

**GOVERNMENT OF MAHARASHTRA**

**Public Works Department**

**Public Works Circle, Jalgaon**

**Public Work Division, Jalgaon**

**Public Work Sub-Division, Jamner**

**Estimate for the Work of**

**Construction of Cement Concrete Roads &  
Drains of D.P. Roads under Maharashtra  
Suvarana Jayanti Nagarotthan Mahabhiyan  
Yojana in Municipal Council Jamner Area Tq.  
Jamner Dist. Jalgaon (38 Roads)**

**Estimated Cost :- Rs. 149.69 Cr.**

Softtech Computers, Beed 9422655558

महाराष्ट्र सुवर्ण जयंती नगरोत्थान  
महाभियान जामनेर शहराच्या रस्ते  
विकास प्रकल्पास प्रशासकीय मान्यता  
देण्याबाबत.

महाराष्ट्र शासन  
नगर विकास विभाग  
शासन निर्णय क्रमांक :- नगरो-२०२३/प्र.क्र.४२३/नवि-३३  
मंत्रालय, मुंबई - ४०० ०३२  
दिनांक :- २६ सप्टेंबर, २०२३

संदर्भ:-

१. शासन निर्णय, नगर विकास विभाग क्र: नगरो २०१४/प्र. क्र.११९/नवि-३३,  
दिनांक २१ ऑगस्ट, २०१४.
२. शासन निर्णय, नगर विकास विभाग क्र: नगरो-२०१५/प्र.क्र.६४/नवि-३३,  
दिनांक २७ मे, २०१६.
३. शासन निर्णयनगर विकास विभाग क्र: नगरो-२०१६/प्र.क्र.३२८/नवि-३३,  
दिनांक ०४ ऑक्टोबर २०१६.
४. शासन निर्णय, नगर विकास विभाग क्र: संकिर्ण-२०१७/प्र.क्र.२३९/नवि-३३,  
दिनांक ११ मे, २०१७ व दिनांक ०७ फेब्रुवारी, २०१८.
५. नगर परिषद शासन संचालनाल यांचे क्र.नपप्रसं/नगरोत्थान/जामनेर.न.प.रस्ते प्रस्ताव/  
प्र.क्र.९४४/२०२३/का.७/४३३८, दिनांक ०४ ऑगस्ट, २०२३.
६. महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानांतर्गत प्रकल्प मान्यता व सनियंत्रण समितीच्या  
दिनांक ०८ ऑगस्ट, २०२३ रोजी झालेल्या बैठकीचे इतिवृत्त.

प्रस्तावना:-

राज्यातील नागरी भागात मुलभूत पायाभूत सुविधा पुरविण्यासाठी व त्यांचा दर्जा वाढविण्या  
करिता संदर्भाधीन क्रमांक १ येथील शासन निर्णयाच्या तरतूदीन्वये महाराष्ट्र सुवर्ण जयंती नगरोत्थान  
महाभियान राबविण्यात येत आहे.

०२. महाराष्ट्र सुवर्ण जयंती नगरोत्थान अभियानांतर्गत जामनेर नगरपरिषद रस्ते विकास प्रकल्प  
नगरपरिषद प्रशासन संचालनालयामार्फत संदर्भाधीन क्र. ५ च्या पत्रान्वये राज्यस्तरीय मान्यता  
समितीकडे मान्यतेकरीता सादर करण्यात आला होता. या प्रकल्पास मुख्य अभियंता, सार्वजनिक  
बांधकाम विभाग, नाशिक विभाग यांनी तांत्रिक मान्यता दिलेली आहे. त्यानुषंगाने राज्यस्तरीय प्रकल्प  
मान्यता समितीने दिनांक ०८ ऑगस्ट, २०२३ रोजी झालेल्या बैठकीमध्ये केलेल्या शिफारसीनुसार  
सादर प्रकल्पास प्रशासकीय मंजूरी देण्याची बाब शासनाच्या विचाराधीन होती.

शासन निर्णय:-

महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानांतर्गत सादर करण्यात आलेल्या जामनेर नगरपरिषदेच्या रस्ते विकास प्रकल्पास संदर्भाधीन शासन निर्णयातील अटी व तरतूदीच्या व सार्वजनिक बांधकाम विभागाने दिलेल्या तांत्रिक मान्यतेच्या अधीन राहून खालील विवरणपत्रात नमूद केल्यानुसार या शासन निर्णयाद्वारे मंजूरी देण्यात येत आहे. या प्रकल्पातील उपांगे व त्यांचे किंमतीचे विवरण पुढीलप्रमाणे आहे :-

अ.क्र.	रस्त्याचे नांव	कामाची मुळ किंमत
1	बजरंगपुरा मुख्य रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २५० मी./ रुंदी - १२ मी.)	१५९७८६४०
2	जुना बोदवड रस्ता सहारा क्लिनिक ते बिस्मिल्ला चौक पर्यंत सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ६१० मी./ रुंदी - १२ मी.)	३८९८७८८९
3	जुना बोदवड रस्ता मस्जिद ते जिल्हा परिषद उर्दु शाळा पर्यंत सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ७०० मी./ रुंदी - १२ मी.)	४४७४०९९९
4	जुना बोदवड रस्ता गांधी चौक ते मस्जिद पर्यंत सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ६७० मी./ रुंदी - १२ मी.)	४२८२२७५४
5	गट नं.७२९ अंतर्गत रस्ते सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ५६० मी./ रुंदी - १२ मी.)	३५७९२९५३
6	गट नं.४३८ समर्थ हॉस्पिटल ते गणपती नगर सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३७० मी./ रुंदी - १२ मी.)	२३६४८३८७
7	गट नं.४३८ मधील मुख्य रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २८० मी./ रुंदी - १२ मी.)	१७८९६०७६
8	पाचोरा रोड ते आर्शीवाद हॉस्पिटल पर्यंत जाणारा रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - १२० मी./ रुंदी - १२ मी.)	७६६९७४७
9	गट नं.१०/२ एकता नगर मधील अंतर्गत रस्ते सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - १७८० मी./ रुंदी - १२ मी.)	११३७६७९१५
10	गट नं.४२२ राजस्थान मार्बल जवळील मुख्य रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २०० मी./ रुंदी - १२ मी.)	२१३०४८५३
11	बाबाजी राघव मंगल कार्यालय समोरील सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३१० मी./ रुंदी - १२ मी.)	१९८१३५१३
12	प्रकाशनगर कडे जाणारा मुख्य रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३३० मी./ रुंदी - १२ मी.)	२१०९९८०४
13	सागर एजन्सी ते माळी मंगल कार्यालयाकडे जाणारा मुख्य रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३८० मी./ रुंदी - १२ मी.)	२४२८७५३२
14	पाचोरा रोड ते रेल्वे स्टेशनकडे जाणारा रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २०० मी./ रुंदी - १२ मी.)	१२७८२९१२

अ.क्र.	रस्त्याचे नांव	कामाची मुळ किंमत
15	गिताई नगर ते सुयोग कॉलनी पर्यंत सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - १५० मी./ रुंदी - ९ मी.)	७१९०३८८
16	बजरंगपुरा रस्ता ते भाजी मंडई पर्यंत सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - १६० मी./ रुंदी - ९ मी.)	७६६९७४७
17	एकलव्य नगर घरकुल परिसरात सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३२० मी./ रुंदी - ९ मी.)	१५३३९४९४
18	घोडेपीर बाबा घरकुल परिसरात सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ७५० मी./ रुंदी - ९ मी.)	३५९५१९३९
19	वर्धमान नगर मधील मुख्य रस्ता सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३२० मी./ रुंदी - ९ मी.)	१५३३९४९४
20	गणेशवाडी दामले प्लॉट मागील रस्ता सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - १५० मी./ रुंदी - ९ मी.)	७६६९७४७
21	स्वामी रेसिडन्सीमधील अंतर्गत सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २५५ मी./ रुंदी - ९ मी.)	१२२२३६५९
22	दत्त चैतन्य नगर मधील मुख्य रस्ता सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३८० मी./ रुंदी - ९ मी.)	१८२१५६४९
23	जैन स्थानकाजवळील सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - १३० मी./ रुंदी - ९ मी.)	६२३१६६९
24	चिप्पड गार्डन जवळील रस्ता सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ३६० मी./ रुंदी - ९ मी.)	१७२५६९३१
25	मथाई नगर मधील मुख्य रस्ता सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २०० मी./ रुंदी - ९ मी.)	९५८७१८४
26	शिक्षक कॉलनीमधील अंतर्गत सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ११० मी./ रुंदी - ९ मी.)	५२७२९५१
27	श्रीकृष्ण नगर मधील अंतर्गत सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ६२० मी./ रुंदी - ९ मी.)	२९७२०२७०
28	सोनबर्डे टेकडी कडे जाणारा मुख्य रस्ता सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ७२० मी./ रुंदी - ९ मी.)	३४५१३८६२
29	सरस्वतीनगर ते जळगाव रस्त्याकडे जाणारा सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - ६६० मी./ रुंदी - ९ मी.)	३१६३७७०७
30	नाकोडा पार्क अंतर्गत रस्ते सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २५० मी./ रुंदी - ९ मी.)	११९८३९८०
31	आय.टी.आय. व मधुवन कॉलनी अंतर्गत रस्ते सिमेंट कॉंक्रीट रस्ता व नाली बांधकाम करणे. (लांबी - २०७० मी./ रुंदी - ९ मी.)	९९२२७३५२
32	द्वारका दर्शन पार्क व गणपती नगर मधील अंतर्गत रस्ते सिमेंट कॉंक्रीट रस्ता व	१०८८१४५३६

०२. जामनेर नगरपरिषदेच्या रस्ते विकास प्रकल्पाचा वित्तीय आकृतिबंध पुढीलप्रमाणे राहिल :-

अ.क्र.	नागरी स्थानिक स्वराज्य संस्थेचे नाव	योजनेची मंजूर किंमत	राज्य शासनामार्फत अनुज्ञेय अनुदान (प्रकल्प किंमतीच्या ८५%)	नागरी स्थानिक स्वराज्य संस्थेचा सहभाग (प्रकल्प किंमतीच्या १५%)
१	२	३	४	५
१	जामनेर नगरपरिषद	रु. १४९.६९ कोटी	रु. १२७.२४ कोटी	रु. २२.४५ कोटी

०३. संदर्भाधीन क्रमांक १ येथील शासन निर्णयानुसार जामनेर नगरपरिषदेच्या रस्ते विकास प्रकल्पास खालील अटीच्या अधीन राहून प्रशासकीय मंजूरी देण्यात येत आहे:-

अ) प्रकल्प कार्यान्वयन यंत्रणा :-

१. सदर प्रकल्पाचे कार्यान्वयन जामनेर नगरपरिषदेमार्फत करण्यात यावे.
२. सदर प्रकल्पास मान्यता देताना राज्यस्तरीय प्रकल्प मान्यता समितीने विहित केलेल्या सर्व अटींची पूर्तता करणे कार्यान्वयन यंत्रणेवर बंधनकारक राहिल.

ब) सुधारणांची पूर्तता :- महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानाच्या संदर्भाधीन क्र. १ च्या शासन निर्णयानुसार नागरी स्थानिक स्वराज्य संस्थांना खाली दर्शविलेल्या बंधनकारक व वैकल्पिक सुधारणा (रिफॉर्म) पूर्ण करणे आवश्यक राहिल. त्यापैकी ८० टक्के वैकल्पिक अटींची पूर्तता प्रकल्पाच्या दुसऱ्या वर्षापर्यंत करणे आवश्यक राहिल.

I) बंधनकारक सुधारणा :-

१. प्रकल्प मंजूरीच्या पहिल्या वर्षात नगरपरिषदेने त्यांच्या कामकाजाचे पूर्ण संगणकीकरण करणे अनिवार्य राहिल. यात प्रामुख्याने ई-गव्हर्नन्स, लेखा, जन्म-मृत्यू नोंद सुधारणा याची १०० टक्के अंमलबजावणी करणे बंधनकारक राहिल.
२. उचित उपभोक्ता कर लागू करून किमान ८० टक्के वसुली करणे.
३. नागरी क्षेत्रातील गरिबांसाठी अर्थसंकल्पात विवक्षित निधीची तरतूद करणे.
४. संबंधित स्थानिक नागरी स्वराज्य संस्थेने, द्विलेखा नोंद पद्धती सहा महिन्यात पूर्ण करणे आवश्यक राहिल.
५. संबंधित नागरी स्थानिक स्वराज्य संस्थेने त्यांच्या क्षेत्रातील मालमत्ता कराचे पुनर्मुल्यांकन झाले नसल्यास, प्रकल्प मंजूरीपासून पुढील एक वर्षाच्या कालावधीत ते पूर्ण करणे बंधनकारक राहिल.
६. संबंधित नागरी स्थानिक स्वराज्य संस्थेने “घनकचरा व्यवस्थापन नियम २०१६” च्या तरतूदीनुसार त्यांच्या कार्यक्षेत्रातील घनकचरा व्यवस्थापन उचित रित्या करणे बंधनकारक राहिल.
७. संबंधित नागरी स्थानिक स्वराज्य संस्थेने त्यांच्या कार्यक्षेत्रातील मालमत्ता कराची व पाणीपट्टीची वसुली पहिल्या वर्षी किमान ८० % करणे बंधनकारक राहिल. त्यापुढील वर्षात सदरहू वसुली उर्वरीत ९० % या प्रमाणात करणे आवश्यक राहिल.

II) वैकल्पिक सुधारणा:-

१. मलनिस्सारण प्रकल्प हाती घेतलेल्या नागरी स्थानिक स्वराज्य संस्थांनी नागरी भागातील सांडपाण्याचे पुर्नप्रक्रिया व पुर्नवापर करण्याबाबतच्या घटकांचा समावेश त्यांच्या सविस्तर प्रकल्प अहवालामध्ये करावा.
२. संबंधित नागरी स्थानिक स्वराज्य संस्थांनी त्यांच्या मालकीच्या इमारतीवर पर्जन्य जलसंचय करावे.

३. संबंधित नागरी स्थानिक स्वराज्य संस्थेने नियमितपणे जल लेखापरिक्षण (वॉटर ऑडीट) करुन घ्यावे. जल लेखा परिक्षण अहवालात नमूद त्रुटींचे निराकरण करण्याबाबत संबंधित नागरी स्थानिक स्वराज्य संस्थेने, त्यासंदर्भात आवश्यक कृती कार्यक्रम तयार करुन विहित कालावधीत त्रुटींची पूर्तता करणे आवश्यक राहिल.

क) निधी वितरणाची कार्यपद्धती:-

१. महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानामधील प्रकल्पांसाठी प्रशासकीय मान्यता दिल्यानंतर संबंधित नागरी स्वराज्य संस्थेने प्रकल्पाचा आर्थिक आराखडा (Financial Closure Report) नगर विकास विभागास सादर करावा. त्यानंतर व कार्यादेश दिल्यानंतर सदर प्रकल्पासाठी पहिल्या हप्त्याचा निधी वितरीत करण्यात येईल.
२. महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियान अंतर्गत मंजूर प्रकल्पास पहिल्या हप्त्याचा निधी वितरीत केल्यानंतर तो हप्ता व स्थानिक स्वराज्य संस्थेचा त्या प्रमाणातील स्वहिस्सा हा एकत्र निधी, शासनाच्या प्रचलित धोरणानुसार विहित केलेल्या बँकांमध्ये, स्वतंत्र खाते उघडून ठेवणे अनिवार्य राहिल.
३. महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानांतर्गत मंजूर प्रकल्पासाठी स्वहिश्याचा निधी उभारताना नागरी स्थानिक स्वराज्य संस्थानी त्यांना राज्य शासनाकडून प्राप्त झालेल्या १४ व्या वित्त आयोग (मुलभूत व कार्यात्मक) अनुदानाशी तसेच प्राप्त होणाऱ्या १५ व्या वित्त आयोगाच्या अनुदानाशी सांगड (Convergence) घालणे आवश्यक राहिल. यासाठी त्यांनी यामधून मिळणारा निधी चिन्हांकीत करुन ठेवणे त्यांच्यावर बंधनकारक राहिल.
४. राज्य शासनाने वितरीत केलेल्या पहिल्या हप्त्याच्या अनुदानाची रक्कम व त्या प्रमाणात नागरी स्थानिक स्वराज्य संस्थेने जमा केलेली पहिल्या हप्त्याची स्वहिश्याची रक्कम अशा एकत्रित रकमेच्या ७५ टक्के खर्चाचे उपयोगिता प्रमाणपत्र, नगरपरिषद प्रशासन संचालनालयामार्फत शासनास सादर केल्यानंतरच राज्य शासनाचा दुसरा हप्ता वितरीत केला जाईल.
५. नागरी स्थानिक स्वराज्य संस्थांनी दुसऱ्या हप्त्याची मागणी करण्याचा प्रस्ताव नगरपरिषद प्रशासन संचालनालयामार्फत शासनास सादर करावा. नगरपरिषद प्रशासन संचालनालय यांनी प्रस्तावांची छाननी करुन उचित अभिप्रायांसह शासनास प्रस्ताव सादर करावा.
६. या अभियानांतर्गत मंजूर प्रकल्पास राज्यशासनाने संबंधित स्थानिक स्वराज्य संस्थेस राज्यशासनाचा हिस्सा मंजूर केल्यानंतर त्यामधून खर्च करताना प्रत्येक टप्प्यावर प्रत्येक देयकामध्ये राज्यशासनाच्या हिश्यामधून जेवढी रक्कम प्रदान होणार असेल त्याप्रमाणात संबंधित स्थानिक स्वराज्य संस्थेने स्वहिश्याची रक्कम प्रदान करावी.

यामुळे अशा योजनेत स्थानिक स्वराज्य संस्थेचा हिस्सा एकाच वेळी भरण्याची वेळ येणार नाही.

७. महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानामधील मंजूर प्रकल्पांसाठी राज्य शासनाने मंजूर केलेला निधी फक्त त्याच प्रकल्पासाठी वापरता येईल व तो अन्य कोणत्याही कामासाठी वळवता किंवा वापरता येणार नाही. अशाप्रकारे मूळ निधी किंवा त्यावरील व्याज कायम स्वरूपी किंवा तात्पुरत्या स्वरूपात अन्यत्र वळविणे ही गंभीर स्वरूपाची आर्थिक अनियमितता मानली जाईल, त्यासाठी संबंधित स्थानिक स्वराज्य संस्था/संबंधित अधिकारी कारवाईस पात्र ठरतील.

ड) निविदा प्रक्रिया, कार्यादेश व कार्यान्वयन :-

१. या अभियानांतर्गत मंजूर प्रकल्पास प्रशासकीय मान्यता दिल्यानंतर ७ दिवसांच्या कालावधीत निविदा काढणे व तीन महिन्यांच्या कालावधीत कार्यादेश देणे व ९९ व्या दिवसापूर्वी कामाचा प्रत्यक्ष प्रारंभ करणे बंधनकारक राहिल. या प्रकल्पासाठी कार्यान्वयन यंत्रणा जामनेर नगरपरिषद आहे. त्यामुळे या कालमर्यादेचे पालन करण्याची संपूर्ण जबाबदारी मुख्याधिकारी, जामनेर नगरपरिषद यांची राहिल.
२. सदर प्रकल्पाची निविदा प्रक्रिया राबविताना संदर्भाधीन क्रमांक ३ च्या शासन निर्णयातील सूचनाचे तंतोतंत पालन करणे कार्यान्वयन यंत्रणेस बंधनकारक राहिल.
३. यानुसार कार्यवाही न झाल्यास संबंधित नागरी स्थानिक स्वराज्य संस्थेस अशा प्रकल्पासाठी मंजूर केलेला निधी त्यावरील व्याजासह शासनास परत करणे आवश्यक राहिल.
४. सदर रस्ते विकास प्रकल्प पूर्ण करताना राज्य शासनाने संदर्भाधीन क्र. ४ येथील शासन निर्णयान्वये विहित केलेल्या कार्यपध्दतीचा अवलंब करणे बंधनकारक राहिल. या प्रकल्पातील रस्ते पाणीपुरवठा/मलनिःस्सारण अशा कामांसाठी पुन्हा खोदावे लागणार नाहीत अशा पध्दतीने या रस्त्यांच्या कामांचे नियोजन करण्यात यावे. तसेच, सदर प्रकल्पात नमूद कामे मागील ५ वर्षात इतर कुठल्याही योजनेमधून करण्यात आलेली नाहीत याची पुनश्च खातरजमा करण्याची जबाबदारी संबंधित मुख्याधिकारी यांची राहिल.
५. सदर प्रकल्पासाठी विहित केलेल्या कार्यमर्यादेत प्रकल्पाचे काम पूर्ण करणे संबंधित कार्यान्वयन यंत्रणेस बंधनकारक राहिल.
६. सदर प्रकल्पाच्या कामाचे कार्यादेश दिल्यानंतर प्रकल्पामध्ये समाविष्ट असलेल्या वस्तूंची खरेदी ही प्रकल्पाच्या आवश्यकतेनुसार प्रकल्प व्यवस्थापन सल्लागाराच्या मार्गदर्शनाने करावी.
७. सदर प्रकल्पासाठी सुरुवातीला अनावश्यक स्वरूपात कोणत्याही प्रकारच्या वस्तूंची खरेदी करणे व त्यासाठी प्रकल्प निधीतून प्रदान करणे ही गंभीर स्वरूपाची वित्तिय

अनियमितता समजण्यात येईल व त्यासाठी संबंधित कार्यान्वयन यंत्रणा व प्रकल्प व्यवस्थापन सल्लागार यंत्रणेस जबाबदार धरण्यात येईल.

इ) प्रकल्पांचे त्रयस्थ तांत्रिक परिक्षण :-

- महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियानांतर्गत मंजूर प्रकल्पांचे, अंमलबजावणीच्या विविध टप्प्यावर वेळोवेळी शासनाने विहित केलेल्या यंत्रणेपैकी एका यंत्रणेकडून “त्रयस्थ तांत्रिक परिक्षण” (थर्ड पार्टी टेक्नीकल ऑडीट) संबंधित नागरी स्थानिक स्वराज्य संस्थेने करून घेणे बंधनकारक राहिल. तसेच प्रकल्पांतर्गत दुसरा हप्ता मंजूर करण्याबाबतचा प्रस्ताव सादर करताना सदर “त्रयस्थ तांत्रिक परिक्षणाचे” गुणवत्तेबाबतचे प्रमाणपत्र सादर करणे आवश्यक राहिल. तदनंतरच दुसऱ्या हप्त्याचा निधी वितरीत केला जाईल.

फ) प्रकल्पासाठी आवश्यक स्वहिश्याचा निधी भरण्याकरिता कर्ज उभारणी :-

१. महाराष्ट्र सुवर्णजयंती नगरोत्थान महाभियानांतर्गत” मंजूर प्रकल्पांसाठी संबंधित नागरी स्थानिक स्वराज्य संस्थांना त्यांचा स्वहिश्याचा निधी उभारण्यासाठी “राष्ट्रीयकृत बँकांकडून” तसेच “मुंबई महानगर प्रदेश विकास प्राधिकरण” (एमएमआरडीए), “महाराष्ट्र नागरी पायाभूत सुविधा विकास कंपनी मर्यादीत” (एमयुआयडीसीएल) व शासन मान्य वित्तीय संस्थांकडून कर्ज घेण्याची मुभा राहिल.
२. तथापि, वित्तीय संस्थांकडून कर्ज घेताना त्यासंदर्भात आवश्यक त्या बाबींची पूर्तता केल्यानंतर प्रचलित नियमांच्या अधीन राहून कर्ज घेण्याबाबत शासनाची परवानगी घेण्यात येईल. तसेच शासनाच्या विहित प्रचलित नियमांच्या अधीन राहून आवश्यक कार्यवाही करणे बंधनकारक राहिल.

ग) प्रकल्पाची देखभाल व दुरुस्ती :-

१. महाराष्ट्र सुवर्णजयंती नगरोत्थान महाभियानांतर्गत मंजूर प्रकल्पाच्या देखभाल व दुरुस्तीबाबत आवश्यक ते नियोजन संबंधित कार्यान्वयन यंत्रणेमार्फत करण्यात यावे, जेणेकरून सदर प्रकल्पांतून होणारी फलनिष्पत्ती ही शाश्वत राहिल.
२. सदर योजनेची देखभाल व दुरुस्ती करण्याची जबाबदारी संबंधित नागरी स्थानिक स्वराज्य संस्थेची राहिल. योजनेच्या देखभाल व दुरुस्तीसाठी कोणताही निधी शासनाकडून प्राप्त होणार नाही.
३. प्रकल्प शाश्वत होण्याच्या अनुषंगाने सदर प्रकल्पाच्या सविस्तर प्रकल्प अहवालामध्ये नमूद केलेप्रमाणे रस्ते विकास कराची आकारणी करणेबाबत सर्वसाधारण सभेची मान्यता घेऊन त्याअनुषंगाने आवश्यक कार्यवाही करणे नगरपरिषदेवर बंधनकारक राहिल.

ह) इतर बंधनकारक अटी व शर्ती :-

१. राज्य शासनामार्फत नागरी स्थानिक स्वराज्य संस्थेसाठी प्रकल्प मंजूर झाल्यानंतर, मूळ प्रकल्प किंमतीमध्ये कोणत्याही कारणास्तव वाढ झाल्यास त्याची संपूर्ण जबाबदारी संबंधित नागरी स्थानिक स्वराज्य संस्थेची राहिल. राज्य शासनामार्फत त्या करिता कोणतेही वाढीव अनुदान उपलब्ध केले जाणार नाही.
२. संदर्भाधीन क्र. १ ते ४ या शासन निर्णयातील तरतूदी तसेच सर्व अटी व शर्तीची पूर्तता करणे संबंधित कार्यान्वयन यंत्रणेवर बंधनकारक राहिल.

सदर शासन निर्णय महाराष्ट्र शासनाच्या [www.maharashtra.gov.in](http://www.maharashtra.gov.in) संकेतस्थळावर उपलब्ध करण्यात आला असून, त्यांचा संगणक संकेतांक २०२३०९२६१४२६१६६९२५ असा आहे. हा शासन निर्णय डिजिटल स्वाक्षरीने साक्षांकित करून काढण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने,

**SHRIKANT  
C ANDGE**  
Digitally signed by SHRIKANT C  
ANDGE  
DN: cn=SHRIKANT C. ANDGE,  
o=Mantralaya, ou=URBAN  
DEVELOPMENT DEPARTMENT,  
email=shrikant.andge@nic.in, c=US  
Date: 2023.09.26 17:01:36 +05'30'

(श्रीकांत चं. आंडगे)

उप सचिव, महाराष्ट्र शासन

प्रति,

१. मा. मुख्यमंत्री, मंत्रालय, मुंबई.
२. मा.उप मुख्यमंत्री, मंत्रालय, मुंबई.
३. अपर मुख्य सचिव, वित्त विभाग, मंत्रालय, मुंबई.
४. अपर मुख्य सचिव, नियोजन विभाग, मंत्रालय, मुंबई.
५. अपर मुख्य सचिव, पाणीपुरवठा विभाग, गो. ते. रुग्णालय, मुंबई.
६. प्रधान सचिव, नगर विकास विभाग(२), मंत्रालय, मुंबई.
७. व्यवस्थापकीय संचालक, एम.यु.आय.डी.सी.एल, मुंबई.
८. सदस्य सचिव, महाराष्ट्र जीवन प्राधिकरण, मुंबई.
९. आयुक्त तथा संचालक, नगरपरिषद प्रशासन संचालनालय, नवी मुंबई.
१०. विभागीय आयुक्त, नाशिक.
११. जिल्हाधिकारी, जळगांव.
१२. मुख्य अभियंता, सार्वजनिक बांधकाम विभाग, नाशिक विभाग.
१३. जिल्हा प्रशासन अधिकारी, जळगांव.
१४. मुख्याधिकारी, जामनेर नगरपरिषद, जामनेर.
१५. निवडनस्ती, नवि-३३.



# नगर परिषद कार्यालय जामनेर, जि. जळगांव

फोन नं. ०२५८०/२३२५२४, फॅक्स नं. ०२५८०/२३००६२

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ग.क्र. जेपजा/समा/२२/१५१८/२०२३

दि. ०९/०१/२०२३

प्रति,  
कार्यकारी अभियंता,  
सार्वजनिक बांधकाम विभाग,  
जामनेर

मार्फत उपविभागीय अभियंता, सार्वजनिक बांधकाम उपविभाग, जामनेर

विषय : तांत्रिक मान्यता प्रदान करणेबाबत.

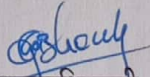
- संदर्भ : 1) शासन निर्णय क्र. नगरो-२०२३/प्र.क्र.४२३/नवि-३३ दि. २६/०९/२०२३  
2) मुख्य अभियंता, सा.बां. प्रादेशिक विभाग, नाशिक यांचे पुर्व तांत्रिक मंजूरी आदेश क्र. ३८९०/२०२३ दि. २७/०७/२०२३.

उपरोक्त विषयी संदर्भीय क्र.१द्वारे महाराष्ट्र शासनाने जामनेर नगर परिषद अंतर्गत महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियान (राज्यस्तर) अंतर्गत रु. १४९.६९ कोटी रकमेसाठी प्रशासकीय मान्यता प्रदान केलेली आहे. यासोबत तांत्रिक मान्यता शुल्क म्हणून आवश्यक रक्कमेचा धनादेश सोबत जोडण्यात येत आहे.

त्यास अनुसरून सदर कामाचे सविस्तर अंदाजपत्रक तांत्रिक मान्यतेसाठी सादर करण्यात येत आहे. तरी तातडीने तांत्रिक मान्यता प्रदान करण्यासाठी आवश्यक ती कार्यवाही व्हावी, हि विनंती.

सोबत : तां.मा. शुल्क धनादेश



  
मुख्याधिकारी,  
नगर परिषद, जामनेर



# नगर परिषद कार्यालय जामनेर, जि. जळगांव

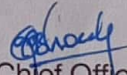
फोन नं. ०२५८०/२३२५२४, फॅक्स नं. ०२५८०/२३००६२

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## CERTIFICATE

Jamner Nagar Parishad certified that the roads submitted for Cement Concrete Roads & Drains under Maharashtra Suvarna Jayanti Maha Abhiyan Yojana have not been carried out with same provisions provided in the last 5 years in the estimate. Hence there is no duplication of works.



  
Chief Officer,  
Nagar Parishad, Jamner

**GOVERNMENT OF MAHARASHTRA**

**Public Works Department**

**Public Works Circle, Jalgaon**

**Public Work Division, Jalgaon**

**Public Work Sub-Division, Jamner**

**Estimate for the Work of**

**Construction of Cement Concrete Roads &  
Drains of D.P. Roads under Maharashtra  
Suvarana Jayanti Nagarothan Mahabhiyan  
Yojana in Municipal Council Jamner Area Tq.  
Jamner Dist. Jalgaon (38 Roads)**

**Estimated Cost :- Rs. 149.69 Cr.**

Softtech Computers, Beed 9422655558

### FUND HEAD SHEET

Division : P.W. Division, Jalgaon  
 Sanctioned Estimate No. :  
 Fund Head :  
 Major Head :  
 Minor Head :  
 Service Head :  
 Department Head :

Estimate framed in the office of the Sub-Divisional Engineer, Public Works Sub-Division, Jamner of the probable expenses that will be incurred from the work of

Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner Area Tq. Jamner Dist. Jalgaon (38 Roads)

Rs. 149.69 Cr.

Administratively approved under :  
 No. Date :  
 Technically sanctioned under :  
 No. Date :  
 Estimate prepared by : Shri Sec. Engr.  
 and checked by : Shri S.D.E.  
 P.W. Sub-Division, Jamner

(General Description)  
Separately Attached.

**Sub- Divisional Engineer,  
 P.W.Sub- Division, Jamner**

कामाचे नांव : जामनेर नगर परिषद अंतर्गत महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियान योजनेंतर्गत डी.पी. रस्त्यांची सिमेंट काँक्रीट रस्ते व पक्की नाली पद्धतीने बांधकाम करणे ता.जामनेर जि.जळगाव (३८ रस्ते)

### सर्वसाधारण अहवाल

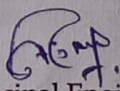
सदर अंदाजपत्रक हे जामनेर नगर परिषद अंतर्गत महाराष्ट्र सुवर्ण जयंती नगरोत्थान महाभियान योजनेंतर्गत डी.पी. रस्त्यांची सिमेंट काँक्रीट रस्ते व पक्की नाली पद्धतीने बांधकाम करणेचे कामाचे अंदाजपत्रक तयार करून तांत्रिक मान्यता प्राप्त करून घेणेसाठी मा.ना.श्री. गिरिशजी महाजन साहेब, मंत्री, ग्रामविकास खाते, महाराष्ट्र राज्य यांनी सुचविले असता सदर कामास महाराष्ट्र शासन निर्णय क्र. नगरो-२०२३/प्र.क्र.४२३/ नवि-३३, मंत्रालय, मुंबई दि. २६ सप्टेंबर २०२३ अन्वये रु. १४९.६९ लक्ष साठी प्रशासकीय मान्यता प्राप्त आहे. तसेच सदर कामाचे नगर परिषदेकडून नाहकरत प्रमाणपत्र घेऊन सविस्तर अंदाजपत्रक बनविण्यात आलेले आहे.

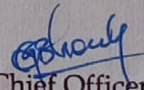
अंदाजपत्रकात खालीलप्रमाणे वाव प्रस्तावित करण्यात आला आहे.

- १) अस्तित्वातील जोत्याच्या उंचीपेक्षा रस्त्याची पातळी उंच असू नये म्हणून खोदकाम करणे
- २) ३०० मी.मी. जाडीचा कठिण मुरुमाचा थर
- ३) २० से.मी. जाडीचा जि.एस.बी. करणे
- ४) एम-१० ग्रेडचे ड्राय लिन काँक्रीट १० से.मी. जाडी
- ५) एम-३० ग्रेडचे पि.क्यू.सी. २८ से.मी. जाडीचे
- ६) पेव्हिंग ब्लॉक बसविणे
- ७) पक्की गटारीसाठी आवश्यक त्या बाबी
- ८) क्रॉसिंगसाठी व नालीवर स्लॅब टाकणे
- ९) १८ टक्के जि.एस.टी. व १ टक्का कामगार विमा.
- १०) रस्त्याच्या बाजूस विद्युत खांब व डि.पी. स्थलांतरीत करणे. तसेच रस्त्यालगत झाडे लावणे, या बाबी प्रस्तावित करण्यात आल्या आहेत.

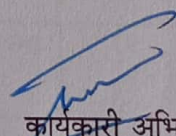
सदर अंदाजपत्रक हे सन २०२२-२३ च्या राज्य दरसूचीवर आधारीत आहे.

M.K.K. Consultant,  
Beed

  
Municipal Engineer,  
Nagar Parishad, Jamner

  
Chief Officer,  
Nagar Parishad, Jamner

उप विभागीय अभियंता,  
सा.बां. उपविभाग, जामनेर

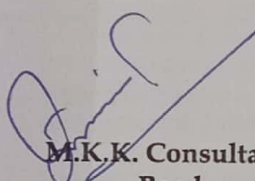
  
कार्यकारी अभियंता,  
सा.बां. विभाग, जळगाव

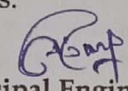
Name of Work

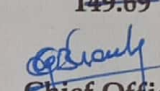
**Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra  
Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner Area Tq.  
Jamner Dist Talgaon (38 Roads)**


GENERAL ABSTRACT

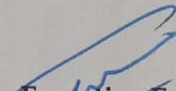
1	Cost of (A) Work Portion	=	1231191471.00	1200672087.75 <del>1220719156.68</del>
2	Cost of (B) VQCC Testing Charges	=	920695.00	9,20,695.00
3	Cost of (C) Royalty Charges	=	18312900.00	25,13,9444.90
<b>TOTAL (A+B+C) Rs.</b>			<b>= 1250425066.00</b>	<b>124,67,79,296.58</b> <del>1228732227.65</del>
4	Add for shifting of Electirc Poles & D.P. from Area of Pavement & Drains.	=	2500000.00	
5	Add for Plantation on both side of all roads	=	10000000.00	22,08,11,800.98
6	Add 18% for G.S.T. on (A)	=	221614465.00	22,44,20,273.38
7	Add 1% for Insurance Charges on (A)	=	12311915.00	1,22,67,191.57
<b>TOTAL Rs.</b>			<b>= 1496851446.00</b>	<b>149,59,06,761.53</b> <del>147,20,50,749.51</del>
<b>SAY Rs.</b>			<b>= 149.69</b>	<b>149.59</b> <del>147,20,50,750/-</del>

  
M.K.K. Consultant,  
Beed

  
Municipal Engineer,  
Nagar Parishad, Jamner

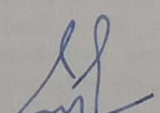
  
Chief Officer,  
Nagar Parishad, Jamner

  
Sub- Divisional Engineer,  
P.W.Sub- Division, Jamner

  
Executive Engineer,  
P.W. Division, Jalgaon

Technically sanctioned for Rs. 122,87,32,228/-  
(Rs. One hundred Twenty Two Crore Sixty Seven lac  
Thirty Two Thousand Two hundred Twenty Eight only)  
Superintending Engineer  
Public Works Circle  
Jalgaon

for

  
Chief Engineer  
P. W. Region, Nashik

Name of Work

**Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner Area Tq. Jamner Dist. Jalgaon (38 Roads)**

**ABSTRACT**

Item No.	Item of work	Quantity	Rate	Unit	Amount
1	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 50 metre and spreading for embankment or stacking as directed. [PWD S.S.R.2022-23 Item No. 2.11 Page No.23] Spec.No.MORTH 301	161084.88	123.76 122.76	Cum	19935865.00 19,774,779.87
2	Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader / Paver on prepared surface, mixing by mix in place method with rotavator at Optimum Moisture Content, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- By Mix in Place Method and Grading - II Material [PWD S.S.R.2022-23 Item No. 3.05 Page No.27] Spec.No.MORTH 401	36610.20	2169.99 2154.84	Cum	79443768.00 78,889,123.37
3	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 mili metre,, cement content not to be less than 150 Kilogram/ Cubic Metre, Optimum Moisture Content (OMC)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 etcetera complete. [PWD S.S.R.2022-23 Item No. 5.13 Page No.43] Spec.No.MORTH 601	12978.50	4122.33 4091.59	Cum	53501660.00 5,31,02,700.81
4	Providing and laying in-situ <del>M-30</del> <sup>M-40</sup> Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate(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 batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, 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 @0.6 metre X 0.6 metre centre to centre, admeasuring 80 mili metre at bottom and 40 mili metre at top with depth of 75 mili metre and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. [PWD S.S.R.2022-23 Item No. 5.06 Page No.37] Spec.No.MORTH 602	36339.80	8177.95 8114.26 8331.93	Cum	297185067.00 29,48,70,585.55 30,27,80,169.81

Item No.	Item of work	Quantity	Rate	Unit	Amount
5	Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet Confirming to Indian Standard 3395 : 1997 below concrete pavement including all materials and labour complete. [PWD S.S.R.2022-23 Item No. 5.19 Page No.44] Spec.No.MORTH 602.5	129785.00	31.20 30.95	Sqm	4049292.00 40,6845.75
6	Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, tie bars precoated with anticorrosive epoxy paint of 12 mili metre diametre 70 centi metre long and at 30.00 centi metre centre to centre and wherever directed including handling, straightening wrapping with paper of approved quality for half length, necessary cutting, handling, straightening, supported by assembly of Thermo Mechanical Treated (TMT) FE 500, chairs with proper alignment etcetera complete. [PWD S.S.R.2022-23 Item No. 5.16 Page No.43] Spec.No.MORTH 602.6.4.2	77510.00	318.24 315.67	No.	24666782.00 24,467,581.70
7	Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, 32 mili metre diametre dowel bars precoated with anticorrosive epoxy paint of required diametre 60 centi metre Long and at 30.00 centi metre centre to centre and wherever directed including handling, straightening, necessary cutting supported by Thermo Mechanical Treated (TMT) FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etcetera complete. [PWD S.S.R.2022-23 Item No. 5.14 Page No.43] Spec.No.MORTH 602.6.5	108961.00	559.52 555.00	No.	60965859.00 60,47,3355.00
8	Cutting transverse contraction joints 3 to 4 mili metre wide and depth 60 mili metre .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etcetera complete including subsequent widening of the groove 8 to 10 mili metre wide at top having depth of 15 mili metre as directed by Engineer incharge. [PWD S.S.R.2022-23 Item No. 5.17 Page No.43] Spec.No.MORTH 602.6.3 & 602.6.4	55699.00	79.04 78.40	Rgm	4402449.00 43,86,801.60
9	Providing to contraction joints polysuphide sealant (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealant 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 mili meter 4 mili metre 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 sealant is applied and applying primer. (A) Contraction and longitudinal joints (15 mili metre deep x 8 mili metre wide) [PWD S.S.R.2022-23 Item No. 5.18 Page No.44] Spec.No.MORTH 602.6.3 & 602.6.4	55699.00	323.44 320.83	Rgm	18015285.00 1,78,69910.17
10	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. [PWD S.S.R.2022-23 Item No. 2.18 Page No.24] Spec.No.MORTH 309	69759.00 65108.40	123.76 122.76	Cum	8633374.00 85,63,614.84 79,92,707.18

Item No.	Item of work	Quantity	Rate	Unit	Amount
11	Providing soling using 80 mili metre size trap metal in 15 centi metre layer including filling voids with Crushed sand/grit, ramming, watering etcetera complete. [PWD S.S.R.2022-23 Item No. 21.40 Page No.157] Spec.No.As directed by Engineer in charge.	9301.20	1766.57 1754.36	Cum	16431221.00 1,63,17,653.23
12	Providing and laying in situ / ready mix cement concrete of M-10 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etcetera complete. (with reversible drum type mixer with SCADA with fine aggregates of required specifications (Natural sand / VSI sand finely washed etcetera ) [PWD S.S.R.2022-23 Item No. 11.02 Page No.81] Spec.No.CD.-3 Page.No. 160	4650.60	6620.41 6569.50	Cum	30788879.00 3,05,52,116.70
13	Providing cast in situ / ready mix M-20 grade cement concrete for head walls of Cross Drainage Work / retaining walls etcetera including necessary form work, compaction, finishing and curing etcetera complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA [PWD S.S.R.2022-23 Item No. 11.29 Page No.83] Spec.No.CD 8 Page 163	21392.76 17439.75	10443.33 10361.46	Cum	223411652.00 2,21,60,227.03 18,07,01,272.04
14	Providing and laying in situ / ready mix M-20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab / Rigid pavement including compacting, finishing, curing etcetera complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications ( Natural sand / VSI sand finely washed etcetera ), cement 6.40 bags/Cubic Metre) [PWD S.S.R.2022-23 Item No. 11.25 Page No.82] Spec.No.CD.15 Page.No. 168 and B 7 Page No. 38	7440.96	7820.45 7759.76	Cum	58191656.00 5,77,40,63.77
15	Providing, cutting, bending, hooking, tying and laying in position Thermo Mechanical Treated (TMT) FE 500 steel bars for reinforcement for all Reinforced Cement Concrete works as per detailed drawings etcetera complete. [PWD S.S.R.2022-23 Item No. 14.01 Page No.93] Spec.No.BR.35 Page Number 134	1618.41	91874.64 91132.58	MT	148690836.00 14,74,89,878.80
16	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 600 mili metre diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etcetera complete. [PWD S.S.R.2022-23 Item No. 11.09 Page No.81] Spec.No.CD.7 Page.No. 162	3825.00	2842.32 2819.36	Rgm	10871874.00 1,09,84,052.00 49,76,6132.57
17	Transportation of excavated material with lead & lifts away from site 3.00 km. etcetera complete as directed by Engineer in Charge.	230843.88 219301.69	219.98 226.93	Cum	50781037.00 5,23,85,401.69
18	Supplying hard murum/ kankar at the road site, including conveying and stacking complete. [PWD S.S.R.2022-23 Item No. 2.29a Page No.25] Spec.No.MORTH 408	71960.42 60418.23	672.38 668.73	Cum	48384747.00 4,91,22,091.67 4,04,03,482.95
19	Spreading hard murum/ soft murum/ gravel or kankar for side width complete [PWD S.S.R.2022-23 Item No. 2.30 Page No.25] Spec.No.MORTH 408	71960.42 60418.23	82.16 81.50	Cum	5912268.00 4,92,40,85.74
20	Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etcetera complete. [PWD S.S.R.2022-23 Item No. 2.31 Page No.25] Spec.No.MORTH 408	236317.00	21.00 21.66	Sqm	4962657.00 5,11,86,26.22

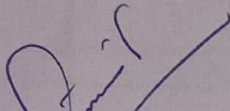
Item No.	Item of work	Quantity	Rate	Unit	Amount
21	Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 80 <sup>39</sup> mili metre thickness of having a strength of 300 Kilogram/Square Centi Metre of approved quality and shape on a bed of crushed sand of 25 to 30 mili metre thick including skirting joints and cleaning etcetera complete [PWD S.S.R.2022-23 Item No. 33.51 Page No.218] Spec.No.A directed by Engineer in charge	53266.00	967.24 959.52 1214.33	Sqm	51521006.00 51,09,792.82 6,46,82,501.78
22	Providing and constructing Brick Masonry Inspection Chamber 90 centi metre x 45 centi metre x 90 centi metre including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with Reinforced Cement Concrete Cover medium duty 140 Kilogram with frame etcetera complete. [PWD S.S.R.2022-23 Item No. 42.13 Page No.275] Spec.No.Bd.V.43, Page Number 574	930.00	11208.08 11129.03	No.	10423514.00 10,34,9,997.90
23	Providing and fixing board displaying information, such as 'Name of work, Tender cost, Name of Contractor, Work completion and liability period etcetera', having rectangular shape of 1.20 metre x 0.90 metre size made out 18 gauge (1.25 mili metre) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border / messages / symbols etcetera with approved colour shade paint complete, on Mild Steelangle of size 35 x 35 x 3 mili metre frame with properly cross braced Mild Steel angles of size 35 mili metrex35 mili metrex3 mili metre duly painted including Two Mild Steel angle iron posts of size 65 mili metre x 65 mili metre x 6 mili metre, 3.65 meter long painted with alternate black and white bands of 25 Centi Metre width including all fixtures etceteraand fixing the boards in 1:4:8 concrete block of size 60 Centi Metre x 60 Centi Metre x 75 Centi Metre including, excavation, refilling, transportation, and labour etcetera complete. Spec. No. As directed by Engineer in Charge [PWD S.S.R.2022-23 Item No. 6.36 Page No.60] Spec.No.MORTH 801	2.00	10361.52 10277.83	No.	20723.00 20,555.66
<b>Total (A) Cost of Civil Portion Rs.</b>					<b>1231191471.00</b>
24	VQCC Testing Charges				
	Standard Consistency Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness	9.00	3960.00	Test	35640.00
	Sand - Finness Modulus (Sieve Analysis), Silt Content & Clay Content	2.00	1450.00	Test	2900.00
	Water Absorption, Specific Gravity, Impact Value, Crushing Value	4.00	2730.00	Test	10920.00
	Sieve Analysis	650.00	725.00	Test	471250.00
	Concrete - Compressive Strength of Cement Concrete Cube (Set of 3 Cubes)	292.00	725.00	Test	211700.00
	Concrete Mix Design (With all Tests on basic materials)	1.00	14445.00	Test	14445.00
	Steel - Upto 16 mm (Set of 3 Bars) [Tensile strength, %, Elongation, Yield Stress, Weight-Per Meter, Bend / Rebend Test, Proof Stress.]	81.00	1340.00	Test	108540.00
	Compressive Strength of Paving Block	5.00	2620.00	Test	13100.00
	Sieve Analysis for Murum	72.00	725.00	Test	52200.00
<b>Total (B) Cost of VQCC Testing Charges Rs.</b>					<b>920695.00</b>

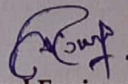
28<sub>a</sub> Royalty for sand

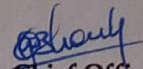
39270.91 x 237.37

93,21,35.90

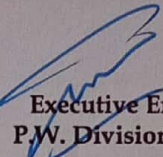
Item No.	Item of work	Quantity	Rate	Unit	Amount
28 <sub>b</sub>	Royalty Charges for All Other Material [Royalty + Surcharge (2%)]	84711.35 73169.16	216.18	Cum	18312900.00 1,58,17,709.00
Total (C) Cost of Royalty Charges Rs.					18312900.00
Total (A+B+C) Rs.					1250425066.00

  
M.K.K. Consultant,  
Beed

  
Municipal Engineer,  
Nagar Parishad, Jamner

  
Chief Officer,  
Nagar Parishad, Jamner

Sub-Divisional Engineer,  
P.W. Sub-Division, Jamner

  
Executive Engineer,  
P.W. Division, Jalgaon

24 Thermoplastic painting

$$4906.20 \times 687.05 = 33,70,804.71$$

25 Cat's eye

$$10,000 \times 377.57 = 37,75,700.00$$

26 Watering & Compaction

$$11542.19 \times 81.50 = 9,40,688.48$$

$$\begin{array}{r} \underline{124,67,79,296.58} \\ 122,67,32,227.65 \end{array}$$

2,00,47,068.93

Name of Work

**Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner Area Tq. Jamner Dist. Jalgaon (38 Roads)**

**MEASUREMENT**

<u>N.</u>	<u>ITEM</u>	<u>No.</u>	<u>L</u>	<u>B</u>	<u>D</u>	<u>QTY</u>	<u>UNIT</u>
1	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 50 metre and spreading for embankment or stacking as directed. [PWD S.S.R.2022-23 Item No. 2.11 Page No.23] Spec.No.MORTH 301						
	<b>For Road</b>						
	12 Metre Roads	1	x 6760.00	x 10.00 ✓	x 0.880	= 59488.00	
	9 Metre Roads	1	x 16493.00	x 7.00 ✓	x 0.880	= 101596.88	
						<b>Total Qty. = 161084.88</b>	<b>Cum</b>
2	Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader / Paver on prepared surface, mixing by mix in place method with rotavator at Optimum Moisture Content, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 – By Mix in Place Method and Grading - II Material [PWD S.S.R.2022-23 Item No. 3.05 Page No.27] Spec.No.MORTH 401						
	12 Metre Roads	1	x 6760.00	x 10.00 ✓	x 0.200	= 13520.00	
	9 Metre Roads	1	x 16493.00	x 7.00 ✓	x 0.200	= 23090.20	
						<b>Total Qty. = 36610.20</b>	<b>Cum</b>
3	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 mili metre,, cement content not to be less than 150 Kilogram/ Cubic Metre, Optimum Moisture Content (OMC)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 etcetera complete. [PWD S.S.R.2022-23 Item No. 5.13 Page No.43] Spec.No.MORTH 601						
	<b>For Road</b>						
	12 Metre Roads	1	x 6760.00	x 7.00 ✓	x 0.10 ✓	= 4732.00	
	9 Metre Roads	1	x 16493.00	x 5.00 ✓	x 0.10 ✓	= 8246.50	
						<b>Total Qty. = 12978.50</b>	<b>Cum</b>

- M-40 ✓
- 4 Providing and laying in-situ ~~M-30~~ Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (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 batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, 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 @0.6 metre X 0.6 metre centre to centre, admeasuring 80 mili metre at bottom and 40 mili metre at top with depth of 75 mili metre and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. [PWD S.S.R.2022-23 Item No. 5.06 Page No.37] Spec.No.MORTH 602

**For Road**

12 Metre Roads	✓	1	x	6760.00	x	7.00	x	0.28	=	13249.60
9 Metre Roads		1	x	16493.00	x	5.00	x	0.28	=	23090.20

**Total Qty. = 36339.80 Cum**

- 5 Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet Confirming to Indian Standard 3395 : 1997 below concrete pavement including all materials and labour complete. [PWD S.S.R.2022-23 Item No. 5.19 Page No.44] Spec.No.MORTH 602.5

12 Metre Roads		1	x	6760.00	x	7.00	=	47320.00
9 Metre Roads		1	x	16493.00	x	5.00	=	82465.00

**Total Qty. = 129785.00 Sqm**

- 6 Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, tie bars precoated with anticorrosive epoxy paint of 12 mili metre diametre 70 centi metre long and at 30.00 centi metre centre to centre and wherever directed including handling, straightening wrapping with paper of approved quality for half length, necessary cutting, handling, straightening, supported by assembly of Thermo Mechanical Treated (TMT) FE 500, chairs with proper alignment etcetera complete. [PWD S.S.R.2022-23 Item No. 5.16 Page No.43] Spec.No.MORTH 602.6.4.2

7 Metre Roads				6760.00	/	0.30	=	22533.00
5 Metre Roads				16493.00	/	0.30	=	54977.00

**Total Qty. = 77510.00 No.**

- 7 Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, 32 mili metre diametre dowel bars precoated with anticorrosive epoxy paint of required diametre 60 centi metre Long and at 30.00 centi metre centre to centre and wherever directed including handling, straightening, necessary cutting supported by Thermo Mechanical Treated (TMT) FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etcetera complete. [PWD S.S.R.2022-23 Item No. 5.14 Page No.43] Spec.No.MORTH 602.6.5

**7 m Road**

6760.00 / 4.00 = 1690 Nos.

1690.00 x 23.00 = 38870.00

**5 m Road**

16493.00 / 4.00 = 4123 Nos.

4123.00 x 17.00 = 70091.00

**Total Qty. = 108961.00 No.**

- 8 Cutting transverse contraction joints 3 to 4 mili metre wide and depth 60 mili metre .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etcetera complete including subsequent widening of the groove 8 to 10 mili metre wide at top having depth of 15 mili metre as directed by Engineer incharge. [PWD S.S.R.2022-23 Item No. 5.17 Page No.43] Spec.No.MORTH 602.6.3 & 602.6.4

Add for Transverse Joints	For 7 M Width	6760.00	x	1.00	=	6760.00 ✓
Add for Transverse Joints	For 5 M Width	16493.00	x	1.00	=	16493.00 ✓
For 7 M Width	1	x	6760.00	/	4.00	x 7.00 = 11830.00 ✓
For 5 M Width	1	x	16493.00	/	4.00	x 5.00 = 20616.00 ✓

Total Qty. = 55699.00 **Rgm**

- 9 Providing to contraction joints polysuphide sealant (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealant 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 mili meter 4 mili metre 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 sealant is applied and applying primer. (A) Contraction and longitudinal joints (15 mili metre deep x 8 mili metre wide) [PWD S.S.R.2022-23 Item No. 5.18 Page No.44] Spec.No.MORTH 602.6.3 & 602.6.4

Qty as per Item No.8 = 55699.00 ✓

Total Qty. = 55699.00 **Rgm**

- 10 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. [PWD S.S.R.2022-23 Item No. 2.18 Page No.24] Spec.No.MORTH 309

**For Drain**

12 Metre Roads	2	x	6760.00	x	1.00	x	<sup>1.40</sup> 1.50 ✓	=	20280.00	18928.00
9 Metre Roads	2	x	16493.00	x	1.00	x	<sup>1.32</sup> 1.50 ✓	=	49479.00	46180.40
									<sup>65108.40</sup>	
									Total Qty. =	<u>69759.00</u> Cum

- 11 Providing soling using 80 mili metre size trap metal in 15 centi metre layer including filling voids with Crushed sand/ grit, ramming, watering etcetera complete. [PWD S.S.R.2022-23 Item No. 21.40 Page No.157] Spec.No.As directed by Engineer in charge.

**For Drain**

12 Metre Roads	2	x	6760.00	x	1.00	x	0.20 ✓	=	2704.00
9 Metre Roads	2	x	16493.00	x	1.00	x	0.20 ✓	=	6597.20

Total Qty. = 9301.20 Cum

- 12 Providing and laying in situ / ready mix cement concrete of M-10 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etcetera complete. (with reversible drum type mixer with SCADA with fine aggregates of required specifications (Natural sand / VSI sand finely washed etcetera ) [PWD S.S.R.2022-23 Item No. 11.02 Page No.81] Spec.No.CD.-3 Page.No. 160

**For Drain**

12 Metre Roads	2	x	6760.00	x	1.00	x	0.10	=	1352.00
9 Metre Roads	2	x	16493.00	x	1.00	x	0.10	=	3298.60

**Total Qty. = 4650.60 Cum**

- 13 Providing cast in situ / ready mix M-20 grade cement concrete for head walls of Cross Drainage Work / retaining walls etcetera including necessary form work, compaction, finishing and curing etcetera complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA [PWD S.S.R.2022-23 Item No. 11.29 Page No.83] Spec.No.CD 8 Page 163

**For Drain**

12 Metre Roads	2	x	2	x	6760.00	x	0.20 <sup>0.15</sup>	x	0.90 <sup>0.75</sup>	=	4867.20	3042.00
For Bed			2	x	6760.00	x	1.00	x	0.10 <sup>0.15</sup>	=	1352.00	2028.00
9 Metre Roads	2	x	2	x	16493.00	x	0.20 <sup>0.15</sup>	x	0.90 <sup>0.75</sup>	=	11874.96	7421.85
For Bed			2	x	16493.00	x	1.00	x	0.10 <sup>0.15</sup>	=	3298.60	4947.90

**Total Qty. = 17439.75 Cum**

- 14 Providing and laying in situ / ready mix M-20 cement concrete of trap / granite / quartzite / gneiss metal for approach slab / Rigid pavement including compacting, finishing, curing etcetera complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications ( Natural sand / VSI sand finely washed etcetera ), cement 6.40 bags/Cubic Metre) [PWD S.S.R.2022-23 Item No. 11.25 Page No.82] Spec.No.CD.15 Page.No. 168 and B.7. Page No. 38

<b>For Slab on Drain</b>	2	x	18602.40	x	1.00	x	0.20	=	7440.96
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80% Qty of Drain Length including Opening

**Total Qty. = 7440.96 Cum**

- 15 Providing, cutting, bending, hooking, tying and laying in position Thermo Mechanical Treated (TMT) FE 500 steel bars for reinforcement for all Reinforced Cement Concrete works as per detailed drawings etcetera complete. [PWD S.S.R.2022-23 Item No. 14.01 Page No.93] Spec.No.BR.35 Page Number 134

For Drain Wall - Qty as per Item No.13	21392.76	@	60.00	Kg/Cum	=	1283565.60
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For Slab - Qty as per Item No.14	7440.96	@	45.00	Kg/Cum	=	334843.20
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**Total Qty. = 1618408.80 Kg**

**i.e. = 1618.41 MT**



- 20 Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etcetera complete. [PWD S.S.R.2022-23 Item No. 2.31 Page No.25] Spec.No.MORTH 408

**For Blanketing**

12 Metre Roads	1	x	6760.00	x	10.00	=	67600.00
9 Metre Roads	1	x	16493.00	x	7.00	=	115451.00

**For Side Shoulders Below Paver Block**

12 Metre Roads	2	x	6760.00	x	1.50	=	20280.00
9 Metre Roads	2	x	16493.00	x	1.00	=	32986.00

**Total Qty. = 236317.00 Sqm**

- 21 Providing and fixing heavy duty inter locking concrete Coloured paving blocks of <sup>80</sup> 80 mili metre thickness of having a strength of 300 Kilogram/Square Centi Metre of approved quality and shape on a bed of crushed sand of 25 to 30 mili metre thick including skirting joints and cleaning etcetera complete [PWD S.S.R.2022-23 Item No. 33.51 Page No.218] Spec.No.A directed by Engineer in charge

12 Metre Roads	2	x	6760.00	x	1.50	=	20280.00
9 Metre Roads	2	x	16493.00	x	1.00	=	32986.00

**Total Qty. = 53266.00 Sqm**

- 22 Providing and constructing Brick Masonry Inspection Chamber 90 centi metre x 45 centi metre x 90 centi metre including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with Reinforced Cement Concrete Cover medium duty 140 Kilogram with frame etcetera complete. [PWD S.S.R.2022-23 Item No. 42.13 Page No.275] Spec.No.Bd.V.43, Page 574

For Utilities	2	x	135.00	=	270.00
	2	x	330.00	=	660.00

**Total Qty. = 930.00 No.**

- 23 Providing and fixing board displaying information, such as 'Name of work, Tender cost, Name of Contractor, Work completion and liability period etcetera', having rectangular shape of 1.20 metre x 0.90 metre size made out 18 gauge (1.25 mili metre) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border / messages / symbols etcetera with approved colour shade paint complete, on Mild Steel angle of size 35 x 35 x 3 mili metre frame with properly cross braced Mild Steel angles of size 35 mili metrex35 mili metrex3 mili metre duly painted including Two Mild Steel angle iron posts of size 65 mili metre x 65 mili metre x 6 mili metre, 3.65 meter long painted with alternate black and white bands of 25 Centi Metre width including all fixtures etcetera and fixing the boards in 1:4:8 concrete block of size 60 Centi Metre x 60 Centi Metre x 75 Centi Metre including, excavation, refilling, transportation, and labour etcetera complete. Spec. No. As directed by Engineer in Charge [PWD S.S.R.2022-23 Item No. 6.36 Page No.60] Spec.No.MORTH 801

	1	x	2.00	=	2.00
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**Total Qty. = 2.00 No.**

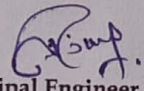
24 VQCC Testing Charges

Standard Consistency Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive St	= 9.00	Test ✓
Sand - Finness Modulus (Sieve Analysis), Silt Content & Clay Content	= 2.00	Test ✓
Water Absorption, Specific Gravity, Impact Value, Crushing Value	= 4.00	Test ✓
Sieve Analysis	= 650.00	Test 100
Concrete - Compressive Strength of Cement Concrete Cube (Set of 3 Cubes)	= 292.00	Test
Concrete Mix Design (With all Tests on basic materials)	= 1.00	Test ✓
Steel - Upto 16 mm (Set of 3 Bars) [Tensile strength, %, Elongation, Yield Stress, Weight-Per Me	= 81.00	Test 15
Compressive Strength of Paving Block	= 5.00	Test 02
Sieve Analysis for Murum	= 72.00	Test 15

28 Royalty Charges for All Other Material [Royalty + Surcharge (2%)]

Sand	= 39270.91 Cum
For Above 40 mm Metal	= 12750.93
For Hard Murum	= <u>71960.42</u>
	60418.23
Total Qty.	= <u>84711.35</u> Cum
	73169.16

  
M.K.K. Consultant,  
Beed

  
Municipal Engineer,  
Nagar Parishad, Jamner

Sub-Divisional Engineer,  
P.W. Sub-Division, Jamner

24:- Thermoplastic Road Marking

7.20m Road	2 x 6760.00 x 0.10	= 1352.00
$\frac{6760}{9}$	752 x 3.00 x 0.10	= 225.60
Zebra crossing	5 x 5 x 7.00 x 0.10	= 17.50
5.00 Road	2 x 16493.00 x 0.10	= 3298.60
Zebra crossing	5 x 5 x 5.00 x 0.10	= <u>12.50</u>
		4906.20 Sqm

5:- Cat's eye

10000.00 = 10000.00 Nos.

26:- Watering & Compaction

It. No. 1	- 161084.88 x 5%	= 8054.24
It. No. 10	- 69759.00 x 5%	= <u>3487.95</u>
		11542.19 Cum

### Name of Work

## Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarothan Mahabhiyan Yojana in Municipal Council Jamner Area Tq. Jamner Dist. Jalgaon (38 Roads)

### RATE ANALYSIS

- 1 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 50 metre and spreading for embankment or stacking as directed. [PWD S.S.R.2022-23 Item No. 2.11 Page No.23] Spec.No.MORTH 301

Rate as per S.S.R.			Rs.---	119.00
Add 4% for M.C. Tax	94.01	(119.00)	0.04	Rs.---
				(4.76) 3.76
				Rs.---
				(123.76) / Cum
				122.76

- 2 Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader / Paver on prepared surface, mixing by mix in place method with rotavator at Optimum Moisture Content, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- By Mix in Place Method and Grading - II Material [PWD S.S.R.2022-23 Item No. 3.05 Page No.27] Spec.No.MORTH 401

Rate as per S.S.R.			Rs.---	1804.00
Add 4% for M.C. Tax	1425.16	(1804.00)	0.04	Rs.---
				(72.16) 57.01
Add lead for 20 mm Metal	0.448	229.55	Rs.---	102.84 -
Add lead for 10 mm Metal	0.320	229.55	Rs.---	73.46 -
Add lead for Stone Dust	0.512	229.55	Rs.---	117.53 ✓
				Rs.---
				(2169.99) / Cum
				2154.84

- 3 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 mili metre,, cement content not to be less than 150 Kilogram/ Cubic Metre, Optimum Moisture Content (OMC)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 etcetera complete. [PWD S.S.R.2022-23 Item No. 5.13 Page No.43] Spec.No.MORTH 601

Rate as per S.S.R.			Rs.---	3659.00
Add 4% for M.C. Tax	2890.81	(3659.00)	0.04	Rs.---
				(146.36) 115.62
Add lead for 40 mm Metal (CB)	0.70	219.98	Rs.---	153.99
Add lead for 20 mm Metal	0.24	229.55	Rs.---	55.09
Add lead for Sand	0.470	229.55	Rs.---	107.89
				Rs.---
				(4122.33) / Cum
				4091.59

- 4 Providing and laying in-situ <sup>MA-40</sup> 150 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (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 batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, 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 @0.6 metre X 0.6 metre centre to centre, admeasuring 80 mili metre at bottom and 40 mili metre at top with depth of 75 mili metre and maintaining the same throughout curing period by any other method approved by Engineer-in-charge. [PWD S.S.R.2022-23 Item No. 5.01 Page No.37] Spec.No.MORTH 602

Rate as per S.S.R.			Rs.---	7793.00 <u>7582.00</u>
Add 4% for M.C. Tax	6156.47 <u>7582.00</u>	0.04	Rs.---	<u>303.28</u> 246.26
Add lead for 20 mm Metal	0.57	229.55	Rs.---	130.84
Add lead for 12 mm Metal	0.28	229.55	Rs.---	64.27
Add lead for Sand	0.425	229.55	Rs.---	97.56
			Rs.---	<u>8177.95</u> / Cum
				8331.93

- 5 Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet Confirming to Indian Standard 3395 : 1997 below concrete pavement including all materials and labour complete. [PWD S.S.R.2022-23 Item No. 5.19 Page No.44] Spec.No.MORTH 602.5

Rate as per S.S.R.			Rs.---	30.00
Add 4% for M.C. Tax	23.70 <u>30.00</u>	0.04	Rs.---	<u>1.20</u> 0.95
			Rs.---	<u>31.20</u> / Sqm
				30.95

- 6 Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, tie bars precoated with anticorrosive epoxy paint of 12 mili metre diametre 70 centi metre long and at 30.00 centi metre centre to centre and wherever directed including handling, straightening wrapping with paper of approved quality for half length, necessary cutting, handling, straightening, supported by assembly of Thermo Mechanical Treated (TMT) FE 500, chairs with proper alignment etcetera complete. [PWD S.S.R.2022-23 Item No. 5.16 Page No.43] Spec.No.MORTH 602.6.4.2

Rate as per S.S.R.			Rs.---	306.00
Add 4% for M.C. Tax	241.74 <u>306.00</u>	0.04	Rs.---	<u>12.24</u> 9.67
			Rs.---	<u>318.24</u> / No.
				315.67

- 7 Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, 32 mili metre diametre dowel bars precoated with anticorrosive epoxy paint of required diametre 60 centi metre Long and at 30.00 centi metre centre to centre and wherever directed including handling, straightening, necessary cutting supported by Thermo Mechanical Treated (TMT) FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etcetera complete. [PWD S.S.R.2022-23 Item No. 5.14 Page No.43] Spec.No.MORTH 602.6.5

Rate as per S.S.R.			Rs.---	538.00
Add 4% for M.C. Tax	425.02	0.04	Rs.---	<u>21.52</u> 17.00
	538.00		Rs.---	<u>559.52</u> / No.
				555.00

- 8 Cutting transverse contraction joints 3 to 4 mili metre wide and depth 60 mili metre .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etcetera complete including subsequent widening of the groove 8 to 10 mili metre wide at top having depth of 15 mili metre as directed by Engineer incharge. [PWD S.S.R.2022-23 Item No. 5.17 Page No.43] Spec.No.MORTH 602.6.3 & 602.6.4

Rate as per S.S.R.			Rs.---	76.00
Add 4% for M.C. Tax	60.04	0.04	Rs.---	<u>3.04</u> 2.40
	76.00		Rs.---	<u>79.04</u> / Rgm
				78.40

- 9 Providing to contraction joints polysuphide sealant (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealant 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 mili meter 4 mili metre 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 sealant is applied and applying primer. (A) Contraction and longitudinal joints (15 mili metre deep x 8 mili metre wide) [PWD S.S.R.2022-23 Item No. 5.18 Page No.44] Spec.No.MORTH 602.6.3 & 602.6.4

Rate as per S.S.R.			Rs.---	311.00
Add 4% for M.C. Tax	245.69	0.04	Rs.---	<u>12.44</u> 9.83
	311.00		Rs.---	<u>323.44</u> / Rgm
				320.83

- 10 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. [PWD S.S.R.2022-23 Item No. 2.18 Page No.24] Spec.No.MORTH 309

Rate as per S.S.R.			Rs.---	119.00
Add 4% for M.C. Tax	119.00	0.04	Rs.---	<u>4.76</u> 3.76
	119.00		Rs.---	<u>123.76</u> / Cum
				122.76

- 11 Providing soling using 80 mili metre size trap metal in 15 centi metre layer including filling voids with Crushed sand/grit, ramming, watering etcetera complete. [PWD S.S.R.2022-23 Item No. 21.40 Page No.157] Spec.No.As directed by Engineer in charge.

Rate as per S.S.R.			Rs.---	1454.00
Add 4% for M.C. Tax	1148.66		Rs.---	<del>1454.00</del> 45.95
Add lead for Soling	1.00	219.98	Rs.---	219.98
Add lead for Grit (6 mm Metal)	0.15	229.55	Rs.---	34.43
			Rs.---	<u>1766.57 / Cum</u>
				1754.36

- 12 Providing and laying in situ / ready mix cement concrete of M-10 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etcetera complete. (with reversible drum type mixer with SCADA with fine aggregates of required specifications (Natural sand / VSI sand finely washed etcetera ) [PWD S.S.R.2022-23 Item No. 11.02 Page No.81] Spec.No.CD.-3 Page.No. 160

Rate as per S.S.R.			Rs.---	6061.00
Add 4% for M.C. Tax	4788.19		Rs.---	<del>6061.00</del> 191.53
Add lead for 40 mm Metal (CB)	0.70	219.98	Rs.---	153.99
Add lead for 20 mm Metal	0.24	229.55	Rs.---	55.09
Add lead for Sand	0.470	229.55	Rs.---	107.89
			Rs.---	<u>6620.41 / Cum</u>
				6569.50

- 13 Providing cast in situ / ready mix M-20 grade cement concrete for head walls of Cross Drainage Work / retaining walls etcetera including necessary form work, compaction, finishing and curing etcetera complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA [PWD S.S.R.2022-23 Item No. 11.29 Page No.83] Spec.No.CD 8 Page 163

Rate as per S.S.R.			Rs.---	9747.00
Add 4% for M.C. Tax	7700.13		Rs.---	<del>9747.00</del> 308
Add lead for 20 mm Metal	0.67	229.55	Rs.---	153.80
Add lead for 12 mm Metal	0.22	229.55	Rs.---	50.50
Add lead for Sand	0.445	229.55	Rs.---	102.15
			Rs.---	<u>10443.33 / Cum</u>
				10361.46

- 14 Providing and laying in situ / ready mix M-20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab / Rigid pavement including compacting, finishing, curing etcetera complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications ( Natural sand / VSI sand finely washed etcetera ), cement 6.40 bags/Cubic Metre) [PWD S.S.R.2022-23 Item No. 11.25 Page No.82] Spec.No.CD.15 Page.No. 168 and B.7. Page No. 38

Rate as per S.S.R.			Rs.---	7225.00
Add 4% for M.C. Tax	5707.75		Rs.---	289.00 228.31
	<u>7225.00</u>	0.04		
Add lead for 20 mm Metal	0.67	229.55	Rs.---	153.80
Add lead for 12 mm Metal	0.22	229.55	Rs.---	50.50
Add lead for Sand	0.445	229.55	Rs.---	102.15
			Rs.---	<u>7820.45</u> / Cum
				7759.76

- 15 Providing, cutting, bending, hooking, tying and laying in position Thermo Mechanical Treated (TMT) FE 500 steel bars for reinforcement for all Reinforced Cement Concrete works as per detailed drawings etcetera complete. [PWD S.S.R.2022-23 Item No. 14.01 Page No.93] Spec.No.BR.35 Page Number 134

Rate as per S.S.R.			Rs.---	88341.00
Add 4% for M.C. Tax	69789.39		Rs.---	3533.64 2791.58
	<u>88341.00</u>	0.04		
			Rs.---	<u>91874.64</u> / MT
				91132.58

- 16 Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 600 mili metre diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etcetera complete. [PWD S.S.R.2022-23 Item No. 11.09 Page No.81] Spec.No.CD.7 Page.No. 162

Rate as per S.S.R.			Rs.---	2733.00
Add 4% for M.C. Tax	2159.07		Rs.---	109.32 86.36
	<u>2733.00</u>	0.04		
			Rs.---	<u>2842.32</u> / Rgm
				2819.36

- 17 Transportation of excavated material with lead & lifts away from site 3.00 km. etcetera complete as directed by Engineer in Charge.

Rate as per S.S.R.			Rs.---	6.95
Lead for 3.00 Km.	173.78 x 4%		Rs.---	0.00
	1.00	219.98	Rs.---	219.98
			Rs.---	<u>219.98</u> / Cum
				226.93

- 18 Supplying hard murum/ kankar at the road site, including conveying and stacking complete. [PWD S.S.R.2022-23 Item No. 2.29a Page No.25] Spec.No.MORTH 408

Rate as per S.S.R.			Rs.---	435.00
Add 4% for M.C. Tax	343.65		Rs.---	17.40 13.75
	<u>435.00</u>	0.04		
Add lead for Hard Murum	1.00	219.98	Rs.---	219.98
			Rs.---	<u>672.38</u> / Cum
				668.73

19 Spreading hard murum/ soft murum/ gravel or kankar for side width complete [PWD S.S.R.2022-23 Item No. 2.30 Page No.25] Spec.No.MORTH 408

Rate as per S.S.R.	62.41		Rs---	79.00
Add 4% for M.C. Tax	79.00	0.04	Rs---	3.16 2.50
			Rs---	<u>82.16 / Cum</u>

21 Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 60<sup>80</sup> mili metre thickness of having a strength of 300 Kilogram/Square Centi Metre of approved quality and shape on a bed of crushed sand of 25 to 30 mili metre thick including skirting joints and cleaning etcetera complete [PWD S.S.R.2022-23 Item No. 33.52 Page No.218] Spec.No.A directed by Engineer in charge

Rate as per S.S.R.	921.14		Rs---	1166.00 919.00
Add 4% for M.C. Tax	919.00	0.04	Rs---	36.76 36.85
Add lead for Sand	0.050	229.55	Rs---	11.48
			Rs---	<u>967.24 / Sqm</u>

22 Providing and constructing Brick Masonry Inspection Chamber 90 centi metre x 45 centi metre x 90 centi metre including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with Reinforced Cement Concrete Cover medium duty 140 Kilogram with frame etcetera complete. [PWD S.S.R.2022-23 Item No. 42.13 Page No.275] Spec.No.Bd.V.43, Page Number 574

Rate as per S.S.R.	8513.83		Rs---	10777.00
Add 4% for M.C. Tax	10777.00	0.04	Rs---	431.08 340.55
			Rs---	<u>11208.08 / No.</u>

20 Compacting HM

$$16.59 \times 0.04$$

Rs - 21.00

0.66

Rs - 21.66 / Sqm

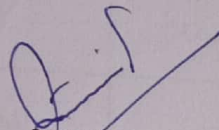
23 Providing and fixing board displaying information, such as 'Name of work, Tender cost, Name of Contractor, Work completion and liability period etcetera', having rectangular shape of 1.20 metre x 0.90 metre size made out 18 gauge (1.25 mili metre) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border / messages / symbols etcetera with approved colour shade paint complete, on Mild Steel angle of size 35 x 35 x 3 mili metre frame with properly cross braced Mild Steel angles of size 35 mili metrex35 mili metrex3 mili metre duly painted including Two Mild Steel angle iron posts of size 65 mili metre x 65 mili metre x 6 mili metre, 3.65 meter long painted with alternate black and white bands of 25 Centi Metre width including all fixtures etcetera and fixing the boards in 1:4:8 concrete block of size 60 Centi Metre x 60 Centi Metre x 75 Centi Metre including, excavation, refilling, transportation, and labour etcetera complete. Spec. No. As directed by Engineer in Charge  
 [PWD S.S.R.2022-23 Item No. 6.36 Page No.60] Spec.No.MORTH 801

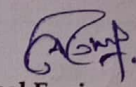
Rate as per S.S.R.

Add 4% for M.C. Tax

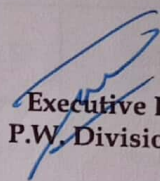
7870.77  
 9963.00 0.04

Rs---	9963.00
Rs---	<u>398.52</u> 314.83
Rs---	<u>10361.52</u> /No.
	10277.83

  
 M.K.K. Consultant,  
 Beed

  
 Municipal Engineer,  
 Nagar Parishad, Jamner

Sub-Divisional Engineer,  
 P.W.Sub-Division, Jamner

  
 Executive Engineer,  
 P.W. Division, Jalgaon

24 Thermoplastic Road Marking - 6.129

Rs :- 666.00

526.14 x 0.04

21.05  
Rs - 687.05 / Sqm

25 Cat's Eye - 6.09

Rs :- 366.00

289.19 x 0.04

11.57  
Rs - 377.57 / No.

26 Watering and Compaction - 2.24

Rs 79.00

62.41 x 0.04

2.50  
81.50 / Cum

Name of Work

Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra  
Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner  
Area Tq. Jamner Dist. Jalgaon (38 Roads)

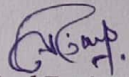
LEAD CHART

Sr, No.	Material	Location of Quarry	Lead in Km.	Lead charges	Pay Load Factor	Net lead charges
1	40 mm Metal & above	Local	3.00	1319.89	6.00	219.98
2	Cr. Metal	Local	3.00	1319.89	5.75	229.55
3	Sand (Crushed)	Local	3.00	1319.89	5.75	229.55
4	Cement/ Steel	Local	0.00	0.00	10.00	0.00
5	Murum	Gairan	3.00	1319.89	6.00	219.98
6	Transportation	Away Site	3.00	1319.89	6.00	219.98

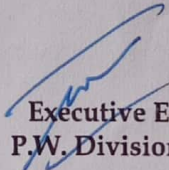
**CERTIFICATE**

Certified that no construction material is available at lesser distance than above shown.  
Certified that good quality and sufficient quantity material available in shown quarry.  
Certified that the distances shown above are verified by me and found correct.

  
M.K.K. Consultant,  
Beed

  
Municipal Engineer,  
Nagar Parishad, Jamner

Sub- Divisional Engineer,  
P.W.Sub- Division, Jamner

  
Executive Engineer,  
P.W. Division, Jalgaon

Name of Work :

Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarothan Mahabhiyan Yojana in Municipal Council Jammu  
Area Tq. Jammu Dist. Jammu (38 Roads)

MATERIAL REQUIREMENT AS PER THEROTICAL CONSUMPTION

Sr. No.	Description of item	As per Estimate		Cement		Metal			Sand			Brick		Steel		Murum		Unit	
		Quantity	Rate in Rs	Amount in Rs	Rate of consumption pylon	Total Cement in Bags	Rate of consumption in 40 mm Stone	Total Below 40 mm Stone	Rate of consumption in 40 mm Stone	Total 40 mm & above Stone	Rate of consumption pylon	Sand in Cum	Rate of consumption	Brick in Nos.	H.Y.S.D.	Mild	Rate of consumption		Murum in Cum
1	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side	3	4	5	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side	161084.88	123.76	19935865.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Cum
2	Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader / Paver on prepared surface, mixing by	36610.20	2169.99	79443768.00	0.00	0.00	1.280	46861.06	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Cum
3	Construction of dry lean cement concrete Sub-base over a prepared sub-grade with coarse and fine aggregate (Natural Sand/ VSI) grade finely washed	12978.50	4122.33	53501680.00	0.30	3893.55	0.890	11550.87	0.00	0.00	0.470	6099.90	0	0	0.00	0.00	0.00	0.00	Cum
4	Providing and laying in-situ M-30 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse and fine	36339.80	8177.95	297185067.00	0.40	14535.92	0.850	30888.83	0.00	0.00	0.425	15444.42	0	0	0.00	0.00	0.00	0.00	Cum
5	Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet Confirming to Indian Standard 3395 : 1997 below concrete pavement	129785.00	31.20	4049292.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Sqrm
6	Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, tie bars precast with anticorrosive epoxy paint of 12 millimetre diameter	77510.00	318.24	24668782.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	No.
7	Providing and fixing in position Thermo Mechanical Treated (TMT) FE 500, 32 millimetre diameter dowel bars precast with anticorrosive epoxy paint of	108961.00	559.52	60965869.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	No.
8	Cutting transverse contraction joints 3 to 4 millimetre wide and depth 60 millimetre in concrete slab using concrete cutting machine with diamond studded saw	55699.00	79.04	4402449.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Rgm
9	Providing to contraction joints polysulphide sealant (Pouring grade) conforming to BS : 5212 - 1989 into sawed groove widened at top for sealant reservoir of	55699.00	323.44	18015285.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Rgm
10	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	69759.00	123.76	8633374.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Cum
11	Providing soling using 80 millimetre size trap metal in 15 centimetre layer including filling voids with Crushed sand/grit, ramming, watering etcetera	9301.20	1766.57	16431221.00	0.00	0.00	0.150	1395.18	1.00	9301.20	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Cum
12	Providing and laying in situ / ready mix cement concrete of M-10 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including	4650.60	6620.41	30788879.00	0.22	1023.13	0.240	1116.14	0.70	3255.42	0.470	2185.78	0	0	0.00	0.00	0.00	0.00	Cum
13	Providing cast in situ / ready mix M-20 grade cement concrete for head walls of Cross Drainage Work / retaining walls etcetera including necessary form	21392.76	10443.33	223411652.00	0.30	6417.83	0.890	19039.56	0.00	0.00	0.445	9519.78	0	0	0.00	0.00	0.00	0.00	Cum
14	Providing and laying in situ / ready mix M-20 cement concrete of trap/ granite /quartzite /gneiss metal for approach slab / Rigid pavement including	7440.96	7820.45	58191656.00	0.30	2232.29	0.850	6324.82	0.00	0.00	0.445	3311.23	0	0	0.00	0.00	0.00	0.00	Cum
15	Providing, cutting, bending, hooking, tying and laying in position Thermo Mechanical Treated (TMT) FE 500 steel bars for reinforcement for all Reinforced	1618.41	91874.64	148690836.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	1.00	1618.41	0.00	0.00	MT
16	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 600 millimetre diameter in proper line, level and slope including providing and	3825.00	2842.32	10871874.00	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Rgm

Sr. No.	Description of Item	As per Estimate		Cement		Metal				Sand		Brick		Steel		Murum		Unit	
		Quantity	Rate in Rs	Amount in Rs	Rate of consumption	Total Cement in Bags	Rate of consumption in 40 mm Stone	Total Below 40 mm Stone	Rate of consumption in 40 mm Stone	Total 40 mm & above Stone	Rate of consumption	Sand in Cum	Rate of consumption	Brick in Nos.	H.Y.S.D.	Mild	Rate of consumption		Murum in Cum
17	2 Transportation of excavated material with lead & lifts away from site 3.00 Km. etcetera complete as directed by Engineer in Charge.	3	4	5	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
18	Supplying hard murum/ kankar at the road site, including conveying and stacking complete. [PWD S.S.R.2022-23 Item No. 2.29a Page No.25]	230843.88	219.98	50781037.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Cum
19	Spreading hard murum/ soft murum/ gravel or kankar for side width complete [PWD S.S.R.2022-23 Item No. 2.30 Page No.25] Spec.No.MORTH 408	71960.42	672.38	48384747.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	1.00	24669.48	Cum
20	Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etcetera complete. [PWD	236317.00	21.00	4962657.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	Cum
21	Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 60 mill metre thickness of having a strength of 300 Kilogram/Square Centi	53266.00	967.24	51521006.00	0.00	0.00	0.00	0.00	0.00	0.00	0.050	2663.30	0	0	0.00	0.00	0.00	0.00	Sqrm
22	Providing and constructing Brick Masonry Inspection Chamber 90 centi metre x 45 centi metre x 90 centi metre including 1:4:8 cement concrete foundation	830.00	11208.08	10423514.00	0.00	0.00	0.00	0.00	0.00	0.00	0.050	46.50	0	0	0.00	0.00	0.00	0.00	No.
23	Providing and fixing board displaying information, such as Name of work, Tender cost, Name of Contractor, Work completion and liability period	2.00	10361.52	20723.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0	0	0.00	0.00	0.00	0.00	No.
				423484474.00	28102.72	117176.46	12750.93	39270.91	1618.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Bag	1405.14	MT												

60418.23

Cum

Cum

MT

M.K.K. Consultant,  
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Municipal Engineer,  
Nagar Parishad, Jamner

Sub-Divisional Engineer,  
P.W.Sub-Division, Jamner

Executive Engineer,  
P.W. Division, Jaigaon

Name of Work

Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner Area Tq. Jamner Dist. Jalgaon (38 Roads)

**FREQUENCY TESTS**

Sr. No.	Material	Qty	Unit	Name of Test	Frequency	No. of Test Required
1	Cement	1405.14	MT	Standard Consistency Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness	Per 150 MT	9
2	Crushed Sand	39270.91	Cum	Finness Modulus (Sieve Analysis), Silt Content & Clay Content	Per Source	2
3	Cr. Metal	117176.46	Cum	Water Absorption, Specific Gravity, Impact Value, Crushing Value	Per Source	2
				Sieve Analysis	Per 200 Cum	586
4	Above 40 mm Metal	12750.93	Cum	Water Absorption, Specific Gravity, Impact Value, Crushing Value	Per Source	2
				Sieve Analysis	Per 200 Cum	64
5	Concrete	43780.76	Cum	Compressive Strength, of C.C. Cube, (Set of 3 Cubes)	Per 150 Cum	292
6	Concrete Mix Design	7440.96	Cum	Concrete Mix Design (With all Tests on basic materials)	--	1
7	Steel	1618.41	MT	Steel - Upto 16 mm (Set of 3 Bars) [Tensile strength, %, Elongation, Yield Stress, Weight-Per Meter, Bend / Rebind Test, Proof Stress.]	Per 20 MT Load	81
8	Paving Block	53266.00	Sqm	Compressive Strength of Paving Block	50000 Blocks/Test	5
9	Murum	71960.42	Cum	Sieve Analysis for Murum	-	72

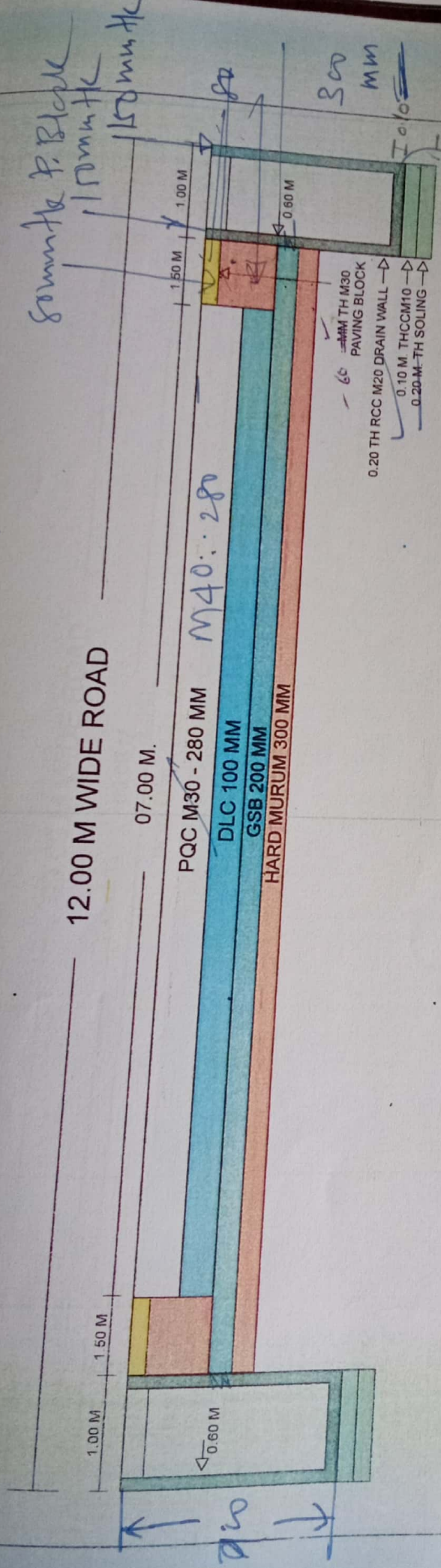
M.K.K. Consultant,  
Beed

Municipal Engineer,  
Nagar Parishad, Jamner

Sub- Divisional Engineer,  
P.W. Sub- Division, Jamner

Executive Engineer,  
P.W. Division, Jalgaon

# CONSTRUCTION OF CC ROAD & RCC DRAIN IN JAMNER, DIST. JALGAON



## CROSS SECTION

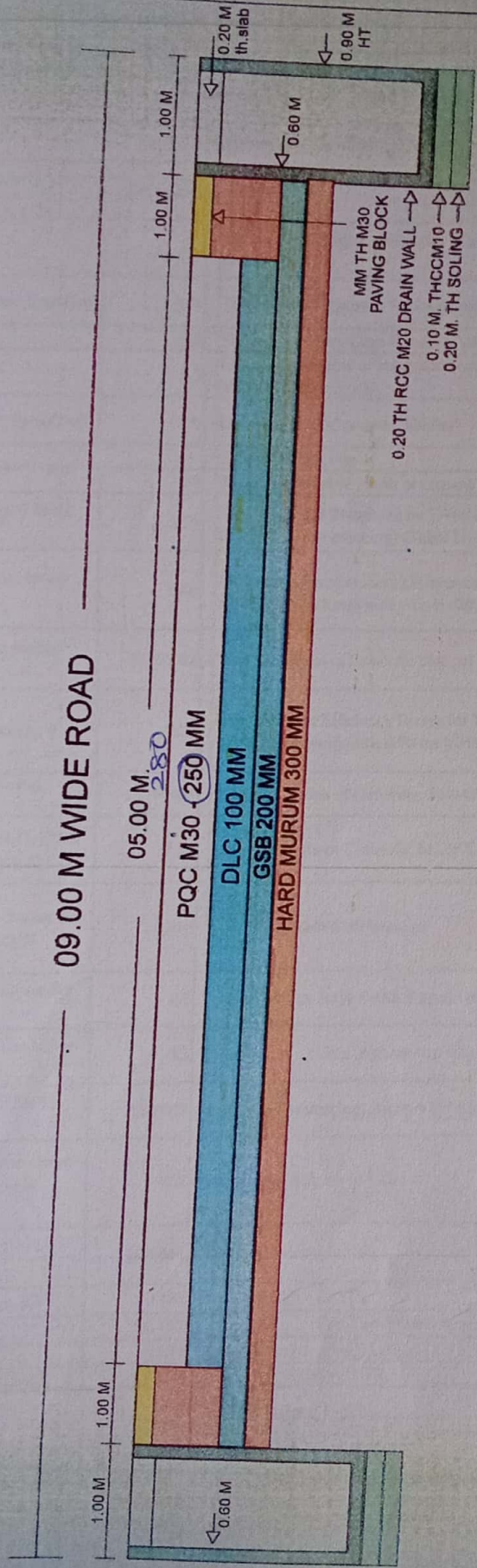
*(Signature)*  
 नगर अभियंता

नगर परिषद जामनेर

*(Signature)*  
 Sub Divisional Engineer  
 P.W. Sub Division, Jamner



# CONSTRUCTION OF CC ROAD & RCC DRAIN IN JAMNER, DIST. JALGAON



## CROSS SECTION

नगर अभियंता  
नगर परिषद जामनेर

Sub Divisional Engineer  
P.W. Sub Division, Jamner



Plain Jointed Rigid Pavements

Design of Slab Thickness for Pavement

and without doweled transverse joints. Beta value will be 0.66 for doweled joint and 0.90 for without dowels case)

Pavement considered		Pavement Structural Details	
way	2-Lane	CBR	8
		Modulus of subgrade reaction of subgrade, MPa/m (Table No. 2)	50.33
are Tied concrete shoulders? (yes/no)	yes	Thickness of Granular Subbase, mm	200
Joint spacing (m)	4.5	Thickness of Dry Lean Concrete subbase, mm	100
h (m)	3.5	Effective modulus of subgrade reaction of foundation, MPa/m (Table No.4)	284.66
Do Joints have dowel bars? (yes/no)	Yes	Unit weight of Concrete, kN/m <sup>3</sup>	24
<b>Traffic Estimation</b>		Grade Of Concrete	M-
Design life (years)	30	28-day Flexural strength of cement concrete, MPa	3.83
Design Commercial Traffic (cvpd) in the completion of construction	458	Max. day-time Temperature Differential in slab, °C (for bottom-up cracking) (Table No. 1)	21
Rate of growth of commercial traffic (as decimal)(5.5.2.1)	0.05	Night-time Temperature Differential in slab, °C (for top-down cracking) = day-time diff/2 + 5 (5.6.2.2)	15.5
No of Commercial vehicles during design period (two-way), A	11106582	Trial Thickness of Concrete Slab, m	0.28
No of axles per commercial vehicle, B	2.35	Load Transfer Efficiency Factor for TDC analysis, Beta = 0.66 for dowel joints, 0.90 for joints without dowels	0.66
No of Commercial Axles during design period (two-way), C = A*B	26100468	Elastic Modulus of Concrete, Ec (MPa)(5.8.4.1)	30000
Ratio of traffic in predominant direction (For highways use a value of 1.0), D	0.50	Poisson's Ratio of Concrete, Mu (5.8.4.1)	0.15
Design factor (0.25 for 2-lane 2-way. For highways the value is 0.25 X C), E	0.250	Radius of relative stiffness, m	0.66641
Percentage of traffic for BUC analysis (for design period during day), F	0.2	<b>Design Axle Load Repetitions for Fatigue Analysis</b>	
Percentage of traffic for TDC analysis (for design period during day), G	0.3	<b>For Bottom-up Cracking Analysis</b>	
Repetitions for BUC analysis (for 6 lane traffic), H = B*E*F	1305023	Front single (steering) Axles = H * K1	587261
Repetitions for vehicles with spacing between front and rear axle less than the spacing of design axles, I	0.55	Rear single Axles = H * K2	195754
Repetitions for TDC analysis (for 6 lane traffic), J = B*E*G*I	1076644	Tandem Axles = H * K3	326256
Front single (steering) Axles, K1	0.450	Tridem Axles = H * K4	195754
Rear single Axles, K2	0.150	<b>For Top-Down Cracking Analysis</b>	
Tandem Axles, K3	0.250	Front single (steering) Axles = J * K1	484490
Tridem Axles, K4 = (1-K1-K2-K3)	0.150	Rear single Axles = J * K2	161497
		Tandem Axles = J * K3	269161
		Tridem Axles = J * K4	161497



Sub Divisional Engineer  
Public Works Sub Division  
Jamner

# Axle Load Spectrum Data

Rear Single Axle			Rear Tandem Axle			Rear Tridem Axle		
Load Group (kN)	Mid-Point of Load Group (kN)	Frequency (%)	Load Group (kN)	Mid-Point of Load Group (kN)	Frequency (%)	Load Group (kN)	Mid-Point of Load Group (kN)	Frequency (%)
185-195	190	0	380 - 400	390	0	530-560	545	0
175-185	180	0	360 - 380	370	0	500-530	515	0
165-175	170	0	340 - 360	350	0	470-500	485	0
155-165	160	2.98	320 - 340	330	0	440-470	455	0
145-155	150	2.98	300 - 320	310	0	410-440	425	0
135-145	140	1.62	280 - 300	290	0	380-410	395	0
125-135	130	2.62	260 - 280	270	0	350-380	365	0
115-125	120	2.65	240 - 260	250	0	320-350	335	0
105-115	110	2.65	220 - 240	230	6.3	290-320	305	0
95-105	100	21.54	200 - 220	210	12.7	260-290	275	0
85-95	90	17.4	180 - 200	190	25	230-260	245	0
< 85	80	45.56	< 180	170	56	< 230	215	100
		100			100			100



नगर अभियंता  
नगर परिषद जामनेर

Sub Divisional Engineer  
Public Works Sub Division  
Jamner

# Fatigue Damage Analysis

Bottom-up Cracking Fatigue Analysis for Day-time (6 hour) traffic and Positive Temperature Differential

Rear Single Axles					Rear Tandem Axles				
Expected Repetitions (ni)	Flex Stress MPa	Stress Ratio (SR)	Allowable Repetitions (Ni)	Fatigue Damage (ni/Ni)	Expected Repetitions (ni)	Flex Stress MPa	Stress Ratio (SR)	Allowable Repetitions (Ni)	Fatigue Damage (ni/Ni)
0	2.722	0.646	8594	0.000	0	2.330218	0.553	113957.07	0.000
0	2.641	0.627	14650	0.000	0	2.2574042	0.536	189586.44	0.000
0	2.560	0.608	24971	0.000	0	2.1845904	0.519	344838.68	0.000
5833	2.479	0.589	42564	0.137	0	2.1117767	0.501	717605.79	0.000
5833	2.399	0.569	72552	0.080	0	2.0389629	0.484	1848429.8	0.000
3171	2.318	0.550	123668	0.026	0	1.9661491	0.467	7039117.3	0.000
5129	2.237	0.531	221731	0.023	0	1.8933353	0.449	infinite	0.000
5187	2.156	0.512	449986	0.012	0	1.8205215	0.432	infinite	0.000
5187	2.075	0.493	1111947	0.005	20554	1.7477078	0.415	infinite	0.000
42165	1.995	0.473	3901346	0.011	41434	1.674894	0.398	infinite	0.000
34061	1.914	0.454	30738300	0.001	81564	1.6020802	0.380	infinite	0.000
89185	1.833	0.435	infinite	0.000	182703	1.5292664	0.363	infinite	0.000
195754	Fat Dam from Sing. Axles =			0.294	326256	Fat Dam from Tand Axles =			0.000
Total Bottom-up Fatigue Damage due to single and tandem axle loads =					0.294	+	0.000	=	0.294

Front Single Axles and Rear Tridem axles not considered for bottom-up analysis



नगरअभियता  
नगर परिषद जामनेर

Sub Divisional Engineer  
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# Fatigue Damage Analysis

Top-Down Cracking Fatigue Analysis for Night-time (6 hour) traffic and Negative Temperature Differential

Expected Repetitions (ni)	Rear Single Axles				Rear Tandem Axles				Rear Tridem Axles					
	Flex Stress MPa	Stress Ratio (SR)	Allowable Repetitions (Ni)	Fatigue Damage (ni/Ni)	Expected Repetitions (ni)	Flex Stress MPa	Stress Ratio (SR)	Allowable Repetitions (Ni)	Fatigue Damage (ni/Ni)	Expected Repetitions (ni)	Flex Stress MPa	Stress Ratio (SR)	Allowable Repetitions (Ni)	Fatigue Damage (ni/Ni)
0	2.628	0.624	15977	0.000	0	2.655608	0.630	13303	0.000	0	2.5816132	0.613	21681	0.000
0	2.572	0.611	23046	0.000	0	2.6001119	0.617	19189	0.000	0	2.5261171	0.600	31272	0.000
4813	2.517	0.597	33241	0.000	0	2.5446158	0.604	27678	0.000	0	2.4706211	0.586	45108	0.000
4813	2.461	0.584	47948	0.100	0	2.4891198	0.591	39923	0.000	0	2.415125	0.573	65064	0.000
2616	2.406	0.571	69160	0.070	0	2.4336237	0.578	57585	0.000	0	2.3596289	0.560	93849	0.000
4231	2.350	0.558	99757	0.026	0	2.3781276	0.564	83062	0.000	0	2.3041329	0.547	135857	0.000
4230	2.295	0.545	144737	0.029	0	2.3226316	0.551	119809	0.000	0	2.2486368	0.534	202622	0.000
4280	2.239	0.532	217672	0.020	0	2.2671355	0.538	176371	0.000	0	2.1931407	0.521	319540	0.000
34785	2.184	0.518	347021	0.012	16957	2.2116394	0.525	272564	0.062	0	2.1376447	0.507	542599	0.000
28100	2.128	0.505	598007	0.058	34183	2.1561434	0.512	450419	0.076	0	2.0821486	0.494	1021019	0.000
79578	2.073	0.492	1149313	0.024	67290	2.1006473	0.499	815631	0.083	0	2.0266525	0.481	2237458	0.000
161497	2.017	0.479	2602762	0.028	150730	2.0451512	0.485	1686032	0.089	161497	1.9711565	0.468	6295247	0.026
			Fat Dam from Sing. Axles =	0.368	269161	Fat Dam from Tand Axles =		0.368	0.310	161497	Fat Dam from Tridem Axles =		0.026	0.704
			Total Top-Down Fatigue Damage =	0.998				0.998	0.310				0.026	0.704

Sum of CFD for BUC & TDC = 0.998


DESIGN IS SAFE SINCE SUM OF CFD FOR BUC AND TDC LESS THAN OR EQUAL TO 1  
Provide a Slab Thickness of (in mm) 280.00 mm

Sub Divisional Engineer  
Public Works Sub Division  
Jammer

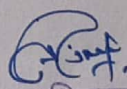


Handwritten signature and text: "K. Singh" and "सुपर प्रिजिट जामनेर"

Design for Bonded Pavement Option				
Subgrade CBR (%)=				8
Granular Subbase Thickness (mm) =				200
Effective k-value from Tables 2 and 3 (MPa/m) =				50.33
For k of 50.33 MPa/m and for				
Doweled Joint	and	Tied Concrete Shoulders,	Slab Thickness (m) =	0.280
Trial Slab thickness (m) over DLC, h1				0.280
Provide DLC thickness (m), h2				0.100
Elastic Modulus of Pavement Concrete (MPa), E1				30000
Elastic Modulus of DLC (MPa), E2				13600
Poisson's Ratio of Paving Concrete, m1				0.15
Poisson's Ratio of DLC, m2				0.20
Depth to Neutral axis, m (See Fig.6)				0.17
Flexural Stiffness of design Slab				56.14
Flexural Stiffness of Partial Slab Provided(PQC)				62.17
Flexural Stiffness of DLC				17.71
Total Flexural Stiffness Provided =	62.17	+	17.71	= 79.88
which is more than the Flexural Stiffness of the Design Slab				56.14
Hence, Provide a Slab of thickness (m)	0.280	over DLC of thickness (m)	0.1	
Slab thickness (h1) over DLC layer may be obtained by iteratively changing h1 and matching the design stiffness with the combined stiffness provided				

  
 Sub Divisional Engineer  
 Public Works Sub Division  
 Jamner

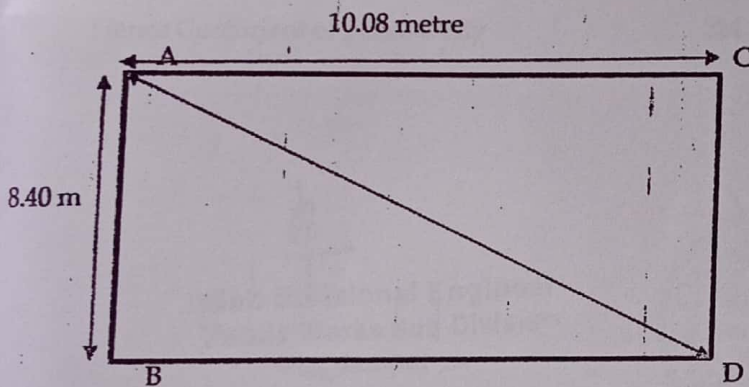


  
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## Design of Drainage Layer

### Design Parameters

Annual Rainfall	350.00 mm/year
Slab Thickness $h =$	280.00 mm
DLC thickness	100.00 mm
Total thickness (SLAB+DLC)	380.00 mm
Width of Pavement	6.00 metre
Width of paved Shoulder	0.00 metre
Width of earthen Shoulder	1.50 metre
Width of drainage layer	8.40 metre



Diagonal AD = 13.12 metre

Drop of elevation along AC 0.302 metre

Drop Of Elevation along CD 0.210 metre

Elevation drop along AD 0.512 metre

Gradient AD 0.0391

Crack infiltration rate I 0.223 cum/day/m

No. of longitudinal joints 3.000

width of pavement subjected to infiltration 7.50 metre  
 Length of transverse crack or joint 8.50 metre  
 spacing of transverse joint 4.50 metre  
 rate of infiltration through uncracked pavement 0.000 cum/day/sqm  
 rate of infiltration through uncracked pavement 0.145 cum/day/sqm  
 Amount of infiltrated water per metre along AD 1.902 cum/day/m

Rate of flow Through Drainage Layer  $K \cdot I \cdot A$

$K \cdot A$  48.71

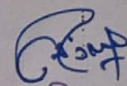
Assuming the depth of drainage layer 150 mm

$A = 1 \times 0.15 = 0.15 \text{ Sqm}$

Hence Coefficient of permeability 324.74 m/day

  
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## Design of Dowel Bars

### Design Parameters

Slab Thickness $h =$	280.00 mm
Characteristic compressive strength of concrete	30.00 Mpa
Joint Width, $Z$	20.00 mm
Elastic Modulus of Concrete, $E_c$ (MPa)	30000
Effective modulus of subgrade reaction of foundation,	284.66
Poisson's Ratio of Concrete, $\mu$ (5.8.4.1)	0.15
modulus of subgrade reaction (7.2.3)	80.00 Mpa/M
Radius of relative stiffness	915.280
E for dowel bar	200000.00 Mpa
Modulus Of Dowel Support	415000.00 Mpa/M
Maximum Single Axle Load	160.00 KN
Maximum Single Wheel load	80.00 KN

**If No Concrete Shoulders are provided No Load transfer to shoulders is assumed**

Percentage of load transfer	30.00%
Wheel Load for Dowel Bar Design	79.76 KN

**Assume the percentage of load transfer through Dowel Bar as 50% for 100% joint efficiency**

Load to transferred	39.88 KN
Assumed Dia of dowel bar	32.00 mm
Permissible bearing stress in concrete is calculated as under	21.92 Mpa

Assumed spacing between dowel bars	300.00 mm
------------------------------------	-----------

First dowel is placed at a distance 150.00 mm from the pavement edge  
Assumed length of dowel bar 450.00 mm

Dowel bars upto a distance of  $1.0 \times$  radius of relative stiffness, from the point of load application are effective in load transfer.

No. Of Dowel bars participating in load transfer when wheel load is just over the Dowel bar close to the edge of the slab  
= 4.00 Dowels

Assuming the load transfered by the first dowel is  $P_1$  and assuming that the load on dowel bar at a distance of  $l$  from first dowel is zero, the total load transfered by dowel bar system  
= 2.03  $P_1$


load transfered by outer 19.61 KN

#### Check for Bearing stress

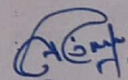
Moment of Inertia of Dowel = 51471.854 mm<sup>4</sup>

Relative stiffness of Dowel bar embeded in concrete 0.171 /mm

Bearing stress in Dowel bar = 9.325 Mpa Safe

  
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## Design of Tie bars

Slab Thickness	0.28 m
Lane Width	3.00 m
Coefficient of friction, $f$	1.5
Density of Concrete KN/M <sup>3</sup>	24
Allowable tensile stress in Plain Bars Mpa (As per IRC:15 - 2011)	125
Allowable tensile stress in Deformed Bars s Mpa (As per IRC:15 - 2011)	200
Allowable Bond stress for Plain tie bars Mpa	1.75
Allowable Bond stress for Deformed tie bars s Mpa	2.46

### Spacing and Length of plain Bar

Assumed dia of tie bar in mm	12
Area of steel Bar per meter width of joint to resist the frictional force at slab bottom ( $A_s$ ) =	241.92 mm <sup>2</sup> /m
the cross sectional area of Tie Bar	113.10 mm <sup>2</sup>
Perimeter of tie Bars ( $P$ )	37.70 mm
Spacing of tie Bars	401.00 mm
say	450.00 mm
Provide at a Spacing of 450 mm C/C	
Length of tie Bar	428.57 mm
length to be increased for loss of Bond(cm)	100.00 mm
Tolerance in Placement (cm)	50.00 mm

Therefor length is

578.57 mm  
Say 580.00 mm

### Spacing and Length of Deformed Bar

Dia. Of Tie Bar 12.00 mm

Area of steel Bar per meter width of joint to resist the frictional force at slab bottom ( $A_s$ ) = 151.200 mm<sup>2</sup>/m

Spacing of tie Bars 748.00 mm

say 600.00 mm

Provide at a Spacing of 600 mm C/C


Length of tie Bar 487.80 mm

length to be increased for loss of Bond(cm) 100.00 mm

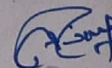
Tolerance in Placement (cm) 50.00 mm

Therefor length is

637.80 mm  
Say 640.00 mm

  
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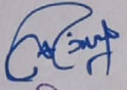
  
कमरजभियता  
कार एरिण्ड जामनेर


Name Of Work

Construction of Cement Concrete Roads & Drains of D.P. Roads under Maharashtra Suvarana Jayanti Nagarotthan Mahabhiyan Yojana in Municipal Council Jamner Area Tq. Jamner Dist. Jalgaon (20 Roads)

M-30	280.00 mm
125 MICRON PVC SHEET	
DLC	100.00 mm
GSB as Separation Layer	200.00 mm

Type Of Bar	Dia(mm)	Spacing (mm)	Length (mm)
Dowel Bar	32	300	450
Tie Bar plain	12	450	580
Tie Bar deformed	12	600	640

  
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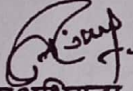
  
Sub Divisional Engineer  
Public Works Sub Division  
Jamner

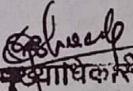


## Traffic Intensity Survey

बजरंगपुरा मुख्य रस्ता सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे

SR. NO.	Time- 16 May 2023 to 30 May 2023	Bicy- cle	Two Wheeler	Three Wheeler	Car/jeep /lmv	LC V	Mini Bus	Tru- ck	Trac- tor
1	10 am - 2 pm	10	450	65	32	30	10	10	5
2	10 am - 2 pm	8	445	53	45	40	15	11	7
3	10 am - 2 pm	12	365	46	63	25	18	15	6
	<b>Total</b>	30	1260	164	140	95	43	36	18
	AADT	10.0 0	420.00	54.67	46.67	31.67	14.33	12.0 0	6.00
	PCU FACTOR	0.40	0.50	1.20	1.50	1.5 0	2.20	2.20	4.00
	PCU	4.00	210.00	65.60	70.00	47.50	31.53	26.4 0	24.00
									479. 03

  
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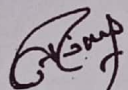
  
 मुख्याधिकारी  
 नगर परिषद जामनेर

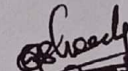


## Traffic Intensity Survey

जुना बोदवड रस्ता मस्जिद ते जिल्हा परिषद उर्दु शाळा पर्यंत सिमेंट काँक्रीट  
रस्ता व नाली बांधकाम करणे

SR. NO.	Time- 16 May 2023 to 30 May 2023	Bicy- cle	Two Wheeler	Three Wheeler	Car/jeep /lmv	LC V	Mini Bus	Tru- ck	Trac- tor
1	10 am - 2 pm	45	460	20	35	42	10	25	10
2	10 am - 2 pm	50	420	30	28	56	12	18	8
3	10 am - 2 pm	35	380	45	18	38	20	23	7
	Total	130	1260	95	81	136	42	66	25
	AADT	43.33	420.00	31.67	27.00	45.33	14.00	22.00	8.33
	PCU FACTOR	0.40	0.50	1.20	1.50	1.50	2.20	2.20	4.00
	PCU	17.33	210.00	38.00	40.50	68.00	30.80	48.40	33.33
								486.00	37.00

  
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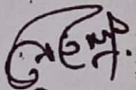
  
 मुख्याधिकारी  
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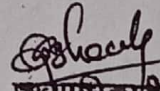


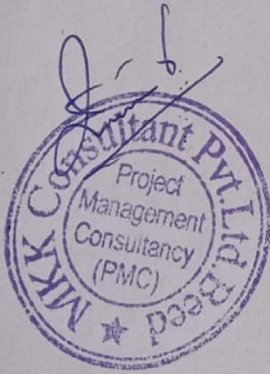
## Traffic Intensity Survey

घोडेपीर बाबा घरकुल परिसरात सिमेंट काँक्रीट रस्ता व नाली बांधकाम करणे

SR. NO.	Time-16 May 2023 to 30 May 2023	Bicycle	Two Wheeler	Three Wheeler	Car/jeep /lmv	LC V	Mini Bus	Truck	Tractor
1	10 am - 2 pm	5	230	65	55	48	8	15	15
2	10 am - 2 pm	8	236	38	45	38	10	20	16
3	10 am - 2 pm	12	194	35	41	37	12	18	20
	<b>Total</b>	25	660	138	141	123	30	53	51
	AADT	8.33	220.00	46.00	47.00	41.00	10.00	17.67	17.00
	PCU FACTOR	0.40	0.50	1.20	1.50	1.50	2.20	2.20	4.00
	PCU	3.33	110.00	55.20	70.50	61.50	22.00	38.87	68.00
									429.40

  
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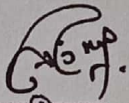
  
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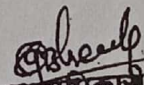


## Traffic Intensity Survey

गट नं. 10/2 एकता नगर मधील अंतर्गत रस्ते सिमेंट कॉक्रीट रस्ता व नाली बांधकाम करणे

SR. NO.	Time- 16 May 2023 to 30 May 2023	Bicy- cle	Two Wheeler	Three Wheeler	Car/jeep /lmv	LC V	Mini Bus	Tru- ck	Trac- tor
1	10 am - 2 pm	10	263	26	15	42	10	25	10
2	10 am - 2 pm	8	321	22	20	35	15	35	14
3	10 am - 2 pm	10	243	18	25	37	18	30	18
	<b>Total</b>	<b>28</b>	<b>827</b>	<b>66</b>	<b>60</b>	<b>114</b>	<b>43</b>	<b>90</b>	<b>42</b>
	<b>AADT</b>	<b>9.33</b>	<b>275.67</b>	<b>22.00</b>	<b>20.00</b>	<b>38.00</b>	<b>14.33</b>	<b>30.00</b>	<b>14.00</b>
	<b>PCU FACTOR</b>	<b>0.40</b>	<b>0.50</b>	<b>1.20</b>	<b>1.50</b>	<b>1.50</b>	<b>2.20</b>	<b>2.20</b>	<b>4.00</b>
	<b>PCU</b>	<b>3.73</b>	<b>137.83</b>	<b>26.40</b>	<b>30.00</b>	<b>57.00</b>	<b>31.53</b>	<b>66.00</b>	<b>56.00</b>
								<b>=</b>	<b>408.50</b>

  
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 नगर परिषद जायभेर

  
 मुख्य अधिकारी  
 नगर परिषद जायभेर

