.195 | 0.144 | 0.087 | 0.068 | 13.0 | 0.5 | 0.4 | 0.4 |
| 27 | 1.019 | 3 | RHS R1 | FAIR | 0.571 | 0.521 | 0.455 | 0.291 | 0.177 | 0.120 | 0.075 | 13.0 | 0.5 | 0.4 | 0.4 |
| 28 | 1.019 | 3 | RHS R3 | FAIR | 0.549 | 0.515 | 0.412 | 0.254 | 0.157 | 0.083 | 0.061 | 13.0 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1491.4 | 136.8 | 76.2 | 1069.8 | 136.8 | 76.2 |
| 2 | 0.000 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1431.2 | 102.7 | 104.3 | 1021.0 | 102.7 | 104.3 |
| 3 | 0.125 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1355.9 | 254.1 | 65.0 | 979.2 | 254.1 | 65.0 |
| 4 | 0.250 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1436.6 | 263.8 | 65.0 | 1061.9 | 263.8 | 65.0 |
| 5 | 0.250 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1494.6 | 100.4 | 107.1 | 1079.4 | 100.4 | 107.1 |
| 6 | 0.375 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1491.4 | 149.7 | 84.8 | 1065.4 | 149.7 | 84.8 |
| 7 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1490.3 | 214.6 | 65.2 | 1037.4 | 214.6 | 65.2 |
| 8 | 0.500 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1495.7 | 150.4 | 74.3 | 1068.5 | 150.4 | 74.3 |
| 9 | 0.625 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1491.4 | 112.5 | 86.5 | 1083.0 | 112.5 | 86.5 |
| 10 | 0.750 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1026.9 | 149.3 | 109.6 | 720.7 | 149.3 | 109.6 |
| 11 | 0.750 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1418.3 | 253.7 | 65.0 | 1029.9 | 253.7 | 65.0 |
| 12 | 0.875 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1048.4 | 138.3 | 98.5 | 762.3 | 138.3 | 98.5 |
| 13 | 1.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 864.5 | 100.0 | 228.5 | 602.6 | 100.0 | 228.5 |
| 14 | 1.000 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1490.3 | 282.6 | 65.0 | 1083.7 | 282.6 | 65.0 |
| 15 | 1.125 | 2 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1394.6 | 203.2 | 88.8 | 1003.1 | 203.2 | 88.8 |
| 16 | 1.250 | 2 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 947.3 | 100.0 | 172.9 | 673.0 | 100.0 | 172.9 |
| 17 | 1.250 | 2 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1458.1 | 156.7 | 84.6 | 1048.7 | 156.7 | 84.6 |
| 18 | 1.375 | 2 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1181.7 | 124.2 | 101.4 | 865.2 | 124.2 | 101.4 |
| 19 | 1.500 | 2 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1475.3 | 100.4 | 160.9 | 1052.4 | 100.4 | 160.9 |
| 20 | 1.500 | 2 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1447.3 | 234.9 | 65.0 | 1059.6 | 234.9 | 65.0 |
| 21 | 1.519 | 3 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1490.3 | 185.6 | 76.1 | 1055.9 | 185.6 | 76.1 |
| 22 | 1.519 | 3 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1365.6 | 101.2 | 94.4 | 986.2 | 101.2 | 94.4 |
| 23 | 1.394 | 3 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 986.0 | 100.4 | 174.0 | 694.8 | 100.4 | 174.0 |
| 24 | 1.269 | 3 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1494.6 | 107.4 | 98.2 | 1046.1 | 107.4 | 98.2 |
| 25 | 1.269 | 3 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1489.2 | 156.7 | 78.9 | 1063.8 | 156.7 | 78.9 |
| 26 | 1.144 | 3 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1036.6 | 114.1 | 126.8 | 730.5 | 114.1 | 126.8 |
| 27 | 1.019 | 3 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1478.5 | 100.0 | 97.0 | 1030.6 | 100.0 | 97.0 |
| 28 | 1.019 | 3 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1202.2 | 100.0 | 120.9 | 873.0 | 100.0 | 120.9 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 27.1 | 760.25 | 102.59 | 65.00 | 0.0005980 | **1.45** | 0.0009515 | **0.71** | 0.0002314 | **58.36** | 0.0003895 | **40.44** | **116** | **120** |
| 2 | 0.000 | 1 | LHS L3 | 27.0 | | | | | | | | | | | | | |
| 3 | 0.125 | 1 | LHS L2 | 27.3 | | | | | | | | | | | | | |
| 4 | 0.250 | 1 | LHS L1 | 27.9 | | | | | | | | | | | | | |
| 5 | 0.250 | 1 | LHS L3 | 27.3 | | | | | | | | | | | | | |
| 6 | 0.375 | 1 | LHS L2 | 27.0 | | | | | | | | | | | | | |
| 7 | 0.500 | 1 | LHS L1 | 26.4 | | | | | | | | | | | | | |
| 8 | 0.500 | 1 | LHS L3 | 27.0 | | | | | | | | | | | | | |
| 9 | 0.625 | 1 | LHS L2 | 27.4 | | | | | | | | | | | | | |
| 10 | 0.750 | 1 | LHS L1 | 26.6 | | | | | | | | | | | | | |
| 11 | 0.750 | 1 | LHS L3 | 27.4 | | | | | | | | | | | | | |
| 12 | 0.875 | 1 | LHS L2 | 27.5 | | | | | | | | | | | | | |
| 13 | 1.000 | 1 | LHS L1 | 26.4 | | | | | | | | | | | | | |
| 14 | 1.000 | 1 | LHS L3 | 27.5 | | | | | | | | | | | | | |
| 15 | 1.125 | 2 | LHS L2 | 27.2 | 817.12 | 100.30 | 79.70 | 0.0005720 | **1.62** | 0.0008155 | **1.42** | 0.0002505 | **40.30** | 0.0003746 | **48.27** | **100** | **100** |
| 16 | 1.250 | 2 | LHS L1 | 26.9 | | | | | | | | | | | | | |
| 17 | 1.250 | 2 | LHS L3 | 27.2 | | | | | | | | | | | | | |
| 18 | 1.375 | 2 | LHS L2 | 27.6 | | | | | | | | | | | | | |
| 19 | 1.500 | 2 | LHS L1 | 27.0 | | | | | | | | | | | | | |
| 20 | 1.500 | 2 | LHS L3 | 27.6 | | | | | | | | | | | | | |
| 21 | 1.519 | 3 | RHS R1 | 26.8 | 737.60 | 100.02 | 79.68 | 0.0006044 | **1.43** | 0.0008365 | **1.26** | 0.0002566 | **40.06** | 0.0003804 | **45.02** | **102** | **105** |
| 22 | 1.519 | 3 | RHS R3 | 27.3 | | | | | | | | | | | | | |
| 23 | 1.394 | 3 | RHS R2 | 26.7 | | | | | | | | | | | | | |
| 24 | 1.269 | 3 | RHS R1 | 26.5 | | | | | | | | | | | | | |
| 25 | 1.269 | 3 | RHS R3 | 27.0 | | | | | | | | | | | | | |
| 26 | 1.144 | 3 | RHS R2 | 26.7 | | | | | | | | | | | | | |
| 27 | 1.019 | 3 | RHS R1 | 26.4 | | | | | | | | | | | | | |
| 28 | 1.019 | 3 | RHS R3 | 27.4 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| 29 | 0.894 | 4 | RHS R2 | FAIR | 0.579 | 0.442 | 0.319 | 0.218 | 0.163 | 0.099 | 0.074 | 13.0 | 0.5 | 0.4 | 0.4 |
| 30 | 0.769 | 4 | RHS R1 | FAIR | 0.596 | 0.514 | 0.356 | 0.245 | 0.180 | 0.110 | 0.088 | 13.0 | 0.5 | 0.4 | 0.4 |
| 31 | 0.769 | 4 | RHS R3 | FAIR | 0.566 | 0.512 | 0.368 | 0.220 | 0.146 | 0.062 | 0.048 | 13.0 | 0.5 | 0.4 | 0.4 |
| 32 | 0.644 | 4 | RHS R2 | FAIR | 0.556 | 0.469 | 0.339 | 0.225 | 0.162 | 0.090 | 0.064 | 13.0 | 0.5 | 0.4 | 0.4 |
| 33 | 0.519 | 4 | RHS R1 | FAIR | 0.587 | 0.489 | 0.333 | 0.264 | 0.149 | 0.098 | 0.055 | 13.0 | 0.5 | 0.4 | 0.4 |
| 34 | 0.519 | 4 | RHS R3 | FAIR | 0.580 | 0.519 | 0.427 | 0.294 | 0.192 | 0.103 | 0.070 | 13.0 | 0.5 | 0.4 | 0.4 |
| 35 | 0.394 | 4 | RHS R2 | FAIR | 0.553 | 0.503 | 0.343 | 0.215 | 0.156 | 0.103 | 0.078 | 13.0 | 0.5 | 0.4 | 0.4 |
| 36 | 0.269 | 4 | RHS R1 | FAIR | 0.567 | 0.487 | 0.370 | 0.248 | 0.177 | 0.096 | 0.071 | 13.0 | 0.5 | 0.4 | 0.4 |
| 37 | 0.269 | 4 | RHS R3 | FAIR | 0.572 | 0.500 | 0.390 | 0.266 | 0.174 | 0.114 | 0.094 | 13.0 | 0.5 | 0.4 | 0.4 |
| 38 | 0.144 | 4 | RHS R2 | FAIR | 0.597 | 0.497 | 0.367 | 0.251 | 0.195 | 0.116 | 0.085 | 13.0 | 0.5 | 0.4 | 0.4 |
| 39 | 0.019 | 4 | RHS R1 | FAIR | 0.563 | 0.483 | 0.348 | 0.233 | 0.174 | 0.091 | 0.066 | 13.0 | 0.5 | 0.4 | 0.4 |
| 40 | 0.019 | 4 | RHS R3 | FAIR | 0.595 | 0.454 | 0.339 | 0.176 | 0.122 | 0.089 | 0.078 | 13.0 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 29 | 0.894 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 972.0 | 138.7 | 113.0 | 682.2 | 138.7 | 113.0 |
| 30 | 0.769 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1093.5 | 123.9 | 100.8 | 769.5 | 123.9 | 100.8 |
| 31 | 0.769 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 890.3 | 100.8 | 144.7 | 647.4 | 100.8 | 144.7 |
| 32 | 0.644 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1023.7 | 148.9 | 104.0 | 716.5 | 148.9 | 104.0 |
| 33 | 0.519 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1088.2 | 100.8 | 120.1 | 766.8 | 100.8 | 120.1 |
| 34 | 0.519 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1332.3 | 100.0 | 101.2 | 958.2 | 100.0 | 101.2 |
| 35 | 0.394 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1131.2 | 124.2 | 111.9 | 793.9 | 124.2 | 111.9 |
| 36 | 0.269 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1353.8 | 100.0 | 109.4 | 964.5 | 100.0 | 109.4 |
| 37 | 0.269 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1335.5 | 116.4 | 98.2 | 977.8 | 116.4 | 98.2 |
| 38 | 0.144 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1217.2 | 128.2 | 96.6 | 856.6 | 128.2 | 96.6 |
| 39 | 0.019 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 1390.3 | 102.3 | 113.4 | 989.1 | 102.3 | 113.4 |
| 40 | 0.019 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 65.0 | 260.0 | 200.0 | 130.0 | 711.8 | 113.7 | 131.9 | 491.5 | 113.7 | 131.9 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| 29 | 0.894 | 4 | RHS R2 | 26.6 | 669.98 | 100.52 | 99.89 | 0.0006244 | **1.37** | 0.0007267 | **2.39** | 0.0002606 | **40.95** | 0.0003397 | **75.20** | **101** | **105** |
| 30 | 0.769 | 4 | RHS R1 | 26.7 | | | | | | | | | | | | | |
| 31 | 0.769 | 4 | RHS R3 | 27.5 | | | | | | | | | | | | | |
| 32 | 0.644 | 4 | RHS R2 | 26.5 | | | | | | | | | | | | | |
| 33 | 0.519 | 4 | RHS R1 | 26.7 | | | | | | | | | | | | | |
| 34 | 0.519 | 4 | RHS R3 | 27.2 | | | | | | | | | | | | | |
| 35 | 0.394 | 4 | RHS R2 | 26.6 | | | | | | | | | | | | | |
| 36 | 0.269 | 4 | RHS R1 | 27.0 | | | | | | | | | | | | | |
| 37 | 0.269 | 4 | RHS R3 | 27.6 | | | | | | | | | | | | | |
| 38 | 0.144 | 4 | RHS R2 | 26.7 | | | | | | | | | | | | | |
| 39 | 0.019 | 4 | RHS R1 | 26.9 | | | | | | | | | | | | | |
| 40 | 0.019 | 4 | RHS R3 | 26.2 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| | | | | | | | | |
| Road No. 2 Sarda circle-Khadkali signal | BHS | 0+000 | 0+655 | 120 | 230 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 2 Khadkali signal-sumangal Stoars | BHS | 0+655 | 0+835 | 120 | 230 | 20 | 40 | VG 40 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMED ED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road No. 2 | 0.000 | 0.835 | 0.0005856 | 1.395 | 0.0007202 | 2.492 | 0.0002466 | 40.327 | 0.0003274 | 88.881 | 102 | 105 |
| 2 | Road No. 2 | 0.835 | 0.000 | 0.0006203 | 1.235 | 0.0006958 | 2.914 | 0.0002536 | 40.078 | 0.0003173 | 102.448 | 103 | 105 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 0.596 | 0.568 | 0.423 | 0.280 | 0.200 | 0.121 | 0.084 | 14.9 | 0.5 | 0.4 | 0.4 |
| 2 | 0.125 | 1 | LHS L2 | FAIR | 0.596 | 0.534 | 0.440 | 0.302 | 0.198 | 0.106 | 0.073 | 14.9 | 0.5 | 0.4 | 0.4 |
| 3 | 0.250 | 1 | LHS L1 | FAIR | 0.593 | 0.514 | 0.486 | 0.319 | 0.235 | 0.145 | 0.109 | 14.9 | 0.5 | 0.4 | 0.4 |
| 4 | 0.375 | 1 | LHS L2 | FAIR | 0.584 | 0.512 | 0.399 | 0.272 | 0.178 | 0.117 | 0.097 | 14.9 | 0.5 | 0.4 | 0.4 |
| 5 | 0.500 | 1 | LHS L1 | FAIR | 0.546 | 0.512 | 0.409 | 0.253 | 0.156 | 0.082 | 0.060 | 14.9 | 0.5 | 0.4 | 0.4 |
| 6 | 0.625 | 1 | LHS L2 | FAIR | 0.584 | 0.445 | 0.333 | 0.174 | 0.120 | 0.087 | 0.076 | 14.9 | 0.5 | 0.4 | 0.4 |
| 7 | 0.750 | 1 | LHS L1 | FAIR | 0.543 | 0.490 | 0.353 | 0.211 | 0.140 | 0.059 | 0.046 | 14.9 | 0.5 | 0.4 | 0.4 |
| 9 | 0.835 | 2 | RHS R1 | FAIR | 0.578 | 0.506 | 0.330 | 0.197 | 0.126 | 0.083 | 0.064 | 14.9 | 0.5 | 0.4 | 0.4 |
| 10 | 0.710 | 2 | RHS R2 | FAIR | 0.507 | 0.437 | 0.311 | 0.200 | 0.147 | 0.084 | 0.062 | 14.9 | 0.5 | 0.4 | 0.4 |
| 11 | 0.585 | 2 | RHS R1 | FAIR | 0.584 | 0.538 | 0.329 | 0.184 | 0.140 | 0.081 | 0.066 | 14.9 | 0.5 | 0.4 | 0.4 |
| 12 | 0.460 | 2 | RHS R2 | FAIR | 0.580 | 0.447 | 0.336 | 0.205 | 0.158 | 0.073 | 0.048 | 14.9 | 0.5 | 0.4 | 0.4 |
| 13 | 0.335 | 2 | RHS R1 | FAIR | 0.593 | 0.556 | 0.386 | 0.236 | 0.169 | 0.093 | 0.070 | 14.9 | 0.5 | 0.4 | 0.4 |
| 14 | 0.210 | 2 | RHS R2 | FAIR | 0.583 | 0.536 | 0.379 | 0.260 | 0.191 | 0.110 | 0.083 | 14.9 | 0.5 | 0.4 | 0.4 |
| 15 | 0.085 | 2 | RHS R1 | FAIR | 0.582 | 0.547 | 0.452 | 0.302 | 0.216 | 0.109 | 0.073 | 14.9 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1459.1 | 109 | 92.4 | 1122.32 | 109.00 | 92.40 |
| 2 | 0.125 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1498.9 | 100 | 98.3 | 1083.97 | 100.00 | 98.30 |
| 3 | 0.250 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1474.2 | 175.5 | 76.3 | 1060.30 | 175.50 | 76.30 |
| 4 | 0.375 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1497.8 | 123.5 | 95.2 | 1174.55 | 123.50 | 95.20 |
| 5 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1374.2 | 101.2 | 122 | 984.34 | 101.20 | 122.00 |
| 6 | 0.625 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 849.5 | 123.1 | 133.6 | 641.85 | 123.10 | 133.60 |
| 7 | 0.750 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1171 | 100 | 153.4 | 903.20 | 100.00 | 153.40 |
| 9 | 0.835 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1004.3 | 102.7 | 134.7 | 723.32 | 102.70 | 134.70 |
| 10 | 0.710 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1486 | 119.6 | 131 | 1146.17 | 119.60 | 131.00 |
| 11 | 0.585 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1002.2 | 107 | 132.5 | 783.74 | 107.00 | 132.50 |
| 12 | 0.460 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1264.5 | 100 | 139.4 | 1012.40 | 100.00 | 139.40 |
| 13 | 0.335 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1175.3 | 100.4 | 111.8 | 846.48 | 100.40 | 111.80 |
| 14 | 0.210 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1481.7 | 110.6 | 98.7 | 1083.31 | 110.60 | 98.70 |
| 15 | 0.085 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 74.3 | 297.2 | 230.0 | 120.0 | 1484.9 | 103.5 | 97.8 | 1177.38 | 103.50 | 97.80 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Temperature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | | |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | Required Thickness | Recommended Thickness |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 28.8 | 877.07 | 100.00 | 90.79 | 0.0005856 | 1.39 | 0.0007202 | 2.49 | 0.0002466 | 40.33 | 0.0003274 | 88.88 | 102 | 105 |
| 2 | 0.125 | 1 | LHS L2 | 27.3 | | | | | | | | | | | | | |
| 3 | 0.250 | 1 | LHS L1 | 27.2 | | | | | | | | | | | | | |
| 4 | 0.375 | 1 | LHS L2 | 29.3 | | | | | | | | | | | | | |
| 5 | 0.500 | 1 | LHS L1 | 27.1 | | | | | | | | | | | | | |
| 6 | 0.625 | 1 | LHS L2 | 28.4 | | | | | | | | | | | | | |
| 7 | 0.750 | 1 | LHS L1 | 28.9 | | | | | | | | | | | | | |
| 9 | 0.835 | 2 | RHS R1 | 27.2 | 777.70 | 100.36 | 98.61 | 0.0006203 | 1.24 | 0.0006958 | 2.91 | 0.0002536 | 40.08 | 0.0003173 | 102.45 | 103 | 105 |
| 10 | 0.710 | 2 | RHS R2 | 28.9 | | | | | | | | | | | | | |
| 11 | 0.585 | 2 | RHS R1 | 29.2 | | | | | | | | | | | | | |
| 12 | 0.460 | 2 | RHS R2 | 29.8 | | | | | | | | | | | | | |
| 13 | 0.335 | 2 | RHS R1 | 27.2 | | | | | | | | | | | | | |
| 14 | 0.210 | 2 | RHS R2 | 27.6 | | | | | | | | | | | | | |
| 15 | 0.085 | 2 | RHS R1 | 29.6 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| | | | | | | | | |
| Road No. 3.1 Sangam Bridge-Kathe Chouk | BHS | 0+000 | 0+610 | 120 | 230 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 3.2 Kathe chouk-Takligaon | BHS | 0+610 | 0+835 | 120 | 230 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 3.4 Nala-Vijaymamata Chouk | BHS | 1130 | 2053 | 120 | 230 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 3.5 Vijaymamata Chouk-Ashoka marg Vadala road | BHS | 2+053 | 3+668 | 120 | 230 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 3.6 Ashoka marg Vadala road-shiwaji wadi Junction | BHS | 3+668 | 3+956 | 120 | 230 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 3.7 shiwaji wadi Junction-Etc Center | BHS | 3+956 | 4+707 | 120 | 230 | 20 | 40 | VG 40 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMEDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road No. 3.1 | 0.000 | 0.610 | 0.0006169 | 1.020 | 0.0008592 | 1.181 | 0.0002359 | 40.272 | 0.0003465 | 68.733 | 108 | 110 |
| 2 | Road No. 3.1 | 0.610 | 0.000 | 0.0004386 | 3.823 | 0.0008615 | 1.299 | 0.0002336 | 40.728 | 0.0003900 | 87.208 | 102 | 105 |
| 3 | Road No. 3.2 | 0.610 | 0.835 | 0.0005458 | 1.429 | 0.0009415 | 0.815 | 0.0002399 | 44.914 | 0.0003883 | 41.012 | 109 | 110 |
| 4 | Road No. 3.2 | 0.835 | 0.610 | 0.0003449 | 8.848 | 0.0008671 | 1.132 | 0.0001785 | 44.914 | 0.0001785 | 152.134 | 118 | 120 |
| 5 | Road No. 3.4 & 3.5 | 1.130 | 2.000 | 0.0003597 | 10.789 | 0.0007880 | 1.862 | 0.0001791 | 125.721 | 0.0003997 | 40.348 | 102 | 105 |
| 6 | Road No. 3.4 & 3.5 | 2.000 | 3.000 | 0.0004988 | 2.672 | 0.0009844 | 0.844 | 0.0002221 | 76.551 | 0.0003964 | 40.964 | 115 | 115 |
| 7 | Road No. 3.4 & 3.5 | 3.000 | 3.668 | 0.0004798 | 1.200 | 0.0007920 | 2.315 | 0.0002565 | 40.249 | 0.0003361 | 104.223 | 106 | 105 |
| 8 | Road No. 3.4 & 3.5 | 3.668 | 3.000 | 0.0006129 | 1.047 | 0.0007735 | 1.803 | 0.0002348 | 40.006 | 0.0003427 | 94.902 | 109 | 110 |
| 9 | Road No. 3.4 & 3.5 | 3.000 | 2.000 | 0.0005341 | 1.523 | 0.0008580 | 1.324 | 0.0002562 | 41.013 | 0.0003893 | 51.486 | 102 | 105 |
| 10 | Road No. 3.4 & 3.5 | 2.000 | 1.130 | 0.0006550 | 0.836 | 0.0009589 | 0.592 | 0.0002407 | 41.067 | 0.0003822 | 44.064 | 114 | 115 |
| 11 | Road No. 3.6 | 3.668 | 3.956 | 0.0006129 | 1.047 | 0.0007735 | 1.803 | 0.0002348 | 40.006 | 0.0003427 | 94.902 | 109 | 110 |
| 12 | Road No. 3.6 | 3.956 | 3.668 | 0.0005683 | 1.189 | 0.0007671 | 1.872 | 0.0002836 | 40.433 | 0.0003267 | 89.747 | 108 | 105 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMEDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 13 | Road No. 3.7 | 3.956 | 4.7.7 | 0.0005683 | **1.189** | 0.0007671 | **1.872** | 0.0002836 | **40.433** | 0.0003267 | **89.747** | **108** | **105** |
| 14 | Road No. 3.7 | 4.707 | 3.956 | 0.0005905 | **2.390** | 0.0008147 | **1.425** | 0.0002197 | **40.711** | 0.0003294 | **95.489** | **98** | **100** |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| **Road No. 3.1 Sangam Bridge-Kathe Chouk** | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 0.590 | 0.517 | 0.378 | 0.265 | 0.201 | 0.103 | 0.072 | 3.8 | 0.5 | 0.4 | 0.4 |
| 2 | 0.125 | 1 | LHS L2 | FAIR | 0.476 | 0.343 | 0.236 | 0.153 | 0.107 | 0.055 | 0.040 | 3.8 | 0.5 | 0.4 | 0.4 |
| 3 | 0.500 | 1 | LHS L1 | FAIR | 0.594 | 0.495 | 0.422 | 0.315 | 0.217 | 0.125 | 0.090 | 3.8 | 0.5 | 0.4 | 0.4 |
| 4 | 0.610 | 1 | LHS L2 | FAIR | 0.565 | 0.531 | 0.434 | 0.351 | 0.256 | 0.146 | 0.107 | 3.8 | 0.5 | 0.4 | 0.4 |
| 5 | 0.610 | 2 | RHS R1 | FAIR | 0.577 | 0.530 | 0.489 | 0.331 | 0.226 | 0.119 | 0.089 | 3.8 | 0.5 | 0.4 | 0.4 |
| 6 | 0.485 | 2 | RHS R2 | FAIR | 0.510 | 0.416 | 0.305 | 0.218 | 0.171 | 0.100 | 0.068 | 3.8 | 0.5 | 0.4 | 0.4 |
| 7 | 0.110 | 2 | RHS R1 | FAIR | 0.570 | 0.535 | 0.437 | 0.353 | 0.257 | 0.146 | 0.107 | 3.8 | 0.5 | 0.4 | 0.4 |
| 8 | 0.000 | 2 | RHS R2 | FAIR | 0.571 | 0.525 | 0.484 | 0.328 | 0.224 | 0.119 | 0.090 | 3.8 | 0.5 | 0.4 | 0.4 |
| **Road No. 3.2 Kathe chouk-Takligaon** | | | | | | | | | | | | | | | |
| 10 | 0.610 | 3 | LHS L1 | FAIR | 0.583 | 0.532 | 0.476 | 0.334 | 0.231 | 0.132 | 0.101 | 3.8 | 0.5 | 0.4 | 0.4 |
| 11 | 0.610 | 3 | LHS L3 | FAIR | 0.591 | 0.525 | 0.410 | 0.291 | 0.211 | 0.113 | 0.082 | 3.8 | 0.5 | 0.4 | 0.4 |
| 12 | 0.735 | 3 | LHS L2 | FAIR | 0.600 | 0.521 | 0.383 | 0.269 | 0.205 | 0.107 | 0.075 | 3.8 | 0.5 | 0.4 | 0.4 |
| 13 | 0.835 | 3 | LHS L1 | FAIR | 0.472 | 0.340 | 0.235 | 0.152 | 0.108 | 0.055 | 0.041 | 3.8 | 0.5 | 0.4 | 0.4 |
| 14 | 0.835 | 3 | LHS L3 | FAIR | 0.593 | 0.496 | 0.430 | 0.315 | 0.218 | 0.125 | 0.090 | 3.8 | 0.5 | 0.4 | 0.4 |
| 15 | 0.835 | 4 | RHS R1 | FAIR | 0.592 | 0.556 | 0.503 | 0.406 | 0.316 | 0.219 | 0.133 | 3.8 | 0.5 | 0.4 | 0.4 |
| 16 | 0.835 | 4 | RHS R3 | FAIR | 0.589 | 0.571 | 0.526 | 0.485 | 0.329 | 0.225 | 0.118 | 3.8 | 0.5 | 0.4 | 0.4 |
| 17 | 0.585 | 4 | RHS R2 | FAIR | 0.573 | 0.480 | 0.372 | 0.257 | 0.190 | 0.117 | 0.072 | 3.8 | 0.5 | 0.4 | 0.4 |
| 18 | 0.335 | 4 | RHS R1 | FAIR | 0.560 | 0.463 | 0.410 | 0.251 | 0.178 | 0.122 | 0.069 | 3.8 | 0.5 | 0.4 | 0.4 |
| 19 | 0.335 | 4 | RHS R3 | FAIR | 0.558 | 0.459 | 0.361 | 0.212 | 0.144 | 0.093 | 0.066 | 3.8 | 0.5 | 0.4 | 0.4 |
| **Road No. 3.4 & 3.5 Nala -Ashoka marg Vadala road** | | | | | | | | | | | | | | | |
| 21 | 1.130 | 5 | LHS L1 | FAIR | 0.570 | 0.517 | 0.372 | 0.247 | 0.193 | 0.093 | 0.070 | 3.8 | 0.5 | 0.4 | 0.4 |
| 22 | 1.130 | 5 | LHS L3 | FAIR | 0.571 | 0.530 | 0.467 | 0.309 | 0.229 | 0.121 | 0.083 | 3.8 | 0.5 | 0.4 | 0.4 |
| 23 | 1.380 | 5 | LHS L2 | FAIR | 0.586 | 0.491 | 0.425 | 0.289 | 0.215 | 0.115 | 0.082 | 3.8 | 0.5 | 0.4 | 0.4 |
| 24 | 1.630 | 5 | LHS L1 | FAIR | 0.574 | 0.420 | 0.286 | 0.194 | 0.150 | 0.086 | 0.057 | 3.8 | 0.5 | 0.4 | 0.4 |
| 25 | 1.630 | 5 | LHS L3 | FAIR | 0.581 | 0.436 | 0.302 | 0.191 | 0.125 | 0.071 | 0.050 | 3.8 | 0.5 | 0.4 | 0.4 |
| 26 | 1.880 | 5 | LHS L2 | FAIR | 0.565 | 0.470 | 0.412 | 0.268 | 0.192 | 0.107 | 0.079 | 3.8 | 0.5 | 0.4 | 0.4 |
| 27 | 2.130 | 6 | LHS L1 | FAIR | 0.567 | 0.511 | 0.323 | 0.237 | 0.170 | 0.101 | 0.074 | 3.8 | 0.5 | 0.4 | 0.4 |
| 28 | 2.130 | 6 | LHS L3 | FAIR | 0.513 | 0.439 | 0.339 | 0.240 | 0.185 | 0.116 | 0.080 | 3.8 | 0.5 | 0.4 | 0.4 |
| 29 | 2.380 | 6 | LHS L2 | FAIR | 0.575 | 0.497 | 0.310 | 0.193 | 0.136 | 0.070 | 0.052 | 3.8 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road No. 3.1 Sangam Bridge-Kathe Chouk | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1444.1 | 152.7 | 214.3 | 993.0 | 152.7 | 214.3 |
| 2 | 0.125 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 425.0 | 100.0 | 236.1 | 297.5 | 100.0 | 236.1 |
| 3 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1025.0 | 128.7 | 129.3 | 728.2 | 128.7 | 129.3 |
| 4 | 0.610 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 384.0 | 119.2 | 173.3 | 412.6 | 119.2 | 173.3 |
| 5 | 0.610 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1409.7 | 100.0 | 198.3 | 997.5 | 100.0 | 198.3 |
| 6 | 0.485 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1459.1 | 100.0 | 237.9 | 1036.6 | 100.0 | 237.9 |
| 7 | 0.110 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1463.4 | 191.0 | 192.3 | 1010.4 | 191.0 | 192.3 |
| 8 | 0.000 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1416.1 | 147.9 | 121.5 | 987.1 | 147.9 | 121.5 |
| | | | | Road No. 3.2 Kathe chouk-Takligaon | | | | | | | | | | | | | |
| 10 | 0.610 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 84.7 | 123.9 | 190.9 | 65.1 | 123.9 | 190.9 |
| 11 | 0.610 | 3 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1418.3 | 143.1 | 221.1 | 1020.1 | 143.1 | 221.1 |
| 12 | 0.735 | 3 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1480.6 | 114.4 | 125.4 | 1060.6 | 114.4 | 125.4 |
| 13 | 0.835 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1430.1 | 138.3 | 99.1 | 1103.0 | 138.3 | 99.1 |
| 14 | 0.835 | 3 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1358.1 | 100.5 | 112.1 | 982.1 | 100.5 | 112.1 |
| 15 | 0.835 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 584.6 | 109.6 | 142.1 | 458.4 | 109.6 | 142.1 |
| 16 | 0.835 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1452.7 | 147.9 | 98.3 | 1097.6 | 147.9 | 98.3 |
| 17 | 0.585 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1440.9 | 171.8 | 244.3 | 1037.8 | 171.8 | 244.3 |
| 18 | 0.335 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1452.7 | 210.2 | 181.5 | 1136.0 | 210.2 | 181.5 |
| 19 | 0.335 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1446.2 | 100.9 | 174.3 | 1041.6 | 100.9 | 174.3 |
| | | | | Road No. 3.4 & 3.5 Nala -Ashoka marg Vadala road | | | | | | | | | | | | | |
| 21 | 1.130 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1482.8 | 205.4 | 137.9 | 1143.7 | 205.4 | 137.9 |
| 22 | 1.130 | 5 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 674.2 | 344.3 | 197.5 | 539.8 | 344.3 | 197.5 |
| 23 | 1.380 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1500.0 | 296.4 | 188.9 | 1096.7 | 296.4 | 188.9 |
| 24 | 1.630 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1462.4 | 100.5 | 171.0 | 1097.4 | 100.5 | 171.0 |
| 25 | 1.630 | 5 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1460.2 | 181.4 | 233.6 | 1053.1 | 181.4 | 233.6 |
| 26 | 1.880 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1448.4 | 100.5 | 173.3 | 1075.0 | 100.5 | 173.3 |
| 27 | 2.130 | 6 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1473.1 | 100.5 | 201.0 | 1108.4 | 100.5 | 201.0 |
| 28 | 2.130 | 6 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1482.8 | 100.5 | 218.6 | 1175.7 | 100.5 | 218.6 |
| 29 | 2.380 | 6 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 756.4 | 559.8 | 280.0 | 541.8 | 559.8 | 280.0 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road No. 3.1 Sangam Bridge-Kathe Chouk | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 26.1 | 349.25 | 108.64 | 149.10 | 0.0006169 | 1.02 | 0.0008592 | 1.18 | 0.0002359 | 40.27 | 0.0003465 | 68.73 | 108 | 110 |
| 2 | 0.125 | 1 | LHS L2 | 26.5 | | | | | | | | | | | | | |
| 3 | 0.500 | 1 | LHS L1 | 26.9 | | | | | | | | | | | | | |
| 4 | 0.610 | 1 | LHS L2 | 36.6 | | | | | | | | | | | | | |
| 5 | 0.610 | 2 | RHS R1 | 26.8 | 991.75 | 100.00 | 153.36 | 0.0004386 | 3.82 | 0.0008615 | 1.30 | 0.0002336 | 40.73 | 0.0003900 | 87.21 | 102 | 105 |
| 6 | 0.485 | 2 | RHS R2 | 26.9 | | | | | | | | | | | | | |
| 7 | 0.110 | 2 | RHS R1 | 26.2 | | | | | | | | | | | | | |
| 8 | 0.000 | 2 | RHS R2 | 26.4 | | | | | | | | | | | | | |
| | | | | Road No. 3.2 Kathe chouk-Takligaon | | | | | | | | | | | | | | |
| 10 | 0.610 | 3 | LHS L1 | 28.8 | 615.33 | 108.84 | 106.90 | 0.0005458 | 1.43 | 0.0009415 | 0.82 | 0.0002399 | 44.91 | 0.0003883 | 41.01 | 109 | 110 |
| 11 | 0.610 | 3 | LHS L3 | 27.2 | | | | | | | | | | | | | |
| 12 | 0.735 | 3 | LHS L2 | 27.1 | | | | | | | | | | | | | |
| 13 | 0.835 | 3 | LHS L1 | 28.9 | | | | | | | | | | | | | |
| 14 | 0.835 | 3 | LHS L3 | 27.3 | | | | | | | | | | | | | |
| 15 | 0.835 | 4 | RHS R1 | 29.3 | 806.03 | 106.10 | 124.58 | 0.0003449 | 8.85 | 0.0008671 | 1.13 | 0.0001785 | 152.13 | 0.0003997 | 40.55 | 118 | 120 |
| 16 | 0.835 | 4 | RHS R3 | 28.4 | | | | | | | | | | | | | |
| 17 | 0.585 | 4 | RHS R2 | 27.2 | | | | | | | | | | | | | |
| 18 | 0.335 | 4 | RHS R1 | 29.2 | | | | | | | | | | | | | |
| 19 | 0.335 | 4 | RHS R3 | 27.2 | | | | | | | | | | | | | |
| | | | | Road No. 3.4 & 3.5 Nala -Ashoka marg Vadala road | | | | | | | | | | | | | |
| 21 | 1.130 | 5 | LHS L1 | 28.9 | 924.77 | 100.50 | 162.73 | 0.0003597 | 10.79 | 0.0007880 | 1.86 | 0.0001791 | 125.72 | 0.0003997 | 40.35 | 102 | 105 |
| 22 | 1.130 | 5 | LHS L3 | 29.8 | | | | | | | | | | | | | |
| 23 | 1.380 | 5 | LHS L2 | 27.6 | | | | | | | | | | | | | |
| 24 | 1.630 | 5 | LHS L1 | 28.2 | | | | | | | | | | | | | |
| 25 | 1.630 | 5 | LHS L3 | 27.3 | | | | | | | | | | | | | |
| 26 | 1.880 | 5 | LHS L2 | 28.0 | | | | | | | | | | | | | |
| 27 | 2.130 | 6 | LHS L1 | 28.3 | 940.92 | 100.53 | 205.88 | 0.0004988 | 2.67 | 0.0009844 | 0.84 | 0.0002221 | 76.55 | 0.0003964 | 40.96 | 115 | 115 |
| 28 | 2.130 | 6 | LHS L3 | 29.6 | | | | | | | | | | | | | |
| 29 | 2.380 | 6 | LHS L2 | 27.1 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| 30 | 2.630 | 6 | LHS L1 | FAIR | 0.560 | 0.448 | 0.360 | 0.178 | 0.132 | 0.066 | 0.049 | 3.8 | 0.5 | 0.4 | 0.4 |
| 31 | 2.630 | 6 | LHS L3 | FAIR | 0.546 | 0.443 | 0.314 | 0.203 | 0.137 | 0.066 | 0.046 | 3.8 | 0.5 | 0.4 | 0.4 |
| 32 | 2.880 | 6 | LHS L2 | FAIR | 0.543 | 0.516 | 0.386 | 0.259 | 0.188 | 0.098 | 0.068 | 3.8 | 0.5 | 0.4 | 0.4 |
| 33 | 3.130 | 7 | LHS L1 | FAIR | 0.585 | 0.455 | 0.330 | 0.211 | 0.147 | 0.080 | 0.059 | 3.8 | 0.5 | 0.4 | 0.4 |
| 34 | 3.130 | 7 | LHS L3 | FAIR | 0.574 | 0.470 | 0.342 | 0.225 | 0.162 | 0.087 | 0.060 | 3.8 | 0.5 | 0.4 | 0.4 |
| 35 | 3.380 | 7 | LHS L2 | FAIR | 0.561 | 0.510 | 0.419 | 0.259 | 0.196 | 0.106 | 0.071 | 3.8 | 0.5 | 0.4 | 0.4 |
| 36 | 3.630 | 7 | LHS L1 | FAIR | 0.579 | 0.533 | 0.441 | 0.371 | 0.261 | 0.154 | 0.046 | 3.8 | 0.5 | 0.4 | 0.4 |
| 37 | 3.630 | 7 | LHS L3 | FAIR | 0.556 | 0.453 | 0.308 | 0.194 | 0.132 | 0.077 | 0.044 | 3.8 | 0.5 | 0.4 | 0.4 |
| 38 | 3.668 | 8 | RHS R1 | FAIR | 0.555 | 0.510 | 0.470 | 0.319 | 0.218 | 0.116 | 0.086 | 3.8 | 0.5 | 0.4 | 0.4 |
| 39 | 3.668 | 8 | RHS R3 | FAIR | 0.576 | 0.468 | 0.332 | 0.215 | 0.145 | 0.071 | 0.050 | 3.8 | 0.5 | 0.4 | 0.4 |
| 40 | 3.418 | 8 | RHS R2 | FAIR | 0.569 | 0.539 | 0.402 | 0.277 | 0.203 | 0.106 | 0.074 | 3.8 | 0.5 | 0.4 | 0.4 |
| 41 | 3.168 | 8 | RHS R1 | FAIR | 0.586 | 0.552 | 0.452 | 0.326 | 0.224 | 0.114 | 0.081 | 3.8 | 0.5 | 0.4 | 0.4 |
| 42 | 3.168 | 8 | RHS R3 | FAIR | 0.588 | 0.438 | 0.339 | 0.251 | 0.143 | 0.101 | 0.049 | 3.8 | 0.5 | 0.4 | 0.4 |
| 43 | 2.918 | 9 | RHS R2 | FAIR | 0.596 | 0.529 | 0.468 | 0.406 | 0.299 | 0.155 | 0.056 | 3.8 | 0.5 | 0.4 | 0.4 |
| 44 | 2.668 | 9 | RHS R1 | FAIR | 0.575 | 0.468 | 0.332 | 0.216 | 0.145 | 0.072 | 0.052 | 3.8 | 0.5 | 0.4 | 0.4 |
| 45 | 2.668 | 9 | RHS R3 | FAIR | 0.601 | 0.558 | 0.465 | 0.333 | 0.202 | 0.154 | 0.059 | 3.8 | 0.5 | 0.4 | 0.4 |
| 46 | 2.418 | 9 | RHS R2 | FAIR | 0.570 | 0.481 | 0.355 | 0.277 | 0.221 | 0.138 | 0.099 | 3.8 | 0.5 | 0.4 | 0.4 |
| 47 | 2.168 | 9 | RHS R1 | FAIR | 0.461 | 0.343 | 0.213 | 0.146 | 0.064 | 0.047 | 0.038 | 3.8 | 0.5 | 0.4 | 0.4 |
| 48 | 2.168 | 9 | RHS R3 | FAIR | 0.537 | 0.433 | 0.288 | 0.190 | 0.101 | 0.063 | 0.041 | 3.8 | 0.5 | 0.4 | 0.4 |
| 49 | 1.918 | 10 | RHS R2 | FAIR | 0.470 | 0.366 | 0.289 | 0.208 | 0.112 | 0.074 | 0.039 | 3.8 | 0.5 | 0.4 | 0.4 |
| 50 | 1.668 | 10 | RHS R1 | FAIR | 0.578 | 0.462 | 0.347 | 0.287 | 0.186 | 0.142 | 0.057 | 3.8 | 0.5 | 0.4 | 0.4 |
| 51 | 1.668 | 10 | RHS R3 | FAIR | 0.584 | 0.511 | 0.375 | 0.264 | 0.200 | 0.103 | 0.072 | 3.8 | 0.5 | 0.4 | 0.4 |
| 52 | 1.168 | 10 | RHS R2 | FAIR | 0.491 | 0.353 | 0.245 | 0.158 | 0.113 | 0.058 | 0.044 | 3.8 | 0.5 | 0.4 | 0.4 |
| 53 | 1.168 | 10 | RHS R1 | FAIR | 0.579 | 0.484 | 0.412 | 0.308 | 0.213 | 0.124 | 0.090 | 3.8 | 0.5 | 0.4 | 0.4 |
| 54 | 1.168 | 10 | RHS R3 | FAIR | 0.578 | 0.543 | 0.444 | 0.360 | 0.263 | 0.150 | 0.112 | 3.8 | 0.5 | 0.4 | 0.4 |
| **Road No. 3.6 Ashoka marg Vadala road-shiwaji wadi Junction** | | | | | | | | | | | | | | | |
| 56 | 3.668 | 11 | LHS | FAIR | 0.522 | 0.427 | 0.313 | 0.224 | 0.176 | 0.104 | 0.072 | 3.8 | 0.5 | 0.4 | 0.4 |
| 57 | 3.918 | 11 | LHS | FAIR | 0.585 | 0.551 | 0.450 | 0.364 | 0.265 | 0.152 | 0.112 | 3.8 | 0.5 | 0.4 | 0.4 |
| 58 | 3.956 | 12 | RHS | FAIR | 0.574 | 0.528 | 0.488 | 0.331 | 0.227 | 0.121 | 0.093 | 3.8 | 0.5 | 0.4 | 0.4 |
| 59 | 3.706 | 12 | RHS | FAIR | 0.606 | 0.549 | 0.483 | 0.347 | 0.240 | 0.143 | 0.110 | 3.8 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| 30 | 2.630 | 6 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1443.0 | 301.2 | 251.1 | 1074.0 | 301.2 | 251.1 |
| 31 | 2.630 | 6 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1500.0 | 195.8 | 211.2 | 1077.4 | 195.8 | 211.2 |
| 32 | 2.880 | 6 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1486.0 | 325.1 | 207.5 | 1087.9 | 325.1 | 207.5 |
| 33 | 3.130 | 7 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 85.6 | 459.2 | 179.4 | 64.6 | 459.2 | 179.4 |
| 34 | 3.130 | 7 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1940.6 | 100.5 | 279.6 | 1397.7 | 100.5 | 279.6 |
| 35 | 3.380 | 7 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1964.8 | 100.8 | 114.5 | 1484.5 | 100.8 | 114.5 |
| 36 | 3.630 | 7 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1898.8 | 238.9 | 204.9 | 1363.8 | 238.9 | 204.9 |
| 37 | 3.630 | 7 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1483.9 | 162.3 | 241.2 | 1060.0 | 162.3 | 241.2 |
| 38 | 3.668 | 8 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 786.4 | 123.9 | 132.2 | 614.1 | 123.9 | 132.2 |
| 39 | 3.668 | 8 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1490.3 | 101.2 | 233.6 | 1070.4 | 101.2 | 233.6 |
| 40 | 3.418 | 8 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1475.3 | 143.1 | 115.2 | 1077.2 | 143.1 | 115.2 |
| 41 | 3.168 | 8 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1494.6 | 102.3 | 106.3 | 1167.2 | 102.3 | 106.3 |
| 42 | 3.168 | 8 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1455.9 | 123.9 | 100.4 | 1058.6 | 123.9 | 100.4 |
| 43 | 2.918 | 9 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 587.2 | 483.2 | 183.1 | 451.7 | 483.2 | 183.1 |
| 44 | 2.668 | 9 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1428.0 | 143.1 | 134.7 | 979.3 | 143.1 | 134.7 |
| 45 | 2.668 | 9 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1497.8 | 102.6 | 193.6 | 1029.9 | 102.6 | 193.6 |
| 46 | 2.418 | 9 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1495.7 | 100.8 | 279.4 | 1187.6 | 100.8 | 279.4 |
| 47 | 2.168 | 9 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1488.2 | 521.5 | 181.5 | 1101.5 | 521.5 | 181.5 |
| 48 | 2.168 | 9 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1471.0 | 272.4 | 142.5 | 1088.8 | 272.4 | 142.5 |
| 49 | 1.918 | 10 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1478.5 | 105.4 | 189.7 | 1167.5 | 105.4 | 189.7 |
| 50 | 1.668 | 10 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 843.7 | 119.2 | 149.4 | 621.1 | 119.2 | 149.4 |
| 51 | 1.668 | 10 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1461.3 | 114.4 | 116.0 | 1066.9 | 114.4 | 116.0 |
| 52 | 1.168 | 10 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1489.2 | 435.3 | 218.6 | 1166.2 | 435.3 | 218.6 |
| 53 | 1.168 | 10 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1450.5 | 100.5 | 119.3 | 1056.2 | 100.5 | 119.3 |
| 54 | 1.168 | 10 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1494.6 | 325.1 | 115.8 | 1077.9 | 325.1 | 115.8 |
| | | | | **Road No. 3.6 Ashoka marg Vadala road-shiwaji wadi Junction** | | | | | | | | | | | | | |
| 56 | 3.668 | 11 | LHS | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 745.8 | 125.6 | 114.5 | 542.3 | 125.6 | 114.5 |
| 57 | 3.918 | 11 | LHS | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1478.5 | 100.5 | 125.4 | 1086.9 | 100.5 | 125.4 |
| 58 | 3.956 | 12 | RHS | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 758.0 | 100.5 | 154.4 | 559.5 | 100.5 | 154.4 |
| 59 | 3.706 | 12 | RHS | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1495.7 | 425.7 | 127.3 | 1036.9 | 425.7 | 127.3 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| 30 | 2.630 | 6 | LHS L1 | 28.0 | | | | | | | | | | | | | |
| 31 | 2.630 | 6 | LHS L3 | 27.2 | | | | | | | | | | | | | |
| 32 | 2.880 | 6 | LHS L2 | 27.6 | | | | | | | | | | | | | |
| 33 | 3.130 | 7 | LHS L1 | 28.4 | 661.85 | 100.68 | 153.44 | 0.0004798 | **1.20** | 0.0007920 | **2.32** | 0.0002565 | **40.25** | 0.0003361 | **104.22** | **106** | **105** |
| 34 | 3.130 | 7 | LHS L3 | 27.2 | | | | | | | | | | | | | |
| 35 | 3.380 | 7 | LHS L2 | 28.4 | | | | | | | | | | | | | |
| 36 | 3.630 | 7 | LHS L1 | 27.2 | | | | | | | | | | | | | |
| 37 | 3.630 | 7 | LHS L3 | 27.0 | | | | | | | | | | | | | |
| 38 | 3.668 | 8 | RHS R1 | 29.2 | 880.84 | 101.86 | 103.94 | 0.0006129 | **1.05** | 0.0007735 | **1.80** | 0.0002348 | **40.01** | 0.0003427 | **94.90** | **109** | **110** |
| 39 | 3.668 | 8 | RHS R3 | 27.2 | | | | | | | | | | | | | |
| 40 | 3.418 | 8 | RHS R2 | 27.6 | | | | | | | | | | | | | |
| 41 | 3.168 | 8 | RHS R1 | 29.2 | | | | | | | | | | | | | |
| 42 | 3.168 | 8 | RHS R3 | 27.5 | | | | | | | | | | | | | |
| 43 | 2.918 | 9 | RHS R2 | 28.8 | 847.37 | 102.15 | 140.55 | 0.0005341 | **1.52** | 0.0008580 | **1.32** | 0.0002562 | **41.01** | 0.0003893 | **51.49** | **102** | **105** |
| 44 | 2.668 | 9 | RHS R1 | 26.0 | | | | | | | | | | | | | |
| 45 | 2.668 | 9 | RHS R3 | 26.1 | | | | | | | | | | | | | |
| 46 | 2.418 | 9 | RHS R2 | 29.6 | | | | | | | | | | | | | |
| 47 | 2.168 | 9 | RHS R1 | 27.9 | | | | | | | | | | | | | |
| 48 | 2.168 | 9 | RHS R3 | 27.9 | | | | | | | | | | | | | |
| 49 | 1.918 | 10 | RHS R2 | 29.5 | 947.39 | 104.18 | 115.95 | 0.0006550 | **0.84** | 0.0009589 | **0.59** | 0.0002407 | **41.07** | 0.0003822 | **44.06** | **114** | **115** |
| 50 | 1.668 | 10 | RHS R1 | 27.8 | | | | | | | | | | | | | |
| 51 | 1.668 | 10 | RHS R3 | 27.6 | | | | | | | | | | | | | |
| 52 | 1.168 | 10 | RHS R2 | 29.3 | | | | | | | | | | | | | |
| 53 | 1.168 | 10 | RHS R1 | 27.5 | | | | | | | | | | | | | |
| 54 | 1.168 | 10 | RHS R3 | 27.3 | | | | | | | | | | | | | |
| | | | | | **Road No. 3.6 Ashoka marg Vadala road-shiwaji wadi Junction** | | | | | | | | | | | | | |
| 56 | 3.668 | 11 | LHS | 27.5 | 623.99 | 104.27 | 116.14 | 0.0005822 | **1.29** | 0.0008898 | **0.96** | 0.0002355 | **40.77** | 0.0003776 | **46.55** | **107** | **110** |
| 57 | 3.918 | 11 | LHS | 27.7 | | | | | | | | | | | | | |
| 58 | 3.956 | 12 | RHS | 27.8 | 631.13 | 149.28 | 131.37 | 0.0005683 | **1.19** | 0.0007671 | **1.87** | 0.0002836 | **40.43** | 0.0003267 | **89.75** | **108** | **105** |
| 59 | 3.706 | 12 | RHS | 26.3 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| Road No. 3.7 shiwaji wadi Junction-Etc Center | | | | | | | | | | | | | | | |
| 61 | 3.956 | 13 | LHS L1 | FAIR | 0.562 | 0.465 | 0.337 | 0.234 | 0.174 | 0.092 | 0.066 | 3.8 | 0.5 | 0.4 | 0.4 |
| 62 | 3.956 | 13 | LHS L3 | FAIR | 0.568 | 0.523 | 0.482 | 0.327 | 0.224 | 0.119 | 0.090 | 3.8 | 0.5 | 0.4 | 0.4 |
| 63 | 4.206 | 13 | LHS L2 | FAIR | 0.518 | 0.396 | 0.305 | 0.208 | 0.148 | 0.082 | 0.059 | 3.8 | 0.5 | 0.4 | 0.4 |
| 64 | 4.456 | 13 | LHS L1 | FAIR | 0.569 | 0.476 | 0.405 | 0.304 | 0.210 | 0.123 | 0.090 | 3.8 | 0.5 | 0.4 | 0.4 |
| 65 | 4.456 | 13 | LHS L3 | FAIR | 0.588 | 0.581 | 0.542 | 0.462 | 0.352 | 0.253 | 0.142 | 3.8 | 0.5 | 0.4 | 0.4 |
| 66 | 4.706 | 13 | LHS L2 | FAIR | 0.560 | 0.536 | 0.473 | 0.414 | 0.289 | 0.204 | 0.113 | 3.8 | 0.5 | 0.4 | 0.4 |
| 67 | 4.707 | 14 | RHS R1 | FAIR | 0.560 | 0.446 | 0.343 | 0.227 | 0.169 | 0.088 | 0.055 | 3.8 | 0.5 | 0.4 | 0.4 |
| 68 | 4.707 | 14 | RHS R3 | FAIR | 0.558 | 0.463 | 0.435 | 0.259 | 0.180 | 0.136 | 0.077 | 3.8 | 0.5 | 0.4 | 0.4 |
| 69 | 4.457 | 14 | RHS R2 | FAIR | 0.598 | 0.494 | 0.353 | 0.210 | 0.139 | 0.085 | 0.068 | 3.8 | 0.5 | 0.4 | 0.4 |
| 70 | 4.207 | 14 | RHS R1 | FAIR | 0.573 | 0.520 | 0.375 | 0.250 | 0.195 | 0.095 | 0.073 | 3.8 | 0.5 | 0.4 | 0.4 |
| 71 | 4.207 | 14 | RHS R3 | FAIR | 0.588 | 0.547 | 0.482 | 0.320 | 0.237 | 0.126 | 0.087 | 3.8 | 0.5 | 0.4 | 0.4 |
| 72 | 3.957 | 14 | RHS R2 | FAIR | 0.561 | 0.471 | 0.408 | 0.279 | 0.208 | 0.114 | 0.081 | 3.8 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road No. 3.7 shiwaji wadi Junction-Etc Center | | | | | | | | | | | | | |
| 61 | 3.956 | 13 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1490.3 | 100.6 | 201.4 | 1091.1 | 100.6 | 201.4 |
| 62 | 3.956 | 13 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1469.9 | 238.9 | 119.9 | 1071.7 | 238.9 | 119.9 |
| 63 | 4.206 | 13 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 845.0 | 401.8 | 148.8 | 594.6 | 401.8 | 148.8 |
| 64 | 4.456 | 13 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1462.4 | 449.7 | 182.5 | 1088.4 | 449.7 | 182.5 |
| 65 | 4.456 | 13 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1423.7 | 507.1 | 127.5 | 1043.8 | 507.1 | 127.5 |
| 66 | 4.706 | 13 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1480.6 | 100.5 | 153.5 | 1103.4 | 100.5 | 153.5 |
| 67 | 4.707 | 14 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1355.9 | 176.6 | 99.1 | 1013.3 | 176.6 | 99.1 |
| 68 | 4.707 | 14 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1467.7 | 114.4 | 91.3 | 1027.2 | 114.4 | 91.3 |
| 69 | 4.457 | 14 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1394.6 | 103.5 | 98.1 | 1039.4 | 103.5 | 98.1 |
| 70 | 4.207 | 14 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1491.4 | 257.0 | 152.1 | 1108.5 | 257.0 | 152.1 |
| 71 | 4.207 | 14 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1325.8 | 285.0 | 137.5 | 947.1 | 285.0 | 137.5 |
| 72 | 3.957 | 14 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 19.0 | 76.0 | 230.0 | 120.0 | 1490.3 | 100.5 | 209.2 | 1121.4 | 100.5 | 209.2 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road No. 3.7 shiwaji wadi Junction-Etc Center | | | | | | | | | | | | | |
| 61 | 3.956 | 13 | LHS L1 | 27.6 | 931.48 | 100.55 | 125.60 | 0.0006155 | **0.99** | 0.0007171 | **2.54** | 0.0002509 | **41.32** | 0.0003836 | **125.14** | **106** | **110** |
| 62 | 3.956 | 13 | LHS L3 | 27.5 | | | | | | | | | | | | | |
| 63 | 4.206 | 13 | LHS L2 | 26.7 | | | | | | | | | | | | | |
| 64 | 4.456 | 13 | LHS L1 | 28.0 | | | | | | | | | | | | | |
| 65 | 4.456 | 13 | LHS L3 | 27.7 | | | | | | | | | | | | | |
| 66 | 4.706 | 13 | LHS L2 | 28.1 | | | | | | | | | | | | | |
| 67 | 4.707 | 14 | RHS R1 | 28.1 | 996.73 | 102.75 | 96.40 | 0.0005905 | **2.39** | 0.0008147 | **1.43** | 0.0002197 | **40.71** | 0.0003294 | **95.49** | **98** | **100** |
| 68 | 4.707 | 14 | RHS R3 | 26.5 | | | | | | | | | | | | | |
| 69 | 4.457 | 14 | RHS R2 | 28.1 | | | | | | | | | | | | | |
| 70 | 4.207 | 14 | RHS R1 | 28.0 | | | | | | | | | | | | | |
| 71 | 4.207 | 14 | RHS R3 | 27.0 | | | | | | | | | | | | | |
| 72 | 3.957 | 14 | RHS R2 | 28.3 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| Road NO. 4.1 Lakshminaraya Bridge-Jayshankar Chowk | BHS | 0+000 | 0+620 | 130 | 230 | 20 | 40 | VG 40 |
| Road NO. 4.2 Jayshankar Chowk-Sonje Bridge | BHS | 0+620 | 1+215 | 130 | 230 | 20 | 40 | VG 40 |
| Road NO. 4.4Sonje Bridge-Dream city chowk | BHS | 1+265 | 2+038 | 130 | 230 | 20 | 40 | VG 40 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMEDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road NO. 4.1 | 0.000 | 0.620 | 0.0004153 | **0.711** | 0.0006376 | **4.330** | 0.0002475 | **40.035** | 0.0003008 | **130.512** | **119** | **120** |
| 2 | Road NO. 4.1 | 0.620 | 0.000 | 0.0004714 | **0.578** | 0.0006876 | **3.075** | 0.0002444 | **40.239** | 0.0003002 | **131.699** | **120** | **120** |
| 3 | Road NO. 4.2 | 0.620 | 1.215 | 0.0004224 | **0.372** | 0.0006439 | **4.141** | 0.0002446 | **40.862** | 0.0003023 | **127.602** | **117** | **120** |
| 4 | Road NO. 4.2 | 1.215 | 0.620 | 0.0004558 | **0.729** | 0.0006746 | **3.353** | 0.0002466 | **40.771** | 0.0003031 | **126.082** | **119** | **120** |
| 5 | Road NO. 4.4 | 1.265 | 2.038 | 0.0004673 | **0.171** | 0.0005961 | **5.874** | 0.0002447 | **41.279** | 0.0002779 | **186.879** | **119** | **120** |
| 6 | Road NO. 4.4 | 2.038 | 1.265 | 0.0004462 | **0.811** | 0.0006362 | **4.373** | 0.0002459 | **40.695** | 0.0002948 | **142.996** | **118** | **120** |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| Road NO. 4.1 Lakshminaraya Bridge-Jayshankar Chowk | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 0.587 | 0.467 | 0.359 | 0.236 | 0.175 | 0.090 | 0.055 | 8.8 | 0.5 | 0.4 | 0.4 |
| 2 | 0.000 | 1 | LHS L3 | FAIR | 0.547 | 0.454 | 0.427 | 0.252 | 0.174 | 0.131 | 0.073 | 8.8 | 0.5 | 0.4 | 0.4 |
| 3 | 0.250 | 1 | LHS L2 | FAIR | 0.572 | 0.473 | 0.337 | 0.199 | 0.131 | 0.079 | 0.063 | 8.8 | 0.5 | 0.4 | 0.4 |
| 4 | 0.500 | 1 | LHS L1 | FAIR | 0.568 | 0.514 | 0.370 | 0.246 | 0.192 | 0.092 | 0.070 | 8.8 | 0.5 | 0.4 | 0.4 |
| 5 | 0.500 | 1 | LHS L3 | FAIR | 0.587 | 0.545 | 0.480 | 0.319 | 0.235 | 0.123 | 0.084 | 8.8 | 0.5 | 0.4 | 0.4 |
| 6 | 0.620 | 2 | RHS R1 | FAIR | 0.557 | 0.466 | 0.404 | 0.274 | 0.205 | 0.109 | 0.077 | 8.8 | 0.5 | 0.4 | 0.4 |
| 7 | 0.620 | 2 | RHS R3 | FAIR | 0.578 | 0.422 | 0.288 | 0.195 | 0.151 | 0.087 | 0.057 | 8.8 | 0.5 | 0.4 | 0.4 |
| 8 | 0.370 | 2 | RHS R2 | FAIR | 0.578 | 0.521 | 0.329 | 0.241 | 0.173 | 0.102 | 0.076 | 8.8 | 0.5 | 0.4 | 0.4 |
| 9 | 0.120 | 2 | RHS R1 | FAIR | 0.599 | 0.451 | 0.312 | 0.197 | 0.128 | 0.073 | 0.051 | 8.8 | 0.5 | 0.4 | 0.4 |
| 10 | 0.120 | 2 | RHS R3 | FAIR | 0.550 | 0.456 | 0.401 | 0.260 | 0.187 | 0.103 | 0.076 | 8.8 | 0.5 | 0.4 | 0.4 |
| Road NO. 4.2 Jayshankar Chowk-Sonje Bridge | | | | | | | | | | | | | | | |
| 11 | 0.620 | 3 | LHS L1 | FAIR | 0.517 | 0.443 | 0.340 | 0.241 | 0.186 | 0.116 | 0.079 | 8.8 | 0.5 | 0.4 | 0.4 |
| 12 | 1.120 | 3 | LHS L1 | FAIR | 0.601 | 0.521 | 0.323 | 0.201 | 0.141 | 0.071 | 0.053 | 8.8 | 0.5 | 0.4 | 0.4 |
| 13 | 0.870 | 3 | LHS L2 | FAIR | 0.537 | 0.430 | 0.346 | 0.170 | 0.125 | 0.063 | 0.047 | 8.8 | 0.5 | 0.4 | 0.4 |
| 14 | 1.215 | 3 | RHS R1 | FAIR | 0.573 | 0.466 | 0.330 | 0.213 | 0.142 | 0.068 | 0.047 | 8.8 | 0.5 | 0.4 | 0.4 |
| 15 | 0.715 | 3 | RHS R1 | FAIR | 0.539 | 0.512 | 0.383 | 0.257 | 0.186 | 0.097 | 0.066 | 8.8 | 0.5 | 0.4 | 0.4 |
| 16 | 0.965 | 3 | RHS R2 | FAIR | 0.578 | 0.450 | 0.325 | 0.207 | 0.144 | 0.078 | 0.058 | 8.8 | 0.5 | 0.4 | 0.4 |
| 17 | 1.000 | 3 | LHS L1 | FAIR | 0.588 | 0.483 | 0.350 | 0.230 | 0.167 | 0.089 | 0.062 | 8.8 | 0.5 | 0.4 | 0.4 |
| 18 | 1.000 | 3 | LHS L3 | FAIR | 0.563 | 0.513 | 0.422 | 0.260 | 0.196 | 0.105 | 0.070 | 8.8 | 0.5 | 0.4 | 0.4 |
| 19 | 1.215 | 4 | RHS R1 | FAIR | 0.573 | 0.464 | 0.419 | 0.273 | 0.206 | 0.105 | 0.068 | 8.8 | 0.5 | 0.4 | 0.4 |
| 20 | 1.215 | 4 | RHS R3 | FAIR | 0.561 | 0.531 | 0.397 | 0.272 | 0.200 | 0.104 | 0.072 | 8.8 | 0.5 | 0.4 | 0.4 |
| 21 | 0.965 | 4 | RHS R2 | FAIR | 0.573 | 0.539 | 0.441 | 0.318 | 0.218 | 0.110 | 0.078 | 8.8 | 0.5 | 0.4 | 0.4 |
| 22 | 0.715 | 4 | RHS R1 | FAIR | 0.589 | 0.535 | 0.439 | 0.341 | 0.251 | 0.143 | 0.101 | 8.8 | 0.5 | 0.4 | 0.4 |
| 23 | 0.715 | 4 | RHS R3 | FAIR | 0.591 | 0.470 | 0.361 | 0.238 | 0.178 | 0.091 | 0.058 | 8.8 | 0.5 | 0.4 | 0.4 |
| 24 | 0.465 | 4 | RHS R2 | FAIR | 0.550 | 0.456 | 0.429 | 0.254 | 0.176 | 0.133 | 0.075 | 8.8 | 0.5 | 0.4 | 0.4 |
| 25 | 0.215 | 4 | RHS R1 | FAIR | 0.595 | 0.492 | 0.351 | 0.209 | 0.138 | 0.084 | 0.068 | 8.8 | 0.5 | 0.4 | 0.4 |
| 26 | 0.215 | 4 | RHS R3 | FAIR | 0.580 | 0.526 | 0.380 | 0.252 | 0.198 | 0.097 | 0.073 | 8.8 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road NO. 4.1 Lakshminaraya Bridge-Jayshankar Chowk | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 2857.0 | 251.6 | 243.7 | 2029.8 | 189.2 | 200.0 |
| 2 | 0.000 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1229.5 | 156.3 | 92.6 | 884.3 | 109.5 | 70.7 |
| 3 | 0.250 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 2967.0 | 156.3 | 189.6 | 2154.5 | 109.5 | 153.7 |
| 4 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 425.3 | 147.3 | 258.6 | 303.0 | 101.7 | 212.7 |
| 5 | 0.500 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1850.4 | 493.7 | 190.3 | 1334.5 | 367.1 | 154.3 |
| 6 | 0.620 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1366.5 | 152.0 | 156.8 | 980.2 | 105.8 | 125.7 |
| 7 | 0.620 | 2 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 961.1 | 301.4 | 152.3 | 693.2 | 228.6 | 121.8 |
| 8 | 0.370 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1829.9 | 377.6 | 141.2 | 1298.3 | 286.1 | 112.3 |
| 9 | 0.120 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1109.2 | 150.0 | 172.5 | 784.8 | 104.0 | 139.1 |
| 10 | 0.120 | 2 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1997.5 | 487.1 | 169.2 | 1436.7 | 362.7 | 136.3 |
| | | | | Road NO. 4.2 Jayshankar Chowk-Sonje Bridge | | | | | | | | | | | | | |
| 11 | 0.620 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1741.5 | 287.5 | 156.8 | 1252.6 | 217.8 | 125.7 |
| 12 | 1.120 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1947.1 | 296.4 | 160.3 | 1368.4 | 224.7 | 128.7 |
| 13 | 0.870 | 3 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1894.4 | 205.6 | 156.2 | 1297.3 | 151.4 | 125.2 |
| 14 | 1.215 | 3 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1769.4 | 298.7 | 152.3 | 1250.3 | 226.5 | 121.8 |
| 15 | 0.715 | 3 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1637.6 | 325.4 | 187.4 | 1112.4 | 247.1 | 151.8 |
| 16 | 0.965 | 3 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1667.8 | 186.2 | 189.7 | 1188.1 | 135.1 | 153.8 |
| 17 | 1.000 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1110.7 | 150.5 | 201.5 | 796.7 | 104.5 | 163.9 |
| 18 | 1.000 | 3 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1753.2 | 125.3 | 195.6 | 1238.8 | 82.4 | 158.9 |
| 19 | 1.215 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1049.9 | 173.9 | 278.6 | 766.6 | 124.6 | 229.9 |
| 20 | 1.215 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1718.5 | 100.0 | 185.6 | 1239.4 | 59.9 | 150.3 |
| 21 | 0.965 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1254.0 | 146.3 | 125.7 | 908.1 | 100.8 | 99.1 |
| 22 | 0.715 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1961.6 | 251.0 | 285.6 | 1444.0 | 188.7 | 235.8 |
| 23 | 0.715 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1960.4 | 248.3 | 254.8 | 1268.1 | 186.5 | 209.5 |
| 24 | 0.465 | 4 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1848.1 | 263.1 | 99.8 | 1147.8 | 198.4 | 76.9 |
| 25 | 0.215 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1025.8 | 185.4 | 245.6 | 664.5 | 134.4 | 201.6 |
| 26 | 0.215 | 4 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 856.4 | 452.3 | 214.3 | 552.5 | 339.1 | 174.9 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road NO. 4.1 Lakshminaraya Bridge-Jayshankar Chowk | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 26.9 | 651.78 | 106.36 | 120.53 | 0.0004153 | 0.71 | 0.0006376 | 4.33 | 0.0002475 | 40.03 | 0.0003008 | 130.51 | 119 | 120 |
| 2 | 0.000 | 1 | LHS L3 | 27.2 | | | | | | | | | | | | | |
| 3 | 0.250 | 1 | LHS L2 | 27.4 | | | | | | | | | | | | | |
| 4 | 0.500 | 1 | LHS L1 | 27.0 | | | | | | | | | | | | | |
| 5 | 0.500 | 1 | LHS L3 | 27.3 | | | | | | | | | | | | | |
| 6 | 0.620 | 2 | RHS R1 | 27.1 | 748.16 | 105.06 | 118.02 | 0.0004714 | 0.58 | 0.0006876 | 3.07 | 0.0002444 | 40.24 | 0.0003002 | 131.70 | 120 | 120 |
| 7 | 0.620 | 2 | RHS R3 | 27.3 | | | | | | | | | | | | | |
| 8 | 0.370 | 2 | RHS R2 | 26.9 | | | | | | | | | | | | | |
| 9 | 0.120 | 2 | RHS R1 | 26.8 | | | | | | | | | | | | | |
| 10 | 0.120 | 2 | RHS R3 | 27.2 | | | | | | | | | | | | | |
| | | | | Road NO. 4.2 Jayshankar Chowk-Sonje Bridge | | | | | | | | | | | | | |
| 11 | 0.620 | 3 | LHS L1 | 27.2 | 1116.16 | 105.99 | 125.18 | 0.0004224 | 0.37 | 0.0006439 | 4.14 | 0.0002446 | 40.86 | 0.0003023 | 127.60 | 117 | 120 |
| 12 | 1.120 | 3 | LHS L1 | 26.6 | | | | | | | | | | | | | |
| 13 | 0.870 | 3 | LHS L2 | 26.0 | | | | | | | | | | | | | |
| 14 | 1.215 | 3 | RHS R1 | 26.8 | | | | | | | | | | | | | |
| 15 | 0.715 | 3 | RHS R1 | 25.8 | | | | | | | | | | | | | |
| 16 | 0.965 | 3 | RHS R2 | 27.0 | | | | | | | | | | | | | |
| 17 | 1.000 | 3 | LHS L1 | 27.1 | | | | | | | | | | | | | |
| 18 | 1.000 | 3 | LHS L3 | 26.8 | | | | | | | | | | | | | |
| 19 | 1.215 | 4 | RHS R1 | 27.6 | 669.56 | 101.99 | 101.62 | 0.0004558 | 0.73 | 0.0006746 | 3.35 | 0.0002466 | 40.77 | 0.0003031 | 126.08 | 119 | 120 |
| 20 | 1.215 | 4 | RHS R3 | 27.3 | | | | | | | | | | | | | |
| 21 | 0.965 | 4 | RHS R2 | 27.4 | | | | | | | | | | | | | |
| 22 | 0.715 | 4 | RHS R1 | 27.8 | | | | | | | | | | | | | |
| 23 | 0.715 | 4 | RHS R3 | 24.6 | | | | | | | | | | | | | |
| 24 | 0.465 | 4 | RHS R2 | 23.6 | | | | | | | | | | | | | |
| 25 | 0.215 | 4 | RHS R1 | 24.6 | | | | | | | | | | | | | |
| 26 | 0.215 | 4 | RHS R3 | 24.5 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| Road NO. 4.4Sonje Bridge-Dream city chowk | | | | | | | | | | | | | | | |
| 27 | 1.265 | 5 | LHS L1 | FAIR | 0.559 | 0.468 | 0.406 | 0.277 | 0.206 | 0.112 | 0.079 | 8.8 | 0.5 | 0.4 | 0.4 |
| 28 | 1.515 | 5 | LHS L2 | FAIR | 0.590 | 0.431 | 0.295 | 0.200 | 0.155 | 0.090 | 0.061 | 8.8 | 0.5 | 0.4 | 0.4 |
| 29 | 1.765 | 5 | LHS L1 | FAIR | 0.568 | 0.528 | 0.465 | 0.309 | 0.229 | 0.122 | 0.083 | 8.8 | 0.5 | 0.4 | 0.4 |
| 30 | 2.015 | 5 | LHS L2 | FAIR | 0.592 | 0.445 | 0.310 | 0.196 | 0.128 | 0.074 | 0.053 | 8.8 | 0.5 | 0.4 | 0.4 |
| 31 | 2.038 | 6 | RHS R1 | FAIR | 0.585 | 0.528 | 0.334 | 0.245 | 0.177 | 0.106 | 0.078 | 8.8 | 0.5 | 0.4 | 0.4 |
| 32 | 1.788 | 6 | RHS R2 | FAIR | 0.520 | 0.446 | 0.344 | 0.244 | 0.188 | 0.120 | 0.083 | 8.8 | 0.5 | 0.4 | 0.4 |
| 33 | 1.538 | 6 | RHS R1 | FAIR | 0.595 | 0.515 | 0.321 | 0.201 | 0.142 | 0.074 | 0.055 | 8.8 | 0.5 | 0.4 | 0.4 |
| 34 | 1.288 | 6 | RHS R2 | FAIR | 0.548 | 0.439 | 0.354 | 0.176 | 0.130 | 0.066 | 0.050 | 8.8 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road NO. 4.4Sonje Bridge-Dream city chowk | | | | | | | | | | | | | |
| 27 | 1.265 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1269.0 | 162.3 | 158.4 | 820.9 | 114.7 | 127.0 |
| 28 | 1.515 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1250.2 | 145.6 | 149.3 | 812.0 | 100.2 | 119.3 |
| 29 | 1.765 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 425.0 | 145.9 | 162.7 | 261.1 | 100.5 | 130.7 |
| 30 | 2.015 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1256.0 | 185.4 | 126.7 | 795.0 | 134.4 | 99.9 |
| 31 | 2.038 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1376.8 | 156.0 | 201.6 | 839.0 | 109.2 | 164.0 |
| 32 | 1.788 | 6 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1256.0 | 193.0 | 99.8 | 782.2 | 140.8 | 76.9 |
| 33 | 1.538 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 1256.0 | 163.4 | 208.5 | 755.0 | 115.6 | 169.9 |
| 34 | 1.288 | 6 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 44.0 | 176.0 | 230.0 | 130.0 | 458.0 | 150.8 | 224.6 | 289.5 | 104.7 | 183.7 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| | | | | Road NO. 4.4Sonje Bridge-Dream city chowk | | | | | | | | | | | | | |
| 27 | 1.265 | 5 | LHS L1 | 24.6 | 501.36 | 100.31 | 108.62 | 0.0004673 | 0.17 | 0.0005961 | 5.87 | 0.0002447 | 41.28 | 0.0002779 | 186.88 | 119 | 120 |
| 28 | 1.515 | 5 | LHS L2 | 24.7 | | | | | | | | | | | | | |
| 29 | 1.765 | 5 | LHS L1 | 23.3 | | | | | | | | | | | | | |
| 30 | 2.015 | 5 | LHS L2 | 24.1 | | | | | | | | | | | | | |
| 31 | 2.038 | 6 | RHS R1 | 23.1 | 498.98 | 106.74 | 116.09 | 0.0004462 | 0.81 | 0.0006362 | 4.37 | 0.0002459 | 40.69 | 0.0002948 | 143.00 | 118 | 120 |
| 32 | 1.788 | 6 | RHS R2 | 23.7 | | | | | | | | | | | | | |
| 33 | 1.538 | 6 | RHS R1 | 22.8 | | | | | | | | | | | | | |
| 34 | 1.288 | 6 | RHS R2 | 24.0 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| Road No. 5.1 Takali Fata to Shankar Nagar chouk | BHS | 0+000 | 0+501 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 5.2 shanakar nagar chouk to jay Shnakar chouk | BHS | 0+501 | 0+906 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 5.3 Jay shankar Chouk to Bohari School | BHS | 0+906 | 1+276 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 5.4 Bohari School to Ramdas swami Math | BHS | 1276 | 2101 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 5.6 Dive Banglwo To salve Mala | BHS | 2+481 | 3+181 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 5.7 Salve Mala to Gandhinagar Wall Gajjar Park | BHS | 3+181 | 3+894 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 5.8 Gandhinagar Gajjar Park to Gandhinagar Upnagar Naka NH-50 | BHS | 3+894 | 4+089 | 120 | 220 | 20 | 40 | VG 40 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMEDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road No. 5.1,5.2,5.3 | 0.000 | 1.276 | 0.0005300 | 1.752 | 0.0006614 | 3.436 | 0.0003376 | 40.180 | 0.0003243 | 107.957 | 97 | 100 |
| 2 | Road No. 5.1,5.2,5.3 | 1.276 | 0.000 | 0.0005660 | 1.675 | 0.0007799 | 1.649 | 0.0002491 | 40.318 | 0.0003613 | 66.577 | 102 | 105 |
| 3 | Road No. 5.4 | 1.276 | 2.101 | 0.0005660 | 1.675 | 0.0007799 | 1.649 | 0.0002491 | 40.318 | 0.0003613 | 66.577 | 102 | 105 |
| 4 | Road No. 5.4 | 2.101 | 1.276 | 0.0005138 | 1.758 | 0.0007227 | 2.623 | 0.0002364 | 40.512 | 0.0003494 | 76.497 | 97 | 100 |
| 5 | Road No. 5.6 & 5.7 | 2.481 | 3.894 | 0.0005138 | 1.758 | 0.0007227 | 2.623 | 0.0002364 | 40.512 | 0.0003494 | 76.497 | 97 | 100 |
| 6 | Road No. 5.6 & 5.7 | 3.894 | 2.481 | 0.0005635 | 1.328 | 0.0006898 | 2.849 | 0.0002387 | 40.238 | 0.0003201 | 112.684 | 104 | 105 |
| 7 | Road No. 5.8 | 3.894 | 4.089 | 0.0005635 | 1.328 | 0.0006898 | 2.849 | 0.0002387 | 40.238 | 0.0003201 | 112.684 | 104 | 105 |

| SR.NO | Chianage | KM WISE Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 0.585 | 0.466 | 0.359 | 0.235 | 0.175 | 0.090 | 0.056 | 6.1 | 0.5 | 0.4 | 0.4 |
| 2 | 0.250 | 1 | LHS L2 | FAIR | 0.585 | 0.543 | 0.479 | 0.318 | 0.235 | 0.123 | 0.085 | 6.1 | 0.5 | 0.4 | 0.4 |
| 3 | 0.500 | 1 | LHS L1 | FAIR | 0.569 | 0.454 | 0.350 | 0.230 | 0.172 | 0.089 | 0.057 | 6.1 | 0.5 | 0.4 | 0.4 |
| 4 | 0.750 | 1 | LHS L2 | FAIR | 0.566 | 0.526 | 0.464 | 0.309 | 0.228 | 0.122 | 0.084 | 6.1 | 0.5 | 0.4 | 0.4 |
| 5 | 1.000 | 1 | LHS L1 | FAIR | 0.570 | 0.472 | 0.336 | 0.199 | 0.131 | 0.080 | 0.063 | 6.1 | 0.5 | 0.4 | 0.4 |
| 6 | 1.250 | 1 | LHS L2 | FAIR | 0.471 | 0.405 | 0.331 | 0.213 | 0.138 | 0.074 | 0.039 | 6.1 | 0.5 | 0.4 | 0.4 |
| 7 | 1.276 | 2 | RHS R1 | FAIR | 0.423 | 0.329 | 0.258 | 0.216 | 0.154 | 0.101 | 0.061 | 6.1 | 0.5 | 0.4 | 0.4 |
| 8 | 1.026 | 2 | RHS R2 | FAIR | 0.540 | 0.381 | 0.306 | 0.206 | 0.142 | 0.087 | 0.051 | 6.1 | 0.5 | 0.4 | 0.4 |
| 9 | 0.776 | 2 | RHS R1 | FAIR | 0.381 | 0.254 | 0.208 | 0.149 | 0.108 | 0.061 | 0.029 | 6.1 | 0.5 | 0.4 | 0.4 |
| 10 | 0.526 | 2 | RHS R2 | FAIR | 0.582 | 0.539 | 0.477 | 0.318 | 0.236 | 0.128 | 0.090 | 6.1 | 0.5 | 0.4 | 0.4 |
| 11 | 0.276 | 2 | RHS R1 | FAIR | 0.466 | 0.330 | 0.267 | 0.198 | 0.146 | 0.088 | 0.048 | 6.1 | 0.5 | 0.4 | 0.4 |
| 12 | 0.026 | 2 | RHS R2 | FAIR | 0.481 | 0.415 | 0.339 | 0.220 | 0.144 | 0.080 | 0.044 | 6.1 | 0.5 | 0.4 | 0.4 |
| 13 | 1.276 | 3 | LHS L1 | FAIR | 0.249 | 0.180 | 0.150 | 0.106 | 0.075 | 0.040 | 0.018 | 6.1 | 0.5 | 0.4 | 0.4 |
| 14 | 1.776 | 3 | LHS L1 | FAIR | 0.339 | 0.258 | 0.219 | 0.170 | 0.135 | 0.092 | 0.055 | 6.1 | 0.5 | 0.4 | 0.4 |
| 15 | 2.101 | 4 | RHS R1 | FAIR | 0.277 | 0.182 | 0.135 | 0.097 | 0.065 | 0.038 | 0.023 | 6.1 | 0.5 | 0.4 | 0.4 |
| 16 | 1.601 | 4 | RHS R1 | FAIR | 0.288 | 0.198 | 0.141 | 0.100 | 0.073 | 0.043 | 0.021 | 6.1 | 0.5 | 0.4 | 0.4 |
| 17 | 2.481 | 5 | LHS L1 | FAIR | 0.394 | 0.284 | 0.230 | 0.161 | 0.109 | 0.050 | 0.022 | 6.1 | 0.5 | 0.4 | 0.4 |
| 18 | 2.731 | 5 | LHS L2 | FAIR | 0.474 | 0.352 | 0.274 | 0.191 | 0.129 | 0.072 | 0.039 | 6.1 | 0.5 | 0.4 | 0.4 |
| 19 | 2.981 | 5 | LHS L1 | FAIR | 0.478 | 0.333 | 0.258 | 0.175 | 0.117 | 0.068 | 0.037 | 6.1 | 0.5 | 0.4 | 0.4 |
| 20 | 3.181 | 6 | RHS R1 | FAIR | 0.559 | 0.379 | 0.273 | 0.174 | 0.113 | 0.058 | 0.037 | 6.1 | 0.5 | 0.4 | 0.4 |
| 21 | 2.931 | 6 | LHS L2 | FAIR | 0.520 | 0.482 | 0.354 | 0.224 | 0.139 | 0.065 | 0.036 | 6.1 | 0.5 | 0.4 | 0.4 |
| 22 | 2.681 | 6 | RHS R1 | FAIR | 0.576 | 0.449 | 0.379 | 0.303 | 0.233 | 0.145 | 0.080 | 6.1 | 0.5 | 0.4 | 0.4 |
| 23 | 3.894 | 7 | LHS L1 | FAIR | 0.580 | 0.454 | 0.383 | 0.308 | 0.237 | 0.148 | 0.084 | 6.1 | 0.5 | 0.4 | 0.4 |
| 24 | 4.089 | 7 | RHS R1 | FAIR | 0.548 | 0.477 | 0.380 | 0.257 | 0.180 | 0.099 | 0.053 | 6.1 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM WISE Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1232.2 | 161.2 | 158.4 | 898.43 | 161.20 | 158.40 |
| 2 | 0.250 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1203.2 | 105.3 | 159.8 | 878.49 | 105.30 | 159.80 |
| 3 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 680.5 | 100.2 | 162.7 | 494.82 | 100.20 | 162.70 |
| 4 | 0.750 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1000.2 | 158.2 | 162.5 | 726.29 | 158.20 | 162.50 |
| 5 | 1.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1376.8 | 108.6 | 110.5 | 1012.13 | 108.60 | 110.50 |
| 6 | 1.250 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1366.5 | 132.3 | 156.8 | 948.63 | 132.30 | 156.80 |
| 7 | 1.276 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1002.3 | 101.2 | 152.3 | 698.65 | 101.20 | 152.30 |
| 8 | 1.026 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1225.6 | 117.5 | 141.2 | 858.96 | 117.50 | 141.20 |
| 9 | 0.776 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1109.2 | 115.6 | 172.5 | 781.63 | 115.60 | 172.50 |
| 10 | 0.526 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1235.2 | 108.5 | 169.2 | 870.42 | 108.50 | 169.20 |
| 11 | 0.276 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1256 | 136.2 | 208.5 | 880.27 | 136.20 | 208.50 |
| 12 | 0.026 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1021.2 | 112.3 | 156.8 | 720.60 | 112.30 | 156.80 |
| 13 | 1.276 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1247.2 | 106.2 | 160.3 | 876.49 | 106.20 | 160.30 |
| 14 | 1.776 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1294.6 | 100.2 | 156.2 | 917.26 | 100.20 | 156.20 |
| 15 | 2.101 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1169.4 | 106.2 | 152.3 | 830.82 | 106.20 | 152.30 |
| 16 | 1.601 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1237.4 | 110.2 | 187.4 | 876.74 | 110.20 | 187.40 |
| 17 | 2.481 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1267.5 | 101.23 | 136.6 | 899.29 | 101.23 | 136.60 |
| 18 | 2.731 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1007.6 | 104.2 | 152.3 | 708.10 | 104.20 | 152.30 |
| 19 | 2.981 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1253.3 | 113.2 | 195.6 | 889.21 | 113.20 | 195.60 |
| 20 | 3.181 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1049.9 | 100.1 | 278.6 | 742.87 | 100.10 | 278.60 |
| 21 | 2.931 | 6 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1128.3 | 103.2 | 185.6 | 796.17 | 103.20 | 185.60 |
| 22 | 2.681 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1232 | 101.2 | 125.7 | 868.17 | 101.20 | 125.70 |
| 23 | 3.894 | 7 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1063.6 | 108.2 | 185.6 | 748.48 | 108.20 | 185.60 |
| 24 | 4.089 | 7 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 30.5 | 122.0 | 220.0 | 120.0 | 1052.6 | 100.4 | 154.8 | 750.90 | 100.40 | 154.80 |

| SR.NO | Chianage | KM WISE Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| 1 | 0.000 | 1 | LHS L1 | 27.5 | 668.42 | 104.03 | 145.23 | 0.00053 | 1.75 | 0.0006614 | 3.44 | 0.0003376 | 40.18 | 0.0003243 | 107.96 | 97 | 100 |
| 2 | 0.250 | 1 | LHS L2 | 27.6 | | | | | | | | | | | | | |
| 3 | 0.500 | 1 | LHS L1 | 27.5 | | | | | | | | | | | | | |
| 4 | 0.750 | 1 | LHS L2 | 27.4 | | | | | | | | | | | | | |
| 5 | 1.000 | 1 | LHS L1 | 27.7 | | | | | | | | | | | | | |
| 6 | 1.250 | 1 | LHS L2 | 26.3 | | | | | | | | | | | | | |
| 7 | 1.276 | 2 | RHS R1 | 26.4 | 715.11 | 106.68 | 149.53 | 0.00056604 | 1.67 | 0.0007799 | 1.65 | 0.0002491 | 40.32 | 0.0003613 | 66.58 | 102 | 105 |
| 8 | 1.026 | 2 | RHS R2 | 26.6 | | | | | | | | | | | | | |
| 9 | 0.776 | 2 | RHS R1 | 26.7 | | | | | | | | | | | | | |
| 10 | 0.526 | 2 | RHS R2 | 26.7 | | | | | | | | | | | | | |
| 11 | 0.276 | 2 | RHS R1 | 26.6 | | | | | | | | | | | | | |
| 12 | 0.026 | 2 | RHS R2 | 26.7 | | | | | | | | | | | | | |
| 13 | 1.276 | 3 | LHS L1 | 26.6 | 882.60 | 101.10 | 156.82 | 0.0005452 | 1.65 | 0.0007102 | 2.86 | 0.0002297 | 40.17 | 0.000321 | 97.59 | 98 | 100 |
| 14 | 1.776 | 3 | LHS L1 | 26.8 | | | | | | | | | | | | | |
| 15 | 2.101 | 4 | RHS R1 | 26.9 | 837.71 | 106.80 | 157.57 | | | | | | | | | | |
| 16 | 1.601 | 4 | RHS R1 | 26.8 | | | | | | | | | | | | | |
| 17 | 2.481 | 5 | LHS L1 | 26.9 | 762.44 | 102.12 | 141.31 | 0.0005138 | 1.76 | 0.0007227 | 2.62 | 0.0002364 | 40.51 | 0.0003494 | 76.50 | 97 | 100 |
| 18 | 2.731 | 5 | LHS L2 | 26.6 | | | | | | | | | | | | | |
| 19 | 2.981 | 5 | LHS L1 | 26.9 | | | | | | | | | | | | | |
| 20 | 3.181 | 6 | RHS R1 | 26.8 | 758.86 | 100.43 | 143.67 | 0.0005298 | 1.51 | 0.0006968 | 3.09 | 0.0002494 | 40.33 | 0.0003262 | 105.07 | 99 | 100 |
| 21 | 2.931 | 6 | LHS L2 | 26.7 | | | | | | | | | | | | | |
| 22 | 2.681 | 6 | RHS R1 | 26.7 | | | | | | | | | | | | | |
| 23 | 3.894 | 7 | LHS L1 | 26.7 | 748.84 | 101.57 | 159.42 | 0.0005635 | 1.33 | 0.0006898 | 2.85 | 0.0002387 | 40.24 | 0.0003201 | 112.68 | 104 | 105 |
| 24 | 4.089 | 7 | RHS R1 | 27.0 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| | | | | | | | | |
| Road No. 6.1 Wadala Naka to Nasardi Bridge | BHS | 0+000 | 0+740 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.2 Nasardi Bridge to Shriram Nagar sahil Lowns | BHS | 0+740 | 1+485 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.3 Shriram nagar sahil Lowns - Sainath Nagar Chouk | BHS | 1+485 | 1+791 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.4 Sainath Nagar Chouk to Rajsarthi Chouk | BHS | 1+791 | 2+820 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.5 Rajsarthi Chouk to Papamiya farm | BHS | 2+820 | 3+682 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.6 Papamiya farm To Viraj Hou. Socity | BHS | 3+682 | 3+852 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.7 Viraj Hou. Socity to Jagganath Chowk | BHS | 3+682 | 4+552 | 120 | 220 | 20 | 40 | VG 40 |
| Road No. 6.8 Approch Road (Sainath Chowk) | BHS | 0+000 | 0+100 | 120 | 220 | 20 | 40 | VG 40 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMENDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road No. 6.1 & 6.2 | 0.000 | 1.485 | 0.0007483 | 0.740 | 0.0001858 | 1.435 | 0.0003330 | 40.264 | 0.0001299 | 174.523 | 95 | 95 |
| 2 | Road No. 6.1 & 6.2 | 1.485 | 0.000 | 0.0007639 | 0.443 | 0.0001862 | 4.186 | 0.0003344 | 40.010 | 0.0001293 | 299.807 | 96 | 100 |
| 3 | Road No. 6.3 | 1.485 | 1.791 | 0.0007639 | 0.443 | 0.0001862 | 4.186 | 0.0003344 | 40.010 | 0.0001293 | 299.807 | 96 | 100 |
| 4 | Road No. 6.3 | 1.791 | 1.485 | 0.0007530 | 0.756 | 0.0001860 | 1.256 | 0.0003326 | 41.560 | 0.0001342 | 148.692 | 99 | 100 |
| 5 | Road No. 6.4 | 1.791 | 2.820 | 0.0007530 | 0.756 | 0.0001860 | 1.256 | 0.0003326 | 41.560 | 0.0001342 | 148.692 | 99 | 100 |
| 6 | Road No. 6.4 | 2.820 | 1.791 | 0.0007498 | 0.382 | 0.0001940 | 2.262 | 0.0003338 | 40.903 | 0.0001355 | 85.164 | 101 | 105 |
| 7 | Road No. 6.5 | 2.820 | 3.682 | 0.0007498 | 0.382 | 0.0001940 | 2.262 | 0.0003338 | 40.903 | 0.0001355 | 85.164 | 101 | 105 |
| 8 | Road No. 6.5 | 3.682 | 2.820 | 0.0007674 | 0.330 | 0.0001977 | 2.011 | 0.0003356 | 40.233 | 0.0001372 | 221.551 | 99 | 100 |
| 9 | Road No. 6.6 | 3.682 | 3.852 | 0.0007674 | 0.330 | 0.0001977 | 2.011 | 0.0003356 | 40.233 | 0.0001372 | 221.551 | 99 | 100 |
| 10 | Road No. 6.6 | 3.852 | 3.682 | 0.0007674 | 0.278 | 0.0001977 | 2.011 | 0.0003356 | 40.932 | 0.0001372 | 188.551 | 95 | 95 |
| 11 | Road No. 6.7 | 3.852 | 4.552 | 0.0007674 | 0.278 | 0.0001977 | 2.011 | 0.0003356 | 40.932 | 0.0001372 | 188.551 | 95 | 95 |
| 12 | Road No. 6.7 | 4.552 | 3.852 | 0.0007674 | 0.367 | 0.0001977 | 1.011 | 0.0003356 | 40.171 | 0.0001372 | 158.551 | 90 | 90 |
| 13 | Road No. 6.8 | 0.000 | 0.100 | 0.0007674 | 0.350 | 0.0001977 | 2.011 | 0.0003356 | 40.731 | 0.0001372 | 189.551 | 94 | 95 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 0.569 | 0.397 | 0.294 | 0.220 | 0.152 | 0.058 | 0.037 | 17.1 | 0.5 | 0.4 | 0.4 |
| 2 | 0.000 | 1 | LHS L3 | FAIR | 0.612 | 0.429 | 0.315 | 0.188 | 0.127 | 0.067 | 0.037 | 17.1 | 0.5 | 0.4 | 0.4 |
| 3 | 0.250 | 1 | LHS L2 | FAIR | 0.597 | 0.320 | 0.274 | 0.193 | 0.141 | 0.081 | 0.053 | 17.1 | 0.5 | 0.4 | 0.4 |
| 4 | 0.500 | 1 | LHS L1 | FAIR | 0.565 | 0.321 | 0.236 | 0.153 | 0.112 | 0.067 | 0.048 | 17.1 | 0.5 | 0.4 | 0.4 |
| 5 | 0.500 | 1 | LHS L3 | FAIR | 0.567 | 0.262 | 0.207 | 0.149 | 0.116 | 0.072 | 0.038 | 17.1 | 0.5 | 0.4 | 0.4 |
| 6 | 0.750 | 1 | LHS L2 | FAIR | 0.496 | 0.252 | 0.223 | 0.168 | 0.135 | 0.087 | 0.050 | 17.1 | 0.5 | 0.4 | 0.4 |
| 7 | 1.000 | 1 | LHS L1 | FAIR | 0.606 | 0.376 | 0.304 | 0.231 | 0.155 | 0.062 | 0.034 | 17.1 | 0.5 | 0.4 | 0.4 |
| 8 | 1.000 | 1 | LHS L3 | FAIR | 0.602 | 0.315 | 0.266 | 0.190 | 0.141 | 0.080 | 0.049 | 17.1 | 0.5 | 0.4 | 0.4 |
| 9 | 1.250 | 1 | LHS L2 | FAIR | 0.558 | 0.387 | 0.268 | 0.167 | 0.118 | 0.056 | 0.030 | 17.1 | 0.5 | 0.4 | 0.4 |
| 10 | 1.485 | 2 | RHS R1 | FAIR | 0.583 | 0.317 | 0.282 | 0.186 | 0.124 | 0.058 | 0.018 | 17.1 | 0.5 | 0.4 | 0.4 |
| 11 | 1.485 | 2 | RHS R3 | FAIR | 0.460 | 0.313 | 0.233 | 0.152 | 0.111 | 0.064 | 0.047 | 17.1 | 0.5 | 0.4 | 0.4 |
| 12 | 1.235 | 2 | RHS R2 | FAIR | 0.555 | 0.403 | 0.285 | 0.162 | 0.101 | 0.051 | 0.030 | 17.1 | 0.5 | 0.4 | 0.4 |
| 13 | 0.985 | 2 | RHS R1 | FAIR | 0.350 | 0.187 | 0.139 | 0.095 | 0.071 | 0.052 | 0.027 | 17.1 | 0.5 | 0.4 | 0.4 |
| 14 | 0.985 | 2 | RHS R3 | FAIR | 0.355 | 0.235 | 0.169 | 0.116 | 0.088 | 0.065 | 0.042 | 17.1 | 0.5 | 0.4 | 0.4 |
| 15 | 0.735 | 2 | RHS R2 | FAIR | 0.555 | 0.405 | 0.286 | 0.163 | 0.103 | 0.053 | 0.032 | 17.1 | 0.5 | 0.4 | 0.4 |
| 16 | 0.485 | 2 | RHS R1 | FAIR | 0.590 | 0.405 | 0.309 | 0.195 | 0.130 | 0.067 | 0.039 | 17.1 | 0.5 | 0.4 | 0.4 |
| 17 | 0.485 | 2 | RHS R3 | FAIR | 0.567 | 0.418 | 0.330 | 0.227 | 0.167 | 0.095 | 0.050 | 17.1 | 0.5 | 0.4 | 0.4 |
| 18 | 0.235 | 2 | RHS R2 | FAIR | 0.594 | 0.406 | 0.293 | 0.168 | 0.095 | 0.038 | 0.014 | 17.1 | 0.5 | 0.4 | 0.4 |
| 19 | 1.485 | 3 | LHS | FAIR | 0.583 | 0.356 | 0.292 | 0.200 | 0.106 | 0.081 | 0.052 | 17.1 | 0.5 | 0.4 | 0.4 |
| 20 | 1.735 | 3 | LHS | FAIR | 0.562 | 0.410 | 0.290 | 0.167 | 0.106 | 0.055 | 0.033 | 17.1 | 0.5 | 0.4 | 0.4 |
| 21 | 1.791 | 4 | RHS | FAIR | 0.557 | 0.413 | 0.318 | 0.213 | 0.148 | 0.077 | 0.046 | 17.1 | 0.5 | 0.4 | 0.4 |
| 22 | 1.541 | 4 | RHS | FAIR | 0.476 | 0.221 | 0.167 | 0.120 | 0.093 | 0.059 | 0.038 | 17.1 | 0.5 | 0.4 | 0.4 |
| 23 | 1.791 | 5 | LHS L1 | FAIR | 0.509 | 0.362 | 0.263 | 0.166 | 0.108 | 0.042 | 0.021 | 17.1 | 0.5 | 0.4 | 0.4 |
| 24 | 2.041 | 5 | LHS L2 | FAIR | 0.439 | 0.280 | 0.215 | 0.146 | 0.102 | 0.061 | 0.035 | 17.1 | 0.5 | 0.4 | 0.4 |
| 25 | 2.291 | 5 | LHS L1 | FAIR | 0.576 | 0.341 | 0.256 | 0.180 | 0.137 | 0.085 | 0.055 | 17.1 | 0.5 | 0.4 | 0.4 |
| 26 | 2.541 | 5 | LHS L2 | FAIR | 0.597 | 0.448 | 0.349 | 0.244 | 0.178 | 0.095 | 0.044 | 17.1 | 0.5 | 0.4 | 0.4 |
| 27 | 2.791 | 5 | LHS L1 | FAIR | 0.489 | 0.275 | 0.208 | 0.149 | 0.114 | 0.077 | 0.052 | 17.1 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 1 | 28 | 29 | 30 |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 532.3 | 100.4 | 159.3 | 344.33 | 100.40 | 159.30 |
| 2 | 0.000 | 1 | LHS L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 11452 | 159.8 | 159.8 | 7407.93 | 159.80 | 159.80 |
| 3 | 0.250 | 1 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 577.14 | 100.4 | 159.9 | 364.82 | 100.40 | 159.90 |
| 4 | 0.500 | 1 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1498.9 | 137.1 | 141.5 | 966.96 | 137.10 | 141.50 |
| 5 | 0.500 | 1 | LHS L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 501.1 | 204 | 141.3 | 317.18 | 204.00 | 141.30 |
| 6 | 0.750 | 1 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1420.1 | 127.4 | 159.9 | 898.91 | 127.40 | 159.90 |
| 7 | 1.000 | 1 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 11459 | 107.8 | 159.9 | 7442.44 | 107.80 | 159.90 |
| 8 | 1.000 | 1 | LHS L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1415.1 | 195.4 | 159.4 | 881.25 | 195.40 | 159.40 |
| 9 | 1.250 | 1 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 15.87 | 139.5 | 147 | 10.28 | 139.50 | 147.00 |
| 10 | 1.485 | 2 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1466.7 | 103.5 | 160 | 910.90 | 103.50 | 160.00 |
| 11 | 1.485 | 2 | RHS R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1465.6 | 492.6 | 159.9 | 930.21 | 492.60 | 159.90 |
| 12 | 1.235 | 2 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1145.2 | 109.4 | 159.9 | 697.83 | 109.40 | 159.90 |
| 13 | 0.985 | 2 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1406.5 | 130.1 | 159.6 | 845.48 | 130.10 | 159.60 |
| 14 | 0.985 | 2 | RHS R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1420.1 | 124.2 | 159.5 | 919.89 | 124.20 | 159.50 |
| 15 | 0.735 | 2 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1479.6 | 100.8 | 159.9 | 904.05 | 100.80 | 159.90 |
| 16 | 0.485 | 2 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 636.6 | 172.7 | 159.8 | 391.09 | 172.70 | 159.80 |
| 17 | 0.485 | 2 | RHS R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1125.6 | 310.8 | 160 | 729.10 | 310.80 | 160.00 |
| 18 | 0.235 | 2 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 795.7 | 100 | 135.7 | 495.52 | 100.00 | 135.70 |
| 19 | 1.485 | 3 | LHS | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1147.3 | 132.5 | 153.8 | 698.16 | 132.50 | 153.80 |
| 20 | 1.735 | 3 | LHS | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1439.8 | 128.9 | 159.5 | 861.97 | 128.90 | 159.50 |
| 21 | 1.791 | 4 | RHS | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1140.9 | 100 | 155.9 | 697.10 | 100.00 | 155.90 |
| 22 | 1.541 | 4 | RHS | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1407.5 | 125.6 | 159.8 | 868.22 | 125.60 | 159.80 |
| 23 | 1.791 | 5 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1414.5 | 126.2 | 160 | 880.87 | 126.20 | 160.00 |
| 24 | 2.041 | 5 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1478.5 | 147.3 | 138.8 | 904.61 | 147.30 | 138.80 |
| 25 | 2.291 | 5 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1475.3 | 100.5 | 149.7 | 886.84 | 100.50 | 149.70 |
| 26 | 2.541 | 5 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1203.4 | 203.6 | 159.9 | 749.41 | 203.60 | 159.90 |
| 27 | 2.791 | 5 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 676.3 | 100.4 | 143.2 | 400.50 | 100.40 | 143.20 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 5 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| 1 | 0.000 | 1 | LHS L1 | FAIR | 24.6 | 322.61 | 101.88 | 142.60 | 0.000748 | **0.74** | 0.000186 | **1.44** | 0.000333 | **40.26** | 0.000130 | **174.52** | **95** | **95** |
| 2 | 0.000 | 1 | LHS L3 | FAIR | 24.6 | | | | | | | | | | | | | |
| 3 | 0.250 | 1 | LHS L2 | FAIR | 24.0 | | | | | | | | | | | | | |
| 4 | 0.500 | 1 | LHS L1 | FAIR | 24.5 | | | | | | | | | | | | | |
| 5 | 0.500 | 1 | LHS L3 | FAIR | 24.1 | | | | | | | | | | | | | |
| 6 | 0.750 | 1 | LHS L2 | FAIR | 24.1 | | | | | | | | | | | | | |
| 7 | 1.000 | 1 | LHS L1 | FAIR | 24.7 | | | | | | | | | | | | | |
| 8 | 1.000 | 1 | LHS L3 | FAIR | 23.7 | | | | | | | | | | | | | |
| 9 | 1.250 | 1 | LHS L2 | FAIR | 24.6 | | | | | | | | | | | | | |
| 10 | 1.485 | 2 | RHS R1 | FAIR | 23.6 | 535.98 | 101.34 | 159.52 | 0.000764 | **0.44** | 0.000186 | **4.19** | 0.000334 | **40.01** | 0.000129 | **299.81** | **96** | **100** |
| 11 | 1.485 | 2 | RHS R3 | FAIR | 24.1 | | | | | | | | | | | | | |
| 12 | 1.235 | 2 | RHS R2 | FAIR | 23.1 | | | | | | | | | | | | | |
| 13 | 0.985 | 2 | RHS R1 | FAIR | 22.8 | | | | | | | | | | | | | |
| 14 | 0.985 | 2 | RHS R3 | FAIR | 24.6 | | | | | | | | | | | | | |
| 15 | 0.735 | 2 | RHS R2 | FAIR | 23.2 | | | | | | | | | | | | | |
| 16 | 0.485 | 2 | RHS R1 | FAIR | 23.3 | | | | | | | | | | | | | |
| 17 | 0.485 | 2 | RHS R3 | FAIR | 24.6 | | | | | | | | | | | | | |
| 18 | 0.235 | 2 | RHS R2 | FAIR | 23.7 | | | | | | | | | | | | | |
| 19 | 1.485 | 3 | LHS | FAIR | 23.1 | 722.73 | 129.44 | 154.66 | 0.000753 | **0.36** | 0.000186 | **1.79** | 0.000334 | **40.53** | 0.000130 | **153.75** | **97** | **100** |
| 20 | 1.735 | 3 | LHS | FAIR | 22.7 | | | | | | | | | | | | | |
| 21 | 1.791 | 4 | RHS | FAIR | 23.2 | 722.77 | 103.84 | 156.49 | 0.000753 | **0.76** | 0.000186 | **1.26** | 0.000333 | **41.56** | 0.000134 | **148.69** | **99** | **100** |
| 22 | 1.541 | 4 | RHS | FAIR | 23.4 | | | | | | | | | | | | | |
| 23 | 1.791 | 5 | LHS L1 | FAIR | 23.7 | 609.85 | 100.46 | 141.44 | 0.000763 | **0.82** | 0.000174 | **2.08** | 0.000334 | **40.49** | 0.000121 | **73.62** | **100** | **100** |
| 24 | 2.041 | 5 | LHS L2 | FAIR | 23.2 | | | | | | | | | | | | | |
| 25 | 2.291 | 5 | LHS L1 | FAIR | 22.8 | | | | | | | | | | | | | |
| 26 | 2.541 | 5 | LHS L2 | FAIR | 23.7 | | | | | | | | | | | | | |
| 27 | 2.791 | 5 | LHS L1 | FAIR | 22.4 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| 28 | 2.820 | 6 | RHS R1 | FAIR | 0.490 | 0.225 | 0.171 | 0.117 | 0.082 | 0.043 | 0.031 | 17.1 | 0.5 | 0.4 | 0.4 |
| 29 | 2.570 | 6 | RHS R2 | FAIR | 0.588 | 0.440 | 0.343 | 0.240 | 0.174 | 0.093 | 0.042 | 17.1 | 0.5 | 0.4 | 0.4 |
| 30 | 2.320 | 6 | RHS R1 | FAIR | 0.539 | 0.406 | 0.286 | 0.162 | 0.101 | 0.050 | 0.029 | 17.1 | 0.5 | 0.4 | 0.4 |
| 31 | 2.070 | 6 | RHS R2 | FAIR | 0.414 | 0.281 | 0.200 | 0.132 | 0.095 | 0.059 | 0.026 | 17.1 | 0.5 | 0.4 | 0.4 |
| 32 | 1.820 | 6 | RHS R1 | FAIR | 0.485 | 0.306 | 0.227 | 0.156 | 0.114 | 0.070 | 0.039 | 17.1 | 0.5 | 0.4 | 0.4 |
| 33 | 2.820 | 7 | LHS L1 | FAIR | 0.390 | 0.251 | 0.178 | 0.121 | 0.087 | 0.048 | 0.016 | 17.1 | 0.5 | 0.4 | 0.4 |
| 34 | 2.820 | 7 | LHS L3 | FAIR | 0.584 | 0.443 | 0.321 | 0.199 | 0.137 | 0.078 | 0.044 | 17.1 | 0.5 | 0.4 | 0.4 |
| 35 | 3.070 | 7 | LHS L2 | FAIR | 0.549 | 0.444 | 0.320 | 0.197 | 0.136 | 0.076 | 0.042 | 17.1 | 0.5 | 0.4 | 0.4 |
| 36 | 3.320 | 7 | LHS L1 | FAIR | 0.577 | 0.366 | 0.262 | 0.159 | 0.112 | 0.055 | 0.030 | 17.1 | 0.5 | 0.4 | 0.4 |
| 37 | 3.320 | 7 | LHS L3 | FAIR | 0.460 | 0.321 | 0.244 | 0.161 | 0.111 | 0.059 | 0.025 | 17.1 | 0.5 | 0.4 | 0.4 |
| 38 | 3.570 | 7 | LHS L2 | FAIR | 0.564 | 0.357 | 0.255 | 0.154 | 0.108 | 0.052 | 0.027 | 17.1 | 0.5 | 0.4 | 0.4 |
| 39 | 3.682 | 8 | RHS R1 | FAIR | 0.537 | 0.328 | 0.210 | 0.106 | 0.064 | 0.036 | 0.022 | 17.1 | 0.5 | 0.4 | 0.4 |
| 40 | 3.682 | 8 | RHS R3 | FAIR | 0.571 | 0.423 | 0.326 | 0.219 | 0.153 | 0.080 | 0.047 | 17.1 | 0.5 | 0.4 | 0.4 |
| 41 | 3.432 | 8 | RHS R2 | FAIR | 0.498 | 0.351 | 0.269 | 0.185 | 0.133 | 0.061 | 0.038 | 17.1 | 0.5 | 0.4 | 0.4 |
| 42 | 3.182 | 8 | RHS R1 | FAIR | 0.489 | 0.321 | 0.233 | 0.151 | 0.108 | 0.062 | 0.035 | 17.1 | 0.5 | 0.4 | 0.4 |
| 43 | 3.182 | 8 | RHS R3 | FAIR | 0.533 | 0.419 | 0.324 | 0.217 | 0.153 | 0.081 | 0.048 | 17.1 | 0.5 | 0.4 | 0.4 |
| 44 | 2.932 | 8 | RHS R2 | FAIR | 0.378 | 0.287 | 0.227 | 0.155 | 0.109 | 0.061 | 0.038 | 17.1 | 0.5 | 0.4 | 0.4 |
| 45 | 3.682 | 9 | L1 | FAIR | 0.513 | 0.335 | 0.241 | 0.150 | 0.103 | 0.045 | 0.030 | 17.1 | 0.5 | 0.4 | 0.4 |
| 46 | 3.807 | 9 | L2 | FAIR | 0.540 | 0.426 | 0.328 | 0.221 | 0.156 | 0.083 | 0.051 | 17.1 | 0.5 | 0.4 | 0.4 |
| 47 | 3.852 | 10 | R1 | FAIR | 0.557 | 0.433 | 0.340 | 0.223 | 0.159 | 0.065 | 0.038 | 17.1 | 0.5 | 0.4 | 0.4 |
| 48 | 3.727 | 10 | R2 | FAIR | 0.546 | 0.308 | 0.214 | 0.151 | 0.098 | 0.072 | 0.028 | 17.1 | 0.5 | 0.4 | 0.4 |
| 49 | 3.852 | 11 | L1 | FAIR | 0.529 | 0.350 | 0.160 | 0.121 | 0.079 | 0.055 | 0.026 | 17.1 | 0.5 | 0.4 | 0.4 |
| 50 | 3.852 | 11 | L3 | FAIR | 0.557 | 0.405 | 0.272 | 0.159 | 0.100 | 0.048 | 0.020 | 17.1 | 0.5 | 0.4 | 0.4 |
| 51 | 4.102 | 11 | L2 | FAIR | 0.599 | 0.388 | 0.253 | 0.192 | 0.095 | 0.030 | 0.025 | 17.1 | 0.5 | 0.4 | 0.4 |
| 52 | 4.352 | 11 | L1 | FAIR | 0.531 | 0.352 | 0.160 | 0.121 | 0.078 | 0.053 | 0.025 | 17.1 | 0.5 | 0.4 | 0.4 |
| 53 | 4.352 | 11 | L3 | FAIR | 0.510 | 0.338 | 0.255 | 0.179 | 0.143 | 0.095 | 0.065 | 17.1 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 1 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | |
| 28 | 2.820 | 6 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1402.2 | 336.2 | 160 | 872.03 | 336.20 | 160.00 |
| 29 | 2.570 | 6 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1434.1 | 138.7 | 159.9 | 869.16 | 138.70 | 159.90 |
| 30 | 2.320 | 6 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1614.5 | 169.2 | 160 | 970.51 | 169.20 | 160.00 |
| 31 | 2.070 | 6 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 690.3 | 100 | 145.7 | 428.71 | 100.00 | 145.70 |
| 32 | 1.820 | 6 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1714.2 | 208.3 | 160 | 1015.13 | 208.30 | 160.00 |
| 33 | 2.820 | 7 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 9614.5 | 196.6 | 160 | 5995.52 | 196.60 | 160.00 |
| 34 | 2.820 | 7 | LHS L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1410.8 | 135.6 | 159.8 | 883.35 | 135.60 | 159.80 |
| 35 | 3.070 | 7 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 651.6 | 100.4 | 159.6 | 388.51 | 100.40 | 159.60 |
| 36 | 3.320 | 7 | LHS L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1414.3 | 132.5 | 160 | 859.47 | 132.50 | 160.00 |
| 37 | 3.320 | 7 | LHS L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1435.5 | 100 | 158.8 | 917.31 | 100.00 | 158.80 |
| 38 | 3.570 | 7 | LHS L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 6147.3 | 153.2 | 160 | 3776.55 | 153.20 | 160.00 |
| 39 | 3.682 | 8 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1448.1 | 277.1 | 159.9 | 943.13 | 277.10 | 159.90 |
| 40 | 3.682 | 8 | RHS R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1523 | 170.8 | 159.8 | 951.02 | 170.80 | 159.80 |
| 41 | 3.432 | 8 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1264 | 121.1 | 159.8 | 776.53 | 121.10 | 159.80 |
| 42 | 3.182 | 8 | RHS R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1523 | 188 | 160 | 979.85 | 188.00 | 160.00 |
| 43 | 3.182 | 8 | RHS R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1495.7 | 100.4 | 149.9 | 962.28 | 100.40 | 149.90 |
| 44 | 2.932 | 8 | RHS R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1022.3 | 100.4 | 148.3 | 634.91 | 100.40 | 148.30 |
| 45 | 3.682 | 9 | L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1465.6 | 157.1 | 125.6 | 955.80 | 157.10 | 125.60 |
| 46 | 3.807 | 9 | L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1483.9 | 100 | 144.5 | 949.52 | 100.00 | 144.50 |
| 47 | 3.852 | 10 | R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1481.7 | 100.4 | 159.6 | 935.33 | 100.40 | 159.60 |
| 48 | 3.727 | 10 | R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1473.1 | 125.6 | 159.9 | 901.31 | 125.60 | 159.90 |
| 49 | 3.852 | 11 | L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1422.6 | 244.7 | 159.9 | 896.81 | 244.70 | 159.90 |
| 50 | 3.852 | 11 | L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1415.1 | 214.6 | 160 | 906.73 | 214.60 | 160.00 |
| 51 | 4.102 | 11 | L2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1406.5 | 100 | 132.5 | 909.82 | 100.00 | 132.50 |
| 52 | 4.352 | 11 | L1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1464.5 | 113.3 | 160 | 937.11 | 113.30 | 160.00 |
| 53 | 4.352 | 11 | L3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1014.3 | 171.2 | 120.6 | 656.12 | 171.20 | 120.60 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | Avg. Teamperature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 5 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | | |
| 28 | 2.820 | 6 | RHS R1 | FAIR | 23.6 | 692.98 | 123.22 | 154.22 | 0.000750 | **0.38** | 0.000194 | **2.26** | 0.000334 | **40.90** | 0.000136 | **85.16** | **101** | **105** |
| 29 | 2.570 | 6 | RHS R2 | FAIR | 23.0 | | | | | | | | | | | | | |
| 30 | 2.320 | 6 | RHS R1 | FAIR | 22.8 | | | | | | | | | | | | | |
| 31 | 2.070 | 6 | RHS R2 | FAIR | 23.6 | | | | | | | | | | | | | |
| 32 | 1.820 | 6 | RHS R1 | FAIR | 22.4 | | | | | | | | | | | | | |
| 33 | 2.820 | 7 | LHS L1 | FAIR | 23.7 | 741.73 | 100.30 | 159.40 | 0.000767 | **0.33** | 0.000198 | **1.01** | 0.000336 | **40.23** | 0.000137 | **184.55** | **89** | **90** |
| 34 | 2.820 | 7 | LHS L3 | FAIR | 23.8 | | | | | | | | | | | | | |
| 35 | 3.070 | 7 | LHS L2 | FAIR | 22.6 | | | | | | | | | | | | | |
| 36 | 3.320 | 7 | LHS L1 | FAIR | 23.1 | | | | | | | | | | | | | |
| 37 | 3.320 | 7 | LHS L3 | FAIR | 24.3 | | | | | | | | | | | | | |
| 38 | 3.570 | 7 | LHS L2 | FAIR | 23.3 | | | | | | | | | | | | | |
| 39 | 3.682 | 8 | RHS R1 | FAIR | 24.8 | 741.12 | 100.40 | 149.50 | 0.000767 | **0.33** | 0.000198 | **2.01** | 0.000336 | **40.23** | 0.000137 | **221.55** | **99** | **100** |
| 40 | 3.682 | 8 | RHS R3 | FAIR | 23.7 | | | | | | | | | | | | | |
| 41 | 3.432 | 8 | RHS R2 | FAIR | 23.3 | | | | | | | | | | | | | |
| 42 | 3.182 | 8 | RHS R1 | FAIR | 24.5 | | | | | | | | | | | | | |
| 43 | 3.182 | 8 | RHS R3 | FAIR | 24.5 | | | | | | | | | | | | | |
| 44 | 2.932 | 8 | RHS R2 | FAIR | 23.6 | | | | | | | | | | | | | |
| 45 | 3.682 | 9 | L1 | FAIR | 24.8 | 950.46 | 108.57 | 128.44 | 0.000767 | **0.27** | 0.000198 | **3.01** | 0.000336 | **40.66** | 0.000137 | **184.55** | **94** | **95** |
| 46 | 3.807 | 9 | L2 | FAIR | 24.3 | | | | | | | | | | | | | |
| 47 | 3.852 | 10 | R1 | FAIR | 24.0 | 906.41 | 104.18 | 159.65 | 0.000767 | **0.28** | 0.000198 | **2.01** | 0.000336 | **40.93** | 0.000137 | **188.55** | **95** | **95** |
| 48 | 3.727 | 10 | R2 | FAIR | 23.2 | | | | | | | | | | | | | |
| 49 | 3.852 | 11 | L1 | FAIR | 24.0 | 800.53 | 107.98 | 127.74 | 0.000767 | **0.31** | 0.000198 | **1.01** | 0.000336 | **40.71** | 0.000137 | **154.55** | **98** | **100** |
| 50 | 3.852 | 11 | L3 | FAIR | 24.4 | | | | | | | | | | | | | |
| 51 | 4.102 | 11 | L2 | FAIR | 24.6 | | | | | | | | | | | | | |
| 52 | 4.352 | 11 | L1 | FAIR | 24.3 | | | | | | | | | | | | | |
| 53 | 4.352 | 11 | L3 | FAIR | 24.6 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |
| 54 | 4.552 | 12 | R1 | FAIR | 0.465 | 0.320 | 0.236 | 0.157 | 0.118 | 0.081 | 0.066 | 17.1 | 0.5 | 0.4 | 0.4 |
| 55 | 4.552 | 12 | R3 | FAIR | 0.480 | 0.249 | 0.187 | 0.128 | 0.098 | 0.065 | 0.038 | 17.1 | 0.5 | 0.4 | 0.4 |
| 56 | 4.302 | 12 | R2 | FAIR | 0.487 | 0.331 | 0.227 | 0.131 | 0.086 | 0.049 | 0.028 | 17.1 | 0.5 | 0.4 | 0.4 |
| 57 | 4.052 | 12 | R1 | FAIR | 0.572 | 0.266 | 0.209 | 0.151 | 0.118 | 0.073 | 0.040 | 17.1 | 0.5 | 0.4 | 0.4 |
| 58 | 4.052 | 12 | R3 | FAIR | 0.484 | 0.251 | 0.189 | 0.129 | 0.099 | 0.067 | 0.039 | 17.1 | 0.5 | 0.4 | 0.4 |
| 59 | 0.000 | 13 | LHS | FAIR | 0.564 | 0.411 | 0.292 | 0.168 | 0.106 | 0.055 | 0.033 | 17.1 | 0.5 | 0.4 | 0.4 |
| 60 | 0.100 | 13 | RHS | FAIR | 0.536 | 0.372 | 0.267 | 0.180 | 0.133 | 0.075 | 0.047 | 17.1 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 1 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | |
| 54 | 4.552 | 12 | R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 568.8 | 191.1 | 136.9 | 376.02 | 191.10 | 136.90 |
| 55 | 4.552 | 12 | R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1401.1 | 100.2 | 159.9 | 839.94 | 100.20 | 159.90 |
| 56 | 4.302 | 12 | R2 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1450.5 | 190.3 | 160 | 875.49 | 190.30 | 160.00 |
| 57 | 4.052 | 12 | R1 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1422.6 | 105.7 | 160 | 837.87 | 105.70 | 160.00 |
| 58 | 4.052 | 12 | R3 | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1425.8 | 142.5 | 159.9 | 909.87 | 142.50 | 159.90 |
| 59 | 0.000 | 13 | LHS | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1404.3 | 100.2 | 123.2 | 915.82 | 100.20 | 123.20 |
| 60 | 0.100 | 13 | RHS | FAIR | 400.0 | 1500.0 | 100.0 | 500.0 | 85.5 | 342.0 | 220.0 | 120.0 | 1025 | 124.6 | 159.6 | 652.33 | 124.60 | 159.60 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | Avg. Temperature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 5 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | | |
| 54 | 4.552 | 12 | R1 | FAIR | 25.1 | 653.13 | 103.50 | 150.70 | 0.000767 | **0.37** | 0.000198 | **1.01** | 0.000336 | **40.17** | 0.000137 | **158.55** | **90** | **90** |
| 55 | 4.552 | 12 | R3 | FAIR | 22.7 | | | | | | | | | | | | | |
| 56 | 4.302 | 12 | R2 | FAIR | 22.9 | | | | | | | | | | | | | |
| 57 | 4.052 | 12 | R1 | FAIR | 22.3 | | | | | | | | | | | | | |
| 58 | 4.052 | 12 | R3 | FAIR | 24.3 | | | | | | | | | | | | | |
| 59 | 0.000 | 13 | LHS | FAIR | 24.8 | 691.85 | 103.86 | 128.66 | 0.000767 | **0.35** | 0.000198 | **2.01** | 0.000336 | **40.73** | 0.000137 | **189.55** | **94** | **95** |
| 60 | 0.100 | 13 | RHS | FAIR | 24.2 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life | Adopted MSA | VG30/VG40 |
| | | | | | | | | |
| Road No. 7.1 NH 3-Tractor house-Maruti Wafers | BHS | 0+000 | 0+745 | 120 | 220 | 20 | 40 | VG 40 |
| | | | | | | | | |
| Road No. 7.2 Maruti Wafers To Karma Hights | BHS | 0+745 | 1+408 | 120 | 220 | 20 | 40 | VG 40 |

## REMAINING LIFE

| SR. NO. | Section | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMED ED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | Road No. 7.1 | 0.000 | 0.745 | 0.0005776 | 1.478 | 0.0005841 | 6.966 | 0.0002478 | 40.645 | 0.0002538 | 236.639 | 99 | 100 |
| 2 | Road No. 7.1 | 0.745 | 0.000 | 0.0006706 | 1.376 | 0.0006899 | 1.639 | 0.0002491 | 40.518 | 0.0003613 | 64.577 | 104 | 105 |
| 3 | Road No. 7.2 | 0.745 | 1.408 | 0.0006706 | 1.376 | 0.0006899 | 1.639 | 0.0002491 | 40.518 | 0.0003613 | 64.577 | 104 | 105 |
| 4 | Road No. 7.2 | 1.408 | 0.745 | 0.0004978 | 2.465 | 0.0008420 | 1.369 | 0.0002363 | 48.894 | 0.0003996 | 40.395 | 102 | 105 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1221.3 | 102.3 | 159.6 | 860.63 | 102.30 | 159.60 |
| 2 | 0.250 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1352.6 | 111.2 | 152.3 | 954.45 | 111.20 | 152.30 |
| 3 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1258.6 | 102.3 | 151.6 | 885.70 | 102.30 | 151.60 |
| 4 | 0.745 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1326.28 | 101.2 | 154.2 | 934.60 | 101.20 | 154.20 |
| 5 | 0.745 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1194.6 | 100.5 | 152.3 | 842.96 | 100.50 | 152.30 |
| 6 | 0.495 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1171.2 | 106.2 | 166.6 | 823.08 | 106.20 | 166.60 |
| 7 | 0.245 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1234.6 | 106.3 | 137.4 | 858.24 | 106.30 | 137.40 |
| 8 | 0.000 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1254.6 | 102.3 | 148.6 | 874.51 | 102.30 | 148.60 |
| 9 | 0.745 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1123.2 | 102.1 | 151.2 | 780.80 | 102.10 | 151.20 |
| 10 | 1.245 | 3 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1052.3 | 101.2 | 153.6 | 719.67 | 101.20 | 153.60 |
| 11 | 1.408 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1041.3 | 100.1 | 148.5 | 718.96 | 100.10 | 148.50 |
| 12 | 0.908 | 4 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 68.5 | 274.0 | 220.0 | 120.0 | 1126.5 | 103.2 | 152.3 | 791.66 | 103.20 | 152.30 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Team perature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 26.7 | 871.91 | 101.70 | 151.92 | 0.0005776 | 1.48 | 0.0005841 | 6.97 | 0.0002478 | 40.65 | 0.0002538 | 236.64 | 99 | 100 |
| 2 | 0.250 | 1 | LHS L2 | 26.7 | | | | | | | | | | | | | |
| 3 | 0.500 | 1 | LHS L1 | 26.7 | | | | | | | | | | | | | |
| 4 | 0.745 | 1 | LHS L2 | 26.7 | | | | | | | | | | | | | |
| 5 | 0.745 | 2 | RHS R1 | 26.7 | 832.02 | 101.31 | 142.44 | 0.0006706 | 1.38 | 0.0006899 | 1.64 | 0.0002491 | 40.52 | 0.0003613 | 64.58 | 104 | 105 |
| 6 | 0.495 | 2 | RHS R2 | 26.6 | | | | | | | | | | | | | |
| 7 | 0.245 | 2 | RHS R1 | 26.4 | | | | | | | | | | | | | |
| 8 | 0.000 | 2 | RHS R2 | 26.4 | | | | | | | | | | | | | |
| 9 | 0.745 | 3 | LHS L1 | 26.4 | 728.84 | 101.34 | 151.56 | 0.0005379 | 1.97 | 0.0008971 | 1.02 | 0.0002245 | 51.51 | 0.0003982 | 41.06 | 108 | 110 |
| 10 | 1.245 | 3 | LHS L1 | 26.0 | | | | | | | | | | | | | |
| 11 | 1.408 | 4 | RHS R1 | 26.2 | 729.86 | 100.57 | 149.07 | 0.0004978 | 2.47 | 0.000842 | 1.37 | 0.0002363 | 48.89 | 0.0003996 | 40.40 | 102 | 105 |
| 12 | 0.908 | 4 | RHS R1 | 26.6 | | | | | | | | | | | | | |

| Section Details | Side | Chainage | | Crust Thickness (MM) | Granular Layer Thickness (MM) | Design Life | | |
|---|---|---|---|---|---|---|---|---|
| | | From | To | | | Design Life (Yrs.) | Adopted MSA | VG30/VG40 |
| | | | | | | | | |
| Proposed Developing of 30 m DP Road from Lekha nagar- NH3- Kala nagar chowk- Wadala gaon- Ravishankar Marg- Vijaymamta chowk, NMC, Nashik. | BHS | 0+000 | 4+290 | 120 | 220 | 20 | 40 | VG 40 |
| | | | | | | | | |

## REMAINING LIFE

| SR. NO. | CHAINAGE | | REMAINING LIFE OF ROAD | | | | OVERLAY DESIGN | | | | REQUIRED THICKNESS | RECOMMEDED THICKNESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FROM | TO | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | FATIGUE TENSILE STR | MSA | RUTTING VERTICAL STR | MSA | | |
| 1 | 0.000 | 0.700 | 0.0006587 | **0.840** | 0.0006285 | **4.621** | 0.0002429 | **40.730** | 0.0002512 | **295.427** | **108** | **110** |
| 2 | 0.700 | 0.000 | 0.0006581 | **0.853** | 0.0006294 | **4.591** | 0.0002440 | **40.452** | 0.0002613 | **247.078** | **107** | **110** |
| 3 | 1.500 | 1.500 | 0.0006566 | **0.857** | 0.0005987 | **5.760** | 0.0002430 | **40.972** | 0.0002486 | **309.696** | **106** | **110** |
| 4 | 1.750 | 2.750 | 0.0006412 | **0.917** | 0.0006864 | **3.099** | 0.0002412 | **41.106** | 0.0002637 | **237.046** | **102** | **105** |
| 5 | 3.000 | 4.000 | 0.0006541 | **0.868** | 0.0006812 | **3.208** | 0.0002430 | **40.845** | 0.0002630 | **239.920** | **105** | **105** |
| 6 | 4.000 | 3.000 | 0.0006631 | **0.838** | 0.0006286 | **4.618** | 0.0002440 | **40.968** | 0.0002516 | **293.304** | **109** | **110** |
| 7 | 2.750 | 1.750 | 0.0010030 | **0.226** | 0.0006283 | **4.628** | 0.0002641 | **40.510** | 0.0002519 | **291.723** | **114** | **115** |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 0.000 | 1 | LHS L1 | Fair | 0.481 | 0.348 | 0.248 | 0.226 | 0.191 | 0.150 | 0.058 | 11.4 | 0.5 | 0.4 | 0.4 |
| 2 | 0.000 | 1 | LHS L3 | Fair | 0.527 | 0.326 | 0.293 | 0.276 | 0.204 | 0.149 | 0.059 | 11.4 | 0.5 | 0.4 | 0.4 |
| 3 | 0.250 | 1 | LHS L2 | Fair | 0.524 | 0.322 | 0.244 | 0.180 | 0.147 | 0.114 | 0.075 | 11.4 | 0.5 | 0.4 | 0.4 |
| 4 | 0.500 | 1 | LHS L1 | Fair | 0.516 | 0.407 | 0.315 | 0.210 | 0.157 | 0.086 | 0.047 | 11.4 | 0.5 | 0.4 | 0.4 |
| 5 | 0.500 | 1 | LHS L3 | Fair | 0.509 | 0.318 | 0.252 | 0.219 | 0.167 | 0.132 | 0.074 | 11.4 | 0.5 | 0.4 | 0.4 |
| 6 | 0.700 | 1 | LHS L2 | Fair | 0.534 | 0.365 | 0.264 | 0.208 | 0.131 | 0.101 | 0.084 | 11.4 | 0.5 | 0.4 | 0.4 |
| 7 | 0.700 | 2 | RHS R2 | Fair | 0.422 | 0.304 | 0.241 | 0.154 | 0.110 | 0.053 | 0.024 | 11.4 | 0.5 | 0.4 | 0.4 |
| 8 | 0.500 | 2 | RHS R3 | Fair | 0.506 | 0.343 | 0.275 | 0.211 | 0.191 | 0.146 | 0.072 | 11.4 | 0.5 | 0.4 | 0.4 |
| 9 | 0.500 | 2 | RHS R1 | Fair | 0.522 | 0.302 | 0.236 | 0.177 | 0.145 | 0.115 | 0.087 | 11.4 | 0.5 | 0.4 | 0.4 |
| 10 | 0.250 | 2 | RHS R2 | Fair | 0.547 | 0.490 | 0.371 | 0.266 | 0.154 | 0.142 | 0.069 | 11.4 | 0.5 | 0.4 | 0.4 |
| 11 | 0.000 | 2 | RHS R3 | Fair | 0.534 | 0.478 | 0.363 | 0.261 | 0.154 | 0.142 | 0.072 | 11.4 | 0.5 | 0.4 | 0.4 |
| 12 | 0.000 | 2 | RHS R1 | Fair | 0.543 | 0.488 | 0.372 | 0.190 | 0.148 | 0.102 | 0.054 | 11.4 | 0.5 | 0.4 | 0.4 |
| 13 | 1.500 | 3 | LHS | Fair | 0.544 | 0.488 | 0.370 | 0.266 | 0.155 | 0.143 | 0.071 | 11.4 | 0.5 | 0.4 | 0.4 |
| 14 | 1.500 | 3 | RHS | Fair | 0.505 | 0.359 | 0.201 | 0.161 | 0.135 | 0.095 | 0.033 | 11.4 | 0.5 | 0.4 | 0.4 |
| 15 | 1.750 | 4 | LHS L2 | Fair | 0.424 | 0.351 | 0.286 | 0.216 | 0.142 | 0.121 | 0.069 | 11.4 | 0.5 | 0.4 | 0.4 |
| 16 | 2.000 | 4 | LHS L1 | Fair | 0.509 | 0.384 | 0.301 | 0.195 | 0.147 | 0.083 | 0.046 | 11.4 | 0.5 | 0.4 | 0.4 |
| 17 | 2.000 | 4 | LHS L3 | Fair | 0.523 | 0.319 | 0.230 | 0.206 | 0.150 | 0.123 | 0.096 | 11.4 | 0.5 | 0.4 | 0.4 |
| 18 | 2.250 | 4 | LHS L2 | Fair | 0.411 | 0.283 | 0.226 | 0.158 | 0.125 | 0.073 | 0.043 | 11.4 | 0.5 | 0.4 | 0.4 |
| 19 | 2.500 | 4 | LHS L1 | Fair | 0.541 | 0.337 | 0.212 | 0.157 | 0.103 | 0.097 | 0.086 | 11.4 | 0.5 | 0.4 | 0.4 |
| 20 | 2.500 | 4 | LHS L3 | Fair | 0.477 | 0.241 | 0.202 | 0.169 | 0.127 | 0.107 | 0.052 | 11.4 | 0.5 | 0.4 | 0.4 |
| 21 | 2.750 | 4 | LHS L2 | Fair | 0.508 | 0.381 | 0.258 | 0.199 | 0.174 | 0.128 | 0.063 | 11.4 | 0.5 | 0.4 | 0.4 |
| 22 | 3.000 | 5 | LHS L1 | Fair | 0.545 | 0.376 | 0.277 | 0.240 | 0.201 | 0.121 | 0.086 | 11.4 | 0.5 | 0.4 | 0.4 |
| 23 | 3.000 | 5 | LHS L3 | Fair | 0.538 | 0.313 | 0.250 | 0.218 | 0.158 | 0.126 | 0.071 | 11.4 | 0.5 | 0.4 | 0.4 |
| 24 | 3.250 | 5 | LHS L2 | Fair | 0.585 | 0.420 | 0.314 | 0.178 | 0.121 | 0.055 | 0.035 | 11.4 | 0.5 | 0.4 | 0.4 |
| 25 | 3.500 | 5 | LHS L1 | Fair | 0.511 | 0.337 | 0.231 | 0.190 | 0.153 | 0.123 | 0.049 | 11.4 | 0.5 | 0.4 | 0.4 |
| 26 | 3.500 | 5 | LHS L3 | Fair | 0.462 | 0.332 | 0.252 | 0.157 | 0.117 | 0.055 | 0.030 | 11.4 | 0.5 | 0.4 | 0.4 |
| 27 | 3.750 | 5 | LHS L2 | Fair | 0.489 | 0.252 | 0.200 | 0.155 | 0.125 | 0.095 | 0.041 | 11.4 | 0.5 | 0.4 | 0.4 |
| 28 | 4.000 | 5 | LHS L1 | Fair | 0.551 | 0.408 | 0.321 | 0.208 | 0.148 | 0.132 | 0.058 | 11.4 | 0.5 | 0.4 | 0.4 |
| 29 | 4.000 | 5 | LHS L3 | Fair | 0.532 | 0.353 | 0.243 | 0.201 | 0.163 | 0.132 | 0.056 | 11.4 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 1 | 0.000 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1460.1 | 102.4 | 195.1 | 931.76 | 102.40 | 195.10 |
| 2 | 0.000 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1497.7 | 110.2 | 127.4 | 958.35 | 110.20 | 127.40 |
| 3 | 0.250 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1497.7 | 104.7 | 163.4 | 954.46 | 104.70 | 163.40 |
| 4 | 0.500 | 1 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1496.6 | 106.3 | 166.9 | 955.05 | 106.30 | 166.90 |
| 5 | 0.500 | 1 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1483.7 | 118 | 139.9 | 948.11 | 118.00 | 139.90 |
| 6 | 0.700 | 1 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1433.2 | 102 | 148.4 | 919.57 | 102.00 | 148.40 |
| 7 | 0.700 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1493.4 | 105.9 | 137.5 | 953.01 | 105.90 | 137.50 |
| 8 | 0.500 | 2 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1490.2 | 104 | 177.2 | 956.15 | 104.00 | 177.20 |
| 9 | 0.500 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1498.8 | 102.4 | 182.4 | 961.66 | 102.40 | 182.40 |
| 10 | 0.250 | 2 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1292.3 | 102 | 181.9 | 824.68 | 102.00 | 181.90 |
| 11 | 0.000 | 2 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1479.4 | 104 | 151.5 | 947.93 | 104.00 | 151.50 |
| 12 | 0.000 | 2 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1498.8 | 119.2 | 145.9 | 960.36 | 119.20 | 145.90 |
| 13 | 1.500 | 3 | LHS | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1435.3 | 103.2 | 183.3 | 917.18 | 103.20 | 183.30 |
| 14 | 1.500 | 3 | RHS | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1468.7 | 102 | 231.1 | 939.80 | 102.00 | 231.10 |
| 15 | 1.750 | 4 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1502 | 102 | 230.2 | 975.56 | 102.00 | 230.20 |
| 16 | 2.000 | 4 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1486.9 | 242 | 63.6 | 965.75 | 242.00 | 63.60 |
| 17 | 2.000 | 4 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1481.6 | 116.1 | 128.6 | 963.62 | 116.10 | 128.60 |
| 18 | 2.250 | 4 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1484.8 | 102.4 | 171.7 | 970.95 | 102.40 | 171.70 |
| 19 | 2.500 | 4 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1499.8 | 102 | 124.8 | 974.13 | 102.00 | 124.80 |
| 20 | 2.500 | 4 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1370.8 | 102 | 152.5 | 897.62 | 102.00 | 152.50 |
| 21 | 2.750 | 4 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1477.3 | 102 | 196.6 | 954.32 | 102.00 | 196.60 |
| 22 | 3.000 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1488 | 102.4 | 121.5 | 977.02 | 102.40 | 121.50 |
| 23 | 3.000 | 5 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1480.5 | 109.4 | 126.7 | 964.21 | 109.40 | 126.70 |
| 24 | 3.250 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1491.2 | 127 | 110.5 | 968.54 | 127.00 | 110.50 |
| 25 | 3.500 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1499.8 | 103.2 | 132.3 | 975.45 | 103.20 | 132.30 |
| 26 | 3.500 | 5 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1176.2 | 497.7 | 72.7 | 769.15 | 497.70 | 72.70 |
| 27 | 3.750 | 5 | LHS L2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1453.6 | 102.4 | 159.6 | 950.55 | 102.40 | 159.60 |
| 28 | 4.000 | 5 | LHS L1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1459 | 102.4 | 178.6 | 948.92 | 102.40 | 178.60 |
| 29 | 4.000 | 5 | LHS L3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1412.8 | 102.8 | 160.5 | 922.62 | 102.80 | 160.50 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Teamperature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| 1 | 0.000 | 1 | LHS L1 | 24.3 | 928.71 | 102.30 | 136.78 | 0.0006587 | **0.84** | 0.0006285 | **4.62** | 0.0002429 | **40.7** | 0.0002512 | **295** | **108** | **110** |
| 2 | 0.000 | 1 | LHS L3 | 24.3 | | | | | | | | | | | | | |
| 3 | 0.250 | 1 | LHS L2 | 24.2 | | | | | | | | | | | | | |
| 4 | 0.500 | 1 | LHS L1 | 24.3 | | | | | | | | | | | | | |
| 5 | 0.500 | 1 | LHS L3 | 24.3 | | | | | | | | | | | | | |
| 6 | 0.700 | 1 | LHS L2 | 24.4 | | | | | | | | | | | | | |
| 7 | 0.700 | 2 | RHS R2 | 24.3 | 917.12 | 102.30 | 143.80 | 0.0006581 | **0.85** | 0.0006294 | **4.59** | 0.000244 | **40.5** | 0.0002613 | **247** | **107** | **110** |
| 8 | 0.500 | 2 | RHS R3 | 24.4 | | | | | | | | | | | | | |
| 9 | 0.500 | 2 | RHS R1 | 24.4 | | | | | | | | | | | | | |
| 10 | 0.250 | 2 | RHS R2 | 24.3 | | | | | | | | | | | | | |
| 11 | 0.000 | 2 | RHS R3 | 24.4 | | | | | | | | | | | | | |
| 12 | 0.000 | 2 | RHS R1 | 24.4 | | | | | | | | | | | | | |
| 13 | 1.500 | 3 | LHS | 24.3 | 920.57 | 102.18 | 190.47 | 0.0006566 | **0.86** | 0.0005987 | **5.76** | 0.000243 | **41** | 0.0002486 | **310** | **106** | **110** |
| 14 | 1.500 | 3 | RHS | 24.3 | | | | | | | | | | | | | |
| 15 | 1.750 | 4 | LHS L2 | 24.7 | 948.65 | 102.00 | 118.68 | 0.0006412 | **0.92** | 0.0006864 | **3.1** | 0.0002412 | **41.1** | 0.0002637 | **237** | **102** | **105** |
| 16 | 2.000 | 4 | LHS L1 | 24.7 | | | | | | | | | | | | | |
| 17 | 2.000 | 4 | LHS L3 | 24.7 | | | | | | | | | | | | | |
| 18 | 2.250 | 4 | LHS L2 | 24.9 | | | | | | | | | | | | | |
| 19 | 2.500 | 4 | LHS L1 | 24.7 | | | | | | | | | | | | | |
| 20 | 2.500 | 4 | LHS L3 | 24.9 | | | | | | | | | | | | | |
| 21 | 2.750 | 4 | LHS L2 | 24.6 | | | | | | | | | | | | | |
| 22 | 3.000 | 5 | LHS L1 | 25.0 | 923.93 | 102.40 | 111.05 | 0.0006541 | **0.87** | 0.0006812 | **3.21** | 0.000243 | **40.8** | 0.000263 | **240** | **105** | **105** |
| 23 | 3.000 | 5 | LHS L3 | 24.8 | | | | | | | | | | | | | |
| 24 | 3.250 | 5 | LHS L2 | 24.7 | | | | | | | | | | | | | |
| 25 | 3.500 | 5 | LHS L1 | 24.7 | | | | | | | | | | | | | |
| 26 | 3.500 | 5 | LHS L3 | 24.9 | | | | | | | | | | | | | |
| 27 | 3.750 | 5 | LHS L2 | 24.9 | | | | | | | | | | | | | |
| 28 | 4.000 | 5 | LHS L1 | 24.7 | | | | | | | | | | | | | |
| 29 | 4.000 | 5 | LHS L3 | 24.8 | | | | | | | | | | | | | |

| SR.NO | Chianage | KM Wise Section | Lane Position | Road Condition | AVERAGE DEFELCTION AT A RADIAL DISTANCE (MM) OF | | | | | | | CBR | POISSON'S RATIO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 | 200 | 300 | 450 | 600 | 900 | 1500 | | BT LAYER | GRANNULAR LAYER | SUBGRADE |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 30 | 4.000 | 6 | RHS R1 | Fair | 0.532 | 0.352 | 0.242 | 0.200 | 0.161 | 0.131 | 0.055 | 11.4 | 0.5 | 0.4 | 0.4 |
| 31 | 4.000 | 6 | RHS R3 | Fair | 0.545 | 0.363 | 0.251 | 0.208 | 0.169 | 0.139 | 0.061 | 11.4 | 0.5 | 0.4 | 0.4 |
| 32 | 3.750 | 6 | RHS R2 | Fair | 0.494 | 0.391 | 0.304 | 0.204 | 0.153 | 0.086 | 0.049 | 11.4 | 0.5 | 0.4 | 0.4 |
| 33 | 3.500 | 6 | RHS R1 | Fair | 0.356 | 0.253 | 0.225 | 0.161 | 0.126 | 0.070 | 0.035 | 11.4 | 0.5 | 0.4 | 0.4 |
| 34 | 3.500 | 6 | RHS R3 | Fair | 0.521 | 0.346 | 0.238 | 0.197 | 0.160 | 0.129 | 0.055 | 11.4 | 0.5 | 0.4 | 0.4 |
| 35 | 3.250 | 6 | RHS R2 | Fair | 0.518 | 0.345 | 0.239 | 0.198 | 0.161 | 0.132 | 0.058 | 11.4 | 0.5 | 0.4 | 0.4 |
| 36 | 3.000 | 6 | RHS R1 | Fair | 0.261 | 0.179 | 0.140 | 0.100 | 0.086 | 0.059 | 0.040 | 11.4 | 0.5 | 0.4 | 0.4 |
| 37 | 3.000 | 6 | RHS R3 | Fair | 0.236 | 0.197 | 0.173 | 0.129 | 0.102 | 0.047 | 0.026 | 11.4 | 0.5 | 0.4 | 0.4 |
| 38 | 2.750 | 7 | RHS R2 | Fair | 0.567 | 0.408 | 0.305 | 0.175 | 0.120 | 0.057 | 0.037 | 11.4 | 0.5 | 0.4 | 0.4 |
| 39 | 2.500 | 7 | RHS R1 | Fair | 0.520 | 0.347 | 0.240 | 0.200 | 0.162 | 0.133 | 0.059 | 11.4 | 0.5 | 0.4 | 0.4 |
| 40 | 2.500 | 7 | RHS R3 | Fair | 0.538 | 0.359 | 0.248 | 0.212 | 0.151 | 0.083 | 0.039 | 11.4 | 0.5 | 0.4 | 0.4 |
| 41 | 2.250 | 7 | RHS R2 | Fair | 0.535 | 0.499 | 0.335 | 0.187 | 0.119 | 0.055 | 0.036 | 11.4 | 0.5 | 0.4 | 0.4 |
| 42 | 2.000 | 7 | RHS R1 | Fair | 0.167 | 0.126 | 0.107 | 0.079 | 0.069 | 0.044 | 0.025 | 11.4 | 0.5 | 0.4 | 0.4 |
| 43 | 2.000 | 7 | RHS R3 | Fair | 0.236 | 0.181 | 0.143 | 0.101 | 0.085 | 0.050 | 0.028 | 11.4 | 0.5 | 0.4 | 0.4 |
| 44 | 1.750 | 7 | RHS R2 | Fair | 0.497 | 0.347 | 0.254 | 0.153 | 0.112 | 0.047 | 0.026 | 11.4 | 0.5 | 0.4 | 0.4 |

| SR.NO | Chianage | KM Wise Section | Lane Position | LAYER MODULIE RANGES | | | | | | THICKNESS | | BACK CAL. FROM KGPBACK SOFTWARE | | | CORRECTED MODULIE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BT LAYER | | GRANNULAR LAYER | | SUBGRADE LAYER | | GRANULAR THICKNESS | CRUST THICKNESS | BC | SUB GRAN | SUB GRADE | BC | GRANNULAR | SUB GRADE |
| | | | | Lower | Upper | Lower | Upper | Lower | Upper | | | | | | | | |
| 1 | 2 | 3 | 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | |
| 30 | 4.000 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1440.7 | 194.3 | 171.7 | 937.02 | 194.30 | 171.70 |
| 31 | 4.000 | 6 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1304.2 | 102 | 195.2 | 852.85 | 102.00 | 195.20 |
| 32 | 3.750 | 6 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1474 | 108.3 | 130.4 | 961.28 | 108.30 | 130.40 |
| 33 | 3.500 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1394.5 | 102 | 196.6 | 903.28 | 102.00 | 196.60 |
| 34 | 3.500 | 6 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1435.3 | 103.6 | 202.7 | 928.45 | 103.60 | 202.70 |
| 35 | 3.250 | 6 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1405.2 | 104.3 | 234 | 910.21 | 104.30 | 234.00 |
| 36 | 3.000 | 6 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1441.8 | 102 | 145.1 | 940.28 | 102.00 | 145.10 |
| 37 | 3.000 | 6 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1474 | 125.9 | 128.5 | 959.98 | 125.90 | 128.50 |
| 38 | 2.750 | 7 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1332.1 | 102 | 203 | 872.28 | 102.00 | 203.00 |
| 39 | 2.500 | 7 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1296.6 | 112.9 | 147.5 | 841.01 | 112.90 | 147.50 |
| 40 | 2.500 | 7 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 983.7 | 103.2 | 144.5 | 639.79 | 103.20 | 144.50 |
| 41 | 2.250 | 7 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 965.4 | 102.4 | 181.4 | 626.18 | 102.40 | 181.40 |
| 42 | 2.000 | 7 | RHS R1 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1123.5 | 102 | 129.8 | 732.70 | 102.00 | 129.80 |
| 43 | 2.000 | 7 | RHS R3 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1469.7 | 112.2 | 136.8 | 950.70 | 112.20 | 136.80 |
| 44 | 1.750 | 7 | RHS R2 | 400.0 | 1500.0 | 100.0 | 500.0 | 57.0 | 228.0 | 220.0 | 120.0 | 1489.1 | 102.4 | 135.9 | 968.49 | 102.40 | 135.90 |

| SR.NO | Chianage | KM Wise Section | Lane Position | Avg. Teamperature | 15TH PERCENTILE VALUES (TEMP CORRECTED VALUES) | | | Remaining life of Pavement | | | | Design MSA | | | | Overlay Requirement | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | FATIGUE | | RUTTING | | FATIGUE | | RUTTING | | Required Thickness | Recommended Thickness |
| | | | | | | | | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | TENSILE STRAIN FROM IIT PAVE SOFTWARE | MSA | VERTICAL STRAIN FROM IIT PAVE SOFTWARE | MSA | | |
| 1 | 2 | 3 | 4 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| | | | | | | | | | | | | | | | | | |
| 30 | 4.000 | 6 | RHS R1 | 24.7 | 903.63 | 102.00 | 131.14 | 0.0006631 | **0.84** | 0.0006286 | **4.62** | 0.000244 | **41** | 0.0002516 | **293** | **109** | **110** |
| 31 | 4.000 | 6 | RHS R3 | 24.9 | | | | | | | | | | | | | |
| 32 | 3.750 | 6 | RHS R2 | 24.8 | | | | | | | | | | | | | |
| 33 | 3.500 | 6 | RHS R1 | 24.6 | | | | | | | | | | | | | |
| 34 | 3.500 | 6 | RHS R3 | 24.6 | | | | | | | | | | | | | |
| 35 | 3.250 | 6 | RHS R2 | 24.6 | | | | | | | | | | | | | |
| 36 | 3.000 | 6 | RHS R1 | 24.8 | | | | | | | | | | | | | |
| 37 | 3.000 | 6 | RHS R3 | 24.8 | | | | | | | | | | | | | |
| 38 | 2.750 | 7 | RHS R2 | 24.9 | 638.43 | 102.00 | 135.29 | 0.001003 | **0.23** | 0.0006283 | **4.63** | 0.0002641 | **40.5** | 0.0002519 | **292** | **114** | **115** |
| 39 | 2.500 | 7 | RHS R1 | 24.7 | | | | | | | | | | | | | |
| 40 | 2.500 | 7 | RHS R3 | 24.7 | | | | | | | | | | | | | |
| 41 | 2.250 | 7 | RHS R2 | 24.7 | | | | | | | | | | | | | |
| 42 | 2.000 | 7 | RHS R1 | 24.8 | | | | | | | | | | | | | |
| 43 | 2.000 | 7 | RHS R3 | 24.6 | | | | | | | | | | | | | |
| 44 | 1.750 | 7 | RHS R2 | 24.7 | | | | | | | | | | | | | |

### 2.4.3 Discussion and Conclusion of Result Values:

For the project Nashik East Division Road.

Civil Tech's Eray-FWD20MT Falling Weight Deflectometer was engaged for data collection and the survey was carried on 26/07/2025. The testing was undertaken in all sections that reflected the road conditions and pavement composition. Subsequently the analysis was undertaken with appropriate pavement compositions as per IRC guidelines - IRC 115: 2014 and IRC 37: 2018.

- Existing road has crust thickness of 120 mm on BHS side.
- Granular thickness is 220 mm on BHS side.
- The design MSA is 40.
- However, as required by the office of Nashik Municipal Corporation following are the recommendation:
    1. For Road No. 1 & 2 Minimum thickness of whitetopping is 175mm & DBM is 75mm proposed.
    2. For Road No. 3 From Chainage 0+000 To 0+835 & From Chainage 1+130 To 4+707 Minimum thickness of BC is 40mm, DBM is 60mm and 50% BM as correction layer with thickness of 55mm is proposed.
    3. For Road No. 4 From Chainage 0+000 To 1+215 & From Chainage 1+265 To 2+038 Minimum thickness of BC is 40mm, DBM is 60mm and 50% BM as correction layer with thickness of 55mm is proposed.
    4. For Road No. 5 From Chainage 0+000 To 2+101 & From Chainage 2+481 To 4+089 Minimum thickness of BC is 40mm, DBM is 60mm and 50% BM as correction layer with thickness of 55mm is proposed.

5. For Road No. 6 From Chainage 0+000 To 4+552 & From Chainage 0+000 To 0+100 For Approach Road Minimum thickness of BC is 40mm, DBM is 60mm and 50% BM as correction layer with thickness of 55mm is proposed.
6. For Road No. 7 From Chainage 0+000 To 1+408 Minimum thickness of BC is 40mm, DBM is 60mm and 50% BM as correction layer with thickness of 55mm is proposed.
7. For Road No. 8 From Chainage 0+000 To 4+290 Minimum thickness of BC is 40mm, DBM is 60mm and 50% BM as correction layer with thickness of 55mm is proposed.

**For Civil Tech India Pvt. Ltd.,**

**Reviewed By**
**Vaishali A. Kachare**

**Authorised Signatory**
**Minal V. Bagul**

15

CIVIL TECH INDIA PVT. LTD

NABL Accredited Material Testing Lab | Highway Tests
Soil Investigation | Non Destructive Test
Structural Audit | PMC | Survey

**Report No.** :- CT/NSK/R/12594/25 **Date** :- 26/08/2025

# Test Report

| | |
|---|---|
| **Customer Name** | :- Executive Engineer East Nashik Division NMC Nashik. |
| **Address** | :- Nashik |
| **Name of Consultant** | :- CivilTech India Pvt. Ltd. |
| **Name of the work** | :- Proposed Developing of 24 m DP Road from Dwarka Circle-Sarda Circle-Gadkari Chowk Signal, NMC, Nashik |
| **Material identification** | :- Crust Thickness Measure on Site |
| **Job No.** | :- 081911 |
| **Date of Performance** | :- 26/08/2025 |

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 15 | Proposed Developing of 24 m DP Road from Dwarka Circle-Sarda Circle-Gadkari Chowk Signal, NMC, Nashik | 130 | 200 | 300 |

**Note :-**

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2) Report shall not be reproduce except in full without prior written Permission of Civil Tech Lab.

**For Civil Tech India Pvt. Ltd.,**

**Reviewed By**
**Vaishali A. Kachare**

CIVILTECH INDIA PVT. LTD. NASHIK

**Authorised Signatory**
**Minal V. Bagul**

**Report No. :-** CT/NSK/R/12595/25 **Date :-** 26/08/2025

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of Consultant** :- CivilTech India Pvt. Ltd.

**Name of the work** :- Proposed Developing of 24 m DP Road from Sarda Circle-Ganjmal Signal, NMC, Nashik.

**Material identification** :- Crust Thickness Measure on Site

**Job No.** :- 081911A

**Date of Performance** :- 26/08/2025

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 10 | Proposed Developing of 24 m DP Road from Sarda Circle-Ganjmal Signal, NMC, Nashik. | 120 | 230 | 320 |

**Note :-**

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**For Civil Tech India Pvt. Ltd.,**

**Reviewed By**
**Vaishali A. Kachare**

CIVILTECH INDIA PVT LTD NASHIK

**Authorised Signatory**
**Minal V. Bagul**

**Report No. :-** CT/NSK/R/12596/25 **Date :-** 26/08/2025

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of Consultant** :- CivilTech India Pvt. Ltd.

**Name of the work** :- Proposed Developing of 30 m DP Road from Sangam bridge-Takligaon-Vijaymamta chowk-Ashoka marg-bharat nagar-chan hotel NH-3, NMC, Nashik.

**Material identification** :- Crust Thickness Measure on Site

**Job No.** :- 081911B

**Date of Performance** :- 26/08/2025

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 3 | Proposed Developing of 30 m DP Road from Sangam bridge-Takligaon-Vijaymamta chowk-Ashoka marg-bharat nagar-chan hotel NH-3, NMC, Nashik. | 120 | 230 | 320 |

**Note :-**

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**For Civil Tech India Pvt. Ltd.,**

**Reviewed By**
**Vaishali A. Kachare**

CIVIL TECH INDIA PVT. LTD. * NASHIK *

Authorised Signatory
**Minal V. Bagul**

**Report No. :-** CT/NSK/R/12597/25 **Date :-** 26/08/2025

# Test Report

**Customer Name** :-Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of Consultant** :- CivilTech India Pvt. Ltd.

**Name of the work** :- Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

**Material identification** :- Crust Thickness Measure on Site

**Job No.** :- 081911C

**Date of Performance** :- 26/08/2025

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 2 | Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik. | 130 | 230 | 320 |

**Note :-**

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**For Civil Tech India Pvt. Ltd.,**

**Reviewed By**
**Vaishali A. Kachare**

CIVILTECH INDIA PVT. LTD. NASHIK

**Authorised Signatory**
**Minal V. Bagul**

Report No. :- CT/NSK/R/12598/25

Date :- 26/08/2025

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of Consultant** :- CivilTech India Pvt. Ltd.

**Name of the work** :-Proposed Developing of 18 m DP Road from Takli phata-NH3-Takli Gaon-Gandhinagar Upnagar Naka NH-50, NMC, Nashik.

**Material identification** :- Crust Thickness Measure on Site

**Job No.** :- 081911D

**Date of Performance** :- 26/08/2025

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 2B | Proposed Developing of 18 m DP Road from Takli phata-NH3-Takli Gaon-Gandhinagar Upnagar Naka NH-50, NMC, Nashik. | 120 | 220 | 330 |

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**For Civil Tech India Pvt. Ltd.,**

**Reviewed By**
**Vaishali A. Kachare**

CIVILTECH INDIA PVT. LTD. NASHIK

**Authorised Signatory**
**Minal V. Bagul**

**Report No. :-** CT/NSK/R/12599/25 **Date :-** 26/08/2025

# Test Report

| | |
|---|---|
| **Customer Name** | :-Executive Engineer East Nashik Division NMC Nashik. |
| **Address** | :- Nashik |
| **Name of Consultant** | :- CivilTech India Pvt. Ltd. |
| **Name of the work** | :- Proposed Developing of 18m & 30 m DP Road from Wadala Naka NH-3-Nasardi Bridge Wadala Road-Sainath Signal-Jagganath Chowk, NMC, Nashik. |
| **Material identification** | :- Crust Thickness Measure on Site |
| **Job No.** | :- 081911E |
| **Date of Performance** | :- 26/08/2025 |

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 14 | Proposed Developing of 18m & 30 m DP Road from Wadala Naka NH-3-Nasardi Bridge Wadala Road-Sainath Signal-Jagganath Chowk, NMC, Nashik. | 120 | 220 | 320 |

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**Reviewed By**
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**Authorised Signatory**
**Minal V. Bagul**

**Report No. :-** CT/NSK/R/12600/25 **Date :-** 26/08/2025

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of Consultant** :- CivilTech India Pvt. Ltd.

**Name of the work** :- Proposed Developing of 18 m DP Road from NH 3- Tractor House- Karma Heights - (Tigraniya Road) NMC, Nashik.

**Material identification** :- Crust Thickness Measure on Site

**Job No.** :- 081911F

**Date of Performance** :- 26/08/2025

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 2A | Proposed Developing of 18 m DP Road from NH 3- Tractor House- Karma Heights - (Tigraniya Road) NMC, Nashik. | 120 | 220 | 330 |

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**Authorised Signatory**
**Minal V. Bagul**

**Report No. :-** CT/NSK/R/12601/25 **Date :-** 26/08/2025

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of Consultant** :- CivilTech India Pvt. Ltd.

**Name of the work** :- Proposed Developing of 30 m DP Road from Lekha nagar- NH3- Kala nagar chowk- Wadala gaon- Ravishankar Marg- Vijaymamta chowk, NMC, Nashik

**Material identification** :- Crust Thickness Measure on Site

**Job No.** :- 081911G

**Date of Performance** :- 26/08/2025

| Road No. | Name of the work | THICKNESS AS PER SITE (MM) | | |
|---|---|---|---|---|
| | | Bitumen Layer | Granular Layer | Subgrade Layer |
| 25 | Proposed Developing of 30 m DP Road from Lekha nagar- NH3- Kala nagar chowk- Wadala gaon- Ravishankar Marg- Vijaymamta chowk, NMC, Nashik | 120 | 220 | 310 |

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**Reviewed By**
**Vaishali A. Kachare**

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**Authorised Signatory**
**Minal V. Bagul**

CIVILTECH INDIA PVT LTD

**Report No.** :- CT/NSK/R/12594/25 **Date :-** 26/08/2025

**ULR No** :- TC536425000012594F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 24 m DP Road from Dwarka Circle-Sarda Circle-Gadkari Chowk Signal, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Clayey Sands)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel | Sand | Silt and clay | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | (> 4.75 mm) | (4.75 to 0.075 mm) | (<0.075mm) | | | | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Clayey Sands) | 15.2 | 38.0 | 46.8 | 36.8 | 22.6 | 14.2 | 1.90 | 12.6 | 13.0 | 30.0 |

**For CivilTech India Pvt. Ltd.**

P. A. Jaiswal

**Reviewed and Authorized by**
**P. A. Jaiswal**

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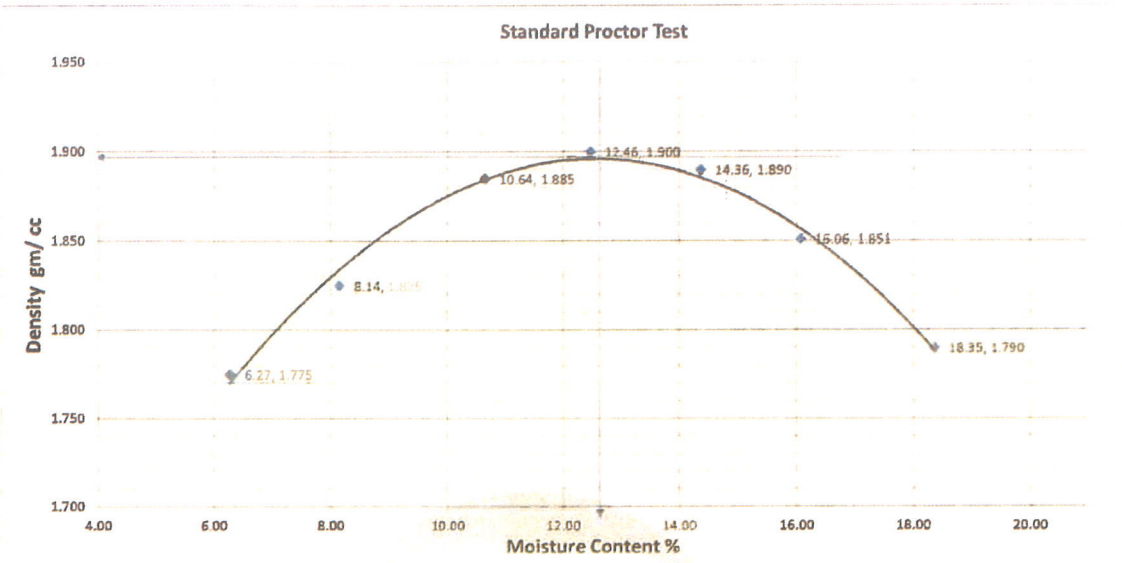


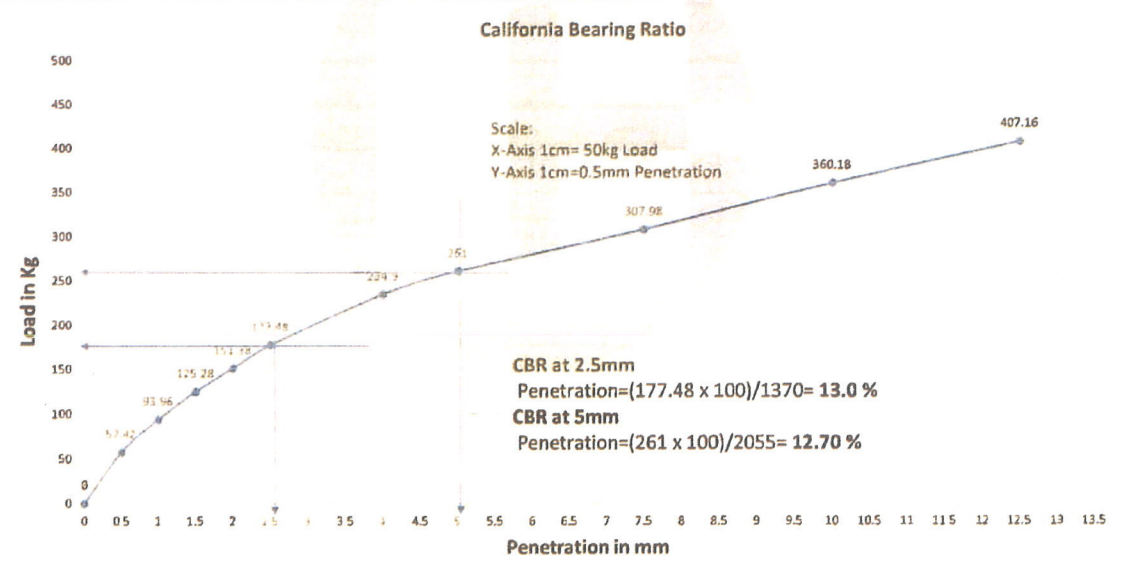


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P. A. Jaiswal

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**P. A. Jaiswal**

Report No. : - CT/NSK/R/12594/25
2of2



TC-5364

CIVILTECH INDIA PVT. LTD

Report No. :- CT/NSK/R/12595/25 Date :- 26/08/2025

ULR No :- TC536425000012595F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 24 m DP Road from Sarda Circle-Ganjmal Signal, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Silty Sand)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911A

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel (> 4.75 mm) | Sand (4.75 to 0.075 mm) | Silt and clay (<0.075mm) | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Silty Sand) | 14.9 | 40.2 | 45.0 | 36.4 | 21.6 | 14.8 | 1.93 | 13.2 | 14.86 | 25.0 |

For CivilTech India Pvt. Ltd.

P.A. Jaiswal

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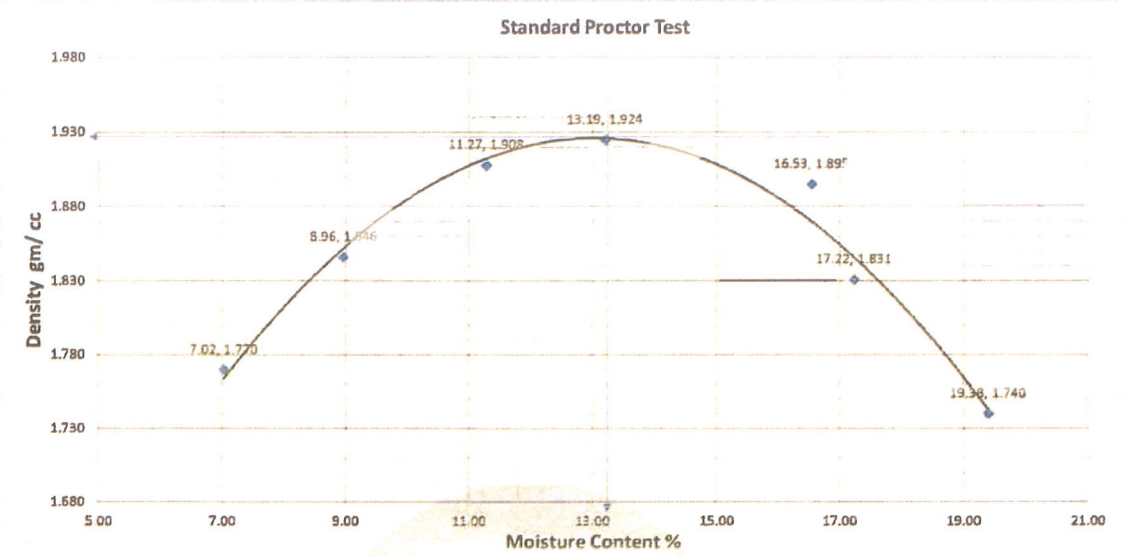


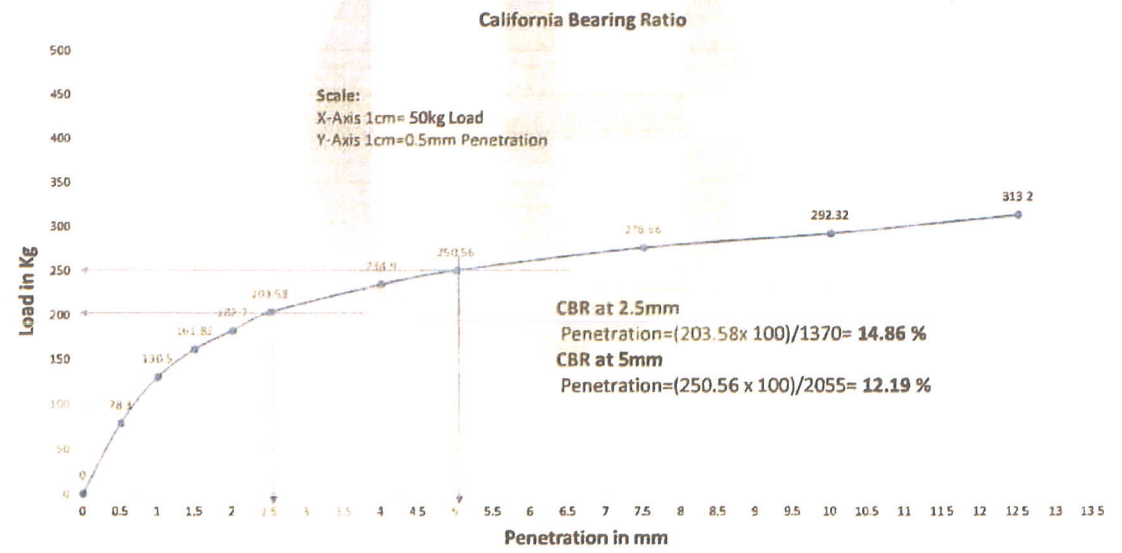


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**P. A. Jaiswal**

Report No. :- CT/NSK/R/12595/25
2of2



TC-5364

CIVILTECH INDIA PVT. LTD

Report No. :- CT/NSK/R/12596/25 Date :- 26/08/2025

ULR No :- TC536425000012596F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 30 m DP Road from Sangam bridge-Takligaon-Vijaymamta chowk-Ashoka marg-bharat nagar-chan hotel NH-3, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Black Cotton Soil)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911B

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel (> 4.75 mm) | Sand (4.75 to 0.075 mm) | Silt and clay (<0.075mm) | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Black Cotton Soil) | 4.6 | 31.9 | 63.5 | 46.2 | 20.4 | 25.8 | 1.75 | 17.6 | 3.8 | 50.0 |

For CivilTech India Pvt. Ltd.

P. A. Jaiswal

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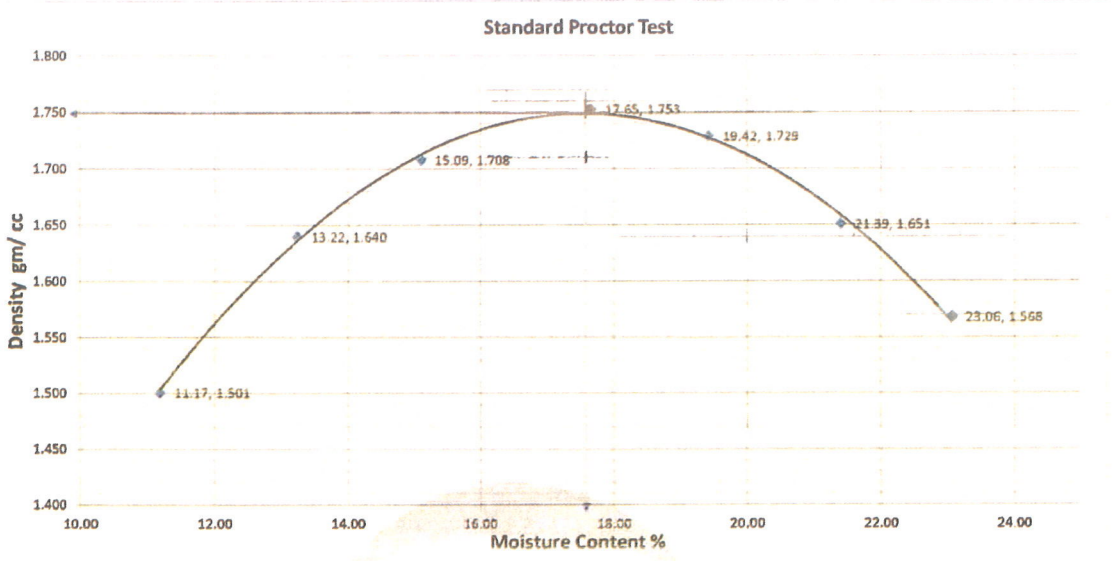


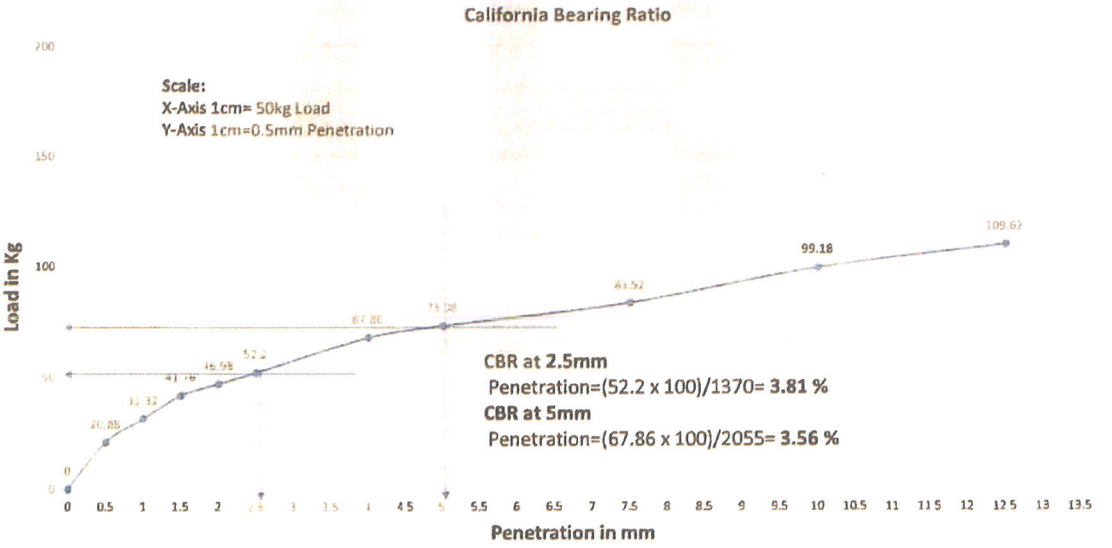


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Report No. : - CT/NSK/R/12596/25
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CIVILTECH INDIA PVT. LTD

Report No. :- CT/NSK/R/12597/25 Date :- 26/08/2025

ULR No :- TC536425000012597F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 30 m DP Road from Lakshminaraya Bridge-Jayshankar Chowk-Dream city chowk, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Poorly Graded Sand-Clay Mixtures)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911C

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel (> 4.75 mm) | Sand (4.75 to 0.075 mm) | Silt and clay (<0.075mm) | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Poorly Graded Sand-Clay Mixtures) | 7.3 | 37.8 | 54.9 | 43.6 | 22.0 | 21.6 | 1.83 | 15.4 | 8.8 | 45.0 |

For CivilTech India Pvt. Ltd.

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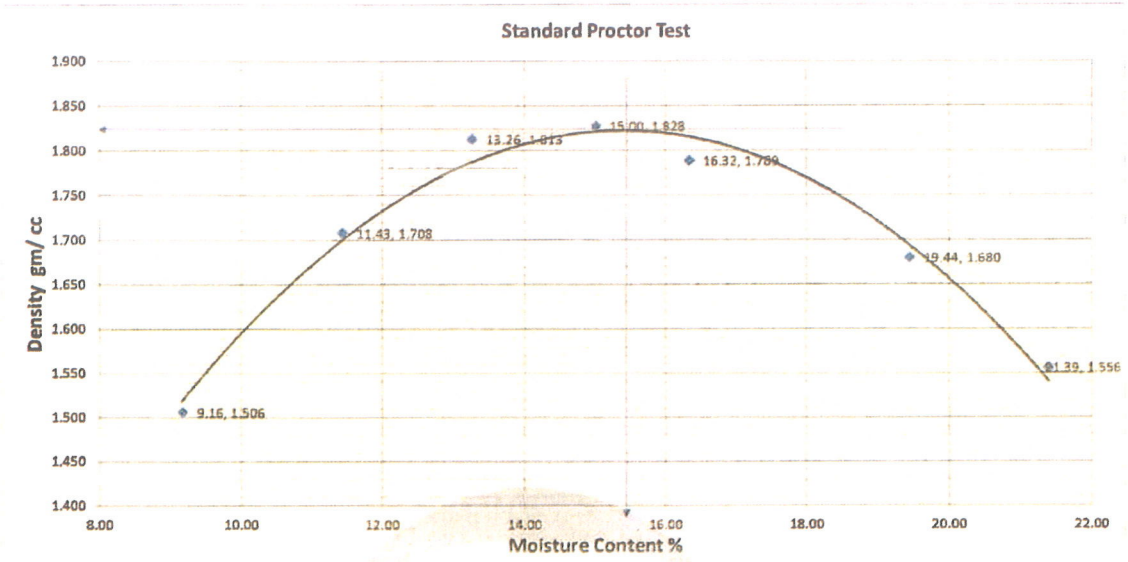


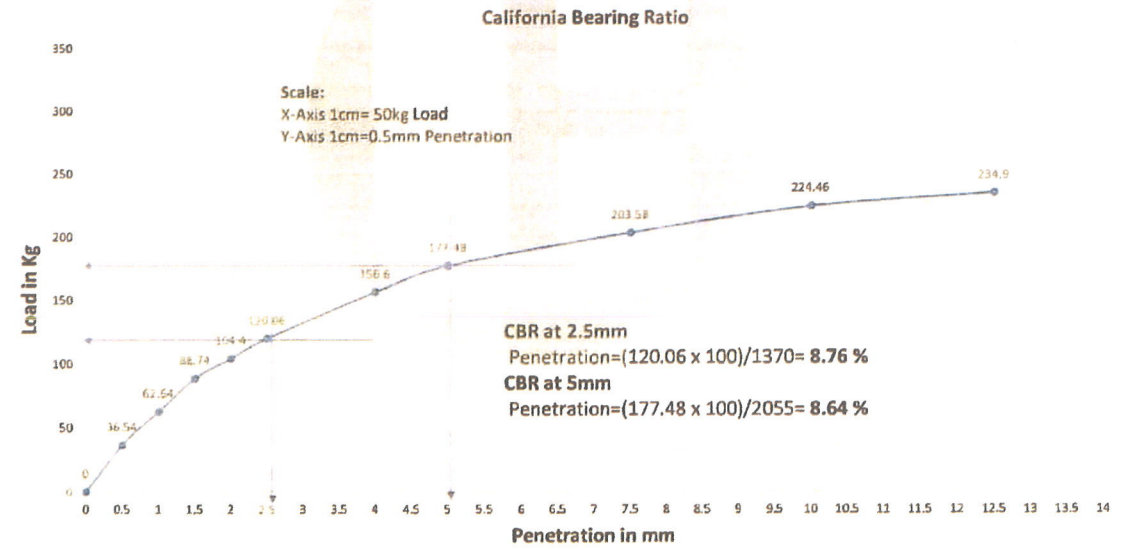


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Report No. :- CT/NSK/R/12597/25
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TC-5364

CIVILTECH INDIA PVT. LTD.

Report No. :- CT/NSK/R/12598/25 Date :- 26/08/2025

ULR No :- TC536425000012598F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 18 m DP Road from Takli phata-NH3-Takli Gaon-Gandhinagar Upnagar Naka NH-50, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Black Cotton Soil)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911D

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel (> 4.75 mm) | Sand (4.75 to 0.075 mm) | Silt and clay (<0.075mm) | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Black Cotton Soil) | 5.2 | 23.3 | 71.6 | 46.6 | 21.4 | 25.2 | 1.71 | 16.2 | 6.1 | 50.0 |

For CivilTech India Pvt. Ltd.

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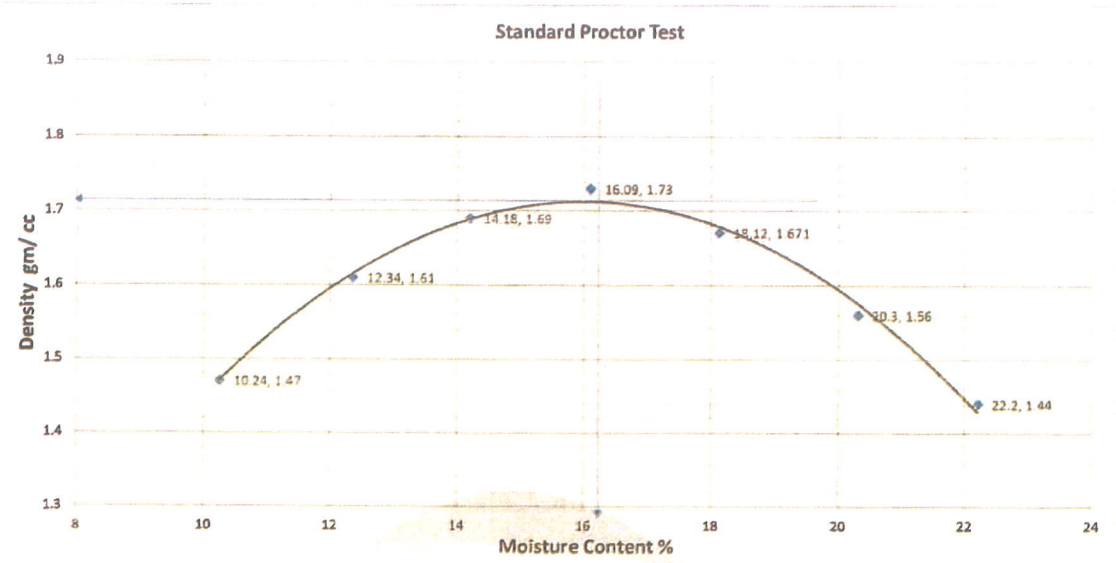


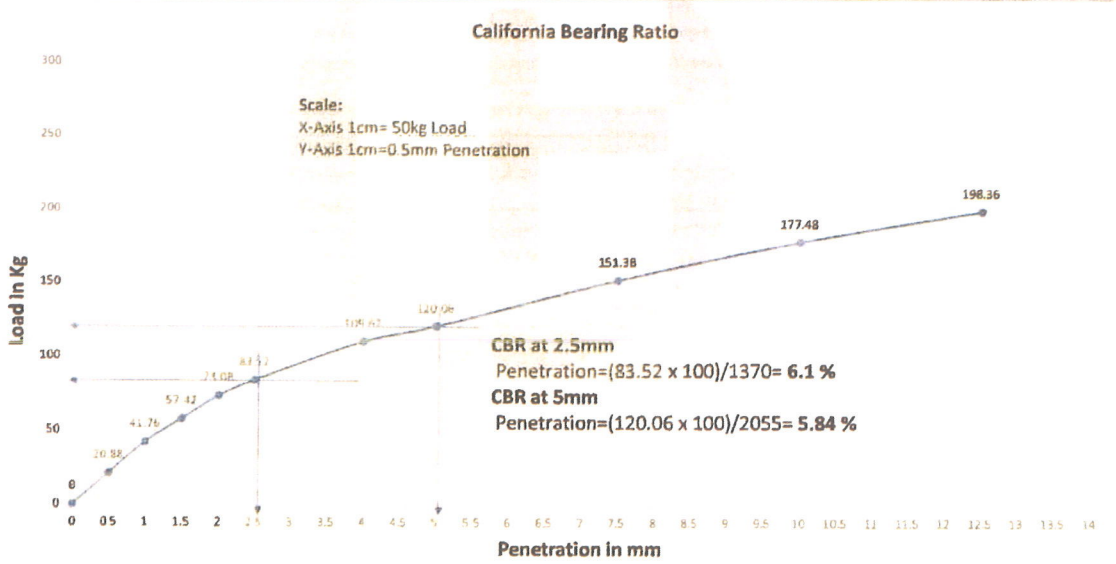


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Report No. :- CT/NSK/R/12598/25
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TC-5364

CIVILTECH INDIA PVT. LTD

Report No. :- CT/NSK/R/12599/25 Date :- 26/08/2025

ULR No :- TC536425000012599F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 18m & 30 m DP Road from Wadala Naka NH-3-Nasardi Bridge Wadala Road-Sainath Signal-Jagganath Chowk, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Silty Sand)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911E

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel | Sand | Silt and clay | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | (> 4.75 mm) | (4.75 to 0.075 mm) | (<0.075mm) | | | | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Silty Sand) | 18.5 | 45.4 | 36.1 | 33.6 | 23.6 | 10.0 | 1.94 | 13.0 | 17.1 | 30.0 |

For CivilTech India Pvt. Ltd.

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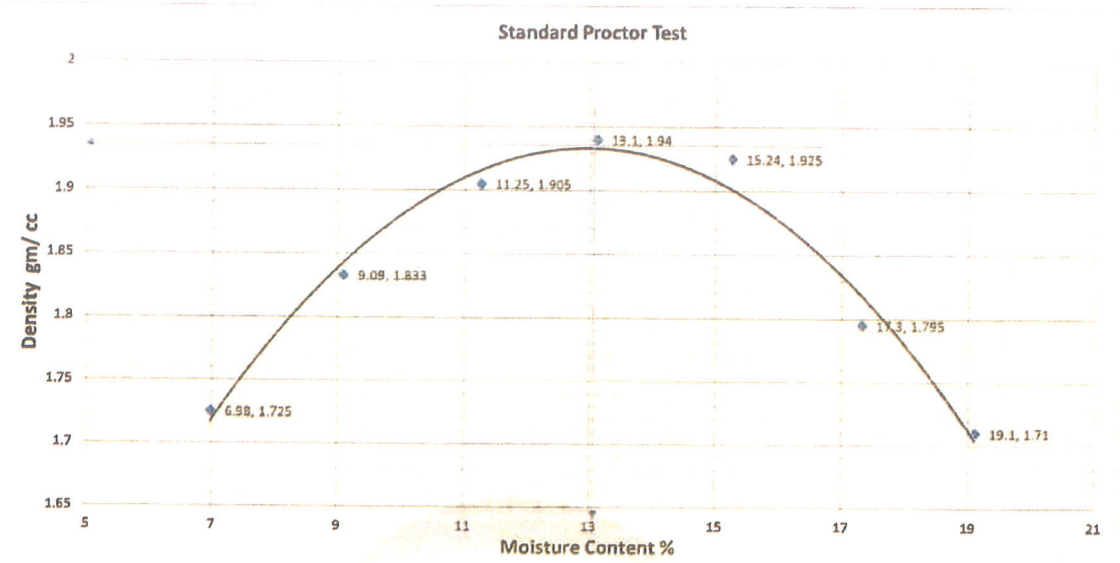
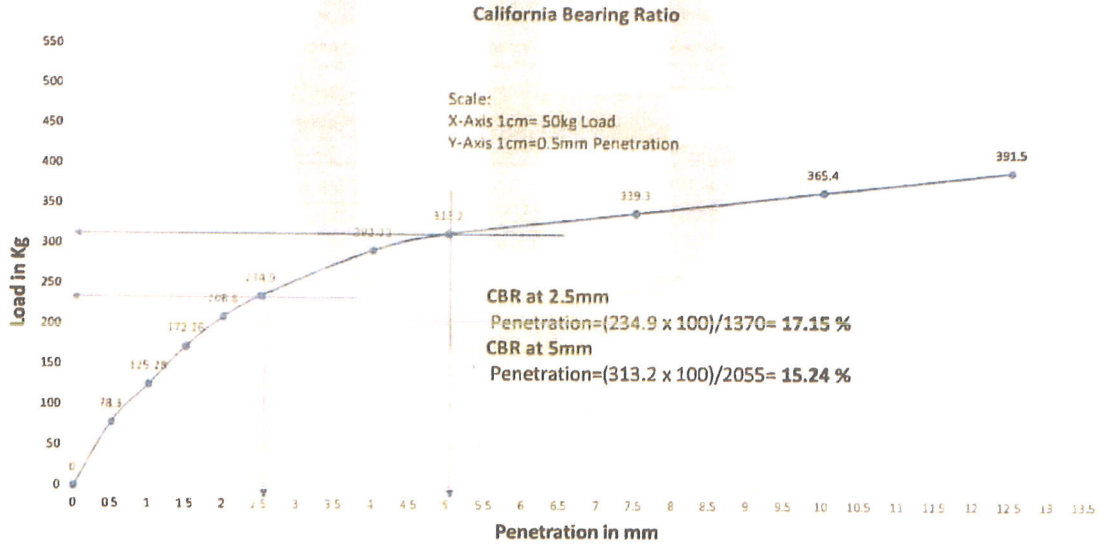
CIVILTECH INDIA PVT. LTD. NASHIK

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Report No. :- CT/NSK/R/12599/25
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TC-5364

CIVILTECH INDIA PVT. LTD

Report No. :- CT/NSK/R/12600/25 Date :- 26/08/2025

ULR No :- TC536425000012600F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 18 m DP Road from NH 3- Tractor House- Karma Heights - (Tigraniya Road) NMC, Nashik.

**Material identification** :- OGL Soil Sample (Silty Sand)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911F

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel (> 4.75 mm) | Sand (4.75 to 0.075 mm) | Silt and clay (<0.075mm) | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Silty Sand) | 13.6 | 37.8 | 48.7 | 36.1 | 23.5 | 12.6 | 1.95 | 12.0 | 13.7 | 35.0 |

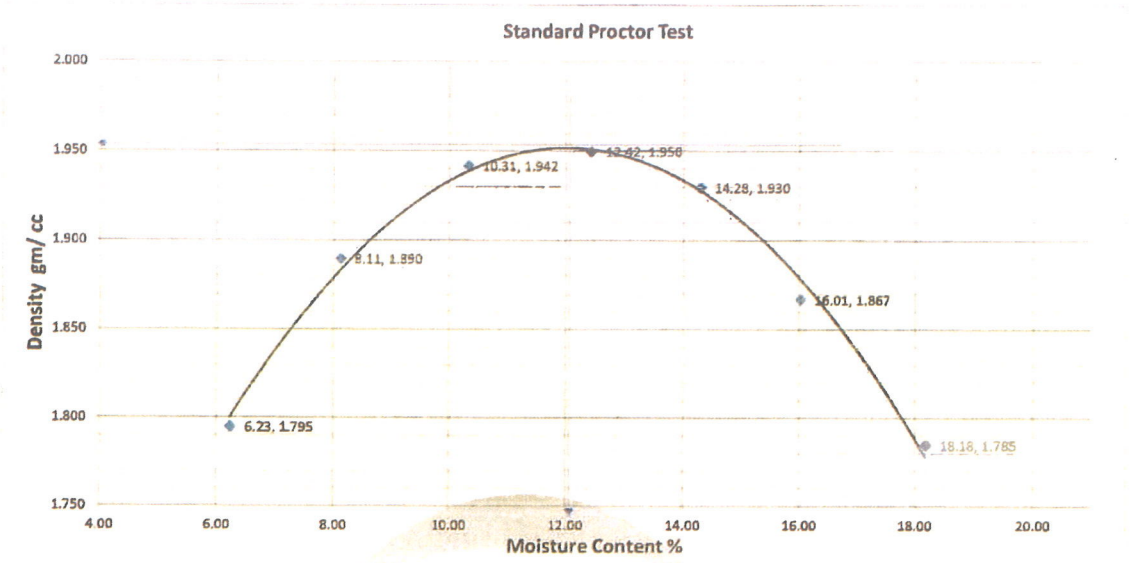
For CivilTech India Pvt. Ltd.

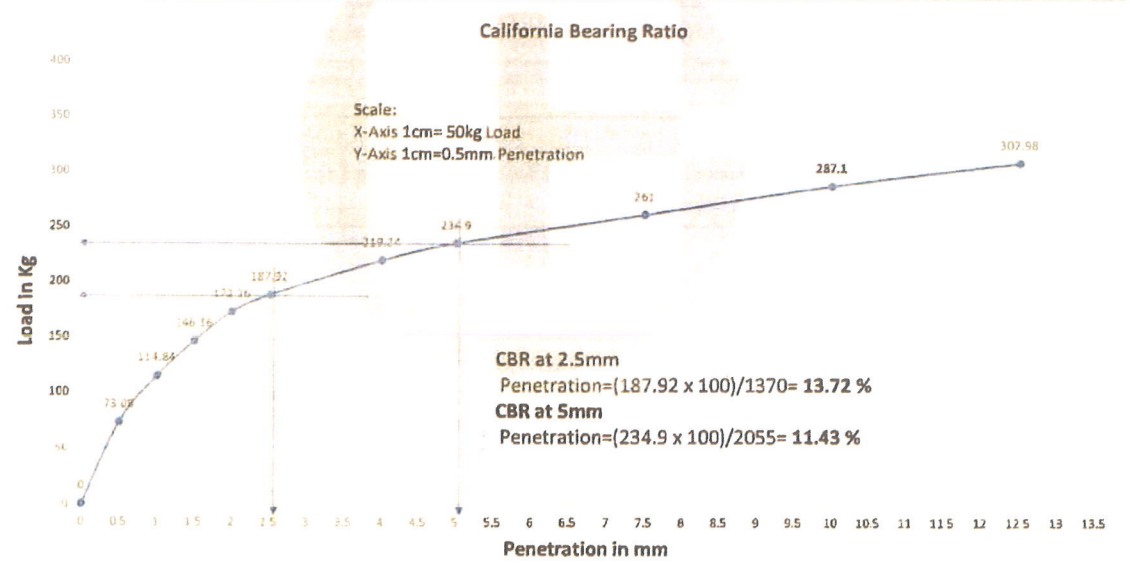
Reviewed and Authorized by
P. A. Jaiswal

CIVILTECH INDIA PVT. LTD. NASHIK



TC-5364




**Note :-**

1) This report refers only to the particular sample submitted to lab for the Test.
2) Report shall not be reproduce except in full without prior written Permission of Civil Tech Lab.
3) NP- Not Plastic; NA - Not Applicable
4) This report is invalid without paper seal of Civil Tech India Pvt. Ltd.

**For CivilTech India Pvt. Ltd.**

CIVILTECH INDIA PVT. LTD. NASHIK

**Reviewed and Authorized by**
**P. A. Jaiswal**

Report No. :- CT/NSK/R/12600/25
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CIVILTECH INDIA PVT LTD.

Report No. :- CT/NSK/R/12601/25 Date :- 26/08/2025

ULR No :- TC536425000012601F

# Test Report

**Customer Name** :- Executive Engineer East Nashik Division NMC Nashik.

**Address** :- Nashik

**Name of work** :- Proposed Developing of 30 m DP Road from Lekha nagar- NH3- Kala nagar chowk- Wadala gaon- Ravishankar Marg- Vijaymamta chowk, NMC, Nashik.

**Material identification** :- OGL Soil Sample (Clayey Sands)

**Test Location** :- Plot no. 1372, Behind Shivaji Garden, Kanherewadi, Nashik- 422001

**Job No.** :- 081911G

**Date of receipt of material** :- 19/08/2025 **Date of performance of test** :- 19/08/2025 to 26/08/2025

**Temp. at time of test** :- NA **Humidity at time of test** :- NA

**Method of Test**

1. Grain Size Analysis Test as per IS 2720-1985 (Part 4) RA 2020
2. Liquid Limit & Plastic Limit Test as per IS 2720-1985 (Part 5) RA 2020
3. Standard Proctor Test as per IS 2720-1983 (Part 8) RA 2020
4. Free Swell Index (FSI) Test as per IS 2720-1977 (Part 40) RA 2021
5. California Bearing Ratio (C.B.R.) Test as per IS 2720-1987 (Part 16) RA 2021

| Sr. No. | Sample Identification | Grain size Analysis | | | Atterberg Limits | | | Max. Dry Density (MDD) | Optimum moisture Content (OMC) | CBR | FSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gravel | Sand | Silt and clay | Liquid Limit (wL) | Plastic Limit (wp) | Plasticity Index (Ip) | | | | |
| | | (> 4.75 mm) | (4.75 to 0.075 mm) | (<0.075mm) | | | | | | | |
| | | % | % | % | % | % | % | (gm/cm$^3$) | % | % | % |
| 1 | OGL Soil Sample (Clayey Sands) | 14.6 | 40.2 | 45.2 | 37.6 | 20.2 | 17.4 | 1.91 | 13.6 | 11.4 | 35.0 |

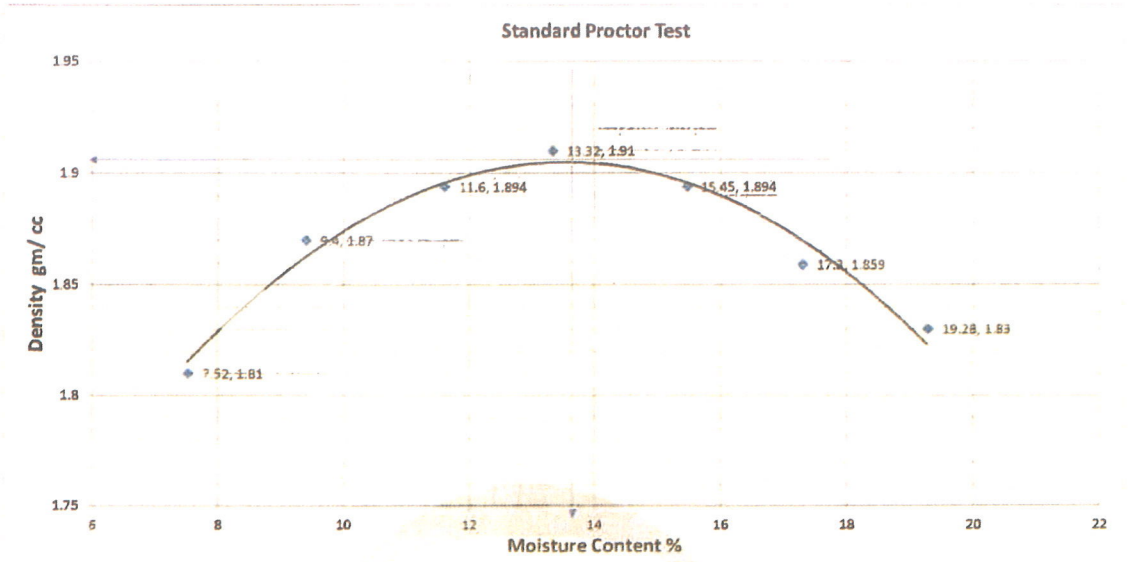
For CivilTech India Pvt. Ltd.

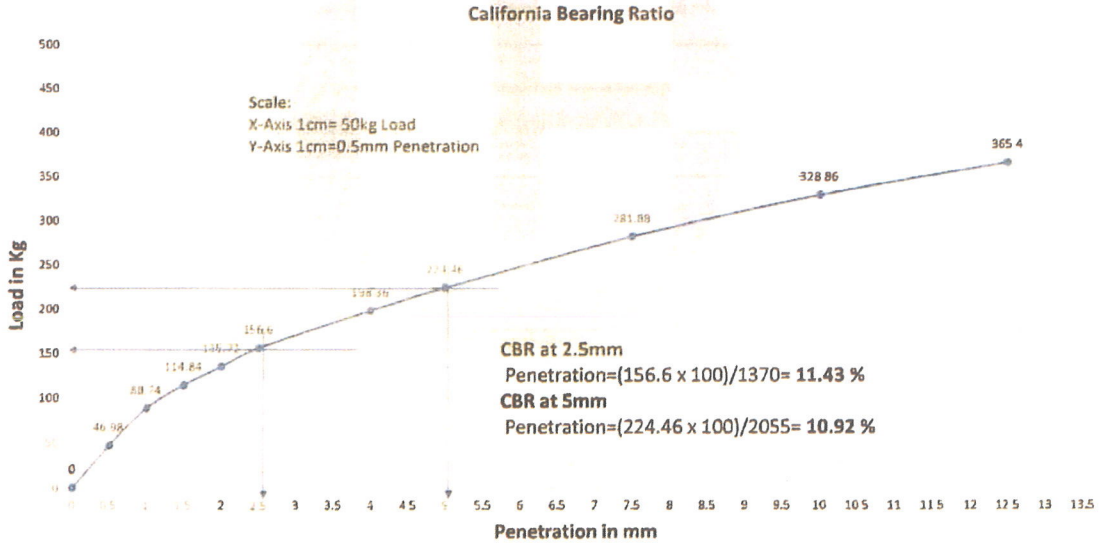
Reviewed and Authorized by
P. A. Jaiswal

CIVILTECH INDIA PVT. LTD. NASHIK



TC-5364

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**For CivilTech India Pvt. Ltd.**

CIVILTECH INDIA PVT. LTD. NASHIK

**Reviewed and Authorized by**
**P. A. Jaiswal**

Report No. :- CT/NSK/R/12601/25
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## On Site Photos







CIVILTECH INDIA PVT. LTD. NASHIK




# विभाजक

नाशिक पुर्व - 04

SE.NO - 10

# नाशिक महानगरपालिका, नाशिक

**अनुक्रमणिका**


| अ.क्र. | तपशिल (का) | दिनांक | पा. नं. (का) |
|---|---|---|---|
| १) | तांत्रिक मान्यता | | प-१ |
| २) | प्राक्कथन | | प्रा-३ ते १६ |
| ३) | डेकोरेटीव्ह पोल फोटो व माहिती | | १७ ते २९ |

# Nashik Municipal Corporation

Electrical & Mechanical Department :- Electrical Branch

Fund Head :-

Estimate Prepared by Jr. / Asst. / Sec. Engineer :-

Deputy Engineer :- Shri. S. I. Kulkarni

Executive Engineer :- Shri. A. S. Gaikwad

Name of work :- **Part-A** Supplying and erecting streetlight pole and allied works of Proposed devloping 30M DP road from Lakshminarayan bridge to Jayshankar chouk to dream city chowk of Nashik East division, NMC.

**Part-B** Shifting of HT, LT lines and allied works of Proposed devloping 30M DP road from Lakshminarayan bridge to Jayshankar chouk to dream city chowk of Nashik East division, NMC.

Estimate Rs. :- 6978121.00 (Part A) + 10618045.00 (Part B) = 17596166.00

Note :- The estimate is prepared on the basis of PWD DSR 2023-24.

| Jr./Sect Engineer | Dy. Engineer | Exe. Engineer |
|---|---|---|
| NMC | NMC | NMC |

Technical Scrutiny

Technically Sanctioned for Rs. :- 17596166.00

In Words :- Two Crore seventy five Lakh ninety six thousand one hundred sixty six Rs. only

Vide No. :- 57 Date :-

APPROVED

Superintending Engineer
Electrical and Mechanical Department
Nashik Municipal Corporation, Nashik

| S. N | Item | Qty | Per | Rate | Amount |
|---|---|---|---|---|---|
| 23 | Supplying and erecting outdoor stand mounted feeder pillar for high-mast of the same manufacturer with 63A TPN MCB incomer, 24hr astronomical time switch with minimum 5 Years battery backup, 45 A TP contactor for automatic switching of luminaries, 2 no 9A contactors and raise/lower push button, and provision for termination of adequate size of incoming and outgoing cables complete erected in min. 14 SWG CRCA sheet box powder coated with supporting angles, self lock, gasket and slanting top erected on CC foundation complete. (PWD DSR 2023-24, 8-2-22) | 1 | No | 33144.00 | 33144.00 |
| 24 | Providing, installing and testing pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod complete with all accessories (PWD DSR 2023-24, 9-1-4) | 75 | Nos | 1537.00 | 115275.00 |
| 25 | Supplying and erecting 7 m long decorative pole with cap, base plate, foundation bolt etc complete in provided foundation. | 20 | Nos | 55100.00 | 1102000.00 |
| 26 | Supplying and erecting 5 m long decorative pole with cap, base plate, foundation bolt etc complete in provided foundation. | 8 | Nos | 54650.00 | 437200.00 |
| 27 | Supplying and erecting decorative single arm bracket for 3/5 m decorative pole etc complete. | 8 | Nos | 14800.00 | 118400.00 |
| 28 | Supplying and erecting decorative single arm bracket for 7/8 m decorative pole etc complete. | 20 | Nos | 19210.00 | 384200.00 |
| 29 | Supplying and erecting decorative integral hanging LED fixtures of 50 W consisting with accessories on provided pole /bracket | 8 | Nos | 7100.00 | 56800.00 |
| 30 | Supplying and erecting decorative integral hanging LED fixtures of 72 W consisting with accessories on provided pole /bracket | 20 | Nos | 9700.00 | 194000.00 |
| 31 | Making fabrication work using 16 gauge metal sheet including Iron work with bending, cutting, drilling and welding complete (PWD DSR 2023-24, 6-1-1). | 100 | Kg | 261.00 | 26100.00 |
| 32 | Dismantling the existing pole above 6 m height with brackets, clamps, insulators, stay from the c.c. foundation (PWD DSR 2023-24, 8-7-2) | 25 | Nos | 1043.00 | 26075.00 |
| | | | | Total | 5913662 |
| | | | | GST @18% | 1064459 |
| | | | | Total | 6978121 |

Junior Engineer
Electrical Department

Deputy Engineer
Electrical Department

# MEASUREMENTS

**Name of work:** Supplying and erecting streetlight pole and allied works of Proposed devloping 30M DP road from Lakshminarayan bridge to Jayshankar chouk to dream city chowk of Nashik East division, NMC.

| S. N | Item | Qty | Per |
|---|---|---|---|
| 1 | 9 m high (clear height) galvanised octagonal pole. | 40 | Nos |
| 2 | 12.5 m (clear height) motorized high-mast. | 1 | No |
| 3 | 1000mm single arm sword type bracket. | 1 | Nos |
| 4 | 1000mm double arm sword type bracket. | 39 | Nos |
| 5 | M-20 grade reinforced cement concrete foundation for 3 to 5m octagonal/ conical | 8 | No |
| 6 | M-20 grade reinforced cement concrete foundation for 6m to 8m high octagonal pole. | 20 | Nos |
| 7 | M-20 grade reinforced cement concrete foundation for 9m high octagonal pole. | 40 | Nos |
| 8 | M-20 cement concrete foundation for 12.5m raising lowering high mast. | 1 | No |
| 9 | Platform of M20 grade trap, steel bar rainforcement of various diameters for RCC work, sand faced plaster externally in cement mortar. | 1 | Cub.M |
| 10 | FRP box of size 300mm x 200mm x 125 mm, 2.7 mm thick. | 5 | Nos |
| 11 | LED street light fitting 120W. | 80 | Nos |
| 12 | LED flood light fitting Max. 195W | 6 | No |
| 13 | FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 4 core 10 sq. mm. aluminium conductor. | 1500 | Mtr |
| 14 | FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 4 core 16 sq. mm. aluminium conductor. | 50 | Mtr |
| 15 | PVC insulated PVC round sheathed FR 1.5 sq.mm (30 no. x 0.25mm dia.) 3 core flexible multi stranded copper industrial cable for voltage grade up to 1.1 kV. | 1200 | Mtr |
| 16 | Mains with WP 2 x 6 sq. mm. 1.1kV. grade aluminium PVC insulated and PVC sheathed wires. | 100 | Mtr |
| 17 | SPMCB 0.5A to 5A. | 110 | No |
| 18 | Epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 2.5 to 16 sq mm. | 4 | Nos |
| 19 | Making trench in Hard murum/Tar road. | 20 | Mtr |
| 20 | 50 mm outside dia. double wall corrugated pipes (DWC). | 1500 | Mtr |
| 21 | 90 mm outside dia. double wall corrugated pipes (DWC). | 50 | Mtr |
| 22 | Three phase, 415V, street light control panel upto the max load of 12kW. | 2 | Nos |
| 23 | outdoor stand mounted feeder pillar for high-mast of the same manufacturer with 63A TPN MCB incomer. | 1 | No |
| 24 | Pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.I. Rod. | 75 | Nos |
| 25 | 7 m long decorative pole. | 20 | Nos |
| 26 | 5 m long decorative pole. | 8 | Nos |
| 27 | Decorative single arm bracket for 3/5 m decorative pole. | 8 | Nos |
| 28 | Decorative single arm bracket for 7/8 m decorative pole. | 20 | Nos |
| 29 | Decorative integral hanging LED fixtures of 50 W. | 8 | Nos |
| 30 | Decorative integral hanging LED fixtures of 72 W. | 20 | Nos |
| 31 | Making fabrication work. | 100 | Kg |
| 32 | Dismantling the existing pole above 6 m height. | 25 | Nos |

Deputy Engineer
Electrical Department

# ABSTRACT

**Name of work:** Shifting of HT, LT lines and allied works of Proposed devloping 30M DP road from Lakshminarayan bridge to Jayshankar chouk to dream city chowk of Nashik East division, NMC.

| S. N | Item | Qty | Per | Rate | Amount |
|---|---|---|---|---|---|
| 1 | Providing and fixing inline cut point D. P. Structure for 11/0.415 kV, 200 KVA Transformer with R.S.J. Pole 2 Nos. of size 100 x 116 mm x 11 Mtr. Long with suitable Distribution Box of C.R.C.A. Sheet 16 SWG with 4 Pole MCCB 400 Amps as incomer & 6 Nos. 200 Amps Kitkat / MCCB for out going circuits. Transformer D.P. Structure includes the A. B. Switch 200 Amps, D.O. fuse Set & L.A. Set. 2 Nos.Top channel of size 100 mmx 50 mm for erection of A.B. Switch & 2 Nos. Base channel of size 100 mm x 50 x mm for erecting Transformer. Channel of size 75 x40 mm for erecting D.O. Fuse Set, L.A., A.B. Switch handle etc.Angle of size 50 x 50 x6 mm for erecting Distribution Box , Transformer Belt etc.as per drawing (min.176 Kg. iron work ) with necessary clamps, Nut-bolts. V cross arm, top clip, insulators etc. complete with caution board & barbed wire.D.P. Structure shall be erected in c.c. foundation complete. (PWD DSR 2023-24, 8-3-23) | 5 | Nos | 167122.00 | 835610.00 |
| 2 | Providing and fixing 3 phase, 11/0.433 kV, 50 Hz., 200 kVA, Mineral oil immersed and naturally cooled outdoor type, aluminium wound Non-sealed transformer, delta/star connected with additional neutral brought out on load side, etc complete (PWD DSR 2023-24, 10-1-3). | 1 | No | 308133.00 | 308133.00 |
| 3 | Providing and fixing rolled steel joist (girder) pole 152 x 152 mm (37.1kg/m) with base plate in provided foundation (PWD DSR 2023-24, 8-1-15) | 65 | Mtr | 2681.00 | 174265.00 |
| 4 | Providing and fixing rolled steel joist (girder) pole 100 x 116 mm (23 kg/m) with base plate in provided foundation (PWD DSR 2023-24, 8-1-13) | 330 | Mtr | 1840.00 | 607200.00 |
| 5 | Providing and fixing rolled steel joist (girder) pole 125 x 70 mm (13.3 kg/m) with base plate in provided foundation (PWD DSR 2023-24, 8-1-10) | 44 | Mtr | 1164.00 | 51216.00 |
| 6 | Providing and fixing G.I. stay set for poles, including loop insulators at inaccessible height with anchor plate 300x300x6 mm., straining screws, G.I. stay wire 7/8 SWG, G.I. stay rod 20mmx1.8m length and pole clamps duly erected in provided cement concrete foundation complete (PWD DSR 2023-24, 8-6-2) | 5 | Nos | 2010.00 | 10050.00 |
| 7 | Providing and fixing HT stay wire | 75 | Kg | 150.00 | 11250.00 |
| 8 | Making Cement concrete foundation including excavation (60 x 60)cm x deep 1/6 of pole length in 1:3:6 cement concrete 20 x 25 mm stone metal, 45cm x 45cm x 45cm/ 45cm dia. x 45cm height plinth duly plastered, with necessary curing and finishing complete. (for above 9m poles) (PWD DSR 2023-24, 16-3-4) | 35 | Nos | 3536.00 | 123760.00 |

| S. N | Item | Qty | Per | Rate | Amount |
|---|---|---|---|---|---|
| 9 | Making Cement concrete foundation including excavation (60 x 60 x 150)cm deep in 1:3:6 cement concrete, (20 to 25) mm stone metal with necessary curing and finishing complete.(for stay). (PWD DSR 2023-24, 16-3-6) | 5 | Nos | 2491.00 | 12455.00 |
| 10 | Providing and making platform by making excavation for foundation, situ cement concrete of M-10, uncoursed rubble masonry of trap, rubble stone soling 15cm to 20dc thick including hand packing and compacting, situ cement concrete of M20 grade trap, steel bar rainforcement of various diameters for RCC work, sand faced plaster externally in cement mortar, etc complete | 12 | Cub.M | 11551.00 | 138612.00 |
| 11 | Providing and fixing various channels, clamp, angle, flat etc fabrication works (PWD DSR 2023-24, 6-1-19) | 1250 | Kg | 196.00 | 245000.00 |
| 12 | Providing and fixing disc type insulator 70 KN with necessary hardware suitable for 33kV line complete (PWD DSR 2023-24, 8-5-8) | 24 | Nos | 2037.00 | 48888.00 |
| 13 | Providing and fixing disc type insulator 45KN with necessary hardware suitable for 11kV line, complete (PWD DSR 2023-24, 8-5-6) | 54 | Nos | 1255.00 | 67770.00 |
| 14 | Providing and fixing pin type insulator with GI pin suitable for 33kV line, complete (PWD DSR 2023-24, 8-5-11) | 15 | Nos | 889.00 | 13335.00 |
| 15 | Providing and fixing porcelain pin type insulator with GI pin suitable for 11kV line, complete (PWD DSR 2023-24, 8-5-9) | 90 | Nos | 313.00 | 28170.00 |
| 16 | Providing and fixing approved make thyrite type lightning arrestor suitable for 11KV line (PWD Elec 2023-24, 8-5-15) | 3 | No | 1347.00 | 4041.00 |
| 17 | Providing and fixing isolator suitable for 33KV capacity | 1 | No | 86400.00 | 86400.00 |
| 18 | Providing and fixing air break switch without earth switch 11KV, 400A outdoor type gang operated air break, triple pole switch of required capacity complete (PWD DSR 2023-24, 10-5-2) | 3 | Nos | 16128.00 | 48384.00 |
| 19 | Providing and fixing 11 kV outdoor type drop out fuse with insulator complete with fuse holders, fuse barrel with metal fitting, fuse element mounted on M.S. channel with working current of 15A capacity complete erected on provided cross arm (PWD DSR 2023-24, 10-5-5) | 1 | No | 6603.00 | 6603.00 |
| 20 | Providing and fixing ACSR conductor of size - 6/1-4.72 mm (Dog) complete. (PWD DSR 2023-24, 8-4-11) | 1 | Km | 97655.00 | 97655.00 |
| 21 | Providing and fixing ACSR conductor of size - 6/1-4.09 mm (Raccon) complete (PWD DSR 2023-24, 8-4-10) | 4.5 | Km | 77065.00 | 346792.50 |

| S. N | Item | Qty | Per | Rate | Amount |
|---|---|---|---|---|---|
| 22 | Providing and fixing Nut bolts, hardware and Sundries, etc | 5 | Set | 15000.00 | 75000.00 |
| 23 | Providing and fixing extendable/non-extendable outdoor type 11 kV 630A, load break isolator switch, etc complete (PWD DSR 2023-24, 5-9-3) | 1 | Nos | 152150.00 | 152150.00 |
| 24 | Providing and fixing HT 11 kV 4 way feeder pillar. | 6 | Nos | 82500.00 | 495000.00 |
| 25 | Providing and fixing HT 33 kV 4 way feeder pillar. | 2 | Nos | 225000.00 | 450000.00 |
| 26 | Providing and fixing 11 kV HRC fuse 63A for load break switch with necessary nut bolts complete. (PWD DSR 2023-24, 5-9-10) | 3 | Nos | 6077.00 | 18231.00 |
| 27 | Dismantling the existing pole above 6 m height with brackets, clamps, insulators, stay from the c.c. foundation (PWD DSR 2023-24, 8-7-2) | 35 | Nos | 1043.00 | 36505.00 |
| 28 | Dismantling the existing overhead line including G.I. wires of all sizes without damaging & making the coils in suitable sizes. (PWD DSR 2023-24, 8-7-3) | 2 | Km | 1489.00 | 2978.00 |
| 29 | Dismantling the existing lightening arrestor set, insulator from DP structure complete. (PWD DSR 2023-24, 8-7-4) | 3 | Nos | 108.00 | 324.00 |
| 30 | Dismantling the existing DP, brackets, clamps, insulators, stay, transformer from the c.c. foundation (PWD DSR 2023-24, 8-7-2) | 5 | Nos | 17500.00 | 87500.00 |
| 31 | Providing and laying XLPE insulated, galvanised steel formed wire armoured (strip) cable 33 kV(E), 3 x 300 sq. mm. aluminium conductor laid in provided trench / pipe (PWD DSR 2023-24, 7-3-27) | 100 | Mtr | 3991.00 | 399100.00 |
| 32 | Providing and laying XLPE insulated, galvanised steel formed wire armoured (strip) cable 11 kV ( E ), 3 x 300 sq. mm. aluminium conductor laid in provided trench / pipe (PWD DSR 2023-24, 7-3-7) | 600 | Mtr | 2764.00 | 1658400.00 |
| 33 | Providing and laying XLPE insulated, galvanised steel formed wire armoured (strip) cable 11 kV (E), 3 x 185 sq. mm. aluminium conductor laid in provided trench / pipe (PWD DSR 2023-24, 7-3-5) | 50 | Mtr | 2008.00 | 100400.00 |
| 34 | Providing and laying XLPE insulated, galvanised steel formed wire armoured (strip) cable 11 kV (E), 3 x 95 sq. mm. aluminium conductor laid in provided trench / pipe (PWD DSR 2023-24, 7-3-2) | 50 | Mtr | 1354.00 | 67700.00 |
| 35 | Providing and fixing Heat shrinkable straight through joint kit for 3 x 300sq.mm 33Kv (E) XLPE HT cable etc complete (PWD Elec 2023-24, 7-5-33) | 2 | Nos | 92799.00 | 185598.00 |
| 36 | Providing and fixing Heat shrinkable straight through joint kit for 11 kV (E) XLPE HT cable 3x300 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-11) | 2 | Nos | 29627.00 | 59254.00 |
| 37 | Providing and fixing Heat shrinkable straight through joint kit for 11 kV (E) XLPE HT cable 3x120 to 185 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-10) | 1 | Nos | 26804.00 | 26804.00 |

| S. N | Item | Qty | Per | Rate | Amount |
|---|---|---|---|---|---|
| 38 | Providing and fixing Heat shrinkable straight through joint kit for 11 kV (E) XLPE HT cable 3x up to 95 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-9) | 1 | Nos | 22307.00 | 22307.00 |
| 39 | Providing and fixing Heat shrinkable outdoor termination kit for 33kV ( E ) XLPE HT cable 3x300 sq. mm. to 400 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-29) | 4 | Nos | 33057.00 | 132228.00 |
| 40 | Providing and fixing Heat shrinkable outdoor termination kit for 11 kV ( E ) XLPE HT cable 3x300 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-7) | 10 | Nos | 14682.00 | 146820.00 |
| 41 | Providing and fixing Heat shrinkable outdoor termination kit for 11 kV ( E ) XLPE HT cable 3x120 to 185 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-6) | 2 | Nos | 13197.00 | 26394.00 |
| 42 | Providing and fixing Heat shrinkable outdoor termination kit for 11 kV (E) XLPE HT cable 3x 95 sq. mm. with necessary material (PWD DSR 2023-24, 7-5-5) | 2 | Nos | 13964.00 | 27928.00 |
| 43 | Providing and laying FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 4 core 10 sq. mm. aluminium conductor complete erected with glands & lugs on wall/ trusses/pole or laid in provided trench/ pipe (PWD DSR 2023-24, 7-1-28) | 100 | Mtr | 183.00 | 18300.00 |
| 44 | Providing and laying FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 4 core 16 sq. mm. aluminium conductor complete (PWD DSR 2023-24, 7-1-29) | 100 | Mtr | 215.00 | 21500.00 |
| 45 | Providing and laying FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 3½ core 185 sq. mm. aluminium conductor complete (PWD DSR 2023-24, 7-1-22) | 400 | Mtr | 1102.00 | 440800.00 |
| 46 | Providing and fixing epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 2.5 to 16 sq mm., with necessary material (PWD DSR 2023-24, 7-4-1) | 5 | Nos | 2075.00 | 10375.00 |
| 47 | Providing and fixing epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 120 to 185 sq mm., with necessary material (PWD DSR 2023-24, 7-4-4) | 5 | Nos | 4014.00 | 20070.00 |
| 48 | Providing and fixing G.I. pipe 'A' class 75 mm dia. for enclosing XLPE armoured cable on wall/pole (PWD DSR 2023-24, 7-6-4) | 72 | Mtr | 674.00 | 48528.00 |
| 49 | Providing and laying (including excavation) half round reinforced cement concrete pipe of NP-2 class of 150mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete. (PWD DSR 2023-24, 7-6-6) | 600 | Mtr | 545.00 | 327000.00 |

| S. N | Item | Qty | Per | Rate | Amount |
|---|---|---|---|---|---|
| 50 | Making trench in Hard murum/Tar road having 0.75m depth and minimum 0.3m width for laying provided cables up to voltage level 1.1kV cable complete (PWD DSR 2023-24, 16-1-2) | 100 | Mtr | 219.00 | 21900.00 |
| 51 | Providing and laying 50 mm outside dia. double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, complete. (PWD DSR 2023-24, 7-6-9) | 100 | Mtr | 204.00 | 20400.00 |
| 52 | Providing and laying 90 mm outside dia. double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, complete. (PWD DSR 2023-24, 7-6-11) | 400 | Mtr | 333.00 | 133200.00 |
| 53 | Providing and fixing pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod complete with all accessories (PWD DSR 2023-24, 9-1-4) | 40 | Nos | 1537.00 | 61480.00 |
| 54 | Providing and fixing GI earth wire of high purity of different sizes used for earthing. (PWD DSR 2023-24, 9-2-5) | 550 | Kg | 168.00 | 92400.00 |
| 55 | Licencing work for line shifting Co-ordination with MSEDCL etc complete. | 2 | Job. | 35000.00 | 70000.00 |
| 56 | Providing and fixing mini feeder pillar with 415V, 315-320A FPMCCB as incomer and 3 outgoing circuits with HRC fuse base and cartridge of 100A aluminium bus bar erected in 14 SWG CRCA sheet box with supporting angles, self locks, gasket and enclosure must be dust proof, rust proof, vermin and water resistant, having slanting top and erected on angle iron/ GI frame in provided C.C. foundation complete (PWD DSR 2023-24, 5-2-2) | 5 | Nos | 55236.00 | 276180.00 |
| | | | | Total | 8998344 |
| | | | | GST @18% | 1619702 |
| | | | | Total | 10618045 |

Junior Engineer
Electrical Department

Deputy Engineer
Electrical Department

# MEASUREMENTS

**Name of work:** Shifting of HT, LT lines and allied works of Proposed devloping 30M DP road from Lakshminarayan bridge to Jayshankar chouk to dream city chowk of Nashik East division, NMC.

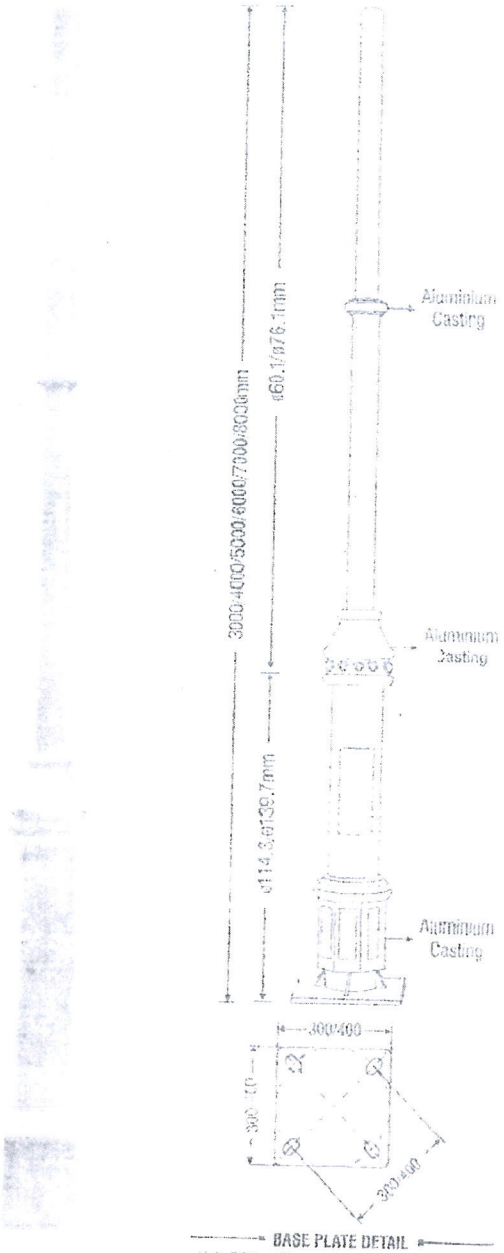
| S. N | Item | Qty | Per |
|---|---|---|---|
| 1 | D. P. Structure for 11/0.415 kV, 200 KVA Transformer with R.S.J. Pole 2 Nos. of size 100 x 116 mm x 11 Mtr. Long. | 5 | Nos |
| 2 | 3 phase, 11/0.433 kV, 50 Hz., 200 kVA, Mineral oil immersed and naturally cooled outdoor type, aluminium wound Non-sealed transformer. | 1 | No |
| 3 | Rolled steel joist (girder) pole 152 x 152 mm. | 65 | Mtr |
| 4 | Rolled steel joist (girder) pole 100 x 116 mm. | 330 | Mtr |
| 5 | Rolled steel joist (girder) pole 125 x 70 mm. | 44 | Mtr |
| 6 | G.I. stay set for poles. | 5 | Nos |
| 7 | HT stay wire | 75 | Kg |
| 8 | Making Cement concrete foundationfor above 9m poles. | 35 | Nos |
| 9 | Making Cement concrete foundation for stay. | 5 | Nos |
| 10 | Platform of M20 grade trap, steel bar rainforcement of various diameters for RCC work, sand faced plaster externally in cement mortar. | 12 | Cub.M |
| 11 | Fabrication works. | 1250 | Kg |
| 12 | Disc type insulator 70 KN with necessary hardware suitable for 33kV line. | 24 | Nos |
| 13 | Disc type insulator 45KN with necessary hardware suitable for 11kV line. | 54 | Nos |
| 14 | Pin type insulator with GI pin suitable for 33kV line. | 15 | Nos |
| 15 | Pin type insulator with GI pin suitable for 11kV line. | 90 | Nos |
| 16 | Thyrite type lightning arrestor suitable for 11KV line. | 3 | No |
| 17 | Isolator suitable for 33KV capacity | 1 | No |
| 18 | Air break switch without earth switch 11KV, 400A outdoor type gang operated air break, | 3 | Nos |
| 19 | 11 kV outdoor type drop out fuse with insulator complete. | 1 | No |
| 20 | ACSR conductor of size - 6/1-4.72 mm (Dog). | 1 | Km |
| 21 | ACSR conductor of size - 6/1-4.09 mm (Raccon). | 4.5 | Km |
| 22 | Nut bolts, hardware and Sundries. | 5 | Set |
| 23 | Extendable/non-extendable outdoor type 11 kV 630A, load break isolator switch. | 1 | Nos |
| 24 | HT 11 kV 4 way feeder pillar. | 6 | Nos |
| 25 | HT 33 kV 4 way feeder pillar. | 2 | Nos |
| 26 | 11 kV HRC fuse 63A. | 3 | Nos |
| 27 | Dismantling the existing pole above 6 m height. | 35 | Nos |
| 28 | Dismantling the existing overhead line. | 2 | Km |
| 29 | Dismantling the existing lightening arrestor set. | 3 | Nos |
| 30 | Dismantling the existing DP. | 5 | Nos |
| 31 | XLPE insulated, galvanised steel formed wire armoured (strip) cable 33 kV(E), 3 x 300 sq. mm. aluminium conductor. | 100 | Mtr |
| 32 | XLPE insulated, galvanised steel formed wire armoured (strip) cable 11 kV ( E ), 3 x 300 sq. mm. aluminium conductor. | 600 | Mtr |
| 33 | XLPE insulated, galvanised steel formed wire armoured (strip) cable 11 kV (E), 3 x 185 sq. mm. aluminium conductor. | 50 | Mtr |
| 34 | XLPE insulated, galvanised steel formed wire armoured (strip) cable 11 kV (E), 3 x 95 sq. mm. aluminium conductor. | 50 | Mtr |
| 35 | Heat shrinkable straight through joint kit for 3 x 300sq.mm 33Kv (E) XLPE HT cable. | 2 | Nos |
| 36 | Heat shrinkable straight through joint kit for 11 kV (E) XLPE HT cable. | 2 | Nos |

| S. N | Item | Qty | Per |
|---|---|---|---|
| 37 | Heat shrinkable straight through joint kit for 11 kV (E) XLPE HT cable 3x120 to 185 sq. mm. | 1 | Nos |
| 38 | Heat shrinkable straight through joint kit for 11 kV (E) XLPE HT cable 3x up to 95 sq. mm. | 1 | Nos |
| 39 | Heat shrinkable outdoor termination kit for 33kV ( E ) XLPE HT cable 3x300 sq. mm. to 400 sq. mm. | 4 | Nos |
| 40 | Heat shrinkable outdoor termination kit for 11 kV ( E ) XLPE HT cable 3x300 sq. mm. | 10 | Nos |
| 41 | Heat shrinkable outdoor termination kit for 11 kV ( E ) XLPE HT cable 3x120 to 185 sq. mm. | 2 | Nos |
| 42 | Heat shrinkable outdoor termination kit for 11 kV (E) XLPE HT cable 3x 95 sq. mm. | 2 | Nos |
| 43 | FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 4 core 10 sq. mm. aluminium conductor. | 100 | Mtr |
| 44 | FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 4 core 16 sq. mm. aluminium conductor. | 100 | Mtr |
| 45 | FR XLPE insulated, galvanised steel formed wire armoured (strip) cable, 1100 V 3½ core 185 sq. mm. aluminium conductor. | 400 | Mtr |
| 46 | Epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 2.5 to 16 sq mm. | 5 | Nos |
| 47 | Epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 120 to 185 sq mm. | 5 | Nos |
| 48 | G.I. pipe 'A' class 75 mm dia. for enclosing XLPE armoured cable | 72 | Mtr |
| 49 | Half round reinforced cement concrete pipe of NP-2 class of 150mm diameter. | 600 | Mtr |
| 50 | Making trench in Hard murum/Tar road. | 100 | Mtr |
| 51 | 50 mm outside dia. double wall corrugated pipes (DWC). | 100 | Mtr |
| 52 | 90 mm outside dia. double wall corrugated pipes (DWC). | 400 | Mtr |
| 53 | Pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod. | 40 | Nos |
| 54 | GI carth wire of high purity. | 550 | Kg |
| 55 | Licencing work for line shifting Co-ordination with MSEDCL. | 2 | Job. |
| 56 | Providing and fixing mini feeder pillar with 415V, 315-320A FPMCCB as incomer and 3 outgoing circuits with HRC fuse base and cartridge of 100A aluminium bus bar erected in | 5 | Nos |

Deputy Engineer
Electrical Department

# DECORATIVE POLES

## VSTP-23

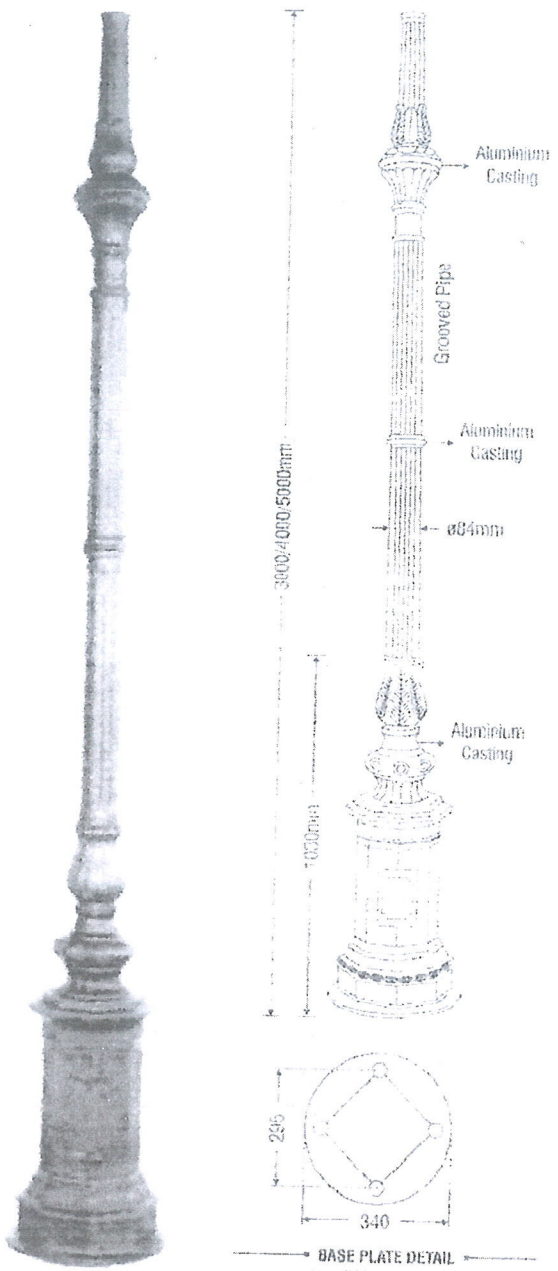



BASE PLATE DETAIL
Upto 5 Mtr. - 12mm, Above 6 Mtr. - 16mm Thk.

| Cat No. | Height (mm) | Price (₹) |
|---|---|---|
| VSTP DP-23-30 | 3000 | 24500/- |
| VSTP DP-23-40 | 4000 | 27400/- |
| VSTP DP-23-50 | 5000 | 31600/- |
| VSTP DP-23-60 | 6000 | 38740/- |
| VSTP DP-23-70 | 7000 | 43000/- |
| VSTP DP-23-80 | 8000 | 50800/- |

**VSTP - Decorative Poles** made out of G.I. pipe,
complete with Aluminium Cast & duly Polyurethane Painted.
**Accessories Included:** Electric Cable, Bakelite Sheet, MCB & Foundation Bolts.

## VSTP-24




BASE PLATE DETAIL
Upto 5 Mtr. - 12mm Thk.

| Cat No. | Height (mm) | Price (₹) |
|---|---|---|
| VSTP DP-24-30 | 3000 | 45980/- |
| VSTP DP-24-40 | 4000 | 51540/- |
| VSTP DP-24-50 | 5000 | 54650/- |

**VSTP - Decorative Poles** made out of G.I. pipe,
complete with Aluminium Cast & duly Polyurethane Painted.
**Accessories Included:** Electric Cable, Bakelite Sheet, MCB & Foundation Bolts.

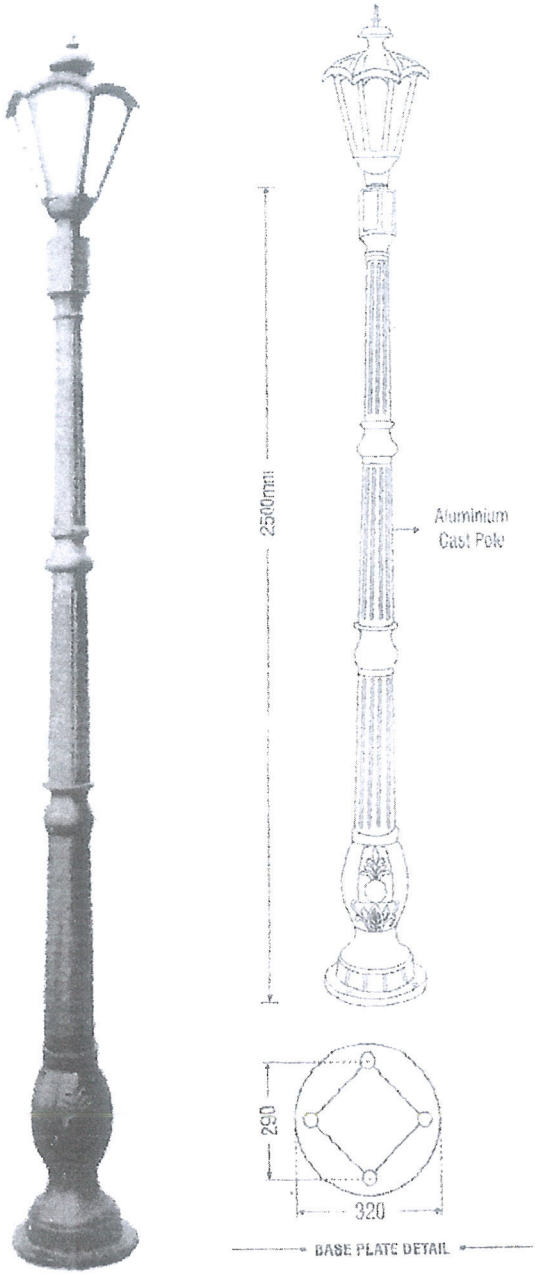


VIPIN S.T. POLES PVT. LTD. E-mail: info@vsphighmast.com

*All Dimensions are in MM

# DECORATIVE POLES

## VSTP-09A

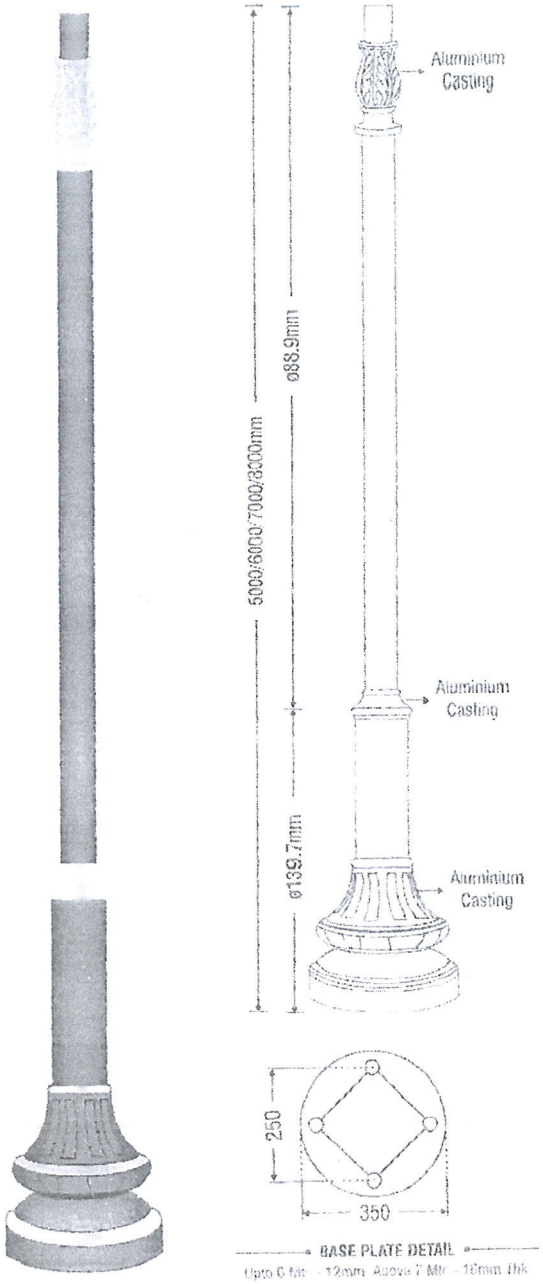



| Cat No. | Height (mm) | Price (₹) |
|---|---|---|
| VSTP DP-09A-25S | 2500 | 33870/- |
| VSTP DP-09A-25D | 2500 | 38075/- |
| VSTP DP-09A-25T | 2500 | 42800/- |

(Without LED Light)

**VSTP - Decorative Poles** made out of Aluminium Cast & duly Polyurethane Painted.
**Accessories Included:** Electric Cable, Bakelite Sheet, MCB & Foundation Bolts.

## VSTP-10A




| Cat No. | Height (mm) | Price (₹) |
|---|---|---|
| VSTP DP-10A-50 | 5000 | 50000/- |
| VSTP DP-10A-60 | 6000 | 54250/- |
| VSTP DP-10A-70 | 7000 | 55100/- |
| VSTP DP-10A-80 | 8000 | 59330/- |

**VSTP - Decorative Poles** made out of G.I. pipe, complete with Aluminium Cast & duly Polyurethane Painted.
**Accessories Included:** Electric Cable, Bakelite Sheet, MCB & Foundation Bolts.



*All Dimensions are in MM

# DECORATIVE BRACKETS




| Cat No. | Price (₹) |
|---|---|
| VSTP-B022-15751 | 18500/- |
| VSTP-B022-201201 | 18850/- |
| VSTP-B022-201501 | 19210/- |

VSTP-B022



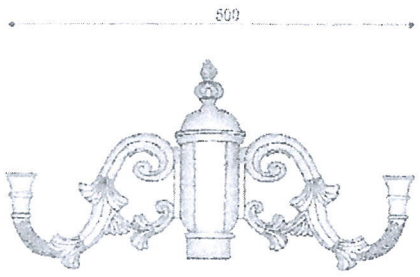

| Cat No. | Price (₹) |
|---|---|
| VSTP-B022-151502 | 31650/- |
| VSTP-B022-202402 | 32200/- |
| VSTP-B022-203002 | 33500/- |

VSTP-B022



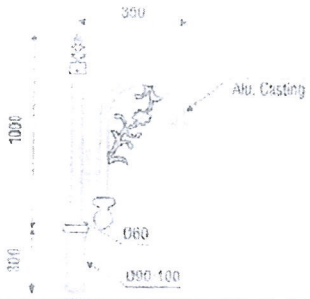

| Cat No. | Price (₹) |
|---|---|
| VSTP-B023-251 | 8540/- |

VSTP-B023




| Cat No. | Price (₹) |
|---|---|
| VSTP-B023-502 | 12500/- |

VSTP-B023



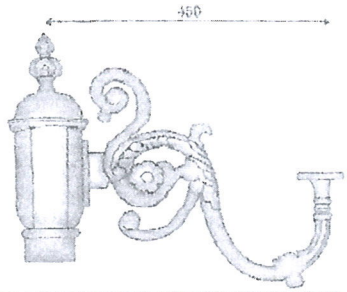

| Cat No. | Price (₹) |
|---|---|
| VSTP-B024-10351 | 7900/- |

VSTP-B024



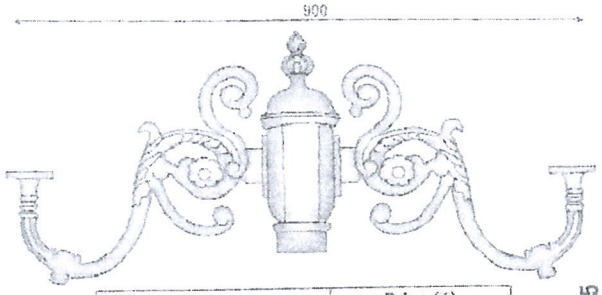

| Cat No. | Price (₹) |
|---|---|
| VSTP-B024-10702 | 11400/- |

VSTP-B024




| Cat No. | Price (₹) |
|---|---|
| VSTP-B025-451 | 9640/- |

VSTP-B025




| Cat No. | Price (₹) |
|---|---|
| VSTP-B025-902 | 14690/- |

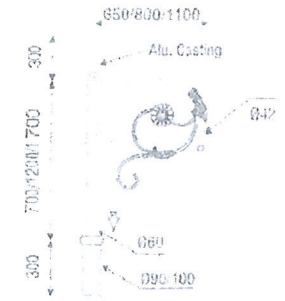
VSTP-B025



*All Dimensions are in MM

# DECORATIVE BRACKETS

VS P®



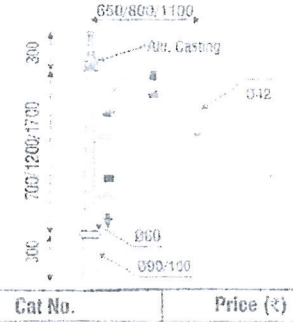

| Cat No. | Price (₹) |
|---|---|
| VSTP-B035-10651 | 12040/- |
| VSTP-B035-15801 | 13650/- |
| VSTP-B035-201101 | 14800/- |

VSTP-B035



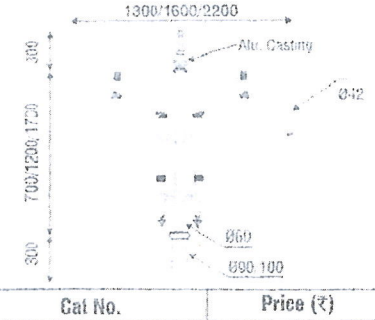

| Cat No. | Price (₹) |
|---|---|
| VSTP-B035-101302 | 19200/- |
| VSTP-B035-151602 | 20900/- |
| VSTP-B035-202202 | 22000/- |

VSTP-B035



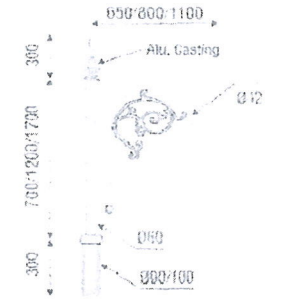

| Cat No. | Price (₹) |
|---|---|
| VSTP-B036-10651 | 11650/- |
| VSTP-B036-15801 | 13100/- |
| VSTP-B036-201101 | 14100/- |

VSTP-B036



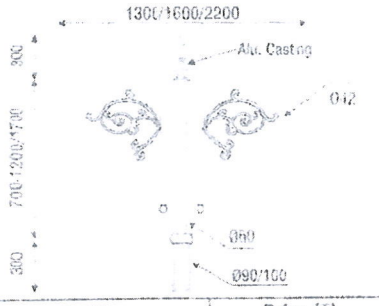

| Cat No. | Price (₹) |
|---|---|
| VSTP-B036-101302 | 18070/- |
| VSTP-B036-151602 | 19800/- |
| VSTP-B036-202202 | 21200/- |

VSTP-B036



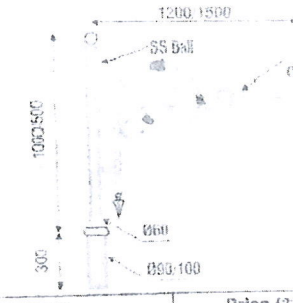

| Cat No. | Price (₹) |
|---|---|
| VSTP-B037-10651 | 15090/- |
| VSTP-B037-15801 | 16525/- |
| VSTP-B037-201101 | 17400/- |

VSTP-B037



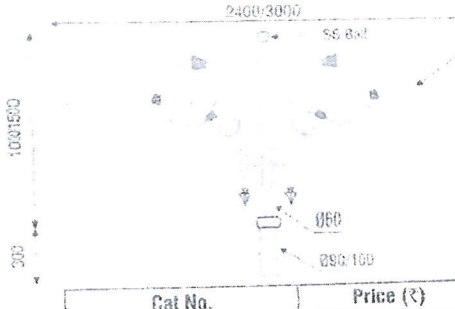

| Cat No. | Price (₹) |
|---|---|
| VSTP-B037-101302 | 20360/- |
| VSTP-B037-151602 | 21500/- |
| VSTP-B037-202202 | 23100/- |

VSTP-B037




| Cat No. | Price (₹) |
|---|---|
| VSTP-B038-101201 | 9875/- |
| VSTP-B038-151201 | 11400/- |
| VSTP-B038-151501 | 12900/- |

VSTP-B038




| Cat No. | Price (₹) |
|---|---|
| VSTP-B038-102402 | 15250/- |
| VSTP-B038-152402 | 17275/- |
| VSTP-B038-153002 | 18850/- |

VSTP-B038



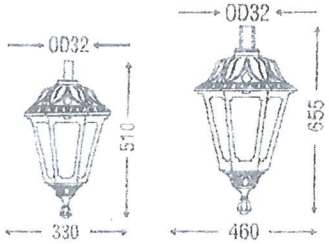
*All Dimensions are in MM

# DECORATIVE DROP DOWN LED LUMINAIRES

## VSTP DL - 09



| Cat No. | Wattage | | CCT | Price (₹) | |
|---|---|---|---|---|---|
| VSTP DL 09 (S) | 30 Watt | | 3000K - 6500K | 6720/- | |
| | 40 Watt | | | 6930/- | |
| | 50 Watt | | | 7455/- | |
| | Wattage | Price (₹) | | Wattage | Price (₹) |
| VSTP DL 09 (D) | 50 Watt | 12075/- | | 80 Watt | 12890/- |
| | 60 Watt | 12280/- | | 90 Watt | 13400/- |
| | 72 Watt | 12600/- | | 120 Watt | 14800/- |




**Features:**

- Aluminum Die Cast Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Internal surge protection upto 6 KVA
- Input Voltage: AC 100~270 volts / 50Hz
- Efficacy: > 110 Lumens/Watt
- IP65 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70

## VSTP DL - 10



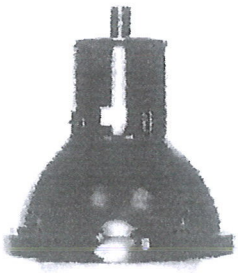
| Cat No. | Wattage | CCT | Price (₹) |
|---|---|---|---|
| VSTP DL 10 | B22-12 Watt | 3000K - 6500K | 6300/- |
| | 30 Watt | | 6685/- |
| | 40 Watt | | 6860/- |
| | 50 Watt | | 7035/- |
| | 60 Watt | | 7175/- |



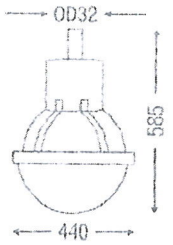

**Features:**

- Aluminum Die Cast Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Input Voltage: AC 100~270 volts / 50Hz
- Internal surge protection upto 6 KVA
- Efficacy: > 110 Lumens/Watt
- IP65 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70

## VSTP DL - 11



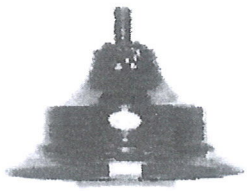
| Cat No. | Wattage | Price (₹) | CCT | Wattage | Price (₹) |
|---|---|---|---|---|---|
| VSTP DL 11 | 50 Watt | 14820/- | 3000K - 6500K | 90 Watt | 15800/- |
| | 60 Watt | 14875/- | | 100 Watt | 15900/- |
| | 72 Watt | 15100/- | | 120 Watt | 16685/- |
| | 80 Watt | 15250/- | | | |



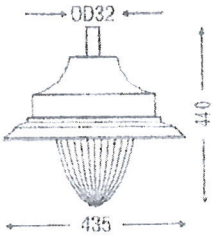

**Features:**

- Aluminum Spun Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Input Voltage: AC 100~270 volts / 50Hz
- Internal surge protection upto 6 KVA
- Efficacy: > 110 Lumens/Watt
- IP66 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70

## VSTP DL - 12



| Cat No. | Wattage | CCT | Price (₹) |
|---|---|---|---|
| VSTP DL 12 | 30 Watt | 3000K - 6500K | 6720- |
| | 40 Watt | | 6880/- |
| | 50 Watt | | 7100/- |
| | 60 Watt | | 7300/- |




**Features:**

- Aluminum Spun Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Input Voltage: AC 100~270 volts / 50Hz
- Internal surge protection upto 6 KVA
- Efficacy: > 110 Lumens/Watt
- IP66 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70



VIPIN S.T. POLES PVT. LTD. E-mail: info@vsphighmast.com

*All Dimensions are in MM **Dimension Tolerance +/- 5%

TURNING
Lighting The Way

Plot No.04, Damodar Nagar, Near Mark Mall, B/h Hotel Seven Haven,
Pathardi Phata, Nashik- 422 010. 8390139100
turningpointnsk@gmail.com www.turningpointnsk.com

GST NO.: 27AAQFT1145H1ZZ

TO
Nashik Municipal Corporation
Nashik.

Subject - QUOTATION for Decorative Stambh

| Sr.No. | Item Discription | Qty | Rate | Item Image |
|---|---|---|---|---|
| 1 | 9 mtr Decorative Stambh model No - SUN-STB-1, Make - Suncity . With foundation ,installation with Warm White light | 1 | 15,68,000 |   |
| 3 | 9 mtr Decorative Stambh model No - SUN-STB-2, Make - Suncity . With foundation ,installation with Warm White light | 1 | 15,95,000 |  |

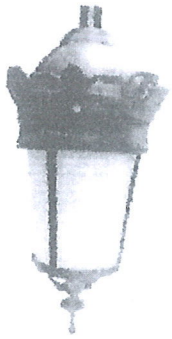
TERMS AND CONDITON

1 GST @ 18% EXTRA
2 TRANSPORTATION - INCLUDING
3 INSPECTION IN YOUR SCOPE
4 WARRANTY - 3 YEARS for LED FIXTURE

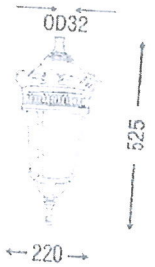
ASTRAL PIPES
KEI Wires & Cables
METROCAB
Bharat Bijlee
valmont
Crompton
TRANSRAIL

# DECORATIVE DROP DOWN LED LUMINAIRES

## VSTP DL - 01



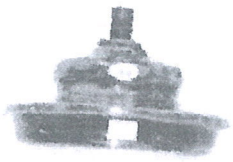
| Cat No. | Wattage | CCT | Price (₹) |
|---|---|---|---|
| VSTP DL 01 | B22-12 Watt | 3000K - 6500K | 5390/- |
| | 30 Watt | | 6440/- |
| | 40 Watt | | 6545/- |
| | 50 Watt | | 6650/- |
| | 60 Watt | | 6755/- |




**Features:**

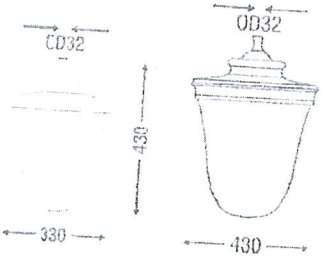
- Aluminum Die Cast Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Internal surge protection upto 6 KVA
- Input Voltage: AC 100--270 volts / 50Hz
- Efficacy: > 110 Lumens/Watt
- IP65 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70

## VSTP DL - 02



| Cat No. | Wattage | CCT | Price (₹) |
|---|---|---|---|
| VSTP DL 02 (S) | 30 Watt | 3000K - 6500K | 6240/- |
| | 40 Watt | | 6350/- |
| | 50 Watt | | 6460/- |

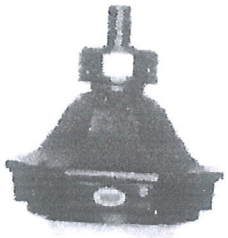
| Cat No. | Wattage | Price (₹) |
|---|---|---|
| VSTP DL02 (B) | 50 Watt | 10270/- |
| | 60 Watt | 10400/- |
| | 72 Watt | 11315/- |
| | 80 Watt | 10460/- |
| | 90 Watt | 12100/- |
| | 120 Watt | 14550/- |




**Features:**

- Aluminum Spun Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Input Voltage: AC 100--270 volts / 50Hz
- Internal surge protection upto 6 KVA
- Efficacy: > 110 Lumens/Watt
- IP66 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70

## VSTP DL - 03



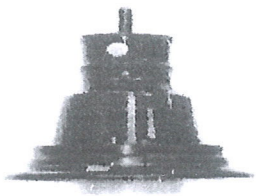
| Cat No. | Wattage | CCT | Price (₹) |
|---|---|---|---|
| VSTP DL 03 | 50 Watt | 3000K - 6500K | 10530/- |
| | 60 Watt | | 10620/- |
| | 72 Watt | | 11190/- |
| | 80 Watt | | 11340/- |
| | 90 Watt | | 11920/- |
| | 100 Watt | | 13200/- |
| | 120 Watt | | 14100/- |



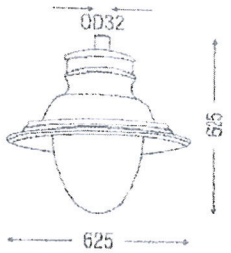

**Features:**

- Aluminum Die Cast Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Input Voltage: AC 100--270 volts / 50Hz
- Internal surge protection upto 6 KVA
- Efficacy: > 110 Lumens/Watt
- IP55 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70

## VSTP DL - 04



| Cat No. | Wattage | CCT | Price (₹) |
|---|---|---|---|
| VSTP DL 04 | 60 Watt | 3000K - 6500K | 9320/- |
| | 72 Watt | | 9700/- |
| | 80 Watt | | 10050/- |
| | 90 Watt | | 10625/- |
| | 100 Watt | | 10780/- |
| | 120 Watt | | 10940/- |




**Features:**

- Aluminum Spun Housing
- Poly Carbonate Diffuser for Uniform Light Distribution
- Waterproof Potted Driver with 80% efficiency
- Input Voltage: AC 100--270 volts / 50Hz
- Internal surge protection upto 6 KVA
- Efficacy: > 110 Lumens/Watt
- IP66 Ingress Protection
- Power Factor >0.90
- Color Rendering Index >70



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*All Dimensions are in MM **Dimension Tolerance: +/- 5%

महानगरपालिका सचिवालय

# नाशिक महानगरपालिका, नाशिक

## महानगरपालिका महासभा ठराव

सभा क्र. : ०६

विषय क्र. : ३२७ ठराव क्र. : ३२७ दिनांक : ०४ / ०९ /२०२५

संदर्भ-मा.आयुक्त तथा प्रशासक सो.यांचेकडील जा.क्र/बांधकाम /२१०/२०२५ दि.०४.०९.२०२५ चे पत्र.

महाराष्ट्र महानगरपालिका अधिनियमातील कलम ४५२ (अ) मधील तरतुदीनुसार मा.प्रशासक सो. यांना प्राप्त झालेल्या अधिकारानुसार असा ठराव करण्यात येत आहे की,

नाशिक-त्र्यंबकेश्वर येथे सन २०२७ मध्ये होणारा सिंहस्थ कुंभमेळा यासाठी मा.मुख्यमंत्री, महाराष्ट्र राज्य, मा.प्रधान सचिव, महाराष्ट्र राज्य, जिल्हास्तरीय सिंहस्थ कुंभमेळा समितीच्या वेळोवेळी बैठका होत आहेत. सदर बैठकांमध्ये ज्या कामांचा पुर्णत्वाचा कालावधी दिड-दोन वर्ष आहे, अशा कामांच्या निविदा लवकरात लवकर प्रकाशित करण्याच्या सुचना दिलेल्या आहेत. मा.मुख्यमंत्री महोदय यांनी दि.२६/२/२०२५ रोजीच्या बैठकीत शहरातील आवश्यक रस्त्यांची व पुलांची कामे त्वरीत सुरु करण्याचे निर्देश दिले आहेत व दि.११/२/२०२५ रोजी झालेल्या जिल्हास्तरीय सिंहस्थ कुंभमेळा कार्यकारी समितीच्या बैठकीमध्ये महत्वाच्या असलेल्या पुलांचे बांधकाम लवकरात लवकर सुरु करावे असे निर्देश दिले आहेत. त्यास अनुसरून पुढीलप्रमाणे रस्त्यांची व पुलांच्या कामांची यादी नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाकडे मंजुरीसाठी, निधी उपलब्धतेसाठी व प्रशासकीय मंजुरीसाठी सादर करावयाची आहे.

| अ.नं | कामाचे नाव | अंदाजपत्रकीय (रक्कम रु कोटी) |
|---|---|---|
| | **रस्ते बांधणे** | |
| १) | टाकळी गाव ते नारायण बापू चौक छत्रपती शिवाजी महाराज चौक (जेलरोड) | १७.१४ |
| | टाकळी गाव ते काठे चौक ते एसटीपी रोड (१९० मीटर) | |
| २) | एसटीपी रोड ते नारायण बापु चौक (८८० मीटर) | २४.२७ |
| | नारायण बापु चौक ते जेलरोड (८०० मीटर) | |
| | उपनगर नाका ते कॅनल रोड गोसावी मळा, मकरंद कॉलनी - टाकळी STP | |
| ३) | उपनगर नाका ते कॅनल रोड गोसावी मळा, (८५० मीटर) | ५२.६४ |
| | गोसावी मळा ते सायखेडा रोड (४५० मीटर) | |
| | सायखेडा रोड ते मकरंद कॉलनी (१९५ मीटर) | |
| | मकरंद कॉलनी ते जुना सायखेडा रोड (४३० मीटर) | |
| | जुना सायखेडा रोड ते गोदावरी नदी (९०० मीटर) | |
| | पिंपळगाव खांब - वडनेर गाव विहितगाव (लॅम रोड) | |
| | पिंपळगाव खांब फाटा ते वडनेर गेट | |
| | वडनेर गेट ते विर सावरकर चौक | |
| | विर सावरकर चौक बागुल नगर | |
| | बॉक्स कल्व्हर्ट | |
| ४) | सौभाग्य नगर ते विटको चौक जेलरोड-गोदावरी नदी (संत जनार्दन स्वामो पुल) पर्यंत | ७१.७७ |
| | सौभाग्य नगर ते वाल देवी नदी | |
| | वाल देवी ते गांधीनगर पुतळा | |
| | गांधीनगर पुतळा ते बिटको पॉईंट | |
| | बिटको पॉईंट ते जनार्दनस्वाती पुल | |
| ५) | उपनगर नाका जय भवानी रोड रोकडोबावाडी -१२ विहितगाव | २४.७१ |
| | उपनगर नाका ते आर्टीलरी सेंटर रोड | |
| | आर्टीलरी सेंटर रोड रोकडोबावाडी पुल | |
| | रोकडोबावाडी पुल ते मथुरा चौक (नवीन रस्ता) | |

| | | |
|---|---|---|
| ६) | दत्त मंदिर सिग्नल पुणे रोड ते बिटको चौक छत्रपती ६. २३ शिवाजी महाराज पुतळा ते डॉ. बाबासाहेब आंबेडकर चर्चाक (सुभाषरोड) ते टाऊन हॉल सत्कार पॉईंट | ३४.९९ |
| | दत्त मंदिर सिग्नल पुणे रोड ते बिटको चौक छत्रपती शिवाजी महाराजचौक | |
| | छत्रपती शिवाजी महाराज चौक ते डॉ बाबासाहेब आंबेडकर चौक | |
| | डॉ बाबासाहेब आंबेडकर चौकं ते सत्कार पॉईंट (कॉक्रिट रस्ता) | |
| | उड्डाण पुल वरील डांबरीकरण | |
| | उड्डाण पुल खालील कॉक्रिटीकरण | |
| ७) | नाशिक पूर्व विभागातील द्वारका सर्कल- सारडा सर्कल- गडकरी चौक सिग्नल पर्यंत रस्ता विकसित करणे | १७.०८ |
| ८) | नाशिक पूर्व विभागातील सारडा सर्कल- गंजमाळ सिग्नल पर्यंत रस्ता विकसित करणे | १०.४९ |
| ९) | नाशिक पूर्व भागातील संगम पूल- टाकळी गाव- विजय ममता चौक- अशोका मार्ग- भारत नगर -छान हॉटेल NH३ पर्यंत रस्ता विकत करणे | ४९.२८ |
| १०) | नाशिक पूर्व भागातील लक्ष्मीनारायण पूल -जय शंकर चौक- ड्रीम सिटी चौक- पर्यंत रस्ता विकसित करणे | २५.५१ |
| ११) | नाशिक पूर्व विभागातील टाकळी फाटा- NH३ -टाकळी गाव -गांधीनगर उपनगर यांनी NH-५० पर्यंत रस्ता विकसित करणे | १८.८५ |
| १२) | नाशिक पूर्वी भागातील वडाळा नाका-NH-३- नासर्डी पूल -वडाळा रोड - साईनाथ नगर सिग्नल -जगन्नाथ चौक पर्यंत रस्ता विकसित करणे | ४१.६३ |
| १३) | नाशिक पूर्व विभागातील NH३- ट्रॅक्टर हाऊस -कर्मा हाइट्स - (तिग्रानिया रोड) पर्यंत रस्ता विकसित करणे | ९.५४ |
| १४) | नाशिक पूर्व विभागातील लेखा नगर NH३ -कलानगर चौक -वडाळागाव रविशंकर मार्ग- विजय ममता चौक पर्यंत रस्ता विकसित करणे | ३८.५० |
| १५) | केटीएचएम पूल ते जुना गंगापूर नाका ते शरणपूर पोलीस चौकी मायको सर्कल ते चांडक सर्कल ते महामार्ग बस स्टॅन्ड रस्ता सुधारणे | ४८.०८ |
| | जुना गंगापूर नाका ते शरणपूर पोलीस चौकी (१५०.to १५९०) | |
| | मायको सर्कल ते महामार्ग बस स्टॅन्ड (१८१० to ३५००) | |
| | मिलिंद नगर कॅनल रोड ते दक्षिण मुखी हनुमान मंदिर (० to ५५०) | |
| १६) | गोविंद नगर पूल (नंदिनी नदी) ते एबीबी सर्कल जेहान सर्कल ते चांदशी पूल पर्यंतचा मध्य रिंग रोड सुधारणे | ५९.५९ |
| | गोविंद नगर नंदिनी नदी ते संभाजी चौक (० to ५०० ) | |
| | सीसीएम सर्कल ते एबीबी सर्कल (० to १११०) | |
| | एबीबी सर्कल ते जेहान सर्कल (१११० to ३१५०) | |
| | जेहान सर्कल ते नेरलेकर सर्कल ( ३१५० to ३४२०) | |
| | नरसिंह नगर ते अयोध्या चौक (३७५० to ३९६०) | |
| | अयोध्या चौक ते चांदशी पूल (३९६० to ४२००) | |
| १७) | अशोक स्तंभ ते जेहान सर्कल (गंगापूर रोड) रस्ता सुधारणे | ३७.८१ |
| | अशोक स्तंभ ते गोळे कॉलनी (३० to २१०) | |
| | गोळे कॉलनी ते पोलीस कमिशनर ऑफिस (२१० to ४२०) | |
| | पोलीस कमिशनर ऑफिस ते जुना गंगापूर नाका (४२० to १४४०) | |
| | जुना गंगापूर नाका ते केबीटी सर्कल (१४४० to २२५०) | |
| | के बी टी सर्कल ते जेहान सर्कल (२२५० to ३२२०) | |

महानगरपालिका सचिवालय

# नाशिक महानगरपालिका, नाशिक

## महानगरपालिका महासभा ठराव

सभा क्र. : ०६

विषय क्र. : ३२१ ठराव क्र. : ३२१ दिनांक : ०४/०९/२०२५

| | | |
|---|---|---|
| १८) | खडकाळी सिग्नल ते त्र्यंबक नाका ते आयटीआय सिग्नल (त्रंबक रोड) पर्यंतचा रस्ता सुधारणे | ५१.०५ |
| | खडकाळी सिग्नल ते त्र्यंबक नाका (० to ५७० White Topping ) | |
| | त्रंबक नाका ते मायको सर्कल (० to ९००) | |
| | मायको सर्कल ते पंचवटी इलाईट (९९० to १९२०) | |
| | पंचवटी लाईट ते एबीबी सार्कल (१९२० to २८८०) | |
| | एबीबी सर्कल ते आयटीआय सर्कल(२८८० to ३३००) | |
| १९) | फॉरेस्ट नर्सरी पूल ते के बी टी सर्कल ते पी टी ए कुलकर्णी चौक ते डिटेक्टिव्ह ट्रेनिंग सेंटर कॅनल रोड | २७.७८ |
| | फॉरेस्ट नर्सरी पूल ते दत्त मंदिर (० to ३००) | |
| | दत्त मंदिर चौक ते स्वर्गीय वसंत पवार चौक (३०० to ५१०) | |
| | स्वर्गीय वसंत पवार चौक ते वाघ गुरुजी शाळा (५१० to ९२०) | |
| | वाघ गुरुजी शाळा ते पी टी ए कुलकर्णी चौक (९२० to १८००) | |
| | पी टी ए कुलकर्णी चौक ते सिद्धार्थनगर (१८०० to २४३०) | |
| २०) | प्रमोद महाजन गार्डन ते गंगापूर रोड ते होरायझन स्कूल ते दत्त चौक ते निर्मला कॉन्व्हेंट स्कूल चौक ते चैतन्य नगर ते आसाराम बापू आश्रम (गोदावरी नदीच्या सलग्न रस्ता) | ३१.७७ |
| | चोपडा लॉन्स ते होरायझन स्कूल (३०० to १४४०) | |
| | दत्त चौक ते निर्मला कॉन्व्हेंट (० to ३९०) | |
| | निर्मला कॉन्व्हेंट ते चैतन्य नगर (३९० to ६९०) | |
| | चैतन्य नगर ते चांदशी पूल (५७० to १०५०) | |
| | चांदशी पूल ते आसाराम बापू आश्रम (१०५० to १२६०) | |
| २१) | गडकरी चौक ते चांडक चौक ते आनंद कान्हेरे मैदान रस्ता सुधारणा करणे. | १०.७१ |
| | गडकरी चौक ते चांडक सर्कल (१५०० to ३१६०) | |
| | चांडक सर्कल ते वीर सावरकर तरण तलाव(० to २६०) | |
| २२) | मुंबई नाका ते गडकरी सिग्नल ते त्रंबक नाकापर्यंत रस्ता सुधारणा करणे | १४.४३ |
| | मुंबई नाका ते महामार्ग बस स्टॅन्ड (० to २१०) | |
| | महामार्ग बस स्टॅन्ड ते गडकरी चौक गडकरी चौक (२१० to ७२०) | |
| | गडकरी चौक ते त्र्यंबक नाका (७२० to ११४०) | |
| २३) | नाशिक - नविन नाशिक विभागातील बाह्य वळण रास्ता पाथर्डी फाटा तेपाथर्डी - पिंपळगाव खांब शिवे पावेतो विकसित करणे | १७.४१ |
| २४) | नाशिक - नवीन नाशिक विभागातील त्रिमूर्ती चौक ते आंबडगाव लिंक रास्ता पावेतो विकसित करणे | १५.३२ |
| २५) | आतील वळण रस्ता सिटी सेंटर ते त्रिमूर्ती चौक ते प्रणव स्टॅम्पिंग कंपनी पावेतो कामतवाडा रास्ता विकसित करणे. | १७.४१ |
| २६) | नाशिक - नवीन नाशिक विभागातील स्टेट बँक चौक ते गणेश चौक ते आंबडगाव लिंक रस्ता (सिंहस्थ पार्किंग छ. संभाजी स्टेडियम) रस्ता विकसित करणे | १७.४१ |
| २७) | नाशिक - नवीन नाशिक विभागातील आतील वळण रस्ता सिटी सेंटर मॉल ते इंदिरा नगर अंडर पास रस्ता विकसित करणे. | १३.१० |
| २८) | नाशिक - नवीन नाशिक विभागातील बाह्य वळण रस्ता पाथर्डी गाव ते जगन्नाथ चौक रस्ता विकसित करणे. | १६.३३ |

महानगरपालिका सचिवालय

# नाशिक महानगरपालिका, नाशिक

## महानगरपालिका महासभा ठराव

सभा क्र. : ०६

विषय क्र. : ३२१ ठराव क्र. : ३२१ दिनांक : ०४/ ०९ /२०२५

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| २९) | नाशिक - नवीन नाशिक विभागातील अंबडगाव रास्ता एक्सलो चौक ( टेक्समो फोर्स सोलुशन कंपनी) पासून अंबडगाव ते पाथर्डी फाटा रस्ता विकसित करणे. | १७.४१ |
| | एक्सलो ते अंबडगाव रस्ता | |
| | एक्सलो चौक ( टेक्समो फोर्स सोलुशन कंपनी) ते अंबडगाव ते पाथर्डी फाटा | |
| ३०) | नाशिक - नवीन नाशिक विभागातील बाह्य वळण रास्ता चौक ते एक्सलो चौक पावेतो रस्ता विकसित करणे. | ७१.९९ |
| ३१) | गंगापूर रोड - जेहान सर्कल ते गंगापूर गाव मनपा हद्द. | ४९.३५ |
| | जेहान सर्कल ते एबीएच गृह प्रकल्प (३२१० to ५९१०) | |
| | एबीएच गृह प्रकल्प ते सोमेश्वर मंदिर टर्न(५९१० to ६७२०) | |
| | सोमेश्वर मंदिर टर्न ते बरदान फाटा (६७२० to ८१९०) | |
| ३२) | त्रिंबक रोड आयटीआय सिग्नल ते पिंपळगाव बहुला मनपा हद्द | ४९.२९ |
| | आयटीआय सिग्नल ते सुला चौक (३३०० to ७०५०) | |
| | सुला चौक ते पिंपळगाव बहुला मनपा हद्द (७०५० to ८०७०) | |
| ३३) | गंगापूर रोड बारदान फाटा ते सुला चौक | ५६.८६ |
| | बरदान फाटा ते बबन लॉन्स (० to १४७०) | |
| | बबन लॉन्स ते कार्बन नाका (१४७० to २७००) | |
| | कार्बन नाका ते सुला चौक (२७०० to ५०१०) | |
| ३४) | त्रिंबक रोड पपाया नर्सरी सिग्नल ते XLO जंक्शन. (० to २७९०) | ७७.३३ |
| ३५) | आसाराम बापू आश्रम ते नवश्या गणपती ते वृंदावन लॉन्स | ५१.२५ |
| | बापू आश्रम ब्रिज ते गंगाजल नर्सरी (१२६० to १८३०) | |
| | गंगाजल नर्सरी ते शिव नगर (१८३० to २३४०) | |
| | शिव नगर ते बेंडकुळे मळा (२३४० to २७९०) | |
| | बेंडकुळे मळा ते वृंदावन लॉन्स (२७९० to ३१३५) | |
| ३६) | नाशिक पंचवटी विभागातील कपिला संगम ते लक्ष्मीनारायण मंदिर ते रा.म. क्रमांक ३ ते पंचमुखी हनुमान मंदिर ते काट्यामारुती चौक ते गणेशवाडी देवी मंदिर ते गाडगेमहाराज पूल पावेतोचा रस्ता विकसित करणे | २२.६४ |
| | कपिला संगम ते लक्ष्मीनारायण मंदिर | |
| | लक्ष्मीनारायण मंदिर ते रा.म. क्रमांक ३ | |
| | रा.म. क्रमांक ३ ते पंचमुखी हनुमान मंदिर | |
| | पंचमुखी हनुमान मंदिर ते काट्यामारुती चौक | |
| | गणेशवाडी देवी मंदिर ते गाडगेमहाराज पूल | |
| | गणेशवाडी देवी मंदिर ते टाळकुटे पूल | |
| ३७) | नाशिक पंचवटी विभागातील रामकुंड ते सार्वजनिक वाचनालय ते पंचवटी कारंजा ते निमाणी चौक ते काट्यामारुती चौक ते रा.म. क्रमांक ३ पावेतोचा रस्ता विकसित करणे | १५.०७ |
| | रामकुंड ते सार्वजनिक वाचनालय | |
| | सार्वजनिक वाचनालय ते पंचवटी कारंजा | |
| | निमाणी चौक | |
| | पुरिया पार्क ते आर पी विद्यालय | |
| | निमाणी बस स्टॅन्ड | |
| | निमाणी ते काट्यामारुती चौक ते रा.म. क्रमांक ३ | |
| | काट्यामारुती चौक | |

# नाशिक महानगरपालिका, नाशिक

## महानगरपालिका महासभा ठराव

सभा क्र. : ०६

विषय क्र. : ३२१ ठराव क्र. : ३२१ दिनांक : ०४/०९/२०२५

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| ३८) | नाशिक पंचवटी विभागातील लक्ष्मीनारायण मंदिर ते पंचवटी अमरधाम ते गाडगेमहाराज पूल पावेतोचा रस्ता विकसित करणे | १०.६६ |
| ३९) | नाशिक पंचवटी विभागातील कपिला संगम ते जयशंकर फेस्टीवल लॉन्स ते नांदूर-दसक शिव रोड पावेतोचा रस्ता विकसित करणे | ११.३६ |
| | नाशिक पंचवटी विभागातील कपिला संगम ते जयशंकर फेस्टीवल लॉन्स | |
| | जयशंकर फेस्टीवल लॉन्स ते नांदूर-दसक शिव रोड | |
| ४०) | नाशिक पंचवटी विभागातील कर्मा गॅलॅक्सि ते तपोवन एसटीपी ते सर्वे क्रमांक ३५७ ते नांदुरगाव पावेतोचा रस्ता विकसित करणे | २०.२६ |
| | कर्मा गॅलॅक्सि ते तपोवन एसटीपी | |
| | तपोवन एसटीपी ते सर्वे क्रमांक ३५७ | |
| | सर्वे क्रमांक ३५७ ते नांदुरगाव | |
| ४१) | नाशिक पंचवटी विभागातील तपोवन बस डेपो ते पिंपळेश्वर मारुती मंदिर, चव्हाण मळा पावेतोचा रस्ता विकसित करणे | ८.०९ |
| ४२) | नाशिक पंचवटी विभागातील आठवण मंगल कार्यालय ते चव्हाण मळा, स्वामी नारायण शाळा रा.म. क्रमांक ३ पावेतोचा रस्ता विकसित करणे | ४.५१ |
| ४३) | नाशिक पंचवटी विभागातील काट्यामारुती चौक ते हत्ती पूल ते काळाराम मंदिर पावेतोचा रस्ता विकसित करणे | ३.५० |
| ४४) | नाशिक पंचवटी विभागातील जनार्दन स्वामी मठ ते लक्ष्मीनारायण पूल पावेतोचा रस्ता विकसित करणे | ११.६० |
| ४५) | नाशिक पंचवटी विभागातील शिंदे माळा ते मार्केट सिग्नल ते गुंजाळ बाबा चौक तारवाला चौक ते अमृतधाम चौक ते मिर्ची हॉटेल चौक ते संगम पूल पावेतोचा रस्ता विकसित करणे | ८३.२६ |
| | शिंदे माळा ते मार्केट सिग्नल ते तारवाला चौक ते गुंजाळ बाबा चौक | |
| | गुंजाळ बाबा चौक ते अमृतधाम चौक | |
| | अमृतधाम चौक ते मिर्ची हॉटेल चौक | |
| | मिर्ची हॉटेल चौक ते संगम पूल | |
| ४६) | नाशिक पंचवटी विभागातील घाडगे मळा ते मखमलाबाद रोड ते आरटीओ कार्यालय, पेठ रोड ते राजस्वीट चौक, दिंडोरी रोड ते रासबिहारी शाळा रा.म. क्रमांक ३ ते निलगिरीबाग चौक ते टाकळी एसटीपी पूल पावेतोचा रस्ता विकसित करणे | ११३.८२ |
| | घाडगे मळा ते मखमलाबाद रोड ते आरटीओ कार्यालय, पेठ रोड | |
| | आरटीओ कार्यालय, पेठ रोड ते राजस्वीट चौक दिंडोरी रोड | |
| | राजस्वीट चौक, दिंडोरी रोड ते रास बिहारी शाळा रा.म. क्रमांक ३ | |
| | रासबिहारी शाळा रा.म. क्रमांक ३ ते निलगिरीबाग चौक | |
| | निलगिरीबाग चौक ते टाकळी एसटीपी पूल | |
| ४७) | नाशिक पंचवटी विभागातील चांदशी पूल ते गांधारवाडी ते डावा कॅनॉल लगत ते मखमलाबाद रोड ते शिंदे नगर पावेतोचा रस्ता विकसित करणे | ६४.२३ |
| | चांदशी पूल ते गांधारवाडी ते डावा कॅनॉल लगत | |
| | कॅनॉल लगत ते मखमलाबाद रोड ते शिंदे नगर | |
| ४८) | नाशिक पंचवटी विभागातील निमाणी चौक ते मनपा हद्द, दिंडोरी रोड पावेतोचा दिंडोरी रस्ता विकसित करणे | ५९.५७ |
| | निमाणी चौक ते म्हसरूळ गाव | |
| | म्हसरूळ गाव ते आळंदी कालवा | |
| | आळंदी कालवा ते मनपा हद्द | |

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| ४९) | नाशिक पंचवटी विभागातील पेठ रोड कालवा ते तवली फाटा ते आळंदी कालवा पावेतोचा पेठ रस्ता विकसित करणे | ७६.४९ |
| | पेठ रोड कालवा ते मेहेरधाम | |
| | मेहेरधाम ते राऊ चौक ते मेघराज बेकरी | |
| | मेघराज बेकरी ते आळंदी कालवा | |
| ५०) | नाशिक पंचवटी विभागातील नांदूर पूल ते नांदूर नाका ते जत्रा हॉटेल ते म्हसरूळ आडगाव लिंक रोड पावेतोचा रस्ता विकसित करणे | ९३.६१ |
| | नांदूर पूल ते नांदूर नाका | |
| | नांदूर नाका ते जत्रा हॉटेल | |
| | जत्रा हॉटेल ते म्हसरूळ आडगाव लिंक रोड | |
| ५१) | नाशिक पंचवटी विभागातील आडगाव राष्ट्रीय महामार्ग ३ ते म्हसरुळगाव पावेतोचा रस्ता विकसित करणे | ४०.०६ |
| ५२) | नाशिक पंचवटी विभागातील शासकीय रोपवाटिका पूल ते मखमलाबाद गाव (उत्तम बादशाहा मार्ग) पावेतोचा रस्ता विकसित करणे | २८.९५ |
| ५३) | नाशिक पंचवटी विभागातील मिनाताई ठाकरे क्रीडासंकुल ते कमल नगर चौक ते भोरे नाट्यगृह पावेतोचा रस्ता अस्तरीकरण करणे | ७.३७ |
| | मिनाताई ठाकरे क्रीडासंकुल ते कमल नगर चौक | |
| | कमल नगर चौक ते भोरे नाट्यगृह | |
| ५४ | नाशिक पंचवटी विभागातील आडगाव नाका, बाप्पा सीताराम मार्ग ते हिरावाडी पावेतोचा रस्ता विकसित करणे | १०.२१ |
| ५५) | नाशिक पंचवटी विभागातील चोपडा लॉन्स पूल ते ड्रीम कॅसल सिग्नल ते मखमलाबाद गाव पावेतोचा रस्ता विकसित करणे | ६३.७० |
| | चोपडा लॉन्स पूल ते ड्रीम कॅसल सिग्नल | |
| | ड्रीम कॅसल सिग्नल ते डावा तट कालवा | |
| | डावा तट कालवा ते मखमलाबाद गाव | |
| ५६) | नाशिक पंचवटी विभागातील म्हसरूळगाव ते मनपा हद्द, वरवंडी रस्ता (विमानतळाकडे जाणारा रस्ता) विकसित करणे | ८.६९ |
| ५७) | नाशिक पंचवटी विभागातील तपोवन एसटीपी ते संगम पूल ते टाकळी एसटीपी पुल ते नांदूर दसक घाट पावेतोचा नदी लगतचा रस्ता विकसित करणे. | ६४.५१ |
| ५८) | नाशिक पंचवटी विभागातील पार्कसाईड ते जत्रा रोड रस्ता विकसित करणे. | १८.८४ |
| ५९) | नाशिक पंचवटी विभागातील आनंदवली पूल ते आसारामबापू पुलापर्यंत गोदावरी नदीकाठी डाव्या बाजूच्या रस्त्याला गॅबियन भिंत बांधून रस्ता विकसित करणे | ३९.६४ |

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| | पुलांची कामे | |
| १) | मिलिंद नगर येथील वाहतुक कोंडी सोडविणे कामी नंदिनी नदीवर २४ मीटर डी. पी.रस्त्यावर पुल बांधणे. | १९.२३ |
| २) | लक्ष्मीनारायण मंदिरालगत समांतर पुल बांधणे. | २०.९६ |
| ३) | रामवाडी ते घारपुरे घाट पर्यंत वाहतुक कोंडी सोडविणे कामी गोदावरी नदीवर पुल बांधणे. | २४.९१ |
| ४) | संत गाडगेमहाराज पुलाचे रुंदीकरण, मजबुतीकरण व सौदर्यीकरण करणे. | ११.३५ |

महानगरपालिका सचिवालय

# नाशिक महानगरपालिका, नाशिक

## महानगरपालिका महासभा ठराव

सभा क्र. : ०६

विषय क्र. : ३२१ ठराव क्र. : ३२१ दिनांक : ०४/०९/२०२५

| | | |
|---|---|---|
| ५) | संत गाडगेमहाराज पुलाचे लगत डाऊन रॅम्पचे बांधकाम करणे. | ५.८५ |
| ६) | गणेशवाडी भाजी बाजार जवळील वाघाडी नदी लगत संरक्षक भिंत (Curtain wall) बांधणे | ७.१९ |
| ७) | वडनेर दुमाला येथे वालदेवी नदीवर अस्तित्वातील पुला लगत नव्याने पुल बांधणे. | १६.८२ |
| | एकूण | १०६.३१ |

सबब, वर नमुद सर्व कामे नाशिक शहरातील कुंभमेळा नियोजनाच्या दृष्टीने आवश्यक असून सदर कामांना मंजुरी मिळणे, निधी मिळणे व प्रशासकीय मान्यता मिळणेसाठी पाठविण्यास, त्याचप्रमाणे यापैकी नाशिक- त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाकडून ज्या कामांना ज्यावेळी मंजुरी मिळेल त्यांची निविदा प्रक्रिया राबविणेस व शिल्लक कामांसाठी पाठपुरावा करणेच्या धोरणात्मक निर्णयास प्रशासकीय मंजुरी देणेत येत आहे.

(मदन हरिश्चंद्र)
प्र.नगरसचिव
नाशिक महानगरपालिका,नाशिक

(मनिषा खत्री)
प्रशासक
नाशिक महानगरपालिका,नाशिक

महाराष्ट्र शासन
नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण
मध्यवर्ती प्रशासकिय इमारत, नाशिक रोड, नाशिक - 422101
दुरध्वनी क्र. 0253-2461909 Email- kumbhmela.2027@mah.gov.in

दिनांक: स्वाक्षरीखाली नमूद आहे.

**प्रशासकीय मान्यता आदेश:-**

विषय:- नाशिक त्र्यंबकेश्वर सिंहस्थ कुंभमेळ्यासाठी रस्त्यांच्या कामांना प्रशासकीय मान्यता देणे बाबत.

संदर्भ:- 1. नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाची बैठक दिनांक 28/07/2025 ठराव क्रमांक 04.
2. या कार्यालयाचे पत्र दिनांक 29/07/2025.
3. शासनाचे पत्र क्रमांक कुंभमे-2025/प्र.क्र.235/ नवि-25 दिनांक 29/08/2025.
4. आयुक्त, नाशिक महानगरपालिका, नाशिक यांचे पत्र क्रमांक जा.क.सावबंवि/डेस्क-8/994/2025 दिनांक 10/07/2025.
5. आयुक्त, नाशिक महानगरपालिका, नाशिक यांचे पत्र क्रमांक जा.क.सावबंवि/डेस्क-8/994/2025 दिनांक 09/09/2025.

वाचा - नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण अधिनियम, 2025 चे कलम 7 (1) (ग).

कार्यान्वयीन यंत्रणा नाशिक महानगरपालिका यांनी विनंती केल्यानुसार नाशिक त्र्यंबकेश्वर सिंहस्थ कुंभमेळा 2027-28 च्या आयोजनासाठीच्या दृष्टीने आवश्यक असणाऱ्या खालील कामांना नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण अधिनियम 2025 चे कलम 7 (1) (ग) नुसार नमूद केलेल्या अटी शर्तीच्या अधीन राहून खालील प्रमाणे प्रशासकीय मान्यता देण्यात येत आहे.

| अ. क्र. | कामांचे नाव | प्रशासकीय मान्यता रक्कम (रुपये कोटी) | काम पूर्ण करण्याची मुदत | कार्यान्वयीन यंत्रणा |
|---|---|---|---|---|
| 1 | गंगापूर रोड बारदान फाटा ते सुला चौक (बाह्य वाहनतळ ते अंतर्गत वाहनतळाना जोडणारा/ त्र्यंबकरोड जोडरस्ता) | 56.86 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 2 | त्र्यंबक रोड पपया नर्सरी सिग्नल ते एक्स.लो. जंक्शन (बाह्य वाहनतळ/ रेल्वे स्थानक- त्र्यंबकरोड- मुंबई महामार्ग जोडरस्ता/ वाहतूक नियोजन) | 77.33 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 3 | एक्सलो चौक ते गरवारे चौकपावेतो (बाह्य वाहनतळ / रेल्वे स्थानक- त्र्यंबकरोड- मुंबई महामार्ग जोडरस्ता / वाहतूक नियोजन) | 71.99 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |

| अ. क्र. | कामांचे नाव | प्रशासकीय मान्यता रक्कम (रुपये कोटी) | काम पूर्ण करण्याची मुदत | कार्यान्वयीन यंत्रणा |
|---|---|---|---|---|
| 4 | वडनेर गेट ते विहितगाव (लॅम रोड) (रेल्वे स्थानक- त्र्यंबकरोड जोडरस्ता/ वाहतूक नियोजन) | 32.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 5 | विहितगाव (लॅम रोड) ते बिटको चौक ते जेलरोड-गोदावरी नदी पर्यंत (घाटाकडे जाणारा रस्ता) | 65.50 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 7 | नांदूर पूल ते जत्रा हॉटेल (घाटाकडे जाणारा रस्ता) | 71.20 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 8 | लेखा नगर NH3 -कलानगर चौक -वडाळागाव रविशंकर मार्ग- विजय ममता चौक (घाटाकडे जाणारा रस्ता/ वाहतुक नियोजन) | 38.50 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 9 | संगम पूल ते मिर्ची हॉटेल चौकते अमृतधाम चौक ते गुंजाळ बाबा चौक तारवाला चौक ते मार्केट सिग्नल ते मखमलाबाद रोड (घाटाकडे जाणारा रस्ता/ साधुग्राम पोहोच रस्ता) | 83.26 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 10 | के.टी.एच.एम. पूल ते जुना गंगापूर नाका ते शरणपूर पोलीस चौकी, बॉश (मायको) सर्कल ते चांडक सर्कल ते महामार्ग बस स्टॅन्ड (घाटाकडे जाणारा रस्ता / वाहनतळ जोडणारा) | 48.08 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 11 | विजय ममता चौक-टाकळी गाव -संगम पूल (घाटाकडे जाणारा रस्ता/ साधुग्राम पोहोच रस्ता) | 22.20 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 12 | अशोक स्तंभ ते जेहान सर्कल (गंगापूर रोड) रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/ वाहनतळ जोडणारा) | 37.81 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 13 | गंगापूर रोड - जेहान सर्कल ते गंगापूर गाव मनपा हद्द पावेतो रस्ता विकसित करणे. (वाहनतळ जोडणारा रस्ता) | 49.35 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 14 | खडकाळी सिग्नल ते त्र्यंबक नाका ते आयटीआय सिग्नल (त्रंबक रोड) पर्यंतचा रस्ता विकसित करणे. (नाशिक त्रंबक कुंभमेळा दोन्ही ठिकाणी जोडणारा रस्ता / वाहनतळ जोडणारा रस्ता) | 51.05 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 15 | त्र्यंबक रोड आय.टी.आय. सिग्नल ते पिंपळगाव बहुला मनपा हद्द रस्ता विकसित करणे. (नाशिक त्रंबक कुंभमेळा दोन्ही ठिकाणी जोडणारा रस्ता / वाहनतळ जोडणारा रस्ता) | 49.29 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 16 | निमाणी चौक ते मनपा हद्द पावेतोचा दिंडोरी रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/ वाहनतळ जोडणारा) | 59.57 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |

| अ. क्र. | कामांचे नाव | प्रशासकीय मान्यता रक्कम (रुपये कोटी) | काम पूर्ण करण्याची मुदत | कार्यान्वयीन यंत्रणा |
|---|---|---|---|---|
| 17 | पेठ रोड कालवा ते मेहेरधाम पेठ रस्ता विकसित करणे (घाटाकडे जाणारा रस्ता/ वाहनतळ जोडणारा) | 76.49 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 18 | पुणे रोड- दत्त मंदिर चौक ते सिन्नर फाटा (रेल्वे स्थानक जोड रस्ता) | 17.75 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 19 | जनार्दन स्वामी मठ (छ.संभाजी नगर रोड) ते लक्ष्मीनारायण मंदिरपूल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) | 15.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 20 | अमृत मिरवणूक मार्ग (जाणारा व परतीचा) देखभाल दुरुस्ती (अमृत मिरवणूक मार्ग) | 5.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| 21 | नवीन प्रस्तावित कपिला संगम घाटाकडे जाणारे पोहोच रस्ते तयार करणे. लक्ष्मी नारायण घाटाकडे जाणारा महत्वाचा रस्ता | 2.00 | मार्च 2027 पर्यंत | नाशिक महानगरपालिका |
| एकूण | | 930.23 | | |

महाराष्ट्र राज्य पायाभूत सुविधा विकास महामंडळामार्फत नाशिक शहराच्या रिंगरोडचे काम प्रस्तावित आहे. सदरचे काम मंजूर झाल्यास नाशिक मुंबई महामार्ग ते नाशिक पुणे महामार्ग या पट्ट्यातील दोन महामार्गांना जोडणारा, नाशिकच्या विकास आराखड्यात दर्शविलेला रिंगरोड मंजूर होण्याची शक्यता आहे. असा रिंगरोड मंजूर झाल्यास, वर अनुक्रमांक चार वर नमूद वडनेर गेट ते विहितगाव (लॅम रोड) (रेल्वे स्थानक- त्र्यंबकरोड जोडरस्ता/ वाहतूक नियोजन) या रस्त्याची कुंभमेळ्याकरिता आवश्यकता राहणार नाही. यामुळे सदरचे काम सुरू करण्यापूर्वी महाराष्ट्र राज्य पायाभूत विकास महामंडळाकडून त्यांचे रिंगरोडचे काम कुंभमेळ्यापूर्वी पूर्ण होणार नाही, याची खात्री करावी आणि त्यानंतरच कार्यारंभ आदेश द्यावा.

अटी व शर्ती:-

१. संबंधित कार्यान्वयीन यंत्रणेला शासनाच्या, संबंधित विभागांच्या आणि इतर सक्षम प्राधिकाऱ्यांच्या (उदा. केंद्रीय सतर्कता आयोग) यांनी वेळोवेळी निर्गमित केलेल्या मार्गदर्शक सूचनांचे पालन करावे लागेल.
२. नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण आणि जिल्हास्तरीय सिंहस्थ कुंभमेळा कार्यकारी समिती, नाशिक यांचे मार्फत वेळोवेळी दिलेल्या निर्देशांचे पालन संबंधित कार्यान्वयीन यंत्रणेला करावं लागेल.
३. नाशिक त्र्यंबकेश्वर कुंभमेळा अधिनियम 2025 मधील सर्व तरतूदी या कामाला लागू राहतील.
४. सदर कामावर नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत निर्देशित केल्यानुसार कामाच्या जागेवर माहिती दर्शविणारा फलक लावावा लागेल.
५. सदर काम किंवा त्याचा कोणताही घटक इतर कोणत्याही योजनेत मान्य झाले नाही अथवा करण्यात आले नाही याची खात्री कार्यान्वयीन यंत्रणेने करावी.
६. सदर काम पूर्ण झाल्यावर त्याचा केवळ सार्वजनिक वापर होणार असून कोणत्याही स्वरुपाचा खाजगी वापर होणार नाही याची दक्षता कार्यान्वयीत यंत्रणेने घ्यावी.

७. कार्यान्वयीन यंत्रणा ही सदर कामाचा वापर करणारी आणि देखभाल दुरुस्ती करणारी यंत्रणा नसल्यास, सदर काम पूर्ण झाल्यावर वापर करणारी आणि देखभाल/ दुरुस्ती करणाऱ्या यंत्रणेने काम गुणवत्तापूर्ण झाले आहे किंवा कसे याची खात्री करून ते ताब्यात घ्यावे.

८. खरेदीच्या कामांबाबत शासनाने वेळोवेळी निर्गमित केलेल्या निर्देशांचे पालन करावे. तसेच वस्तुंची अथवा इतर बाबींची खरेदी शासनाच्या GeM पोर्टलवरुन अथवा शासनाच्या इतर मार्गदर्शक सूचनांनुसारच करावी.

९. मंजूर अनुदानापेक्षा (प्रशासकीय मान्यता रकमेपेक्षा) जास्त खर्च करता येणार नाही. तसेच कामाचे भाग पाडून काम करता येणार नाही.

१०. वर दर्शविण्यात आलेली काम पूर्ण करण्याची मुदत ही अंतिम मुदत असून शक्य असल्यास यापेक्षा लवकर काम पूर्ण करण्याचे नियोजन करावे आणि तशी अंमलबजावणी करावी. त्यानुसार निविदा प्रक्रिया राबवावी.

११. सर्व कामांच्या जागांचे कामाचे काम सुरु करण्यापूर्वी कोणतीही जागा सुटणार नाही अशाप्रकारे दिनांक नमूद करून व्हिडिओ शूटिंग करावे आणि जियो स्टॅम्प्ड आणि जियो टॅग्ड फोटो काढावेत. त्याचप्रमाणे प्रत्येक कामाचे जास्तीत जास्त एक महिना किंवा त्यापेक्षा कमी या कालावधीमधे अशा प्रकारचे व्हिडिओ आणि फोटो पुन्हा काढावेत हे सर्व जतन करून ठेवावेत जेणेकरुन याला भविष्यात योग्य त्या संकेतस्थळावर जाहीररित्या प्रदर्शित करता येईल.

१२. नियोजन विभागाच्या दिनांक 09 जून 2025 रोजीच्या शासन निर्णयानुसार प्रत्येक पायाभूत विकास प्रकल्पांसाठी युनिक पायाभूत सुविधा आयडी पोर्टल (Infra ID Portal) कार्यान्वित करणे बाबत दिलेल्या सूचनांचे कार्यान्वयीन यंत्रणेने पालन करावे व त्यानुसार कार्यवाही करावी.

१३. प्रकल्प व्यवस्थापनाच्या दृष्टीने वेळोवेळी दिलेल्या निर्देशानुसार आवश्यक ती माहिती नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाला सादर करावी.

१४. मंजूर करण्यात येत असलेल्या वरील कामांची भविष्यातील देखभाल दुरुस्तीचा खर्च कार्यान्वयीन यंत्रणेने स्वत:च्या निधीतून करावा अथवा हस्तांतरण करुन घेणाऱ्या यंत्रणेने करावे.

१५. सदर कामांचा कोणत्याही उपांगांचे काम इतर कोणत्याही शीर्ष अथवा योजनेतून प्रस्तावित नाही आणि/ किंवा झाले नाही याची खात्री कार्यान्वयीन यंत्रणेने काम सुरु करण्यापूर्वी करावी.

१६. सदर कामांची सक्षम प्राधिकाऱ्याकडून तांत्रिक मान्यता घेणे बंधनकारक आहे.

१७. सदर कामाचे पर्यवेक्षण आणि नियंत्रण संबंधित कार्यान्वयीन यंत्रणेने करावे.

१८. सदर कामाचा दर्जा/ गुणवत्ता आणि वेग तपासण्यासाठी, त्याचप्रमाणे कार्यान्वयीन यंत्रणेच्या कामकाजाचे मूल्यमापन करण्यासाठी त्रयस्थ यंत्रणांमार्फत/ यंत्रणांना वेळोवेळी तपासणी आणि मूल्यमापन करण्यात येईल. यासाठीचा येणारा खर्च या कामाच्या अंदाजपत्रकीय रकमेतून नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरणामार्फत थेट संबंधित यंत्रणांना अदा केला जाईल.

१९. थर्ड पार्टी इन्स्पेक्शन बद्दल आवश्यक ती तरतूद अंदाजपत्रकात करावी.

२०. निविदा प्रक्रियेमध्ये सर्वसाधारण पात्रते (eligibility) संबंधात निकष सर्वसाधारणपणे त्या त्या विभागाचे नेहमीचे जशी असतात त्या पद्धतीने ठेवावे जेणेकरून स्पर्धा चांगली होईल. तथापि दर्जा उत्तम राखण्यासाठी दंडात्मक (penalty च्या) तरतुदी अधिक कठोर करायचे असल्यास तशी मुभा संबंधित विभागाला राहील.

२१. कामे हाती घेताना शासनाच्या संबंधित विभागाच्या / कार्यालयांच्या मार्गदर्शक सूचना विचारात घ्याव्यात (उदा. अग्नीशमन सेवा संचालनालय, वैद्यकीय शिक्षण व संशोधन संचालनालय, इ.). तसेच याबाबत इतर मोठ्या शासकीय व निमशासकीय संस्था (उदा. राज्य शासनाचे संबंधित विभाग, केंद्र शासनाचे संबंधित विभाग, मोठ्या महानगरपालिका/ महामंडळे, इ.) यांनी वेळोवेळी निर्गमित केलेल्या मार्गदर्शक सूचना, खरेदी धोरण व निविदांचा देखील अभ्यास निष्पक्षपणे व सखोलपणे करावा. त्याचप्रमाणे या क्षेत्रातील सर्वोत्तम कार्यपद्धतींचा (best practices) चा विचार करावा. तसेच आवश्यकतेनुसार त्या क्षेत्रातील तज्ञ / सल्लागार यांच्या सेवा घ्याव्यात. या प्रकारे पूर्ण काळजी घेवून अशा कामांबाबत/ प्रकल्पांबाबत कार्यवाही करावी. सदरची कामे/ प्रकल्प वेळेत

आणि गुणवत्तेनुसार पार पाडण्याची जबाबदारी संबंधित कार्यान्वयीन यंत्रणेच्या कार्यालय प्रमुखाची राहील याची नोंद घ्यावी.

२२. सदर कामांची प्रस्तावित रक्कम ही कामे पूर्ण करुन ती कुंभमेळ्यासाठी प्रत्यक्षात उपयोगाला येण्याच्या दृष्टीने आणि कार्यान्वित होण्याच्या दृष्टीने परिपूर्ण प्रकारे प्रस्तावित केली आहे, असे गृहीत धरण्यातून ही प्रक्रिया करण्यात येत आहे. उदा. एखाद्या कामासाठी भूसंपादन किंवा तिथे पोहचण्यासाठी अप्रोच रोड किंवा फर्निचर/ विद्युतीकरण ते या कामाचा भाग आहे, असे गृहीत धरण्यात येत आहे. तसेच कामाशी निगडीत नसलेली कामे घेतलेले नाही (उदा. कार्यालयीन गाड्यांचे भाडे) असे गृहीत धरण्यात येत आहे याची नोंद कार्यान्वयीन यंत्रणेने घ्यावी.

२३. सदर कामाचे आवश्यक ते अभिलेखे तयार करण्याची आणि अभिलेख जतन करण्याची जबाबदारी संबंधित कार्यान्वयीन यंत्रणेची राहील.

२४. या कामाबाबत उद्भवणाऱ्या न्यायालयीन, कायदेशीर आणि लेखापरीक्षण विषयक बाबींसाठी संबंधित कार्यान्वयीन यंत्रणा जबाबदार आहे.

२५. काम पूर्ण झाल्यानंतर कामाच्या पूर्णत्वाचा दाखला व कामावर केलेल्या खर्चाचे उपयोगीता प्रमाणपत्र 30 दिवसात सादर करावे.

२६. या कामांवर होणारा खर्चाचा हिशेब स्वतंत्रपणे ठेवण्यात यावा. तसेच कामावर झालेला खर्च वजा जाता शिल्लक रक्कम या कार्यालयाकडे 15 दिवसात वर्ग करावी. कामावर झालेली बचत इतर कामांवर वळती करण्यात येवू नये.

२७. सदर कामासाठी आवश्यक असलेली जागा कायदेशीररित्या ताब्यात घेण्याची जबाबदारी संबंधित कार्यान्वयीन यंत्रणेची राहील.

२८. सदर काम करीत असताना आवश्यक असणाऱ्या केंद्र शासन, राज्य शासन, स्थानिक स्वराज्य संस्था किंवा कोणत्याही प्राधिकाऱ्याच्या आवश्यक असणाऱ्या, कायदेशीर व इतर परवानग्या प्राप्त करून घेण्याची जबाबदारी संबंधित कार्यान्वित यंत्रणेची राहील.

२९. सदरचा प्रशासकीय मान्यतेचा आदेश नगर विकास विभागाच्या मागणी क्र.एफ-2, मुख्य लेखाशिर्ष 2217B357, 191, स्थानिक संस्था, महानगरपालिका, नगरविकास प्राधिकरणे, शहर सुधार मंडळे, इत्यादींना सहाय्य, 31 सहायक अनुदाने (वेतनेतर) (00) (00) (97) सिंहस्थ कुंभमेळ्याचे नियोजन व अंमलबजावणी यावरील खर्चाकरिता सहायक अनुदान (कार्यक्रम) कुंभमेळा निधी संबंधित शीर्षातून देण्यात येत आहे. तथापि शासनस्तरावर किंवा प्राधिकरणात इतर शीर्षातून किंवा योजनेतून सदरचा खर्च करण्याचा निर्णय झाल्यास त्याप्रमाणे निधी उपलब्ध केला जाईल.

३०. नाशिक महानगरपालिकेने कुंभमेळा संबंधित कामांवर त्यांच्या निधीतील किती टक्के वाटा उचलायचा हे ठरलेले नाही. याबाबत शासनस्तरावर होणारा निर्णय महानगरपालिकेला बंधनकारक राहील आणि त्यानुसार तसा वाटा त्यांना उचलणे बंधनकारक राहील.

Signed by
Praveen Nilkanthrao Gedam
Date: 14-09-2025 22:39:39
(डॉ. प्रवीण गेडाम)
अध्यक्ष, नाशिक त्र्यंबकेश्वर कुंभमेळा प्राधिकरण तथा,
विभागीय आयुक्त, नाशिक

प्रति,

आयुक्त, नाशिक महानगरपालिका, नाशिक.

16 Jun

नाशिक महानगरपालिका
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Visit us at : www.nmc.gov.in e-mail : ce-pwd@nmc.gov.in

जा.क्र.साबांवि/डेस्क-२/२५२/ २०२५
दिनांक- ०९ / १२/२०२५

**प्रति,**
मे.स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि.,
निविदाधारक, मुंबई

**विषय :-** जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता). रस्ता विकसीत करणे.

**संदर्भ :-** ई-निविदा सु.क्र.०३/ १८ (सन २०२५-२६)

महोदय,

नाशिक येथे सन २०२७ साली होणारा सिंहस्थ कुंभमेळा अनुषंगाने करावयाच्या वरील विषयांकीत कामासाठी प्राप्त निविदांमध्ये तुम्ही सादर केलेली निविदा सर्वात न्युनतम दराची म्हणजेच **प्राकलन दरापेक्षा १६.५०० %** इतक्या **कमी** दराची निविदा दाखल केली आहे. तुम्ही दाखल केलेल्या निविदेच्या दराबाबत चर्चा करावयाची असुन पुढील निर्णय घ्यावयाचा आहे. त्यामुळे इकडील कार्यालयात याबाबत चर्चेसाठी **सोमवार, दिनांक ०१/१२/२०२५ रोजी सायंकाळी ५.०० वा** आपण अथवा आपला प्रतिनिधी पत्रासह शहर अभियंता व कार्यकारी अभियंता यांचे दालनात उपस्थित रहावे. त्याच बरोबर सादर केलेल्या दराबाबत योग्य ते **दरपृथ:करण** लेखी स्वरुपात सादर करावे.

कार्यकारी अभियंता (बांधकाम)
नाशिक महानगरपालिका, नाशिक

*Ref No: CORP/NMC/HO/STEM/2512012*
*Date: 01/12/2025*

प्रति,
कार्यकारी अभियंता,
सार्वजनिक बांधकाम विभाग,
नाशिक महानगरपालिका,
राजीव गांधी भवन,
नाशिक – ४२२००२.

कामाचे नाव:- जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता). रस्ता विकसीत करणे.

विषय - दरपृथःकरण करणेबाबत.

संदर्भ: १) ई-निविदा सु.क्र. ०३/१८ (सन २०२५-२६)
२) ई-निविदा सु.क्र. 2025_NMC_1221768_18
३) आपले पत्र जा.क्र.साबांवि/डेस्क-२/२५२/२०२५ दिनांक-०१.१२.२०२५

महोदय,

तुमच्या कार्यालयाकडून मिळालेल्या वर उल्लेख केलेल्या पत्राच्या संदर्भात, आम्ही तुम्हाला कळवू इच्छितो की आम्ही अंदाजे खर्चापेक्षा १६.५०% कमी दराने सदर कामासाठी आमची निविदा सादर केली आहे.

आम्ही तुम्हाला कळवू इच्छितो की आमच्याकडे सदर काम करण्यासाठी यंत्रसामग्री आणि मनुष्यबळ उपलब्ध आहे व आमच्याकडे सध्या नवीन काम नसून आम्ही अंदाजे खर्चापेक्षा १६.५०% कमी दराने सदर काम करण्यास तयार आहोत.

आपला विश्वासु,
स्वस्तिक इन्फ्रालॉजिक्स प्रा. लिमिटेड,

श्रीकांत राघवराजू
व्यवस्थापकीय संचालक

कार्यकारी अभियंता
सार्वजनिक बांधकाम विभाग
आदेश क्र. ७८२ दि. 02/12/25
जावक क्र. ..... दि. / /

नाशिक महानगरपालिका
Nashik Municipal Corporation
Rajeev Gandhi Bhavan, Sharanpur Road (Post Box No.१२), Nashik – ४२२ ००२
Visit us at : www.nmc.gov.in e-mail :nmc@gov.in

जा.क्र.साबांवि/डेस्क-२/२५७/२०२५
दिनांक- ०३ /१२/२०२५

**प्रति,**
मे.स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि.
निविदाधारक, मुंबई

**विषय** :- जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) विकसीत करणे.

**संदर्भ** :- १) ई-निविदा सु.क्र.०३/१८ सन २०२५-२६
२) आपणास दिलेले पत्र जा.क्र.सांबावि/डेस्क-२/२५२/२०२५ दि.०१/१२/२०२५
३) मक्तेदार यांनी दि. ०१/१२/२०२५ रोजी दिलेले पत्र.

महोदय,

नाशिक येथे सन २०२७ साली होणारा सिंहस्थ कुंभमेळा अनुषंगाने करावयाच्या वरील विषयांकीत कामासाठी प्राप्त निविदांमध्ये तुम्ही सादर केलेली निविदा सर्वात न्युनतम दराची म्हणजेच **प्राकलन दरापेक्षा १६.५०० %** इतक्या **कमी** दराची निविदा दाखल केली आहे. सदर निविदा दरा बाबत झालेल्या चर्चेनुसार आपण संदर्भ क्र.०३ नुसार विषयांकीत काम **निविदा दरापेक्षा १६.५००% कमी** दरानेच मंजुर करण्याची विनंती केली आहे. यास्तव निविदा अटी व शर्ती क्र.२.२ नुसार **मा.आयुक्त नाशिक महानगरपालिका, नाशिक या नावे** अतिरिक्त सुरक्षा अनामत रक्कमे पोटी **र.रु.१,३५,००,००० /-** इतक्या रक्कमेची **राष्ट्रीय कृत बँकेचा एफ.डी.आर/ बँक गॅरंटी,** अथवा रोख स्वरुपात मनपा खजिन्यात भरणा करुन त्याची पावती ८ दिवसांचे आत इकडील कार्यालयात सादर करावी. विहीत मुदतीत अतिरीक्त सुरक्षा अनामत रक्कमेची पुर्तता न केल्यास निविदा अटी व शर्ती क्र.२.२ (२) नुसार पुढील कार्यवाही करणेत येईल याची कृपया नोंद घ्यावी.

Received.

कार्यकारी अभियंता (बांधकाम)
नाशिक महानगरपालिका, नाशिक

*Ref No: CORP/NMC/HO/STEM/2512028*
*Date: 05/12/2025*

swastik
ENGINEERING EMERGENCE

**To,**
**The Executive Engineer,**
Public Works Department,
Nashik Municipal Corporation,
Rajiv Gandhi Bhavan, Nashik 422002

**Subject:** Development of road from Janardan Swami Math (Ch.Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (Ghat Approach/Sadhugram Connect). **Reg- Submission of Additional Performance Security Deposit**

**Ref:** 1. Tender Notice No. 03/18 (2025-26)
2. Your Letter No: PWD/Desk-2/257/2025, Dated: 03.12.2025

Sir,

Greetings from Swastik,

With reference to the above subject and your letter under Ref. 2, we hereby submit the **Additional Performance Security Deposit** in the form of Fixed Deposit Receipt (FDR), in accordance with tender the conditions.

**Details of the Fixed Deposit Receipt are as follows:**

| Sr. No. | FDR Number | Amount | Bank Name | Date of Expiry |
|---|---|---|---|---|
| 1 | 011656110008239 | Rs. 1,35,00,000/- | Bank of India | 05/08/2027 |

We remain in anticipation of your support and with assurance of our sincere service at all times.

Thanking you,

Yours Faithfully,
**For Swastik Infralogics Pvt. Ltd.**

SWASTIK INFRALOGICS PRIVATE LIMITED

**Srikanth Raghavraju**
**Managing Director**

***Attachments:*** *Original Fixed Deposit Receipt as mentioned above*

T-3-18

14.99,85,937

GST - 2,24,50,502.04

Rou. 28,10,423.40

12,47,25,011.

16.500% amt

10,41,45,384.18

GST - 1,87,46,169.15

Rou - 28,10,423.40

12,57,01,976.73

SCHEDULES OF FORMATING PROFIT & LOSS ACCOUNT
FOR THE PERIOD 31.03.2021

| SCHEDULE [1] PURCHASES | |
|---|---|
| Particulars | Amount |
| **MATERIAL PURCHASES** | 1,56,15,944.85 |
| Asphalt, F.O. & L.D.O, Metal Etc | |
| TOTAL | 1,56,15,944.85 |

| SCHEDULE [2] DIRECT EXPS. | |
|---|---|
| Particulars | Amount |
| Labour Charges | [illegible] |
| Carting Exps | 1,90,860.00 |
| Rep. & Maint. | [illegible] |
| Insurance (NMC) | 74,833.00 |
| Lease Rent (Machine) | [illegible] |
| Other Taxes | [illegible] |
| Security Charges | [illegible] |
| Tender Fees | [illegible] |
| Testing Charges | [illegible] |
| Weighment Charges | [illegible] |
| Water Charges | [illegible] |
| TOTAL | 29,11,469.61 |

| SCHEDULE [3] SALES & ADMINISTRATIVE EXPS. | |
|---|---|
| Particulars | Amount |
| Bank Charges | [illegible] |
| Contr. To PTrept | [illegible] |
| Contr. To ESIC | [illegible] |
| Salaries & Bonus Exps | [illegible] |
| Interest Paid | [illegible] |
| Insurance | [illegible] |
| Telephone Charges | 3,247.53 |
| Sundry Exps | 16,562.00 |
| Professional Fees | 15,488.00 |
| Travelling & Convency | 29,500.00 |
| Audit Fees | [illegible] |
| Electricity Charges | [illegible] |
| Income tax assessment fees | [illegible] |
| Vehicle Expenses | [illegible] |
| TOTAL | 28,28,604.66 |

# नाशिक महानगरपालिका, नाशिक

NMC/PWD/OWL/२०२५/
जा.क्र.मनपा/बांध/न.स./२६५ /२०२५
दि. १२-/१२-/२०२५

प्रति,
मा. नगरसचिव,
नाशिक महानगरपालिका,
यांचेकडेस —

**विषय** : जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता)

**संदर्भ** : १) मा.महासभा ठराव क्रमांक.३२१ दिनांक. ०४ /०९ /२०२५
२) ई- निविदा सु.क्र.०३/१८ (सन २०२५-२६)
३) नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचाकडील प्रशासकीय मान्यता आदेश दि.१४/०९/२०२५.

नाशिक-त्र्यंबकेश्वर येथे सन-२०२७ होणारा सिंहस्थ कुंभमेळा पुर्व तयारी दृष्टीकोनातुन वाहतुक व्यवस्था सुधारणे आदी दृष्टीकोनातुन रस्त्याचा कामाची यादी तयार करुन त्यानुसार निधी मागणीसाठी प्रस्ताव सादर करण्यास मा.महासभा ठराव क्र.३२१ दि.०४/०९/२०२५ अन्वये मान्यता प्राप्त झाली आहे. त्यापुर्वी नाशिक महानगरपालिके मार्फत दि.०२/०७/२०२४ अन्वये र.रु.१५१७२.४२ कोटी रक्कमेचा आराखडा मंजुरीसाठी पाठविण्यात आला होता. त्याचप्रमाणे दि.०४/०६/२०२५, दि.१७/०७/२०२५, दि.१०/०७/२०२५, दि.०९/०९/२०२५, दि.०३/१०/२०२५, दि.२४/१०/२०२५ अन्वये वारंवार निधी मंजुरीसाठी पाठपुरावा करण्यात आला. त्याचप्रमाणे पोलिस विभागाने त्याचाकडील दि.२८/०७/२०२५ व दि.०९/०९/२०२५ चा पत्रान्वये प्रधान्यक्रम कळविला आहे. त्यास अनुसरुन नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणा मार्फत दि.१४/०९/२०२५ व दि.२२/०९/२०२५ अन्वये प्रशासकीय मान्यता प्राप्त झालेली आहे.

त्यानुसार संपुर्ण निविदा प्रक्रीया राबविण्यासाठी नाशिक महानगरपालिकेमध्ये स्वतंत्र मध्यवर्ती निविदा कक्षाची स्थापना करण्यात आली आहे, त्यामुळे मध्यवर्ती निविदा कक्षाकडुन सदर कामाची ई-निविदा प्रक्रिया राबविण्यात आली असून त्याचा तपशिल खालील प्रमाणे आहे.

१) विभागाचे नांव : सार्वजनिक बांधकाम विभाग

२) प्राकलन मंजुर रक्कम : **र.रु १४,९९,८५,९३७/-** (**अक्षरी** — चौदा कोटी नव्याण्णव लक्ष पंच्याऐंशी हजार नऊशे सदोवतीस मात्र मात्र )

३) तांत्रिक मान्यता : सदर कामास मा.शहर अभियंता यांची नं. NMC/PWD/TS/१८/२०२५, दि.१६/०९/२०२५ अन्वये यांनी तांत्रिक मान्यता दिलेली आहे.

४) निविदा सुचना क्रमांक : ई - निविदा सुचना क्र. ०३/१८ (सन २०२५-२६)

५) दै.लोकमत, दै.दिव्य मराठी, दै.सकाळ, दै.लोकमत टाईम्स, दै.टाईम्स ऑफ इंडिया, दै.मिन्ट टाईम्स, दै.हिदुस्तान टाईम्स, दै.नवभारत, दै.प्रात:काल, दै.फ्रिप्रेस जरनल या वर्तमान पत्रात निविदेस जाहिर प्रसिध्दी देऊन व www.mahatenders.gov.in या महाराष्ट्र शासनाच्या संकेतस्थळावर ऑनलाईन प्रसिध्दीने निविदा मागविण्यात आलेल्या आहेत.

अ) निविदा प्रसिध्दी कालावधी : दि. २५/०९/२०२५ ते १७/१०/२०२५
आ) आर्थिक देकार /निविदा उघडल्याचा : दि. २९/११/२०२५

६) विषयांकित कामासाठी एकुण अकरा (११) निविदा प्राप्त झालेल्या आहेत. त्यापैकी पाच (०५) निविदा पात्र झालेल्या आहेत, असे मध्यवर्ती निविदा कक्षाने कळविले आहे. त्या निविदांचा तपशिल खालील प्रमाणे आहे.

| अ.नं. | निविदाधारकाचे नांव | पुर्वगणपत्रकापेक्षा टक्केवारी |
|---|---|---|
| १. | **मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** | **१६.५०० % कमी दराने** |
| २. | मे.पी.डी.इन्फ्रा प्रोजेक्ट प्रा. लि., मुंबई | १५.३२० % कमी दराने |
| ३. | मे.महालक्ष्मी कंन्स्ट्रक्शन, नाशिक | १४.३१० % कमी दराने |
| ४. | मे.बी.एस.चोप्रा, नाशिक | ९.००० % कमी दराने |
| ५. | मे.एस.आर.ठोंबरे, वैजापुर | ४.५१० % कमी दराने |

न्युनत्तम दराच्या निविदेची शिफारस करण्यात आलेली आहे.

वरील बाब क्र. ६ मध्ये नमूद केलेल्या निविदांपैकी **मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** या मक्तेदाराची निविदा प्राकलन दरापेक्षा **१६.५०० % कमी** दराने ही न्युनत्तम दराची असून, मक्तेदार यांना लेखी पत्र देऊन वाटाघाटी व दरपृथ्थकरण सादर करणेबाबत विचारणा केली असता, मक्तेदार यांनी लेखी पत्र देऊन सदरचा दर रास्त असुन त्यांनी सादर केलेली प्राकलन दरापेक्षा **१६.५०० % कमी** दराची निविदा मंजुर करणेची विनंती केली आहे.

विषयांधीन कामास संदर्भ क्र.३ अन्वये नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाची प्रशासकीय मंजुरी प्राप्त झाली असुन, त्यामध्ये सदर कामाचा समावेश असुन प्रशासकीय मान्यता **रक्कम रु.१५.०० कोटी** आहे. शासन निधीतुन कामासाठी उपलब्ध तरतुदी मधुन सदरचा खर्च करण्यात येईल.

सदर प्रशासकीय मान्यतेनुसार न्युनतम निविदाधारक **मक्तेदार मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** यांचेकडून प्राकलन दरापेक्षा **१६.५०० % कमी** दराने र.रु.१०,४१,४५,३८४/- अधिक (र.रु.१,८७,४६,१६९/- जी.एस.टी. + र.रु.२८,१०,४२३/- रॉयल्टी व टेस्टींग चार्जेस सह) अशी **एकुण र.रु.१२,५७,०१,९७७ /-** (अक्षरी र.रु.बारा कोटी सत्तावन्न लाख एक हजार नऊशे सत्याहत्तर मात्र ) इतक्या रकमेपर्यंत काम करुन घेणेसाठी व त्यांच्याशी करार करण्यास मान्यता घेण्यासाठी सदरचा विषय मा.स्थायी समितीच्या मंजुरीस सविनय सादर

शहर अभियंता
नाशिक महानगरपालिका नाशिक

अति. आयुक्त (र)
नाशिक महानगरपालिका नाशिक

सदर प्रकरणी महाराष्ट्र महानगरपालिका अधिनियमातील तरतुदीनुसार कार्यवाही करणेत यावी.

आयुक्त तथा प्रशासक
नाशिक महानगरपालिका, नाशिक

21/12/2024

महानगरपालिका सचिवालय

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# नाशिक महानगरपालिका, नाशिक

## स्थायी समिती ठराव

सभा क्र. : ७७

विषय क्र. : ४६०  ठराव क्र. : ४६०  दिनांक : १२/१२/२०२५

**संदर्भ- मा.आयुक्त तथा प्रशासक सो. यांचेकडील जा.क्र/बांध/ ८६५ /२०२५ दि. १२.१२.२०२५ चे पत्र.**

१) मा.महासभा ठराव क्रमांक.३२१ दिनांक. ०४ /०९ /२०२५

२) ई- निविदा सु.क्र.०३/१८ (सन २०२५-२६)

३) नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरण यांचाकडील प्रशासकीय मान्यता आदेश दि.१४/०९/२०२५.

**महाराष्ट्र महानगरपालिका अधिनियमातील कलम ४५२ (अ) मधील तरतुदीनुसार मा.प्रशासक सो.यांना प्राप्त झालेल्या अधिकारानुसार असा ठराव करण्यांत येत आहे कि,**

जनार्दन स्वामी मठ (छत्रपती संभाजी नगर रोड) ते लक्ष्मी नारायण मंदिरपुल ते ड्रीम सिटी चौक (घाटाकडे जाणारा रस्ता/ साधुग्राम जोडणारा रस्ता) चे काम नाशिक-त्र्यंबकेश्वर येथे सन-२०२७ होणारा सिंहस्थ कुंभमेळा पुर्व तयारी दृष्टीकोनातुन वाहतुक व्यवस्था सुधारणे आदी दृष्टीकोनातुन रस्त्याचा कामाची यादी तयार करुन त्यानुसार निधी मागणीसाठी प्रस्ताव सादर करण्यास मा.महासभा ठराव क्र.३२१ दि.०४/०९/२०२५ अन्वये मान्यता प्राप्त झाली आहे. त्यापुर्वी नाशिक महानगरपालिके मार्फत दि.०२/०७/२०२४ अन्वये र.रु.१५१७२.४२ कोटी रक्कमेचा आराखडा मंजुरीसाठी पाठविण्यात आला होता. त्याचप्रमाणे दि.०४/०६/२०२५, दि.१७/०७/२०२५, दि.१०/०७/२०२५, दि.०९/०९/२०२५, दि.०३/१०/२०२५, दि.२४/१०/२०२५ अन्वये वारंवार निधी मंजुरीसाठी पाठपुरावा करण्यात आला. त्याचप्रमाणे पोलिस विभागाने त्याचाकडील दि.२८/०७/२०२५ व दि.०९/०९/२०२५ चा पत्रान्वये प्रधान्यक्रम कळविला आहे. त्यास अनुसरुन नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणा मार्फत दि.१४/०९/२०२५ व दि.२२/०९/२०२५ अन्वये प्रशासकीय मान्यता प्राप्त झालेली आहे.

त्यानुसार संपुर्ण निविदा प्रक्रीया राबविण्यासाठी नाशिक महानगरपालिकेमध्ये स्वतंत्र मध्यवर्ती निविदा कक्षाची स्थापना करण्यात आली आहे, त्यामुळे मध्यवर्ती निविदा कक्षाकडुन सदर कामाची ई-निविदा प्रक्रिया राबविण्यात आली असून त्याचा तपशिल खालील प्रमाणे आहे.

१) विभागाचे नांव : सार्वजनिक बांधकाम विभाग

२) प्राकलन मंजुर रक्कम : **र.रु १४,९९,८५,९३७/-** (**अक्षरी** — चौदा कोटी नव्याण्णव लक्ष पंच्याऐंशी हजार नऊशे सदोवतीस मात्र मात्र )

३) तांत्रिक मान्यता : सदर कामास मा.शहर अभियंता यांची नं. NMC/PWD/TS/१८/२०२५, दि.१६/०९/२०२५ अन्वये यांनी तांत्रिक मान्यता दिलेली आहे.

४) निविदा सुचना क्रमांक : ई - निविदा सुचना क्र. ०३/१८ (सन २०२५-२६)

५) दै.लोकमत, दै.दिव्य मराठी, दै.सकाळ, दै.लोकमत टाईम्स, दै.टाईम्स ऑफ इंडिया, दै.मिन्ट टाईम्स, दै.हिदुस्तान टाईम्स, दै.नवभारत, दै.प्रात:काल, दै.फ्रिप्रेस जरनल या वर्तमान पत्रात निविदेस जाहिर प्रसिध्दी देऊन व www.mahatenders.gov.in या महाराष्ट्र शासनाच्या संकेतस्थळावर ऑनलाईन प्रसिध्दीने निविदा मागविण्यात आलेल्या आहेत.

अ) निविदा प्रसिध्दी कालावधी : दि. २५/०९/२०२५ ते १७/१०/२०२५

आ) आर्थिक देकार /निविदा उघडल्याचा : दि. २९/११/२०२५

६) विषयांकित कामासाठी एकुण अकरा (११) निविदा प्राप्त झालेल्या आहेत. त्यापैकी पाच (०५) निविदा पात्र झालेल्या आहेत, असे मध्यवर्ती निविदा कक्षाने कळविले आहे. त्या निविदांचा तपशिल खालील प्रमाणे आहे.

| अ.नं. | निविदाधारकाचे नांव | पुर्वगणपत्रकापेक्षा टक्केवारी |
|---|---|---|
| १. | **मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** | **१६.५०० % कमी दराने** |
| २. | मे.पी.डी.इन्फ्रा प्रोजेक्ट प्रा. लि., मुंबई | १५.३२० % कमी दराने |
| ३. | मे.महालक्ष्मी कंन्स्ट्रक्शन, नाशिक | १४.३१० % कमी दराने |
| ४. | मे.बी.एस.चोप्रा, नाशिक | ९.००० % कमी दराने |
| ५. | मे.एस.आर.ठोंबरे, वैजापुर | ४.५१० % कमी दराने |

न्युनत्तम दराच्या निविदेची शिफारस करण्यात आलेली आहे.

महानगरपालिका सचिवालय

# नाशिक महानगरपालिका, नाशिक

## स्थायी समिती ठराव

सभा क्र. : ७७

विषय क्र. : ४६० ठराव क्र. : ४६० दिनांक : १२ / १२ / २०२५

वरील बाब क्र. ६ मध्ये नमूद केलेल्या निविदांपैकी **मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** या मक्तेदाराची निविदा प्राकलन दरापेक्षा **१६.५०० % कमी** दराने ही न्युनत्तम दराची असून, मक्तेदार यांना लेखी पत्र देऊन वाटाघाटी व दरपृथ्थकरण सादर करणेबाबत विचारणा केली असता, मक्तेदार यांनी लेखी पत्र देऊन सदरचा दर रास्त असुन त्यांनी सादर केलेली प्राकलन दरापेक्षा **१६.५०० % कमी** दराची निविदा मंजुर करणेची विनंती केली आहे.

विषयांधीन कामास संदर्भ क्र.३ अन्वये नाशिक-त्र्यंबकेश्वर कुंभमेळा प्राधिकरणाची प्रशासकीय मंजुरी प्राप्त झाली असुन, त्यामध्ये सदर कामाचा समावेश असुन प्रशासकीय मान्यता **रक्कम रु.१५.०० कोटी** आहे. शासन निधीतुन कामासाठी उपलब्ध तरतुदी मधुन सदरचा खर्च करण्यात येईल.

सदर प्रशासकीय मान्यतेनुसार न्युनतम निविदाधारक **मक्तेदार मे. स्वस्तिक इन्फ्रालॉजिक्स प्रा.लि, नवी मुंबई** यांचेकडून प्राकलन दरापेक्षा **१६.५०० % कमी** दराने र.रु.१०,४१,४५,३८४/- अधिक (र.रु.१,८७,४६,१६९/- जी.एस.टी. + र.रु.२८,१०,४२३/- रॉयल्टी व टेस्टींग चार्जेस सह) अशी **एकुण र.रु.१२,५७,०१,९७७ /-** (अक्षरी र.रु.बारा कोटी सत्तावन्न लाख एक हजार नऊशे सत्याहत्तर मात्र ) इतक्या रकमेपर्यंत काम करुन घेणेस व करार करण्यास नियमानुसार मंजुरी देणेत येत आहे.

(मदन हरिश्चंद्र)
प्र.नगरसचिव,
नाशिक महानगरपालिका, नाशिक

(मनिषा खत्री)
प्रशासक,
नाशिक महानगरपालिका, नाशिक

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**HDFC BANK**

We understand your world

HDFC BANK LTD
KRUSHI PLAZA
SHOP NO 3 4 AND 5 APMC
MARKET PLOT NO.15
SECTOR 19
OPP COMMODITY CENTER
VASHI NAVI MUMBAI
MAHARASHTRA - 400705.

Date 12 JAN 2026

Form Serial No. GTEE/ 1796019

CIN Number : L65920MH1994PLC080618
GSTN Number: 27AACH2702H1Z0

To,
THE COMMISSIONER
NASHIK MUNICIPAL CORPORATION
RAJIV GANDHI BHAVAN,
NASHIK 422002

| | | |
|---|---|---|
| OUR REFERENCE | : | 5WSGT02260120008 |
| DATE OF ISSUE | : | 12-JAN-2026 |
| APPLICANT | : | SWASTIK INFRALOGICS PRIVATE LIMITED |
| GUARANTEE AMOUNT | : | INR 1,35,00,000.00 |
| AMOUNT IN WORDS | : | RUPEES ONE CRORE THIRTY FIVE LAKH ONLY |
| EXPIRY DATE | : | 05-JUL-2027 |
| EXPIRY PLACE | : | VASHI |
| CLAIM DATE | : | 05-JUL-2028 |

---

DEAR SIR,

PLEASE FIND ENCLOSED THE CAPTIONED GUARANTEE DULY ISSUED BY US.

THE ORIGINAL GUARANTEE ATTACHED IS TO BE RETURNED TO US ALONG WITH BENEFICIARY DISCHARGE LETTER WITHIN 15 DAYS FROM THE DATE IT CEASES TO BE IN FORCE OR AS SOON AS THE PURPOSE FOR WHICH IT HAS BEEN ISSUED IS FULFILLED ,WHICHEVER IS EARLIER.

IN CASE BANK GUARANTEE ISSUED IN FAVOUR OF CUSTOMS DEPARTMENT OR DGS AND D, ABOVE CLAUSE TO BE READ AS - THIS GUARANTEE WILL BE RETURNED TO US AS SOON AS THE PURPOSE FOR WHICH IT IS ISSUED IS FULFILLED.

WE CONFIRM THAT THE SIGNATORIES WHO HAVE SIGNED THE SUBJECT GUARANTEE / EXTENSION AS STATED BELOW HAVE THE REQUISITE POWERS TO SIGN ON BEHALF OF THE BANK.

1. Mr./Ms.
   Designation
   P.A NO.

2. Mr./Ms.
   Designation
   P.A NO.

TUSHAR CHAVAN (T2564)
MANAGER-TRADE FINANCE
SIGN CODE - B24992

FURTHER CONFIRMATION OF THIS GUARANTEE IF DESIRED, SHOULD BE SOUGHT BY SENDING EMAIL TO BGCONFIRMATION@HDFC.BANK.IN
THIS LETTER FORMS AN INTEGRAL PART OF THE GUARANTEE.

FOR HDFC BANK LTD.

B32617

VIJAY CHANDKALE
15759

AUTHORISED SIGNATORY/S

# महाराष्ट्र शासन
# GOVERNMENT OF MAHARASHTRA
## ई-सुरक्षित बँक व कोषागार पावती
## e-SECURED BANK & TREASURY RECEIPT (e-SBTR)

24713310332059

Bank/Branch: IBKL - 6910705/Vashi
Pmt Txn id : 767440719
Pmt DtTime : 12-JAN-2026@16:54:37
ChallanIdNo: 69103332026011251251
District : 7101-MUMBAI

Stationery No: 24713310332059
Print DtTime : 12-JAN-2026 16:55:24
GRAS GRN : MH015149993202526S
Office Name : IGR183-BOM2 JT SUB REGI
GRN Date : 12-Jan-2026@16:54:38

StDuty Schm: 0030045501-75/STAMP DUTY
StDuty Amt : R 10,500/- (Rs One Zero, Five Zero Zero only)

RgnFee Schm: 0030063301-70/Registration Fees
RgnFee Amt : R 0/- (Rs Zero only)

Article : 13--Bond
Proo Mvblty: N.A.
Consideration: R 1,35,00,000/-
Prop Descr : Bank Guarantee

Duty Payer: PAN-AANCS5446E,Swastik Infralogics Private Limited

Other Party: PAN-AAACH2702H,HDFC Bank Ltd

Bank official1 Name & Signature

Bank official2 Name & Signature

--- --- Space for customer/office use - - - Please write below this line --- ---

**This non-judicial ESBTR forms part and parcel of this Bank Guarantee bearing number. 5WSGT02260120008 dated. 12-JAN-2026 issued by us in favour of THE COMMISSIONER, NASHIK MUNICIPAL CORPORATION on behalf of SWASTIK INFRALOGICS PRIVATE LIMITED**

**Bank Guarantee: 5WSGT02260120008.**

HDFC BANK LTD. Vashi Navi Mumbai

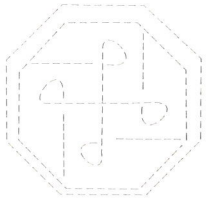
FOR HDFC BANK LTD.
MUMBAI

Authorised Signatory
APMC MARKET II, VASHI, NAVI MUMBAI-400705

TUSHAR CHAVAN (T2564)
MANAGER

DNYANESHWAR DIVEKAR
MANAGER

e-SBTR IS VALID UPTO SIX MONTHS FROM THE DATE OF PAYMENT.



# महाराष्ट्र शासन
# GOVERNMENT OF MAHARASHTRA
# ई-सुरक्षित बँक व कोषागार पावती
# e-SECURED BANK & TREASURY RECEIPT (e-SBTR)

24713310432375

Bank/Branch: IBKL - 6910705/Vashi
Pmt Txn id : 767441297
Pmt DtTime : 12-JAN-2026@16:59:44
ChallanIdNo: 69103332026011251279
District : 7101-MUMBAI

Stationery No: 24713310432375
Print DtTime : 12-JAN-2026 17:00:25
GRAS GRN : MH015150668202526S
Office Name : IGR183-BOM2 JT SUB REGI
GRN Date : 12-Jan-2026@16:59:45

StDuty Schm: 0030045501-75/STAMP DUTY
StDuty Amt : R 16,500/- (Rs One Six, Five Zero Zero only)

RgnFee Schm: 0030063301-70/Registration Fees
RgnFee Amt : R 0/- (Rs Zero only)

Article : 13--Bond
Prop Mvblty: N.A.
Prop Descr : Bank Guarantee

Consideration: R 1,35,00,000/-

Duty Payer: PAN-AANCS5446E,Swastik Infralogics Private Limited

Other Party: PAN-AAACH2702H,HDFC Bank Ltd

Bank official1 Name & Signature

Bank official2 Name & Signature

--- --- Space for customer/office use - - - Please Write below this line --- ---

**This non-judicial ESBTR forms part and parcel of this Bank Guarantee bearing number. 5WSGT02260120008 dated. 12-JAN-2026 issued by us in favour of THE COMMISSIONER, NASHIK MUNICIPAL CORPORATION on behalf of SWASTIK INFRALOGICS PRIVATE LIMITED**

**Bank Guarantee: 5WSGT02260120008.**

FOR HDFC BANK LTD.
MUMBAI

Authorised Signatory
APMC MARKET II, VASHI, NAVI MUMBAI-400705

TUSHAR CHAVAN (T2564)
MANAGER-TRADE FINANCE

e-SBTR IS VALID UPTO SIX MONTHS FROM THE DATE OF PAYMENT.

OUR GTEE REF NO: 5WSGT02260120008

BG AMOUNT : Rs. 1,35,00,000.00 (RUPEES ONE CRORE THIRTY FIVE LAKH ONLY)

ISSUE DATE : 12-JAN-2026

EXPIRY DATE : 05-JUL-2027

CLAIM DATE : 05-JUL-2028

## ADDITIONAL PERFORMANCE BANK GUARANTEE

To,
The Commissioner,
Nashik Municipal Corporation,
Rajiv Gandhi Bhavan,
Nashik – 422002.

WHEREAS, Swastik Infralogics Private Limited and having its registered office at 5th Floor, Proxima, Arunachal Bhavan, Plot No.19, Sector 30A, Vashi, Navi Mumbai 400703. (hereinafter called "the Contractor") has undertaken, in pursuance of Contract to execute the work of Development of road from Janardan Swami Math (Ch. Sambhaji Nagar Road) to Laxminarayan Mandir Bridge to Dream City Chowk (Ghat Approach/Sadhugram Connect) (hereinafter called "the Contract").

AND WHEREAS, we HDFC Bank Ltd a Banking Company incorporated under Companies Act, 1956, having their Registered office at HDFC Bank Ltd., HDFC Bank House, C.S. No. 6/242, Senapati Bapat Marg, Lower Parel (W), Mumbai 400013 and acting through its Branch Office at HDFC BANK LTD, Krushi Plaza , Shop No 3,4 & 5, APMC Market, Plot no 15 ,Sector 19 -Vashi, Navi Mumbai - 400 705. (hereinafter called The Bank/Guarantor) which expression shall, unless repugnant to the context or meaning thereof, include its successors and assigns have agreed to furnish a Performance Bank Guarantee in favour of the Employer.

NOW THEREFORE, we hereby irrevocably affirm and undertake that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total sum of Rs. 1,35,00,000/- (Rupees One Crore Thirty Five Lakh Only), such sum being payable in the currency(ies) in which the Contract Price is payable.

We further undertake to pay you, upon your first written demand and without demur, reservation, contest, recourse, or protest, and without reference to the Contractor, any sum or sums within the limits of Rs. 1,35,00,000/- (Rupees One Crore Thirty Five Lakh Only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby expressly waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition, or modification of the terms of the Contract, or of the Works to be performed thereunder, or of any of the Contract documents, which may be made between you and the Contractor, shall in any way release us from any liability under this Guarantee, and we hereby expressly waive notice of any such change, addition, or modification.

This Guarantee shall remain valid up to 05-JUL-2027.

Notwithstanding anything contained herein above :

a. Our liability under this Bank Guarantee shall not exceed Rs. 1,35,00,000.00 (RUPEES ONE CRORE THIRTY FIVE LAKH ONLY)

b. This Bank Guarantee shall be valid up to 05-JUL-2027 (Expiry Date)

c. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before 05-JUL-2028 (Claim period of one year from date of expiry of BG) failing which the bank shall stand released and discharged from any liability whatsoever under this Guarantee.

All claims under the guarantee to be presented in original & payable at HDFC BANK LTD, Krushi Plaza , Shop No 3,4 & 5, APMC Market, Plot no 15 ,Sector 19 -Vashi, Navi Mumbai - 400 705.

This guarantee will be returned to us as soon as the purpose for which it is issued is fulfilled .

The BG Confirmation Letter No. GTEE/1796019 is an integral Part of the BG No. 5WSGT02260120008 dated 12-JAN-2026.

FOR HDFC BANK LTD.
MUMBAI

Authorised Signatory
APMC MARKET II, VASHI, NAVI MUMBAI-400705

DARSHAN DIVEKAR
MANAGER

HDFC BANK LTD.
Vashi
Navi Mumbai

TUSHAR CHAVAN (T2564)
MANAGER-TRADE FINANCE
SIGN CODE - B24992

N

SCALE:-1:1000
PART-1

TO AURANGABAD

BUILDING

S.NO.332

EXISTING ASPHALT ROAD

STEG

LAXMINARAYAN TEMPLE

GOTHA

SHED

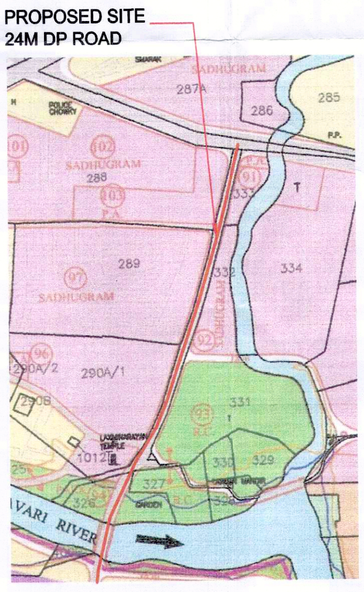
SILVER OAK TREE'S

30M PROPOSED DP ROAD

LAXMI NARAYAN BRIDGE

GODAVARI RIVER

PROPOSED SITE
24M DP ROAD




LOCATION MAP (DP-2017)
SCALE-1:10000

## TOTAL STATION SURVEY FOR PROPOSED 30M DP ROAD JANARDAN SWAMI MATH (CH. SAMBHAJI MAHARAJ ROAD)TO LAKSHUMI NARAYAN BRIDGE TO DREAM CITY CHOWK(TAPOVAN ROAD)

**(AS PER SITE CONDITION)**

NOTE-D.P.ROAD ALIGNMENT SHOWN IN THIS DRAWING IS TENTATIVE AND ESTIMATION PURPOSE. ACCURATE ALIGNMENT WILL BE GIVEN T.P. DEPT. NMC AS PER THEIR SANCTIONS AND LAND RECORDS GIVEN.

LEGEND

| | |
|---|---|
| PROPOSED DP ROAD | |
| EX.TAR RD/WBM RD | |
| FOOTPATH | |
| S.NO.BANDH | |
| FENCING/TAR COMPOUND | |
| COMPOUND WALL | |
| HOUSE'S/BUILDING'S | |
| EP/SP/TREE | |
| CH/EDP | |

AUTHORITY :- NASHIK MUNICIPAL CORPORATION, NASHIK.

NAME OF WORK :-
**30M DP ROAD JANARDAN SWAMI MATH TO DREAM CITY CHOWK**

NMC PANEL CONSULTANT :- H. T. Jadhav & Associates, Nashik.

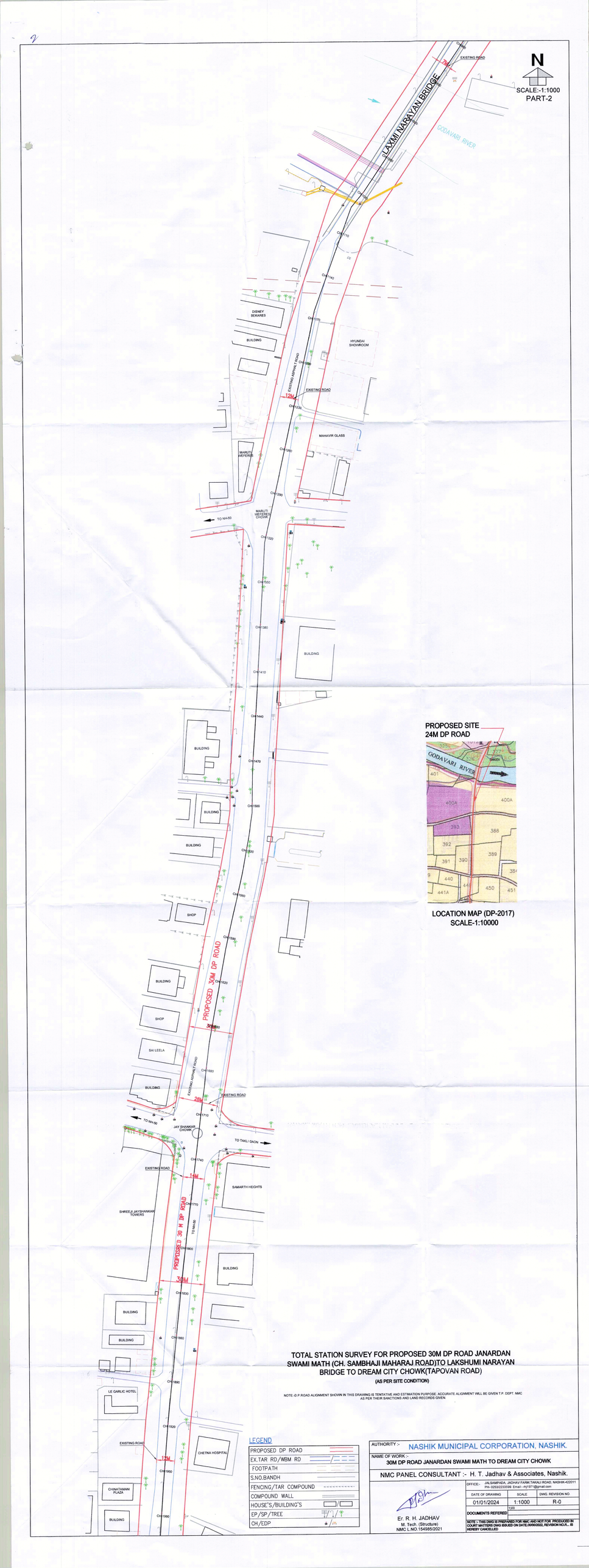

OFFICE:- JALSAMPADA, JADHAV FARM,TAKALI ROAD, NASHIK-422011
PH- 0253/2233599. Email:- rhj1971@gmail.com

Er. R. H. JADHAV
M. Tech. (Structure)
NMC L.NO.154985/2021


| DATE OF DRAWING | SCALE | DWG. REVISION NO. |
|---|---|---|
| 21/12/2024 | 1:1000 | R-0 |
| DOCUMENTS REFERED | 1)00 | |

NOTE :- THIS DWG IS PREPARED FOR NMC AND NOT FOR PRODUCED IN COURT MATTERS DWG ISSUED ON DATE.00/00/2022, REVISION NO.'... IS HEREBY CANCELLED

2




## TOTAL STATION SURVEY FOR PROPOSED 30M DP ROAD JANARDAN SWAMI MATH (CH. SAMBHAJI MAHARAJ ROAD)TO LAKSHUMI NARAYAN BRIDGE TO DREAM CITY CHOWK(TAPOVAN ROAD)

**(AS PER SITE CONDITION)**

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| LEGEND |
|---|
| PROPOSED DP ROAD |
| EX.TAR RD/WBM RD |
| FOOTPATH |
| S.NO.BANDH |
| FENCING/TAR COMPOUND |
| COMPOUND WALL |
| HOUSE'S/BUILDING'S |
| EP/SP/TREE |
| CH/EDP |

AUTHORITY :- NASHIK MUNICIPAL CORPORATION, NASHIK.

NAME OF WORK :-
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|---|---|---|
| 01/01/2024 | 1:1000 | R-0 |
| | 2020 | |

DOCUMENTS REFERED

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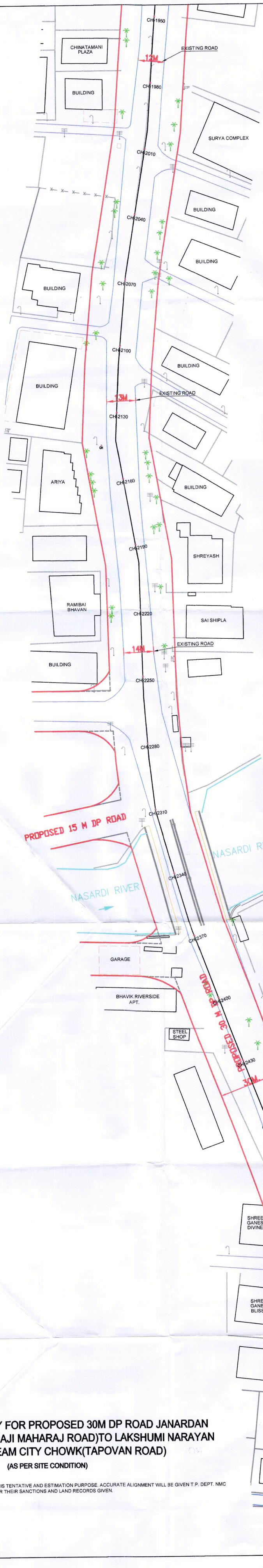
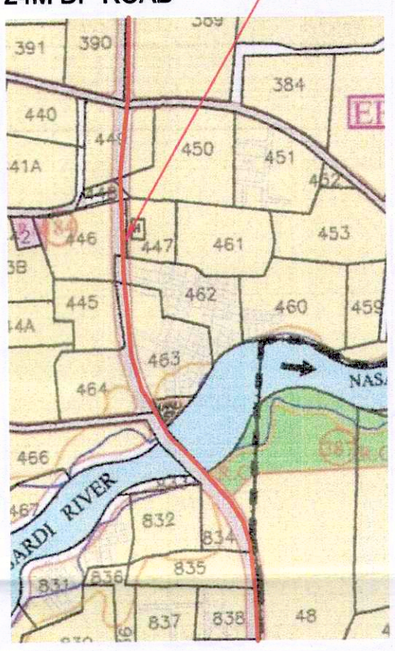
3

N

SCALE:-1:1000
PART-3




PROPOSED SITE
24M DP ROAD




LOCATION MAP (DP-2017)
SCALE-1:10000

## TOTAL STATION SURVEY FOR PROPOSED 30M DP ROAD JANARDAN SWAMI MATH (CH. SAMBHAJI MAHARAJ ROAD)TO LAKSHUMI NARAYAN BRIDGE TO DREAM CITY CHOWK(TAPOVAN ROAD)

**(AS PER SITE CONDITION)**

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LEGEND

| | |
|---|---|
| PROPOSED DP ROAD | |
| EX.TAR RD/WBM RD | |
| FOOTPATH | |
| S.NO.BANDH | |
| FENCING/TAR COMPOUND | |
| COMPOUND WALL | |
| HOUSE'S/BUILDING'S | |
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AUTHORITY :- NASHIK MUNICIPAL CORPORATION, NASHIK.

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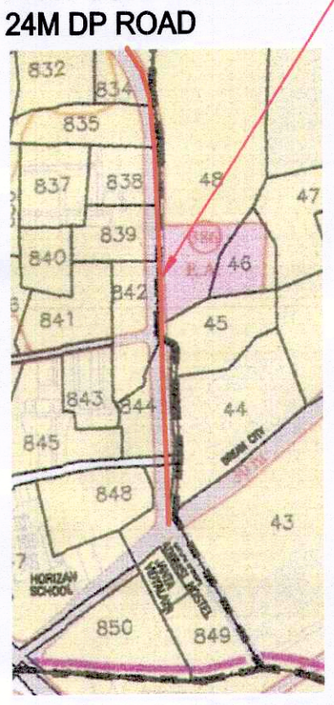
N

SCALE:-1:1000

PART-4

RAM HERITAGE
EXISTING ROAD
15M
CH-2640
CH-2670
BULDING
EXISTING ROAD
13M
GRUHAM
CH-2700
GATE
EXIASTING ASPHAD ROAD
PODDAR SCHOOL
SILVER SPRING
CH-2730
SAMAY PLYWOOD
CH-2760
NAVKAR LOTUS
CH-2790
DARGA
TATA STEEL
CH-2820
EXISTING ROAD
21M
BULDING
CH-2850
CH-2880
PRABHU SHILP APARTMENT
CH-2910
EXISTING ROAD
16M
CH-2940
EXIASTING ASPHAD ROAD
METRO MALL
CH-2970
GREEN MIND
VIRAJ
CH-3000
NAVKAR NXT
CH-3030
CH-3060
EXISTING ROAD
15M
CH-3090
CH-3120
EXISTING ROAD
12M
INFINIA BUILDING
CH-3148
DREAM CITY CHOWK
SHREEJI PINNACLE
HOUSE
EXIASTING ASPHAD ROAD
NILKANTH
VANVIHAR
JANTA VIDYALAY

PROPOSED SITE
24M DP ROAD




LOCATION MAP (DP-2017)
SCALE-1:10000

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TOTAL STATION SURVEY FOR PROPOSED 30M DP ROAD JANARDAN SWAMI MATH (CH. SAMBHAJI MAHARAJ ROAD)TO LAKSHUMI NARAYAN BRIDGE TO DREAM CITY CHOWK(TAPOVAN ROAD)
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