

मिरा भाईंदर महानगरपालिका
मा. प्रशासकीय सभादि. ०५/०८/२०२४

// गोषवारा //

१५३

विषय : मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामीच्या निविदेचे अवलोकन करणेबाबत.
(अंदाजित खर्च : रु. १२,९८,०००/- (जी. एस. टी. सह))
(Tender ID : 2024_MBMC_1071737_1)

संदर्भ : शासन निर्णय क्र. मनपा-२०२२/प्र.क्र.१४२(१८-अ)/न.वि.१६, दि. १०/०६/२०२२

प्रकरण क्र. : ()

मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामीच्या निविदेमध्ये प्राप्त दरांचे अवलोकन करणे आवश्यक आहे.

मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामी मागविण्यात आलेल्या निविदेचा तांत्रिक लिफाफा उघडला असता मे. रुद्रा इनोटेक, मे. न्यू फिल्ड व मे. मिरॅकल इलेक्ट्रीकल सोल्यूशन्स इंडीया प्रा. लि. यांनी महानगरपालिकेने मागविलेल्या कागदपत्रांची पूर्तता करून पात्र ठरत आहेत.

पात्र निविदा धारकांचा दराचा लिफाफा उघडणेस मा. निविदा निवड समितीने मान्यता दिलेनुसार निविदेचा दराचा लिफाफा उघडला असता त्यामध्ये खालीलप्रमाणे दर प्राप्त झाले आहेत.

अ. क्र.	महानगरपालिकेने मागविलेल्या कागदपत्रांचा तपशिल	अंदाजपत्रकीय दर	मे. रुद्रा इनोटेक	मे. न्यू फिल्ड	मे. मिरॅकल इलेक्ट्रीकल सोल्यूशन्स इंडीया प्रा. लि.
१	Supply and Installation CCTV System On Rental Basis as per requirement at Ganapati Visarjan Spots in MBMC Area.	रु. १२,९८,०००/-	-०.१% (रु. १२,९६,७०२/-)	+२.५६% (रु. १३,३१,२२८/-)	०% (रु. १२,९८,०००/-)
शेरा			L1	L3	L2

महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्र. एमसीओ-२०२०/प्र.क्र.७१ (भाग-२)/नवि - १४, दि. २६/०८/२०२२ अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतूद व विशेषतः कलम ४५२ अ चा (१अ) व (१ब) मधील तरतूदीनुसार मा. आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झालेले आहेत. सदर प्राप्त अधिकारात मे. रुद्रा इनोटेक यांनी निविदेमध्ये सादर केलेले दर बाजारभावाशी व अंदाजपत्रकीय दरांशी तुलना केली असता वाजवी असल्याने उपरोक्त दर मंजुरीकरीता मा. आयुक्त सो. यांनी मान्यता दिलेली आहे. करीता वरील कामाचे अवलोकन होणेस शिफारस आहे.

(संजय दोंडे)

उप-आयुक्त

मिरा भाईंदर महानगरपालिका

मिरा भाईंदर महानगरपालिका
मा. प्रशासकीय सभादि. ०५/०१/२०२४

// ठराव //

९५३

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(अंदाजित खर्च : रु. १२,९८,०००/- (जी. एस. टी. सह))
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प्रकरणक्र. : (९५३)


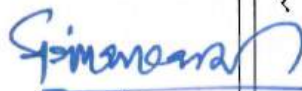
मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामीच्या निविदेमध्ये प्राप्त दरांचे अवलोकन करणे आवश्यक आहे.

मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामी मागविण्यात आलेल्या निविदेचा तांत्रिक लिफाफा उघडला असता मे. रुद्रा इनोटेक, मे. न्यू फिल्ड व मे. मिरॅकल इलेक्ट्रीकल सोल्यूशन्स इंडीया प्रा. लि. यांनी महानगरपालिकेने मागविलेल्या कागदपत्रांची पूर्तता करून पात्र ठरत आहेत.

पात्र निविदा धारकांचा दराचा लिफाफा उघडणेस मा. निविदा निवड समितीने मान्यता दिलेनुसार निविदेचा दराचा लिफाफा उघडला असता त्यामध्ये खालीलप्रमाणे दर प्राप्त झाले आहेत.

याकामी महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्र. एमसीओ-२०२०/प्र.क्र.७१ (भाग-२)/नवि-१४, दि. २६/०८/२०२२ अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतूद व विशेषतः कलम ४५२ अ चा (१अ) व (१ब) मधील तरतूदीनुसार मा. आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झालेले आहेत. वरील कामाच्या निविदेस प्रशासकीय ठरावाद्वारे अवलोकन करण्याचा प्रस्ताव प्रशासनाने सादर केलेला आहे.

मसुदा मान्यतेस्तव	प्रशासकीय ठराव क्र.	दि.
 (मनस्वी म्हात्रे) सिस्टीम अॅनालिस्ट	मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामाच्या प्रस्तावाचे अवलोकन करण्यात आले. महाराष्ट्र महानगरपालिका अधिनियमातील तरतूदी व विशेषतः कलम ४५२ अ च्या १(अ) व १(ब) नुसार, महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्र. एमसीओ-२०२०/प्र.क्र.७१ (भाग-२)/नवि-१४, दि. २६/०८/२०२२ अन्वये प्राप्त अधिकारानुसार मी, संजय श्रीपतराव काटकर, प्रशासक, मिरा भाईंदर महानगरपालिका, मा. स्थायी सभेच्या अधिकाराचा वापर करून प्रशासनाने सादर केलेल्या विषयास अनुसरून निविदेमधील प्राप्त प्रस्तावाचे अवलोकन करीत आहे.	
 (संजय दोंडे) उप-आयुक्त		

<p style="text-align: center;">  (डा. संभाजी पानपट्टे) अतिरीक्त आयुक्त </p> <p style="text-align: center;">  (संजय श्रीपतराव काटकर, भाप्रसे) प्रशासक तथा आयुक्त </p>	अ. क्र.	महानगरपालिकेने मागविलेल्या कागदपत्रांचा तपशिल	अंदाजपत्रकीय दर	मे. रुद्रा इनोटेक	मे. न्यू फिल्ड	मे. मिरॅकल इलेक्ट्रीकल सोल्यूशन्स इंडीया प्रा. लि.
	१	Supply and Installation CCTV System On Rental Basis as per requirement at Ganpati Visarjan Spots in MBMC Area.	रु. १२,९८,०००/-	-०.१% (रु.१२,९६,७०२/-)	+२.५६% (रु.१३,३१,२२८/-)	०% (रु.१२,९८,०००/-)
		शेरा		L1	L3	L2

वरीलप्रमाणे निविदेचे दरांस प्राप्त मान्यतेनुसार प्रस्तावाचे अवलोकन करण्यात येत आहे. पुढील आवश्यक कार्यवाही नियमानुसार संबंधित विभागाने विहीत पद्धतीने करावी.

मिरा भाईंदर महानगरपालिका
मा. प्रशासकीय सभादि. ०५/०९/२०२४

// ठराव //

विषय : मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामीच्या निविदेचे अवलोकन करणेबाबत. (अंदाजित खर्च : रु. १२,९८,०००/- (जी. एस. टी. सह))
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प्रकरणक्र.: (१५३)

मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामीच्या निविदेमध्ये प्राप्त दरांचे अवलोकन करणे आवश्यक आहे.

मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामी मागविण्यात आलेल्या निविदेचा तांत्रिक लिफाफा उघडला असता मे. रुद्रा इनोटेक, मे. न्यू फिल्ड व मे. मिरॅकल इलेक्ट्रीकल सोल्यूशन्स इंडीया प्रा. लि. यांनी महानगरपालिकेने मागविलेल्या कागदपत्रांची पूर्तता करून पात्र ठरत आहेत.

पात्र निविदा धारकांचा दराचा लिफाफा उघडणोस मा. निविदा निवड समितीने मान्यता दिलेनुसार निविदेचा दराचा लिफाफा उघडला असता त्यामध्ये खालीलप्रमाणे दर प्राप्त झाले आहेत.

याकामी महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्र. एमसीओ-२०२०/प्र.क्र.७१ (भाग-२)/नवि -१४, दि. २६/०८/२०२२ अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतूद व विशेषतः कलम ४५२ अ चा (१अ) व (१ब) मधील तरतूदीनुसार मा. आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झालेले आहेत. वरील कामाच्या निविदेस प्रशासकीय ठरावाद्वारे अवलोकन करण्याचा प्रस्ताव प्रशासनाने सादर केलेला आहे.


प्रशासकीय ठराव क्र. १५३ दि. ०५/०९/२०२४.


मिरा भाईंदर महानगरपालिका क्षेत्रामध्ये आवश्यकतेनुसार गणपती विसर्जन ठिकाणी तात्पुरत्या स्वरूपात सी. सी. टी. व्ही. यंत्रणा कार्यान्वित करणे कामाच्या प्रस्तावाचे अवलोकन करण्यात आले.

महाराष्ट्र महानगरपालिका अधिनियमातील तरतूदी व विशेषतः कलम ४५२ अ च्या १(अ) व १(ब) नुसार, महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्र. एमसीओ-२०२०/प्र.क्र.७१ (भाग-२)/नवि -१४, दि. २६/०८/२०२२ अन्वये प्राप्त अधिकारानुसार मी, संजय श्रीपतराव काटकर, प्रशासक, मिरा भाईंदर महानगरपालिका, मा. स्थायी सभेच्या अधिकाराचा वापर करून प्रशासनाने सादर केलेल्या विषयास अनुसरून निविदेमधील प्राप्त प्रस्तावाचे अवलोकन करीत आहे.

अ. क्र.	महानगरपालिकेने मागविलेल्या कागदपत्रांचा तपशिल	अंदाजपत्रकीय दर	मे. रुद्रा इनोटेक	मे. न्यू फिल्ड	मे. मिरॅकल इलेक्ट्रीकल सोल्यूशन्स इंडीया प्रा. लि.
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शेरा			L1	L3	L2

वरीलप्रमाणे निविदेचे दरांस प्राप्त मान्यतेनुसार प्रस्तावाचे अवलोकन करण्यात येत आहे. पुढील आवश्यक कार्यवाही नियमानुसार संबंधित विभागाने विहीत पद्धतीने करावी.


(वासुदेव शिरवळकर)
नगरसचिव
मिरा भाईंदर महानगरपालिका


(संजय श्रीपतराव काटकर, भाप्रसे)
प्रशासक तथा आयुक्त
मिरा भाईंदर महानगरपालिका

मिरा भाईंदर महानगरपालिका

आस्थापना विभाग

दि. ०५ / ०६ / २०२४

(गोपवारा)

प्रकरण क्र. :- १५४ मिरा भाईंदर महानगरपालिका सुधारित सेवा (सेवाप्रवेश व सेवांचे वर्गीकरण) नियम, २०१९ मधील महापालिका लेखापाल व लेखापरिक्षक या पदासाठी विहीत केलेल्या अर्हता व नेमणूकीच्या पध्दतीत बदल करून मान्यता देणेबाबत

मिरा भाईंदर महानगरपालिका सुधारित (सेवा प्रवेश व सेवांचे वर्गीकरण) नियम, २०१९ ला शासनाने शासन निर्णय क्र. मिभाम-११६/प्र.क्र.३६(भाग-१)/१६/नवि-२८ दि.२८/०५/२०१९ अन्वये मान्यता दिलेली आहे. सदरचे सेवा नियम दि १०/०६/२०१९ रोजी शासन राजपत्रात प्रसिध्द झाले असून मिरा भाईंदर महानगरपालिका अधिकारी/कर्मचारी यांना दि.१०/०६/२०१९ पासून प्रत्यक्षात लागू झाले आहेत. सेवा प्रवेश नियाममध्ये "लेखापाल" व "लेखापरिक्षक" या पदाच्या नेमणूकीसाठी खालीलप्रमाणे अर्हता व पात्रता विहीत करण्यात आलेली आहे.

अ.क्र.	पदनाम व श्रेणी	नेमणूकीची पध्दत व टक्केवारी (नामनिर्देशन / पदोन्नती / प्रतिनियुक्ती)	नेमणूकी करिता अर्हता व नेमणूकीची पध्दती
१	लेखापाल (श्रेणी-३, लेखासेवा)	पदोन्नती २५%	मिरा भाईंदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक (लेखा) या पदावर किमान ५ वर्षांची सेवा पूर्ण झालेल्या व विभागीय परिक्षा उत्तीर्ण असलेल्या कर्मचाऱ्यांची सेवाजेष्ठता व गुणवत्तेच्या आधारे पदोन्नतीने नियुक्त करता येईल.
२	लेखापरिक्षक (श्रेणी-३, लेखापरिक्षण सेवा)	पदोन्नती ५०%	मिरा भाईंदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक (लेखा परिक्षण) या पदावर किमान ५ वर्षांची सेवा पूर्ण झालेल्या व विभागीय परिक्षा उत्तीर्ण असलेल्या कर्मचाऱ्यांची सेवा जेष्ठता व गुणवत्तेच्या आधारे पदोन्नतीने नियुक्त करता येईल.

तथापि, मिरा भाईंदर आस्थापनेवर उक्त पदावर पदोन्नती देणेसाठी अनुभव आवश्यक असलेल्या निम्न पदावरील मंजूर पदाची संख्या पुरेशी नसल्याने सदरची पदे दिर्घकाळ रिक्त राहणार आहेत. त्यामुळे सदर पदांसाठी आवश्यक असलेली शैक्षणिक अर्हता धारण करणारे कर्मचारी उपलब्ध असल्याने त्यांना सदर पदावर पदोन्नतीची संधी उपलब्ध होण्याच्या दृष्टीने शासनाने विहीत केलेल्या अर्हतेमध्ये खालील प्रमाणे अंशतः बदल करणे आवश्यक आहे.

अ.क्र.	पदनाम व श्रेणी	नेमणूकीची पध्दत व टक्केवारी (नामनिर्देशन / पदोन्नती / प्रतिनियुक्ती)	नेमणूकी करिता अर्हता व नेमणूकीची पध्दती
1	लेखापाल (श्रेणी 3 लेखासेवा)	पदोन्नती 50%	मान्यता प्राप्त विद्यापीठाची वाणिज्य शाखेची पदवी धारण करणाऱ्या मिरा भाईंदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक पदाची किमान 3 वर्षांची/लिपीक पदावर किमान 10 वर्षांची सेवा पूर्ण झालेल्या कर्मचाऱ्यांची सेवाजेष्ठता व गणुवतेच्या आधारे पदोन्नतीने नियुक्ती करता येईल.
2	लेखापरिक्षक (श्रेणी 3 लेखापरिक्षण सेवा)	पदोन्नती 50%	मान्यता प्राप्त विद्यापीठाची वाणिज्य शाखेची पदवी धारण करणाऱ्या मिरा भाईंदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक पदाची किमान 3 वर्षांची/लिपीक पदावर किमान 10 वर्षांची सेवा पूर्ण झालेल्या कर्मचाऱ्यांची सेवाजेष्ठता व गणुवतेच्या आधारे पदोन्नतीने नियुक्ती करता येईल.

मिरा भाईंदर महानगरपालिका आस्थापनेवर महापालिका लेखापाल व लेखापरिक्षक या पदासाठी विहीत केलेली शैक्षणिक अर्हता व पात्रता धारण करणारे कर्मचारी उपलब्ध असल्याने त्यांना सदर पदावर पदोन्नतीची संधी उपलब्ध होण्याच्या दृष्टीने वरीलप्रमाणे प्रस्ताव शासन मान्यता मिळण्याकरीता शासनास पाठविणेसाठी मा.प्रशासक, मिरा भाईंदर महानगरपालिका यांची मंजूरी मिळणेस शिफारस आहे.

(मा.आयुक्त महोदय यांचे मान्यतेने)

(संजय दोंदे)

उप-आयुक्त (मुख्यालय)
मिरा भाईंदर महानगरपालिका

मा. ~~प्रशासक~~ समिती सभा
संकेत प्राप्त दि. 03/ ९/२०२४ वेळ ०५.५०
रजिस्टर नोंद अ. क्र. १५६ वॉ २४/२५


लिपिक

सचिव विभाग

मिरा-भाईंदर महानगरपालिका

मिरा भाईंदर महानगरपालिका

आस्थापना विभाग

दि. ०५ / ०६ / २०२४

प्रकरण क्र.१५४ मिरा भाईंदर महानगरपालिका सुधारित सेवा (सेवाप्रवेश व सेवांचे वर्गीकरण) नियम, २०१९ मधील महापालिका लेखापाल व लेखापरिक्षक या पदासाठी विहीत केलेल्या अर्हता व नेमणूकीच्या पध्दतीत बदल करून मान्यता देणेबाबत

कार्यालयीन प्रस्ताव

मिरा भाईंदर महानगरपालिका सुधारित (सेवा प्रवेश व सेवांचे वर्गीकरण) नियम, २०१९ ला शासनाने शासन निर्णय क्र. मिभाम-११६/प्र.क्र.३६(भाग-१)/१६/नवि-२८ दि.२८/०५/२०१९ अन्वये मान्यता दिलेली आहे. सदरचे सेवा नियम दि १०/०६/२०१९ रोजी शासन राजपत्रात प्रसिध्द झाले असून मिरा भाईंदर महानगरपालिका अधिकारी/कर्मचारी यांना दि.१०/०६/२०१९ पासून प्रत्यक्षात लागू झाले आहेत. सेवा प्रवेश नियाममध्ये "लेखापाल" व "लेखापरिक्षक" या पदाच्या नेमणूकीसाठी खालीलप्रमाणे अर्हता व पात्रता विहीत करण्यात आलेली आहे.

अ.क्र.	पदनाम व श्रेणी	नेमणूकीची पध्दत व टक्केवारी (नामनिर्देशन / पदोन्नती / प्रतिनियुक्ती)	नेमणूकी करिता अर्हता व नेमणूकीची पध्दती
१	लेखापाल (श्रेणी-३, लेखासेवा)	पदोन्नती २५%	मिरा भाईंदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक (लेखा) या पदावर किमान ५ वर्षांची सेवा पूर्ण झालेल्या व विभागीय परिक्षा उत्तीर्ण असलेल्या कर्मचाऱ्यांची सेवाजेष्ठता व गुणवत्तेच्या आधारे पदोन्नतीने नियुक्त करता येईल.
२	लेखापरिक्षक (श्रेणी-३, लेखापरिक्षण सेवा)	पदोन्नती ५०%	मिरा भाईंदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक (लेखा परिक्षण) या पदावर किमान ५ वर्षांची सेवा पूर्ण झालेल्या व विभागीय परिक्षा उत्तीर्ण असलेल्या कर्मचाऱ्यांची सेवा जेष्ठता व गुणवत्तेच्या आधारे पदोन्नतीने नियुक्त करता येईल.

तथापि, मिरा भाईंदर आस्थापनेवर उक्त पदावर पदोन्नती देणेसाठी अनुभव आवश्यक असलेल्या निम्न पदावरील मंजूर पदाची संख्या पुरेशी नसल्याने सदरची पदे दिर्घकाळ रिक्त राहणार आहेत. त्यामुळे सदर पदांसाठी आवश्यक असलेली शैक्षणिक अर्हता धारण करणारे कर्मचारी उपलब्ध असल्याने त्यांना सदर पदावर पदोन्नतीची संधी उपलब्ध होण्याच्या दृष्टीने शासनाने विहीत केलेल्या अर्हतेमध्ये खालील प्रमाणे अशंत: बदल करणे आवश्यक आहे.

अ.क्र.	पदनाम व श्रेणी	नेमणूकीची पध्दत व टक्केवारी (नामनिर्देशन / पदोन्नती / प्रतिनियुक्ती)	नेमणूकी करीता अर्हता व नेमणूकीची पध्दती
1	लेखापाल (श्रेणी 3 लेखासेवा)	पदोन्नती 50%	मान्यता प्राप्त विद्यापीठाची वाणिज्य शाखेची पदवी धारण करणाऱ्या मिरा भाईदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक पदाची किमान 3 वर्षांची/लिपीक पदावर किमान 10 वर्षांची सेवा पूर्ण झालेल्या कर्मचाऱ्यांची सेवाजेष्ठता व गणवत्तेच्या आधारे पदोन्नतीने नियुक्ती करता येईल.
2	लेखापरिक्षक (श्रेणी 3 लेखापरिक्षण सेवा)	पदोन्नती 50%	मान्यता प्राप्त विद्यापीठाची वाणिज्य शाखेची पदवी धारण करणाऱ्या मिरा भाईदर महानगरपालिकेच्या आस्थापनेवरील वरिष्ठ लिपीक पदाची किमान 3 वर्षांची/लिपीक पदावर किमान 10 वर्षांची सेवा पूर्ण झालेल्या कर्मचाऱ्यांची सेवाजेष्ठता व गणवत्तेच्या आधारे पदोन्नतीने नियुक्ती करता येईल.

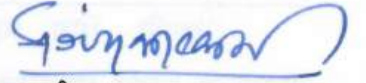
मिरा भाईदर महानगरपालिका आस्थापनेवर महापालिका लेखापाल व लेखापरिक्षक या पदासाठी विहीत केलेली शैक्षणिक अर्हता व पात्रता धारण करणारे कर्मचारी उपलब्ध असल्याने त्यांना सदर पदावर पदोन्नतीची संधी उपलब्ध होण्याच्या दृष्टीने वरीलप्रमाणे प्रस्ताव शासन मान्यता मिळण्याकरीता शासनास पाठविणेसाठी मा.प्रशासक, मिरा भाईदर महानगरपालिका यांची मंजूरी मिळणेस विनंती आहे, असा प्रस्ताव प्रशासनामार्फत सादर करण्यात आलेला आहे.

प्रशासकीय ठराव क्र. १५४ दिनांक ०५/०९/२०२४

“मिरा भाईदर महानगरपालिका सुधारित सेवा (सेवाप्रवेश व सेवांचे वर्गीकरण) नियम, २०१९ मधील महापालिका लेखापाल व लेखापरिक्षक या पदासाठी विहीत केलेल्या अर्हता व नेमणूकीच्या पध्दतीत बदल करून मान्यता देणेबाबतच्या प्रस्तावाचे अवलोकन करण्यात आले.

महाराष्ट्र महानगरपालिका अधिनियमातील तरतुदी व विशेषतः कलम ४५२ अ च्या (१ अ) व (१ ब) नुसार महाराष्ट्र शासन, नगर विकास विभागाकडील शासन आदेश क्रमांक : एमसीओ २०२०/प्र.क्र.७१(भाग-२)/नवि-१४, दि.२६/०८/२०२२ अन्वये प्रशासनाने सादर केलेल्या विषयास अनुसरून “मिरा भाईदर महानगरपालिका सुधारित सेवा (सेवाप्रवेश व सेवांचे वर्गीकरण) नियम, २०१९ मधील महापालिका लेखापाल व लेखापरिक्षक या पदासाठी विहीत केलेल्या अर्हता व नेमणूकीच्या पध्दतीत बदल करणेबाबतचा प्रस्ताव शासन मान्यता मिळण्याकरीता शासनास पाठविणेसाठी मंजूरी देण्यात येत आहे.”


(वासुदेव शिरवंकर)
नगरसचिव
मिरा भाईदर महानगरपालिका


(संजय श्रीपतराव काटकर, भा.प्र.से.)
आयुक्त तथा प्रशासक
मिरा भाईदर महानगरपालिका

मिरा-भाईंदर महानगरपालिका

बांधकाम विभाग

दि. ५ / ९ / 2024

// गोपवारा //

प्रकरण क्र. (१५५) :- निविदेस मान्यता देणेबाबत.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव	सादर केलेला दर
1	2	3	4	5	6
1.	1049595_1	मनपा क्षेत्रात विविध उद्याने व मैदाने येथे ऑन ग्रिड सौरऊर्जा यंत्रणा बसविणे. (माझी वसुंधरा अभियान 3.0 अंतर्गत बक्षीस प्राप्त निधी)	रु.1,56,08,994/-	मे. पुणे इलेक्ट्रीकल्स	9.2200 % कमी दराने
2.	1054960_1	मिरा भाईंदर महानगरपालिका क्षेत्रातील भाईंदर (प.) स्व. कल्पना चावला अग्निशमन केंद्र इमारत येथे उद्वाहक यंत्रणा बसविणे.	रु.34,15,000/-	मे. मिरॅकल इलेक्ट्रीकल सोल्युशन इंडिया प्रा.लि.	0.1000% कमी दराने

वरील कामी अ.क्र.01 व 02 च्या निविदाधारकाने अंदाजपत्रकीय दरापेक्षा कमी दराची निविदा सादर केल्या आहेत. मा.आयुक्त महोदय यांनी सदरचे दर स्विकारण्यास मान्यता दिलेली आहे. नगरविकास विभाग, शासन आदेश क्रमांक एमसीओ-2020/प्र.क्र.71 (भाग-2)/नवि-14 दि.26 ऑगस्ट 2022 अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतुद व विशेषतः कलम 452 अ च्या (1 अ) व (1 ब) मधील तरतुदीनुसार मा.आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झाले आहेत. सदर अधिकारात वरील 02 कामांस महाराष्ट्र महानगरपालिका अधिनियम मधील कलम 73 (क) नुसार मान्यता देण्यास शिफारस आहे.



(दिपक खांबित)

शहर अभियंता

मिरा-भाईंदर महानगरपालिका

मा. आयुक्त यांच्या मान्यतेने

मिरा-भाईंदर महानगरपालिका

प्रशासकीय ठराव दिनांक ०५/०८/२०२४

विषय क्र. (१५५) :- मा. आयुक्त महोदयाकडील कामकाज

निविदेस मान्यता देणेबाबत.

अ. क्र.	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव	सादर केलेला दर
1	2	3	4	5	6
1.	1049595_1	मनपा क्षेत्रात विविध उद्याने व मैदाने येथे ऑन ग्रिड सौरऊर्जा यंत्रणा बसविणे. (माझी वसुंधरा अभियान 3.0 अंतर्गत बक्षीस प्राप्त निधी)	रु.1,56,08,994/-	मे. पुणे इलेक्ट्रीकल्स	9.2200 % कमी दराने
2.	1054960_1	मिरा भाईंदर महानगरपालिका क्षेत्रातील भाईंदर (प.) स्व. कल्पना चावला अग्निशमन केंद्र इमारत येथे उद्वाहक यंत्रणा बसविणे.	रु.34,15,000/-	मे. मिरॅकल इलेक्ट्रीकल सोल्युशन इंडिया प्रा.लि.	0.1000% कमी दराने

कार्यालयीन प्रस्तावना

वरील कामी अ.क्र.01 व 02 च्या निविदाधारकाने अंदाजपत्रकीय दरापेक्षा कमी दराची निविदा सादर केली आहे. मा.आयुक्त महोदय यांनी सदरचे दर स्विकारण्यास मान्यता दिलेली आहे. नगरविकास विभाग, शासन आदेश क्रमांक एमसीओ-2020/प्र.क्र.71 (भाग-2)/नवि-14 दि.26 ऑगस्ट 2022 अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतुद व विशेषतः कलम 452 अ च्या (1 अ) व (1 ब) मधील तरतुदीनुसार मा.आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झाले आहेत. सदर अधिकारात वरील अ.क्र.01 व 02 कामांस महाराष्ट्र महानगरपालिका अधिनियम मधील कलम 73 (क) नुसार प्रशासकीय ठरावाव्दारे मान्यता देण्याचा प्रस्ताव प्रशासनाने सादर केला आहे.

प्रशासकीय ठराव क्र. १५५ दिनांक ०५/०८/२०२४


मिरा भाईंदर महानगरपालिका क्षेत्रातील वरील 02 कामांस मान्यता देण्याच्या प्रस्तावाचे अवलोकन करण्यात आले.


महाराष्ट्र महानगरपालिका अधिनियम तरतुदी व विशेषतः कलम 452 (अ) च्या (1अ) व (1ब) नुसार, महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्रमांक :- एमसीओ 2020/प्र.क्र.71 (भाग-2)/नवि-14 दिनांक 26 ऑगस्ट 2022 अन्वये प्राप्त अधिकारानुसार मी, संजय काटकर, प्रशासक, मिरा भाईंदर

महानगरपालिका मा.महानगरपालिका महासभेच्या अधिकाराचा वापर करून प्रशासनाने सादर केलेल्या विषयास अनुसरून खालील कामाच्या अ.क्र.01 व 02 च्या निविदाधारकाने सादर केलेल्या अंदाजपत्रकीय दरापेक्षा कमी दराची निविदेस महाराष्ट्र महानगरपालिका अधिनियम कलम 73 (क) नुसार मान्यता देण्यात येत आहे.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव	सादर केलेला दर
1	2	3	4	5	6
1.	1049595_1	मनपा क्षेत्रात विविध उद्याने व मैदाने येथे ऑन ग्रिड सौरऊर्जा यंत्रणा बसविणे. (माझी वसुंधरा अभियान 3.0 अंतर्गत बक्षीस प्राप्त निधी)	रु.1,56,08,994/-	मे. पुणे इलेक्ट्रीकल्स	9.2200 % कमी दराने
2.	1054960_1	मिरा भाईंदर महानगरपालिका क्षेत्रातील भाईंदर (प.) स्व. कल्पना चावला अग्निशमन केंद्र इमारत येथे उद्वाहक यंत्रणा बसविणे.	रु.34,15,000/-	मे. मिरॅकल इलेक्ट्रीकल सोल्युशन इंडिया प्रा.लि.	0.1000% कमी दराने

वरील कामाबाबतची पुढील कार्यवाही नियमानुसार संबंधित विभागाने विहित पध्दतीने करावी.


(वासुदेव शिरवळेकर)
नगरसचिव
मिरा भाईंदर महानगरपालिका


(संजय काटकर, भाप्रसे)
प्रशासक तथा आयुक्त
मिरा भाईंदर महानगरपालिका

प्रत बांधकाम विभागाकडे योग्य त्या कार्यवाहीसाठी रवाना

मिरा-भाईंदर महानगरपालिका

बांधकाम विभाग

दि. ०५/०९/२०२४

// गोपवारा //

प्रकरण क्र. (१५६) :- निविदेस मान्यता देणेबाबत.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव
1	2	3	4	5
1.	1052415_1	गुजरात मधील साबरमती रिव्हर वॉटर फ्रंट डेव्हलपमेंटच्या धर्तीवर मिरा भाईंदर महानगरपालिका हद्दीतील चेना नदीवर रिव्हर वॉटर फ्रंट डेव्हलपमेंट उभारणे. (मुलभुत सोई सुविधा विकास योजना)	रु.40,95,81,644/-	मे. श्री.जी. इपीसी प्रा.लि. मे.एन.ए.कंस्ट्रक्शन

Sl. No	Item Description	Quantity	Units	M/s. Shreeji EPC Pvt. Ltd. M/s.				M/s. N A CONSTRUCTION PVT LTD	
				Quoted Rate	Quoted Amount	Final Negotiate Rate	Final Negotiate Amount	Rate	Amount
1.1	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By Mechanical Means) a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR No 12.03	8430.75	Cum	95	800921.25	95.00	8,00,921.25	100	843075
1.2	Excavation for foundation in hard murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR No 12.04	3798.45	Cum	253	961007.85	253.00	9,61,007.85	260	987597
1.3	Excavation for foundation in hardrock by chiselling and wedging or line drilling including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete SSR No 12.11	35700.00	CUM	2027	72363900	2,027.00	7,23,63,900.00	2100	74970000
1.4	Excavation for foundation in soft rock including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to	12.30	CUM	585	7195.5	585.00	7,195.50	605	7441.5

	4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR no 12.08								
1.5	Excavation for foundation / pipe trenches in slush muddy / marshy / slushy / soil including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding backfilling, etc. complete. Providing and fixing shuttering shall be paid separately. MJP SSR	28560.00	cum	448	12794880	448.00	1,27,94,880.00	465	13280400
1.6	Dewatering on BHP basis by using water pump including diversion of stream, providing coffer dams, earthen bunds etc. as may be necessary for foundation and other parts of the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary). SSR no 12.23	1380.00	Hour	210	289800	210.00	2,89,800.00	215	296700
1.7	Providing soling using 80 mmsize trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.) SSR no 21.40	1367	Cum	3200	4374400	3,200.00	43,74,400.00	3300	4511100
1.8	Providing and laying in situ / ready mix / ready mix M15 cement concrete of trap / granite / quartzite / gneiss metal in foundation including necessary centering, formwork, bailing out water, compacting and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer / concrete batch mix plant (pan mixer) with natural /artificial sand) SSR no 24.04	450.23	Cum	8011	3606792.53	8,011.00	36,06,792.53	8250	3714397.5
1.9	Providing and laying Cast in situ / Ready Mix cement concrete in M20 of trap / granite / quartzite / gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying / pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro process or based PLC with SCADA	2087.40	Cum	8344	17417265.6	8,344.00	1,74,17,265.60	8550	17847270

	enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 24.10								
2.0	Providing and laying Cast insitu / Ready Mix cement concrete in M-25 of trap / granite / quartzite / gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying/ pumping, compacting and roughening them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mixplant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 26.19	5215.20	Cum	17974	93738004.8	17,974.00	9,37,38,004.80	18500	96481200
2.1	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite / quartzite/ gneiss metal for R.C.C. beams as per detailed designs and drawings or as directed including centering, SSR no 25.54	144.00	Cum	14553	2095632	14,553.00	20,95,632.00	15000	2160000
2.2	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite / quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including centering, formwork. SSR no 25.35	20.25	cum	16144	326916	16,144.00	3,26,916.00	16500	334125
2.3	Providing and laying Cast in situ / Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, SSR no 26.23	3.00	CUM	7550	22650	7,550.00	22,650.00	7800	23400
2.4	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI	648.00	Cum	16300	10562400	16,300.00	1,05,62,400.00	16750	10854000

	Grade) SSR no 25.74								
2.5	Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, arches etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete SSR no 26.34	1216.52	MT	98845	120246919.4	98,845.00	12,02,46,919.40	102000	124085040
2.6	Providing Fusion Bonded Epoxy Coating SSR no 26.41	15.00	MT	11383	170745	11,383.00	1,70,745.00	11750	176250
2.7	Providing and fixing bituminous pad 25mm thick for expansion joints in retaining wall, compound wall etc. complete. SSR no 30.11	168.00	SQMT	1855	311640	1,855.00	3,11,640.00	1900	319200
2.8	Conveying excavated material upto lid of 20KM (Lead Chart)	76501.50	CUM	469	35879203.5	469.00	3,58,79,203.50	475	36338212.5
2.9	Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3)- 1984 in extra fine jointing mortar of fix oblock of UltraTch or equivalent in superstructure including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972) SSR no 27.15	131.37	CUM	7708	1012599.96	7,708.00	10,12,599.96	7900	1037823
3.0	Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTch or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972) SSR no 27.16	3.01	sqmt	1080	3250.8	1,080.00	3,250.80	1120	3371.2
3.1	Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete SSR no 33.34	213.28	Sq mt	4245	905373.6	4,245.00	9,05,373.60	4400	938432
3.2	Providing sandfaced plaster externally in cement mortar using approved screened sand in all positions including base coat of 15 mm thick in cement mortar 1:4 using water proofing compound at 1 Kilogram per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement	14242.50	sqmt	701	9983992.5	701.00	99,83,992.50	725	10325812.5

	mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete. SSR no 32.11								
3.3	Providing and applying two coats Apex Ultima Puranature Anti-Pollution Or equivalent approved brand, paint should decomposes organic substances and inorganic gases (NOx, VOC's, CO, SOx, formaldehydes, etc.) in presence of natural or artificial light. It contains Graphene and nanoparticles of titanium oxide, and Absorbs CO2 (4.8 Kilogram / 15l). plaster crack should be filled by Acrylic base Crack seal / Textured Crack filler, Paint has to applied on one coat of Apex Ultima Puranature Anti-Pollution Primer or Equivalent. Warranty Should be given by the Manufacturer The work should be done by the Manufacturer Recommended applicator and he should be able to furnish stage wise on site technical reports from the concerned company technologist. SSR no 50.79	14242.50	sqmt	390	5554575	390.00	55,54,575.00	400	5697000
3.4	Providing and laying weep holes of 100 mm diameter PVC pipes as per drawing for abutment returns, return walls etc. Complete. SSR no 17.37	1050.00	rmt	560	588000	560.00	5,88,000.00	580	609000
3.5	Providing and fixing 900 mm high S.S.304 Grade Stainless steel railing with 40 mm diameter and 1.5mm thick at top, 40 mm diameter and 1.5 mm thick vertical supports spaced at 1.5 m center to center and 8mm thick toughened glass including fabricating, fixtures, erecting, necessary welding, grinding, finishing, buffing to stainless steel pipe etc. complete SSR no 40.07	1050.00	rmt	4939	5185950	4,939.00	51,85,950.00	5100	5355000
3.6	Stamp Concrete of 100mm Thickness-Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand/VSI grade finely washed crusheds and) Confirming to IS383, as per mixed in a batching and mixing plant/non tilting mixer and weigh batcher as per approved mix design , admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continous operation , finishing to lines and grades. Also Providing, Placing and applying stamp powder which	2040.00	Sq mt	1872	3818880	1,872.00	38,18,880.00	1940	3957600

	<p>is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method@5kg per sqm. Including texturing, and covering with plastic sheet(min200micron thickness) and also applying two coats of UV-stable,30%solids clear sealer@150 to 250gms per sqm using surface roller and protecting from falling dust,dirt and curring by curring compound/by providing cement vata in cement</p> <p>Mortar 1:8@0.6mx0.6m center to center,admeasuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same through out curing period by any other method approved by Engineer-in charge or Landscape architect etc.complete.(prior approval of superintending Engineer will be necessary)</p> <p>SSR/54.01</p>								
3.7	<p>Providing and fixing kerb stone with led lighting system as per following specifications: dimensions with vertical mounting legs with 10mm horizontal square shape mild steel reinforcements. Illuminated kerb stone having visible dimensions:- 500mmx150mmx150mm. (asperirc-86-1983) 80mm leg shaving ms reinforcements shall be embedded in bit/concrete road surface. the kerb stone should have kerb angle of 45degree, with rubber plugs at both ends of the kerb stones (2nos) having load carrying capacity- vertical:1465kg, horizontal:2349 (certified by govt. Recogonized bodies) having thermal stability:-40 to 120degree celcius (certified by govt. Recogonized bodies. Illuminated kerb stones including: in grace protection and connect or rating ip 67, electrical wire- (asperis:694), ledstrip (asperlm:80) standard. Including for electrical fixing- fip junction box consisting of- 10amp. Switch module power supply (smgs) having input voltage-230vac, output voltage 36vdc, 2polemcb. Illuminated kerb stone shaving warranty for 3 years. illuminated kerb stone shall be fixed into cast-in-situ cement concrete of m20 grade at base, back filling and grooves, including dismantling, fixing, removal of dismantled material and cleaning etc.Complete. The colour of kerb stone shall be provided as directed by engineer in charge. SSR no 54.05</p>	20.00	Rmt	7782	155640	7,782.00	1,55,640.00	8000	160000

3.8	FRP Pargola for Seating (Market Rate)	25.00	Sq mt	15340	383500	15,340.00	3,83,500.00	15900	397500
3.9	Providing Geotextile filter fabric for retaining wall SSR Page no 543 Material rate	7100.00	sqmt	66	468600	66.00	4,68,600.00	68	482800
4.0	Providing structural steel work of rectangular hollow steel section for steel trusses, other similar trussed items like purlin and members with all bracing, gusset plates etc. as per detailed designs and drawings SSR no 23.11	3.00	MT	124730	374190	1,24,730.00	3,74,190.00	129000	387000
4.1	Providing, applying, fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4mm thick ACP sheet material consisting of 3mm thick FRG grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS 476 part 6 and 7 class O) and welded between two aluminium sheets (each 0.5mm thick of AA5005/AA3105 grade) The aluminium composite panel cladding sheets shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and glossy hard coat on face and polymer (service) coating on bottom face as specified in stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rod etc. overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre) SSR no 51.100	6.00	sqmt	4064	24384	4,064.00	24,384.00	4200	25200
4.2	Providing and Fixing Processed Stone Cladding on wall surface/ plywood surface. RCC part II/ Wall and all type of Interior, Exterior Compound wall and Gate etc of cladding processed stone with material of Processed clay, Wooden chips, Silica sand, Cement, GFRc admixtures, Colour pigments, Fiber up to thick of 230 mm/ 25 mm including scaffolding, fixing of screw, etc. (As directed by Engineer in Charge) SSR no 51.192	6.00	sqmt	9028	54168	9,028.00	54,168.00	9250	55500
4.3	GARDEN SOIL :- Supplying on site garden soil well sieved 90% to pass through I.S. sieve of 10mm size Free from stones rubbish like dried grass roots and other such materials. The soil should be fresh be measured by measuring box (Farma) Item includes royalty charges, octroi, corporation Tax Transporting, loading – unloading etc GDSR	400.00	Cu.M.	1500	600000	1,500.00	6,00,000.00	1550	620000
4.4	FARM YARD MANURE: - Supplying on site well decayed, well dried, well powdered, without clods and free from stones, dried grass and other rubbish material. The color of the manure generally is black. The manure will be measured by measuring box. (Farma)	240.00	Cu.M.	1550	372000	1,550.00	3,72,000.00	1600	384000

	Item includes Transporting, loading -unloading etc (.Lead charges per 50 km. considered.) GDSR								
4.5	Preparing Instant Lawn : Supplying on site fresh Garden soil (free from stones rubbish like dried grass roots, other such materials) for excavation area of depth of 20 cms.(consolidated thickness).(As per P&G DSR 2022-23 Items of garden work,Sr No.38a)	240.00	Sq.M.	773	185520	773.00	1,85,520.00	800	192000
4.6	Supplyings & planting of plants required for landscaping:- Bahva (Amaltash) Bakul (height of plant 8-10 ft) GDSR	100.00	Nos.	548	54800	548.00	54,800.00	560	56000
4.7	Planting large flowering / shady trees :-Areca Palm should be well Developed,Good Branching ,healthy Condition,appropriate Size in Polybag,undamaged 7-8 FT GDSR	100.00	Nos.	1250	125000	1,250.00	1,25,000.00	1300	130000
4.8	Supplying & erecting triple pole and neutral distribution board (TPNDB).SPMCB of 12 ways /phase (36 poles), with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB CSR 5.4.3	2.00	Nos	4610	9220	4,610.00	9,220.00	4775	9550
4.9	Supplying and erecting single pole and neutral distribution board (SPNDB),with 2 ways for incoming and 10 ways (10 poles) for outgoing SP MCBs, with door, 1.2mm thickness surface / flush mounted, IP 43 Protection on iron /GI frame as per specification no. SW-SWR/MCBDBCSR 5.4.9	1.00	Nos	1495	1495	1,467.00	1,467.00	1550	1550
5.0	Supplying, erecting & marking SP MCB 6A to 32A, C-series with rated short circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB CSR 5.3.2	82.00	Nos	174	14268	174.00	14,268.00	180	14760
5.1	Supplying, erecting & marking FP MCB 40A to 63A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB CSR 5.3.13	2.00	Nos	1329	2658	1,329.00	2,658.00	1350	2700
5.2	Supplying, erecting & commissioning 2 pole RCCB 40A, electromagnetic type with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no.SW-RCCB/RCCB CSR 5.6.2	6.00	Nos	2207	13242	2,207.00	13,242.00	2250	13500
5.3	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip)	120.00	Mtr.	316	37920	316.00	37,920.00	325	39000

	cable 1100 V, 3 core 6 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU CSR 7.2.16								
5.4	LV Cables of following sizes to be laid buried in ground/ laid in cable trays in ready made trenches, cables shall be fitted on wall / ceiling by the means of saddle & spacers. Miscellaneous items such as cable dressing accessories like nylon tie, Aluminium clamps, GI cleats, cable tags etc. are included in the scope. Removal of empty drums, cartoons and making the site normal as instructed by Purchaser client is included in scope. Supplying, erecting & terminating FR XLPE insulated, galvanised steelformed wire armoured (strip) cable 1100 V, 4 core 10 sq. mm. copperconductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU CSR 7.2.33	240.00	Mtr.	603	144720	603.00	1,44,720.00	625	150000
5.5	Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of single compression cable glands, stripping of cable insulation, supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, G.I nut - bolts and G.I washers, consumables and other hardware materials as required to make the installation complete, are in the scope. All G.I Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core & accessories. Supplying & erecting single compression type brass cable glands for 3 to 4 core 6 sq mm / 2 to 4 core 10 sq mm for XLPE armoured cable as per specification No. CB-GL CSR 7.7.2	6.00	Nos	87	522	87.00	522.00	90	540
5.6	Supplying and laying (including excavation of suitable width & depth up to 90 cm) 160 mm outside dia, double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete. CSR 7.6.14	200.00	Mtr.	496	99200	496.00	99,200.00	515	103000
5.7	Supplying, fixing and commissioning 2 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30/100/300 mA sensitivity and short circuit and earth leakage trip indication as	1.00	Nos	3182	3182	3,182.00	3,182.00	3300	3300


	per specification no SW- RCCB/RCBO CSR 5.6.10								
5.8	Point wiring for light/bell/exhaust fan in PVC trunking (casing-capping) with 1.5 sq.mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW CSR 1.7.19	24.00	Nos	552	13248	552.00	13,248.00	575	13800
5.9	Secondary point wiring for additional light/ bell point, concealed type in min 20 mm FRLS grade PVC conduit with 1.5 sq.mm. (2+1E) FRLSH grade copper wires with required accessories as per specification No: WG-PW/CW CSR 1.7.22	28.00	Nos	204	5712	204.00	5,712.00	210	5880
6.0	Supplying and erecting modular type switch 6A / 10A duly erected on provided plate and box with wiring connections complete. CSR 1.6.1	28.00	Nos	72	2016	72.00	2,016.00	75	2100
6.1	Supplying and erecting modular type 3 pin 6A multi socket with safety shutter, duly erected on provided plate and box with wiring connections complete CSR 1.6.10	5.00	Nos	112	560	110.00	550.00	115	575
6.2	Supplying and erecting mains with 3x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification NoWG-MA/BW CSR 1.3.6	7550.00	mtr	93	702150	93.00	7,02,150.00	95	717250
6.3	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC. CSR 1.1.9	5900.00	mtr	127	749300	127.00	7,49,300.00	130	767000
6.4	Supplying and erecting integrated LED street light fitting 60W IP65 & IK08class having single piece pressure die-cast aluminium housing, having systemlumens output of Min. 6600 Lumens, min. efficacy of 110 lumen/W, CRI>70,CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No FG-ODE/FLS2 CSR 2.4.5	191.00	Nos	4970	949270	4,970.00	9,49,270.00	5155	984605
6.5	Supplying and erecting Gate/garden light fitting with 200mm dia. glass bowl suitable for upto 12W LED Lamp on provided pipe as per specification No. FGODF/GLT CSR 2.5.1	39.00	Nos	529	20631	528.00	20,592.00	550	21450

6.6	Supplying and erecting LED square / circular Max. 11 W down lighter/Panel Light having pressure die-cast aluminium housing, polystyrene diffuser having system lumens output of Min. 1200 Lumens, min. efficacy of 110 lumen/W, CRI>80, CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50, including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty. CSR 2.1.3	75.00	Nos	796	59700	795.00	59,625.00	825	61875
6.7	Supplying and erecting Street light bracket for erection of Single fitting on tubular welded pole with 40 mm. dia 1.0 m. length "B" class G.I. pipe along with pole cap of 125mm dia 600 mm long duly welded as per specification no. FG-BKT/BPC CSR 2.7.7	43.00	Nos	1680	72240	1,680.00	72,240.00	1740	74820
6.8	Supplying and erecting Street light bracket for erection of Double fitting on tubular welded pole with 40 mm. dia 1.0 m. length "B" class G.I. pipe along with pole cap of 125mm dia 600 mm long duly welded as per specification no. FG-BKT/BPC CSR 2.7.8	94.00	Nos	2154	202476	2,145.00	2,01,630.00	2235	210090
6.9	Supplying and erecting GI wire of high purity of required sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/cable/ conduit with screws complete. CSR 9.2.5	8.00	kg	155	1240	150.00	1,200.00	160	1280
7.0	Supplying and erecting G.I. pipe pole 'B' class 80 mm dia 6 m long with pole cap, base plate in provided foundation as per specification no. OH-PL/GIP CSR 8.1.16	117.00	Nos	5545	648765	5,535.00	6,47,595.00	5750	672750
7.1	Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no. EA-EP CSR 9.1.1	2.00	Nos	4715	9430	4,710.00	9,420.00	4890	9780
					409583862.3		40,95,81,644 Final Negotiate Amount		421924602.2

वरील कामी मे. श्री.जी. इपीसी प्रा.लि. यांनी वरील दराची (रु. 40,95,81,644/-) निविदा सादर केल्या आहेत.

मा.आयुक्त महोदय यांनी सदरचे दर स्विकारण्यास मान्यता दिलेली आहे. नगरविकास विभाग, शासन आदेश क्रमांक

एमसीओ-2020/प्र.क्र.71 (भाग-2)/नवि-14 दि.26 ऑगस्ट 2022 अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतुद व विशेषतः कलम 452 अ च्या (1 अ) व (1 ब) मधील तरतुदीनुसार मा.आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झाले आहेत. सदर अधिकारात वरील कामांस महाराष्ट्र महानगरपालिका अधिनियम मधील कलम 73 (क) नुसार मान्यता देण्यास शिफारस आहे.


(दिपक खांबित)

शहर अभियंता

मिरा-भाईंदर महानगरपालिका

मा. आयुक्त यांच्या मान्यतेने

708708/24-15/10/22

मा. महासभा / स्थायी समिती वभा
मोडका प्रप दि. 28/08/2022 / सप्र.प=34 अ.
संख्या मो.क्र. 945 दि. 2022/24
लिपीव
सचिव विभाग
मिरा-भाईंदर महानगरपालिका

मिरा-भाईंदर महानगरपालिका

प्रशासकीय ठराव दिनांक ०५ सप्टेंबर २०२४

१५६

विषय क्र. () :- मा. आयुक्त महोदयाकडील कामकाज

निविदेस मान्यता देणेबाबत.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव
१	२	३	४	५
१.	१०५२४१५_१	गुजरात मधील साबरमती रिव्हर वॉटर फ्रंट डेव्हलपमेंटच्या धर्तीवर मिरा भाईंदर महानगरपालिका हद्दीतील चेना नदीवर रिव्हर वॉटर फ्रंट डेव्हलपमेंट उभारणे. (मुलभुत सोई सुविधा विकास योजना)	रु.४०,९५,८१,६४४/-	मे. श्री.जी. इपीसी प्रा.लि. मे.एन.ए.कंस्ट्रक्शन

Sl. No	Item Description	Quantity	Units	M/s. Shreeji EPC Pvt. Ltd.				M/s. N A CONSTRUCTION PVT. LTD	
				Quoted Rate	Quoted Amount	Final Negotiate Rate	Final Negotiate Amount	Rate	Amount
1.1	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By Mechanical Means) a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR No 12.03	8430.75	Cum	95	800921.25	95.00	8,00,921.25	100	843075
1.2	Excavation for foundation in hard murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR No 12.04	3798.45	Cum	253	961007.85	253.00	9,61,007.85	260	987597
1.3	Excavation for foundation in hardrock by chiselling and wedging or line drilling including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete SSR No 12.11	35700.00	CUM	2027	72363900	2,027.00	7,23,63,900.00	2100	74970000
1.4	Excavation for foundation in soft rock including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR no 12.08	12.30	CUM	585	7195.5	585.00	7,195.50	605	7441.5

1.5	Excavation for foundation / pipe trenches in slush muddy / marshy / slushy / soil including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding backfilling, etc. complete. Providing and fixing shuttering shall be paid separately. MJP SSR	28560.00	cum	448	12794880	448.00	1,27,94,880.00	465	13280400
1.6	Dewatering on BHP basis by using water pump including diversion of stream, providing coffer dams, earthen bunds etc. as may be necessary for foundation and other parts of the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary). SSR no 12.23	1380.00	Hour	210	289800	210.00	2,89,800.00	215	296700
1.7	Providing solingusing 80 mmsize trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.) SSR no 21.40	1367	Cum	3200	4374400	3,200.00	43,74,400.00	3300	4511100
1.8	Providing and laying in situ / ready mix / ready mix M15 cement concrete of trap / granite / quartzite / gneiss metal in foundation including necessary centering, formwork, bailing out water, compacting and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer / concrete batch mix plant (pan mixer) with natural /artificial sand) SSR no 24.04	450.23	Cum	8011	3606792.53	8,011.00	36,06,792.53	8250	3714397.5
1.9	Providing and laying Cast in situ / Ready Mix cement concrete in M20 of trap / granite / quartzite / gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying / pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering unevenand honeycombed surfaceonly. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro process or based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. Withfine aggregate (Crushed sand VSI Grade) SSR no 24.10	2087.40	Cum	8344	17417265.6	8,344.00	1,74,17,265.60	8550	17847270

2.0	Providing and laying Cast insitu / Ready Mix cement concrete in M-25 of trap /granite /quartzite /gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying/ pumping, compacting and roughening them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mixplant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 26.19	5215.20	Cum	17974	93738004.8	17,974.00	9,37,38,004.80	18500	96481200
2.1	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. beams as per detailed designs and drawings or as directed including centering, SSR no 25.54	144.00	Cum	14553	2095632	14,553.00	20,95,632.00	15000	2160000
2.2	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including centering, formwork, SSR no 25.35	20.25	cum	16144	326916	16,144.00	3,26,916.00	16500	334125
2.3	Providing and laying Cast in situ / Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering.SSR no 26.23	3.00	CUM	7550	22650	7,550.00	22,650.00	7800	23400
2.4	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 25.74	648.00	Cum	16300	10562400	16,300.00	1,05,62,400.00	16750	10854000
2.5	Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies,	1216.52	MT	98845	120246919.4	98,845.00	12,02,46,919.40	102000	124085040

	staircase, newels, chajjas, lintels, pargolis, copings, fins, arches etc. as per detailed designs, drawings and schedules, including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete SSR no 26.34								
2.6	Providing Fusion Bonded Epoxy Coating SSR no 26.41	15.00	MT	11383	170745	11,383.00	1,70,745.00	11750	176250
2.7	Providing and fixing bituminous pad 25mm thick for expansion joints in retaining wall, compound wall etc. complete. SSR no 30.11	168.00	SQMT	1855	311640	1,855.00	3,11,640.00	1900	319200
2.8	Conveying excavated material upto lid of 20KM (Lead Chart)	76501.50	CUM	469	35879203.5	469.00	3,58,79,203.50	475	36338212.5
2.9	Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3)- 1984 in extra fine jointing mortar of fix oblock of UltraTech or equivalent in superstructure including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972) SSR no 27.15	131.37	CUM	7708	1012599.96	7,708.00	10,12,599.96	7900	1037823
3.0	Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972) SSR no 27.16	3.01	sqmt	1080	3250.8	1,080.00	3,250.80	1120	3371.2
3.1	Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete SSR no 33.34	213.28	Sq mt	4245	905373.6	4,245.00	9,05,373.60	4400	938432
3.2	Providing sandfaced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using water proofing compound at 1 Kilogram per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete. SSR no 32.11	14242.50	sqmt	701	9983992.5	701.00	99,83,992.50	725	10325812.5
3.3	Providing and applying two coats Apex Ultima Puranature Anti-Pollution Or equivalent approved brand, paint should decomposes organic substances and inorganic gases (NOx, VOC's, CO, SOx,	14242.50	sqmt	390	5554575	390.00	55,54,575.00	400	5697000

	formaldehydes, etc.) in presence of natural or artificial light. It contains Graphene and nanoparticles of titanium oxide. and Absorbs CO2 (4.8 Kilogram / 15l). plaster crack should be filled by Acrylic base Crack seal / Textured Crack filler, Paint has to applied on one coat of Apex Ultima Puranature Anti-Pollution Primer or Equivalent. Warranty Should be given by the Manufacturer The work should be done by the Manufacturer Recommended applicator and he should be able to furnish stage wise on site technical reports from the concerned company technologist. SSR no 50.79								
3.4	Providing and laying weep holes of 100 mm diameter PVC pipes as per drawing for abutment returns, return walls etc. Complete SSR no 17.37	1050.00	rmt	560	588000	560.00	5,88,000.00	580	609000
3.5	Providing and fixing 900 mm high S.S.304 Grade Stainless steel railing with 40 mm diameter and 1.5mm thick at top, 40 mm diameter and 1.5 mm thick vertical supports spaced at 1.5 m center to center and 8mm thick toughened glass including fabricating, fixtures, erecting, necessary welding, grinding, finishing, buffing to stainless steel pipe etc. complete SSR no 40.07	1050.00	rmt	4939	5185950	4,939.00	51,85,950.00	5100	5355000
3.6	Stamp Concrete of 100mm Thickness-Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand/VSI grade finely washed crusheds and)Confirming to IS383, as per mixed in a batching and mixing plant/non tilting mixer and weigh batcher as per approved mix design , admixtures , transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continous operation , finishing to lines and grades. Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method@5kg per sqm. Including texturing and covering with plastic sheet(min200micron thickness) and also applying two coats of UV-stable, 30% solids clear sealer@150 to 250gms per sqm using surface roller and protecting from falling dust, dirt	2040.00	Sq mt	1872	3818880	1,872.00	38,18,880.00	1940	3957600

	and curing by curing compound/by providing cement vata in cement Mortar 1:8@0.6mx0.6m center to center, measuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same through out curing period by any other method approved by engineer-in charge or Landscape architect etc. complete. (prior approval of superintending Engineer will be necessary) SSR/54.01								
3.7	Providing and fixing kerb stone with led lighting system as per following specifications: dimensions with vertical mounting legs with 10mm horizontal square shape mild steel reinforcements. Illuminated kerb stone having visible dimensions:- 500mmx150mmx150mm. (asperire-86-1983) 80mm leg shaving ms reinforcements shall be embedded in bit/concrete road surface, the kerb stone should have kerb angle of 45degree, with rubber plugs at both ends of the kerb stones (2nos) having load carrying capacity- vertical:1465kg, horizontal:2349 (certified by govt. Recognized bodies) having thermal stability:-40 to 120degree celcius (certified by govt. Recognized bodies). Illuminated kerb stones including: in place protection and connect or rating ip 67, electrical wire- (asperis:694), ledstrip (asperim:80) standard. Including for electrical fixing- frp junction box consisting of- 10amp. Switch module power supply (smpls) having input voltage-230vac, output voltage 36vdc, 2polemcb. Illuminated kerb stone shaving warranty for 3 years. illuminated kerb stone shall be fixed into cast-in-situ cement concrete of m20 grade at base, back filling and grooves, including dismantling, fixing, removal of dismantled material and cleaning etc. Complete. The colour of kerb stone shall be provided as directed by engineer in charge. SSR no 54.05	20.00	Rmt	7782	155640	7,782.00	1,55,640.00	8000	160000
3.8	FRP Pargola for Seating (Market Rate)	25.00	Sq mt	15340	383500	15,340.00	3,83,500.00	15900	397500
3.9	Providing Geotextile filter fabric for retaining wall SSR Page no 543 Material rate	7100.00	sqmt	66	468600	66.00	4,68,600.00	68	482800
4.0	Providing structural steel work of rectangular hollow steel section for steel trusses, other similar trussed items like purlin and members with all bracing, gusset plates etc. as per detailed designs and drawings SSR no 23.11	3.00	MT	124730	374190	1,24,730.00	3,74,190.00	129000	387000
4.1	Providing, supplying, fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4mm thick ACP sheet material consisting of 3mm thick FRG grade mineral core following NBC part IV Fire and life safety	6.00	sqmt	4064	24384	4,064.00	24,384.00	4200	25200

	having 2 hours fire resistance in accordance to ASTM E119-12 and BS 476 part 6 and 7 class O/s and sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA 3105 grade). The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and shall have a top face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rod etc. overall weight of the ACP shall not be less than 7.5 Kg/gram/ One Square Metre) SSR no 51.100								
4.2	Providing and Fixing Processed Stone Cladding on wall surface/plywood surface. RCC pardi/ Wall and all type of Interior, Exterior Compound wall and Gate etc. of cladding processed stone with material of Processed clay, Wooden chips, Silica sand, Cement, GFRc admixtures, Colour pigments, Fiber up to thick of 230 mm/ 25 mm including scaffolding, fixing of screw, etc. (As directed by Engineer in Charge) SSR no 51.192	6.00	sqmt	9028	54168	9,028.00	54,168.00	9250	55500
4.3	GARDEN SOIL :- Supplying on site garden soil well sieved 90% to pass through I.S. sieve of 10mm size Free from stones rubbish like dried grass roots and other such materials. The soil should be fresh be measured by measuring box (Farma) Item includes royalty charges, octroi, corporation Tax Transporting, loading - unloading etc GDSR	400.00	Cu.M.	1500	600000	1,500.00	6,00,000.00	1550	620000
4.4	FARM YARD MANURE: - Supplying on site well decayed, well dried, well powdered, without clods and free from stones, dried grass and other rubbish material. The color of the manure generally is black. The manure will be measured by measuring box. (Farma) Item includes Transporting, loading -unloading etc (Lead charges per 50 km. considered.) GDSR	240.00	Cu.M.	1550	372000	1,550.00	3,72,000.00	1600	384000
4.5	Preparing Instant Lawn : Supplying on site fresh Garden soil (free from stones rubbish like dried grass roots, other such materials) for excavation area of depth of 20 cms.(consolidated thickness).(As per P&G DSR 2022-23 Items of garden work, Sr No.38a)	240.00	Sq.M.	773	185520	773.00	1,85,520.00	800	192000
4.6	Supplying & planting of plants required for landscaping:- Bahva (Amaltash) Bakul (height of plant 8-10 ft) GDSR	100.00	Nos.	548	54800	548.00	54,800.00	560	56000

4.7	Planting large flowering / shady trees :-Areca Palm should be well Developed,Good Branching ,healthy Condition,appropriate Size in Polybag,undamaged 7-8 FT GDSR	100.00	Nos.	1250	125000	1,250.00	1,25,000.00	1300	130000
4.8	Supplying & erecting triple pole and neutral distribution board (TPNDB),SPMCB of 12 ways /phase (36 poles), with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB CSR 5.4.3	2.00	Nos	4610	9220	4,610.00	9,220.00	4775	9550
4.9	Supplying and erecting single pole and neutral distribution board (SPNDB),with 2 ways for incoming and 10 ways (10 poles) for outgoing SP MCBs, with door, 1.2mm thickness surface / flush mounted, IP 43 Protection on iron /GI frame as per specification no. SW-SWR/MCBDBCSR 5.4.9	1.00	Nos	1495	1495	1,467.00	1,467.00	1550	1550
5.0	Supplying, erecting & marking SP MCB 6A to 32A, C-series with rated short circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB CSR 5.3.2	82.00	Nos	174	14268	174.00	14,268.00	180	14760
5.1	Supplying, erecting & marking FP MCB 40A to 63A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB CSR 5.3.13	2.00	Nos	1329	2658	1,329.00	2,658.00	1350	2700
5.2	Supplying, erecting & commissioning 2 pole RCCB 40A, electromagnetic type with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no.SW-RCCB/RCCB CSR 5.6.2	6.00	Nos	2207	13242	2,207.00	13,242.00	2250	13500
5.3	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3 core 6 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU CSR 7.2.16	120.00	Mtr.	316	37920	316.00	37,920.00	325	39000
5.4	LV Cables of following sizes to be laid buried in ground/ laid in cable trays in ready made trenches, cables shall be fitted on wall / ceiling by the means of saddle & spacers. Miscellaneous items such as cable dressing accessories like nylon tie, Aluminium clamps, GI cleats, cable tags etc. are included in the scope. Removal of empty drums, cartoons and making the site normal as instructed by Purchaser client is included in scope.Supplying, erecting & terminating FR XLPE insulated, galvanised steelformed wire armoured	240.00	Mtr.	603	144720	603.00	1,44,720.00	625	150000

	(strip) cable 1100 V, 4 core 10 sq. mm. copperconductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LI/CUCSR 7.2.33								
5.5	Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of single compression cable glands, stripping of cable insulation, supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, G.I nut - bolts and G.I washers, consumables and other hardware materials as required to make the installation complete, are in the scope. All G.I Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core & accessories. Supplying & erecting single compression type brass cable glands for 3 to 4 core 6 sq mm / 2 to 4 core 10 sq mm for XLPE armoured cable as per specification No. CB-GL CSR 7.7.2	6.00	Nos	87	522	87.00	522.00	90	540
5.6	Supplying and laying (including excavation of suitable width & depth up to 90 cm) 160 mm outside dia, double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete. CSR 7.6.14	200.00	Mtr.	496	99200	496.00	99,200.00	515	103000
5.7	Supplying, fixing and commissioning 2 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30/100/300 mA sensitivity and short circuit and earth leakage trip indication as per specification no SW-RCCB/RCBO CSR 5.6.10	1.00	Nos	3182	3182	3,182.00	3,182.00	3300	3300
5.8	Point wiring for light/bell/exhaust fan in PVC trunking (casing-capping) with 1.5 sq. mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW CSR 1.7.19	24.00	Nos	552	13248	552.00	13,248.00	575	13800
5.9	Secondary point wiring for additional light/ bell point, concealed type in min 20 mm FRLS grade PVC conduit with 1.5 sq. mm. (2+1E) FRLSH grade copper wires with required accessories as per specification No: WG-PW/CW CSR 1.7.22	28.00	Nos	204	5712	204.00	5,712.00	210	5880
6.0	Supplying and erecting modular type switch 6A / 10A duly erected on provided plate and box with wiring connections complete. CSR 1.6.1	28.00	Nos	72	2016	72.00	2,016.00	75	2100

6.1	Supplying and erecting modular type 3 pin 6A multi socket with safety shutter, duly erected on provided plate and box with wiring connections complete CSR 1.6.10	5.00	Nos	112	560	110.00	550.00	115	575
6.2	Supplying and erecting mains with 3x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW CSR 1.3.6	7550.00	mtr	93	702150	93.00	7,02,150.00	95	717250
6.3	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC. CSR 1.1.9	5900.00	mtr	127	749300	127.00	7,49,300.00	130	767000
6.4	Supplying and erecting integrated LED street light fitting 60W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 6600 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No: FG-ODF/FLS2.CSR 2.4.5	191.00	Nos	4970	949270	4,970.00	9,49,270.00	5155	984605
6.5	Supplying and erecting Gate/garden light fitting with 200mm dia. glass bowl suitable for upto 12W LED Lamp on provided pipe as per specification No. FGODF/GLT CSR 2.5.1	39.00	Nos	529	20631	528.00	20,592.00	550	21450
6.6	Supplying and erecting LED square / circular Max. 11 W down lighter/Panel Light having pressure die-cast aluminium housing, polystyrene diffuser having system lumens output of Min. 1200 Lumens, min. efficacy of 110 lumen/W, CRI>80, CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50, including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty. CSR 2.1.3	75.00	Nos	796	59700	795.00	59,625.00	825	61875
6.7	Supplying and erecting Street light bracket for erection of Single fitting on tubular welded pole with 40 mm. dia 1.0 m. length "B" class G.I. pipe along with pole cap of 125mm dia	43.00	Nos	1680	72240	1,680.00	72,240.00	1740	74820

	600 mm long duly welded as per specification no. FG-BKT/BPC CSR 2.7.7								
6.8	Supplying and erecting Street light bracket for erection of Double fitting ontubular welded pole with 40 mm. dia 1.0 m. length "B" class G.I pipe alongwith pole cap of 125mm dia 600 mm long duly welded as per specification no.FG-BKT/BPCCSR 2.7.8	94.00	Nos	2154	202476	2,145.00	2,01,630.00	2235	210090
6.9	Supplying and erecting GI wire of high purity of required sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/cable/ conduit with screws complete. CSR 9.2.5	8.00	kg	155	1240	150.00	1,200.00	160	1280
7.0	Supplying and erecting G.I. pipe pole 'B' class 80 mm dia 6 m long with pole cap, base plate in provided foundation as per specification no. OI-PL/GIP CSR 8.1.16	117.00	Nos	5545	648765	5,535.00	6,47,595.00	5750	672750
7.1	Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no.EA-EP CSR 9.1.1	2.00	Nos	4715	9430	4,710.00	9,420.00	4890	9780
					409583862.3		40,95,81,644 Final Negotiate Amount		421924602.2

कार्यालयीन प्रस्तावना

वरील कामी मे. श्री.जी. इपीसी प्रा.लि. यांनी वरील दराची (रु.40,95,81,644/-) निविदा सादर केली आहे. मा.आयुक्त महोदय यांनी सदरचे दर स्विकारण्यास मान्यता दिलेली आहे. नगरविकास विभाग, शासन आदेश क्रमांक एमसीओ-2020/प्र.क्र.71 (भाग-2)/नवि-14 दि.26 ऑगस्ट 2022 अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतुद व विशेषतः कलम 452 अ च्या (1 अ) व (1 ब) मधील तरतुदीनुसार मा.आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असुन त्यांना अधिनियमातील सर्व अधिकार प्राप्त झाले आहेत. सदर अधिकारात वरील 01 कामांस महाराष्ट्र महानगरपालिका अधिनियम मधील कलम 73 (क) नुसार प्रशासकीय ठरावाव्दारे मान्यता देण्याचा प्रस्ताव प्रशासनाने सादर केला आहे.

प्रशासकीय ठराव क्र. १५६ दिनांक ०५/०८/२०२४

मिरा भाईंदर महानगरपालिका क्षेत्रातील वरील 01 कामांस मान्यता देण्याच्या प्रस्तावाचे अवलोकन करण्यात आले.

महाराष्ट्र महानगरपालिका अधिनियम तरतुदी व विशेषतः कलम 452 (अ) च्या (1अ) व (1ब) नुसार, महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्रमांक :- एमसीओ 2020/प्र.क्र.71 (भाग-2)/नवि-14 दिनांक 26 ऑगस्ट 2022 अन्वये प्राप्त अधिकारानुसार मी, संजय काटकर, प्रशासक, मिरा भाईंदर महानगरपालिका मा.महानगरपालिका महासभेच्या अधिकाराचा वापर करुन प्रशासनाने सादर केलेल्या विषयास अनुसरुन खालील कामाच्या मे. श्री.जी. इपीसी प्रा.लि. यांनी दरवाटाघाटीनंतर रक्कम रु.40,95,81,644/- दराची निविदा सादर केली आहे. सदर निविदाधारकाने दरवाटाघाटीनंतर

रकम रु.40,95,81,644/- (अंदाजपत्रकिय दराच्या) निविदेस महाराष्ट्र महानगरपालिका अधिनियम कलम 73 (क) नुसार मान्यता देण्यात येत आहे.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव
1	2	3	4	5
1.	1052415_1	गुजरात मधील साबरमती रिव्हर वॉटर फ्रंट डेव्हलपमेंटच्या धर्तीवर मिरा भाईंदर महानगरपालिका हद्दीतील चेना नदीवर रिव्हर वॉटर फ्रंट डेव्हलपमेंट उभारणे. (मुलभुत सोई सुविधा विकास योजना)	रु.40,95,81,644/-	मे. श्री.जी. इपीसी प्रा.लि. मे.एन.ए.कंस्ट्रक्शन

Sl. No	Item Description	Quantity	Units	M/s. Shreeji EPC Pvt. Ltd. M/s.				M/s. N A CONSTRUCTION PVT. LTD	
				Rate	Amount	Final Negotiate Rate	Final Negotiate Amount	Rate	Amount
1.1	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By Mechanical Means) a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR No 12.03	8430.75	Cum	95	800921.25	95.00	8,00,921.25	100	843075
1.2	Excavation for foundation in hard murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR No 12.04	3798.45	Cum	253	961007.85	253.00	9,61,007.85	260	987597
1.3	Excavation for foundation in hardrock by chiselling and wedging or line drilling including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete SSR No 12.11	35700.00	CUM	2027	72363900	2,027.00	7,23,63,900.00	2100	74970000
1.4	Excavation for foundation in soft rock including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30% SSR no 12.08	12.30	CUM	585	7195.5	585.00	7,195.50	605	7441.5
1.5	Excavation for foundation / pipe trenches in slush muddy / marshy / slushy / soil including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by	28560.00	cum	448	12794880	448.00	1,27,94,880.00	465	13280400

	cleaning the mud, labour required for execution for shuttering item but excluding backfilling, etc. complete. Providing and fixing shuttering shall be paid separately. MJP SSR								
1.6	Dewatering on BHP basis by using water pump including diversion of stream, providing coffer dams, earthen bunds etc. as may be necessary for foundation and other parts of the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary). SSR no 12.23	1380.00	Hour	210	289800	210.00	2,89,800.00	215	296700
1.7	Providing and laying 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.) SSR no 21.40	1367	Cum	3200	4374400	3,200.00	43,74,400.00	3300	4511100
1.8	Providing and laying in situ / ready mix / ready mix M15 cement concrete of trap / granite / quartzite / gneiss metal in foundation including necessary centering, formwork, bailing out water, compacting and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer / concrete batch mix plant (pan mixer) with natural / artificial sand) SSR no 24.04	450.23	Cum	8011	3606792.53	8,011.00	36,06,792.53	8250	3714397.5
1.9	Providing and laying Cast in situ / Ready Mix cement concrete in M20 of trap / granite / quartzite / gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying / pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro process or based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 24.10	2087.40	Cum	8344	17417265.6	8,344.00	1,74,17,265.60	8550	17847270
2.0	Providing and laying Cast in situ / Ready Mix cement concrete in M-25 of trap / granite / quartzite / gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying / pumping, compacting and roughening	5215.20	Cum	17974	93738004.8	17,974.00	9,37,38,004.80	18500	96481200

	them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mixplant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 26.19								
2.1	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. beams as per detailed designs and drawings or as directed including centering, SSR no 25.54	144.00	Cum	14553	2095632	14,553.00	20,95,632.00	15000	2160000
2.2	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including centering, formwork, SSR no 25.35	20.25	cum	16144	326916	16,144.00	3,26,916.00	16500	334125
2.3	Providing and laying Cast in situ / Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering,SSR no 26.23	3.00	CUM	7550	22650	7,550.00	22,650.00	7800	23400
2.4	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc complete.(Excluding reinforcement and structural steel) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR no 25.74	648.00	Cum	16300	10562400	16,300.00	1,05,62,400.00	16750	10854000
2.5	Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, parris, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required	1216.52	MT	98845	120246919.4	98,845.00	12,02,46,919.40	102000	124085040

	complete SSR no 26.34								
2.6	Providing Fusion Bonded Epoxy Coating SSR no 26.41	15.00	MT	11383	170745	11,383.00	1,70,745.00	11750	176250
2.7	Providing and fixing bituminous pad 25mm thick for expansion joints in retaining wall, compound wall etc. complete. SSR no 30.11	168.00	SQMT	1855	311640	1,855.00	3,11,640.00	1900	319200
2.8	Conveying excavated material upto lid of 20KM (Lead Chart)	76501.50	CUM	469	35879203.5	469.00	3,58,79,203.50	475	36338212.5
2.9	Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part3)- 1984 in extra fine jointing mortar of fix oblock of UltraTech or equivalent in superstructure including striking joints, raking out joints and scaffolding etc Complete.(The test shall be carried out conforming to IS:6441 (Part I) - 1972)SSR no 27.15	131.37	CUM	7708	1012599.96	7,708.00	10,12,599.96	7900	1037823
3.0	Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc.Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972) SSR no 27.16	3.01	sqmt	1080	3250.8	1,080.00	3,250.80	1120	3371.2
3.1	Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete SSR no 33.34	213.28	Sq mt	4245	905373.6	4,245.00	9,05,373.60	4400	938437
3.2	Providing sandfaced plaster externally in cement mortar using approved screened sand in all positions including base coat of 15 mm thick in cement mortar 1:4 using water proofing compound at 1 Kilogram per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc complete. SSR no 32.11	14242.50	sqmt	701	9983992.5	701.00	99,83,992.50	725	10325812.5
3.3	Providing and applying two coats Apex Ultima Puranature Anti-Pollution Or equivalent approved brand, paint should decomposes organic substances and inorganic gases (NOx, VOC's, CO, SOx, formaldehydes, etc.) in presence of natural or artificial light. It contains Graphene and nanoparticles of titanium oxide, and Absorbs CO2 (4.8 Kilogram / 15l) plaster crack should be filled by Acrylic base Crack seal / Textured Crack	14242.50	sqmt	390	5554575	390.00	55,54,575.00	400	5697000

	filler, Paint has to applied on one coat of Apex Ultima Puranature Anti-Pollution Primer or Equivalent. Warranty Should be given by the Manufacturer The work should be done by the Manufacturer Recommended applicator and he should be able to furnish stage wise on site technical reports from the concerned company technologist. SSR no 50.79								
3.4	Providing and laying weep holes of 100 mm diameter PVC pipes as per drawing for abutment returns, return walls etc. Complete. SSR no 17.37	1050.00	rmt	560	588000	560.00	5,88,000.00	580	609000
3.5	Providing and fixing 900 mm high S.S.304 Grade Stainless steel railing with 40 mm diameter and 1.5mm thick at top, 40 mm diameter and 1.5 mm thick vertical supports spaced at 1.5 m center to center and 8mm thick toughened glass including fabricating, fixtures, erecting, necessary welding, grinding, finishing, buffing to stainless steel pipe etc. complete SSR no 40.37	1050.00	rmt	4939	5185950	4,939.00	51,85,950.00	5100	5355000
3.6	Stamp Concrete of 100mm Thickness-Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand/VSI grade finely washed crusheds and)Confirming to IS 383, as per mixed in a batching and mixing plant/non tilting mixer and weigh batcher as per approved mix design, admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continuous operation, finishing to lines and grades. Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @ 5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable, 30% solids clear sealer @ 150 to 250gms per sqm using surface roller and protecting from falling dust, dirt and curing by curing compound/by providing cement vata in cement Mortar 1:8 @ 0.6m x 0.6m center to center, measuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same through out curing	2040.00	Sq mt	1872	3818880	1,872.00	38,18,880.00	1940	3957600

	period by any other method approved by Engineer-in charge or Landscape architect etc. complete. (prior approval of superintending Engineer will be necessary) SSR/54.01								
3.7	Providing and fixing kerb stone with led lighting system as per following specifications: dimensions with vertical mounting legs with 10mm horizontal square shape mild steel reinforcements. Illuminated kerb stone having visible dimensions:- 500mmx150mmx150mm. (asperirc-86-1983) 80mm leg shaving ms reinforcements shall be embedded in bit/concrete road surface. the kerb stone should have kerb angle of 45degree. with rubber plugs at both ends of the kerb stones (2nos) having load carrying capacity- vertical: 1465kg. horizontal: 2349 (certified by govt. Recognized bodies) having thermal stability:-40 to 120degree celcius (certified by govt. Recognized bodies). Illuminated kerb stones including in grace protection and connect or rating ip 67, electrical wire- (asperis:694), ledstrip (asperlm:80) standard. Including for electrical fixing- frp junction box consisting of- 10amp. Switch module power supply (smpls) having input voltage-230vac, output voltage 36vdc, 2polemc. Illuminated kerb stone shaving warranty for 3 years. illuminated kerb stone shall be fixed into cast-in-situ cement concrete of m20 grade at base, back filling and grooves, including dismantling, fixing, removal of dismantled material and cleaning etc Complete. The colour of kerb stone shall be provided as directed by engineer in charge SSR no 54.05	20.00	Rmt	7782	155640	7,782.00	1,55,640.00	8000	160000
3.8	FRP Pergola for Seating (Market Rate)	25.00	Sq mt	15340	383500	15,340.00	3,83,500.00	15900	397500
3.9	Providing Geotextile filter fabric for retaining wall SSR Page no 543 Material rate	7100.00	sqmt	66	468600	66.00	4,68,600.00	68	482800
4.0	Providing structural steel work of rectangular hollow steel section for steel trusses, other similar trussed items like purlin and members with ail bracing, gusset plates etc. as per detailed designs and drawings SSR no 23.11	3.00	MT	124730	374190	1,24,730.00	3,74,190.00	129000	387000
4.1	Providing, supplying, fabricating and fixing panel of aluminium composite panel cladding in approved shapemadeoutof4mmthickACP sheetmaterialconsistingof3mmthickFRGrademineralcorefollowingNBCpartIVFireandlifesafety(having2hoursfireresistanceinaccordancetoASTME119-12andBS476part6and7classO)s andwichedbetween twoaluminiumsheets(each0.5mmthickofAA500S/AA3105grade)Thealuminiumcompositpanelcladdingsheetshallbecoiledwithkynar5	6.00	sqmt	4064	24384	4,064.00	24,384.00	4200	25200

	00basedPVDf/Lumiflonbasedfluoropolymerresin(having70:30ratioofPVDfandacrylic)coatingof approvedcolourandsyntheticcontent of face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rod etc. overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre) SSR no 51.100								
4.2	Providing and Fixing Processed Stone Cladding on wall surface/ plywood surface. RCC paradi/ Wall and all type of Interior, Exterior Compound wall and Gate etc. of cladding processed stone with material of Processed clay, Wooden chips, Silica sand, Cement, GFRc admixtures, Colour pigments, Fiber up to thick of 230 mm/ 25 mm including scaffolding, fixing of screw, etc. (As directed by Engineer in Charge) SSR no 51.192	6.00	sqm	9028	54168	9,028.00	54,168.00	9250	55500
4.3	GARDEN SOIL :- Supplying on site garden soil well sieved 90% to pass through I.S. sieve of 10mm size Free from stones rubbish like dried grass roots and other such materials. The soil should be fresh be measured by measuring box (Farma) Item includes royalty charges, octroi, corporation Tax Transporting, loading - unloading etc GDSR	400.00	Cu.M.	1500	600000	1,500.00	6,00,000.00	1550	620000
4.4	FARM YARD MANURE: - Supplying on site well decayed, well dried, well powdered, without clods and free from stones, dried grass and other rubbish material. The color of the manure generally is black. The manure will be measured by measuring box. (Farma) Item includes Transporting, loading -unloading etc (Lead charges per 50 km. considered.) GDSR	240.00	Cu.M.	1550	372000	1,550.00	3,72,000.00	1600	384000
4.5	Preparing Instant Lawn : Supplying on site fresh Garden soil (free from stones rubbish like dried grass roots, other such materials) for excavation area of depth of 20 cms.(consolidated thickness). (As per P&G DSR 2022-23 Items of garden work, Sr No.38a)	240.00	Sq.M.	773	185520	773.00	1,85,520.00	800	192000
4.6	Supplyings & planting of plants required for landscaping:- Bahva (Amaltash) Bakul (height of plant 8-10 ft) GDSR	100.00	Nos.	548	54800	548.00	54,800.00	560	56000
4.7	Planting large flowering / shady trees :-Areca Palm should be well Developed, Good Branching ,healthy Condition, appropriate Size in Polybag, undamaged, 7-8 FT GDSR	100.00	Nos.	1250	125000	1,250.00	1,25,000.00	1300	130000
4.8	Supplying & erecting triple pole and neutral distribution board (TPNDB), SPMCB of 12 ways /phase (36 poles), with door, 1.2mm thickness surface/flush mounted, IP 43	2.00	Nos	4610	9220	4,610.00	9,220.00	4775	9550

	Protection on iron/GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB CSR 5.4.3								
4.9	Supplying and erecting single pole and neutral distribution board (SPNDB), with 2 ways for incoming and 10 ways (10 poles) for outgoing SP MCBs, with door, 1.2mm thickness surface / flush mounted, IP 43 Protection on iron /GI frame as per specification no. SW-SWR/MCBDBCSR 5.4.9	1.00	Nos	1495	1495	1,467.00	1,467.00	1550	1550
5.0	Supplying, erecting & marking SP MCB 6A to 32A, C-series with rated short circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB CSR 5.3.2	82.00	Nos	174	14268	174.00	14,268.00	180	14760
5.1	Supplying, erecting & marking FP MCB 40A to 63A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB CSR 5.3.13	2.00	Nos	1329	2658	1,329.00	2,658.00	1350	2700
5.2	Supplying, erecting & commissioning 2 pole RCCB 40A, electromagnetic type with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no SW-RCCB/RCCB CSR 5.6.2	6.00	Nos	2207	13242	2,207.00	13,242.00	2250	13500
5.3	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3 core 6 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU CSR 7.2.16	120.00	Mtr.	316	37920	316.00	37,920.00	325	39000
5.4	LV Cables of following sizes to be laid buried in ground/ laid in cable trays in ready made trenches, cables shall be fitted on wall / ceiling by the means of saddle & spacers. Miscellaneous items such as cable dressing accessories like nylon tie, Aluminium clamps, GI cleats, cable tags etc. are included in the scope. Removal of empty drums, cartoons and making the site normal as instructed by Purchaser client is included in scope. Supplying, erecting & terminating FR XLPE insulated, galvanised steelformed wire armoured (strip) cable 1100 V, 4 core 10 sq. mm. copperconductor complete erected with glands & lugs, on wall/ trusses/ pole or laid inprovided trench/ pipe as per specification no. CB-LT/CUCSR 7.2.33	240.00	Mtr.	603	144720	603.00	1,44,720.00	625	150000
5.5	Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of single compression cable glands, stripping of cable insulation,	6.00	Nos	87	522	87.00	522.00	90	540

	supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, G.I nut - bolts and G.I washers, consumables and other hardware materials as required to make the installation complete, are in the scope. All G.I Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core & accessories Supplying & erecting single compression type brass cable glands for 3 to 4 core 6 sq mm / 2 to 4 core 10 sq mm for XLPE armoured cable as per specification No. CB-GI. CSR 7.7.2								
5.6	Supplying and laying (including excavation of suitable width & depth up to 90 cm) 160 mm outside dia, double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete. CSR 7.6.14	200.00	Mtr.	496	99200	496.00	99,200.00	515	103000
5.7	Supplying, fixing and commissioning 2 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30/100/300 mA sensitivity and short circuit and earth leakage trip indication as per specification no SW-RCCB/RCBO CSR 5.6.10	1.00	Nos	3182	3182	3,182.00	3,182.00	3300	3300
5.8	Point wiring for light/bell/exhaust fan in PVC trunking (casing-capping) with 1.5 sq.mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW CSR 1.7.19	24.00	Nos	552	13248	552.00	13,248.00	575	13800
5.9	Secondary point wiring for additional light/ bell point, concealed type in min 20 mm FRLS grade PVC conduit with 1.5 sq.mm. (2+1E) FRLSH grade copper wires with required accessories as per specification No: WG-PW/CW CSR 1.7.22	28.00	Nos	204	5712	204.00	5,712.00	210	5880
6.0	Supplying and erecting modular type switch 6A / 10A duly erected on provided plate and box with wiring connections complete. CSR 1.6.1	28.00	Nos	72	2016	72.00	2,016.00	75	2100
6.1	Supplying and erecting modular type 3 pin 6A multi socket with safety shutter, duly erected on provided plate and box with wiring connections complete CSR 1.6.10	5.00	Nos	112	560	110.00	550.00	115	575
6.2	Supplying and erecting mains with 3x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/ inside pole/Bus bars or any other places as per specification No. WG-MA/BW CSR 1.3.6	7550.00	mtr	93	702150	93.00	7,02,150.00	95	717250

6.3	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC. CSR 1.1.9	5900.00	mtr	127	749300	127.00	7,49,300.00	130	767000
6.4	Supplying and erecting integrated LED street light fitting 60W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 6600 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No. FG-ODF/FLS2. CSR 2.4.5	191.00	Nos	4970	949270	4,970.00	9,49,270.00	5155	984605
6.5	Supplying and erecting Gate/garden light fitting with 200mm dia. glass bowl suitable for upto 12W LED Lamp on provided pipe as per specification No. FGODF/GLT CSR 2.5.1	39.00	Nos	529	20631	528.00	20,592.00	550	21450
6.6	Supplying and erecting LED square / circular Max. 11 W down lighter / Panel Light having pressure die-cast aluminium housing, polystyrene diffuser having system lumens output of Min. 1200 Lumens, min. efficacy of 110 lumen/W, CRI>80, CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50, including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty. CSR 2.1.3	75.00	Nos	796	59700	795.00	59,625.00	825	61875
6.7	Supplying and erecting Street light bracket for erection of Single fitting on tubular welded pole with 40 mm. dia 1.0 m. length "B" class G.I. pipe along with pole cap of 125mm dia 600 mm long duly welded as per specification no. FG-BKT/BPC CSR 2.7.7	43.00	Nos	1680	72240	1,680.00	72,240.00	1740	74820
6.8	Supplying and erecting Street light bracket for erection of Double fitting on tubular welded pole with 40 mm. dia 1.0 m. length "B" class G.I. pipe along with pole cap of 125mm dia 600 mm long duly welded as per specification no. FG-BKT/BPC CSR 2.7.8	94.00	Nos	2154	202476	2,145.00	2,01,630.00	2235	210090
6.9	Supplying and erecting GI wire of high purity of required sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/cable/ conduit with screws complete. CSR 9.2.5	8.00	kg	155	1240	150.00	1,200.00	160	1280

7.0	Supplying and erecting G.I. pipe pole 'B' class 80 mm dia 6 m long with pole cap, base plate in provided foundation as per specification no. OH-PL-GP' CSR 8.1.16	117.00	Nos	5545	648765	5,535.00	6,47,595.00	5750	672750
7.1	Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no EA-EP' CSR 9.1.1	2.00	Nos	4715	9430	4,710.00	9,420.00	4890	9780
					409583862.3		40,95,81,644 Final Negotiate Amount		42,02,6602.3

(वासुदेव शिरवळकर)
नगरसचिव
मिरा भाईंदर महानगरपालिका

प्रत बांधकाम विभागाकडे योग्य त्या कार्यदाहीसाठी रवाना

मिरा-भाईंदर महानगरपालिका

बांधकाम विभाग

दि. ५/९/२०२४

// गोपवारा //

प्रकरण क्र. (९५७) :- निविदेस मान्यता देणेबाबत.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव
1	2	3	4	5
1.	1050627_1	वर्सोवा ब्रिज ते घोडबंदर गावाशेजारी खाडी किनारा विकसीत करणे. (मुलभुत सोई सुविधांचा विकास योजना)	रु.1,21,98,38,909/-	मे. एन.ए.कंस्ट्रक्शन प्रा.लि.

Sl. No.	Item Description	Quantity	Units	Quoted Rate		Final Negotiate Amount	
				Rate	Total Amount	Rate	Total Amount
1.1	Item No.1 Providing Dozer D 80 A 12 (Medium) for Dismantling of various structure available on site.	147.00	Hr	3480	511560.00	3405	500535
1.2	Item No.2 Labour charges for removing grass, thorney shrubs, Jungli shrub, Kubabul and alike grass along roadside making the ground clean by shovel and phavaras etc. complete.	37982.00	Sqm	8.00	303856.00	8	303856
1.3	Item No.3 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means	14946.75	cum	180.00	2630628.00	176	2630628
1.4	Item No.4 Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means	3557.61	cum	180.00	626139.36	176	626139.36
1.5	Item No.5 Excavation for foundation in hard rock by manual means including removing the excavated materials upto distance of 50 m beyond the building area, stacking and spreading as directed including dewatering under provided elsewhere preparing the bed for the foundation &	921.30	cum	1250.00	1126749.90	1223	1126749.9

	necessary backfilling, remaining, watering complete including shorting & strutting. (Lift up to 1.5M) Hard Rock by mechanical means with hydraulic excavator & rock breaker etc complete. BDA 1 to 4 page No.259 Pg no 7						
1.6	Item No.6 Removing sand/ muck/ slush/ soil bellow low tide level to the specified section from navigation channel as per the area and depth upto 3.00 m from sea bed by mechanical means with, hydraulic excavator, etc. and barge for establishment all machinery with all required tools and equipments, boat for conveying excavated material, including removing the excavated materials with all lift and leads as directed beyond high tide level line of water stacking spreading or disposing, dewatering if required unless otherwise provided else where complete under tidal condition.	6412.50	cum	525.00	3296025.00	514	3296025
1.7	Item No.7 Transporting of excavated/Dismantled materials lead 20 K.M.	19989.76	cum	500.00	9774992.64	489	9774992.64
1.8	Item No.8 Filling in Plinth & Floors with Approved Excavated materials in 15 to 20 cm layers including watering and compaction complete. BDA 10 Pgno 262	13926.94	cum	110.00	1504109.52	108	1504109.52
1.9	Item No.9 Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	55280.39	cum	1000.00	54064221.42	978	54064221.4
2.0	Item No.10 Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	11967.33	cum	2500	29272089.18	2446	29272089.2
2.1	Item No.11 Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary).	4000.00	hour	200.00	784000.00	196	784000
2.2	Item No.12 Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand	2682.90	cum	6500.00	17063244.00	6360	17063244

2.3	<p>Item No.13</p> <p>Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.),with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)</p>	930.09	cum	7500.00	6825000.42	7338	6825000.42
2.4	<p>Item No.14</p> <p>Providing and laying Cast in situ/ Ready Mix cement concrete M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork, cover blocks, laying/ pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel)etc.complete With fine aggregate (Crushed sand VSI Grade)</p>	396.30	cum	8500.00	3295630.80	8316	3295630.8
2.5	<p>Item No.15</p> <p>Providing and laying Cast in situ/ Ready Mix cement concrete M-40 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork, cover blocks, laying/ pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel)etc.complete With fine aggregate (Crushed sand VSI Grade)</p>	504.22	cum	9000.00	4440161.32	8806	4440161.32
2.6	<p>Item No.16</p> <p>Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand. Spec. No.: Bd.F.6 Page No. 300 and B.7, Page No.38 Providing and laying Cast in situ/Ready Mix cement</p>	63.45	cum	11500.00	713939.40	11252	713939.4

	concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork ,cover blocks, laying/pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
2.7	Item No.17 Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including centering, formwork, cover blocks, laying/pumping, compacting and roughening them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand	219.61	cum	14500.00	3115607.07	14187	3115607.07
2.8	Item No.18 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	26.97	cum	14500.00	382623.39	14187	382623.39
2.9	Item No.19 Providing and laying in situ / ready mix M-35 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers.column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailing out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate.	547.81	cum	11000	5895531.22	10762	5895531.22

	ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine aggregates of required specifications (VSI sand finely washed etc)						
3.0	Item No.20 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	164.70	cum	14500.00	2336598.90	14187	2336598.9
3.1	Item No.21 Providing and laying cast in situ / ready mix M35 RCC for 1000 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	660.00	Rmt	11000.00	7102920.00	10762	7102920
3.2	Item No.22 Providing and laying cast in situ / ready mix M40 RCC for 800 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc) Height 10-15m	4350.40	Rmt	16500.00	70232857.60	16144	70232857.6
3.3	Item No.23 Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the	569.40	RMT	2500.00	1392752.40	2446	1392752.4

3.4	<p>unserviceable materials as directed etc. complete. A) With Concrete Mixer iv) 1000 mm dia</p> <p>Item No24</p> <p>Providing, placing and driving in position 6mm thick permanent MS liner up to required depth with 12 mm thick MS cutting edge of 0.50 meter length of bottom including fabricating, cutting the MS sheet to required diameter and shape, welding the joints and driving with the help of required machineries, all materials, labour and lift etc. complete.</p> <p>(Excluding steel reinforcement)</p>	735.93	MT	106000.00	76323300.30	103710	76323300.3
3.5	<p>Item No25</p> <p>Chipping and dressing of the R.C.C. piles upto 0.60 meter including cleaning reinforcement and removal of dismantled materials upto a distance of 50 meter beyond the building area etc. for providing pile caps. (Excluding steel reinforcement)</p>	229.00	Nos	700.00	156865.00	685	156865
3.6	<p>Item No26</p> <p>Providing and laying in situ M40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for PSC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand) i) Height up to 5 m, normal rate.</p> <p>ii) Height 5 to 7.50 m, add 5 percent extra.</p> <p>iii) Height 7.50 to 10 m, 7.50 percent extra.</p> <p>iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.</p>	2358.00	Cum	12000.00	27685278.00	11741	27685278
3.7	<p>Item No27</p> <p>Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/pumping, compacting, curing, finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)</p>	141.92	cum	8500.00	1180206.72	8316	1180206.72

3.8	Item No28 Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, piers, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	1161.51	MT	92000	104550999.6 3	90013	104551000
3.9	Item No29 Providing and fixing in position to the exact profile and prestressing the high tensile strands to specified ultimate strength, standard end anchorages, cable ducts, grouting ducts after prestressing and bearing plates with wedges as per detailed drawings including necessary plant and machinery for prestressing etc. complete.	86.03	MT	175000.00	14730056.60	171220	14730056.6
4.0	Item No30 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually, striking joints on un exposed faces and watering etc. complete.	1976.37	cum	7000.00	13536158.13	6849	13536158.1
4.1	Item No31 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including racking out joints when plastering is to be done / striking joints when no plastering is to be done on inside watering and scaffolding etc. complete.	878.48	cum	7350.00	6317149.68	7191	6317149.68
4.2	Item No32 Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including raking out joints when plastering is to be done and striking joints when no plastering is to be done on the inside, watering scaffolding etc. complete.	135.65	cum	12000.00	1592666.65	11741	1592666.65
4.3	Item No33 Providing & fixing G.I. wire Gabions coated with Zinc+PVC of required size, section including boxes made of mechanically woven hexagonal shaped wire mesh of type, 10x12cm. edges mechanically selvaged made of heavily (Zinc+ PVC) coated G.I. wires as per BS: 443, mesh wire 3.00 mm Ø edge wire 3.9 mm Ø and filled with 20 to 50 kilogram weight trap stones including conveying with all the leads & lifts and placing at required places in required line, level, slope as per drawing, section as directed etc. complete under tidal conditions. a) Gabions of size — 1.00 x 1.00 x 1.00 M	4395.00	cum	4820.00	20726820.00	4716	20726820

4.4	Item No34 Providing 100mm diameter GI water spouts as per detailed drawings in RCC slab and wearing surface / kerb etc. complete.	340.00	Nos	2500.00	831640.00	2446	831640
4.5	Item No35 Providing and filling in the foundation with sand of approved quality including watering, compacting etc. complete. (To be executed with prior approval of Superintending Engineer)	1570.95	cum	2850.00	4379808.60	2788	4379808.6
4.6	Item No36 Providing and laying CE Marked Needle Punched and Mechanically Bonded Non-Woven Geotextile (TechGeo) indigenously manufactured from high quality polypropylene staple fibres (continuous filament will not be accepted) of Techfab India on the prepared subgrade for separation, drainage & filtration application with necessary overlaps as per drawing etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer. c) TFI TECHGEO PR-30	4320.00	Sqm	180.00	760320.00	176	760320
4.7	Item No37 Supplying Hot Rolled steel sheet piles having properties described in respective specifications or/ and shown in drawings (Z or U type with sectional modulus of minimum 2500 cm ³ , steel grade S430 GP with minimum yield strength of 430 MPa, minimum thickness 12.0 mm thickness, with Larssen interlocks and applying recommended sealant for complete watertightness (if required) & using suitable corner sections as per site condition) .Installing the same to line and level including making reformed steel sheet piles at required positions as corners, junction, wedges etc. as per approved drawing and specification in single or group jointing by welding properly. installing vertically along the alignment with the help of equipments like air compressors,excavator mounted / crane mounted vibro hammers / Impact Hammers / Hydraulic Pressing Hammers / vibrating drives powered by electric or hydraulic motor or combination of both based on the site requirements through the grooves to interlock together, wedges to make up for the permissible deviation of piles from the plumb lines caused during pile driving, slipped piles with the adjacent ones are found or loosened or dislocated during or after installation , sheet piles shall be pulled out and replaced with new ones or redone including necessary modification to the sheet pile to suit the groove of existing sheet piles , including cost and conveyance of all materials, hire charges of equipments, hire charges of crane/rigs, cost of electrodes, mobilisation and demobilisation charges, all labour, other incidentals etc complete. (No extra	420.00	Sqm	14050	5773740.00	13747	5773740

	payment shall be made for cost of extraction and replacement for installing of sheet pile deviating the specification or rejected by Engineer -in-charge. The rate is inclusive of providing guide frames, cost of installation pit, formation and removal of earthen bund etc.). Payment shall be made on actual depth of sheet pile installation.						
4.8	<p>Item No38</p> <p>Supplying Hot Rolled steel sheet piles having properties described in respective specifications or/ and shown in drawings (Z or U type with sectional modulus of minimum 2500 cm³, steel grade S430 GP with minimum yield strength of 430 MPa, minimum thickness 12.0 mm thickness, with Larssen interlocks and applying recommended sealant for complete watertightness (if required) & using suitable corner sections as per site condition). Installing the same to line and level including making reformed steel sheet piles at required positions as corners, junction, wedges etc. as per approved drawing and specification in single or group jointing by welding properly, installing vertically along the alignment with the help of equipments like air compressors, excavator mounted / crane mounted vibro hammers / Impact Hammers / Hydraulic Pressing Hammers / vibrating drives powered by electric or hydraulic motor or combination of both based on the site requirements through the grooves to interlock together, wedges to make up for the permissible deviation of piles from the plumb lines caused during pile driving, slipped piles with the adjacent ones are found or loosened or dislocated during or after installation, sheet piles shall be pulled out and replaced with new ones or redone including necessary modification to the sheet pile to suit the groove of existing sheet piles, including cost and conveyance of all materials, hire charges of equipments, hire charges of crane/rigs, cost of electrodes, mobilisation and demobilisation charges, all labour, other incidentals etc complete. (No extra payment shall be made for cost of extraction and replacement for installing of sheet pile deviating the specification or rejected by Engineer - in-charge. The rate is inclusive of providing guide frames, cost of installation pit, formation and removal of earthen bund etc.). Payment shall be made on actual depth of sheet pile installation.</p>	938.95	Sqm	16000.00	14698323.30	15654	14698323.3
4.9	<p>Item No39</p> <p>Supplying, fabricating and installing in position waling channel I.S 226 / 2062 quality to sheet piles to correct line and level as per approved drawing and specification with required accessories such as plates, bolt & nuts etc. for</p>	168.00	Sqm	1400.00	230160.00	1370	230160

	connecting with sheet piles as well as for splicing the channels, welding the channel joints to achieve the properties of the section / welding of connecting plates etc including cost and conveyance of all materials, cost of drilling holes, hire charges of equipments, hire charges of crane, cost of electrodes, cost of fixing with bolts, nuts & washers, all labour, painting one coat of zinchromite primer after rubbing and cleaning the surface with mechanical wire brushing, sand paper, other incidentals etc complete. (Rate quoted shall include supplying, fabricating, drilling holes and fixing waling channels to SSP only, cost of accessories such as connecting plates, bolts & nuts etc).						
5.0	Item No40 Design and engineering, supply and fixing of tensile membrane of high tensile strength, primary and secondary steel, hardware and accessories, including the fabrication of steel structure made out of MS structural steel tubular section of high yield strength as per relevant IS codes. The tensile membrane roof cover shall be of PVC coated polyester composite membrane of approved make and quality including membrane cutting, seaming and HF welding as per manufacturer standards. The membrane shall be fixed to MS structural members with necessary SS plates, lugs, clamping plates as required. The membrane shall be stretched and tensioned as per the design approved. The Membrane shall be flame resistant, fungicide finish, high tear out force and continued tear out force, well weldable, good UV resistance, high water pressure resistance and very low maintenance.	360.00	Sqm	7000.00	2465640.00	6849	2465640
5.1	Item No41 Design Conceptualisation & painting 3D artwork on any surface at all height and locations as directed.	7704.00	Sqm	1000.00	7534512.00	978	7534512
5.2	Item No42 Providing and Installing water fountain of 3 M dia with below specification wall should be of brick wall of 0.45 m width and 0.9 m ht above ground and clad with granite tiles. Inner area with wall and flooring should be waterproofed inner area wall and flooring should be done with premium glass mosaic tiles. Electricals wire of 4 core 16 sqmm and submersible pump of 7 HP with all necessary fitting and control panel (Including Glow lighting) Main sculpture as shown in dwg in GRC and other small sculpture of any animal in GRC. Plumbing work with all necessary fittings of pipe and nozzle etc complete as directed by Engineer-In-Charge (With 5 Years of Maintenance)	2.00	Each	2500000.00	4892000.00	2446000	4892000
5.3	Item No43 Supplying and laying of high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement	21600.00	Sqm	500.00	10562400.00	489	10562400

	made of high tenacity polyester core with polyethylene coating with Minimum Long Term Design Strength (LTDS) indicated below for 120 years design life at 20 degreeC. The LTDS should be strictly based on reliable test data and performance data available with the manufacturer from accredited independent agency certifying the Reduction Factor (RF) value for their geogrid for design temperature. The geogrid manufacturer should have creep test data from independent accredited laboratory for period over 5 years and should have minimum roll width of 4.5m with core of MS steel tube convenient for handling and lifting work as per detailed specification all complete as per directions of Engineer in charge. (Reference MoRT&H 3100 & IRC 113). High strength geogrid of Long Term Design Strength 59.5 kN/m						
5.4	Item No44 Providing and casting in C.C. M-25 for pier protection as per detailed drawing complete as specified and directed	1176.00	Rmt	6000.00	6903120.00	5870	6903120
5.5	Item No45 Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972)	415.30	Sqm	1000.00	406163.40	978	406163.4
5.6	Item No46 Providing waterproof plaster in W.C. and bath 20 mm thick for dado in CEMENTmortar 1:3 with neat finishing, floating using approved waterproofing compound of IS Std. at the rate of one kg per 50 kg of CEMENTetc. complete.Spec.As directed by Engineer-In-Charge.	527.40	Sqm	600	309583.80	587	309583.8
5.7	Item No47 Providing vee pointing with cement mortar 1:3 for stone /Brick masonry including scaffolding and curing etc. complete	4457.60	Sqm	200.00	873689.60	196	873689.6
5.8	Item No48 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	3051.78	Sqm	600.00	1791394.86	587	1791394.86
5.9	Item No49 Providing and applying laying Aggregate plaster in granite / marble stones, as decorative finish to give granite / marble like appearance to concrete, brick or block surfaces in	589.05	Sqm	2500.00	1440816.30	2446	1440816.3

	all position including preparation of surface smoothly, evenly by racking of joints in case of Brick or block work including backing layer of 12 mm thick with cement mortar 1:3 with 2% integral cement water proofing compound, roughening for wall keying hardening and drying the surface for a minimum five days gaps including second coat of cement lime mortar into a proportion 1:4 preparing the surface for three coat of marble finish plaster giving a thin coat of white cement and two parts of coarse calcite powder, applying the mortar with steel float on the surface in proper evenness applying at coat of white cement and lime to set a smooth finish then applying a thin coat of slurry made of white cement and black oxide colour in required proportion by the steel float to get black streaks on the surface and curing the surface for two days including all materials and labour etc. complete.						
6.0	Item No50 Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including leaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. NOTE: For Item Number 15 to 18 prior approval of Superintending Engineer will be necessary	182.40	Sqm	300.00	53625.60	294	53625.6
6.1	Item No51 Providing and applying two coats of protective membrane over the cured concrete surface like R.C.C. footings, columns, plinth beams etc. which will be submerged under soil so as to protect the same. Apply two pack coal tar epoxy system of Sunepoxy Coal tar of approved make & approved by Engineer in charge, having solid content ranges from 80-100%, Tack free time 4-6 hrs. Recoat after 16-24 hrs. Mix Part A and Part B of Sunepoxy Coal tar of approved make & approved by Engineer in charge in 1:1 ratio with slow speed stirrer and apply the same on a clean R.C.C. surface by brush. Allow to set for 8-10 hours and apply the second coat. The rate to include for application at all levels to various RCC elements to the satisfaction of the EIC etc. complete	15837.81	Sqm	325.00	5036423.58	318	5036423.58
6.2	Item No52 Providing and fixing fenders made from used tyres including fixing by stainless steel chain links of 8mm dia. and anchor bolts of 16 mm diameter etc. complete as per drawing and as directed under tidal range.	53.00	Nos	2600.00	134832.00	2544	134832
6.3	Item No53 Providing and fixing stainless steel mooring ring in cement concrete on deck of jetty consist of 32 mm thick steel bar, 225 mm inner diameter, steel ring with 75 mm inner diameter steel hook of 32 mm diameter as per	12.00	Nos	11000.00	129144.00	10762	129144

	approved drawing etc. complete. (Stainless steel of grade S-304)						
6.4	Item No54 Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304)	5.00	Nos	19500.00	95395.00	19079	95395
6.5	Item No55 Providing and applying one coat of two component, anti-corrosive, solvent free, substituted long chain nylon reticulant based epoxy coating / primer. Cleaning the existing steel surface by mechanical means such as sand blasting, wire brushing and other mechanical means so as to remove all the existing loose rust etc. Apply the coats by brush or spray at 4-6 hours interval between each coat complete as directed by the Engineer in charge.	10620.27	Sqm	650	6754491.72	636	6754491.72
6.6	Item No56 Providing and laying telephone black / Amba White / Cadburybrown / RBI red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing the sharp edges wherever necessary, curing, etc. complete. Specifications: Bd. M. 12 Spec. No.: As directed by Engineer-In- Charge	4.20	Sqm	4200.00	17257.80	4109	17257.8
6.7	Item No57 Providing and fixing solid core flush door shutter in single leaf 32 mm thick decorative type of exterior grade as per detailed drawings approved face veneers 3 mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, and finishing with French Polish etc. complete.	8.40	Sqm	7800.00	64108.80	7632	64108.8
6.8	Item No58 Providing and fixing fiber glass reinforced polyster door shutter 35 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fastening with chromium plated handles on both sides, etc complete. Spec.No. : As directed by Engineer In Charge	3.15	Sqm	3500.00	10785.60	3424	10785.6
6.9	Item No59 Providing and fixing in position anodised (as per IS 1868/1982) Aluminium fixed staggered (Z Type) Ventilator with aluminium rectangular pipe 63 mm x 38.10 mm x 1.22 mm at weight 0.650 Kilogram/One Running Metre, Aluminium angle of size 15 mm x 15 mm x 1 mm, aluminium channel of 9 mm sizes, S.S.mosquito net of 304 Grade, 4 mm thick float glass per detailed drawing and as directed by Engineer in charge etc.complete.	0.72	Sqm	4200.00	2958.48	4109	2958.48

7.0	Item No60 Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.	4284.00	Sqm	1500.00	6288912.00	1468	6288912
7.1	Item No61 Providing and laying ceramic tiles having size 30 cm. x 60 cm. conforming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	182.40	Sqm	1350.00	240950.40	1321	240950.4
7.2	Item No62 Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown /RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with rounded moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete. Skirting Spec.No. : Bd. M.22 B/Page No. 390	146.66	Sqm	4200.00	602625.94	4109	602625.94
7.3	Item No63 Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of interlocking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer specifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	404.39	Sqm	750.00	296822.26	734	296822.26
7.4	Item No64 Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete, with prior approval of concerned Superintending Engineer.	8444.00	Sqm	2450	20240268.00	2397	20240268

7.5	Item No65 Supply & Fixing of Full Body Vitrified Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	76.50	Sqm.	3760.00	281443.50	3679	281443.5
7.6	Item No66 Providing 25 mm to 30 mm thick flooring of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. a) One side polish	1403.00	Sqm	1350.00	1853363.00	1321	1853363
7.7	Item No67 Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment) of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	252.45	Sqm	1200.00	296376.30	1174	296376.3
7.8	Item No68 Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	5687.00	Sqm	525.00	2923118.00	514	2923118
7.9	Item No69 CAST IN SITU SAFETY RUBBER FLOORING SYSTEM WITH including 20mm thick SBR Black Rubber Granule and 5MM colour EPDM granule absolute thickness = 25mm (as per drawing attached) etc. including VAT, tax complete. Manufacturers warranty is 5 years.	125.00	Sqm	4700.00	574750.00	4598	574750
8.0	Item No70 Providing and laying RED & BLACK GRANITE cobble stones of 100mm x 100mm x 100mm, 3 line dressing with 12 mm top layer in size of fine cut and well dressed in Grey colour in paving on a bed of min. 40 mm thick cushioning in C.M. 1:4 including neat cement float etc. filling of joints in C.M. 1:2 with grey cement to match the colour of cobble stone in the required pattern, design and as directed by the Engineer incharge, including cleaning, curing etc. complete.	95.00	Sqm	3760.00	349505.00	3679	349505
8.1	Item No71 Providing & fixing in position 20 +/- 2mm thick machine cut, mirror polished, 1st quality granite cladding such as black galaxy or approved equivalent in lift lobby / passage installed in approved pattern and design of size 600 x 1200mm and as directed	446.40	Sqm	4800.00	2096294.40	4696	2096294.4

	including backing coat of 1:4 cement plaster of required thickness with stainless steel fasteners cleats etc. The joint between the granite slabs to be filled with white cement mixed with matching pigments. The rate to include all curing, polishing at all lift and levels. (Basic rate of granite is Rs.3600/-Sq.m.)						
8.2	Item No72 Accupressure Bed - Providing and fixing Natural Stone pebbles in 1:6 Cement mortar of natural sand of 50mm thick bed as required line, level, shape and size as instructed by Engineer in charge. Item including color pigments, lead lift, curing, cutting, all material and labour with wastage etc. complete all	45.00	Sqm	1850.00	81450.00	1810	81450
8.3	Item No73 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	6154.02	Rmt	520	3132396.18	509	3132396.18
8.4	Item No74 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	605.07	Rmt	850.00	503418.24	832	503418.24
8.5	Item No75 Basalt stone Paving in cement Mortar - Providing and Laying Newasa Stone for paving and thread risers in cement mortar of 150 mm thick (Two line dressed stone 0.45x0.30x0.125 to 0.15 and not less than 0.30x0.30x0.15 Mtrs cut in shape and two adjacent sides to be dressed, from Newasa, Dist Ahmednagar) in plain/diamond pattern on a bed of 1:4 C.M. over 150mm thick cement concrete, and filling the gap in 1:2 Mortar etc. complete) STONE DRESSING IN TICHIV STYLE	1305.00	Sqm	6500.00	8299800.00	6360	8299800
8.6	Item No76 Newasa Basalt stone for wall 15 cm thick : Providing and fixing Newasa Basalt stone for wall 15 cm thick(Two line dressed stone of size 0.45x0.30x0.125 to 0.15 and not less than 0.30x0.30x0.15 Mtr, cut in shape and two adjacent sides to be dressed, from Newasa, Dist Ahmednagar) in 1:1 Cement mortar in super structure including striking joints and watering complete to the entire satisfaction of the architect (Ashlar Masonary in tichiv style)	582.72	Sqm	8000.00	4560949.44	7827	4560949.44

8.7	Item No77 Ashlars fine stone coping : Providing, supplying & fixing ashlar fine stone coping of size 320 mm long, 500 mm width & 150 mm thick in cement mortar 1:3 including pointing in Cement slurry, raking joints, curing, loading & unloading etc. complete. (Including Scaffolding)	142.60	Rmt	7000.00	976667.40	6849	976667.4
8.8	Item No78 Stamp Concrete of 100mm Thickness - Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand / VSI grade finely washed crushed sand) Confirming to IS 383. as per mixed in a batching and mixing plant / non tilting mixer and weigh batcher as per approved mix design. admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi). spreading, laying with approved make pover, compacted and finished in a continous operation, finishing to lines and grades Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable.30 % solids clear sealer @ 150 to 250 gms per sqm using surface roller and protecting from falling dust,dirt and curring by curring compound / by providing cement vata in cement Mortar 1 :8 @ 0.6m x 0.6m center to center, admeasuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-incharge or Landscape architect etc. complete. (prior approval of superintending Engineer will	3420.00	Sqm	1750.00	5855040.00	1712	5855040
8.9	Item No79 Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	7167.50	Sqm	825.00	5784172.50	807	5784172.5
9.0	Item No80 Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete.	7167.50	Sqm	3760.00	26369232.50	3679	26369232.5

9.1	Item No81 Fixing 40 to 50mm thick Natural Shahabad Kerbing of 600 x 600mm with 75mm thk. in 1:3:6 P.C.C. bed, and filling joints with 1:3 cement mortar, including lead, lift within garden, cutting, curring, etc complet (excluding P.C.C.)	92.40	Sqm	135.00	12196.80	132	12196.8
9.2	Item No82 WOODEN FINISH PAINTING OF EXISTING WOODEN FINISH TEXTURED SURFACE CEMENT CONCRETE BENCH including any material, machinery, scaffolding etc. complete. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including cement, Sand, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	826.90	Sqm	1650	1334616.60	1614	1334616.6
9.3	Item No83 Providing, supplying, fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and shade on top face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicon sealant, backer rods etc. overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre)	456.43	Sqm	4500.00	2009661.29	4403	2009661.29
9.4	Item No84 Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed design and drawings or as directed by Engineer-In-Charge., including cutting, fabricating, hoisting, erecting fixing in position, making riveted/bolted/welded connection and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. Spec. No.: Bd.C.8 Page No. 278	249.67	MT	120000.00	29313255.36	117408	29313255.4
9.5	Item No85 Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on	175.00	Rmt	3000.00	513625.00	2935	513625

	vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.						
9.6	Item No86 Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25 mm dia in three rows, all pipes of 2 mm thick including buffing, fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)	2856.22	Rmt	3850.00	10759380.74	3767	10759380.7
9.7	Item No87 Providing and fixing 50 mm. dia. medium class G.I. pipe gate with wicket gate of approved drawing with all fixtures and fittings in two leaves with strong hold fast embedded in c.c. block at top and bottom with locking arrangement including cutting, bending, making holes and with one coat of primer etc. complete.	239.40	Sqm	6500.00	1522584.00	6360	1522584
9.8	Item No88 Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/ One Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete.	249.48	Sqm	2500.00	610228.08	2446	610228.08
9.9	Item No89 Providing detailed geological reports of proposed site by maintaining geotechnical investigation of structure stratification collecting soil, rock and ground water samples for laboratory tests to arrive the foundation design parameters . Rock properties such as type of rock, jointing fractures, etc. complete with suggestion about the site foundation and remedies.	10.00	Sqm	36500.00	357120.00	35712	357120
10.0	Item No90 Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe (Rezan/ concentric Deleted ire 0.75 mm dia) with hot dip and G.I. coated hooks as per drawing supported on M.S. angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete.	1210.00	Rmt	1100.00	1301960.00	1076	1301960

10.1	Item No91 Providing and constructing Brick Masonry Inspection Chamber 60 cm x 45 cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channel shaft round G.S.W. pipes. Brick Masonry, plastering from inside and airtight 75mm thick R.C.C. cover medium duty 100Kilogrametc. complete.	12.00	Nos	10000	117408.00	9784	117408
10.2	Item No92 Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channel shaft round G.S.W.pipes.Brick Masonry.plastering from inside and airtight with 75 mm thick R.C.C. cover medium duty 140Kilogrametc. complete.	12.00	Nos	11000.00	129144.00	10762	129144
10.3	Item No93 Providing and constructing Ductile Iron circular manhole 45 cm dia. At top 90 cm at bottom up to 1.80 meter to 2.70 meter depth including excavation, laying 1:4:8 cement concrete bedding 15 cm thick burnt brick masonry with 1:1 cement mortar plaster 25 mm thick inside and outside 20 mm (1:3) ductile iron heavy type cover with ring 125Kilogram weight. High strength. More life and Durability, Good Antiskid Grip, Suitable to heavy theatric loading. Light weight casting after cost benefits for Transportation Refilling etc. as per requirement. with prior approval of concerned Superintending Engineer.	28.00	Nos	12000.00	328748.00	11741	328748
10.4	Item No94 Providing and laying salt glazed stone ware pipe of 100mm diameter including fittings such as bends, tees, single junction, double junction, laying, jointing including excavation and refilling trenches complete. BDV.-39 Page No.573	3.00	Rmt	400.00	1173.00	391	1173
10.5	Item No95 Providing and fixing 25mm dia screw down wheeled stop tap of steel with chromium plating of approved quality and make bearing ISI mark. including sockets union nut complete. BDV 9 Pgno 555.	2.00	Nos	1500.00	2936.00	1468	2936
10.6	Item No96 Providing and fixing 15 cm rigid PVC Nahani trap including PVC grating .bend.connectingpiece of UPVC pipe up to the outside face of wall .making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Ex. Engr. is necessary before use)	4.00	Nos	650.00	2544.00	636	2544
10.7	Item No97 Providing and fixing white wash basin with half pedestal of size 515mmX615mmX460mm including pillar cock auto-closing system CP angular stop cock long thread of approved make continental including S.S. bottle trap of necessary pipe connection upto the outside face of the wall.	2.00	Nos	13000.00	25438.00	12719	25438

10.8	Item No98 Providing and fixing 450mm x 550mm size superior type Belgium mirror with 16mm dia. nickel plated towel rod etc. complete Spec. No.: As directed by Engineer in charge.	10.00	Nos	1000.00	9780.00	978	9780
10.9	Item No99 Providing and fixing Wall Mounted European type white glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall 10 liter enameled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps 20 mm dia. UPVC overflow pipe mosquito proof couplings G.I. chain and pulley with water Jet and fitting including cutting and making good to the walls and floors testing etc. complete. (prior approval of sample and brand by Ex. Engineer is necessary before use)	2.00	Nos	13500.00	26416.00	13208	26416
11.0	Item No100 Providing and fixing on walls/ ceiling/ floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	490.00	Rmt	350	167580.00	342	167580
11.1	Item No101 Providing and fixing on walls/ ceiling/ floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	320.00	Rmt	400.00	125120.00	391	125120
11.2	Item No102 Providing and fixing on walls/ ceiling/ floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	120.00	Rmt	450.00	52800.00	440	52800
11.3	Item No103 Providing and fixing on walls/ ceiling/ floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete.	631.00	Rmt	800.00	494073.00	783	494073
11.4	Item No104 Providing and laying in trenches 80 mm dia medium grade having embossed as ISI Mark galvanised iron pipes of 8.57 kg/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats complete. B) Heavy Type Spec. No.: Bd.V.5 Page No. 551	750.00	Rmt	1250.00	917250.00	1223	917250
11.5	Item No105 Providing and laying in trenches 100 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 12.43 kg/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats complete. B) Heavy Type Spec. No.: Bd.V.5 Page No. 551	2040.00	Rmt	2000.00	3992280.00	1957	3992280

11.6	Item No106 Providing and laying concrete pipes of I.S.NP. class of 150mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	250.00	Rmt	525.00	128500.00	514	128500
11.7	Item No107 Providing and fixing P.V.C. Rain water pipes of 160mm outer diameter and having wall thickness of 2.2 to 2.7 mm conforming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number, filing the joint using rubber gasket with solvent CEMENT and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc.complete. (The contractor shall give 3 yrs guarantee bond for payment) Spec. No.: As directed by Engineer in charge	20.00	Rmt	1500.00	29360.00	1468	29360
11.8	Item No108 Providing and fixing 80 mm.dia. screw down wheeled stop tap of steel with chromium plating of approved quality and make bearing I.S.I. mark. including sockets, union nut complete.	20.00	Nos	4300.00	84140.00	4207	84140
11.9	Item No109 Providing and fixing 100 mm dia. Chromium plated brass showers rose to 15 mm dia. Supply pipe including necessary bend and socket complete.	20.00	Nos	550	10760.00	538	10760
12.0	Item No110 Providing and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock. [Without chamber].	29.00	Nos	40000.00	1134944.00	39136	1134944
12.1	Item No111 Providing and fixing C.P. Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete.	4.00	Nos	1600.00	6260.00	1565	6260
12.2	Item No112 Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	29.00	Nos	1200.00	34046.00	1174	34046
12.3	Item No113 Providing and fixing C.P. pillar cock long neck with aerator of approved make including necessary sockets/union nut etc. complete.	2.00	Nos	1750.00	3424.00	1712	3424
12.4	Item No114 Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super jet spray with flange 2 in 1 faucet 1.50 metre long including all accessories etc complete	2.00	Nos	1100.00	2152.00	1076	2152

12.5	Item No115 Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete.	2.00	Nos	350.00	684.00	342	684
12.6	Item No116 Providing and fixing C.P. wall mixer with provision for overhead shower with 115 mm long bend pipe and wall flange of approved make including necessary sockets/ unionnut etc.complete.	2.00	Nos	4850.00	9490.00	4745	9490
12.7	Item No117 Providing and fixing H.D.P container Syntex or alike one piece moulded water tank made out of low density polythylter and built corrugation including of delivery up to destination hoisting and fixing of accessories such as inlet, outlet overflow of all tanks capacity above 1000 to 20,000 litres Spec. No.: As directed by engineer-in-charge.	11000.00	Ltr	10.50	110000.00	10	110000
12.8	Item No118 Providing and fixing machine cut mirror polished 18 mm to 20 mm thick telephone black granite/ Amba White/ Catbarybrown /RBired /OceanBrown granite stone partition with full moulding the edges etc. complete . Both side polish	6.00	Sqm	3760	22074.00	3679	22074
12.9	Item No119 Providing and fixing White Glazed Earthenware full stall type Urinal with P.V.C. flushing cistern of 5 liters capacity with fitting, inlet pipes and stop tap, brackets for fixing the cistern, 32 mm dia. P.V.C flush pipe with fittings and flushing arrangement including lead soil pipe, lead trap, soil pipe connection up to the outside face of the wall	2.00	Nos	10500.00	20546.00	10273	20546
13.0	Item No120 Providing and fixing reinforced cement concrete cover of size 90cmx 45cm with frame over inspection chamber etc. complete. Medium duty (140 Kilogram)	112.00	Nos	5200.00	569856.00	5088	569856
13.1	Item No121 Providing and Supplying Biodigester Tank as per the specification and guideline set by DRDO for tank of 2 cum capacity having FRP tank with two baffle plates. Total 3 compartments with inlet and out let connections Recharged with 400 Liter inoculums and inbuilt with immobilization Matrix. Thickness of tank should be 3mm. Partition 3 with metal reinforcement, with initiating and supervising the operation of the tank and transport upto work site etc complete.	2.00	Nos	135000.00	264168.00	132084	264168
13.2	Item No122 Garden Soil :- Supplying on site garden soil well sieved 90% to pass through I.S. sieve of 10mm size free from stones, rubbish like dried grass roots and other such materials. The soil should be fresh from quarry. The color of the soil generally is red. The soil will be measured by measuring box. (Farna) Item includes royalty charges, octroi, corporation tax, Transporting, loading-	1951.66	Cum	1650.00	3149979.24	1614	3149979.24

13.3	unloading etc. (Lead charges per 90km are considered.) Item No123 Farm Yard Manure :- Supplying on site well-decayed, well-dried, well-powdered, without clods and free from stones, dried grass and other rubbish material. The color of the soil generally is black. The manure will be measured by measuring box. (Farma). Item includes Transporting, loading-unloading etc. (Lead charges per 50km are considered)	650.55	Cum	1650.00	1049987.70	1614	1049987.7
13.4	Item No124 Preparing instant Lawn:- Excavating the ground to a required depth of 20cms, removing & conveying unwanted stuff to a required distance as directed, providing and Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 20cms. Mixing garden soil and manure thoroughly well, levelling, watering on previous night. Planting required variety of lawn grass as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	1773.34	Sqm	850.00	1475418.88	832	1475418.88
13.5	Item No125 Preparing Lawn (30 Cm depth):- Excavating the ground to a required depth of 30cms, removing & conveying unwanted stuff to a required distance as directed, providing and Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 30cms. Mixing garden soil and manure thoroughly well, levelling, watering on previous night. Planting required variety of lawn grass as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	1290.34	Sqm	950.00	1198725.86	929	1198725.86
13.6	Item No126 Preparing Shrubbery:- Excavating the ground to required depth of 30cms, removing and conveying unwanted stuff to a required distance as directed, providing and Filling fresh garden soil & manure in excavated area in 3:1 proportion to a height of 30cms. Mixing garden soil and manure thoroughly well, levelling, watering, on previous night. Planting well-rooted shrubs 0.5 Mtrs.apart as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	2250.86	Sqm	725.00	1595859.74	709	1595859.74
13.7	Item No127 Planting large flowering/Shady trees:- (Minimum Height to 1-2 Mtr.)Digging pit with size 0.6 m × 0.6 m × 0.6 m Removing & conveying unwanted stuff to a required distance as directed, providing and Filling the pit with approved excavated material up to a height of 0.30 m. and remaining height of 0.60 m. with fresh garden soil & manure in 3:1 proportion. Mixing soil and manure thoroughly well, leveling, as directed, watering previous night. Planting two or three year old, minimum 2.0 mtr. height, healthy tree sapling as per specifications, Maintaining till 30	262.00	Nos	900	230822.00	881	230822

	days by watering, weeding, clipping, rolling etc. complete.						
13.8	Item No128 Providing and Fixing , Installation of Drip and Sprinkler Irrigation system in gardens having area above 3000 Sq. Mtr. Includes drips, Sprinkler, Filters, Pipes with 3 year warranty . Excluding Pumping Unit	3907.85	Sqm	350.00	1336484.70	342	1336484.7
13.9	Item No129 Providing and fixing Animal Mgr with all fitting as approved with Engineer-In-Charge	4.00	Nos	75000.00	293520.00	73380	293520
14.0	Item No130 3 IN 1 (AERIAL STROLLER + SURF BOARD + SHOULDER TWIRL)	8.00	Nos	250000.00	1956800.00	244600	1956800
14.1	Item No131 Providing and fixing Multi Seater Sec Saw with all fitting as approved with Engineer-In-Charge	4.00	Nos	50000.00	195680.00	48920	195680
14.2	Item No132 Providing toilet of 4 units of 0.9*1.2M size of 1 unit with all necessary fittings such WC Wash basin overhead tank of 1000 ltr for each Type of WC : European with ceramic base , Water facility : By mean of overhead tank. Electric provisionBy mean of connection from main line, Bottom frame material: 35mm X 35mm X 5mm(thick) MS angle for one seater, Bottom frame support material : 25mm X 25mm X 3mm(thick) MS angle, Side & Top Roof panel frame material : 35mm X 35mm X 5mm(thick) MS angle, Top(roof) support frame structure : 25mm X 25mm X 3mm(thick) MS angle, Ventilation frame material: 25mm X 25mm X 3mm(thick) flat MS, Door frame material: 35 mm x 35 mm x 5 mm (thick) MS ANGLE, Support material for Door panel fixing: Aluminium U-channel of 18gauge, Door hinges(two numbers): 75mm size with 1.2-1.5mm thickness MS, Tank holder frame material: 25mm X 3mm(thick) MS flat, Unit understructure Supported by 4-legs of size 35mm X 35mm X 5mm MS angle with corner support of 25mm x 25mm X 3mm MS angle for 1-seater, Door Tee material: 40mm X 40mm x40mm X 5mm(thick) MS Tee,	6.00	Nos	1150000.00	6750960.00	1125160	6750960
14.3	Item No133 Providing Unbranded Steel Porta Cabin consist of With one Room of size 3050 mm x 2440 mm x 2590 mm ht having following specifications. 1) PUF Wall Panel -- Panel made up of micro ribbing Pre-Painted Galvanized Iron Sheet on both sides(have tongue groove arrangement) and 50mm thick composite PUF sandwich between Pre-Painted Galvanized Iron Sheet 2) Flush door 32 mm thick water proof. 3)Window-Powder coated aluminium sliding windows with 4 mm tinted Glass 4)Flooring- 15 mm heavy duty cement fiber board inside and outside texture paint. 5)Roofing -The PUF insulated Ceiling panels. The covering on ceiling panels	2.00	Nos	100000.00	195680.00	97840	195680

	shall be micro riving Pre-coated galvanized iron sheet and Self draining Type Roof shall be provided with water proof covering. 6) general electrical- Provision for 3 nos. tube light (18 Watt LED light) - 2 nos. wall mounted ceiling fan (300 mm) - 3 nos. plug and socket (3 pin 5 amps electric plug socket)- 1 no main input socket (32 Amp heavy duty 3 pin power socket with MCB)- split AC (1.5 T) provision						
14.4	Item No134 Providing, hoisting and fixing at all level precast or reinforced cement concrete gazebo with all elements like roofing, string courses, bands, copings, columns, pillars beams, plinth beams, railings, benches, flooring, foundations including architectural design, moulding, arches, shapes, and applying proper texture and painting coats to suit a particular asthetic element (trunk of trees, shapes of animals, birds, timber benching, any element or structure representing culture or tradition) the cost of required centering, shuttering and reinforcement, of M25 grade and fibrous material, etc complete as per the instructions of Architect or Engineer-in-charge. (Refer sketch 3)	133.05	Sqm	65500.00	8526509.25	64085	8526509.25
14.5	Item No135 Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	9533.85	Cum	180.00	1677957.60	176	1677957.6
14.6	Item No136 Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means -Grading 1 (Using Screening Type B (11.2 mm) Aggregate)	4949.00	Cum	3850	18642883.00	3767	18642883
14.7	Item No137 Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading II (Using Screening Type B (11.2 mm) Aggregate)	1871.00	Cum	3850.00	7048057.00	3767	7048057
14.8	Item No138 Providing and constructing 75 mm. thick Modified Penetration Macadam	18710.00	Sqm	350.00	6398820.00	342	6398820

	(MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone metal layers 30% crusher broken metal + 70% Hand broken (by breaking rubble obtained by blasting) heating and spraying the bitumen of specified grade @ 2 Kg/sqm, spreading 12 mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface. (VG-30 bulk bitumen rates are considered to arrive at rates)						
14.9	Item No139 Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen set footed in bitumen boiler on B.T. surface 2.5 kg/10 sqm.(VG-30 bulk bitumen rates are considered to arrive at rates)	37420.00	Sqm	20.00	748400.00	20	748400
15.0	Item No140 BITUMINOUS MACADAM: Providing and laying bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 80/100 mm compacted thickness with 3.3 % using specified grade of Bitumen. -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, vibratory roller.(VG-30 bulk bitumen rates are considered to arrive at rates)	1403.25	Cum	9200.00	12630653.25	9001	12630653.3
15.1	Item No141 Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on Dry / Hungry B.T. surface 3 kg/10 sqm. (VG-30 bulk bitumen rates are considered to arrive at rates)	18710.00	Sqm	20.00	374200.00	20	374200
15.2	Item No142 BITUMINOUS CONCRETE:-- Providing and laying bituminous concrete using crushed aggregate of grading 1, premixed with bituminous binder @5.40% by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 50mm compacted thickness with drum mix plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen of specified grade with stone dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)	1341.00	Cum	12100.00	15876099.00	11839	15876099

15.3	<p>Item No143</p> <p>Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area. thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete.</p>	605.07	Sqm	450.00	266230.80	440	266230.8
15.4	<p>Item No144</p> <p>Nameplate (3D acrylic hollow blocks with LED)</p> <p>S.I.I.C. of Nameplate stating in Devnagri/English font in the desired style as per specifications. The total assembly letters made of frosted acrylic sheets cut and glued together to achieve the hollow letters as per approved design with provision for electrical supply for white/warm white LED lights of required wattage that will be lit from inside the blocks for illumination in the night. The whole assembly shall be rested/fixed with all necessary fittings and cleaning etc. complete as directed by the Engineer-in-charge.</p>	38.75	Sqm	30000.00	1137390.00	29352	1137390
15.5	<p>Item No145</p> <p>Providing and fixing informatory sign boards in rectangular shape of size 1.20m x 0.90m madeout of 16 guage Aluminum panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border &messages in IRC Specified colour background including M. S. angle iron frame of size 35 mm X 35 mm X 3mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil painthaving alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum Panel TypeIV High Intensity</p>	19.00	Nos	13500	250952.00	13208	250952
15.6	<p>Item No146</p> <p>Providing and fixing sign boards of size size 60 x 80 cm made out of 14 gauge M.S.Sheet with retro reflective sheeting of Engineering Grade as per M.O.T. specification No. 801-3(1993) white reflective back ground, lettering symbol</p>	21.00	Nos	10000.00	205464.00	9784	205464

	bordering of black non reflective paint including 3.65 metre long M.S. angle one post of 65 x 65 x 6 mm size duly painted with white and black bands including fixing the boards of M.S. angle with galvanised nuts and bolts and washer. The Board shall be as per IRC-67-1977 including conveying fixing in ground with C.C. 1:4:8 block of size 0.60 x 0.60 x 0.75 m, with 7 year guarantee for the sheeting etc. complete. Mild Steel Board with Engineering Grade.						
15.7	Item No147 Providing and fixing board displaying information, such as "Name of work, Tender cost, Name of Contractor, Work completion and liability period etc", having rectangular shape of 1.20m x 0.90m size made up of 4 mm aluminum composite pannel sheet with 0.5 mm skin thickness on either side bonded with white retro reflective sheeting of Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive adhesive. Retro reflective sheeting with specified background, border and back side retro reflective symbols, letters, numerals, arrow as per IRC: 67-2012 Table No 8.3, on M.S. angle of size 35 x 35 x 3 mm frame with properly cross braced M.S. angles of size 35mmx35mmx3mm duly painted including Two M.S. angle iron posts of size 65 mm x 65 mm x 6 mm, 3.65 m long painted with alternate black and white bands of 25 cm width including all fixtures etc. and fixing the boards in 1:4:8 concrete block of size 60 cm x 60 cm x 75 cm including, excavation, refilling, transportation, and labour etc complete. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have 7 years written warranty from the manufacturer including the Digitally Printed areas with Latex printing technology with sheeting manufacturer approved inks and laminated with UV overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.	2.16	Sqm	15000.00	31700.16	14676	31700.16
15.8	Item No148 Providing & fixing BENCH IN CEMENT MORTOR/CONCRETE WITH WOODEN FINISHING ON ALL EXTERNAL SURFACE. Bench should have min. 2.1m to max. length 2.4m with 0.45m wide seat & 0.40m high back for resting. bench should have 2 to 3 supports/Legs as per requirement from ground in 1:1.5:3 ratio Concrete with 4 bar 12mm as a main & distribution 8mm Tor steel at 150mm c/c. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish	60.00	Rmt	12500.00	733800.00	12230	733800

	including Cement, Sand, Aggregate, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, excavation, pcc, tor steel etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.						
15.9	Item No149 Providing and fixing Garden Bench with Arm with all fitting as approved with Engineer-In-Charge	10.00	Nos	15000.00	146760.00	14676	146760
16.0	Item No150 Ss Dust Bin (Refer sketch 10) Product area:0.76Sqm. Capacity in ltrs: 42.0 ltrs, Product height:0.92m	80.00	Nos	14500.00	1134960.00	14187	1134960
16.1	Item No151 Providing and fixing of retro-reflectorisrd informatory sign board rectangular/Square in shape having area greater than 0.9 One Square Meterr made out of 4 mm aluminum composite panel bonded with 0.5 mm skin thickness on either side with white retro reflective sheeting of Class C (Type XI Type XI Micro prismatic grade sheeting) having pressure sensitive adhesive retorelective specified back ground, border and back side retorelective symbols, letters, numerals, arrow including Art Work complete as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt ~ 3.9 mtlong firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. ClassC (Type XI Type XI Micro prismatic grade sheeting) sheeting shall have 10 years written warranty from the manufacturer including the Digitally Printed areas with Latex printing technology with sheeting manufacturer approved inks and laminated with UV overlay film and this warranty certificate along with sheeting manufacturer attested 3 years outdoor weathering test report from Indian govt lab must be submitted to the Engineer in charge by the contractor/supplier.	217.00	Sqm	16500.00	3503248.00	16144	3503248
16.2	Item No152 Providing and laying of compression seal joint consisting of steel armoured nosing at two edges of the joint gap suitably anchored to the deck concrete and a preformed chloroprene elastomer	8.00	Rmt	4850.00	37960.00	4745	37960

	or closed cell foam joint sealer compressed and fixed into the joint gap with special adhesive binder to cater for a horizontal movement upto 40 mm and vertical movement of 3 mm etc. complete						
16.3	Item No153 Providing and laying of a strip seal expansion joint catering to maximum horizontal movement upto 70 mm to be installed by the manufacturer / supplier to their authorized representative ensuring compliance to the manufacturers instruction for installation as per approved drawings and standard specifications etc. complete.	616.00	Rmt	12000.00	7232456.00	11741	7232456
16.4	Item No154 Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	82.50	Cum	13000	1049317.50	12719	1049317.5
16.5	Item No155 Painting Line, Dashes, Arrows etc on Roads in two coats on new work with ready mixed road marking paint conforming to I.S. 164 on Bituminous surface including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control (Over/Upto ___cm wide) (MORTH-803) — Surface Over 10cm Wide On New Surface	40.00	Sqm	230.00	9000.00	225	9000
16.6	Item No156 Providing and fixing neoprene bearing as per detailed drawings etc. complete.	28000.00	CuCm	3.00	84000.00	3	84000
16.7	Item No157 Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia over burden (by diamond drilling machine) such as soil of all sorts, soft murum, hard murum and boulders and in soft rock including all materials such as casing pipes and accessories oil, grease, steel, rods, and such other materials as required (including conveying the material to site of work) . Preserving the loose sample in glass jar and core sample serially on site of work and conveying the same to HQ of concernring office as directed. R.A. for 10.00 Rmt a) over burden 0 to 50 meter.	40.00	Rmt	2500.00	97840.00	2446	97840
16.8	Item No158 Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil, grease, steel, hoostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concernring office as directed. Quartzite with diamond drill with Nx Bit 0 to 50 metre	37.50	Rmt	6500.00	238500.00	6360	238500

16.9	Item No159 Carrying out low strain pile integrity test on 900 mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile (installation of pile shall be paid separately as per relevant items) all complete as per specification and as directed by the engineer-in-charge	229.00	Nos	4200.00	940961.00	4109	940961
17.0	Item No160 Conducting Initial Load Test (Compression) up to maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with IS 2911 part-4 including preparation of pile head for testing, necessary excavation, jacks, kentledge, accessories, measuring devices, recording of results, labour, submission of test report etc, complete, but excluding the cost of installation of pile (installation of pile shall be paid separately) etc. all complete as per the specification, drawing and as directed by the Engineer in charge for the following for vertical compression test by cyclic load method	5.00	Nos	700000.00	3424400.00	684880	3424400
17.1	Item No161 Mobilisation of Project, setting of pile points, Pile driving System using end on the Gantry system with required no. of Gantry Platforms & shifting of Gantry Platforms from one position to another, etc complete as per direction of Engineer, etc complete	1.00	Nos	3000000.00	2935200.00	2935200	2935200
17.2	Item No162 Supplying, fitting and fixing in position true to line and level sliding plate bearing with stainless steel plate sliding on stainless steel plate with mild steel matrix including all accessories as per drawings and technical	4.92	MT	350.00	1682.64	342	1682.64
17.3	Item No163 Supplying, fitting and fixing in position true to line and level forged steel rocker bearing including all accessories as per drawings and technical specifications conforming to IRC:83 (Pt-1) section IX and clause 2003 of MoRTH specifications etc, complete.	3.28	MT	350	1121.76	342	1121.76
17.4	Item No164 Providing and laying in situ cement concrete M30 with tremix treatment for 200 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc, complete.	2653.73	Sqm	2500.00	6442103.58	2446	6442103.58
17.5	Item No165 Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Acoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion	981.99	Sqm	7840.00	7532845.29	7671	7532845.29

	<p>Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.</p>						
17.6	<p>Item No166 Design Supply and Installation of the Mangroves Trail Walk of Section 20 Meter Length and 2.5 Meter Wide as per the Details and Specification of Project Information Memorandum (PIM) attached. Technical Specification :</p> <ul style="list-style-type: none"> • The mangrove trail should be 2.5m wide and should be made in sustainable method. To avoid harm to the environment/ ecosystem. • The all components should be made in wood/ substitute to wood, but the metal too avoids rusting of the members. • Piles are proposed to be in Jambha (Botincial Name: Xylia xylocarpa) wood which should be designed to take the axial load upto 2000 Kg Per pile. These Piles should be drilled in the mud/ marshy land at 2 Meter c/c and then should be made ready to receive the primary beams on them. • Primary beams should be made in first class teak wood/similar quality substitute. The primary beams do run along the trail, and do support the trail deck which should be designed for live load of 500 kg/sqm. • Secondary beams are then rested on primary beam perpendicular to the primary beam are to be made of the Nature fibre Composite Material/ similar quality substitute. These secondary beams support keels in made from secondary Nature fibre Composite Material which then support floor finish. • Floor finish should be made to take wear & tear of the people movement, giving appropriate friction in all the seasons and should be long lasting with minimal maintenance. These floor boards can be made in Nature fibre Composite Material). Designing load of 500 kg/sqm should be considered. • Handrails and brackets supporting them should be made in Nature fibre 	36.00	Per 20 Meter Length	3792700.00	133588008.00	3710778	133588008

	Composite Material / similar quality substitute. • All of these components should be strictly fixed with nut bolt system made up from high grade stainless steel nut bolts only.						
17.7	Item No167 Supplying, installing, testing & commissioning 3 phase, 11/0.433 kV, 50 Hz., 400 kVA. Mineral oil immersed and naturally cooled outdoor type. Copper wound Non-sealed transformer delta/star connected with additional neutral brought out on load side, temperature rise should not exceed 45°C by thermometer in oil and 50°C by the resistance method in winding at full load rating, using type A winding insulation (kraft paper) with HV tapping (with off load tap changer) off load +5 to -10 in steps of 2.5%, having 7 number of tap positions with standard accessories complete with test certificate with losses below 1225 Watts at 50% load, 3450 Watts at 100% load as per IS:1180 (part 1) : 2014 with necessary permissions of Electrical Inspector, as per specification no SS-TRNSL.	1.00	Each	1118640.60	1094478.00	1094478	1094478
17.8	Item No168 Making transformer plinth (1.5 x 1.5 x 1.5) m in size with necessary excavation in ground with 150 mm. thick M- 10 PCC at the bottom and top and 250 mm. thick, burnt brick wall constructed at periphery and remaining hollow portion shall be filled with 40mm hard broken aggregate. External surface duly plastered by 12 mm thick including watering etc complete.	4.00	Each	15730.00	61560.00	15390	61560
17.9	Item No169 Supplying and erecting triple pole mini feeder pillar with 500V, 300A FPMCCB as incomer and 3 outgoing circuits with HRC fuse base and cartridge of 100A with aluminium bus bar erected in 14 SWG CRCA sheet box with supporting angles, self locks, gasket having IP54,IK10 protection and slanting top to be erected on provided foundation as per specification no. SW-SWR/MFP	5.00	Each	60880.00	297825.00	59565	297825
18.0	Item No170 Supplying & erecting single phase, 240V, street light control panel up to the max load of 12kW, SPN MCB 63A, powder coated CRCA 14 SWG sheet, outdoor type, having IP54,IK10 protection, suitable rating contactor, 24 hrs. astronomical time switch with minimum 5 years battery back up, auto/manual selector switch, ON/OFF push buttons, indicator lamps, controlwiring, metering device, etc. for automatic operation & overcurrent, short circuit, earth fault protection on provided iron frame / CC foundation.	2.00	Each	26840.00	52520.00	26260	52520
18.1	Item No171 Supplying & erecting three phase, 415V, street light control panel up to the	1.00	Each	25010.00	24470.00	24470	24470

	max load of 6kW, TPN MCB 40A, powder coated CRCA 14 SWG sheet, outdoor type, having IP54,IK10 protection, suitable rating contactor, 24 hrs. astronomical time switch with minimum 5 years battery back up, auto/manual selector switch, ON/OFF push buttons, indicator lamps, control wiring, metering device, etc. for automatic operation, with overcurrent, shortcircuit, earth fault protection on provided iron frame / CC foundation.						
18.2	Item No172 Supplying, erecting & marking SPMCB 6A to 32A, C-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	450.00	Each	190	83700.00	186	83700
18.3	Item No173 Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	200.00	Each	190.00	37200.00	186	37200
18.4	Item No174 Supplying, erecting & marking FPMCB 6A to 32A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	50.00	Each	1165.00	57000.00	1140	57000
18.5	Item No175 Supplying, erecting and marking triple pole isolators only switch version of miniature circuit breaker of 40A with required wiring connections and lugs etc. in provided distribution board.	5.00	Each	665.00	3255.00	651	3255
18.6	Item No176 Supplying, erecting and marking four pole isolators only switch version of miniature circuit breakers of 63A in provided distribution board.	5.00	Each	805.00	3940.00	788	3940
18.7	Item No177 Supplying, fixing and commissioning MCB type change over switch 2 pole, 40 A with 3 positions (I-O-II) with centre off position as per specification no. SWSWR/MCBCOS	100.00	Each	1790.00	175100.00	1751	175100
18.8	Item No178 Supplying & erecting triple pole and neutral distribution board (TPNDB), SPMCB of 12 ways /phase (36 poles), with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB	10.00	Each	5070.00	49600.00	4960	49600
18.9	Item No179 Providing & erecting 3 Pole MCCB 415V, 250A, rated short-circuit breaking capacity 36 kA (Ics=100% of Icu) adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	50.00	Each	15575.00	761950.00	15239	761950
19.0	Item No180 Supplying, erecting & commissioning 4 pole RCCB 63A, electromagnetic type	50.00	Each	3215.00	157300.00	3146	157300

19.1	with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no. SW-RCCB/RCCB Item No181 Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/ trunking/ inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	250.00	Rmt	100	24500.00	98	24500
19.2	Item No182 Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 16 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	1435.00	Rmt	235.00	330050.00	230	330050
19.3	Item No183 Supplying and erecting mains with 2x1.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW	500.00	Rmt	45.00	22000.00	44	22000
19.4	Item No184 Supplying and erecting mains with 2x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	200.00	Rmt	70.00	13600.00	68	13600
19.5	Item No185 Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit /trunking /inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	900.00	Rmt	100.00	88200.00	98	88200
19.6	Item No186 Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 95 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/A	750.00	Rmt	730.00	535500.00	714	535500
19.7	Item No187 Supplying and erecting shockproof 3 pin plug socket 6A with porcelain base / flush type erected on filled polypropylene board or polished thick varnished double wooden block / folded or screwed board with top of either wooden / 3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick laminate with S M screws and duly connected	200.00	Each	50.00	9800.00	49	9800
19.8	Item No188 Supplying and erecting shockproof 3 pin plug socket 16A with porcelain base/ flush type erected on filled polypropylene (IS:14772-2000) board or polished thick varnished double wooden block / folded or screwed board with top of either wooden/3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick laminate with S M screws and duly connected.	50.00	Each	65.00	3200.00	64	3200

19.9	Item No189 Supplying and erecting modular type switch 16A duly erected on provided plate and box with wiring connections complete.	20.00	Each	116.00	2260.00	113	2260
20.0	Item No190 Supplying and erecting HMS PVC conduit FRLS grade 20 mm dia. With PVC accessories on wall / ceiling as per specification No: WG-MA/CON.	100.00	Rmt	90	8800.00	88	8800
20.1	Item No191 Supplying and erecting unbreakable concealed type modular switch box with double mounting plate for 16 / 18 module duly erected flush to wall with required chiselling and finishing with cement mortar / POP as per required to match the background.	50.00	Each	635.00	31050.00	621	31050
20.2	Item No192 Point wiring in for light/fan/bell in 20 mm metal conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, flush type switch, earthing and required accessories as per specification No: WG-PW/SW	200.00	Each	940.00	184000.00	920	184000
20.3	Item No193 Supplying and erecting energy saving ceiling fan 230 V A.C. 50 cycles 1200 mm complete erected in position as per specification no. FG-FN/CF	2.00	Each	2635.00	5156.00	2578	5156
20.4	Item No194 Supplying and erecting condenser 2.5 micro farad for ceiling fan.	2.00	Each	75.00	146.00	73	146
20.5	Item No195 Supplying and erecting electronic type step regulator for ceiling fan 600/ 900/ 1200/ 1400 mm. sweep. complete erected on provided switch board..	2.00	Each	295.00	578.00	289	578
20.6	Item No196 Supplying and erecting fan hook box of 10 mm M.S. round bar bounded to the R.C.C. bars upto 50 mm length each side and pierced through a 16 S.W.G. thick aluminium/M.S. Bowl 100 mm dia.or equivalent square size and having depth upto 75 mm complete erected with duly painted by one coat of red oxide paint and two coats of paint erected in position and without any leakage of slurry of cement concrete on either side of the box and positioned to the bottom level of the slab.	2.00	Each	225.00	440.00	220	440
20.7	Item No197 Supplying and erecting 20mm dia. corrugated flexible polypropylene conduit	25.00	Rmt	18.00	450.00	18	450
20.8	Item No198 Supplying and erecting fresh air cum exhaust fan of light duty 250 V A.C. 50 cycles 300mm. 1400 RPM rust proof body & blades. wire mesh, duly erected, complete.	2.00	Each	1740.00	3404.00	1702	3404
20.9	Item No199 Supplying & erecting ready to use Retrofit T8 LED 18 / 20 tube light with polycarbonate body, heat sink, integrated HF electronic driver complete & compatible to T8 / T12 LED luminaire by disconnecting starter & ballast if necessary.	25.00	Each	690	16875.00	675	16875

21.0	Item No200 Supplying & erecting 10-12W, 230V integral type LED Lamp suitable for B- 22 / E-27 base.	5.00	Each	255.00	1245.00	249	1245
21.1	Item No201 Supply, Installation, Testing and commissioning of maintenance free earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron molecular copper bonded earthing rod of Length 3m along with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete. Specification no. EA-MOBI	25.00	Each	15185.00	371425.00	14857	371425
21.2	Item No202 Making trench in soft soil having 0.75 m depth and minimum 0.3 m width for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-FXN-CTR	1670.00	Rmt	175.00	285570.00	171	285570
21.3	Item No203 Supplying & erecting integral post top lantern fixtures (mushroom type) suitable for LED lamp upto 12 W consisting of clear acrylic top cover, cast aluminium pole cap complete with accessories on provided pole /bracket as per specification no. FG-ODF/PTL	100.00	Each	2415.00	236300.00	2363	236300
21.4	Item No204 Supplying & erecting integral post top lantern fixtures (globe type) suitable for LED lamp upto 12 W consisting of aesthetic round clear acrylic top cover, cast aluminium pole cap on provided pole /bracket as per specification no. FGODF/PTL	60.00	Each	1835.00	107700.00	1795	107700
21.5	Item No205 Making cement concrete foundation including excavation (45 x 45x 120) cm deep in 1:3:6 cement concrete, 20 to 25 mm stone metal, m(45 x 45 x 45) cm / 45 cm dia. x 45 cm height plinth duly plastered, with necessary curing and finishing complete.	273.00	Each	50.00	13377.00	49	13377
21.6	Item No206 40W/60W LED Decorative Tower Light with color Blue /WW /CW 7.5Mtr. with Include Pole/Bolt /Nut/Template with LED Driver	273.00	Each	62000.00	16560453.00	60661	16560453
21.7	Item No207 Supplying and erecting integrated LED flood light fitting Max. 30W IP65 & IK07 class having pressure die-cast aluminium housing, having system lumens output of Min. 3000 Lumens, min. efficacy of 100 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-270V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L70B50, including driver with U shaped bracket with 3 Years warranty as per specification No FG-ODF/FLS2.	36.00	Each	2910.00	102492.00	2847	102492
21.8	Item No208 Supplying and erecting integrated LED flood light fitting Max. 100W IP65 & IK07 class having pressure die-cast aluminium housing, having system lumens output of Min. 12000 Lumens.	15.00	Each	9070	133110.00	8874	133110

	min. efficacy of 120 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-270V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L70B50, including driver with U shaped bracket with 3 Years warranty as per specification No FG-ODF/FLS2.						
21.9	Item No209 Supplying and erecting LED square / circular Max. 25 W down lighter/ Panel Light having pressure die-cast aluminium housing, polystyrene diffuser having system lumens output of Min. 2750 Lumens, min. efficacy of 110 lumen/W, CRI>80, CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50, including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty.	15.00	Each	2145.00	31485.00	2099	31485
22.0	Item No210 Supplying and erecting integrated LED Bollard Cylindrical /Cubical shaped 500mm 8W IP65 & IK10 class having extrusion aluminium housing with polycarbonate diffuser, having system lumens output of Min. 800 Lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-240V, inbuilt surge protection of 2 kV, Life class of 25,000 Hrs. at L50B50, including driver complete with 2 Year warranty as per specification No FG-ODF/FLS2.	50.00	Each	5780.00	282750.00	5655	282750
22.1	Item No211 Supplying and erecting integrated LED round burial light 6W IP65 & IK10 class having pressure die-cast housing, having system lumens output of Min. 500 Lumens, min. efficacy of 85 lumen/W, CRI>80, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 100-240V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L50B50, including driver, salt spray tested for 500 Hrs. including making of recess of appropriate size for flushing into surface with 2 Year warranty as per specification No FG-ODF/FLS2.	6.00	Each	4475.00	26268.00	4378	26268
22.2	Item No212 Supplying and erecting Concealed type foot/step light Max. 5W having IP67, IK10 rated Pressure die cast housing having system lumens output of Min. 500 Lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 5000K, Beam Angle of 110 deg., THD<10%, SDCM<5, p.f. >0.95, operating range of 230-270V, surge protection of 2.5 kV, Life class of 25,000 Hrs. at L70B50, including driver by making necessary arrangement/recess in wall to make it flush with surface with 2 Year warranty.	4.00	Each	4220.00	16516.00	4129	16516
22.3	Item No213 Supplying and erecting Gate/garden light fitting with 300mm dia. glass bowl	5.00	Each	1260.00	6165.00	1233	6165

	suitable for upto 12W LED Lamp on provided pipe as per specification No. FGODF/ GLT						
22.4	Item No214 Making trench in soft soil having 0.75 m depth and minimum 0.3 m width for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-EXN-CTR	370.00	Rmt	175.00	63270.00	171	63270
22.5	Item No215 Supplying & erecting FRP box of size 150mm x 125mm x 100 mm, 2.7 mm thick complete on pole/wall as per specification No. CB-SB	273.00	Each	545.00	145509.00	533	145509
22.6	Item No216 Supplying & erecting crimping type copper lugs for cable up to 16 sq mm complete as per specification No. CB-CL/CU	200.00	Each	25.00	4800.00	24	4800
22.7	Item No217 Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no. EA-EP	489.00	Each	5185	2480697.00	5073	2480697
22.8	Item No218 Providing pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod complete with all materials testing and recording the results as per specification no. EA-EP	273.00	Each	1650.00	440622.00	1614	440622
22.9	Item No219 Supplying and erecting bus bar chamber triple pole with neutral with four aluminium bars, 500V, 100A having 15mm (Width) X 3 mm (Thickness), with 99.9 % aluminium purity as per H91E Grade & Current Density 0.8 A per sq. mm. compliance to IS 5082 and Enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CPBB	10.00	Each	6480.00	63400.00	6340	63400
23.0	Item No220 Supplying & erecting Minimum three & above star rated Centrifugal water pump (Monoblock), 230V, Single phase 50 cycles A.C. supply of 1.5 kW/2 HP with discharge 600/140 Litres per Minute (LPM) for head of 8/22 m & 50mm suction/ 50 mm delivery pipe on provided C.C. foundation as perspecification No. WP-CGP	5.00	Each	16300.00	79740.00	15948	79740
23.1	Item No221 Supplying & erecting minimum three & above star rated Centrifugal water pump (Monoblock), 415 V, three phase 50 cycles A.C. supply of 7.5 KW/10 HP with discharge 1150/600 Litres per Minute (LPM) for head of 24/69 m and 65 mm suction/ 50 mm delivery pipe of size, on provided C.C. foundation as per specification No. WP-CGP	2.00	Each	50000.00	97840.00	48920	97840
23.2	Item No222 Supplying & erecting automatic control panel for 3 Phase, 415 volt, A.C.	7.00	Each	6670.00	45682.00	6526	45682

	Submersible/centrifugal pump set up to 7.5 HP consisting of DOL starter having relay range 9-14 AMP, S.P.P., Combined ammeter/ voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof enclosure with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase imbalance etc.						
23.3	Item No223 Supplying & erecting D.O.L Starter suitable for 250 V, Single phase 50 cycles with overload element with necessary materials and connected to supply up to 3 H.P.	5.00	Each	1280.00	6260.00	1252	6260
23.4	Item No224 Supplying & erecting D.O.L Starter suitable for 415 V, 3 phase 50 cycles with no volt coil and overload element with necessary materials and connected to supply for 10 H.P.	2.00	Each	3260.00	6380.00	3190	6380
23.5	Item No225 Supplying and erecting 75/80 mm dia cast iron double flange NRV complete with PN16 pressure rating, as per specification no. FF-VL/NRV	10.00	Each	6760.00	66140.00	6614	66140
23.6	Item No226 Supplying and erecting 100 mm dia cast iron double flange NRV complete with PN16 pressure rating, as per specification no. FF-VL/NRV	6.00	Each	9065	53214.00	8869	53214
23.7	Item No227 Supplying and erecting static energy meter with 240V 50 Hz. AC supply 10 to 60 A, ISI mark, accuracy class 1.0 with backlit LCD display, (measuring and display kWh, kVAh, V, I, PF, frequency, kW, kVA, six months history of Energy & MD in kW & kVA) with transparent hinge type box complete erected on polished teak wood board duly wired with required size of weather proof PVC wires duly tested by electric supply company.	10.00	Each	3260.00	31900.00	3190	31900
23.8	Item No228 Supplying and erecting static energy Trivector meter 440 V 50 Hz. 20- 100A ISI mark meter AC 3 phase 4 wires LCD/LED display (Measuring and display Trivector, V, I, kW, PF, Hz, Last month history of kWh & MD in kW) with special features like TOD, Tamper logging, Optical Communication Port & Display in absence of Power complete erected on polished teak wood board duly wired with required size of weather proof PVC wires duly tested for class 1.0 accuracy by electric supply company.	5.00	Each	9065.00	44345.00	8869	44345
23.9	Item No229 Supplying and erecting minimum Three & above star rated submersible pump set suitable for erection on open well of 5.625 KW/7.5 HP with 415 V 50 c/s. A.C. supply, having delivery head from 57 to 22 m and discharge from 120 to 900 litres. per minute & pipe of Suction 75 mm/Delivery 65 mm	5.00	Each	41520.00	203115.00	40623	203115

24.0	<p>diameter erected with necessary H type clamps as per specification No. WP-OSP</p> <p>Item No230</p> <p>Supplying, installing, testing and commissioning of 5 kWp OFF-GRID solar power pack with interconnecting wires / cables up to 24V pure sine wave solar power inverter (THD<3%), SPV Modules (335 WP X 15 Nos.), C-10 rated lead acid battery bank 24V, 300Ah x 4 nos. (12V, 300 Ah x 8 nos) suitable for 4 Hours backup with suitable MS powder coated stand to hold battery bank and keeping sufficient space for filling distilled water, canopy box to house inverter and other electronics, wiring up to solar inverter in casing and capping, display board, sign board, two distinct earthing, spike type lightning arrester, necessary accessories complete with 5 years ON-SITE warranty and fully comprehensive maintenance contract as per specification no. ESD-RT-OFG</p>	8.00	Each	410670.00	3214400.00	401800	3214400
24.1	<p>Item No231</p> <p>Supplying and erecting three phase 10 to 60 A net meter DLMS compliance of accuracy class 1.0, 3 x 240V, 50 Hz, with backlit LCD display, optical port and RJ 232 port (measures import kWh, kVAh, export kWh, kVAh, Net kWh, kVAh, V, I, kW, 6 months history of energy) with wiring connections and mounting hardware on provided panels complete with calibration certificate from manufacturer.</p>	8.00	Each	12350.00	96664.00	12083	96664
24.2	<p>Item No232</p> <p>S.I.T.C. of LIGHT 851, Wattage 30W-40W Power Module LED,3000k,Upright</p> <p>Light 851:it's upper square frame in single piece made of die cast aluminum using pressure die-casting process,with a decorative element which is also made of die cast aluminium using pressure die-casting process, fixed on the top. Auxiliary and optical compartment can be accessed by tilting the top frame.Bottom frame with Company /brand name engraved in the mold, in single piece, made of die cast aluminum using pressure die-casting process with a four-armed bracket with flange, which is also made of die cast aluminum using pressure die-casting process, fixed at the bottom. Frosted Screen made of polymethylmethacrylate (PMMA) molded in a single piece using Injection molding process. Screen's Impact resistance: IK06. Pure polyester powder coating in Standard Grey Colour. IP Rating - IP 66.</p> <p>Power LED Module with Company /brand name printed on PCB with the metal core plate.LED Chips of CREE/NICHIA/OSRAM/LUMILEDS make - same should be supported by LED manufacturer's tech sheet . Colour Rendering Index: Ra > 70. Electronic</p>	13.00	Each	16500.00	209872.00	16144	209872

	Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection (an additional surge protection device of 10kV also provided in-built the fixture). Optics with refractive lens in PMMA/PC . LED Lifetime >1,00,000hours@Ts 85°C. LM80 report from LED Manufacturer should be submitted.The Light fixture shall be in compliance with IEC 60598-2-3; IEC 60598-1(Supporting Test Report from UL/UL Authorised/Intertek Laboratory should be submitted) .LM79 report also should be submitted from UL/UL Authorised/Intertek Laboratory.Sample should be submitted for approval from concerned engineer-in charge.						
24.3	<p>Item No233</p> <p>S.I.T.C. of 3M HEIGHT ARCHITECTURAL POST TOP</p> <p>POLE3M height Pole made of complete cast iron decorative components where the internal fabricated pole of 3M is made in combination of mild steel pipe sections of suitable size covered on the outside by decorative cast iron base and columns.Decorative Cast iron Base in the cast iron mould, height again followed by a ring dia 210mm and gradual tapering upto a dia 92mm as approved by the econcerned Engineer the total height of decorative cast iron base is 700mm and weight-32kgs.</p> <p>Decorative cast iron base should be provided with a flush door of length 228mm, width 124mm and height 30mm. Decorative cast iron flower starting with a dia 102 mm increasing gradually to 160mm and then tapering to a dia 99mm.Total height of cast iron flower is 304 mm & weight is 6.3kgs..</p> <p>Decorative cast iron column(2nos.) is of 80mm dia. and having continuous grooves along the height. The height of each pillar is 750mm & weight of each pillar is 9.5kgs. Decorative Cast iron top starting with dia 80mm and a ring of dia 96mm at height of 160mm then gradually increasing to dia 120mm the top half of the decorative top should have grooves along the length, total height of cast iron top is 334mm - weight-5.2kg. All cast iron parts weight mentioned are with +/-5% tolerance.Entire pole shall be made to provide pleasing aesthetics as approved by Concerned Engineer in-charge. The pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. The decorative pole to be provided with a suitable size steel base plate. This mounting steel plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation. After Fabrication, Internal pole should be shot blasted for the effective</p>	13.00'	Each	16500.00	209872.00	16144	209872

	adhesion of 3layer coating so as to avoid the corrosion. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN-40 should be submitted to verify the pole design. Only cast iron parts outside are PU painted in 3 layer coating(coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint.						
24.4	Item No234 S.I.T.C. of Spot Light, NSL-10S , LED,9-11W,LED, 3000k,IP 66 Body made of Aluminium and finished with pure polyester powder coating in grey colour. Screen in flat tempered glass. Dimension-65mm(Dia.) minimum,220mm(L) minimum,Weight-0.7kgs minimum. Electronic Driver which offers Protection against Short Circuit, Over-Voltage & Over- Current. IP 66 protection.voltage input AC240V. Estimated Lifetime-L70 @ 50,000hours minimum.	47.00	Each	9900.00	455242.00	9686	455242
24.5	Item No235 S.I.T.C. of NCL-02S-Ceiling Light, 10-15W, LED, 3000k, IP 65 Body made of aluminium & screen in tempered glass (IK 08). Pure Polyester powder coating in RAL 9005 Matt. Electronic Driver which offers Protection against Short Circuit, Over-Voltage & Over- Current. Dimension-126mm (Dia.) x 138mm(H), Weight-1.2kg. Estimated Lifetime-L70 @ 50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in-charge. Sample should be submitted for approval from Architect/ engineer-in-charge	17.00	Each	16890	280925.00	16525	280925
24.6	Item No236 S.I.T.C. of MELIA-ILLUMINATED BOLLARD-10W-15W,LED, 3000KThe Bollard suitable for on ground installation.It is made in combination of Steel pipe of 127mm dia. & decorative cast iron elements. . After Fabrication, Entire bollard should be shot blasted for the effective adhesion of 3layer coating so as to avoid the corrosion.Decorative base with company name/logo engraved - it's design starting with 178mm dia. continues for a height of 30mm,than gradually tapering to 150mm,for a height of 60mm, ends. with ring of 165dia. and 20mm height. total height of the base is 140 mm & Weight is 3Kgs. and top sphere shaped decorative element design starting with a ring of 150mm dia. and 18mm height,followed by a section of 130mm dia,then gradually tapering to 70mm dia. for a height 17mm,followed by a ring of 87mm dia.,17mm height and ends with a sphere section of 125m dia. total height is 170mm - Weight is 3Kgs.All cast iron parts weight mentioned are	100.00	Each	12320.00	1205400.00	12054	1205400

	with +/- 5% tolerance. LED source is made of Silicon material-Much more flexible, Efficient heat dissipation, Perfect resealing with silicone glue. Mounting channel made of aluminium. Diffused Screen in Acrylic. LED-source Efficacy > 90lm/W, SMD LED, yellow glue 3M, 120 degree beam angle, Voltage DC 24V. It also includes External common Electronic Power Supply (Meanwell /Equivalent), which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection. Finish- Pure Polyester Powder Coating in customised colour Metallic Grey. IP Rating - IP 54. Height - 1000mm, Dia - 127mm.						
24.7	<p>Item No237</p> <p>S.I.T.C. of Underwater Spot Light, NHL-145, LED, 8-10W, LED, 3000k, IP 68, External common power supply NHL-145: The housing in circular shape is completely made of high strength stainless steel (304 grade minimum). Protection screen in clear tempered glass with high impact resistance. Precise structure and multi-protection silicon rubber seal ensures the Ingress Protection-IP 68.</p> <p>Dimension-Dia-145mm, Height - 180mm, Weight - 1.2Kgs.</p> <p>Power LED Module with high efficacy LED's (Cree/Osram/Nichia/Lumileds), on Printed Circuit Board with metal core plate. Common external electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection. Lens made of PC which should offer various beam angles. Estimated LED Lifetime is L70-50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Minimum Light fixture Lumen output is 700 Lumens. Sample Should be submitted for concerned engineer in charge for approval of light fixture.</p>	2.00	Each	21960.00	42972.00	21486	42972
24.8	<p>Item No238</p> <p>S.I.T.C. of NGB-6-1-Ground Buried Uplight, 1-2W, LED, 3000k, IP 67 Body made of Die cast aluminium using pressure die casting process. Top Cover in Stainless steel & screen in tempered glass (IK 08). Burying barrel in ABS. External Electronic Driver which offers Protection against Short Circuit, Over- Voltage & Over- Current.</p> <p>Dimension-35 (Dia.) x 38mm (H), Weight-0.1kg. Estimated Lifetime-L70 @ 50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in charge. Sample should be submitted for approval from Architect/ engineer-in-charge.</p>	12.00	Each	16280.00	191136.00	15928	191136

24.9	Item No239 S.I T.C. of 1 Mtr. Length of 48V Track for track light with connectors (I & Tshape connectors)	3000.00	Each	8140.00	23892000.00	7964	23892000
25.0	Item No240 Making M- 20 grade reinforced cement concrete foundation by considering the safe soil bearing capacity at site as 10 T/sq.m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template, duly plastered as per design complete (for 6m to 8m high octagonal /conical GI pole).	154.00	Each	4100.00	617694.00	4011	617694
25.1	Item No241 Providing & erecting 7 m high (clear height) galvanised octagonal pole with foundation bolts having bottom of 130 mm A/T, top 70 mm A/F on provided foundation as per specification no. OH-PL/OPL	154.00	Each	18800.00	2832676.00	18394	2832676
25.2	Item No242 Supplying and erecting integrated LED street light fitting 120W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 13000 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No FG-ODE/FLS2	154.00	Each	10780.00	1624238.00	10547	1624238
25.3	Item No243 Providing and laying in situ M40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for PSC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	2483.76	Cum	12500.00	30376384.80	12230	30376384.8
25.4	Item No244 Providing & Supplying of FRP sculpture of various art piece including creative involvement of creative artist as per theme as instructed by Engineer-In-Charge/architect. The model to be done in following stages clay work, pop moulding 4 to 5mm fibre casting with steel reinforcement from inside. Gridding finishing and colouring with appropriate colours. Transportation to site and installation	90.00	Per Square Meter	29450	2593260.00	28814	2593260
25.5	Item No245 Providing & Supplying of Metal sculpture of various art piece including creative involvement of creative artist as per theme as instructed by Engineer-In-Charge/architect. The model to be done in following stages clay work, pop moulding 4 to 5mm metal casting with	30.00	Per Square Meter	78550.00	2305590.00	76853	2305590

	steel reinforcement from inside. Gridding finishing and colouring with appropriate colours .Transportation to site and installation						
25.6	Item No246 Designing, Providing & Installation of Sculpture . The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 3.5m. Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalatar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm -10% in Length, Width and Height shall be permitted.) Inclusive all taxesExcludung of GST .etc. Complete.	1.00	Each	1173000.00	1147663.00	1147663	1147663
25.7	Item No247 Designing, Providing & Installation of Sculpture of . The material for this sculpture is Metal . The Height of the Sculpture should be minimum 3m. Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalatar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm -10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excludung of GST .etc. Complete.	2.00	Each	1322500.00	2587868.00	1293934	2587868
25.8	Item No248 Designing, Providing & Installation of Sculpture of The material for this sculpture is Fibre/FRP . The Length of the Sculpture should be minimum 3m. Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with	2.00	Each	977500.00	1912772.00	956386	1912772

	Coaltar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST etc. Complete.						
25.9	Item No249 Designing, Providing & Installation of Sculpture . The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 2.1m.& Length will be around 5m Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement(TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coaltar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST etc. Complete	2.00	Each	1677500.00	3282532.00	1641266	3282532
26.0	Item No250 Designing, Providing & Installation of Sculpture Set The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 3.6m. Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coaltar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST etc. Complete.	1.00	Each	2185000.00	2137804.00	2137804	2137804
26.1	Item No251 Designing, Providing & Installation of Sculpture The material for this sculpture is Fibre/FRP . The Length & Height of the Sculpture should be minimum 3m & 2m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation,	2.00	Each	690000.00	1350192.00	675096	1350192

	Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalter Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm -10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc.						
26.2	Item No252 Designing, Providing & Installation of Sculpture The material for this sculpture is Fibre/FRP . The Dia of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement(TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalter Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be \pm -10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete	3.00	Each	747500.00	2194062.00	731354	2194062
26.3	Item No253 Fee towards the MCZMA Security ass per the 114 MOM of MCZMA	1.00	Per Proposal	850000	831640.00	831640	831640
26.4	Item No254 Cost towards the Demarcation of the HTL and HFL from the Government Agencies approved by the MoEFCC	1.00	Pre Proposal	850000.00	831640.00	831640	831640
26.5	Item No255 Carrying Comperhensive EIA for the Project including the generation of Required Basline Survey Data for 3 Seasons and CRZ Clearnces for the Project and CRZ Clearnces of the project	1.00	Job	2000000.00	1956800.00	1956800	1956800
26.6	Item No256 Remuneration to agency for the prepartion of the Forest Diversion Proposal.	1.00	Job	2500000.00	2446000.00	2446000	2446000
26.7	Item No257 Cost towards the Payment of NPV	2.24	Ha	1650000.00	3616166.40	1614360	3616166.4
26.8	Item No258 Cost towards the Payment of Compensatory Afforestation Cost including Maintaencae of 10 Years	2.24	Ha	950000.00	2082035.20	929480	2082035.2
26.9	Item No259 Towards conservation measure for Avifauna (Bird)	1.00	Lumsum	750000.00	733800.00	733800	733800
27.0	Item No260 Towards Legal cost for obtaining the Clearnces from Hon High Court as per PIL No. 87 of 2006	1.00	Lumsum	900000.00	880560.00	880560	880560

27.1	Item No261 Implementation of the Environment Monitoring Plan during the Project Execution	1.00	Lumsum	1000000.00	978400.00	978400	978400
27.2	Item No262 S.I.T.C. of GOBO PROJECTOR350 Watt,LED,IP 65Gobo Projector:Body made of Diecast Aluminium. Uses high power white LED chip,3.8°-45°(electronic linear zoom),Display-On board Control, Gobo-8+6 Gobos(single colour), Gobo-flow effect, Gobo shake, Bi-directional rotation.Colours-One color wheel (13 colour: White, Rainbow flow effect),Prism-16 prism with bi-directional rotation, , Speed adjustable,Focus-Motorized linear focus.Nos.of DMX Channels-16 Light fixture should be standard DMX512 protocol compatible, the DMX decoder function should be inbuilt the light fixture,Each light fixture should be individually addressable & should be able to operate with any standard DMX512 equipment. In-Built Electronic Power Supply for LED Module,which offers Protection against Short Circuit, Over-Voltage & Over- Current, with in-built surge protection.Lifetime is 50,000 hours.IP rating-IP 65 minimum.Length-480mm,Width- 410mm. Height-640mm Weight -39Kgs.	8.00	NOS	750000	5870400.00	733800	5870400
27.3	Item No263 S.I.T.C. of DMX Control System	1.00	Set	700000.00	684880.00	684880	684880
27.4	Item No264 S.I.T.C. of 6m height pole made in combination of mild steel pipe sections 114mm dia. & 76mm dia. with suitable fixing arrangement to mount Laser projector. The pole to be provided with a suitable size steel plate. This mounting steel plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation.After Fabrication, Entire Pole is hot dip galvanized(100 microns-Minimum) for the effective corrosion resistance. The hot dip Galvanised pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB. at the bottom - the inbuilt box should have a flush door of suitable size. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN40 should be submitted to verify the pole design. Pole & it's parts are painted in 3 layer coating (coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint.	8.00	NOS	111090.00	869520.00	108690	869520
27.5	Item No265 S.I.T.C. of 3 Chip DLP Laser Cinema series Projector, Brightness: 22000 Lumens or more, Resolution: Native 4K or better, along with the appropriate Lens to manage the throw distance, 3D ready, Native aspect ratio 16:10, Horizontal & vertical edge blending, Motorised Zoom & Focus, Motorised Lens shift H/V, Sealed DLP™ core,	2.00	Nos.	4628750.00	9057538.00	4528769	9057538

	Standard Orientation : 360°, DMX 512 Standard WARP Direct adjust OSD + toolset, Image processing, Embedded warp & blend, 3D Active eye wear (optional), passive circular (optional); 2 flash up to 200Hz; optional Dual Eye Point 240Hz, Single HDBaseT; HDMI2.0 (HDCP2.2, HDR10); DP 1.2 (HDCP1.3); Quad 3G/12G SDI/BarcoLink ULTRA, supplied with DP input cards, IR, RS232, IP (RJ45 Network connection), direct Android app to control.						
27.6	Item No266 S.I.T.C. of Smart poles of 10 mtrs heights Customized enclosure for above projector with pole mounting arrangement IP68 protection and security. Each enclosure allow to put minimum 1 projector, White in color, easy maintainable Make: Techvisio/ Mapan/Aura / LM3X [Urban pole / Valmount structures	2.00	Nos.	1587000.00	3105442.00	1552721	3105442
27.7	Item No267 S.I.T.C. of Display media server with 4nos x HD outputs as required , synced together. , Min. 1x NVidia Quadro RTXA5000 graphic processor.	1.00	Nos.	1262990.00	1235709.00	1235709	1235709
27.8	Item No268 S.I.T.C. of Production PC i7 process RAM 32 GB 2TB SSD memory with HD outputs as required, , with 16GB graphic card ,to be supplied with 27" Monitor	1.00	Nos.	793500.00	776360.00	776360	776360
27.9	Item No269 S.I.T.C. of 3D Projection mapping software, Playback control System to manage, schedule & control the media servers, watchout software should work best in above system	1.00	Nos.	1322500.00	1293934.00	1293934	1293934
28.0	Item No270 S.I.T.C. of 20 KVA UPS with 30 minutes power backup. along with Electrical cabling and Earthing for projector	1.00	Nos.	1256375.00	1229237.00	1229237	1229237
28.1	Item No271 S.I.T.C. of Long distance transmitter for High resolution signals, Transmits HDMI, USB data, control, and analog audio up to 330' (100 m) over a shielded CAT 6A cable Supports computer and video resolutions up to 4K/60 @ 4:4:4, USB 2.0 extension, Analog stereo audio embedding, HDCP 2.3 compliant, Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats	2.00	Nos.	165315	323488.00	161744	323488
28.2	Item No272 S.I.T.C. of Long distance Receiver for High resolution signals, Receives HDMI, USB data, control, and analog audio up to 330' (100 m) over a shielded CAT 6A cable Supports computer and video resolutions up to 4K/60 @ 4:4:4, USB 2.0 extension, Analog stereo audio embedding, HDCP 2.3 compliant,	2.00	Nos.	165315.00	323488.00	161744	323488

	Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and JID lossless audio formats						
28.3	Item No273 SITC of 4k enabled HDMI male to male cables, of 2 mtrs. Ultra-flexible HDMI cables Conforms to Premium High Speed HDMI cable performance standards 4K/60 verified	10.00	Nos.	10127.00	99080.00	9908	99080
28.4	Item No274 SITC of 30 mtr / 100ft High speed 4k HDMI cable, HDMI Premium High Speed Optical Cables - Plenum, Conforms to Premium High Speed HDMI Cable performance standards Flexible, ultra-thin 0.16" (4 mm) diameter cable Plenum, NEC CMP-rated cable No external power is needed, Highly resistant to EMI/RFI interference, Color-coded and labeled ends	1.00	Nos.	108975.00	106621.00	106621	106621
28.5	Item No275 SITC of other accessories like connectors, small patch cables of CAT6 / audio etc, sleeves, DP to HDMI or HDMI to DP, etc adapters	1.00	LS	264500.00	258787.00	258787	258787
28.6	Item No276 SITC of LED RGBW DMX control LED channel with aluminium extrusion channel linkable option outdoor IP66 with diffuse optic power 15 watt per meter control by independent DMX controller creating multiple lighting scene (minimum 32 scene)	180.00	meter	11500.00	2025360.00	11252	2025360
28.7	Item No277 SITC of LED screen 4 mm pitch 5500 nits IP66, size 3m x 5m floor standing mounting bracket with media server , AV connectivity , link with APP through wifi or QR code rider	1.00	nos	1725000.00	1687740.00	1687740	1687740
28.8	Item No278 SITC of MEDIA server	1.00	nos	57500.00	56258.00	56258	56258
28.9	Item No279 SITC Mobile app for QR code	1.00	nos	230000.00	225032.00	225032	225032
29.0	Item No280 SITC of Approved content and video	8.00	nos	287500	2250320.00	281290	2250320
29.1	Item No281 SITC of entry art work of height 8000mm made up of fibre body made up of glowing fibre with base of 2500 x 1000 mm	1.00	set	805000.00	787612.00	787612	787612
29.2	Item No282 SITC of RGB lights of 24 watt 16 nos DMX control with continuous transition made by aluminium extrusion with connecting cable & controller	1.00	set	230000.00	225032.00	225032	225032
29.3	Item No283 SITC of LED screen with 31.5 mm pitch with high brightness of 3500 NIT day visibility with media server controller	30.00	sq meter	86250.00	2531610.00	84387	2531610
29.4	Item No284 SITC of Programme controller and present scene controller with built in memory 256 GB and ram of 16 GB to store programme	1.00	nos	327750.00	320671.00	320671	320671
29.5	Item No285 Set of all control cable and power cable	1.00	set	115000.00	112516.00	112516	112516
29.6	Item No286 SITC OF RGB laser system projection	1.00	NOS	3220000.00	3150448.00	3150448	3150448

	with laser power of 42 watt (red 9w/638nm, Green 13w/525nm, blue 20w/ 455nm). Cooling mode - lasr with TEC cooling, whote machine is with air cooling, with enclosure of IP65,power consumption 1200watt. Laser service life 10000 hoursand operating volatge 230 volt 50Hz.lighting effect- full color animation laser with high speed galvanometer scanning technology. laser projector should confirm to EU norm and CE / UL certified. (Kvant / Aura / Bajaj)						
29.7	Item No287 SITC of customised laser enclosure for all laser projector with IP65 protection with security mechanism (techvisio / mapan / Aura)	1.00	NOS	230000.00	225032.00	225032	225032
29.8	Item No288 SITC of pangolin software to develop various lighting show (Pangolin / laser world / star dimension)	1.00	Set	103500.00	101264.00	101264	101264
29.9	Item No289 SITC of wiring , power cable , control cable for laser	1.00	Set	575000	562580.00	562580	562580
30.0	Item No290 Content with Script writing: includes movement, actions, expression and dialogue of the characters, drama Storyboard, Storytelling, 2D 3D animation, Graphics, Art Works, Archival Imagery, Video-timeline, Sfx, Vfx, Voiceovers and Music etc for the show.etc for about 15 mins.	15.00	Minutes	396750.00	5822700.00	388180	5822700
30.1	Item No291 SITC of ISO 7240-16 Certified EVAC PA controller capable of adding 12 zones in the system and expandable upto 400 zones with 14x 4 Audio matrix with full DSP functionality. 8 audio, inputs, 4 audio outputs, 4 channel output matrix. Shall support the following: single line, switching or redundant group A/B switching, amplifier redundancy, 4 x 100V audio inputs, and 12 speaker line outputs. Fault, warning and event conditions log. Built in message, manager for 100 emergency/business calls up to 85 minutes. 18 control inputs and 18, control outputs. Impedance measurement and Pilot Tone supervision for speaker line, monitoring. The network controllers shall have a possibility to be integrated using an, interface module which is able to send and receive Audio to and from other, Controllers.Frequency response (ref. 1 kHz) 20 Hz to 20 kHz (-0.5 dB), Signal-to-noise ratio, (A-weighted): Line in to line out: 106 dB typical, THD+N < 0.05%, Crosstalk (line level) Line, in to line out (0 dB gain): < 100 dB at 1 kHz, Sample rate 48 kHz, DSP processing resolution, 24-bit linear A/D and D/A conversion, 48-bit processing, Graphics User Interface software, should be considered for Monitoring and control of signal.MAKE/BRAND: Bosch	1.00	NOS	287040.00	280840.00	280840	280840

30.2	<p>Item No292</p> <p>SITC of The Digital call station shall be an EN54-16 & ISO 7240 -16 certified user interface.</p> <p>It shall be designed in a modern and robust chassis with a graphical display. As standard, the call station shall have a gooseneck microphone with pop shield and permanent monitoring, an illuminated LC-display and an integrated loudspeaker to be used, for system sounds. It shall be possible to modify the call station to suit the user's requirements by connecting, up to five remote call station extensions, each with 20 free customizable functions and selection buttons. The Call station shall have a built-in numerical keypad; it shall be possible to enable or disable the keypad during configuration</p> <ul style="list-style-type: none"> • Five menu/function keys (pre-programmed) – four buttons shall provide each 1 LED (two LED's shall be 2 green and 2 LED's shall be yellow). • Green led on the microphone which is active during a call • 15 function and speed dial buttons (customizable); two LEDs (green/red) per button. • Button functions shall be programmable such as: <ul style="list-style-type: none"> • Zone select, source select, level control, emergency on/off, message on/off, failure acknowledge/reset. • switching output trigger on/off or 0 to 10V, select scheduled events, scheduled event on/off • CAT5 cable for data and audio connection to controller (can bus, up to 1000 meter).MAKE/BRAND: Bosch 	1.00	NOS	103040.00	100814.00	100814	100814
30.3	<p>Item No293</p> <p>SITC of The call station extension shall be EN54-16 Certified. It shall be designed in a robust and modern chassis. It shall expand the call station by 20 customizable functions keys. • 20 free customizable functions keys, and two LEDs per button (green/red). • It shall be possible to program button functions as: • Zone select, source select, level control, emergency on/off, message on/off, failure acknowledge/reset. • switching output trigger on/off or 0 to 10V, select scheduled events, scheduled event on/off. • An LED shall also be programmable for own indication functionalityMAKE/BRAND: Bosch</p>	1.00	NOS	61870.00	60534.00	60534	60534
30.4	<p>Item No294</p> <p>SITC of EN54-24 Certified IP65 rated outdoor surface mount speaker to be supplied with standard U-bracket, Maximum power 22.5 W, Power tapping 15/7.5/3.75/1.9 W, Sound pressure level at rated power / 1 W (1 kHz, 1 m) 98/86 dB (SPL), Opening angle at 1 kHz / 4 kHz (-6 dB) 179° / 101° (hor.) 168° / 35° (ver.)MAKE/BRAND: Bosch</p>	100.00	NOS	9948.00	973300.00	9733	973300

30.5	Item No295 SITC of EN54 Certified EVAC Router for adding 24 zones in the system and to route 4 channels into. 8 100V audio inputs to 24 loudspeaker line outputs. 2-in-6 matrix. 20 Control Inputs, 26, Control Outputs. Shall support single line switching or redundant group A/B switching, amplifier redundancy. Impedance measurement and Pilot Tone supervision for speaker line monitoringMAKE/BRAND: Bosch	1.00	NOS	238510.00	233358.00	233358	233358
30.6	Item No296 SITC of 480 W power amplifier in a 3U high housing with 70 V / 100 V and 8 ohm outputs.Dual inputs with priority switching,100 V input for slave operation on 100 V speaker line.Mains, battery back-up, With Following Features: 1.Output power (rms) 480 W 2.Frequency response 60 Hz to 18 kHz (+1 / -3 dB at -10 dB ref. rated output) 3.Distortion <1% @ rated output power, 1 kHz 4.S/N (flat at max volume) >90 dB 5.Battery power supply:24 VDC MAKE/BRAND: Bosch	4.00	NOS	49680.00	194428.00	48607	194428
30.7	Item No. 297 Standard Consistency, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	10.00	1 Test	1175.00	11500.00	1150	11500
30.8	Item No. 298 Water Absorption, Specific Gravity,Impact Value, Crushing Value.	10.00	1 Test	585	5720.00	572	5720
30.9	Item No. 299 Sieve Analysis.	10.00	1 Test	1260.00	12330.00	1233	12330
31.0	Item No. 300 Abrasion Value.	10.00	1 Test	4880.00	47750.00	4775	47750
31.1	Item No. 301 Flakiness Index & Elongation Index.	10.00	1 Test	870.00	8510.00	851	8510
31.2	Item No. 302 Stripping Value. (for Bituminous Work)	10.00	1 Test	3465.00	33900.00	3390	33900
31.3	Item No. 303 Soundness.	10.00	1 Test	1895.00	18540.00	1854	18540
31.4	Item No. 304 GSB Mix Design./Cement Treated Sub Base (CTSB)	1.00	1 Test	670.00	656.00	656	656
31.5	Item No. 305 Fineness Modulus (Sieve Analysis),Silt & Clay Content	10.00	1 Test	1755.00	17170.00	1717	17170
31.6	Item No. 306 Chloride & Sulphate Content.	10.00	1 Test	735.00	7190.00	719	7190
31.7	Item No. 307 Silt Factor.	10.00	1 Test	5380	52640.00	5264	52640
31.8	Item No. 308 Flexural test (Set of 6 Tiles), Water Absorption (Set of 6 Tiles).Resistance to wear (Set of 6 Tiles).	10.00	1 Test	2630.00	25730.00	2573	25730
31.9	Item No. 309 Flooring of Natural Stone (Kota,Marble, Granite,Tandur.etc.) Water absorption, Specific gravity	10.00	1 Test	3225.00	31550.00	3155	31550
32.0	Item No. 310 Compressive Strength OF C.C. Cube (Set of 3 cubes).	4.00	1 Test	4080.00	15968.00	3992	15968

32.1	Item No. 311 Concrete Mix Design (With all Tests on basic materials)	1.00	1 Test	810.00	793.00	793	793
32.2	Item No. 312 Compressive Strength, Water Absorption, (Set of 8 Blocks)	1.00	1 Test	215.00	210.00	210	210
32.3	Item No. 313 Crushing Value/Compressive Strength, Water Absorption & Specific Gravity.	10.00	1 Test	1785.00	17460.00	1746	17460
32.4	Item No. 314 Sieve Analysis.	5.00	1 Test	4280.00	20940.00	4188	20940
32.5	Item No. 315 Liquid limit & plastic Limit.	5.00	1 Test	2155.00	10540.00	2108	10540
32.6	Item No. 316 Compaction Test (Proctor Density).	5.00	1 Test	1935	9465.00	1893	9465
32.7	Item No. 317 Sulphate & Chloride Contents.	5.00	1 Test	17400.00	85120.00	17024	85120
32.8	Item No. 318 Penetration, Softening Point, Flash & Fire Point, Specific Gravity	2.00	1 Test	17400.00	34048.00	17024	34048
32.9	Item No. 319 Extraction Test.(Bituminous mix)	2.00	1 Test	5060.00	9902.00	4951	9902
33.0	Item No. 320 Extraction & Sieve Analysis of Bituminous mix (for BM/DBM/AC) (2 samples of extraction for one sieve analysis including extraction)	2.00	1 Test	6685.00	13082.00	6541	13082
33.1	Item No. 321 Job Mix Design with all Tests on aggregate (Excluding bitumen) for DBM/SDBC/AC/SMA (Stone Mastic Asphalt) (Testing of Bitumen shall be separately Charged)	2.00	1 Mix Design	12280.00	24030.00	12015	24030
33.2	Item No. 322 B. M. Mix Design with all Tests on aggregate (Excluding bitumen) (Testing of Bitumen shall be separately Charged)	2.00	1 Mix Design	19855.00	38852.00	19426	38852
33.3	Item No. 323 Separation test for modified bitumen.	2.00	1 Test	7850.00	15360.00	7680	15360
33.4	Item No. 324 Density Test. (Set of 3 Blocks), Compressive Strength. (Set of 3 Blocks), Water Absorption Test (Set of 3 Blocks)	1.00	1 Test	7850.00	7680.00	7680	7680
33.5	Item No. 325 PH Value, Sulphate & Chloride Content.	4.00	1 Test	360	1408.00	352	1408
33.6	Item No. 326 Weight per running meter, Diameter of pipe & wall thickness of pipe.	1.00	1 Test	5300.00	5186.00	5186	5186
33.7	Item No. 327 Weight per running meter, Diameter of pipe & wall thickness of pipe	1.00	1 Test	1700.00	1663.00	1663	1663
33.8	Item No. 328 Upto 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress, Weight-Per Meter, Bend / Rebend Test, Proof Stress.)	4.00	1 Test	4675.00	18296.00	4574	18296
33.9	Item No. 329 Above 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress, Weight-Per Meter, Bend / Rebend Test, Proof Stress.)	2.00	1 Test	108600.00	212508.00	106254	212508
34.0	Item No. 330 Reflectance & yellowness index.	1.00	1 Test	80.00	78.00	78	78
34.1	Item No. 331 Retro Reflective Test.	1.00	1 Test	80.00	78.00	78	78

34.2	Item No297 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	81.66	Rmt	1175.00	93909.00	1150	93909
34.3	Item No298 Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete.	81.66	Sqm	585.00	46709.52	572	46709.52
34.4	Item No299 Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer specifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	54.76	Sqm	1260	67519.08	1233	67519.08
34.5	Item No300 Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete.	967.63	Sqm	4880.00	4620433.25	4775	4620433.25
34.6	Item No301 Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing	967.33	Sqm	870.00	823197.83	851	823197.83

34.7	of stone as per drawing and design, including cleaning, washing and finishing etc. complete. Item No302 Supply & Fixing of Full Body Vitrified Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	10.32	Sqm	3465.00	34984.80	3390	34984.8
34.8	Item No303 Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment) of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	34.07	Sqm	1895.00	63165.78	1854	63165.78
34.9	Item No304 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	702.33	Rmt	670.00	460728.48	656	460728.48
35.0	Item No305 Providing 25 mm to 30 mm thick flooring of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. a) One side polish	189.36	Sqm	1755.00	325131.12	1717	325131.12
35.1	Item No306 Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	767.53	Sqm	735.00	551854.07	719	551854.07
35.2	Item No307 CAST IN SITU SAFETY RUBBER FLOORING SYSTEM WITH including 20mm thick SBR Black Rubber Granule and 5MM colour EPDM granule absolute thickness = 25mm (as per drawing attached) etc. including VAT, tax complete. Manufacturers warranty is 5 years.	16.88	Sqm	5380.00	88856.32	5264	88856.32
35.3	Item No308 Accupressure Bed - Providing and fixing Natural Stone pebbles in 1:6 Cement mortar of natural sand of 50mm thick bed as required line, level, shape and size as instructed by Engineer	6.08	Sqm	2630	15643.84	2573	15643.84

	incharge. Item including color pigments, lead lift, curing, cutting, all material and labour with wastage etc. complete all						
35.4	Item No309 Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete, with prior approval of concerned Superintending Engineer.	1139.60	Sqm	3220.00	3589740.00	3150	3589740
35.5	Item No310 Providing and laying RED & BLACK GRANITE cobble stones of 100mm x 100mm x 100mm. 3 line dressing with 12 mm top layer in size of fine cut and well dressed in Grey colour in paving on a bed of min. 40 mm thick cushioning in C.M. 1:4 including neat cement float etc. filling of joints in C.M. 1:2 with grey cement to match the colour of cobble stone in the required pattern, design and as directed by the Engineer incharge, including cleaning, curing etc. complete.	12.83	Sqm	4080.00	51217.36	3992	51217.36
35.6	Item No311 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	216.23	Sqm	810.00	171470.39	793	171470.39
35.7	Item No312 Providing vee pointing with cement mortar 1:3 for stone /Brick masonry including scaffolding and curing etc. complete	79.02	Sqm	215.00	16594.20	210	16594.2
35.8	Item No313 WOODEN FINISH PAINTING OF EXISTING WOODEN FINISH TEXTURED SURFACE CEMENT CONCRETE BENCH including any material, machinery, scaffolding etc. complete. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including cement, Sand, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	1653.80	Sqm	1785.00	2887534.80	1746	2887534.8
35.9	Item No314 Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25	270.08	Sqm	4280.00	1131095.04	4188	1131095.04

36.0	<p>mm dia in three rows, all pipes of 2 mm thick including buffing, fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)</p> <p>Item No315</p> <p>Stamp Concrete of 100mm Thickness - Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand / VSI grade finely washed crushed sand) Confirming to IS 383, as per mixed in a batching and mixing plant / non tilting mixer and weigh batcher as per approved mix design, admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continuous operation, finishing to lines and grades Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @ 5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable, 30 % solids clear sealer @ 150 to 250 gms per sqm using surface roller and protecting from falling dust, dirt and curing by curing compound / by providing cement vata in cement Mortar 1 : 8 @ 0.6m x 0.6m center to center, measuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge or Landscape architect etc. complete. (prior approval of superintending Engineer will be necessary)</p>	461.56	Sqm	2155.00	972968.48	2108	972968.48
36.1	<p>Item No316</p> <p>Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.</p>	578.17	Sqm	1935.00	1094475.81	1893	1094475.81
36.2	<p>Item No317</p> <p>Design Conceptualisation & painting 3D artwork on any surface at all height and locations as directed .</p>	15408.00	Sqm	980	14776272.00	959	14776272
36.3	<p>Item No318</p> <p>Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)</p>	11.13	Cum	17400.00	189477.12	17024	189477.12

36.4	Item No319 Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown /RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with rounded moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete. Skirting Spec.No. : Bd. M.22 B/Page No. 390	6.29	Sqm	5060.00	31141.79	4951	31141.79
36.5	Item No320 Providing&fixing in position 20 +/- 2mm thick machine cut, mirrorpolished, 1st quality granite cladding such as black galaxy or approved equivalent in lift lobby / passage installed in approved pattern and design of size 600 x 1200mm and as directed includingbackingcoat of 1:4 cement plaster of required thickness with stainless steelfasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with with matching pigments. The rate toinclude all curing, polishing at all lift and levels. (Basic rate ofgranite is Rs.3600/-Sq.m.)	60.25	Sqm	6685.00	394095.25	6541	394095.25
36.6	Item No321 Providing & fixing BENCH IN CEMENT MORTOR/CONCRETE WITH WOODEN FINISHING ON ALL EXTERNAL SURFACE. Bench should have min. 2.1m to max. length 2.4m with 0.45m wide seat & 0.40m high back for resting. beach should have 2 to 3 supports/Legs as per requirement from ground in 1:1.5:3 ratio Concrete with 4 bar 12mm as a main & distribution 8mm Tor steel at 150mm c/c. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including Cement, Sand, Aggregate, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, excavation, pec, tor steel etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	8.10	Rmt	12285.00	97362.00	12020	97362
36.7	Item No322 Ss Dust Bin (Refer sketch 10) Product area:0.76Sqm, Capacity in-ltrs: 42.0 ltrs, Product height:0.92m	12.00	No	19855.00	233112.00	19426	233112
36.8	Item No323 Design and engineering, supply and fixing of tensile membrane of high tensile strength, primary and secondary steel, hardware and accessories, including the fabrication of steel structure made out of MS structural steel tubular section of high yield strength as per relevant IS codes. The tensile membrane roof cover shall be of	48.59	Sqm	7800.00	370838.88	7632	370838.88

	PVC coated polyester composite membrane of approved make and quality including membrane cutting, seaming and HF welding as per manufacturer standards. The membrane shall be fixed to MS structural members with necessary SS plates, lugs, clamping plates as required. The membrane shall be stretched and tensioned as per the design approved. The Membrane shall be flame resistant, fungicide finish, high tear out force and continued tear out force, well weldable, good UV resistance, high water pressure resistance and very low maintenance.						
36.9	Item No324 Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Accoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 100mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wali surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf, with Eco friendly UV coating, all complete as per direction of Engineer in-charge.	132.53	Sqm	7845.00	1017300.28	7676	1017300.28
37.0	Item No325 Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including leaning, preparing the plaster surface, applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE:ForItem Number 15 to 18 prior approval of Superintending Engineer will be necessary	364.80	Sqm	360.00	128409.60	352	128409.6
37.1	Item No326 Providing and laying telephone black / Amba White / Cadburybrown / RBI red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing the sharp edges wherever	0.56	Sqm	5300	2904.16	5186	2904.16

	necessary, curing, etc. complete. Specifications: Bd. M. 12 Spec. No.: As directed by Engineer-In- Charge						
37.2	Item No327 Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	24.62	Sqm	1700.00	40943.06	1663	40943.06
37.3	Item No328 Providing, applying, fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and shade on top face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicon sealant, backer rods etc. overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre)	61.61	Sqm	4675.00	281804.14	4574	281804.14
37.4	Item No 329 Civil Operation Cost -	60.00	Monthly	108595.00	6374940.00	106249	6374940
37.5	Item No 330 Garden Maintenance (Including Cost of Water) - 2nd Year	7717.20	Per Sqm/Month	80.00	601941.60	78	601941.6
37.6	Item No 331 Garden Maintenance (Including Cost of Water) - 3rd Year	9260.64	Per Sqm/Month	80.00	722329.92	78	722329.92
37.7	Item No 332 Garden Maintenance (Including Cost of Water) - 4th Year	11575.80	Per Sqm/Month	80.00	902912.40	78	902912.4
37.8	Item No 333 Garden Maintenance (Including Cost of Water) - 5th Year	13119.24	Per Sqm/Month	80.00	1023300.72	78	1023300.72
37.9	Item No 334 Electrical and Public Art Lighting - Comprehensive Maintenance for 2nd Year	1.00	Yearly	2828150.00	2767062.00	2767062	2767062
38.0	Item No 335 Electrical and Public Art Lighting - Comprehensive Maintenance for 3rd Year	1.00	Yearly	4525030	4427289.00	4427289	4427289
38.1	Item No 336 Electrical and Public Art Lighting - Comprehensive Maintenance for 4th Year	1.00	Yearly	6221915.00	6099863.94	6099863.94	6099863.94

38.2	Item No 337 Electrical and Public Art Lighting - Comprehensive Maintenance for 5th Year	1.00	Yearly	7918800.00	7747751.00	7747751	7747751
38.3	Item No 338 Electrical Work - Operation Amount	60.00	Monthly	18400.00	1080180.00	18001	1980180
Total Amount					1246766593		1219838509 Final Negotiable Amount

वरील कामी मे. एन.ए.कंस्ट्रक्शन प्रा.लि. यांनी वरील दरची (रु.121,98,38,909/-) निविदा सदर केल्या आहेत. मा.आयुक्त महोदय यांनी सदरचे दर स्विकारण्यास मान्यता दिलेली आहे. नगरविकास विभाग, शासन आदेश क्रमांक एनसीओ-2020/प्र.क्र.71 (भाग-2)/नवि-14 दि.26 ऑगस्ट 2022 अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतुद व विशेषत: कलम 452 अ च्या (1 अ) व (1 ब) मधील तरतुदीनुसार मा.आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झाले आहेत. सदर अधिकारात वरील कामांस महाराष्ट्र महानगरपालिका अधिनियम मधील कलम 73 (क) नुसार मान्यता देण्यास शिफारस आहे.



(दिपक खरित)

शहर अभियंता

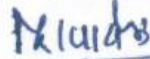
मिरा-भाईंदर महानगरपालिका

मा. आयुक्त यांच्या आनखीने

RECEIVED

मा. महामंडळ / स्थानीय समिती यांनी
घेवता येणारे ०४/०९/२०२२ साथे ५२३५ वा.

संख्या क्र. ३३७ व २०२२/२४



लिपिका
सचिव विभाग

मिरा-भाईंदर महानगरपालिका

मिरा-भाईंदर महानगरपालिका

प्रशासकीय ठराव दिनांक ०५ सप्टेंबर २०२४

विषय क्र. १५७ :- मा. आयुक्त महोदयाकडील कामकाज

निविदेस मान्यता देणेबाबत.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव
1	2	3	4	5
1.	1050627_1	वसोवा ब्रिज ते घोडबंदर गावाशेजारी खाडी किनारा विकसीत करणे. (मुलभुत सोई सुविधांचा विकास योजना)	रु.1,21,98,38,909/-	मे. एन.ए.कंस्ट्रक्शन प्रा.लि.

Sl. No.	Item Description	Quantity	Units	Quated Rate		Final Negotiate Amount	
				Rate	Total Amount	Rate	Total Amount
1.1	Item No.1 Providing Dozer D 80 A 12 (Medium) for Dismantling of various structure available on site.	147.00	Hr	3480	511560.00	3405	500535
1.2	Item No.2 Labour charges for removing grass, thorney shrubs, Jungli shrub, Kubabul and alike grass along roadside making the ground clean by showel and phavaras etc. complete.	37982.00	Sqm	8.00	303856.00	8	303856
1.3	Item No.3 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means	14946.75	cum	180.00	2630628.00	176	2630628
1.4	Item No.4 Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means	3557.61	cum	180.00	626139.36	176	626139.36
1.5	Item No.5 Excavation for foundation in hard rock by manual means inclucing removing the excavated materials upto distance of 50 m beyond the building area, stacking and spreading as directed including dewatering under provided elsewhere preparing the bed for the foundation & necessary backfilling, remaining, watering complete including shorting & strutting. (Lift up to 1.5M) Hard Rock by mechanical means with hydraulic	921.30	cum	1250.00	1126749.90	1223	1126749.9

	excavator & rock breaker.etc.complete.BDA 1 to 4 page No.259 Pg no 7						
1.6	Item No.6 Removing sand/ muck/ slush/ soil bellow low tide level to the specified section from navigation channel as per the area and depth upto 3.00 m from sea bed by mechaniceal means with, hyderaulic excavator, etc. and barge for establishment all machinery with all required tools and equipments, boat for conveying excavetd material,including removing the excavated materials with all lift and leads as directed beyond high tide level line of water stacking spreading or disposing, dewatering if required unless otherwise provided else where complete under tidal condition.	6412.50	cum	525.00	3296025.00	514	3296025
1.7	Item No.7 Transporting of excavated/Dismantled materialslead 20 K.M.	19989.76	cum	500.00	9774992.64	489	9774992.64
1.8	Item No.8 Filling in Plinth & Floors with Approved Excavated materials in 15 to 20 cm layers including watering and compaction complete. BDA 10 Pgno 262	13926.94	cum	110.00	1504109.52	108	1504109.52
1.9	Item No.9 Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	55280.39	cum	1000.00	54064221.42	978	54064221.4
2.0	Item No.10 Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	11967.33	cum	2500	29272089.18	2446	29272089.2
2.1	Item No.11 Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary).	4000.00	hour	200.00	784000.00	196	784000
2.2	Item No.12 Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand	2682.90	cum	6500.00	17063244.00	6360	17063244
2.3	Item No.13 Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/ quartzite/ gneiss metal for steps including steel	930.09	cum	7500.00	6825000.42	7338	6825000.42

	centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
2.4	Item No.14 Providing and laying Cast in situ/ Ready Mix cement concrete M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork, cover blocks, laying/ pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete With fine aggregate (Crushed sand VSI Grade)	396.30	cum	8500.00	3295630.80	8316	3295630.8
2.5	Item No.15 Providing and laying Cast in situ/ Ready Mix cement concrete M-40 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork, cover blocks, laying/ pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete With fine aggregate (Crushed sand VSI Grade)	504.22	cum	9000.00	4440161.32	8806	4440161.32
2.6	Item No.16 Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand. Spec. No.: Bd.F.6 Page No. 300 and B.7, Page No.38 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite/quartzite/ gneiss metal for	63.45	cum	11500.00	713939.40	11252	713939.4

	R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork ,cover blocks, laying/pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
2.7	Item No.17 Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. piers of required thickness including centering, formwork, cover blocks, laying/pumping, compacting and roughening them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand	219.61	cum	14500.00	3115607.07	14187	3115607.07
2.8	Item No.18 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite/quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	26.97	cum	14500.00	382623.39	14187	382623.39
2.9	Item No.19 Providing and laying in situ / ready mix M-35 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers,column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailing out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent	547.81	cum	11000	5895531.22	10762	5895531.22

	extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine aggregates of required specifications (VSI sand finely washed etc)						
3.0	Item No.20 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	164.70	cum	14500.00	2336598.90	14187	2336598.9
3.1	Item No.21 Providing and laying cast in situ / ready mix M35 RCC for 1000 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	660.00	Rmt	11000.00	7102920.00	10762	7102920
3.2	Item No22 Providing and laying cast in situ / ready mix M40 RCC for 800 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc) Height10-15m	4350.40	Rmt	16500.00	70232857.60	16144	70232857.6
3.3	Item No23 Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the	569.40	RMT	2500.00	1392752.40	2446	1392752.4

	unserviceable materials as directed etc. complete.A) With Concrete Mixer iv) 1000 mm dia						
3.4	Item No24 Providing, placing and driving in position 6mm thick permanent MS liner up to required depth with 12 mm thick MS cutting edge of 0.50 meter length of bottom including fabricating, cutting the MS sheet to required diameter and shape, welding the joints and driving with the help of required machineries, all materials, labour and lift etc. complete. (Excluding steel reinforcement)	735.93	MT	106000.00	76323300.30	103710	76323300.3
3.5	Item No25 Chipping and dressing of the R.C.C. piles upto 0.60 meter including cleaning reinforcement and removal of dismantled materials upto a distance of 50 meter beyond the building area etc. for providing pile caps. (Excluding steel reinforcement)	229.00	Nos	700.00	156865.00	685	156865
3.6	Item No26 Providing and laying in situ M40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for PSC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	2358.00	Cum	12000.00	27685278.00	11741	27685278
3.7	Item No27 Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	141.92	cum	8500.00	1180206.72	8316	1180206.72
3.8	Item No28 Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels,	1161.51	MT	92000	104550999.6 3	90013	104551000

	chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.						
3.9	Item No29 Providing and fixing in position to the exact profile and prestressing the high tensile strands to specified ultimate strength, standard end anchorages, cable ducts, grouting ducts after prestressing and bearing plates with wedges as per detailed drawings including necessary plant and machinery for prestressing etc. complete.	86.03	MT	175000.00	14730056.60	171220	14730056.6
4.0	Item No30 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete.	1976.37	cum	7000.00	13536158.13	6849	13536158.1
4.1	Item No31 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including racking out joints when plastering is to be done / striking joints when no plastering is to be done on inside watering and scaffolding etc.complete.	878.48	cum	7350.00	6317149.68	7191	6317149.68
4.2	Item No32 Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including raking out joints when plastering is to be done and striking joints when no plastering is to be done on the inside, watering scaffolding etc.complete.	135.65	cum	12000.00	1592666.65	11741	1592666.65
4.3	Item No33 Providing & fixing G.I. wire Gabions coated with Zinc+PVC of required size, section including boxes made of mechanically woven hexagonal shaped wire mesh of type, 10x12cm. edges mechanically selvaged made of heavily (Zinc+ PVC) coated G.I. wires as per BS: 443, mesh wire 3.00 mm Ø edge wire 3.9 mm Ø and filled with 20 to 50 kilogram weight trap stones including conveying with all the leads & lifts and placing at required places in required line, level, slope as per drawing, section as directed etc. complete under tidal conditions. a) Gabions of size – 1.00 x 1.00 x 1.00 M	4395.00	cum	4820.00	20726820.00	4716	20726820
4.4	Item No34 Providing 100mm diameter GI water spouts as per detailed drawings in RCC slab and wearing surface / kerb etc. complete.	340.00	Nos	2500.00	831640.00	2446	831640

4.5	Item No35 Providing and filling in the foundation with sand of approved quality including watering, compacting etc. complete. (To be executed with prior approval of Superintending Engineer)	1570.95	cum	2850.00	4379808.60	2788	4379808.6
4.6	Item No36 Providing and laying CE Marked Needle Punched and Mechanically Bonded Non-Woven Geotextile (TechGeo) indigenously manufactured from high quality polypropylene staple fibres (continuous filament will not be accepted) of Techfab India on the prepared subgrade for separation, drainage & filtration application with necessary overlaps as per drawing etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer. c) TFI TECHGEO PR-30	4320.00	Sqm	180.00	760320.00	176	760320
4.7	Item No37 Supplying Hot Rolled steel sheet piles having properties described in respective specifications or/ and shown in drawings (Z or U type with sectional modulus of minimum 2500 cm ³ , steel grade S430 GP with minimum yield strength of 430 MPa, minimum thickness 12.0 mm thickness, with Larssen interlocks and applying recommended sealant for complete watertightness (if required) & using suitable corner sections as per site condition) .Installing the same to line and level including making reformed steel sheet piles at required positions as corners, junction, wedges etc. as per approved drawing and specification in single or group jointing by welding properly, installing vertically along the alignment with the help of equipments like air compressors,excavator mounted / crane mounted vibro hammers / Impact Hammers / Hydraulic Pressing Hammers / vibrating drives powered by electric or hydraulic motor or combination of both based on the site requirements through the grooves to interlock together, wedges to make up for the permissible deviation of piles from the plumb lines caused during pile driving, slipped piles with the adjacent ones are found or loosened or dislocated during or after installation , sheet piles shall be pulled out and replaced with new ones or redone including necessary modification to the sheet pile to suit the groove of existing sheet piles , including cost and conveyance of all materials, hire charges of equipments, hire charges of crane/rigs, cost of electrodes, mobilisation and demobilisation charges, all labour, other incidentals etc complete. (No extra payment shall be made for cost of extraction and replacement for installing of sheet pile deviating the specification or rejected by Engineer -in-charge. The rate is inclusive of providing guide frames,	420.00	Sqm	14050	5773740.00	13747	5773740

	cost of installation pit, formation and removal of earthen bund etc.). Payment shall be made on actual depth of sheet pile installation.						
4.8	<p>Item No38</p> <p>Supplying Hot Rolled steel sheet piles having properties described in respective specifications or/ and shown in drawings (Z or U type with sectional modulus of minimum 2500 cm³, steel grade S430 GP with minimum yield strength of 430 MPa, minimum thickness 12.0 mm thickness, with Larssen interlocks and applying recommended sealant for complete watertightness (if required) & using suitable corner sections as per site condition) .Installing the same to line and level including making reformed steel sheet piles at required positions as corners, junction, wedges etc. as per approved drawing and specification in single or group jointing by welding properly, installing vertically along the alignment with the help of equipments like air compressors, excavator mounted / crane mounted vibro hammers / Impact Hammers / Hydraulic Pressing Hammers / vibrating drives powered by electric or hydraulic motor or combination of both based on the site requirements through the grooves to interlock together, wedges to make up for the permissible deviation of piles from the plumb lines caused during pile driving, slipped piles with the adjacent ones are found or loosened or dislocated during or after installation , sheet piles shall be pulled out and replaced with new ones or redone including necessary modification to the sheet pile to suit the groove of existing sheet piles , including cost and conveyance of all materials, hire charges of equipments, hire charges of crane/rigs, cost of electrodes, mobilisation and demobilisation charges, all labour, other incidentals etc complete. (No extra payment shall be made for cost of extraction and replacement for installing of sheet pile deviating the specification or rejected by Engineer - in-charge. The rate is inclusive of providing guide frames, cost of installation pit, formation and removal of earthen bund etc.). Payment shall be made on actual depth of sheet pile installation.</p>	938.95	Sqm	16000.00	14698323.30	15654	14698323.3
4.9	<p>Item No39</p> <p>Supplying, fabricating and installing in position waling channel I.S 226 / 2062 quality to sheet piles to correct line and level as per approved drawing and specification with required accessories such as plates, bolt & nuts etc.for connecting with sheet piles as well as for splicing the channels, welding the channel joints to achieve the properties of the section / welding of connecting plates etc including cost and conveyance of all materials, cost</p>	168.00	Sqm	1400.00	230160.00	1370	230160

	of drilling holes, hire charges of equipments, hire charges of crane, cost of electrodes, cost of fixing with bolts, nuts & washers, all labour, painting one coat of zinchromite primer after rubbing and cleaning the surface with mechanical wire brushing, sand paper, other incidentals etc complete. (Rate quoted shall include supplying, fabricating, drilling holes and fixing waling channels to SSP only, cost of accessories such as connecting plates, bolts & nuts etc).						
5.0	Item No40 Design and engineering, supply and fixing of tensile membrane of high tensile strength, primary and secondary steel, hardware and accessories, including the fabrication of steel structure made out of MS structural steel tubular section of high yield strength as per relevant IS codes. The tensile membrane roof cover shall be of PVC coated polyester composite membrane of approved make and quality including membrane cutting, seaming and HF welding as per manufacturer standards. The membrane shall be fixed to MS structural members with necessary SS plates, lugs, clamping plates as required. The membrane shall be stretched and tensioned as per the design approved. The Membrane shall be flame resistant, fungicide finish, high tear out force and continued tear out force, well weldable, good UV resistance, high water pressure resistance and very low maintenance.	360.00	Sqm	7000.00	2465640.00	6849	2465640
5.1	Item No41 Design Conceptualisation & painting 3D artwork on any surface at all height and locations as directed .	7704.00	Sqm	1000.00	7534512.00	978	7534512
5.2	Item No42 Providing and Installing water fountain of 3 M dia with below specification wall should be of brick wall of 0.45 m width and 0.9 m ht above ground and clad with granite tiles. Inner area with wall and flooring should be waterproffed inner area wall and flooring should be done with premium glass mosaic tiles. Electricals wire of 4 core 16 sqmm and submersible pump of 7 HP with all necessary fitting and control panel (Including Glow lighting) Main sculpture as shown in dwg in GRC and other small sculpture of any animal in GRC. Plumbing work with all necessary fittings of pipe and nozzle etc complete as directed by Engineer-In-Charge (With 5 Years of Maintenance)	2.00	Each	2500000.00	4892000.00	2446000	4892000
5.3	Item No43 Supplying and laying of high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement made of high tenacity polyester core with polyethylene coating with Minimum Long Term Design Strength	21600.00	Sqm	500.00	10562400.00	489	10562400

	(LTDS) indicated below for 120 years design life at 20 degreeC. The LTDS should be strictly based on reliable test data and performance data available with the manufacturer from accredited independent agency certifying the Reduction Factor (RF) value for their geogrid for design temperature. The geogrid manufacturer should have creep test data from independent accredited laboratory for period over 5 years and should have minimum roll width of 4.5m with core of MS steel tube convenient for handling and lifting work as per detailed specification all complete as per directions of Engineer in charge. (Reference MoRT&H 3100 & IRC 113).High strength geogrid of Long Term Design Strength 59.5 kN/m						
5.4	Item No44 Providing and casting in C.C. M-25 for pier protection as per detailed drawing complete as specified and directed	1176.00	Rmt	6000.00	6903120.00	5870	6903120
5.5	Item No45 Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972)	415.30	Sqm	1000.00	406163.40	978	406163.4
5.6	Item No46 Providing waterproof plaster in W.C. and bath 20 mm thick for dado in CEMENTmortar 1:3 with neat finishing, floating using approved waterproofing compound of IS Std. at the rate of one kg per 50 kg of CEMENTetc. complete.Spec.As directed by Engineer-In-Charge.	527.40	Sqm	600	309583.80	587	309583.8
5.7	Item No47 Providing vee pointing with cement mortar 1:3 for stone /Brick masonry including scaffolding and curing etc. complete	4457.60	Sqm	200.00	873689.60	196	873689.6
5.8	Item No48 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	3051.78	Sqm	600.00	1791394.86	587	1791394.86
5.9	Item No49 Providing and applying laying Aggregate plaster in granite / marble stones, as decorative finish to give granite / marble like appearance to concrete, brick or block surfaces in all position	589.05	Sqm	2500.00	1440816.30	2446	1440816.3

	including preparation of surface smoothly, evenly by racking of joints in case of Brick or block work including backing layer of 12 mm thick with cement mortar 1:3 with 2% integral cement water proofing compound, roughening for wall keying hardening and drying the surface for a minimum five days gaps including second coat of cement lime mortar into a proportion 1:4 preparing the surface for three coat of marble finish plaster giving a thin coat of white cement and two parts of course calcite powder, applying the mortar with steel float on the surface in proper evenness applying at coat of white cement and lime to set a smooth finish then applying a thin coat of slurry made of white cement and black oxide colour in required proportion by the steel float to get black streaks on the surface and curing the surface for two days including all materials and labour etc. complete.						
6.0	Item No50 Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including leaning, preparing the plaster surface, applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE:ForItem Number 15 to 18 prior approval of Superintending Engineer will be necessary	182.40	Sqm	300.00	53625.60	294	53625.6
6.1	Item No51 Providing and applying two coats of protective membrane over the cured concrete surface like R.C.C. footings, columns, plinth beams etc. which will be submerged under soil so as to protect the same. Apply two pack coal tar epoxy system of Sunepoxy Coal tar of approved make & approved by Engineer in charge, having solid content ranges from 80-100%, Tack free time 4-6 hrs. Recoat after 16-24 hrs. Mix Part A and Part B of Sunepoxy Coal tar of approved make & approved by Engineer in charge in 1:1 ratio with slow speed stirrer and apply the same on a clean R.C.C. surface by brush. Allow to set for 8-10 hours and apply the second coat. The rate to include for application at all levels to various RCC elements to the satisfaction of the EIC etc. complete	15837.81	Sqm	325.00	5036423.58	318	5036423.58
6.2	Item No52 Providing and fixing fenders made from used tyres including fixing by stainless steel chain links of 8mm dia. and anchor bolts of 16 mm diameter etc. complete as per drawing and as directed under tidal range.	53.00	Nos	2600.00	134832.00	2544	134832
6.3	Item No53 Providing and fixing stainless steel mooring ring in cement concrete on deck of jetty consist of 32 mm thick steel bar, 225 mm inner diameter, steel ring with 75 mm inner diameter steel hook of 32 mm diameter as per	12.00	Nos	11000.00	129144.00	10762	129144

	approved drawing etc. complete. (Stainless steel of grade S-304)						
6.4	Item No54 Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304)	5.00	Nos	19500.00	95395.00	19079	95395
6.5	Item No55 Providing and applying one coat of two component, anti-corrosive, solvent free, substituted long chain nylon reticulant based epoxy coating / primer. Cleaning the existing steel surface by mechanical means such as sand blasting, wire brushing and other mechanical means so as to remove all the existing loose rust etc. Apply the coats by brush or spray at 4-6 hours interval between each coat complete as directed by the Engineer in charge.	10620.27	Sqm	650	6754491.72	636	6754491.72
6.6	Item No56 Providing and laying telephone black / Amba White / Cadburybrown / RBI red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing the sharp edges wherever necessary, curing, etc. complete. Specifications: Bd. M. 12 Spec. No.: As directed by Engineer-In- Charge	4.20	Sqm	4200.00	17257.80	4109	17257.8
6.7	Item No57 Providing and fixing solid core flush door shutter in single leaf 32 mm thick decorative type of exterior grade as per detailed drawings approved face veneers 3 mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, and finishing with French Polish etc. complete.	8.40	Sqm	7800.00	64108.80	7632	64108.8
6.8	Item No58 Providing and fixing fiber glass reinforced polyster door shutter 35 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fastening with chromium plated handles on both sides, etc complete. Spec.No. : As directed by Engineer In Charge	3.15	Sqm	3500.00	10785.60	3424	10785.6
6.9	Item No59 Providing and fixing in position anodised (as per IS 1868/1982) Aluminium fixed staggered (Z Type) Ventilator with aluminium rectangular pipe 63 mm x 38.10 mm x 1.22 mm at weight 0.650 Kilogram/One Running Metre, Aluminium angle of size 15 mm x 15 mm x 1 mm, aluminium channel of 9 mm sizes, S.S.mosquito net of 304 Grade, 4 mm thick float glass per detailed drawing and as directed by Engineer in charge etc.complete.	0.72	Sqm	4200.00	2958.48	4109	2958.48

7.0	Item No60 Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.	4284.00	Sqm	1500.00	6288912.00	1468	6288912
7.1	Item No61 Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	182.40	Sqm	1350.00	240950.40	1321	240950.4
7.2	Item No62 Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown /RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with rounded moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete. Skirting Spec.No. : Bd. M.22 B/Page No. 390	146.66	Sqm	4200.00	602625.94	4109	602625.94
7.3	Item No63 Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer specifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	404.39	Sqm	750.00	296822.26	734	296822.26
7.4	Item No64 Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superintending	8444.00	Sqm	2450	20240268.00	2397	20240268

7.5	Item No65 Supply & Fixing of Full Body Vitrifid Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	76.50	Sqm	3760.00	281443.50	3679	281443.5
7.6	Item No66 Providing 25 mm to 30 mm thick flooring of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. a) One side polish	1403.00	Sqm	1350.00	1853363.00	1321	1853363
7.7	Item No67 Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment) of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	252.45	Sqm	1200.00	296376.30	1174	296376.3
7.8	Item No68 Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	5687.00	Sqm	525.00	2923118.00	514	2923118
7.9	Item No69 CAST IN SITU SAFETY RUBBER FLOORING SYSTEM WITH including 20mm thick SBR Black Rubber Granule and 5MM colour EPDM granule absolute thickness =25mm .(as per drawing attached) etc. including VAT, tax complete. Manufacturers warranty is 5 years.	125.00	Sqm	4700.00	574750.00	4598	574750
8.0	Item No70 Providing and laying RED & BLACK GRANITE cobble stones of 100mm x 100mm x 100mm, 3 line dressing with 12 mm top layer in size of fine cut and well dressed in Grey colour in paving on a bed of min. 40 mm thick cushioning in C.M. 1:4 including neat cement float etc. filling of joints in C.M. 1:2 with grey cement to match the colour of cobble stone in the required pattern, design and as directed by the Engineer incharge, including cleaning, curing etc. complete.	95.00	Sqm	3760.00	349505.00	3679	349505
8.1	Item No71 Providing & fixing in position 20 +/- 2mm thick machine cut, mirror polished, 1st quality granite cladding such as black galaxy or approved equivalent in lift lobby / passage installed in approved pattern	446.40	Sqm	4800.00	2096294.40	4696	2096294.4

	and design of size 600 x 1200mm and as directed including backing coat of 1:4 cement plaster of required thickness with stainless steel fasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with matching pigments. The rate to include all curing, polishing at all lift and levels. (Basic rate of granite is Rs.3600/-Sq.m.)						
8.2	Item No72 Accupressure Bed - Providing and fixing Natural Stone pebbles in 1:6 Cement mortar of natural sand of 50mm thick bed as required line, level, shape and size as instructed by Engineer in charge. Item including color pigments, lead lift, curing, cutting, all material and labour with wastage etc. complete all	45.00	Sqm	1850.00	81450.00	1810	81450
8.3	Item No73 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	6154.02	Rmt	520	3132396.18	509	3132396.18
8.4	Item No74 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	605.07	Rmt	850.00	503418.24	832	503418.24
8.5	Item No75 Basalt stone Paving in cement Mortar - Providing and Laying Newasa Stone for paving and thread risers in cement mortar of 150 mm thick (Two line dressed stone 0.45x0.30x0.125 to 0.15 and not less than 0.30x0.30x0.15 Mtrs cut in shape and two adjacent sides to be dressed, from Newasa, Dist Ahmednagar) in plain/diamond pattern on a bed of 1:4 C.M. over 150mm thick cement concrete , and filling the gap in 1:2 Mortar etc, complete) STONE DRESSING IN TICHIV STYLE	1305.00	Sqm	6500.00	8299800.00	6360	8299800
8.6	Item No76 Newasa Basalt stone for wall 15 cm thick : Providing and fixing Newasa Basalt stone for wall 15 cm thick(Two line dressed stone of size 0.45x0.30x0.125 to 0.15 and not less than 0.30x0.30x0.15 Mtr, cut in shape and two adjacent sides to be dressed, from Newasa, Dist Ahmednagar) in 1:1 Cement mortar in super structure including striking joints and watering	582.72	Sqm	8000.00	4560949.44	7827	4560949.44

	complete to the entire satisfaction of the architect (Ashlar Masonary in tichiv style)						
8.7	Item No77 Ashlars fine stone coping : Providing, supplying & fixing ashlar fine stone coping of size 320 mm long, 500 mm width & 150 mm thick in cement mortar 1:3 including pointing in Cement slurry, raking joints, curing, loading & unloading etc. complete. (Including Scaffolding)	142.60	Rmt	7000.00	976667.40	6849	976667.4
8.8	Item No78 Stamp Concrete of 100mm Thickness - Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand / VSI grade finely washed crushed sand) Confirming to IS 383, as per mixed in a batching and mixing plant / non tilting mixer and weigh batcher as per approved mix design, admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continous operation, finishing to lines and grades Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable,30 % solids clear sealer @ 150 to 250 gms per sqm using surface roller and protecting from falling dust,dirt and curring by curring compound / by providing cement vata in cement Mortor 1 :8 @ 0.6m x 0.6m center to center, admeasuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-incharge or Landscape architect etc. complete. (prior approval of superintending Engineer will	3420.00	Sqm	1750.00	5855040.00	1712	5855040
8.9	Item No79 Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	7167.50	Sqm	825.00	5784172.50	807	5784172.5
9.0	Item No80 Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints,	7167.50	Sqm	3760.00	26369232.50	3679	26369232.5

	pointing in C.M. 1:3 curing and cleaning etc. complete.						
9.1	Item No81 Fixing 40 to 50mm thick Natural Shahabad Kerbing of 600 x 600mm with 75mm thk. in 1:3:6 P.C.C. bed, and filling joints with 1:3 cement mortar, including lead, lift within garden, cutting, curring, etc complet (excluding P.C.C.)	92.40	Sqm	135.00	12196.80	132	12196.8
9.2	Item No82 WOODEN FINISH PAINTING OF EXISTING WOODEN FINISH TEXTURED SURFACE CEMENT CONCRETE BENCH including any material, machinery, scaffolding etc. complete. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including cement, Sand, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	826.90	Sqm	1650	1334616.60	1614	1334616.6
9.3	Item No83 Providing, supplying, fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and shade on top face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicon sealant, backer rods etc. overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre)	456.43	Sqm	4500.00	2009661.29	4403	2009661.29
9.4	Item No84 Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed design and drawings or as directed by Engineer-In-Charge., including cutting, fabricating, hoisting, erecting fixing in position, making riveted/bolted/welded connection and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. Spec. No.: Bd.C.8 Page No. 278	249.67	MT	120000.00	29313255.36	117408	29313255.4

9.5	<p>Item No85</p> <p>Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.</p>	175.00	Rmt	3000.00	513625.00	2935	513625
9.6	<p>Item No86</p> <p>Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25 mm dia in three rows, all pipes of 2 mm thick including buffing,fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)</p>	2856.22	Rmt	3850.00	10759380.74	3767	10759380.7
9.7	<p>Item No87</p> <p>Providing and fixing 50 mm. dia. medium class G.I.pipe gate with wicket gate of approved drawing with all fixtures and fittings in two leaves with strong hold fast embedded in c.c. block at top and bottom with locking arrangement including cutting, bending, making holes and with one coat of primer etc. complete.</p>	239.40	Sqm	6500.00	1522584.00	6360	1522584
9.8	<p>Item No88</p> <p>Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/ One Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete.</p>	249.48	Sqm	2500.00	610228.08	2446	610228.08
9.9	<p>Item No89</p> <p>Providing detailed geological reports of proposed site by maintaining geotechnical investigation of structure stratification collecting soil, rock and ground water samples for laboratory tests to arrive the foundation design parameters . Rock properties such as type of rock, jointing fractures, etc. complete with suggestion about the site foundation and remedies.</p>	10.00	Sqm	36500.00	357120.00	35712	357120
10.0	<p>Item No90</p> <p>Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe (Rezan/ concentiDeleted ire 0.75 mm dia) with hot dip and G.I. coated hooks as per drawing supported on M.S.</p>	1210.00	Rmt	1100.00	1301960.00	1076	1301960

	angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete.						
10.1	Item No91 Providing and constructing Brick Masonry Inspection Chamber 60 cm x 45 cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channel half round G.S.W. pipes, Brick Masonry, plastering from inside and airtight 75mm thick R.C.C. cover medium duty 100Kilogrametc. complete.	12.00	Nos	10000	117408.00	9784	117408
10.2	Item No92 Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channel half round G.S.W.pipes,Brick Masonry,plastering from inside and airtight with 75 mm thick R.C.C. cover medium duty 140Kilogrametc. complete.	12.00	Nos	11000.00	129144.00	10762	129144
10.3	Item No93 Providing and constructing Ductile Iron circular manhole 45 cm dia. At top 90 cm at bottom up to 1.80 meter to 2.70 meter depth including excavation, laying 1:4:8 cement concrete bedding 15 cm thick burnt brick masonry with 1:1 cement mortar plaster 25 mm thick inside and outside 20 mm (1:3) ductile iron heavy type cover with ring 125Kilogram weight. High strength. More life and Durability, Good Antiskid Grip, Suitable to heavy theatric loading, Light weight casting after cost benefits for Transportation Refilling etc. as per requirement. with prior approval of concerned Superitending Engineer.	28.00	Nos	12000.00	328748.00	11741	328748
10.4	Item No94 Providing and laying salt glazed stone ware pipe of 100mm diameter including fittings such as bends, tees, single junction, double junction, laying, jointing including excavation and refilling trenches complete. BDV.-39 Page No.573	3.00	Rmt	400.00	1173.00	391	1173
10.5	Item No95 Providing and fixing 25mm dia screw down wheeled stop tap of steel with chromium plating of approved quality and make bearing ISI mark, including sockets uion nut complete. BDV 9 Pgno 555,	2.00	Nos	1500.00	2936.00	1468	2936
10.6	Item No96 Providing and fixing 15 cm rigid PVC Nahani trap including PVC grating ,bend,connectingpiece of UPVC pipe up to the outside face of wall ,making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Ex. Engr. is necessary before use)	4.00	Nos	650.00	2544.00	636	2544
10.7	Item No97 Providing and fixing white wash basin with half pedestal of size 515mmX615mmX460mm including pillar cock auto-closing system CP	2.00	Nos	13000.00	25438.00	12719	25438

	angular stop cock long thread of approved make continental including S.S. bottle trap of necessary pipe connection upto the outside face of the wall.						
10.8	Item No98 Providing and fixing 450mm x 550mm size superior type Belgium mirror with 16mm dia. nickel plated towel rod etc. complete Spec. No.: As directed by Engineer in charge.	10.00	Nos	1000.00	9780.00	978	9780
10.9	Item No99 Providing and fixing Wall Mounted European type white glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall 10 liter enameled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps ,20 mm dia.UPVC overflow pipe ,mosquito proof couplings G.I. chain and pulley,with water Jet and fitting including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	2.00	Nos	13500.00	26416.00	13208	26416
11.0	Item No100 Providing and fixing on walls/ ceiling/ floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	490.00	Rmt	350	167580.00	342	167580
11.1	Item No101 Providing and fixing on walls/ ceiling/ floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	320.00	Rmt	400.00	125120.00	391	125120
11.2	Item No102 Providing and fixing on walls/ ceiling/ floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	120.00	Rmt	450.00	52800.00	440	52800
11.3	Item No103 Providing and fixing on walls/ ceiling/ floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete.	631.00	Rmt	800.00	494073.00	783	494073
11.4	Item No104 Providing and laying in trenches 80 mm dia medium grade having embossed as ISI Mark galvanised iron pipes of 8.57 kg/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. B)Heavy Type Spec. No.: Bd.V.5 Page No. 551	750.00	Rmt	1250.00	917250.00	1223	917250
11.5	Item No105 Providing and laying in trenches 100 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 12.43 kg/meter necessary fitting remaking good the demolished	2040.00	Rmt	2000.00	3992280.00	1957	3992280

	portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats complete. B)Heavy Type Spec. No.: Bd.V.5 Page No. 551						
11.6	Item No106 Providing and laying concrete pipes of I.S.NP. class of 150mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	250.00	Rmt	525.00	128500.00	514	128500
11.7	Item No107 Providing and fixing P.V.C. Rain water pipes of 160mm outer diameter and having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent CEMENTand properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc.complete. (The contractor shall give 3 yrs guarantee bond for payment) Spec. No.: As directed by Engineer in charge	20.00	Rmt	1500.00	29360.00	1468	29360
11.8	Item No108 Providing and fixing 80 mm.dia. screw down wheeled stop tap of steel with chromium plating of approved quality and make bearing I.S.I. mark, including sockets, union nut complete.	20.00	Nos	4300.00	84140.00	4207	84140
11.9	Item No109 Providing and fixing 100 mm dia. Chromium plated brass showers rose to 15 mm dia. Supply pipe including necessary bend and socket complete.	20.00	Nos	550	10760.00	538	10760
12.0	Item No110 Providing and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock. [Without chamber].	29.00	Nos	40000.00	1134944.00	39136	1134944
12.1	Item No111 Providing and fixing C.P. Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete.	4.00	Nos	1600.00	6260.00	1565	6260
12.2	Item No112 Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	29.00	Nos	1200.00	34046.00	1174	34046
12.3	Item No113 Providing and fixing C.P. pillar cock long neck with aerator of approed make including necessary sockets/union nut etc. complete.	2.00	Nos	1750.00	3424.00	1712	3424
12.4	Item No114 Providing and fixing 15 mm diameter PVC Aqua kraft type of approved	2.00	Nos	1100.00	2152.00	1076	2152

	make super jet spray with flange 2 in 1 faucet 1.50 metre long including all accessories etc complete						
12.5	Item No115 Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete.	2.00	Nos	350.00	684.00	342	684
12.6	Item No116 Providing and fixing C.P. wall mixer with provision for overhead shower with 115 mm long bend pipe and wall flange of approved make including necessary sockets/ unionnut etc.complete.	2.00	Nos	4850.00	9490.00	4745	9490
12.7	Item No117 Providing and fixing H.D.P container Syntex or alike one piece moulded water tank made out of low density polythylar and built corrugation including of delivery up to destination hoisting and fixing of accessories such as inlet, outlet overflow of all tanks capacity above 1000 to 20,000 litres Spec. No.: As directed by engineer-in-charge.	11000.00	Ltr	10.50	110000.00	10	110000
12.8	Item No118 Providing and fixing machine cut mirror polished 18 mm to 20 mm thick telephone black granite/ Amba White/ Catbarybrown /RBIred /OceanBrown granite stone partition with full moulding the edges etc. complete . Both side polish	6.00	Sqm	3760	22074.00	3679	22074
12.9	Item No119 Providing and fixing White Glazed Earthenware full stall type Urinal with P.V.C. flushing cistern of 5 liters capacity with fitting, inlet pipes and stop tap, brackets for fixing the cistern, 32 mm dia. P.V.C flush pipe with fittings and flushing arrangement including lead soil pipe, lead trap, soil pipe connectionup to the outside face of the wall	2.00	Nos	10500.00	20546.00	10273	20546
13.0	Item No120 Providing and fixing reinforced cement concrete cover of size 90cmx 45cm with frame over inspection chamber etc. complete. Medium duty (140 Kilogram)	112.00	Nos	5200.00	569856.00	5088	569856
13.1	Item No121 Providing and Supplying Biodigester Tank as per the specification and guideline set by DRDO for tank of 2 cum capacity having FRP tank with two baffle plates. Total 3 compartments with inlet and out let connections Recharged with 400 Liter inoculums and inbuilt with immobilization Matrix. Thickness of tank should be 3mm, Partition 3 with metal reinforcement, with iniititing and supervising the operation of the tank and transport upto work site etc complete.	2.00	Nos	135000.00	264168.00	132084	264168
13.2	Item No122 Garden Soil :- Supplying on site garden soil well sieved 90% to pass through I.S. sieve of 10mm size free from stones, rubbish like dried grass roots and other such materials. The soil should be fresh from quarry. The	1951.66	Cum	1650.00	3149979.24	1614	3149979.24

	color of the soil generally is red. The soil will be measured by measuring box. (Farma) Item includes royalty charges, octroi, corporation tax, Transporting, loading-unloading etc. (Lead charges per 90km are considered.)						
13.3	Item No123 Farm Yard Manure :- Supplying on site well-decayed, well-dried, well-powdered, without clods and free from stones, dried grass and other rubbish material. The color of the soil generally is black. The manure will be measured by measuring box. (Farma). Item includes Transporting, loading-unloading etc. (Lead charges per 50km are considered)	650.55	Cum	1650.00	1049987.70	1614	1049987.7
13.4	Item No124 Preparing instant Lawn:- Excavating the ground to a required depth of 20cms, removing & conveying unwanted stuff to a required distance as directed. providing and Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 20cms.Mixing garden soil and manure thoroughly well, levelling, watering on previous night. Planting required variety of lawn grass as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	1773.34	Sqm	850.00	1475418.88	832	1475418.88
13.5	Item No125 Preparing Lawn (30 Cm depth):- Excavating the ground to a required depth of 30cms, removing & conveying unwanted stuff to a required distance as directed. providing and Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 30cms.Mixing garden soil and manure thoroughly well, levelling, watering on previous night. Planting required variety of lawn grass as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	1290.34	Sqm	950.00	1198725.86	929	1198725.86
13.6	Item No126 Preparing Shrubbery:- Excavating the ground to required depth of 30cms, removing and conveying unwanted stuff to a required distance as directed. providing and Filling fresh garden soil & manure in excavated area in 3:1 proportion to a height of 30cms. Mixing garden soil and manure thoroughly well, levelling, watering, on previous night. Planting well-rooted shrubs 0.5 Mtrs.apart as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	2250.86	Sqm	725.00	1595859.74	709	1595859.74
13.7	Item No127 Planting large flowering/Shady trees:- (Minimum Height to 1-2 Mtr.)Digging pit with size 0.6 m × 0.6 m × 0.6 m Removing & conveying unwanted stuff to a required distance as directed. providing and Filling the pit with approved excavated material up to a hight of 0.30 m. and remaining height of 0.60 m. with fresh garden	262.00	Nos	900	230822.00	881	230822

	soil & manure in in 3:1 proportion. Mixing soil and manure thoroughly well, leveling, as directed, watering previous night. Planting two or three year old, minimum 2.0 mtr. height, healthy tree sapling as per specifications. Maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.						
13.8	Item No128 Providing and Fixing , Installation of Drip and Sprinkler Irrigation system in gardens having area above 3000 Sq. Mtr. Includes drips, Sprinkler, Filters, Pipes with 3 year warranty . Excluding Pumping Unit	3907.85	Sqm	350.00	1336484.70	342	1336484.7
13.9	Item No129 Providing and fixing Animal Mgr with all fitting as approved with Engineer-In-Charge	4.00	Nos	75000.00	293520.00	73380	293520
14.0	Item No130 3 IN 1 (AERIAL STROLLER + SURF BOARD + SHOULDER TWIRL)	8.00	Nos	250000.00	1956800.00	244600	1956800
14.1	Item No131 Providing and fixing Multi Seater See Saw with all fitting as approved with Engineer-In-Charge	4.00	Nos	50000.00	195680.00	48920	195680
14.2	Item No132 Providing toilet of 4 units of 0.9*1.2M size of 1 unit with all necessary fittings such WC Wash basin overhead tank of 1000 ltr for each Type of WC : European with ceramic base , Water facility : By mean of overhead tank, Electric provisionBy mean of connection from main line, Bottom frame material: 35mm X 35mm X 5mm(thick) MS angle for one seater, Bottom frame support material : 25mm X 25mm X 3mm(thick) MS angle, Side & Top Roof panel frame material : 35mm X 35mm X 5mm(thick) MS angle, Top(roof) support frame structure : 25mm X 25mm X 3mm(thick) MS angle, Ventilation frame material: 25mm X 25mm X 3mm(thick) flat MS, Door frame material: 35 mm x 35 mm x 5 mm (thick) MS ANGLE, Support material for Door panel fixing: Aluminium U-channel of 18gauge, Door hinges(two numbers): 75mm size with 1.2-1.5mm thickness MS, Tank holder frame material: 25mm X 3mm(thick) MS flat, Unit understructure Supported by 4-legs of size 35mm X 35mm X 5mm MS angle with corner support of 25mm x 25mm X 3mm MS angle for 1-seater, Door Tee material: 40mm X 40mm x40mm X 5mm(thick) MS Tee,	6.00	Nos	1150000.00	6750960.00	1125160	6750960
14.3	Item No133 Providing Unbranded Steel Porta Cabin consist of With one Room of size 3050 mm x 2440 mm x 2590 mm ht having following specifications. 1) PUF Wall Panel – Panel made up of micro ribbing Pre-Painted Galvanized Iron Sheet on both sides(have tongue groove arrangement) and 50mm thick composite PUF sandwich between Pre-Painted Galvanized Iron Sheet	2.00	Nos	100000.00	195680.00	97840	195680

	<p>2) Flush door 32 mm thick water proof.</p> <p>3) Window-Powder coated aluminium sliding windows with 4 mm tinted Glass</p> <p>4) Flooring- 15 mm heavy duty cement fiber board inside and outside texture paint.</p> <p>5) Roofing -The PUF insulated Ceiling panels. The covering on ceiling panels shall be micro riving Pre-coated galvanized iron sheet and Self draining Type Roof shall be provided with water proof covering.</p> <p>6) general electrical- Provision for 3 nos. tube light (18 Watt LED light) - 2 nos. wall mounted ceiling fan (300 mm) - 3 nos. plug and socket (3 pin 5 amps electric plug socket)- 1 no main input socket (32 Amp heavy duty 3 pin power socket with MCB)- split AC (1.5 T) provision</p>						
14.4	<p>Item No134</p> <p>Providing, hoisting and fixing at all level precast or reinforced cement concrete gazebo with all elements like roofing, string courses, bands, copings, columns, pillars beams, plinth beams, railings, benches, flooring, foundations including architectural design, moulding, arches, shapes, and applying proper texture and painting coats to suit a particular aesthetic element (trunk of trees, shapes of animals, birds, timber benching, any element or structure representing culture or tradition) the cost of required centering, shuttering and reinforcement, of M25 grade and fibrous material, etc complete as per the instructions of Architect or Engineer-incharge.(Refer sketch 3)</p>	133.05	Sqm	65500.00	8526509.25	64085	8526509.25
14.5	<p>Item No135</p> <p>Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.</p>	9533.85	Cum	180.00	1677957.60	176	1677957.6
14.6	<p>Item No136</p> <p>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading I (Using Screening Type B (11.2 mm) Aggregate)</p>	4949.00	Cum	3850	18642883.00	3767	18642883
14.7	<p>Item No137</p> <p>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type</p>	1871.00	Cum	3850.00	7048057.00	3767	7048057

	of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading II (Using Screening Type B (11.2 mm) Aggregate)						
14.8	Item No138 Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone metal layers 30% crusher broken metal + 70% Hand broken (by breaking rubble obtained by blasting) heating and spraying the bitumen of specified grade @ 2 Kg/sqm, spreading 12 mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	18710.00	Sqm	350.00	6398820.00	342	6398820
14.9	Item No139 Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen set footed in bitumen boiler on B.T. surface 2.5 kg/10 sqm.(VG-30 bulk bitumen rates are considered to arrive at rates)	37420.00	Sqm	20.00	748400.00	20	748400
15.0	Item No140 BITUMINOUS MACADAM: Proving and laying bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 80/100 mm compacted thickness with 3.3 % using specified grade of Bitumen. -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, vibratory roller.(VG-30 bulk bitumen rates are considered to arrive at rates)	1403.25	Cum	9200.00	12630653.25	9001	12630653.3
15.1	Item No141 Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen with sprayer on Dry / Hungry B.T. surface 3 kg/10 sqm. (VG-30 bulk bitumen rates are considered to arrive at rates)	18710.00	Sqm	20.00	374200.00	20	374200
15.2	Item No142 BITUMINOUS CONCRETE:-- Providing and laying bituminous concrete using crushed aggregate of grading 1, premixed with bituminous binder @5.40% by weight of total mix and filler, transported at site with VTS, laid over a previously prepared	1341.00	Cum	12100.00	15876099.00	11839	15876099

	surface, finished to the required grade ,level, alignment, and rolling to achieve the desired density for 50mm compacted thickness with drum mix plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen of specified grade with stone dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)						
15.3	Item No143 Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete.	605.07	Sqm	450.00	266230.80	440	266230.8
15.4	Item No144 Nameplate (3D acrylic hollow blocks with LED) S.I.T.C. of Nameplate stating in Devnagri/English font in the desired style as per specifications. The total assembly letters made of frosted acrylic sheets cut and glued together to achieve the hollow letters as per approved design with provision for electrical supply for white/warm white LED lights of required wattage that will be lit from inside the blocks for illumination in the night. The whole assembly shall be rested/fixed with all necessary fittings and cleaning etc. complete as directed by the Engineer-in-charge.	38.75	Sqm	30000.00	1137390.00	29352	1137390
15.5	Item No145 Providing and fixing informatory sign boards in rectangular shape of size 1.20m x 0.90m madeout of 16 guage Aluminum panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border &messages in IRC Specified colour background including M. S. angle iron frame of size 35 mm X 35 mm X 3mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil painthaving alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum Panel TypeIV High Intensity	19.00	Nos	13500	250952.00	13208	250952
15.6	Item No146 Providing and fixing sign boards of size size 60 x 80 cm made out of 14 gauge M.S.Sheet with retro reflective sheeting of Engineering Grade as per M.O.T. specification No. 801-3(1993)	21.00	Nos	10000.00	205464.00	9784	205464

	white reflective back ground, lettering symbol bordering of black non reflective paint including 3.65 metre long M.S.angle one post of 65 x 65 x 6 mm size duly painted with white and black bands including fixing the boards of M.S. angle with galvanised nuts and bolts and washer. The Board shall be as per IRC-67-1977 including conveying fixing in ground with C.C. 1:4:8 block of size 0.60 x 0.60 x 0.75 m, with 7 year guarantee for the sheeting etc. complete. Mild Steel Board with Engineering Grade.						
15.7	<p>Item No147</p> <p>Providing and fixing board displaying information, such as "Name of work, Tender cost, Name of Contractor, Work completion and liability period etc", having rectangular shape of 1.20m x 0.90m size made up of 4 mm aluminum composite pannel sheet with 0.5 mm skin thickness on either side bonded with white retro reflective sheeting of Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive adhesive. Retro reflective sheeting with specified background, border and back side retro reflective symbols, letters, numerals, arrow as per IRC: 67-2012 Table No 8.3, on M.S.angle of size 35 x 35 x 3 mm frame with properly cross braced M.S. angles of size 35mmx35mmx3mm duly painted including Two M.S. angle iron posts of size 65 mm x 65 mm x 6 mm, 3.65 m long painted with alternate black and white bands of 25 cm width including all fixtures etc.and fixing the boards in 1:4:8 concrete block of size 60 cm x 60 cm x 75 cm including, excavation, refilling, transportation, and labour etc complete. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have 7 years written warranty from the manufacturer including the Digitally Printed areas with Latex printing technology with sheeting manufacturer approved inks and laminated with UV overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.</p>	2.16	Sqm	15000.00	31700.16	14676	31700.16
15.8	<p>Item No148</p> <p>Providing & fixing BENCH IN CEMENT MORTOR/CONCRETE WITH WOODEN FINISHING ON ALL EXTERNAL SURFACE. Bench should have min. 2.1m to max. length 2.4m with 0.45m wide seat & 0.40m high back for resting. beach should have 2 to 3 supports/Legs as per requirement from ground in 1:1.5:3 ratio Concrete with 4 bar 12mm as a main & distribution 8mm Tor steel at 150mm c/c. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for</p>	60.00	Rmt	12500.00	733800.00	12230	733800

	making wooden finish/grains & with 2 final coat of Apex clear polish including Cement, Sand, Aggregate, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, excavation, pcc, tor steel etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.						
15.9	Item No149 Providing and fixing Garden Bench with Arm with all fitting as approved with Engineer-In-Charge	10.00	Nos	15000.00	146760.00	14676	146760
16.0	Item No150 Ss Dust Bin (Refer sketch 10) Product area:0.76Sqm, Capacity in ltrs: 42.0 ltrs, Product height:0.92m	80.00	Nos	14500.00	1134960.00	14187	1134960
16.1	Item No151 Providing and fixing of retro-reflectorised informatory sign board rectangular/Square in shape having area greater than 0.9 One Square Meterr made out of 4 mm aluminum composite panel bonded with 0.5 mm skin thickness on either side with white retro reflective sheeting of Class C (Type XI Type XI Micro prismatic grade sheeting) having pressure sensitive adhesive retoreflective specified back ground, border and back side retoreflective symbols, letters, numerals, arrow including Art Work complete as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt ~ 3.9 mtlong firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. ClassC_ (Type XI Type XI Micro prismatic grade sheeting) sheeting shall have 10 years written warranty from the manufacturer including the Digitally Printed areas with Latex printing technology with sheeting manufacturer approved inks and laminated with UV overlay film and this warranty certificate along with sheeting manufacturer attested 3 years outdoor weathering test report from Indian govt lab must be submitted to the Engineer in charge by the contractor/supplier.	217.00	Sqm	16500.00	3503248.00	16144	3503248
16.2	Item No152 Providing and laying of compression seal joint consisting of steel armoured nosing at two edges of the joint gap suitably anchored to the deck concrete	8.00	Rmt	4850.00	37960.00	4745	37960

	and a preformed chloroprene elastomer or closed cell foam joint sealer compressed and fixed into the joint gap with special adhesive binder to cater for a horizontal movement upto 40 mm and vertical movement of 3 mm etc. complete						
16.3	Item No153 Providing and laying of a strip seal expansion joint catering to maximum horizontal movement upto 70 mm to be installed by the manufacturer / supplier to their authorized representative ensuring compliance to the manufacturers instruction for installation as per approved drawings and standard specifications etc. complete.	616.00	Rmt	12000.00	7232456.00	11741	7232456
16.4	Item No154 Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	82.50	Cum	13000	1049317.50	12719	1049317.5
16.5	Item No155 Painting Line, Dashes, Arrows etc on Roads in two coats on new work with ready mixed road marking paint confirming to I.S. 164 on Bituminous surface including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control (Over/Upto ___cm wide) (MORTH-803) -- _____ Surface Over 10cm Wide On New Surface	40.00	Sqm	230.00	9000.00	225	9000
16.6	Item No156 Providing and fixing neoprene bearing as per detailed drawings etc. complete.	28000.00	CuCm	3.00	84000.00	3	84000
16.7	Item No157 Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia over burden (by diamond drilling machine) such as soil of all sorts, soft murum, hard murum and boulders and in soft rock including all materials such as casing pipes and accessories oil, grease, steel, rods, and such other materials as required (including conveying the material to site of work) . Preserving the loose sample in glass jar and core sample serially on site of work and conveying the same to HQ of concernring office as directed. R.A. for 10.00 Rmt a) over burden 0 to 50 meter.	40.00	Rmt	2500.00	97840.00	2446	97840
16.8	Item No158 Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil, grease, steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concernring office as directed. Quartzite with diamond drill with Nx Bit 0 to 50 metre	37.50	Rmt	6500.00	238500.00	6360	238500

16.9	Item No159 Carrying out low strain pile integrity test on 900 mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile (installation of pile shall be paid seperately as per relevent items) all complete as per specification and as directed by the engineer-in-charge	229.00	Nos	4200.00	940961.00	4109	940961
17.0	Item No160 Conducting Initial Load Test (Compression) up to maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with IS 2911 part-4 including preparation of pile head for testing, necessary excavation, jacks, kentledge, accessories, measuring devices, recording of results, labour, submission of test report etc. complete, but excluding the cost of installation of pile (insallation of pile shall be paid seperately) etc.all complete as per the specification, drawing and as directed by the Engineer in charge for the following for vertical compression test by cyclic load method	5.00	Nos	700000.00	3424400.00	684880	3424400
17.1	Item No161 Mobilisaton of Project , setting of pile points, Pile driving System using end on the Gantry system with required no. of Gantry Platforms & shifing of Gantry Platforms from on position to another, etc complete as per direction of Engineer.....etc complete	1.00	Nos	3000000.00	2935200.00	2935200	2935200
17.2	Item No162 Supplying, fitting and fixing in position true to line and level sliding plate bearing with stainless steel plate sliding on stainless steel plate with mild steel matrix including all accessories as per drawings and technical	4.92	MT	350.00	1682.64	342	1682.64
17.3	Item No163 Supplying, fitting and fixing in position true to line and level forged steel rocker bearing including all accessories as per drawings and technical specifications conforming to IRC:83 (Pt-1) section IX and clause 2003 of MoRTH specifications etc. complete.	3.28	MT	350	1121.76	342	1121.76
17.4	Item No164 Providing and laying in situ cement concrete M30 with tremix treatment for 200 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete.	2633.73	Sqm	2500.00	6442103.58	2446	6442103.58
17.5	Item No165 Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Accoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by	981.99	Sqm	7840.00	7532845.29	7671	7532845.29

	<p>Building Materials & Technology Promotion Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.</p>						
17.6	<p>Item No166 Design Supply and Installation of the Mangroves Trail Walk of Section 20 Meter Length and 2.5 Meter Wide as per the Details and Specification of Project Information Memorandum (PIM) attached. Technical Specification : <ul style="list-style-type: none"> • The mangrove trail should be 2.5m wide and should be made in sustainable method. To avoid harm to the environment/ ecosystem. • The all components should be made in wood/ substitute to wood, but the metal too avoids rusting of the members. • Piles are proposed to be in Jambha (Botincial Name: Xylia xylocarpa) wood which should be designed to take the axial load upto 2000 Kg Per pile. These Piles should be drilled in the mud/ marshy land at 2 Meter c/c and then should be made ready to receive the primary beams on them. • Primary beams should be made in first class teak wood/similar quality substitute. The primary beams do run along the trail, and do support the trail deck which should be designed for live load of 500 kg/sqm. • Secondary beams are then rested on primary beam perpendicular to the primary beam are to be made of the Nature fibre Composite Material/ similar quality substitute. These secondary beams support keels in made from secondary Nature fibre Composite Material which then support floor finish. • Floor finish should be made to take wear & tear of the people movement, giving appropriate friction in all the seasons and should be long lasting with minimal maintenance. These floor boards can be made in Nature fibre Composite Material). Designing load of 500 kg/sqm should be considered. </p>	36.00	Per 20 Meter Length	3792700.00	133588008.00	3710778	133588008

	<ul style="list-style-type: none"> • Handrails and brackets supporting them should be made in Nature fibre Composite Material / similar quality substitute. • All of these components should be strictly fixed with nut bolt system made up from high grade stainless steel nut bolts only. 						
17.7	<p>Item No167</p> <p>Supplying, installing, testing & commissioning 3 phase, 11/0.433 kV, 50 Hz., 400 kVA, Mineral oil immersed and naturally cooled outdoor type, Copper wound Non-sealed transformer delta/star connected with additional neutral brought out on load side, temperature rise should not exceed 45°C by thermometer in oil and 50°C by the resistance method in winding at full load rating, using type A winding insulation (kraft paper) with HV tapping (with off load tap changer) off load +5 to -10 in steps of 2.5%, having 7 number of tap positions with standard accessories complete with test certificate with losses below 1225 Watts at 50% load, 3450 Watts at 100% load as per IS:1180 (part 1) : 2014 with necessary permissions of Electrical Inspector, as per specification no SS- TRNSL.</p>	1.00	Each	1118640.60	1094478.00	1094478	1094478
17.8	<p>Item No168</p> <p>Making transformer plinth (1.5 x 1.5 x 1.5) m in size with necessary excavation in ground with 150 mm. thick M- 10 PCC at the bottom and top and 250 mm. thick, burnt brick wall constructed at periphery and remaining hollow portion shall be filled with 40mm hard broken aggregate. External surface duly plastered by 12 mm thick including watering etc complete.</p>	4.00	Each	15730.00	61560.00	15390	61560
17.9	<p>Item No169</p> <p>Supplying and erecting triple pole mini feeder pillar with 500V, 300A FPMCCB as incomer and 3 outgoing circuits with HRC fuse base and cartridge of 100A with aluminium bus bar erected in 14 SWG CRCA sheet box with supporting angles, self locks, gasket having IP54,IK10 protection and slanting top to be erected on provided foundation as per specification no. SW-SWR/MFP</p>	5.00	Each	60880.00	297825.00	59565	297825
18.0	<p>Item No170</p> <p>Supplying & erecting single phase, 240V, street light control panel up to the max load of 12kW, SPN MCB 63A, powder coated CRCA 14 SWG sheet, outdoor type, having IP54,IK10 protection, suitable rating contactor, 24 hrs. astronomical time switch with minimum 5 years battery back up, auto/manual selector switch, ON/OFF push buttons, indicator lamps, controlwiring, metering device, etc. for automatic operation & overcurrent, short circuit, earth fault protection on provided iron frame /</p>	2.00	Each	26840.00	52520.00	26260	52520

18.1	Item No171 Supplying & erecting three phase, 415V, street light control panel up to the max load of 6kW, TPN MCB 40A, powder coated CRCA 14 SWG sheet, outdoor type, having IP54,IK10 protection, suitable rating contactor, 24 hrs. astronomical time switch with minimum 5 years battery back up, auto/manual selector switch, ON/OFF push buttons, indicator lamps, control wiring, metering device, etc. for automatic operation, with overcurrent, shortcircuit, earth fault protection on provided iron frame / CC foundation.	1.00	Each	25010.00	24470.00	24470	24470
18.2	Item No172 Supplying, erecting & marking SPMCB 6A to 32A, C-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	450.00	Each	190	83700.00	186	83700
18.3	Item No173 Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	200.00	Each	190.00	37200.00	186	37200
18.4	Item No174 Supplying, erecting & marking FPMCB 6A to 32A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	50.00	Each	1165.00	57000.00	1140	57000
18.5	Item No175 Supplying, erecting and marking triple pole isolators only switch version of miniature circuit breaker of 40A with required wiring connections and lugs etc. in provided distribution board.	5.00	Each	665.00	3255.00	651	3255
18.6	Item No176 Supplying, erecting and marking four pole isolators only switch version of miniature circuit breakers of 63A in provided distribution board.	5.00	Each	805.00	3940.00	788	3940
18.7	Item No177 Supplying, fixing and commissioning MCB type change over switch 2 pole, 40 A with 3 positions (I-O-II) with centre off position as per specification no. SWSWR/MCBCOS	100.00	Each	1790.00	175100.00	1751	175100
18.8	Item No178 Supplying & erecting triple pole and neutral distribution board (TPNDB), SPMCB of 12 ways /phase (36 poles), with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB	10.00	Each	5070.00	49600.00	4960	49600
18.9	Item No179 Providing & erecting 3 Pole MCCB 415V, 250A, rated short-circuit breaking capacity 36 kA (Ics=100% of Icu) adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-WR/MCCB	50.00	Each	15575.00	761950.00	15239	761950

19.0	Item No180 Supplying, erecting & commissioning 4 pole RCCB 63A, electromagnetic type with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no. SW-RCCB/RCCB	50.00	Each	3215.00	157300.00	3146	157300
19.1	Item No181 Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/ trunking/ inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	250.00	Rmt	100	24500.00	98	24500
19.2	Item No182 Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 16 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	1435.00	Rmt	235.00	330050.00	230	330050
19.3	Item No183 Supplying and erecting mains with 2x1.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW	500.00	Rmt	45.00	22000.00	44	22000
19.4	Item No184 Supplying and erecting mains with 2x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	200.00	Rmt	70.00	13600.00	68	13600
19.5	Item No185 Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit /trunking /inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	900.00	Rmt	100.00	88200.00	98	88200
19.6	Item No186 Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 95 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/A	750.00	Rmt	730.00	535500.00	714	535500
19.7	Item No187 Supplying and erecting shockproof 3 pin plug socket 6A with porcelain base / flush type erected on filled polypropylene board or polished thick varnished double wooden block / folded or screwed board with top of either wooden / 3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick laminate with S M screws and duly connected	200.00	Each	50.00	9800.00	49	9800
19.8	Item No188 Supplying and erecting shockproof 3 pin plug socket 16A with porcelain base/ flush type erected on filled polypropylene (IS:14772-2000) board or polished thick varnished double wooden block / folded or screwed board with top of either wooden/3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick	50.00	Each	65.00	3200.00	64	3200

	laminate with S M screws and duly connected.						
19.9	Item No189 Supplying and erecting modular type switch 16A duly erected on provided plate and box with wiring connections complete.	20.00	Each	116.00	2260.00	113	2260
20.0	Item No190 Supplying and erecting HMS PVC conduit FRLS grade 20 mm dia. With PVC accessories on wall / ceiling as per specification No: WG-MA/CON.	100.00	Rmt	90	8800.00	88	8800
20.1	Item No191 Supplying and erecting unbreakable concealed type modular switch box with double mounting plate for 16 / 18 module duly erected flush to wall with required chiselling and finishing with cement mortar / POP as per required to match the background.	50.00	Each	635.00	31050.00	621	31050
20.2	Item No192 Point wiring in for light/fan/bell in 20 mm metal conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, flush type switch, earthing and required accessories as per specification No: WG-PW/SW	200.00	Each	940.00	184000.00	920	184000
20.3	Item No193 Supplying and erecting energy saving ceiling fan 230 V A.C. 50 cycles 1200 mm complete erected in position as per specification no. FG-FN/CF	2.00	Each	2635.00	5156.00	2578	5156
20.4	Item No194 Supplying and erecting condenser 2.5 micro farad for ceiling fan.	2.00	Each	75.00	146.00	73	146
20.5	Item No195 Supplying and erecting electronic type step regulator for ceiling fan 600/ 900/ 1200/ 1400 mm. sweep, complete erected on provided switch board..	2.00	Each	295.00	578.00	289	578
20.6	Item No196 Supplying and erecting fan hook box of 10 mm M.S. round bar bounded to the R.C.C. bars upto 50 mm length each side and pierced through a 16 S.W.G. thick aluminium/M.S. Bowl 100 mm dia.or equivalent square size and having depth upto 75 mm complete erected with duly painted by one coat of red oxide paint and two coats of paint erected in position and without any leakage of slurry of cement concrete on either side of the box and positioned to the bottom level of the slab.	2.00	Each	225.00	440.00	220	440
20.7	Item No197 Supplying and erecting 20mm dia. corrugated flexible polypropylene conduit	25.00	Rmt	18.00	450.00	18	450
20.8	Item No198 Supplying and erecting fresh air cum exhaust fan of light duty 250 V A.C. 50 cycles 300mm. 1400 RPM rust proof body & blades, wire mesh, duly erected, complete.	2.00	Each	1740.00	3404.00	1702	3404
20.9	Item No199 Supplying & erecting ready to use Retrofit T8 LED 18 / 20 tube light with polycarbonate body, heat sink, integrated HF electronic driver complete & compatible to T8 / T12 LED luminaire by disconnecting starter & ballast if necessary.	25.00	Each	690	16875.00	675	16875

21.0	Item No200 Supplying & erecting 10-12W, 230V integral type LED Lamp suitable for B-22 / E-27 base.	5.00	Each	255.00	1245.00	249	1245
21.1	Item No201 Supply, Installation, Testing and commissioning of maintenance free earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron molecular copper bonded earthing rod of Length 3m along with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete. Specification no. EA-MOBI	25.00	Each	15185.00	371425.00	14857	371425
21.2	Item No202 Making trench in soft soil having 0.75 m depth and minimum 0.3 m width for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-EXN-CTR	1670.00	Rmt	175.00	285570.00	171	285570
21.3	Item No203 Supplying & erecting integral post top lantern fixtures (mushroom type) suitable for LED lamp upto 12 W consisting of clear acrylic top cover, cast aluminium pole cap complete with accessories on provided pole /bracket as per specification no. FG-ODF/PTL	100.00	Each	2415.00	236300.00	2363	236300
21.4	Item No204 Supplying & erecting integral post top lantern fixtures (globe type) suitable for LED lamp upto 12 W consisting of aesthetic round clear acrylic top cover, cast aluminium pole cap on provided pole /bracket as per specification no. FGODF/PTL	60.00	Each	1835.00	107700.00	1795	107700
21.5	Item No205 Making cement concrete foundation including excavation (45 x 45x 120) cm deep in 1:3:6 cement concrete, 20 to 25 mm stone metal, m(45 x 45 x 45) cm / 45 cm dia. x 45 cm height plinth duly plastered, with necessary curing and finishing complete.	273.00	Each	50.00	13377.00	49	13377
21.6	Item No206 40W/60W LED Decorative Tower Light with color Blue /WW /CW 7.5Mtr. with Include Pole/Bolt /Nut/Template with LED Driver	273.00	Each	62000.00	16560453.00	60661	16560453
21.7	Item No207 Supplying and erecting integrated LED flood light fitting Max. 30W IP65 & IK07 class having pressure die-cast aluminium housing, having system lumens output of Min. 3000 Lumens, min. efficacy of 100 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-270V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L70B50, including driver with U shaped bracket with 3 Years warranty as per specification No FG-ODF/FLS2.	36.00	Each	2910.00	102492.00	2847	102492
21.8	Item No208 Supplying and erecting integrated LED flood light fitting Max. 100W IP65 & IK07 class having pressure die-cast aluminium housing, having system lumens output of Min. 12000	15.00	Each	9070	133110.00	8874	133110

	Lumens, min. efficacy of 120 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-270V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L70B50, including driver with U shaped bracket with 3 Years warranty as per specification No FG-ODF/FLS2.						
21.9	Item No209 Supplying and erecting LED square / circular Max. 25 W down lighter/ Panel Light having pressure die-cast aluminium housing, polystyrene diffuser having system lumens output of Min. 2750 Lumens, min. efficacy of 110 lumen/W, CRI>80, CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50, including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty.	15.00	Each	2145.00	31485.00	2099	31485
22.0	Item No210 Supplying and erecting integrated LED Bollard Cylindrical /Cubical shaped 500mm 8W IP65 & IK10 class having extrusion aluminium housing with polycarbonate diffuser, having system lumens output of Min. 800 Lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-240V, inbuilt surge protection of 2 kV, Life class of 25,000 Hrs. at L50B50, including driver complete with 2 Year warranty as per specification No FG-ODF/FLS2.	50.00	Each	5780.00	282750.00	5655	282750
22.1	Item No211 Supplying and erecting integrated LED round burial light 6W IP65 & IK10 class having pressure die-cast housing, having system lumens output of Min. 500 Lumens, min. efficacy of 85 lumen/W, CRI>80, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 100-240V, i nbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L50B50, including driver, salt spray tested for 500 Hrs. including making of recess of appropriate size for flushing into surface with 2 Year warranty as per specification No FG-ODF/FLS2.	6.00	Each	4475.00	26268.00	4378	26268
22.2	Item No212 Supplying and erecting Concealed type foot/step light Max. 5W having IP67. IK10 rated Pressure die cast housing having system lumens output of Min. 500 Lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 5000K, Beam Angle of 110 deg., THD<10%, SDCM<5, p.f. >0.95, operating range of 230-270V,surge protection of 2.5 kV, Life class of 25,000 Hrs. at L70B50, including driver by making necessary arrangement/recess in wall to make it flush with surface with2 Year arranty.	4.00	Each	4220.00	16516.00	4129	16516

22.3	Item No213 Supplying and erecting Gate/garden light fitting with 300mm dia. glass bowl suitable for upto 12W LED Lamp on provided pipe as per specification No. FGODF/ GLT	5.00	Each	1260.00	6165.00	1233	6165
22.4	Item No214 Making trench in soft soil having 0.75 m depth and minimum 0.3 m width for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-EXN-CTR	370.00	Rmt	175.00	63270.00	171	63270
22.5	Item No215 Supplying & erecting FRP box of size 150mm x 125mm x 100 mm, 2.7 mm thick complete on pole/wall as per specification No. CB-SB	273.00	Each	545.00	145509.00	533	145509
22.6	Item No216 Supplying & erecting crimping type copper lugs for cable up to 16 sq mm complete as per specification No. CB-CL/CU	200.00	Each	25.00	4800.00	24	4800
22.7	Item No217 Providng earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no. EA-EP	489.00	Each	5185	2480697.00	5073	2480697
22.8	Item No218 Providing pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod complete with all materials testing and recording the results as per specification no. EA-EP	273.00	Each	1650.00	440622.00	1614	440622
22.9	Item No219 Supplying and erecting bus bar chamber triple pole with neutral with four aluminium bars, 500V, 100A having 15mm (Width) X 3 mm (Thickness), with 99.9 % aluminium purity as per E91E Grade & Current Density 0.8 A per sq. mm. compliance to IS 5082 and Enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CPBB	10.00	Each	6480.00	63400.00	6340	63400
23.0	Item No220 Supplying & erecting Minimum three & above star rated Centrifugal water pump (Monoblock), 230V, Single phase 50 cycles A.C. supply of 1.5 kW/2 HP with discharge 600/140 Litres per Minute (LPM) for head of 8/22 m & 50mm suction/ 50 mm delivery pipe on provided C.C. foundation as perspecification No. WP-CGP	5.00	Each	16300.00	79740.00	15948	79740
23.1	Item No221 Supplying & erecting minimum three & above star rated Centrifugal water pump (Monoblock), 415 V, three phase 50 cycles A.C. supply of 7.5 KW/10 HP with discharge 1150/600 Litres per Minute (LPM) for head of 24/69 m and 65 mm suction/ 50 mm delivery pipe of size, on provided C.C. foundation as per specification No. WP-CGP	2.00	Each	50000.00	97840.00	48920	97840

23.2	Item No222 Supplying & erecting automatic control panel for 3 Phase , 415 volt, A.C, Submersible/centrifugal pump set up to 7.5 HP consisting of DOL starter having relay range 9-14 AMP,S.P.P., Combined ammeter/ voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof enclosure with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase imbalance etc .	7.00	Each	6670.00	45682.00	6526	45682
23.3	Item No223 Supplying & erecting D.O.L Starter suitable for 250 V, Single phase 50 cycles with overload element with necessary materials and connected to supply up to 3 H.P.	5.00	Each	1280.00	6260.00	1252	6260
23.4	Item No224 Supplying & erecting D.O.L Starter suitable for 415 V, 3 phase 50 cycles with no volt coil and overload element with necessary materials and connected to supply for 10 H.P.	2.00	Each	3260.00	6380.00	3190	6380
23.5	Item No225 Supplying and erecting 75/80 mm dia cast iron double flange NRV complete with PN16 pressure rating, as per specification no. FF-VL/NRV	10.00	Each	6760.00	66140.00	6614	66140
23.6	Item No226 Supplying and erecting 100 mm dia cast iron double flange NRV complete with PN16 pressure rating, as per specification no. FF-VL/NRV	6.00	Each	9065	53214.00	8869	53214
23.7	Item No227 Supplying and erecting static energy meter with 240V 50 Hz. AC supply 10 to 60 A, ISI mark, accuracy class 1.0 with backlit LCD display, (measuring and display kWh, kVAh, V,I,PF, frequency, kW, kVA, six months history of Energy & MD in kW & kVA) with transparent hinge type box complete erected on polished teak wood board duly wired with required size of weather proof PVC wires duly tested by electric supply company.	10.00	Each	3260.00	31900.00	3190	31900
23.8	Item No228 Supplying and erecting static energy Trivector meter 440 V 50 Hz. 20-100A ISI mark meter AC 3 phase 4 wires LCD/LED display (Measuring and display Trivector, V, I, kW, PF, Hz, Last month history of kWh & MD in kW) with special features like TOD, Tamper logging, Optical Communication Port & Display in absence of Power complete erected on polished teak wood board duly wired with required size of weather proof PVC wires duly tested for class 1.0 accuracy by electric supply company.	5.00	Each	9065.00	44345.00	8869	44345
23.9	Item No229 Supplying and erecting minimum Three & above star rated submersible pump set suitable for erection on open well of 5.625 KW/7.5 HP with 415 V 50 c/s. A.C. supply, having delivery head from 57 to 22 m and discharge from 120 to 900 litres. . per minute &	5.00	Each	41520.00	203115.00	40623	203115

	pipe of Suction 75 mm/Delivery 65 mm diameter erected with necessary H type clamps as per specification No. WP-OSP						
24.0	<p>Item No230</p> <p>Supplying, installing, testing and commissioning of 5 kWp OFF-GRID solar power pack with interconnecting wires / cables up to 24V pure sine wave solar power inverter (THD<3%), SPV Modules (335 WP X 15 Nos.), C-10 rated lead acid battery bank 24V, 300Ah x 4 nos. (12V, 300 Ah x 8 nos) suitable for 4 Hours backup with suitable MS powder coated stand to hold battery bank and keeping sufficient space for filling distilled water, canopy box to house inverter and other electronics, wiring up to solar inverter in casing and capping, display board, sign board, two distinct earthing, spike type lightning arrester, necessary accessories complete with 5 years ON-SITE warranty and fully comprehensive maintenance contract as per specification no. ESD-RT-OFG</p>	8.00	Each	410670.00	3214400.00	401800	3214400
24.1	<p>Item No231</p> <p>Supplying and erecting three phase 10 to 60 A net meter DLMS compliance of accuracy class 1.0, 3 x 240V, 50 Hz, with backlit LCD display, optical port and RJ 232 port (measures import kWh, kVAh, export kWh, kVAh, Net kWh, kVAh, V, I, kW, 6 months history of energy) with wiring connections and mounting hardware on provided panels complete with calibration certificate from manufacturer.</p>	8.00	Each	12350.00	96664.00	12083	96664
24.2	<p>Item No232</p> <p>S.I.T.C. of LIGHT 851, Wattage 30W-40W Power Module LED,3000k,Upright</p> <p>Light 851:it's upper square frame in single piece made of die cast aluminum using pressure die-casting process,with a decorative element which is also made of die cast aluminium using pressure die-casting process, fixed on the top. Auxiliary and optical compartment can be accessed by tilting the top frame.Bottom frame with Company /brand name engraved in the mold, in single piece, made of die cast aluminum using pressure die-casting process with a four-armed bracket with flange, which is also made of die cast aluminum using pressure die-casting process, fixed at the bottom. Frosted Screen made of polymethylmethacrylate (PMMA) molded in a single piece using Injection molding process. Screen's Impact resistance: IK06. Pure polyester powder coating in Standard Grey Colour. IP Rating - IP 66. Power LED Module with Company /brand name printed on PCB with the metal core plate.LED Chips of CREE/NICHIA/OSRAM/LUMILEDS make - same should be supported by LED manufacturer's tech sheet .</p>	13.00	Each	16500.00	209872.00	16144	209872

	<p>Colour Rendering Index: Ra > 70. Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection (an additional surge protection device of 10kV also provided in-built the fixture). Optics with refractive lens in PMMA/PC . LED Lifetime >1,00,000hours@Ts 85°C. LM80 report from LED Manufacturer should be submitted.The Light fixture shall be in compliance with IEC 60598-2-3; IEC 60598-1(Supporting Test Report from UL/UL Authorised/Intertek Laboratory should be submitted) .LM79 report also should be submitted from UL/UL Authorised/Intertek Laboratory.Sample should be submitted for approval from concerned engineer-in charge.</p>						
24.3	<p>Item No233 S.I.T.C. of 3M HEIGHT ARCHITECTURAL POST TOP POLE3M height Pole made of complete cast iron decorative components where the internal fabricated pole of 3M is made in combination of mild steel pipe sections of suitable size covered on the outside by decorative cast iron base and columns.Decorative Cast iron Base in the cast iron mould, height again followed by a ring dia 210mm and gradual tapering upto a dia 92mm as approved by the econcerned Engineer the total height of decorative cast iron base is 700mm and weight-32kgs. Decorative cast iron base should be provided with a flush door of length 228mm, width 124mm and height 30mm. Decorative cast iron flower starting with a dia 102 mm increasing gradually to 160mm and then tapering to a dia 99mm.Total height of cast iron flower is 304 mm & weight is 6.3kgs.. Decorative cast iron column(2nos.) is of 80mm dia. and having continuous grooves along the height. The height of each pillar is 750mm & weight of each pillar is 9.5kgs. Decorative Cast iron top starting with dia 80mm and a ring of dia 96mm at height of 160mm then gradually increasing to dia 120mm the top half of the decorative top should have grooves along the length, total height of cast iron top is 334mm - weight-5.2kg. All cast iron parts weight mentioned are with +/-5% tolerance.Entire pole shall be made to provide pleasing aesthetics as approved by Concerned Engineer in-charge. The pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. The decorative pole to be provided with a suitable size steel base plate. This mounting steel plate along with foundation bolts of suitable size to be</p>	13.00	Each	16500.00	209872.00	16144	209872

	used for ensuring firm grouting into the specially designed RCC foundation. After Fabrication, Internal pole should be shot blasted for the effective adhesion of 3layer coating so as to avoid the corrosion. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN40 should be submitted to verify the pole design. Only cast iron parts outside are PU painted in 3 layer coating(coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint.						
24.4	Item No234 S.I.T.C. of Spot Light, NSL-10S , LED,9-11W,LED, 3000k,IP 66 Body made of Aluminium and finished with pure polyester powder coating in grey colour. Screen in flat tempered glass. Dimension- 65mm(Dia.) minimumx220mm(L) minimum,Weight-0.7kgs minimum. Electronic Driver which offers Protection against Short Circuit, Over-Voltage & Over- Current, IP 66 protection,voltage input AC240V. Estimated Lifetime-L70 @ 50,000hours minimum.	47.00	Each	9900.00	455242.00	9686	455242
24.5	Item No235 S.I.T.C. of NCL-02S-Ceiling Light, 10-15W, LED, 3000k, IP 65 Body made of aluminium & screen in tempered glass (IK 08). Pure Polyester powder coating in RAL 9005 Matt. Electronic Driver which offers Protection against Short Circuit, Over-Voltage & Over- Current. Dimension- 126mm (Dia.) x 138mm(H), Weight- 1.2kg. Estimated Lifetime-L70 @ 50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in charge. Sample should be submitted for approval from from Architect/ engineer-in-charge	17.00	Each	16890	280925.00	16525	280925
24.6	Item No236 S.I.T.C. of MELIA-ILLUMINATED BOLLARD-10W-15W,LED, 3000KThe Bollard suitable for on ground installation,It is made in combination of Steel pipe of 127mm dia. & decorative cast iron elements. . After Fabrication, Entire bollard should be shot blasted for the effective adhesion of 3layer coating so as to avoid the corrosion.Decorative base with company name/logo engraved - it's design starting with 178mm dia. continues for a height of 30mm,than gradually tapering to 150mm,for a height of 60mm, ends. with ring of 165dia. and 20mm height. total height of the base is 140 mm & Weight is 3Kgs. and top sphere shaped decorative element design starting with a ring of 150mm dia. and 18mm height,followed by a section of 130mm dia,then gradually tapering to 70mm dia. for a height 17mm,followed by a ring of 87mm	100.00	Each	12320.00	1205400.00	12054	1205400

	<p>dia.,17mm height and ends with a sphere section of 125mm dia. total height is 170mm - Weight is 3Kgs.All cast iron parts weight mentioned are with +/- 5% tolerance. LED source is made of Silicon material-Much more flexible,Efficient heat dissipation,Perfect resealing with silicone glue. Mounting channel made of aluminium. Diffused Screen in Acrylic, LED-source Efficacy>90lm/W,SMD LED,yellow glue 3M,120 degree beam angle, Voltage DC 24V. It also includes Externl common Electronic Power Supply(Meanwell /Equivalent) ,which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection.Finish- Pure Polyester Powder Coating in customised colour Metallic Grey. IP Rating - IP 54.Height – 1000mm, Dia - 127mm.</p>						
24.7	<p>Item No237 S.I.T.C. of Underwater Spot Light, NHL-145, LED, 8-10W, LED, 3000k, IP 68,External common power supply NHL-145: The housing in circular shape is completely made of high strength stainless steel(304grade minimum). Protection screen in clear tempered glass with high impact resistance . Precise structure and multi-protection silicon rubber seal ensures the Ingress Protection-IP 68. Dimension-Dia.-145mm,Height – 180mm, Weight - 1.2Kgs. Power LED Module with high efficacy LED's(Cree/Osram/Nichia/Lumileds), on Printed Circuit Board with metal core plate. Common external electronic Power Supply for LED Module,which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection. Lens made of PC which should offer various beam angles. Estimated LED Lifetime is L70- 50,000 hours minimum.LM80 report from LED Manufacturer should be submitted. Minimum Light fixture Lumen output is 700Lumens. Sample Should be submitted for concerned engineer incharge for approval of light fixture.</p>	2.00	Each	21960.00	42972.00	21486	42972
24.8	<p>Item No238 S.I.T.C. of NGB-6-1-Ground Buried Uplight, 1-2W, LED, 3000k, IP 67Body made of Die cast aluminium using pressure die casting process. Top Cover in Stainless steel & screen in tempered glass (IK 08). Burying barrel in ABS.External Electronic Driver which offers Protection against Short Circuit, Over- Voltage & Over- Current. Dimension-35 (Dia.) x38mm(H), Weight-0.1kg. Estimated Lifetime-L70 @ 50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in charge. Sample should be submitted</p>	12.00	Each	16280.00	191136.00	15928	191136

	for approval from Architect/ engineer-in-charge.						
24.9	Item No239 S.I.T.C. of 1 Mtr. Length of 48V Track for track light with connectors (L&Tshape connectors)	3000.00	Each	8140.00	23892000.00	7964	23892000
25.0	Item No240 Making M- 20 grade reinforced cement concrete foundation by considering the safe soil bearing capacity at site as 10 T/sq.m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template, duly plastered as per design complete (for 6m to 8m high octagonal /conical GI pole).	154.00	Each	4100.00	617694.00	4011	617694
25.1	Item No241 Providing & erecting 7 m high (clear height) galvanised octagonal pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification no. OH-PL/OPL	154.00	Each	18800.00	2832676.00	18394	2832676
25.2	Item No242 Supplying and erecting integrated LED street light fitting 120W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 13000 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No FG- ODF/FLS2	154.00	Each	10780.00	1624238.00	10547	1624238
25.3	Item No243 Providing and laying in situ M40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for PSC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand) i) Height up to 5 m, normal rate.ii) Height 5 to 7.50 m, add 5 percent extra. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	2483.76	Cum	12500.00	30376384.80	12230	30376384.8
25.4	Item No244 Providing & Supplying of FRP sculpture of various art piece including creative envolment of creative artist as per theme as instructed by Engineer-In- Charge/architect .The model to be done in following stages clay work,pop moulding 4 to 5mm fibre casting with steel reinforcement from inside. Griding finishing and colouring with apporpraite colours .Transportation to site and installation	90.00	Per Square Meter	29450	2593260.00	28814	2593260
25.5	Item No245	30.00	Per	78550.00	2305590.00	76853	2305590

	Providing & Supplying of Metal sculpture of various art piece including creative envolment of creative artist as per theme as instructed by Engineer-In-Charge/architect .The model to be done in following stages clay work,pop moulding 4 to 5mm metal casting with steel reinforcement from inside. Griding finishing and colouring with apporpraite colours .Transportation to site and installation		Square Meter				
25.6	Item No246 Designing, Providing & Installation of Sculpture . The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 3.5m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalatar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxesExcludling of GST .etc. Complete.	1.00	Each	1173000.00	1147663.00	1147663	1147663
25.7	Item No247 Designing, Providing & Installation of Sculpture of . The material for this sculpture is Metal . The Height of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalatar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excludling of GST .etc. Complete.	2.00	Each	1322500.00	2587868.00	1293934	2587868
25.8	Item No248 Designing, Providing & Installation of Sculpture of The material for this sculpture is Fibre/FRP . The Length of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material	2.00	Each	977500.00	1912772.00	956386	1912772

	should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +- 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete.						
25.9	Item No249 Designing, Providing & Installation of Sculpture . The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 2.1m,& Length will be around 5m Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement(TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete	2.00	Each	1677500.00	3282532.00	1641266	3282532
26.0	Item No250 Designing, Providing & Installation of Sculpture Set The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 3.6m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +- 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. =	1.00	Each	2185000.00	2137804.00	2137804	2137804
26.1	Item No251	2.00	Each	690000.00	1350192.00	675096	1350192

	Designing, Providing & Installation of Sculpture The material for this sculpture is Fibre/FRP . The Length & Height of the Sculpture should be minimum 3m & 2m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc.						
26.2	Item No252 Designing, Providing & Installation of Sculpture The material for this sculpture is Fibre/FRP . The Dia of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement(TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete	3.00	Each	747500.00	2194062.00	731354	2194062
26.3	Item No253 Fee towards the MCZMA Security as per the 114 MOM of MCZMA	1.00	Per Proposal	850000	831640.00	831640	831640
26.4	Item No254 Cost towards the Demarcation of the HTL and HFL from the Government Agencies approved by the MoEFCC	1.00	Pre Proposal	850000.00	831640.00	831640	831640
26.5	Item No255 Carrying Comprehensive EIA for the Project including the generation of Required Baseline Survey Data for 3 Seasons and CRZ Clearances for the Project and CRZ Clearances of the project	1.00	Job	2000000.00	1956800.00	1956800	1956800
26.6	Item No256 Remuneration to agency for the preparation of the Forest Diversion Proposal.	1.00	Job	2500000.00	2446000.00	2446000	2446000
26.7	Item No257 Cost towards the Payment of NPV	2.24	Ha	1650000.00	3616166.40	1614360	3616166.4
26.8	Item No258	2.24	Ha	950000.00	2082035.20	929480	2082035.2

	Cost towards the Payment of Compensatory Afforestation Cost including Maintenance of 10 Years						
26.9	Item No259 Towards conservation measure for Avifauna (Bird)	1.00	Lumsu m	750000.00	733800.00	733800	733800
27.0	Item No260 Towards Legal cost for obtaining the Clearances from Hon High Court as per PIL No. 87 of 2006	1.00	Lumsu m	900000.00	880560.00	880560	880560
27.1	Item No261 Implementation of the Environment Monitoring Plan during the Project Execution	1.00	Lumsu m	1000000.00	978400.00	978400	978400
27.2	Item No262 S.I.T.C. of GOBO PROJECTOR350 Watt,LED,IP 65Gobo Projector:Body made of Diecast Aluminium. Uses high power white LED chip,3.8°-45°(electronic linear zoom),Display-On board Control, Gobo-8+6 Gobos(single colour), Gobo-flow effect, Gobo shake, Bi-directional rotation.Colours-One color wheel (13 colour+White, Rainbow flow effect),Prism-16 prism with bi-directional rotation, , Speed adjustable,Focus-Motorized linear focus.Nos.of DMX Channels-16 Light fixture should be standard DMX512 protocol compatible, the DMX decoder function should be inbuilt the light fixture,Each light fixture should be individually addressable & should be able to operate with any standard DMX512 equipment. In-Built Electronic Power Supply for LED Module,which offers Protection against Short Circuit, Over-Voltage & Over- Current, with in-built surge protection.Lifetime is 50,000 hours.IP rating-IP 65 minimum.Length-480mm,Width-410mm, Height-640mm Weight - 39Kgs.	8.00	NOS	750000	5870400.00	733800	5870400
27.3	Item No263 S.I.T.C. of DMX Control System	1.00	Set	700000.00	684880.00	684880	684880
27.4	Item No264 S.I.T.C. of 6m height pole made in combination of mild steel pipe sections 114mm dia. & 76mm dia. with suitable fixing arrangement to mount Laser projector. The pole to be provided with a suitable size steel plate. This mounting steel plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation.After Fabrication, Entire Pole is hot dip galvanized(100 microns Minimum) for the effective corrosion resistance. The hot dip Galvanised pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN40 should be submitted to verify the pole design. Pole & it's parts are painted in 3 layer coating (coating thickness-100	8.00	NOS	111090.00	869520.00	108690	869520

	microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint.						
27.5	Item No265 S.I.T.C. of 3 Chip DLP Laser Cinema series Projector, Brightness: 22000 Lumens or more, Resolution: Native 4K or better, along with the appropriate Lens to manage the throw distance, 3D ready, Native aspect ratio 16:10, Horizontal & vertical edge blending, Motorised Zoom & Focus, Motorised Lens shift H/V, Sealed DLP™ core, Standard Orientation : 360°, DMX 512 Standard WARP Direct adjust OSD + toolset, Image processing, Embedded warp & blend, 3D Active eye wear (optional), passive circular (optional); 2 flash up to 200Hz; optional Dual Eye Point 240Hz, Single HDBaseT; HDMI2.0 (HDCP2.2, HDR10); DP 1.2 (HDCP1.3); Quad 3G/12G SDI/BarcoLink ULTRA, supplied with DP input cards, IR, RS232, IP (RJ45 Network connection), direct Android app to control,	2.00	Nos.	4628750.00	9057538.00	4528769	9057538
27.6	Item No266 S.I.T.C. of Smart poles of 10 mtrs heights Customized enclosure for above projector with pole mounting arrangement IP68 protection and security. Each enclosure allow to put minimum 1 projector, White in color, easy maintainable Make: Techvisio/ Mapan/Aura / LM3X [Urban pole / Valmount structur	2.00	Nos.	1587000.00	3105442.00	1552721	3105442
27.7	Item No267 S.I.T.C. of Display media server with 4nos x HD outputs as required , synced together. . Min. 1x NVidia Quadro RTXA5000 graphic processor,	1.00	Nos.	1262990.00	1235709.00	1235709	1235709
27.8	Item No268 S.I.T.C. of Production PC i7 process RAM 32 GB 2TB SSD memory with HD outputs as required, , with 16GB graphic card ,to be supplied with 27" Monitor	1.00	Nos.	793500.00	776360.00	776360	776360
27.9	Item No269 S.I.T.C. of 3D Projection mapping software, Playback control System to manage, schedule & control the media servers, watchout software should work best in above system	1.00	Nos.	1322500.00	1293934.00	1293934	1293934
28.0	Item No270 S.I.T.C. of 20 KVA UPS with 30 minutes power backup, along with Electrical cabling and Earthing for projector	1.00	Nos.	1256375.00	1229237.00	1229237	1229237
28.1	Item No271 S.I.T.C. of Long distance transmitter for High resolution signals, Transmits HDMI, USB data, control, and analog audio up to 330' (100 m) over a shielded CAT 6A cable Supports computer and video resolutions up to 4K/60 @ 4:4:4, USB 2.0 extension, Analog stereo audio embedding, HDCP 2.3 compliant, Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D,	2.00	Nos.	165315	323488.00	161744	323488

	and HD lossless audio formats						
28.2	Item No272 S.I.T.C. of Long distance Receiver for High resolution signals, Receives HDMI, USB data, control, and analog audio up to 330' (100 m) over a shielded CAT 6A cable Supports computer and video resolutions up to 4K/60 @ 4:4:4, USB 2.0 extension, Analog stereo audio embedding, HDCP 2.3 compliant, Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats	2.00	Nos.	165315.00	323488.00	161744	323488
28.3	Item No273 SITC of 4k enabled HDMI male to male cables, of 2 mtrs, Ultra-flexible HDMI cables Conforms to Premium High Speed HDMI cable performance standards 4K/60 verified	10.00	Nos.	10127.00	99080.00	9908	99080
28.4	Item No274 SITC of 30 mtr / 100ft High speed 4k HDMI cable, HDMI Premium High Speed Optical Cables - Plenum, Conforms to Premium High Speed HDMI Cable performance standards Flexible, ultra-thin 0.16" (4 mm) diameter cable Plenum, NEC CMP-rated cable No external power is needed, Highly resistant to EMI/RFI interference, Color-coded and labeled ends	1.00	Nos.	108975.00	106621.00	106621	106621
28.5	Item No275 SITC of other accessories like connectors, small patch cables of CAT6 / audio etc, sleeves, DP to HDMI or HDMI to DP, etc adapters	1.00	LS	264500.00	258787.00	258787	258787
28.6	Item No276 SITC of LED RGBW DMX control LED channel with aluminium extrusion channel linkable option outdoor IP66 with diffuse optic power 15 watt per meter control by independent DMX controller creating multiple lighting scene (minimum 32 scene)	180.00	meter	11500.00	2025360.00	11252	2025360
28.7	Item No277 SITC of LED screen 4 mm pitch 5500 nits IP66, size 3m x 5m floor standing mounting bracket with media server , AV connectivity , link with APP through wifi or QR code rider	1.00	nos	1725000.00	1687740.00	1687740	1687740
28.8	Item No278 SITC of MEDIA server	1.00	nos	57500.00	56258.00	56258	56258
28.9	Item No279 SITC Mobile app for QR code	1.00	nos	230000.00	225032.00	225032	225032
29.0	Item No280 SITC of Approved content and video	8.00	nos	287500	2250320.00	281290	2250320
29.1	Item No281 SITC of entry art work of height 8000mm made up of fibre body made up of glowing fibre with base of 2500 x 1000 mm	1.00	set	805000.00	787612.00	787612	787612
29.2	Item No282 SITC of RGB lights of 24 watt 16 nos DMX control with continuous transition made by aluminium extrusion with connecting cable & controller	1.00	set	230000.00	225032.00	225032	225032
29.3	Item No283	30.00	sq	86250.00	2531610.00	84387	2531610

	SITC of LED screen with 31.5 mm pitch with high brightness of 3500 NIT day visibility with media server controller		meter				
29.4	Item No284 SITC of Programme controller and present scene controller with built in memory 256 GB and ram of 16 GB to store programme	1.00	nos	327750.00	320671.00	320671	320671
29.5	Item No285 Set of all control cable and power cable	1.00	set	115000.00	112516.00	112516	112516
29.6	Item No286 SITC OF RGB laser system projection with laser power of 42 watt (red 9w/638nm. Green 13w/525nm, blue 20w/ 455nm). Cooling mode - lasr with TEC cooling, whote machine is with air cooling, with enclosure of IP65,power consumption 1200watt. Laser service life 10000 hoursand operating volatge 230 volt 50Hz.lighting effect- full color animation laser with high speed galvanometer scanning technology. laser projector should confirm to EU norm and CE / UL certified. (Kvant / Aura / Bajaj)	1.00	NOS	3220000.00	3150448.00	3150448	3150448
29.7	Item No287 SITC of customised laser enclosure for all laser projector with IP65 protection with security mechanism (techvisio / mapan / Aura)	1.00	NOS	230000.00	225032.00	225032	225032
29.8	Item No288 SITC of pangolin software to develop various lighting show (Pangolin / laser world / star dimension)	1.00	Set	103500.00	101264.00	101264	101264
29.9	Item No289 SITC of wiring , power cable , control cable for laser	1.00	Set	575000	562580.00	562580	562580
30.0	Item No290 Content with Script writing: includes movement, actions, expression and dialogue of the characters, drama Storyboard, Storytelling, 2D 3D animation, Graphics, Art Works, Archival Imagery, Video-timeline, SFX, VFX, Voiceovers and Music etc for the show.etc for about 15 mins.	15.00	Minutes	396750.00	5822700.00	388180	5822700
30.1	Item No291 SITC of ISO 7240-16 Certified EVAC PA controller capable of adding 12 zones in the system and expandable upto 400 zones with 14x 4 Audio matrix with full DSP functionality. 8 audio, inputs, 4 audio outputs, 4 channel output matrix. Shall support the following: single line, switching or redundant group A/B switching, amplifier redundancy, 4 x 100V audio inputs, and 12 speaker line outputs. Fault, warning and event conditions log. Built in message, manager for 100 emergency/business calls up to 85 minutes. 18 control inputs and 18, control outputs. Impedance measurement and Pilot Tone supervision for speaker line, monitoring. The network controllers shall have a possibility to be integrated using an, interface module which is able to send and receive Audio to and from other, Controllers.Frequency response (ref. 1	1.00	NOS	287040.00	280840.00	280840	280840

	<p>kHz) 20 Hz to 20 kHz (-0.5 dB), Signal-to-noise ratio, (A-weighted): Line in to line out: 106 dB typical, THD+N < 0.05%, Crosstalk (line level) Line, in to line out (0 dB gain): < 100 dB at 1 kHz, Sample rate 48 kHz, DSP processing resolution, 24-bit linear A/D and D/A conversion, 48-bit processing. Graphics User Interface software, should be considered for Monitoring and control of signal.MAKE/BRAND: Bosch</p>						
30.2	<p>Item No292 SITC of The Digital call station shall be an EN54-16 & ISO 7240 -16 certified user interface. It shall be designed in a modern and robust chassis with a graphical display. As standard, the call station shall have a gooseneck microphone with pop shield and permanent monitoring, an illuminated LC-display and an integrated loudspeaker to be used, for system sounds, It shall be possible to modify the call station to suit the user's requirements by connecting, up to five remote call station extensions, each with 20 free customizable functions and selection buttons., The Call station shall have a built-in numerical keypad; it shall be possible to enable or disable the keypad during configuration</p> <ul style="list-style-type: none"> • Five menu/function keys (pre-programmed) – four buttons shall provide each 1 LED (two LED's shall be 2 green and 2 LED's shall be yellow). • Green led on the microphone which is active during a call • 15 function and speed dial buttons (customizable), two LEDs (green/red) per button. • Button functions shall be programmable such as: <ul style="list-style-type: none"> • Zone select, source select, level control, emergency on/off, message on/off, failure acknowledge/reset. • switching output trigger on/off or 0 to 10V, select scheduled events, scheduled event on/off. • CAT5 cable for data and audio connection to controller (can bus, up to 1000 meter).MAKE/BRAND: Bosch 	1.00	NOS	103040.00	100814.00	100814	100814
30.3	<p>Item No293 SITC of The call station extension shall be EN54-16 Certified. It shall be designed in a robust andmodern chassis. It shall expand the call station by 20 customizable functions keys. • 20 free customizable functions keys, and two LEDs per button (green/red). • It shall be possible to program button functions as: • Zone select, source select, level control, emergency on/off, message on/off, failureacknowledge/reset. • switching output trigger on/off or 0 to 10V, select scheduled events, scheduled eventon/off. • An LED shall also be</p>	1.00	NOS	61870.00	60534.00	60534	60534

	programmable for own indication functionalityMAKE/BRAND: Bosch						
30.4	Item No294 SITC of EN54-24 Certified IP65 rated outdoor surface mount speaker to be supplied with standard U-bracket, Maximum power22.5 W, Power tapping15/7.5/3.75/1.9 W, Sound pressure levelat rated power / 1 W(1 kHz, 1 m)98/86 dB (SPL), Opening angleat 1 kHz / 4 kHz(-6 dB)179° / 101° (hor.)168° / 35° (ver.)MAKE/BRAND: Bosch	100.00	NOS	9948.00	973300.00	9733	973300
30.5	Item No295 SITC of EN54 Certified EVAC Router for adding 24 zones in the system and to route 4 channels into, 8 100V audio inputs to 24 loudspeaker line outputs. 2-in-6 matrix. 20 Control Inputs, 26, Control Outputs. Shall support single line switching or redundant group A/B switching, amplifier redundancy. Impedance measurement and Pilot Tone supervision for speaker line monitoringMAKE/BRAND: Bosch	1.00	NOS	238510.00	233358.00	233358	233358
30.6	Item No296 SITC of 480 W power amplifier in a 3U high housing with 70 V / 100 V and 8 ohm outputs,Dual inputs with priority switching,100 V input for slave operation on 100 V speaker line,Mains, battery back-up, With Following Features: 1.Output power (rms) 480 W 2.Frequency response 60 Hz to 18 kHz (+1 / -3 dB at -10 dB ref. rated output) 3.Distortion <1% @ rated output power, 1 kHz 4.S/N (flat at max volume) >90 dB 5.Battery power supply:24 VDC MAKE/BRAND: Bosch	4.00	NOS	49680.00	194428.00	48607	194428
30.7	Item No. 297 Standard Consistancy, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	10.00	1 Test	1175.00	11500.00	1150	11500
30.8	Item No. 298 Water Absorption, Specific Gravity,Impact Value, Crushing Value.	10.00	1 Test	585	5720.00	572	5720
30.9	Item No. 299 Sieve Analysis.	10.00	1 Test	1260.00	12330.00	1233	12330
31.0	Item No. 300 Abrasion Value.	10.00	1 Test	4880.00	47750.00	4775	47750
31.1	Item No. 301 Flakiness Index & Elongation Index.	10.00	1 Test	870.00	8510.00	851	8510
31.2	Item No. 302 Stripping Value. (for Bituminous Work)	10.00	1 Test	3465.00	33900.00	3390	33900
31.3	Item No. 303 Soundness.	10.00	1 Test	1895.00	18540.00	1854	18540
31.4	Item No. 304 GSB Mix Design./Cement Treated Sub Base (CTSB)	1.00	1 Test	670.00	656.00	656	656
31.5	Item No. 305 Fineness Modulus (Sieve Analysis ,Silt & Clay Content	10.00	1 Test	1755.00	17170.00	1717	17170
31.6	Item No. 306 Chloride & Sulphate Content.	10.00	1 Test	735.00	7190.00	719	7190
31.7	Item No. 307	10.00	1 Test	5380	52640.00	5264	52640

	Silt Factor.						
31.8	Item No. 308 Flexural test (Set of 6 Tiles), Water Absorption (Set of 6 Tiles).Resistance to wear (Set of 6 Tiles).	10.00	1 Test	2630.00	25730.00	2573	25730
31.9	Item No. 309 Flooring of Natural Stone (Kota,Marble, Granite,Tandur.etc.) Water absorption, Specific gravity	10.00	1 Test	3225.00	31550.00	3155	31550
32.0	Item No. 310 Compressive Strength OF C.C. Cube (Set of 3 cubes).	4.00	1 Test	4080.00	15968.00	3992	15968
32.1	Item No. 311 Concrete Mix Design (With all Tests on basic materials)	1.00	1 Test	810.00	793.00	793	793
32.2	Item No. 312 Compressive Strength , Water Absorption,(Set of 8 Blocks)	1.00	1 Test	215.00	210.00	210	210
32.3	Item No. 313 Crushing Value/Compressive Strength, Water Absorption & Specific Gravity.	10.00	1 Test	1785.00	17460.00	1746	17460
32.4	Item No. 314 Sieve Analysis.	5.00	1 Test	4280.00	20940.00	4188	20940
32.5	Item No. 315 Liquid limit & plastic Limit.	5.00	1 Test	2155.00	10540.00	2108	10540
32.6	Item No. 316 Compaction Test (Proctor Density).	5.00	1 Test	1935	9465.00	1893	9465
32.7	Item No. 317 Sulphate & Chloride Contents.	5.00	1 Test	17400.00	85120.00	17024	85120
32.8	Item No. 318 Penetration, Softening Point, Flash & Fire Point, Specific Gravity	2.00	1 Test	17400.00	34048.00	17024	34048
32.9	Item No. 319 Extraction Test.(Bituminous mix)	2.00	1 Test	5060.00	9902.00	4951	9902
33.0	Item No. 320 Extraction & Sieve Analysis of Bituminous mix (for BM/DBM/AC) (2 samples of extraction for one sieve analysis including extraction)	2.00	1 Test	6685.00	13082.00	6541	13082
33.1	Item No. 321 Job Mix Design with all Tests on aggregate (Excluding bitumen) for DBM/SDBC/AC/SMA (Stone Mastic Asphalt) (Testing of Bitumen shall be seperately Charged)	2.00	1 Mix Design	12280.00	24030.00	12015	24030
33.2	Item No. 322 B. M. Mix Design with all Tests on aggregate (Excluding bitumen) (Testing of Bitumen shall be seperately Charged)	2.00	1 Mix Design	19855.00	38852.00	19426	38852
33.3	Item No. 323 Seperation test for modified bitumen.	2.00	1 Test	7850.00	15360.00	7680	15360
33.4	Item No. 324 Density Test . (Set of 3 Blocks),Compressive Strength. (Set of 3 Blocks),Water Absorption Test (Set of 3 Blocks)	1.00	1 Test	7850.00	7680.00	7680	7680
33.5	Item No. 325 PH Value, Sulphate & Chloride Content.	4.00	1 Test	360	1408.00	352	1408
33.6	Item No. 326 Weight per running meter,Diameter of pipe & wall thickness of pipe,	1.00	1 Test	5300.00	5186.00	5186	5186
33.7	Item No. 327 Weight per running meter,Diameter of pipe & wall thickness of pipe	1.00	1 Test	1700.00	1663.00	1663	1663
33.8	Item No. 328 Upto 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress,Weight-Per Meter, Bend /	4.00	1 Test	4675.00	18296.00	4574	18296

	Rebend Test, Proof Stress.)						
33.9	Item No. 329 Above 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress, Weight-Per Meter, Bend / Rebend Test, Proof Stress.)	2.00	1 Test	108600.00	212508.00	106254	212508
34.0	Item No. 330 Reflectance & yellowness index.	1.00	1 Test	80.00	78.00	78	78
34.1	Item No. 331 Retro Reflective Test.	1.00	1 Test	80.00	78.00	78	78
34.2	Item No297 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In- charge. Using Concrete Batching and Mixing Plant	81.66	Rmt	1175.00	93909.00	1150	93909
34.3	Item No298 Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete.	81.66	Sqm	585.00	46709.52	572	46709.52
34.4	Item No299 Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer spspecifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	54.76	Sqm	1260	67519.08	1233	67519.08
34.5	Item No300 Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of	967.63	Sqm	4880.00	4620433.25	4775	4620433.25

	approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete.						
34.6	Item No301 Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	967.33	Sqm	870.00	823197.83	851	823197.83
34.7	Item No302 Supply & Fixing of Full Body Vitrified Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	10.32	Sqm	3465.00	34984.80	3390	34984.8
34.8	Item No303 Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment) of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	34.07	Sqm	1895.00	63165.78	1854	63165.78
34.9	Item No304 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	702.33	Rmt	670.00	460728.48	656	460728.48
35.0	Item No305 Providing 25 mm to 30 mm thick flooring of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. a) One side polish	189.36	Sqm	1755.00	325131.12	1717	325131.12
35.1	Item No306 Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	767.53	Sqm	735.00	551854.07	719	551854.07
35.2	Item No307	16.88	Sqm	5380.00	88856.32	5264	88856.32

	CAST IN SITU SAFETY RUBBER FLOORING SYSTEM WITH including 20mm thick SBR Black Rubber Granule and 5MM colour EPDM granule absolute thickness =25mm .(as per drawing attached) etc. including VAT, tax complete. Manufacturers warranty is 5 years.						
35.3	Item No308 Accupressure Bed - Providing and fixing Natural Stone pebbles in 1:6 Cement mortar of natural sand of 50mm thick bed as required line, level, shape and size as instructed by Engineer in charge. Item including color pigments, lead lift, curing, cutting, all material and labour with wastage etc. complete all	6.08	Sqm	2630	15643.84	2573	15643.84
35.4	Item No309 Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superintending Engineer.	1139.60	Sqm	3220.00	3589740.00	3150	3589740
35.5	Item No310 Providing and laying RED & BLACK GRANITE cobble stones of 100mm x 100mm x 100mm, 3 line dressing with 12 mm top layer in size of fine cut and well dressed in Grey colour in paving on a bed of min. 40 mm thick cushioning in C.M. 1:4 including neat cement float etc. filling of joints in C.M. 1:2 with grey cement to match the colour of cobble stone in the required pattern, design and as directed by the Engineer in charge, including cleaning, curing etc. complete.	12.83	Sqm	4080.00	51217.36	3992	51217.36
35.6	Item No311 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1 Kilogram per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete.	216.23	Sqm	810.00	171470.39	793	171470.39
35.7	Item No312 Providing vee pointing with cement mortar 1:3 for stone /Brick masonry including scaffolding and curing etc. complete	79.02	Sqm	215.00	16594.20	210	16594.2
35.8	Item No313 WOODEN FINISH PAINTING OF EXISTING WOODEN FINISH TEXTURED SURFACE CEMENT CONCRETE BENCH including any material, machinery, scaffolding etc. complete. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of	1653.80	Sqm	1785.00	2887534.80	1746	2887534.8

	exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including cement, Sand, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.						
35.9	Item No314 Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25 mm dia in three rows, all pipes of 2 mm thick including buffing,fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)	270.08	Sqm	4280.00	1131095.04	4188	1131095.04
36.0	Item No315 Stamp Concrete of 100mm Thickness - Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand / VSI grade finely washed crushed sand) Confirming to IS 383, as per mixed in a batching and mixing plant / non tilting mixer and weigh batcher as per approved mix design, admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continous operation, finishing to lines and grades Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable,30 % solids clear sealer @ 150 to 250 gms per sqm using surface roller and protecting from falling dust,dirt and curring by curring compound / by providing cement vata in cement Mortor 1 :8 @ 0.6m x 0.6m center to center, admeasuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-incharge or Landscape architect etc. complete. (prior approval of superinteding Engineer will be necessary)	461.56	Sqm	2155.00	972968.48	2108	972968.48
36.1	Item No316	578.17	Sqm	1935.00	1094475.81	1893	1094475.81

	Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.						
36.2	Item No317 Design Conceptualisation & painting 3D artwork on any surface at all height and locations as directed .	15408.00	Sqm	980	14776272.00	959	14776272
36.3	Item No318 Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	11.13	Cum	17400.00	189477.12	17024	189477.12
36.4	Item No319 Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown /RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with rounded moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete. Skirting Spec.No. : Bd. M.22 B/Page No. 390	6.29	Sqm	5060.00	31141.79	4951	31141.79
36.5	Item No320 Providing&fixing in position 20 +/- 2mm thick machine cut, mirrorpolished, 1st quality granite cladding such as black galaxy or approved equivalent in lift lobby / passage installed in approved pattern and design of size 600 x 1200mm and as directed includingbackingcoat of 1:4 cement plaster of required thickness with stainless steelfasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with with matching pigments. The rate toinclude all curing, polishing at all lift and levels. (Basic rate ofgranite is Rs.3600/-Sq.m.)	60.25	Sqm	6685.00	394095.25	6541	394095.25
36.6	Item No321 Providing & fixing BENCH IN CEMENT MORTOR/CONCRETE WITH WOODEN FINISHING ON ALL EXTERNAL SURFACE. Bench should have min. 2.1m to max. length 2.4m with 0.45m wide seat & 0.40m high back for resting. beach should have 2 to 3 supports/Legs as per requirement from ground in 1:1.5:3 ratio Concrete with 4 bar 12mm as a main & distribution 8mm Tor steel at 150mm c/c. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish	8.10	Rmt	12285.00	97362.00	12020	97362

	including Cement, Sand, Aggregate, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, excavation, pcc, tor steel etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.						
36.7	Item No322 Ss Dust Bin (Refer sketch 10) Product area:0.76Sqm, Capacity in ltrs: 42.0 ltrs, Product height:0.92m	12.00	No	19855.00	233112.00	19426	233112
36.8	Item No323 Design and engineering, supply and fixing of tensile membrane of high tensile strength, primary and secondary steel, hardware and accessories, including the fabrication of steel structure made out of MS structural steel tubular section of high yield strength as per relevant IS codes. The tensile membrane roof cover shall be of PVC coated polyester composite membrane of approved make and quality including membrane cutting, seaming and HF welding as per manufacturer standards. The membrane shall be fixed to MS structural members with necessary SS plates, lugs, clamping plates as required. The membrane shall be stretched and tensioned as per the design approved. The Membrane shall be flame resistant, fungicide finish, high tear out force and continued tear out force, well wieldable, good UV resistance, high water pressure resistance and very low maintenance.	48.59	Sqm	7800.00	370838.88	7632	370838.88
36.9	Item No324 Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Accoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per	132.53	Sqm	7845.00	1017300.28	7676	1017300.28

	direction of Engineer in-charge.						
37.0	Item No325 Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including leaning, preparing the plaster surface, applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE:ForItem Number 15 to 18 prior approval of Superintending Engineer will be necessary	364.80	Sqm	360.00	128409.60	352	128409.6
37.1	Item No326 Providing and laying telephone black / Amba White / Cadburybrown / RBI red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing the sharp edges wherever necessary, curing, etc. complete. Specifications: Bd. M. 12 Spec. No.: As directed by Engineer-In- Charge	0.56	Sqm	5300	2904.16	5186	2904.16
37.2	Item No327 Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	24.62	Sqm	1700.00	40943.06	1663	40943.06
37.3	Item No328 Providing,applying,fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and sg=hade on top face and polymer (service) coating of bottom face as specified using stainless steel screws,nuts,bolts,washers,cleats,weath er silicon sealent,backer rods etc .overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre)	61.61	Sqm	4675.00	281804.14	4574	281804.14
37.4	Item No 329 Civil Operation Cost -	60.00	Monthl y	108595.00	6374940.00	106249	6374940
37.5	Item No 330 Garden Maintenace (Including Cost of Water) - 2nd Year	7717.20	Per Sqm/M onth	80.00	601941.60	78	601941.6
37.6	Item No 331 Garden Maintenace (Including Cost of Water) - 3rd Year	9260.64	Per Sqm/M onth	80.00	722329.92	78	722329.92
37.7	Item No 332	11575.80	Per	80.00	902912.40	78	902912.4

	Garden Maintenance (Including Cost of Water) - 4th Year		Sqm/Month				
37.8	Item No 333 Garden Maintenance (Including Cost of Water) - 5th Year	13119.24	Per Sqm/Month	80.00	1023300.72	78	1023300.72
37.9	Item No 334 Electrical and Public Art Lighting - Comprehensive Maintenance for 2nd Year	1.00	Yearly	2828150.00	2767062.00	2767062	2767062
38.0	Item No 335 Electrical and Public Art Lighting - Comprehensive Maintenance for 3rd Year	1.00	Yearly	4525030	4427289.00	4427289	4427289
38.1	Item No 336 Electrical and Public Art Lighting - Comprehensive Maintenance for 4th Year	1.00	Yearly	6221915.00	6099863.94	6099863.94	6099863.94
38.2	Item No 337 Electrical and Public Art Lighting - Comprehensive Maintenance for 5th Year	1.00	Yearly	7918800.00	7747754.00	7747754	7747754
38.3	Item No 338 Electrical Work - Operation Amount	60.00	Monthly	18400.00	1080180.00	18003	1080180
Total Amount					1246766893		1219838909. Final Negotiate Amount

कार्यालयीन प्रस्तावना

वरील कामी मे. एन.ए.कंस्ट्रक्शन प्रा.लि. यांनी दरवाटाघाटीनंतर वरील दराची (रु.121,98,38,909/-) निविदा सादर केली आहे. मा.आयुक्त महोदय यांनी सदरचे दर स्विकारण्यास मान्यता दिलेली आहे. नगरविकास विभाग, शासन आदेश क्रमांक एमसीओ-2020/प्र.क्र.71 (भाग-2)/नवि-14 दि.26 ऑगस्ट 2022 अन्वये महाराष्ट्र महानगरपालिका अधिनियम तरतुद व विशेषतः कलम 452 अ च्या (1 अ) व (1 ब) मधील तरतुदीनुसार मा.आयुक्त यांची प्रशासक पदी नियुक्ती करण्यात आली असून त्यांना अधिनियमातील सर्व अधिकार प्राप्त झाले आहेत. सदर अधिकारात वरील 01 कामांस महाराष्ट्र महानगरपालिका अधिनियम मधील कलम 73 (क) नुसार प्रशासकीय ठरावाव्दारे मान्यता देण्याचा प्रस्ताव प्रशासनाने सादर केला आहे.

प्रशासकीय ठराव क्र. दिनांक

मिरा भाईंदर महानगरपालिका क्षेत्रातील वरील 01 कामांस मान्यता देण्याच्या प्रस्तावाचे अवलोकन करण्यात आले.

महाराष्ट्र महानगरपालिका अधिनियम तरतुदी व विशेषतः कलम 452 (अ) च्या (1अ) व (1ब) नुसार, महाराष्ट्र शासन, नगरविकास विभागाकडील शासन आदेश क्रमांक :- एमसीओ 2020/प्र.क्र.71 (भाग-2)/नवि-14 दिनांक 26 ऑगस्ट 2022 अन्वये प्राप्त अधिकारानुसार मी, संजय काटकर, प्रशासक, मिरा भाईंदर महानगरपालिका मा.महानगरपालिका महासभेच्या अधिकाराचा वापर करून प्रशासनाने सादर केलेल्या विषयास अनुसरून खालील कामाच्या मे. एन.ए.कंस्ट्रक्शन प्रा.लि. यांनी दरवाटाघाटीनंतर रक्कम रु.121,98,38,909/- दराची निविदा सादर केली आहे. सदर निविदाधारकाने दरवाटाघाटीनंतर रक्कम रु.121,98,38,909/- (अंदाजपत्रकिय दराच्या) निविदेस महाराष्ट्र महानगरपालिका अधिनियम कलम 73 (क) नुसार मान्यता देण्यात येत आहे.

अ. क्र	टेंडर आय डी	कामाचे नाव	अंदाजित खर्च	निविदाधारकाचे नाव
1	2	3	4	5
1.	1050627_1	वर्सावा ब्रिज ते घोडबंदर गावाशेजारी खाडी किनारा विकसीत करणे. (मुलभुत सोई सुविधांचा विकास योजना)	रु.1,21,98,38,909/-	मे. एन.ए.कंस्ट्रक्शन प्रा.लि.

Sl. No.	Item Description	Quantity	Units	Quated Rate		Final Negotiate Amount	
				Rate	Total Amount	Rate	Total Amount
1.1	Item No.1 Providing Dozer D 80 A 12 (Medium) for Dismantaling of various structure available on site.	147.00	Hr	3480	511560.00	3405	500535
1.2	Item No.2 Labour charges for removing grass, thorney shrubs, Jungli shrub, Kubabul and alike grass along roadside making the ground clean by showel and phavaras etc. complete.	37982.00	Sqm	8.00	303856.00	8	303856
1.3	Item No.3 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means	14946.75	cum	180.00	2630628.00	176	2630628
1.4	Item No.4 Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means	3557.61	cum	180.00	626139.36	176	626139.36
1.5	Item No.5 Excavation for foundation in hard rock by manual means inclucing removing the excavated materials upto distance of 50 m beyond the building area, stacking and spreading as directed including dewatering under provided elsewhere preparing the bed for the foundation & necessary backfilling, remaining, watering complete including shorting & strutting. (Lift up to 1.5M) Hard Rock by mechanical means with hydraulic excavator & rock breaker.etc.complete.BDA 1 to 4 page No.259 Pg no 7	921.30	cum	1250.00	1126749.90	1223	1126749.9
1.6	Item No.6 Removing sand/ muck/ slush/ soil bellow low tide level to the specified section from navigation channel as per the area and depth upto 3.00 m from sea bed by mechaniceal means with, hyderaulic excavator, etc. and barge for establishment all machinery with all	6412.50	cum	525.00	3296025.00	514	3296025

	required tools and equipments, boat for conveying excavated material, including removing the excavated materials with all lift and leads as directed beyond high tide level line of water stacking spreading or disposing, dewatering if required unless otherwise provided else where complete under tidal condition.						
1.7	Item No.7 Transporting of excavated/Dismantled materials lead 20 K.M.	19989.76	cum	500.00	9774992.64	489	9774992.64
1.8	Item No.8 Filling in Plinth & Floors with Approved Excavated materials in 15 to 20 cm layers including watering and compaction complete. BDA 10 Pgno 262	13926.94	cum	110.00	1504109.52	108	1504109.52
1.9	Item No.9 Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	55280.39	cum	1000.00	54064221.42	978	54064221.4
2.0	Item No.10 Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	11967.33	cum	2500	29272089.18	2446	29272089.2
2.1	Item No.11 Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary).	4000.00	hour	200.00	784000.00	196	784000
2.2	Item No.12 Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand	2682.90	cum	6500.00	17063244.00	6360	17063244
2.3	Item No.13 Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/ quartzite/ gneiss metal for steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering	930.09	cum	7500.00	6825000.42	7338	6825000.42

	will not be allowed.),with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
2.4	Item No.14 Providing and laying Cast in situ/ Ready Mix cement concrete M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork, cover blocks, laying/ pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel)etc.complete With fine aggregate (Crushed sand VSI Grade)	396.30	cum	8500.00	3295630.80	8316	3295630.8
2.5	Item No.15 Providing and laying Cast in situ/ Ready Mix cement concrete M-40 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork, cover blocks, laying/ pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel)etc.complete With fine aggregate (Crushed sand VSI Grade)	504.22	cum	9000.00	4440161.32	8806	4440161.32
2.6	Item No.16 Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand. Spec. No.: Bd.F.6 Page No. 300 and B.7, Page No.38 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite/quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork ,cover blocks, laying/pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor	63.45	cum	11500.00	713939.40	11252	713939.4

	based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
2.7	Item No.17 Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including centering, formwork, cover blocks, laying/pumping, compacting and roughening them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand	219.61	cum	14500.00	3115607.07	14187	3115607.07
2.8	Item No.18 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite/quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	26.97	cum	14500.00	382623.39	14187	382623.39
2.9	Item No.19 Providing and laying in situ / ready mix M-35 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers,column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailling out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine agreeegates of required specifications (VSI sand finely washed etc)	547.81	cum	11000	5895531.22	10762	5895531.22
3.0	Item No.20 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss	164.70	cum	14500.00	2336598.90	14187	2336598.9

	metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
3.1	Item No.21 Providing and laying cast in situ / ready mix M35 RCC for 1000 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	660.00	Rmt	11000.00	7102920.00	10762	7102920
3.2	Item No22 Providing and laying cast in situ / ready mix M40 RCC for 800 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc) Height10-15m	4350.40	Rmt	16500.00	70232857.60	16144	70232857.6
3.3	Item No23 Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the unserviceable materials as directed etc. complete.A) With Concrete Mixer iv) 1000 mm dia	569.40	RMT	2500.00	1392752.40	2446	1392752.4
3.4	Item No24 Providing, placing and driving in position 6mm thick permanent MS liner up to required depth with 12 mm thick MS cutting edge of 0.50 meter length of bottom including fabricating, cutting the MS sheet to required	735.93	MT	106000.00	76323300.30	103710	76323300.3

	diameter and shape, welding the joints and driving with the help of required machineries, all materials, labour and lift etc. complete. (Excluding steel reinforcement)						
3.5	Item No25 Chipping and dressing of the R.C.C. piles upto 0.60 meter including cleaning reinforcement and removal of dismantled materials upto a distance of 50 meter beyond the building area etc. for providing pile caps. (Excluding steel reinforcement)	229.00	Nos	700.00	156865.00	685	156865
3.6	Item No26 Providing and laying in situ M40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for PSC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	2358.00	Cum	12000.00	27685278.00	11741	27685278
3.7	Item No27 Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	141.92	cum	8500.00	1180206.72	8316	1180206.72
3.8	Item No28 Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	1161.51	MT	92000	104550999.6 3	90013	104551000
3.9	Item No29 Providing and fixing in position to the exact profile and prestressing the high tensile strands to specified ultimate strength, standard end anchorages,	86.03	MT	175000.00	14730056.60	171220	14730056.6

	cable ducts, grouting ducts after prestressing and bearing plates with wedges as per detailed drawings including necessary plant and machinery for prestressing etc. complete.						
4.0	Item No30 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete.	1976.37	cum	7000.00	13536158.13	6849	13536158.1
4.1	Item No31 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including racking out joints when plastering is to be done / striking joints when no plastering is to be done on inside watering and scaffolding etc.complete.	878.48	cum	7350.00	6317149.68	7191	6317149.68
4.2	Item No32 Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including raking out joints when plastering is to be done and striking joints when no plastering is to be done on the inside, watering scaffolding etc.complete.	135.65	cum	12000.00	1592666.65	11741	1592666.65
4.3	Item No33 Providing & fixing G.I. wire Gabions coated with Zinc+PVC of required size, section including boxes made of mechanically woven hexagonal shaped wire mesh of type, 10x12cm. edges mechanically selvedged made of heavily (Zinc+ PVC) coated G.I. wires as per BS: 443, mesh wire 3.00 mm Ø edge wire 3.9 mm Ø and filled with 20 to 50 kilogram weight trap stones including conveying with all the leads & lifts and placing at required places in required line, level, slope as per drawing, section as directed etc. complete under tidal conditions. a) Gabions of size – 1.00 x 1.00 x 1.00 M	4395.00	cum	4820.00	20726820.00	4716	20726820
4.4	Item No34 Providing 100mm diameter GI water spouts as per detailed drawings in RCC slab and wearing surface / kerb etc. complete.	340.00	Nos	2500.00	831640.00	2446	831640
4.5	Item No35 Providing and filling in the foundation with sand of approved quality including watering, compacting etc. complete. (To be executed with prior approval of Superintending Engineer)	1570.95	cum	2850.00	4379808.60	2788	4379808.6
4.6	Item No36 Providing and laying CE Marked Needle Punched and Mechanically Bonded Non-Woven Geotextile (TechGeo) indigenously manufactured from high quality polypropylene	4320.00	Sqm	180.00	760320.00	176	760320

	staple fibres (continuous filament will not be accepted) of Techfab India on the prepared subgrade for separation, drainage & filtration application with necessary overlaps as per drawing etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer. c) TFI TECHGEO PR-30						
4.7	<p>Item No37</p> <p>Supplying Hot Rolled steel sheet piles having properties described in respective specifications or/ and shown in drawings (Z or U type with sectional modulus of minimum 2500 cm³, steel grade S430 GP with minimum yield strength of 430 MPa, minimum thickness 12.0 mm thickness, with Larssen interlocks and applying recommended sealant for complete watertightness (if required) & using suitable corner sections as per site condition) .Installing the same to line and level including making reformed steel sheet piles at required positions as corners, junction, wedges etc. as per approved drawing and specification in single or group jointing by welding properly, installing vertically along the alignment with the help of equipments like air compressors,excavator mounted / crane mounted vibro hammers / Impact Hammers / Hydraulic Pressing Hammers / vibrating drives powered by electric or hydraulicmotor or combination of both based on the site requirements through thegrooves to interlock together, wedges to make up for the permissibledeviation of piles from the plumb lines caused during pile driving, slippedpiles with the adjacent ones are found or loosened or dislocated duringor after installation , sheet piles shall be pulled out and replaced withnew ones or redone including necessary modification to the sheet pile tosuit the grove of existing sheet piles , including cost and conveyance ofall materials, hire charges of equipments, hire charges of crane/rigs, costof electrodes, mobilisation and demobilisation charges, all labour, otherincidentals etc complete. (No extra payment shall be made for cost ofextraction and replacement for installing of sheet pile deviating thespecification or rejected by Engineer -in-charge. The rate is inclusive ofproviding guide frames, cost of installation pit, formation and removal ofearthen bund etc.). Payment shall be made on actual depth of sheet pileinstallation.</p>	420.00	Sqm	14050	5773740.00	13747	5773740
4.8	<p>Item No38</p> <p>Supplying Hot Rolled steel sheet piles having properties described in respective specifications or/ and shown in drawings (Z or U type with sectional modulus of minimum 2500 cm³, steel grade S430 GP with minimum yield strength of 430 MPa, minimum thickness 12.0 mm</p>	938.95	Sqm	16000.00	14698323.30	15654	14698323.3

	<p>thickness, with Larssen interlocks and applying recommended sealant for complete watertightness (if required) & using suitable corner sections as per site condition) .Installing the same to line and level including making reformed steel sheet piles at required positions as corners, junction, wedges etc. as per approved drawing and specification in single or group jointing by welding properly, installing vertically along the alignment with the help of equipments like air compressors,excavator mounted / crane mounted vibro hammers / Impact Hammers / Hydraulic Pressing Hammers / vibrating drives powered by electric or hydraulic motor or combination of both based on the site requirements through the grooves to interlock together, wedges to make up for the permissible deviation of piles from the plumb lines caused during pile driving, slipped piles with the adjacent ones are found or loosened or dislocated during or after installation , sheet piles shall be pulled out and replaced with new ones or redone including necessary modification to the sheet pile to suit the grove of existing sheet piles , including cost and conveyance of all materials, hire charges of equipments, hire charges of crane/rigs, cost of electrodes, mobilisation and demobilisation charges, all labour, other incidentals etc complete. (No extra payment shall be made for cost of extraction and replacement for installing of sheet pile deviating the specification or rejected by Engineer - in-charge. The rate is inclusive of providing guide frames, cost of installation pit, formation and removal of earthen bund etc.). Payment shall be made on actual depth of sheet pile installation.</p>						
4.9	<p>Item No39 Supplying, fabricating and installing in position waling channel I.S 226 / 2062 quality to sheet piles to correct line and level as per approved drawing and specification with required accessories such as plates, bolt & nuts etc.for connecting with sheet piles as well as for splicing the channels, welding the channel joints to achieve the properties of the section / welding of connecting plates etc including cost and conveyance of all materials, cost of drilling holes, hire charges of equipments, hire charges of crane, cost of electrodes, cost of fixing with bolts, nuts & washers, all labour, painting one coat of zinchromite primer after rubbingand cleaning the surface with mechanical wire brushing, sand paper,other incidentals etc complete.(Rate quoted shall includes supplying,fabricating, drilling holes and fixing waling channels to SSP only ,cost of accessories such as connecting plates,</p>	168.00	Sqm	1400.00	230160.00	1370	230160

	bolts & nuts etc).						
5.0	<p>Item No40</p> <p>Design and engineering, supply and fixing of tensile membrane of high tensile strength, primary and secondary steel, hardware and accessories, including the fabrication of steel structure made out of MS structural steel tubular section of high yield strength as per relevant IS codes. The tensile membrane roof cover shall be of PVC coated polyester composite membrane of approved make and quality including membrane cutting, seaming and HF welding as per manufacturer standards. The membrane shall be fixed to MS structural members with necessary SS plates, lugs, clamping plates as required. The membrane shall be stretched and tensioned as per the design approved. The Membrane shall be flame resistant, fungicide finish, high tear out force and continued tear out force, well weldable, good UV resistance, high water pressure resistance and very low maintenance.</p>	360.00	Sqm	7000.00	2465640.00	6849	2465640
5.1	<p>Item No41</p> <p>Design Conceptualisation & painting 3D artwork on any surface at all height and locations as directed .</p>	7704.00	Sqm	1000.00	7534512.00	978	7534512
5.2	<p>Item No42</p> <p>Providing and Installing water fountain of 3 M dia with below specification wall should be of brick wall of 0.45 m width and 0.9 m ht above ground and clad with granite tiles. Inner area with wall and flooring should be waterproofed inner area wall and flooring should be done with premium glass mosaic tiles. Electricals wire of 4 core 16 sqmm and submersible pump of 7 HP with all necessary fitting and control panel (Including Glow lighting) Main sculpture as shown in dwg in GRC and other small sculpture of any animal in GRC.Plumbing work with all necessary fittings of pipe and nozzle etc complete as directed by Engineer-In-Charge (With 5 Years of Maintenance)</p>	2.00	Each	2500000.00	4892000.00	2446000	4892000
5.3	<p>Item No43</p> <p>Supplying and laying of high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement made of high tenacity polyester core with polyethylene coating with Minimum Long Term Design Strength (LTDS) indicated below for 120 years design life at 20 degreeC. The LTDS should be strictly based on reliable test data and performance data available with the manufacturer from accredited independent agency certifying the Reduction Factor (RF) value for their geogrid for design temperature. The geogrid manufacturer should have creep test data from independent accredited laboratory for period over 5 years and should have minimum roll width of</p>	21600.00	Sqm	500.00	10562400.00	489	10562400

	4.5m with core of MS steel tube convenient for handling and lifting work as per detailed specification all complete as per directions of Engineer in charge. (Reference MoRT&H 3100 & IRC 113).High strength geogrid of Long Term Design Strength 59.5kN/m						
5.4	Item No44 Providing and casting in C.C. M-25 for pier protection as per detailed drawing complete as specified and directed	1176.00	Rmt	6000.00	6903120.00	5870	6903120
5.5	Item No45 Providing Autoclaved Aerated Concrete Block masonry of conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972)	415.30	Sqm	1000.00	406163.40	978	406163.4
5.6	Item No46 Providing waterproof plaster in W.C. and bath 20 mm thick for dado in CEMENTmortar 1:3 with neat finishing, floating using approved waterproofing compound of IS Std. at the rate of one kg per 50 kg of CEMENTetc. complete.Spec.As directed by Engineer-In-Charge.	527.40	Sqm	600	309583.80	587	309583.8
5.7	Item No47 Providing vee pointing with cement mortar 1:3 for stone /Brick masonry including scaffolding and curing etc. complete	4457.60	Sqm	200.00	873689.60	196	873689.6
5.8	Item No48 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	3051.78	Sqm	600.00	1791394.86	587	1791394.86
5.9	Item No49 Providing and applying laying Aggregate plaster in granite / marble stones, as decorative finish to give granite / marble like appearance to concrete, brick or block surfaces in all position including preparation of surface smoothly, evenly by racking of joints in case of Brick or block work including backing layer of 12 mm thick with cement mortar 1:3 with 2% integral cement water proofing compound, roughening for wall keying hardening and drying the surface for a minimum five days gaps including second coat of cement lime mortar into a proportion 1:4 preparing the surface for three coat of marble finish plaster giving a thin coat of white cement and two parts of course	589.05	Sqm	2500.00	1440816.30	2446	1440816.3

	calcite powder, applying the mortar with steel float on the surface in proper evenness applying at coat of white cement and lime to set a smooth finish then applying a thin coat of slurry made of white cement and black oxide colour in required proportion by the steel float to get black streaks on the surface and curing the surface for two days including all materials and labour etc. complete.						
6.0	Item No50 Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including leaning, preparing the plaster surface, applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE:ForItem Number 15 to 18 prior approval of Superintending Engineer will be necessary	182.40	Sqm	300.00	53625.60	294	53625.6
6.1	Item No51 Providing and applying two coats of protective membrane over the cured concrete surface like R.C.C. footings, columns, plinth beams etc. which will be submerged under soil so as to protect the same. Apply two pack coal tar epoxy system of Sunepoxy Coaltar of approved make & approved by Engineer in charge, having solid content ranges from 80-100%, Tack free time 4-6 hrs. Recoat after 16-24 hrs. Mix Part A and Part B of Sunepoxy Coaltar of approved make & approved by Engineer in charge in 1:1 ratio with slow speed stirrer and apply the same on a clean R.C.C. surface by brush. Allow to set for 8-10 hours and apply the second coat. The rate to include for application at all levels to various RCC elements to the satisfaction of the EIC etc. complete	15837.81	Sqm	325.00	5036423.58	318	5036423.58
6.2	Item No52 Providing and fixing fenders made from used tyres including fixing by stainless steel chain links of 8mm dia. and anchor bolts of 16 mm diameter etc. complete as per drawing and as directed under tidal range.	53.00	Nos	2600.00	134832.00	2544	134832
6.3	Item No53 Providing and fixing stainless steel mooring ring in cement concrete on deck of jetty consist of 32 mm thick steel bar, 225 mm inner diameter, steel ring with 75 mm inner diameter steel hook of 32 mm diameter as per approved drawing etc. complete. (Stainless steel of grade S-304)	12.00	Nos	11000.00	129144.00	10762	129144
6.4	Item No54 Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304)	5.00	Nos	19500.00	95395.00	19079	95395
6.5	Item No55 Providing and applying one coat of two component, anti-corrosive,	10620.27	Sqm	650	6754491.72	636	6754491.72

	solvent free, substituted long chain nylon reticulant based epoxy coating / primer. Cleaning the existing steel surface by mechanical means such as sand blasting, wire brushing and other mechanical means so as to remove all the existing loose rust etc. Apply the coats by brush or spray at 4-6 hours interval between each coat complete as directed by the Engineer in charge.						
6.6	Item No56 Providing and laying telephone black / Amba White / Cadburybrown / RBI red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing the sharp edges wherever necessary, curing, etc. complete. Specifications: Bd. M. 12 Spec. No.: As directed by Engineer-In- Charge	4.20	Sqm	4200.00	17257.80	4109	17257.8
6.7	Item No57 Providing and fixing solid core flush door shutter in single leaf 32 mm thick decorative type of exterior grade as per detailed drawings approved face veneers 3 mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, and finishing with French Polish etc. complete.	8.40	Sqm	7800.00	64108.80	7632	64108.8
6.8	Item No58 Providing and fixing fiber glass reinforced polyster door shutter 35 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fastening with chromium plated handles on both sides, etc complete. Spec.No. : As directed by Engineer In Charge	3.15	Sqm	3500.00	10785.60	3424	10785.6
6.9	Item No59 Providing and fixing in position anodised (as per IS 1868/1982) Aluminium fixed staggered (Z Type) Ventilator with aluminium rectangular pipe 63 mm x 38.10 mm x 1.22 mm at weight 0.650 Kilogram/One Running Metre, Aluminium angle of size 15 mm x 15 mm x 1 mm, aluminium channel of 9 mm sizes, S.S.mosquito net of 304 Grade, 4 mm thick float glass per detailed drawing and as directed by Engineer in charge etc.complete.	0.72	Sqm	4200.00	2958.48	4109	2958.48
7.0	Item No60 Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.	4284.00	Sqm	1500.00	6288912.00	1468	6288912
7.1	Item No61 Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of	182.40	Sqm	1350.00	240950.40	1321	240950.4

	approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.						
7.2	Item No62 Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown /RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with rounded moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete. Skirting Spec.No. : Bd. M.22 B/Page No. 390	146.66	Sqm	4200.00	602625.94	4109	602625.94
7.3	Item No63 Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer specifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	404.39	Sqm	750.00	296822.26	734	296822.26
7.4	Item No64 Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superintending	8444.00	Sqm	2450	20240268.00	2397	20240268
7.5	Item No65 Supply & Fixing of Full Body Vitrified Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	76.50	Sqm	3760.00	281443.50	3679	281443.5
7.6	Item No66 Providing 25 mm to 30 mm thick flooring of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3	1403.00	Sqm	1350.00	1853363.00	1321	1853363

	curing and cement etc. complete. a) One side polish						
7.7	Item No67 Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment) of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	252.45	Sqm	1200.00	296376.30	1174	296376.3
7.8	Item No68 Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	5687.00	Sqm	525.00	2923118.00	514	2923118
7.9	Item No69 CAST IN SITU SAFETY RUBBER FLOORING SYSTEM WITH including 20mm thick SBR Black Rubber Granule and 5MM colour EPDM granule absolute thickness =25mm .(as per drawing attached) etc. including VAT, tax complete. Manufacturers warranty is 5 years.	125.00	Sqm	4700.00	574750.00	4598	574750
8.0	Item No70 Providing and laying RED & BLACK GRANITE cobble stones of 100mm x 100mm x 100mm, 3 line dressing with 12 mm top layer in size of fine cut and well dressed in Grey colour in paving on a bed of min. 40 mm thick cushioning in C.M. 1:4 including neat cement float etc. filling of joints in C.M. 1:2 with grey cement to match the colour of cobble stone in the required pattern, design and as directed by the Engineer incharge, including cleaning, curing etc. complete.	95.00	Sqm	3760.00	349505.00	3679	349505
8.1	Item No71 Providing & fixing in position 20 +/- 2mm thick machine cut, mirror polished, 1st quality granite cladding such as black galaxy or approved equivalent in lift lobby / passage installed in approved pattern and design of size 600 x 1200mm and as directed including backing coat of 1:4 cement plaster of required thickness with stainless steel fasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with matching pigments. The rate to include all curing, polishing at all lift and levels. (Basic rate of granite is Rs.3600/-Sq.m.)	446.40	Sqm	4800.00	2096294.40	4696	2096294.4
8.2	Item No72 Accupressure Bed - Providing and fixing Natural Stone pebbles in 1:6 Cement mortar of natural sand of 50mm thick bed as required line, level,	45.00	Sqm	1850.00	81450.00	1810	81450

	shape and size as instructed by Engineer incharge. Item including color pigments, lead lift, curing, cutting, all material and labour with wastage etc. complete all						
8.3	Item No73 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	6154.02	Rmt	520	3132396.18	509	3132396.18
8.4	Item No74 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	605.07	Rmt	850.00	503418.24	832	503418.24
8.5	Item No75 Basalt stone Paving in cement Mortar - Providing and Laying Newasa Stone for paving and thread risers in cement mortar of 150 mm thick (Two line dressed stone 0.45x0.30x0.125 to 0.15 and not less than 0.30x0.30x0.15 Mtrs cut in shape and two adjacent sides to be dressed, from Newasa, Dist Ahmednagar) in plain/diamond pattern on a bed of 1:4 C.M. over 150mm thick cement concrete , and filling the gap in 1:2 Mortar etc, complete) STONE DRESSING IN TICHIV STYLE	1305.00	Sqm	6500.00	8299800.00	6360	8299800
8.6	Item No76 Newasa Basalt stone for wall 15 cm thick : Providing and fixing Newasa Basalt stone for wall 15 cm thick(Two line dressed stone of size 0.45x0.30x0.125 to 0.15 and not less than 0.30x0.30x0.15 Mtr, cut in shape and two adjacent sides to be dressed, from Newasa, Dist Ahmednagar) in 1:1 Cement mortar in super structure including striking joints and watering complete to the entire satisfaction of the architect (Ashlar Masonary in tichiv style)	582.72	Sqm	8000.00	4560949.44	7827	4560949.44
8.7	Item No77 Ashlars fine stone coping : Providing, supplying & fixing ashlar fine stone coping of size 320 mm long, 500 mm width & 150 mm thick in cement mortar 1:3 including pointing in Cement slurry, raking joints, curing, loading & unloading etc. complete. (Including Scaffolding)	142.60	Rmt	7000.00	976667.40	6849	976667.4
8.8	Item No78 Stamp Concrete of 100mm Thickness - Providing and Laying in-situ M30	3420.00	Sqm	1750.00	5855040.00	1712	5855040

	<p>Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand / VSI grade finely washed crushed sand)</p> <p>Confirming to IS 383, as per mixed in a batching and mixing plant / non tilting mixer and weigh batcher as per approved mix design, admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continous operation, finishing to lines and grades Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable,30 % solids clear sealer @ 150 to 250 gms per sqm using surface roller and protecting from falling dust,dirt and curring by curring compound / by providing cement vata in cement Mortor 1 :8 @ 0.6m x 0.6m center to center, admeasuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-incharge or Landscape architect etc. complete. (prior approval of superinteding Engineer will</p>						
8.9	<p>Item No79</p> <p>Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.</p>	7167.50	Sqm	825.00	5784172.50	807	5784172.5
9.0	<p>Item No80</p> <p>Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete.</p>	7167.50	Sqm	3760.00	26369232.50	3679	26369232.5
9.1	<p>Item No81</p> <p>Fixing 40 to 50mm thick Natural Shahabad Kerbing of 600 x 600mm with 75mm thk. in 1:3:6 P.C.C. bed, and filling joints with 1:3 cement mortar, including lead, lift within garden, cutting, curring, etc complet (excluding P.C.C.)</p>	92.40	Sqm	135.00	12196.80	132	12196.8
9.2	<p>Item No82</p> <p>WOODEN FINISH PAINTING OF EXISTING WOODEN FINISH TEXTURED SURFACE CEMENT CONCRETE BENCH including any</p>	826.90	Sqm	1650	1334616.60	1614	1334616.6

	material, machinery, scaffolding etc. complete. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including cement, Sand, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.						
9.3	<p>Item No83</p> <p>Providing,applying,fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and shade on top face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers,cleats,weather silicon sealent,backer rods etc .overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre)</p>	456.43	Sqm	4500.00	2009661.29	4403	2009661.29
9.4	<p>Item No84</p> <p>Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed design and drawings or as directed by Engineer-In-Charge., including cutting, fabricating, hoisting, erecting fixing in position, making riveted/bolted/welded connection and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. Spec. No.: Bd.C.8 Page No. 278</p>	249.67	MT	120000.00	29313255.36	117408	29313255.4
9.5	<p>Item No85</p> <p>Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross</p>	175.00	Rmt	3000.00	513625.00	2935	513625

	support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.						
9.6	Item No86 Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25 mm dia in three rows, all pipes of 2 mm thick including buffing, fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)	2856.22	Rmt	3850.00	10759380.74	3767	10759380.7
9.7	Item No87 Providing and fixing 50 mm. dia. medium class G.I. pipe gate with wicket gate of approved drawing with all fixtures and fittings in two leaves with strong hold fast embedded in c.c. block at top and bottom with locking arrangement including cutting, bending, making holes and with one coat of primer etc. complete.	239.40	Sqm	6500.00	1522584.00	6360	1522584
9.8	Item No88 Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/ One Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete.	249.48	Sqm	2500.00	610228.08	2446	610228.08
9.9	Item No89 Providing detailed geological reports of proposed site by maintaining geotechnical investigation of structure stratification collecting soil, rock and ground water samples for laboratory tests to arrive the foundation design parameters . Rock properties such as type of rock, jointing fractures, etc. complete with suggestion about the site foundation and remedies.	10.00	Sqm	36500.00	357120.00	35712	357120
10.0	Item No90 Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe (Rezan/ concentiDeleted ire 0.75 mm dia) with hot dip and G.I. coated hooks as per drawing supported on M.S. angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete.	1210.00	Rmt	1100.00	1301960.00	1076	1301960
10.1	Item No91 Providing and constructing Brick Masonry Inspection Chamber 60 cm x 45 cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channel shalf round G.S.W. pipes, Brick Masonry, plastering from inside and airtight 75mm thick R.C.C. cover medium duty 100Kilogrametc. complete.	12.00	Nos	10000	117408.00	9784	117408

10.2	Item No92 Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channel shaft round G.S.W.pipes,Brick Masonry,plastering from inside and airtight with 75 mm thick R.C.C. cover medium duty 140Kilogrametc. complete.	12.00	Nos	11000.00	129144.00	10762	129144
10.3	Item No93 Providing and constructing Ductile Iron circular manhole 45 cm dia. At top 90 cm at bottom up to 1.80 meter to 2.70 meter depth including excavation, laying 1:4:8 cement concrete bedding 15 cm thick burnt brick masonry with 1:1 cement mortar plaster 25 mm thick inside and outside 20 mm (1:3) ductile iron heavy type cover with ring 125Kilogram weight. High strength. More life and Durability, Good Antiskid Grip, Suitable to heavy theatric loading, Light weight casting after cost benefits for Transportation Refilling etc. as per requirement. with prior approval of concerned Superintending Engineer.	28.00	Nos	12000.00	328748.00	11741	328748
10.4	Item No94 Providing and laying salt glazed stone ware pipe of 100mm diameter including fittings such as bends, tees, single junction, double junction, laying, jointing including excavation and refilling trenches complete. BDV.-39 Page No.573	3.00	Rmt	400.00	1173.00	391	1173
10.5	Item No95 Providing and fixing 25mm dia screw down wheeled stop tap of steel with chromium plating of approved quality and make bearing ISI mark, including sockets uion nut complete. BDV 9 Pgno 555,	2.00	Nos	1500.00	2936.00	1468	2936
10.6	Item No96 Providing and fixing 15 cm rigid PVC Nahani trap including PVC grating ,bend,connectingpiece of UPVC pipe up to the outside face of wall ,making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Ex. Engr. is necessary before use)	4.00	Nos	650.00	2544.00	636	2544
10.7	Item No97 Providing and fixing white wash basin with half pedestal of size 515mmX615mmX460mm including pillar cock auto-closing system CP angular stop cock long thread of approved make continental including S.S. bottle trap of necessary pipe connection upto the outside face of the wall.	2.00	Nos	13000.00	25438.00	12719	25438
10.8	Item No98 Providing and fixing 450mm x 550mm size superior type Belgium mirror with 16mm dia. nickel plated towel rod etc. complete Spec. No.: As directed by Engineer in charge.	10.00	Nos	1000.00	9780.00	978	9780
10.9	Item No99 Providing and fixing Wall Mounted European type white glazed earthenware water closet pan with	2.00	Nos	13500.00	26416.00	13208	26416

	UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall 10 liter enameled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps ,20 mm dia.UPVC overflow pipe ,mosquito proof couplings G.I. chain and pulley,with water Jet and fitting including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)						
11.0	Item No100 Providing and fixing on walls/ ceiling/ floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	490.00	Rmt	350	167580.00	342	167580
11.1	Item No101 Providing and fixing on walls/ ceiling/ floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BD.V 5 page 551 and as directed by Engineer in charge	320.00	Rmt	400.00	125120.00	391	125120
11.2	Item No102 Providing and fixing on walls/ ceiling/ floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. BDV 5 page 551 and as directed by Engineer in charge	120.00	Rmt	450.00	52800.00	440	52800
11.3	Item No103 Providing and fixing on walls/ ceiling/ floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete.	631.00	Rmt	800.00	494073.00	783	494073
11.4	Item No104 Providing and laying in trenches 80 mm dia medium grade having embossed as ISI Mark galvanised iron pipes of 8.57 kg/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. B)Heavy Type Spec. No.: Bd.V.5 Page No. 551	750.00	Rmt	1250.00	917250.00	1223	917250
11.5	Item No105 Providing and laying in trenches 100 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 12.43 kg/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats complete. B)Heavy Type Spec. No.: Bd.V.5 Page No. 551	2040.00	Rmt	2000.00	3992280.00	1957	3992280
11.6	Item No106 Providing and laying concrete pipes of I.S.NP. class of 150mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	250.00	Rmt	525.00	128500.00	514	128500
11.7	Item No107 Providing and fixing P.V.C. Rain water pipes of 160mm outer diameter and having wall thickness of 2.2 to 2.7	20.00	Rmt	1500.00	29360.00	1468	29360

	mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent CEMENTand properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc.complete. (The contractor shall give 3 yrs guarantee bond for payment) Spec. No.: As directed by Engineer in charge						
11.8	Item No108 Providing and fixing 80 mm.dia. screw down wheeled stop tap of steel with chromium plating of approved quality and make bearing I.S.I. mark, including sockets, union nut complete.	20.00	Nos	4300.00	84140.00	4207	84140
11.9	Item No109 Providing and fixing 100 mm dia. Chromium plated brass showers rose to 15 mm dia. Supply pipe including necessary bend and socket complete.	20.00	Nos	550	10760.00	538	10760
12.0	Item No110 Providing and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock. [Without chamber].	29.00	Nos	40000.00	1134944.00	39136	1134944
12.1	Item No111 Providing and fixing C.P. Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete.	4.00	Nos	1600.00	6260.00	1565	6260
12.2	Item No112 Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	29.00	Nos	1200.00	34046.00	1174	34046
12.3	Item No113 Providing and fixing C.P. pillar cock long neck with aerator of approed make including necessary sockets/union nut etc. complete.	2.00	Nos	1750.00	3424.00	1712	3424
12.4	Item No114 Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super jet spray with flange 2 in 1 faucet 1.50 metre long including all accessories etc complete	2.00	Nos	1100.00	2152.00	1076	2152
12.5	Item No115 Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete.	2.00	Nos	350.00	684.00	342	684
12.6	Item No116 Providing and fixing C.P. wall mixer with provision for overhead shower with 115 mm long bend pipe and wall flange of approved make including necessary sockets/ unionnut etc.complete.	2.00	Nos	4850.00	9490.00	4745	9490

12.7	Item No117 Providing and fixing H.D.P container Syntex or alike one piece moulded water tank made out of low density polythylar and built corrugation including of delivery up to destination hoisting and fixing of accessories such as inlet, outlet overflow of all tanks capacity above 1000 to 20,000 litres Spec. No.: As directed by engineer-in-charge.	11000.00	Ltr	10.50	110000.00	10	110000
12.8	Item No118 Providing and fixing machine cut mirror polished 18 mm to 20 mm thick telephone black granite/ Amba White/ Catbarybrown /RBIred /OceanBrown granite stone partition with full moulding the edges etc. complete . Both side polish	6.00	Sqm	3760	22074.00	3679	22074
12.9	Item No119 Providing and fixing White Glazed Earthenware full stall type Urinal with P.V.C. flushing cistern of 5 liters capacity with fitting, inlet pipes and stop tap, brackets for fixing the cistern, 32 mm dia. P.V.C flush pipe with fittings and flushing arrangement including lead soil pipe, lead trap, soil pipe connection up to the outside face of the wall	2.00	Nos	10500.00	20546.00	10273	20546
13.0	Item No120 Providing and fixing reinforced cement concrete cover of size 90cmx 45cm with frame over inspection chamber etc. complete. Medium duty (140 Kilogram)	112.00	Nos	5200.00	569856.00	5088	569856
13.1	Item No121 Providing and Supplying Biodigester Tank as per the specification and guideline set by DRDO for tank of 2 cum capacity having FRP tank with two baffle plates. Total 3 compartments with inlet and out let connections Recharged with 400 Liter inoculums and inbuilt with immobilization Matrix. Thickness of tank should be 3mm, Partition 3 with metal reinforcement, with initiating and supervising the operation of the tank and transport upto work site etc complete.	2.00	Nos	135000.00	264168.00	132084	264168
13.2	Item No122 Garden Soil :- Supplying on site garden soil well sieved 90% to pass through I.S. sieve of 10mm size free from stones, rubbish like dried grass roots and other such materials. The soil should be fresh from quarry. The color of the soil generally is red. The soil will be measured by measuring box. (Farma) Item includes royalty charges, octroi, corporation tax, Transporting, loading-unloading etc. (Lead charges per 90km are considered.)	1951.66	Cum	1650.00	3149979.24	1614	3149979.24
13.3	Item No123 Farm Yard Manure :- Supplying on site well-decayed, well-dried, well-powdered, without clods and free from stones, dried grass and other rubbish material. The color of the soil generally is black. The manure will be measured by measuring box. (Farma). Item includes Transporting, loading-	650.55	Cum	1650.00	1049987.70	1614	1049987.7

	unloading etc. (Lead charges per 50km are considered)						
13.4	Item No124 Preparing instant Lawn:- Excavating the ground to a required depth of 20cms, removing & conveying unwanted stuff to a required distance as directed. providing and Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 20cms.Mixing garden soil and manure thoroughly well, levelling, watering on previous night. Planting required variety of lawn grass as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	1773.34	Sqm	850.00	1475418.88	832	1475418.88
13.5	Item No125 Preparing Lawn (30 Cm depth):- Excavating the ground to a required depth of 30cms, removing & conveying unwanted stuff to a required distance as directed. providing and Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 30cms.Mixing garden soil and manure thoroughly well, levelling, watering on previous night. Planting required variety of lawn grass as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	1290.34	Sqm	950.00	1198725.86	929	1198725.86
13.6	Item No126 Preparing Shrubbery:- Excavating the ground to required depth of 30cms, removing and conveying unwanted stuff to a required distance as directed. providing and Filling fresh garden soil & manure in excavated area in 3:1 proportion to a height of 30cms. Mixing garden soil and manure thoroughly well, levelling, watering, on previous night. Planting well-rooted shrubs 0.5 Mtrs.apart as directed and maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	2250.86	Sqm	725.00	1595859.74	709	1595859.74
13.7	Item No127 Planting large flowering/Shady trees:- (Minimum Height to 1-2 Mtr.)Digging pit with size 0.6 m × 0.6 m × 0.6 m Removing & conveying unwanted stuff to a required distance as directed. providing and Filling the pit with approved excavated material up to a hight of 0.30 m. and remaining height of 0.60 m. with fresh garden soil & manure in in 3:1 proportion. Mixing soil and manure thoroughly well, leveling, as directed, watering previous night. Planting two or three year old,minimum 2.0 mtr. mtr. hight, healthy tree sapling as per specifications. Maintaining till 30 days by watering, weeding, clipping, rolling etc. complete.	262.00	Nos	900	230822.00	881	230822
13.8	Item No128 Providing and Fixing , Installation of Drip and Sprinkler Irrigation system in gardens having area above 3000 Sq. Mtr. Incudes drips, Sprinkler, Filters, Pipes with 3 year warranty . Excluding Pumping Unit	3907.85	Sqm	350.00	1336484.70	342	1336484.7

13.9	Item No129 Providing and fixing Animal Mgr with all fitting as approved with Engineer-In-Charge	4.00	Nos	75000.00	293520.00	73380	293520
14.0	Item No130 3 IN 1 (AERIAL STROLLER + SURF BOARD + SHOULDER TWIRL)	8.00	Nos	250000.00	1956800.00	244600	1956800
14.1	Item No131 Providing and fixing Multi Seater See Saw with all fitting as approved with Engineer-In-Charge	4.00	Nos	50000.00	195680.00	48920	195680
14.2	Item No132 Providing toilet of 4 units of 0.9*1.2M size of 1 unit with all necessary fittings such WC Wash basin overhead tank of 1000 ltr for each Type of WC : European with ceramic base , Water facility : By mean of overhead tank, Electric provisionBy mean of connection from main line, Bottom frame material: 35mm X 35mm X 5mm(thick) MS angle for one seater, Bottom frame support material : 25mm X 25mm X 3mm(thick) MS angle, Side & Top Roof panel frame material : 35mm X 35mm X 5mm(thick) MS angle, Top(roof) support frame structure : 25mm X 25mm X 3mm(thick) MS angle, Ventilation frame material: 25mm X 25mm X 3mm(thick) flat MS, Door frame material: 35 mm x 35 mm x 5 mm (thick) MS ANGLE, Support material for Door panel fixing: Aluminium U-channel of 18gauge, Door hinges(two numbers): 75mm size with 1.2-1.5mm thickness MS, Tank holder frame material: 25mm X 3mm(thick) MS flat, Unit understructure Supported by 4-legs of size 35mm X 35mm X 5mm MS angle with corner support of 25mm x 25mm X 3mm MS angle for 1-seater, Door Tee material: 40mm X 40mm x40mm X 5mm(thick) MS Tee,	6.00	Nos	1150000.00	6750960.00	1125160	6750960
14.3	Item No133 Providing Unbranded Steel Porta Cabin consist of With one Room of size 3050 mm x 2440 mm x 2590 mm ht having following specifications. 1) PUF Wall Panel – Panel made up of micro ribbing Pre-Painted Galvanized Iron Sheet on both sides(have tongue groove arrangement) and 50mm thick composite PUF sandwich between Pre-Painted Galvanized Iron Sheet 2) Flush door 32 mm thick water proof. 3)Window-Powder coated aluminium sliding windows with 4 mm tinted Glass 4)Flooring- 15 mm heavy duty cement fiber board inside and outside texture paint. 5)Roofing -The PUF insulated Ceiling panels. The covering on ceiling panels shall be micro riving Pre-coated galvanized iron sheet and Self draining Type Roof shall be provided with water proof covering. 6) general electrical- Provision for 3 nos. tube light (18 Watt LED light) - 2	2.00	Nos	100000.00	195680.00	97840	195680

	nos. wall mounted ceiling fan (300 mm) - 3 nos. plug and socket (3 pin 5 amps electric plug socket)- 1 no main input socket (32 Amp heavy duty 3 pin power socket with MCB)- split AC (1.5 T) provision						
14.4	Item No134 Providing, hoisting and fixing at all level precast or reinforced cement concrete gazebo with all elements like roofing, string courses, bands, copings, columns, pillars beams, plinth beams, railings, benches, flooring, foundations including architectural design, moulding, arches, shapes, and applying proper texture and painting coats to suit a particular asthetic element (trunk of trees, shapes of animals, birds, timber benching, any element or structure representing culture or tradition) the cost of required centering, shuttering and reinforcement, of M25 grade and fibrous material, etc complete as per the instructions of Architect or Engineer-incharge.(Refer sketch 3)	133.05	Sqm	65500.00	8526509.25	64085	8526509.25
14.5	Item No135 Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	9533.85	Cum	180.00	1677957.60	176	1677957.6
14.6	Item No136 Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading I (Using Screening Type B (11.2 mm) Aggregate)	4949.00	Cum	3850	18642883.00	3767	18642883
14.7	Item No137 Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading II (Using Screening Type B (11.2 mm) Aggregate)	1871.00	Cum	3850.00	7048057.00	3767	7048057
14.8	Item No138 Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone metal layers 30% crusher broken metal + 70% Hand broken (by breaking rubble obtained by blasting) heating and	18710.00	Sqm	350.00	6398820.00	342	6398820

	spraying the bitumen of specified grade @ 2 Kg/sqm, spreading 12 mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface. (VG-30 bulk bitumen rates are considered to arrive at rates)						
14.9	Item No139 Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen set footed in bitumen boiler on B.T. surface 2.5 kg/10 sqm.(VG-30 bulk bitumen rates are considered to arrive at rates)	37420.00	Sqm	20.00	748400.00	20	748400
15.0	Item No140 BITUMINOUS MACADAM: Providing and laying bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 80/100 mm compacted thickness with 3.3 % using specified grade of Bitumen. -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, vibratory roller.(VG-30 bulk bitumen rates are considered to arrive at rates)	1403.25	Cum	9200.00	12630653.25	9001	12630653.3
15.1	Item No141 Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen with sprayer on Dry / Hungry B.T. surface 3 kg/10 sqm. (VG-30 bulk bitumen rates are considered to arrive at rates)	18710.00	Sqm	20.00	374200.00	20	374200
15.2	Item No142 BITUMINOUS CONCRETE:-- Providing and laying bituminous concrete using crushed aggregate of grading 1, premixed with bituminous binder @5.40% by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 50mm compacted thickness with drum mix plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen of specified grade with stone dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)	1341.00	Cum	12100.00	15876099.00	11839	15876099
15.3	Item No143 Road Marking with Hot Applied Thermoplastic Compound with ReflectORIZING Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is	605.07	Sqm	450.00	266230.80	440	266230.8

	exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete.						
15.4	<p>Item No144</p> <p>Nameplate (3D acrylic hollow blocks with LED)</p> <p>S.I.T.C. of Nameplate stating in Devnagri/English font in the desired style as per specifications. The total assembly letters made of frosted acrylic sheets cut and glued together to achieve the hollow letters as per approved design with provision for electrical supply for white/warm white LED lights of required wattage that will be lit from inside the blocks for illumination in the night. The whole assembly shall be rested/fixed with all necessary fittings and cleaning etc. complete as directed by the Engineer-in-charge.</p>	38.75	Sqm	30000.00	1137390.00	29352	1137390
15.5	<p>Item No145</p> <p>Providing and fixing informatory sign boards in rectangular shape of size 1.20m x 0.90m madeout of 16 guage Aluminum panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border &messages in IRC Specified colour background including M. S. angle iron frame of size 35 mm X 35 mm X 3mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil painthaving alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum Panel TypeIV High Intensity</p>	19.00	Nos	13500	250952.00	13208	250952
15.6	<p>Item No146</p> <p>Providing and fixing sign boards of size size 60 x 80 cm made out of 14 gauge M.S.Sheet with retro reflective sheeting of Engineering Grade as per M.O.T. specification No. 801-3(1993) white reflective back ground, lettering symbol bordering of black non reflective paint including 3.65 metre long M.S.angle one post of 65 x 65 x 6 mm size duly painted with white and black bands including fixing the boards of M.S. angle with galvanised nuts and bolts and washer. The Board shall be as per IRC-67-1977 including conveying fixing in ground with C.C. 1:4:8 block of size 0.60 x 0.60 x 0.75 m, with 7 year guarantee for the sheeting etc. complete. Mild Steel Board with Engineering Grade.</p>	21.00	Nos	10000.00	205464.00	9784	205464
15.7	<p>Item No147</p> <p>Providing and fixing board displaying information, such as "Name of work, Tender cost, Name of Contractor, Work completion and liability period</p>	2.16	Sqm	15000.00	31700.16	14676	31700.16

	etc", having rectangular shape of 1.20m x 0.90m size made up of 4 mm aluminum composite pannel sheet with 0.5 mm skin thickness on either side bonded with white retro reflective sheeting of Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive adhesive. Retro reflective sheeting with specified background, border and back side retro reflective symbols, letters, numerals, arrow as per IRC: 67-2012 Table No 8.3, on M.S.angle of size 35 x 35 x 3 mm frame with properly cross braced M.S. angles of size 35mmx35mmx3mm duly painted including Two M.S. angle iron posts of size 65 mm x 65 mm x 6 mm, 3.65 m long painted with alternate black and white bands of 25 cm width including all fixtures etc.and fixing the boards in 1:4:8 concrete block of size 60 cm x 60 cm x 75 cm including, excavation, refilling, transportation, and labour etc complete. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have 7 years written warranty from the manufacturer including the Digitally Printed areas with Latex printing technology with sheeting manufacturer approved inks and laminated with UV overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.						
15.8	Item No148 Providing & fixing BENCH IN CEMENT MORTOR/CONCRETE WITH WOODEN FINISHING ON ALL EXTERNAL SURFACE. Bench should have min. 2.1m to max. length 2.4m with 0.45m wide seat & 0.40m high back for resting. beach should have 2 to 3 supports/Legs as per requirement from ground in 1:1.5:3 ratio Concrete with 4 bar 12mm as a main & distribution 8mm Tor steel at 150mm c/c. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including Cement, Sand, Aggregate, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, excavation, pcc, tor steel etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	60.00	Rmt	12500.00	733800.00	12230	733800
15.9	Item No149 Providing and fixing Garden Bench with Arm with all fitting as approved with Engineer-In-Charge	10.00	Nos	15000.00	146760.00	14676	146760
16.0	Item No150 Ss Dust Bin (Refer sketch 10) Product area:0.76Sqm, Capacity in ltrs: 42.0 ltrs, Product height:0.92m	80.00	Nos	14500.00	1134960.00	14187	1134960

16.1	<p>Item No151</p> <p>Providing and fixing of retro-reflectorised inforatory sign board rectangular/Square in shape having area greater than 0.9 One Square Meterr made out of 4 mm aluminum composite panel bonded with 0.5 mm skin thickness on either side with white retro reflective sheeting of Class C (Type XI Type XI Micro prismatic grade sheeting) having pressure sensitive adhesive retorefective specified back ground, border and back side retorefective symbols, letters, numerals, arrow including Art Work complete as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two no. mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt ~ 3.9 mtlong firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including fixures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. ClassC (Type XI Type XI Micro prismatic grade sheeting) sheeting shall have 10 years written warranty from the manufacturer including the Digitally Printed areas with Latex printing technology with sheeting manufacturer approved inks and laminated with UV overlay film and this warranty certificate along with sheeting manufacturer attested 3 years outdoor weathering test report from Indian govt lab must be submitted to the Engineer in charge by the contractor/supplier.</p>	217.00	Sqm	16500.00	3503248.00	16144	3503248
16.2	<p>Item No152</p> <p>Providing and laying of compression seal joint consisting of steel armoured nosing at two edges of the joint gap suitably anchored to the deck concrete and a preformed chloroprene elastomer or closed cell foam joint sealer compressed and fixed into the joint gap with special adhesive binder to cater for a horizontal movement upto 40 mm and vertical movement of 3 mm etc. complete</p>	8.00	Rmt	4850.00	37960.00	4745	37960
16.3	<p>Item No153</p> <p>Providing and laying of a strip seal expansion joint catering to maximum horizontal movement upto 70 mm to be installed by the manufacturer / supplier to their authorized representative ensuring compliance to the manufacturers instruction for installation as per approved drawings and standard specifications etc. complete.</p>	616.00	Rmt	12000.00	7232456.00	11741	7232456

16.4	Item No154 Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	82.50	Cum	13000	1049317.50	12719	1049317.5
16.5	Item No155 Painting Line, Dashes, Arrows etc on Roads in two coats on new work with ready mixed road marking paint confirming to I.S. 164 on Bituminous surface including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control (Over/Upto __ cm wide) (MORTH-803) --____ Surface Over 10cm Wide On New Surface	40.00	Sqm	230.00	9000.00	225	9000
16.6	Item No156 Providing and fixing neoprene bearing as per detailed drawings etc. complete.	28000.00	CuCm	3.00	84000.00	3	84000
16.7	Item No157 Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia over burden (by diamond drilling machine) such as soil of all sorts, soft murum,hard murum and boulders and in soft rock including all materials such as casing pipes and accessories oil,grease, steel, rods, and such other materials as required (including conveying the material to site of work) . Preserving the loose sample in glass jar and core sample serially on site ofwork and conveying the same to HQ of concernring office as directed. R.A.for 10.00 Rmt a) over burden 0 to 50 meter.	40.00	Rmt	2500.00	97840.00	2446	97840
16.8	Item No158 Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil,grease,steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concernring office as directed. Quartzite with diamond drill with Nx Bit 0 to 50 metre	37.50	Rmt	6500.00	238500.00	6360	238500
16.9	Item No159 Carrying out low strain pile integrity test on 900 mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile (installation of pile shall be paid seperately as per releventitems)all complete as per specification and as directed by the engineer-in-charge	229.00	Nos	4200.00	940961.00	4109	940961
17.0	Item No160 Conducting Initial Load Test (Compression) up to maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with IS 2911 part-4 including preparation of pile head for testing, necessary excavation, jacks,	5.00	Nos	700000.00	3424400.00	684880	3424400

	kentledge, accessories, measuring devices, recording of results, labour, submission of test report etc. complete, but excluding the cost of installation of pile (insallation of pile shall be paid seperately) etc.all complete as per the specification, drawing and as directed by the Engineer in charge for the following for vertical compression test by cyclic load method						
17.1	Item No161 Mobilisaton of Project , setting of pile points, Pile driving System using end on the Gantry system with required no. of Gantry Platforms & shifing of Gantry Platforms from on position to another, etc complete as per direction of Engineer.....etc complete	1.00	Nos	3000000.00	2935200.00	2935200	2935200
17.2	Item No162 Supplying, fitting and fixing in position true to line and level sliding plate bearing with stainless steel plate sliding on stainless steel plate with mild steel matrix including all accessories as per drawings and technical	4.92	MT	350.00	1682.64	342	1682.64
17.3	Item No163 Supplying, fitting and fixing in position true to line and level forged steel rocker bearing including all accessories as per drawings and technical specifications conforming to IRC:83 (Pt-1) section IX and clause 2003 of MoRTH specifications etc. complete.	3.28	MT	350	1121.76	342	1121.76
17.4	Item No164 Providing and laying in situ cement concrete M30 with tremix treatment for 200 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete.	2633.73	Sqm	2500.00	6442103.58	2446	6442103.58
17.5	Item No165 Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Accoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The	981.99	Sqm	7840.00	7532845.29	7671	7532845.29

	Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.						
17.6	<p>Item No166 Design Supply and Installation of the Mangroves Trail Walk of Section 20 Meter Length and 2.5 Meter Wide as per the Details and Specification of Project Information Memorandum (PIM) attached.</p> <p>Technical Specification :</p> <ul style="list-style-type: none"> • The mangrove trail should be 2.5m wide and should be made in sustainable method. To avoid harm to the environment/ ecosystem. • The all components should be made in wood/ substitute to wood, but the metal too avoids rusting of the members. • Piles are proposed to be in Jambha (Botincial Name: Xylia xylocarpa) wood which should be designed to take the axial load upto 2000 Kg Per pile. These Piles should be drilled in the mud/ marshy land at 2 Meter c/c and then should be made ready to receive the primary beams on them. • Primary beams should be made in first class teak wood/similar quality substitute. The primary beams do run along the trail, and do support the trail deck which should be designed for live load of 500 kg/sqm. • Secondary beams are then rested on primary beam perpendicular to the primary beam are to be made of the Nature fibre Composite Material/ similar quality substitute. These secondary beams support keels in made from secondary Nature fibre Composite Material which then support floor finish. • Floor finish should be made to take wear & tear of the people movement, giving appropriate friction in all the seasons and should be long lasting with minimal maintenance. These floor boards can be made in Nature fibre Composite Material). Designing load of 500 kg/sqm should be considered. • Handrails and brackets supporting them should be made in Nature fibre Composite Material / similar quality substitute. • All of these components should be strictly fixed with nut bolt system made up from high grade stainless steel nut bolts only. 	36.00	Per 20 Meter Length	3792700.00	133588008.00	3710778	133588008
17.7	<p>Item No167 Supplying, installing, testing & commissioning 3 phase, 11/0.433 kV, 50 Hz., 400 kVA, Mineral oil immersed and naturally cooled outdoor type, Copper wound Non-sealed transformer delta/star connected with additional neutral brought out on load side, temperature rise should not exceed 45°C by thermometer in oil and 50°C by the resistance method in winding at full</p>	1.00	Each	1118640.60	1094478.00	1094478	1094478

	load rating, using type A winding insulation (kraft paper) with HV tapping (with off load tap changer) off load +5 to -10 in steps of 2.5%, having 7 number of tap positions with standard accessories complete with test certificate with losses below 1225 Watts at 50% load, 3450 Watts at 100% load as per IS:1180 (part 1) : 2014 with necessary permissions of Electrical Inspector, as per specification no SS- TRNSL.						
17.8	Item No168 Making transformer plinth (1.5 x 1.5 x 1.5) m in size with necessary excavation in ground with 150 mm. thick M- 10 PCC at the bottom and top and 250 mm. thick, burnt brick wall constructed at periphery and remaining hollow portion shall be filled with 40mm hard broken aggregate. External surface duly plastered by 12 mm thick including watering etc complete.	4.00	Each	15730.00	61560.00	15390	61560
17.9	Item No169 Supplying and erecting triple pole mini feeder pillar with 500V, 300A FPMCCB as incomer and 3 outgoing circuits with HRC fuse base and cartridge of 100A with aluminium bus bar erected in 14 SWG CRCA sheet box with supporting angles, self locks, gasket having IP54,IK10 protection and slanting top to be erected on provided foundation as per specification no. SW-SWR/MFP	5.00	Each	60880.00	297825.00	59565	297825
18.0	Item No170 Supplying & erecting single phase, 240V, street light control panel up to the max load of 12kW, SPN MCB 63A, powder coated CRCA 14 SWG sheet, outdoor type, having IP54,IK10 protection, suitable rating contactor, 24 hrs. astronomical time switch with minimum 5 years battery back up, auto/manual selector switch, ON/OFF push buttons, indicator lamps, controlwiring, metering device, etc. for automatic operation & overcurrent, short circuit,earth fault protection on provided iron frame /	2.00	Each	26840.00	52520.00	26260	52520
18.1	Item No171 Supplying & erecting three phase, 415V, street light control panel up to the max load of 6kW, TPN MCB 40A, powder coated CRCA 14 SWG sheet, outdoor type, having IP54,IK10 protection, suitable rating contactor, 24 hrs. astronomical time switch with minimum 5 years battery back up, auto/manual selector switch, ON/OFF push buttons, indicator lamps, control wiring, metering device, etc. for automatic operation, with overcurrent, shortcircuit, earth fault protection on provided iron frame / CC foundation.	1.00	Each	25010.00	24470.00	24470	24470
18.2	Item No172 Supplying, erecting & marking SPMCB 6A to 32A, C-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	450.00	Each	190	83700.00	186	83700

18.3	Item No173 Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW- SWR/MCB	200.00	Each	190.00	37200.00	186	37200
18.4	Item No174 Supplying, erecting & marking FPMCB 6A to 32A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	50.00	Each	1165.00	57000.00	1140	57000
18.5	Item No175 Supplying, erecting and marking triple pole isolators only switch version of miniature circuit breaker of 40A with required wiring connections and lugs etc. in provided distribution board.	5.00	Each	665.00	3255.00	651	3255
18.6	Item No176 Supplying, erecting and marking four pole isolators only switch version of miniature circuit breakers of 63A in provided distribution board.	5.00	Each	805.00	3940.00	788	3940
18.7	Item No177 Supplying, fixing and commissioning MCB type change over switch 2 pole, 40 A with 3 positions (I-O-II) with centre off position as per specification no. SWSWR/MCBCOS	100.00	Each	1790.00	175100.00	1751	175100
18.8	Item No178 Supplying & erecting triple pole and neutral distribution board (TPNDB), SPMCB of 12 ways /phase (36 poles), with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB	10.00	Each	5070.00	49600.00	4960	49600
18.9	Item No179 Providing & erecting 3 Pole MCCB 415V, 250A, rated short-circuit breaking capacity 36 kA (Ics=100% of Icu) adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-WR/MCCB	50.00	Each	15575.00	761950.00	15239	761950
19.0	Item No180 Supplying, erecting & commissioning 4 pole RCCB 63A, electromagnetic type with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no. SW- RCCB/RCCB	50.00	Each	3215.00	157300.00	3146	157300
19.1	Item No181 Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/ trunking/ inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	250.00	Rmt	100	24500.00	98	24500
19.2	Item No182 Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 16 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or	1435.00	Rmt	235.00	330050.00	230	330050

	laid in provided trench/ pipe as per specification no. CB-LT/AL						
19.3	Item No183 Supplying and erecting mains with 2x1.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW	500.00	Rmt	45.00	22000.00	44	22000
19.4	Item No184 Supplying and erecting mains with 2x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	200.00	Rmt	70.00	13600.00	68	13600
19.5	Item No185 Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit /trunking /inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	900.00	Rmt	100.00	88200.00	98	88200
19.6	Item No186 Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 95 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/A	750.00	Rmt	730.00	535500.00	714	535500
19.7	Item No187 Supplying and erecting shockproof 3 pin plug socket 6A with porcelain base / flush type erected on filled polypropylene board or polished thick varnished double wooden block / folded or screwed board with top of either wooden / 3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick laminate with S M screws and duly connected	200.00	Each	50.00	9800.00	49	9800
19.8	Item No188 Supplying and erecting shockproof 3 pin plug socket 16A with porcelain base/ flush type erected on filled polypropylene (IS:14772-2000) board or polished thick varnished double wooden block / folded or screwed board with top of either wooden/3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick laminate with S M screws and duly connected.	50.00	Each	65.00	3200.00	64	3200
19.9	Item No189 Supplying and erecting modular type switch 16A duly erected on provided plate and box with wiring connections complete.	20.00	Each	116.00	2260.00	113	2260
20.0	Item No190 Supplying and erecting HMS PVC conduit FRLS grade 20 mm dia. With PVC accessories on wall / ceiling as per specification No: WG-MA/CON.	100.00	Rmt	90	8800.00	88	8800
20.1	Item No191 Supplying and erecting unbreakable concealed type modular switch box with double mounting plate for 16 / 18 module duly erected flush to wall with required chiselling and finishing with cement mortar / POP as per required to match the background.	50.00	Each	635.00	31050.00	621	31050

20.2	Item No192 Point wiring in for light/fan/bell in 20 mm metal conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, flush type switch, earthing and required accessories as per specification No: WG-PW/SW	200.00	Each	940.00	184000.00	920	184000
20.3	Item No193 Supplying and erecting energy saving ceiling fan 230 V A.C. 50 cycles 1200 mm complete erected in position as per specification no. FG-FN/CF	2.00	Each	2635.00	5156.00	2578	5156
20.4	Item No194 Supplying and erecting condenser 2.5 micro farad for ceiling fan.	2.00	Each	75.00	146.00	73	146
20.5	Item No195 Supplying and erecting electronic type step regulator for ceiling fan 600/ 900/ 1200/ 1400 mm. sweep, complete erected on provided switch board..	2.00	Each	295.00	578.00	289	578
20.6	Item No196 Supplying and erecting fan hook box of 10 mm M.S. round bar bounded to the R.C.C. bars upto 50 mm length each side and pierced through a 16 S.W.G. thick aluminium/M.S. Bowl 100 mm dia.or equivalent square size and having depth upto 75 mm complete erected with duly painted by one coat of red oxide paint and two coats of paint erected in position and without any leakage of slurry of cement concrete on either side of the box and positioned to the bottom level of the slab.	2.00	Each	225.00	440.00	220	440
20.7	Item No197 Supplying and erecting 20mm dia. corrugated flexible polypropylene conduit	25.00	Rmt	18.00	450.00	18	450
20.8	Item No198 Supplying and erecting fresh air cum exhaust fan of light duty 250 V A.C. 50 cycles 300mm. 1400 RPM rust proof body & blades, wire mesh, duly erected, complete.	2.00	Each	1740.00	3404.00	1702	3404
20.9	Item No199 Supplying & erecting ready to use Retrofit T8 LED 18 / 20 tube light with polycarbonate body, heat sink, integrated HF electronic driver complete & compatible to T8 / T12 LED luminaire by disconnecting starter & ballast if necessary.	25.00	Each	690	16875.00	675	16875
21.0	Item No200 Supplying & erecting 10-12W, 230V integral type LED Lamp suitable for B-22 / E-27 base.	5.00	Each	255.00	1245.00	249	1245
21.1	Item No201 Supply, Installation, Testing and commissioning of maintenance free earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron molecular copper bonded earthing rod of Length 3m along with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete. Specification no. EA-MOBI	25.00	Each	15185.00	371425.00	14857	371425

21.2	Item No202 Making trench in soft soil having 0.75 m depth and minimum 0.3 m width for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-EXN-CTR	1670.00	Rmt	175.00	285570.00	171	285570
21.3	Item No203 Supplying & erecting integral post top lantern fixtures (mushroom type) suitable for LED lamp upto 12 W consisting of clear acrylic top cover, cast aluminium pole cap complete with accessories on provided pole /bracket as per specification no. FG-ODF/PTL	100.00	Each	2415.00	236300.00	2363	236300
21.4	Item No204 Supplying & erecting integral post top lantern fixtures (globe type) suitable for LED lamp upto 12 W consisting of aesthetic round clear acrylic top cover, cast aluminium pole cap on provided pole /bracket as per specification no. FGODF/PTL	60.00	Each	1835.00	107700.00	1795	107700
21.5	Item No205 Making cement concrete foundation including excavation (45 x 45x 120) cm deep in 1:3:6 cement concrete, 20 to 25 mm stone metal, m(45 x 45 x 45) cm / 45 cm dia. x 45 cm height plinth duly plastered, with necessary curing and finishing complete.	273.00	Each	50.00	13377.00	49	13377
21.6	Item No206 40W/60W LED Decorative Tower Light with color Blue /WW /CW 7.5Mtr. with Include Pole/Bolt /Nut/Template with LED Driver	273.00	Each	62000.00	16560453.00	60661	16560453
21.7	Item No207 Supplying and erecting integrated LED flood light fitting Max. 30W IP65 & IK07 class having pressure die-cast aluminium housing, having system lumens output of Min. 3000 Lumens, min. efficacy of 100 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-270V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L70B50, including driver with U shaped bracket with 3 Years warranty as per specification No FG-ODF/FLS2.	36.00	Each	2910.00	102492.00	2847	102492
21.8	Item No208 Supplying and erecting integrated LED flood light fitting Max. 100W IP65 & IK07 class having pressure die-cast aluminium housing, having system lumens output of Min. 12000 Lumens, min. efficacy of 120 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-270V, inbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L70B50, including driver with U shaped bracket with 3 Years warranty as per specification No FG-ODF/FLS2.	15.00	Each	9070	133110.00	8874	133110
21.9	Item No209 Supplying and erecting LED square / circular Max. 25 W down lighter/ Panel Light having pressure die-cast aluminium housing, polystyrene diffuser having system lumens output of Min. 2750 Lumens, min. efficacy of 110 lumen/W, CRI>80, CCT upto	15.00	Each	2145.00	31485.00	2099	31485

	6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50, including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty.						
22.0	Item No210 Supplying and erecting integrated LED Bollard Cylindrical /Cubical shaped 500mm 8W IP65 & IK10 class having extrusion aluminium housing with polycarbonate diffuser, having system lumens output of Min. 800 Lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 140-240V, inbuilt surge protection of 2 kV, Life class of 25,000 Hrs. at L50B50, including driver complete with 2 Year warranty as per specification No FG-ODF/FLS2.	50.00	Each	5780.00	282750.00	5655	282750
22.1	Item No211 Supplying and erecting integrated LED round burial light 6W IP65 & IK10 class having pressure die-cast housing, having system lumens output of Min. 500 Lumens, min. efficacy of 85 lumen/W, CRI>80, CCT upto 6500K, THD<10%, p.f. >0.90, operating range of 100-240V, i nbuilt surge protection of 4 kV, Life class of 50,000 Hrs. at L50B50, including driver, salt spray tested for 500 Hrs. including making of recess of appropriate size for flushing into surface with 2 Year warranty as per specification No FG-ODF/FLS2.	6.00	Each	4475.00	26268.00	4378	26268
22.2	Item No212 Supplying and erecting Concealed type foot/step light Max. 5W having IP67. IK10 rated Pressure die cast housing having system lumens output of Min. 500 Lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 5000K, Beam Angle of 110 deg., THD<10%, SDCM<5, p.f. >0.95, operating range of 230-270V, surge protection of 2.5 kV, Life class of 25,000 Hrs. at L70B50, including driver by making necessary arrangement/recess in wall to make it flush with surface with 2 Year warranty.	4.00	Each	4220.00	16516.00	4129	16516
22.3	Item No213 Supplying and erecting Gate/garden light fitting with 300mm dia. glass bowl suitable for upto 12W LED Lamp on provided pipe as per specification No. FGODF/GLT	5.00	Each	1260.00	6165.00	1233	6165
22.4	Item No214 Making trench in soft soil having 0.75 m depth and minimum 0.3 m width	370.00	Rmt	175.00	63270.00	171	63270

	for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-EXN-CTR						
22.5	Item No215 Supplying & erecting FRP box of size 150mm x 125mm x 100 mm, 2.7 mm thick complete on pole/wall as per specification No. CB-SB	273.00	Each	545.00	145509.00	533	145509
22.6	Item No216 Supplying & erecting crimping type copper lugs for cable up to 16 sq mm complete as per specification No. CB-CL/CU	200.00	Each	25.00	4800.00	24	4800
22.7	Item No217 Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no. EA-EP	489.00	Each	5185	2480697.00	5073	2480697
22.8	Item No218 Providing pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod complete with all materials testing and recording the results as per specification no. EA-EP	273.00	Each	1650.00	440622.00	1614	440622
22.9	Item No219 Supplying and erecting bus bar chamber triple pole with neutral with four aluminium bars, 500V, 100A having 15mm (Width) X 3 mm (Thickness), with 99.9 % aluminium purity as per E91E Grade & Current Density 0.8 A per sq. mm. compliance to IS 5082 and Enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CPBB	10.00	Each	6480.00	63400.00	6340	63400
23.0	Item No220 Supplying & erecting Minimum three & above star rated Centrifugal water pump (Monoblock), 230V, Single phase 50 cycles A.C. supply of 1.5 kW/2 HP with discharge 600/140 Litres per Minute (LPM) for head of 8/22 m & 50mm suction/ 50 mm delivery pipe on provided C.C. foundation as perspecification No. WP-CGP	5.00	Each	16300.00	79740.00	15948	79740
23.1	Item No221 Supplying & erecting minimum three & above star rated Centrifugal water pump (Monoblock), 415 V, three phase 50 cycles A.C. supply of 7.5 KW/10 HP with discharge 1150/600 Litres per Minute (LPM) for head of 24/69 m and 65 mm suction/ 50 mm delivery pipe of size, on provided C.C. foundation as per specification No. WP-CGP	2.00	Each	50000.00	97840.00	48920	97840
23.2	Item No222 Supplying & erecting automatic control panel for 3 Phase , 415 volt, A.C, Submersible/centrifugal pump set up to 7.5 HP consisting of DOL starter having relay range 9-14 AMP,S.P.P., Combined ammeter/ voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof enclosure with IP 54 protection. Control Panel should offer	7.00	Each	6670.00	45682.00	6526	45682

	single phasing, phase reversal, phase imbalance etc .						
23.3	Item No223 Supplying & erecting D.O.L Starter suitable for 250 V, Single phase 50 cycles with overload element with necessary materials and connected to supply up to 3 H.P.	5.00	Each	1280.00	6260.00	1252	6260
23.4	Item No224 Supplying & erecting D.O.L Starter suitable for 415 V, 3 phase 50 cycles with no volt coil and overload element with necessary materials and connected to supply for 10 H.P.	2.00	Each	3260.00	6380.00	3190	6380
23.5	Item No225 Supplying and erecting 75/80 mm dia cast iron double flange NRV complete with PN16 pressure rating, as per specification no. FF-VL/NRV	10.00	Each	6760.00	66140.00	6614	66140
23.6	Item No226 Supplying and erecting 100 mm dia cast iron double flange NRV complete with PN16 pressure rating, as per specification no. FF-VL/NRV	6.00	Each	9065	53214.00	8869	53214
23.7	Item No227 Supplying and erecting static energy meter with 240V 50 Hz. AC supply 10 to 60 A, ISI mark, accuracy class 1.0 with backlit LCD display, (measuring and display kWh, kVAh, V,I,PF, frequency, kW, kVA, six months history of Energy & MD in kW & kVA) with transparent hinge type box complete erected on polished teak wood board duly wired with required size of weather proof PVC wires duly tested by electric supply company.	10.00	Each	3260.00	31900.00	3190	31900
23.8	Item No228 Supplying and erecting static energy Trivector meter 440 V 50 Hz. 20-100A ISI mark meter AC 3 phase 4 wires LCD/LED display (Measuring and display Trivector, V, I, kW, PF, Hz, Last month history of kWh & MD in kW) with special features like TOD, Tamper logging, Optical Communication Port & Display in absence of Power complete erected on polished teak wood board duly wired with required size of weather proof PVC wires duly tested for class 1.0 accuracy by electric supply company.	5.00	Each	9065.00	44345.00	8869	44345
23.9	Item No229 Supplying and erecting minimum Three & above star rated submersible pump set suitable for erection on open well of 5.625 KW/7.5 HP with 415 V 50 c/s. A.C. supply, having delivery head from 57 to 22 m and discharge from 120 to 900 litres. . per minute & pipe of Suction 75 mm/Delivery 65 mm diameter erected with necessary H type clamps as per specification No. WP-OSP	5.00	Each	41520.00	203115.00	40623	203115
24.0	Item No230 Supplying, installing, testing and commissioning of 5 kWp OFF-GRID solar power pack with interconnecting wires / cables up to 24V pure sine wave solar power inverter (THD<3%), SPV Modules (335 WP X	8.00	Each	410670.00	3214400.00	401800	3214400

	15 Nos.), C-10 rated lead acid battery bank 24V, 300Ah x 4 nos. (12V, 300 Ah x 8 nos) suitable for 4 Hours backup with suitable MS powder coated stand to hold battery bank and keeping sufficient space for filling distilled water, canopy box to house inverter and other electronics, wiring up to solar inverter in casing and capping, display board, sign board, two distinct earthing, spike type lightning arrester, necessary accessories complete with 5 years ON-SITE warranty and fully comprehensive maintenance contract as per specification no. ESD-RT-OFG						
24.1	Item No231 Supplying and erecting three phase 10 to 60 A net meter DLMS compliance of accuracy class 1.0, 3 x 240V, 50 Hz, with backlit LCD display, optical port and RJ 232 port (measures import kWh, kVAh, export kWh, kVAh, Net kWh, kVAh, V, I, kW, 6 months history of energy) with wiring connections and mounting hardware on provided panels complete with calibration certificate from manufacturer.	8.00	Each	12350.00	96664.00	12083	96664
24.2	Item No232 S.I.T.C. of LIGHT 851, Wattage 30W-40W Power Module LED,3000k,Upright Light 851:it's upper square frame in single piece made of die cast aluminum using pressure die-casting process,with a decorative element which is also made of die cast aluminium using pressure die-casting process, fixed on the top. Auxiliary and optical compartment can be accessed by tilting the top frame.Bottom frame with Company /brand name engraved in the mold, in single piece, made of die cast aluminum using pressure die-casting process with a four-armed bracket with flange, which is also made of die cast aluminum using pressure die-casting process, fixed at the bottom. Frosted Screen made of polymethylmethacrylate (PMMA) molded in a single piece using Injection molding process. Screen's Impact resistance: IK06. Pure polyester powder coating in Standard Grey Colour. IP Rating - IP 66. Power LED Module with Company /brand name printed on PCB with the metal core plate.LED Chips of CREE/NICHIA/OSRAM/LUMILEDS make - same should be supported by LED manufacturer's tech sheet . Colour Rendering Index: Ra > 70. Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection (an additional surge protection device of 10kV also provided in-built the fixture). Optics with refractive lens in PMMA/PC . LED Lifetime >1,00,000hours@Ts 85°C. LM80 report from LED	13.00	Each	16500.00	209872.00	16144	209872

	<p>Manufacturer should be submitted. The Light fixture shall be in compliance with IEC 60598-2-3; IEC 60598-1 (Supporting Test Report from UL/UL Authorised/Intertek Laboratory should be submitted). LM79 report also should be submitted from UL/UL Authorised/Intertek Laboratory. Sample should be submitted for approval from concerned engineer-in charge.</p>						
24.3	<p>Item No233 S.I.T.C. of 3M HEIGHT ARCHITECTURAL POST TOP POLE 3M height Pole made of complete cast iron decorative components where the internal fabricated pole of 3M is made in combination of mild steel pipe sections of suitable size covered on the outside by decorative cast iron base and columns. Decorative Cast iron Base in the cast iron mould, height again followed by a ring dia 210mm and gradual tapering upto a dia 92mm as approved by the concerned Engineer the total height of decorative cast iron base is 700mm and weight-32kgs. Decorative cast iron base should be provided with a flush door of length 228mm, width 124mm and height 30mm. Decorative cast iron flower starting with a dia 102mm increasing gradually to 160mm and then tapering to a dia 99mm. Total height of cast iron flower is 304mm & weight is 6.3kgs. Decorative cast iron column (2nos.) is of 80mm dia. and having continuous grooves along the height. The height of each pillar is 750mm & weight of each pillar is 9.5kgs. Decorative Cast iron top starting with dia 80mm and a ring of dia 96mm at height of 160mm then gradually increasing to dia 120mm the top half of the decorative top should have grooves along the length, total height of cast iron top is 334mm - weight-5.2kg. All cast iron parts weight mentioned are with +/5% tolerance. Entire pole shall be made to provide pleasing aesthetics as approved by Concerned Engineer in-charge. The pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. The decorative pole to be provided with a suitable size steel base plate. This mounting steel plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation. After Fabrication, Internal pole should be shot blasted for the effective adhesion of 3layer coating so as to avoid the corrosion. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN40 should be submitted to verify the pole design. Only cast iron parts outside are PU</p>	13.00	Each	16500.00	209872.00	16144	209872

	<p> painted in 3 layer coating(coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint. </p>						
24.4	<p> Item No234 S.I.T.C. of Spot Light, NSL-10S , LED,9-11 W,LED, 3000k,IP 66 Body made of Aluminium and finished with pure polyester powder coating in grey colour. Screen in flat tempered glass. Dimension-65mm(Dia.) minimumx220mm(L) minimum,Weight-0.7kgs minimum. Electronic Driver which offers Protection against Short Circuit, Over-Voltage & Over- Current, IP 66 protection,voltage input AC240V. Estimated Lifetime-L70 @ 50,000hours minimum. </p>	47.00	Each	9900.00	455242.00	9686	455242
24.5	<p> Item No235 S.I.T.C. of NCL-02S-Ceiling Light, 10-15W, LED, 3000k, IP 65 Body made of aluminium & screen in tempered glass (IK 08). Pure Polyester powder coating in RAL 9005 Matt. Electronic Driver which offers Protection against Short Circuit, Over-Voltage & Over- Current. Dimension-126mm (Dia.) x 138mm(H), Weight-1.2kg. Estimated Lifetime-L70 @ 50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in charge. Sample should be submitted for approval from Architect/ engineer-in-charge </p>	17.00	Each	16890	280925.00	16525	280925
24.6	<p> Item No236 S.I.T.C. of MELIA-ILLUMINATED BOLLARD-10W-15W,LED, 3000KThe Bollard suitable for on ground installation,It is made in combination of Steel pipe of 127mm dia. & decorative cast iron elements. . After Fabrication, Entire bollard should be shot blasted for the effective adhesion of 3layer coating so as to avoid the corrosion.Decorative base with company name/logo engraved - it's design starting with 178mm dia. continues for a height of 30mm,than gradually tapering to 150mm,for a height of 60mm, ends. with ring of 165dia. and 20mm height. total height of the base is 140 mm & Weight is 3Kgs. and top sphere shaped decorative element design starting with a ring of 150mm dia. and 18mm height,followed by a section of 130mm dia,then gradually tapering to 70mm dia. for a height 17mm,followed by a ring of 87mm dia.,17mm height and ends with a sphere section of 125m dia. total height is 170mm - Weight is 3Kgs.All cast iron parts weight mentioned are with +/- 5% tolerance. LED source is made of Silicon material-Much more flexible,Efficient heat dissipation,Perfect resealing with silicone glue. Mounting channel made of aluminium. Diffused Screen in Acrylic, LED-source </p>	100.00	Each	12320.00	1205400.00	12054	1205400

	Efficacy>90lm/W,SMD LED,yellow glue 3M,120 degree beam angle, Voltage DC 24V. It also includes Externl common Electronic Power Supply(Meanwell /Equivalent) ,which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection.FInish- Pure Polyester Powder Coating in customised colour Metallic Grey. IP Rating - IP 54.Height – 1000mm, Dia - 127mm.						
24.7	Item No237 S.I.T.C. of Underwater Spot Light, NHL-145, LED, 8-10W, LED, 3000k, IP 68,External common power supply NHL-145: The housing in circular shape is completely made of high strength stainless steel(304grade minimum). Protection screen in clear tempered glass with high impact resistance . Precise structure and multi-protection silicon rubber seal ensures the Ingress Protection-IP 68. Dimension-Dia.-145mm,Height – 180mm, Weight - 1.2Kgs. Power LED Module with high efficacy LED's(Cree/Osram/Nichia/Lumileds), on Printed Circuit Board with metal core plate. Common external electronic Power Supply for LED Module,which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection. Lens made of PC which should offer various beam angles. Estimated LED Lifetime is L70- 50,000 hours minimum.LM80 report from LED Manufacturer should be submitted. Minimum Light fixture Lumen output is 700Lumens. Sample Should be submitted for concerned engineer incharge for approval of light fixture.	2.00	Each	21960.00	42972.00	21486	42972
24.8	Item No238 S.I.T.C. of NGB-6-1-Ground Buried Uplight, 1-2W, LED, 3000k, IP 67Body made of Die cast aluminium using pressure die casting process. Top Cover in Stainless steel & screen in tempered glass (IK 08). Burying barrel in ABS.External Electronic Driver which offers Protection against Short Circuit, Over- Voltage & Over- Current. Dimension-35 (Dia.) x38mm(H), Weight-0.1kg. Estimated Lifetime-L70 @ 50,000 hours minimum. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in charge. Sample should be submitted for approval from from Architect/ engineer-in-charge.	12.00	Each	16280.00	191136.00	15928	191136
24.9	Item No239 S.I.T.C. of 1 Mtr. Length of 48V Track for track light with connectors (L&Tshape connectors)	3000.00	Each	8140.00	23892000.00	7964	23892000
25.0	Item No240 Making M- 20 grade reinforced cement concrete foundation by considering the safe soil bearing capacity at site as 10 T/sq.m at 1.5 m	154.00	Each	4100.00	617694.00	4011	617694

	depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template, duly plastered as per design complete (for 6m to 8m high octagonal /conical GI pole).						
25.1	Item No241 Providing & erecting 7 m high (clear height) galvanised octagonal pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification no. OH-PL/OPL	154.00	Each	18800.00	2832676.00	18394	2832676
25.2	Item No242 Supplying and erecting integrated LED street light fitting 120W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 13000 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No FG-ODF/FLS2	154.00	Each	10780.00	1624238.00	10547	1624238
25.3	Item No243 Providing and laying in situ M40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for PSC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand) i) Height up to 5 m, normal rate.ii) Height 5 to 7.50 m, add 5 percent extra. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	2483.76	Cum	12500.00	30376384.80	12230	30376384.8
25.4	Item No244 Providing & Supplying of FRP sculpture of various art piece including creative envolment of creative artist as per theme as instructed by Engineer-In-Charge/architect .The model to be done in following stages clay work, pop moulding 4 to 5mm fibre casting with steel reinforcement from inside. Griding finishing and colouring with apporpraite colours .Transportation to site and installation	90.00	Per Square Meter	29450	2593260.00	28814	2593260
25.5	Item No245 Providing & Supplying of Metal sculpture of various art piece including creative envolment of creative artist as per theme as instructed by Engineer-In-Charge/architect .The model to be done in following stages clay work, pop moulding 4 to 5mm metal casting with steel reinforcement from inside. Griding finishing and colouring with apporpraite colours .Transportation to site and installation	30.00	Per Square Meter	78550.00	2305590.00	76853	2305590
25.6	Item No246	1.00	Each	1173000.00	1147663.00	1147663	1147663

	Designing, Providing & Installation of Sculpture . The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 3.5m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete.						
25.7	Item No247 Designing, Providing & Installation of Sculpture of . The material for this sculpture is Metal . The Height of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete.	2.00	Each	1322500.00	2587868.00	1293934	2587868
25.8	Item No248 Designing, Providing & Installation of Sculpture of The material for this sculpture is Fibre/FRP . The Length of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as	2.00	Each	977500.00	1912772.00	956386	1912772

	directed by Engineer in Charge. (Variation in size off sculpture shall be +- 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete.						
25.9	Item No249 Designing, Providing & Installation of Sculpture . The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 2.1m,& Length will be around 5m Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement(TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. Complete	2.00	Each	1677500.00	3282532.00	1641266	3282532
26.0	Item No250 Designing, Providing & Installation of Sculpture Set The material for this sculpture is Fibre/FRP . The Height of the Sculpture should be minimum 3.6m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coal tar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +- 10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excluding of GST .etc. =	1.00	Each	2185000.00	2137804.00	2137804	2137804
26.1	Item No251 Designing, Providing & Installation of Sculpture The material for this sculpture is Fibre/FRP . The Length & Height of the Sculpture should be minimum 3m & 2m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC- M20 Grade	2.00	Each	690000.00	1350192.00	675096	1350192

	Concrete including Reinforcement (TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalatar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excludling of GST .etc.						
26.2	Item No252 Designing, Providing & Installation of Sculpture The material for this sculpture is Fibre/FRP . The Dia of the Sculpture should be minimum 3m, Size of the sculpture shall be in proportionate to the height of the sculpture. Thickness of FRP material should be 5-10mm. Including all cost of design, Making models (if any), making sculpture, inspection charges, Transportation, Fixing at site, Construction of Foundation in RCC-M20 Grade Concrete including Reinforcement(TMT/FE 500), Pedestal including all material required for fixing the sculpture, coating the pedestal with Coalatar Epoxy Coating, all Filling material upto the base of Sculpture, polishing and painting of the sculpture, as directed by Engineer in Charge. (Variation in size off sculpture shall be +-10% in Length, Width and Height shall be permitted.) Inclusive all taxes Excludling of GST .etc. Complete	3.00	Each	747500.00	2194062.00	731354	2194062
26.3	Item No253 Fee towards the MCZMA Scurity ass per the 114 MOM of MCZMA	1.00	Per Proposa l	850000	831640.00	831640	831640
26.4	Item No254 Cost towards the Demarcation of the HTL and HFL from the Government Agencies approved by the MoEFCC	1.00	Pre Proposa l	850000.00	831640.00	831640	831640
26.5	Item No255 Carrying Comperhensive EIA for the Project including the generation of Required Basline Survey Data for 3 Seasons and CRZ Clearnces for the Project and CRZ Clearnces of the project	1.00	Job	2000000.00	1956800.00	1956800	1956800
26.6	Item No256 Remuneration to agency for the prepartion of the Forest Diversion Proposal.	1.00	Job	2500000.00	2446000.00	2446000	2446000
26.7	Item No257 Cost towards the Payment of NPV	2.24	Ha	1650000.00	3616166.40	1614360	3616166.4
26.8	Item No258 Cost towards the Payment of Compensatory Afforestaion Cost including Maintaencae of 10 Years	2.24	Ha	950000.00	2082035.20	929480	2082035.2
26.9	Item No259 Towards conservation measure for Avifauna (Bird)	1.00	Lumsu m	750000.00	733800.00	733800	733800
27.0	Item No260 Towards Legal cost for obtaining the Clearnces from Hon High Court as per PIL No. 87 of 2006	1.00	Lumsu m	900000.00	880560.00	880560	880560
27.1	Item No261	1.00	Lumsu	1000000.00	978400.00	978400	978400

	Implementen of the Enviornment Mointoring Plan during the Project Execution		m				
27.2	<p>Item No262</p> <p>S.I.T.C. of GOBO PROJECTOR350 Watt,LED,IP 65Gobo Projector:Body made of Diecast Aluminium. Uses high power white LED chip,3.8°-45°(electronic linear zoom),Display-On board Control, Gobo-8+6 Gobos(single colour), Gobo-flow effect, Gobo shake, Bi-directional rotation.Colours-One color wheel (13 colour+White, Rainbow flow effect),Prism-16 prism with bi-directional rotation, , Speed adjustable,Focus-Motorized linear focus.Nos.of DMX Channels-16</p> <p>Light fixture should be standard DMX512 protocol compatible, the DMX decoder function should be inbuilt the light fixture,Each light fixture should be invidually addressable & should be able to operate with any standard DMX512 equipment. In-Built Electronic Power Supply for LED Module,which offers Protection against Short Circuit, Over-Voltage & Over- Current, with in-built surge protection.Lifetime is 50,000 hours.IP rating-IP 65 minimum.Length-480mm,Width-410mm, Height-640mm Weight - 39Kgs.</p>	8.00	NOS	750000	5870400.00	733800	5870400
27.3	<p>Item No263</p> <p>S.I.T.C. of DMX Controll System</p>	1.00	Set	700000.00	684880.00	684880	684880
27.4	<p>Item No264</p> <p>S.I.T.C. of 6m height pole made in combination of mild steel pipe sections 114mm dia. & 76mm dia. with suitable fixing arrangement to mount Laser projector. The pole to be provided with a suitable size steel plate. This mounting steel plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation.After Fabrication, Entire Pole is hot dip galvanized(100 microns Minimum) for the effective corrosion resistance. The hot dip Galvanised pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN40 should be submitted to verify the pole design. Pole & it's parts are painted in 3 layer coating (coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint.</p>	8.00	NOS	111090.00	869520.00	108690	869520
27.5	<p>Item No265</p> <p>S.I.T.C. of 3 Chip DLP Laser Cinema series Projector, Brightness: 22000 Lumens or more, Resolution: Native 4K or better, along with the appropriate Lens to manage the throw distance, 3D ready, Native aspect ratio 16:10, Horizontal & vertical edge</p>	2.00	Nos.	4628750.00	9057538.00	4528769	9057538

	blending, Motorised Zoom & Focus, Motorised Lens shift H/V, Sealed DLP™ core, Standard Orientation : 360°, DMX 512 Standard WARP Direct adjust OSD + toolset, Image processing, Embedded warp & blend, 3D Active eye wear (optional), passive circular (optional); 2 flash up to 200Hz; optional Dual Eye Point 240Hz, Single HDBaseT; HDMI2.0 (HDCP2.2, HDR10); DP 1.2 (HDCP1.3); Quad 3G/12G SDI/BarcoLink ULTRA, supplied with DP input cards, IR, RS232, IP (RJ45 Network connection), direct Android app to control,						
27.6	Item No266 S.I.T.C. of Smart poles of 10 mtrs heights Customized enclosure for above projector with pole mounting arrangement IP68 protection and security. Each enclosure allow to put minimum 1 projector, White in color, easy maintainable Make: Techvisio/ Mapan/Aura / LM3X [Urban pole / Valmount structures	2.00	Nos.	1587000.00	3105442.00	1552721	3105442
27.7	Item No267 S.I.T.C. of Display media server with 4nos x HD outputs as required , synced together. . Min. 1x NVidia Quadro RTXA5000 graphic processor,	1.00	Nos.	1262990.00	1235709.00	1235709	1235709
27.8	Item No268 S.I.T.C. of Production PC i7 process RAM 32 GB 2TB SSD memory with HD outputs as required, , with 16GB graphic card ,to be supplied with 27" Monitor	1.00	Nos.	793500.00	776360.00	776360	776360
27.9	Item No269 S.I.T.C. of 3D Projection mapping software, Playback control System to manage, schedule & control the media servers, watchout software should work best in above system	1.00	Nos.	1322500.00	1293934.00	1293934	1293934
28.0	Item No270 S.I.T.C. of 20 KVA UPS with 30 minutes power backup, along with Electrical cabling and Earthing for projector	1.00	Nos.	1256375.00	1229237.00	1229237	1229237
28.1	Item No271 S.I.T.C. of Long distance transmitter for High resolution signals, Transmits HDMI, USB data, control, and analog audio up to 330' (100 m) over a shielded CAT 6A cable Supports computer and video resolutions up to 4K/60 @ 4:4:4, USB 2.0 extension, Analog stereo audio embedding, HDCP 2.3 compliant, Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats	2.00	Nos.	165315	323488.00	161744	323488
28.2	Item No272 S.I.T.C. of Long distance Receiver for High resolution signals, Receives HDMI, USB data, control, and analog audio up to 330' (100 m) over a shielded CAT 6A cable Supports computer and video resolutions up to 4K/60 @ 4:4:4, USB 2.0 extension, Analog stereo audio embedding, HDCP 2.3 compliant, Supported HDMI 2.0b specification features	2.00	Nos.	165315.00	323488.00	161744	323488

	include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats						
28.3	Item No273 SITC of 4k enabled HDMI male to male cables, of 2 mtrs, Ultra-flexible HDMI cables Conforms to Premium High Speed HDMI cable performance standards 4K/60 verified	10.00	Nos.	10127.00	99080.00	9908	99080
28.4	Item No274 SITC of 30 mtr / 100ft High speed 4k HDMI cable, HDMI Premium High Speed Optical Cables - Plenum, Conforms to Premium High Speed HDMI Cable performance standards Flexible, ultra-thin 0.16" (4 mm) diameter cable Plenum, NEC CMP-rated cable No external power is needed, Highly resistant to EMI/RFI interference, Color-coded and labeled ends	1.00	Nos.	108975.00	106621.00	106621	106621
28.5	Item No275 SITC of other accessories like connectors, small patch cables of CAT6 / audio etc, sleeves, DP to HDMI or HDMI to DP, etc adapters	1.00	LS	264500.00	258787.00	258787	258787
28.6	Item No276 SITC of LED RGBW DMX control LED channel with aluminium extrusion channel linkable option outdoor IP66 with diffuse optic power 15 watt per meter control by independent DMX controller creating multiple lighting scene (minimum 32 scene)	180.00	meter	11500.00	2025360.00	11252	2025360
28.7	Item No277 SITC of LED screen 4 mm pitch 5500 nits IP66, size 3m x 5m floor standing mounting bracket with media server , AV connectivity , link with APP through wifi or QR code reader	1.00	nos	1725000.00	1687740.00	1687740	1687740
28.8	Item No278 SITC of MEDIA server	1.00	nos	57500.00	56258.00	56258	56258
28.9	Item No279 SITC Mobile app for QR code	1.00	nos	230000.00	225032.00	225032	225032
29.0	Item No280 SITC of Approved content and video	8.00	nos	287500	2250320.00	281290	2250320
29.1	Item No281 SITC of entry art work of height 8000mm made up of fibre body made up of glowing fibre with base of 2500 x 1000 mm	1.00	set	805000.00	787612.00	787612	787612
29.2	Item No282 SITC of RGB lights of 24 watt 16 nos DMX control with continuous transition made by aluminium extrusion with connecting cable & controller	1.00	set	230000.00	225032.00	225032	225032
29.3	Item No283 SITC of LED screen with 31.5 mm pitch with high brightness of 3500 NIT day visibility with media server controller	30.00	sq meter	86250.00	2531610.00	84387	2531610
29.4	Item No284 SITC of Programme controller and present scene controller with built in memory 256 GB and ram of 16 GB to store programme	1.00	nos	327750.00	320671.00	320671	320671
29.5	Item No285 Set of all control cable and power cable	1.00	set	115000.00	112516.00	112516	112516
29.6	Item No286	1.00	NOS	3220000.00	3150448.00	3150448	3150448

	SITC OF RGB laser system projection with laser power of 42 watt (red 9w/638nm. Green 13w/525nm, blue 20w/ 455nm). Cooling mode - lasr with TEC cooling, whote machine is with air cooling, with enclosure of IP65,power consumption 1200watt. Laser service life 10000 hoursand operating volatge 230 volt 50Hz.lighting effect- full color animation laser with high speed galvanometer scanning technology. laser projector should confirm to EU norm and CE / UL certified. (Kvant / Aura / Bajaj)						
29.7	Item No287 SITC of customised laser enclosure for all laser projector with IP65 protection with security mechanism (techvisio / mapan / Aura)	1.00	NOS	230000.00	225032.00	225032	225032
29.8	Item No288 SITC of pangolin software to develop various lighting show (Pangolin / laser world / star dimension)	1.00	Set	103500.00	101264.00	101264	101264
29.9	Item No289 SITC of wiring , power cable , control cable for laser	1.00	Set	575000	562580.00	562580	562580
30.0	Item No290 Content with Script writing: includes movement, actions, expression and dialogue of the characters, drama Storyboard, Storytelling, 2D 3D animation, Graphics, Art Works, Archival Imagery, Video-timeline, SFX, VFX, Voiceovers and Music etc for the show.etc for about 15 mins.	15.00	Minutes	396750.00	5822700.00	388180	5822700
30.1	Item No291 SITC of ISO 7240-16 Certified EVAC PA controller capable of adding 12 zones in the system and expandable upto 400 zones with 14x 4 Audio matrix with full DSP functionality. 8 audio, inputs, 4 audio outputs, 4 channel output matrix. Shall support the following: single line, switching or redundant group A/B switching, amplifier redundancy, 4 x 100V audio inputs, and 12 speaker line outputs. Fault, warning and event conditions log. Built in message, manager for 100 emergency/business calls up to 85 minutes. 18 control inputs and 18, control outputs. Impedance measurement and Pilot Tone supervision for speaker line, monitoring. The network controllers shall have a possibility to be integrated using an, interface module which is able to send and receive Audio to and from other, Controllers.Frequency response (ref. 1 kHz) 20 Hz to 20 kHz (-0.5 dB), Signal-to-noise ratio, (A-weighted): Line in to line out: 106 dB typical, THD+N < 0.05%, Crosstalk (line level) Line, in to line out (0 dB gain): < 100 dB at 1 kHz, Sample rate 48 kHz, DSP processing resolution, 24-bit linear A/D and D/A conversion, 48-bit processing. Graphics User Interface software, should be considered for Monitoring and control of signal.MAKE/BRAND: Bosch	1.00	NOS	287040.00	280840.00	280840	280840
30.2	Item No292	1.00	NOS	103040.00	100814.00	100814	100814

	<p>SITC of The Digital call station shall be an EN54-16 & ISO 7240 -16 certified user interface.</p> <p>It shall be designed in a modern and robust chassis with a graphical display. As standard, the call station shall have a gooseneck microphone with pop shield and permanent monitoring, an illuminated LC-display and an integrated loudspeaker to be used, for system sounds, It shall be possible to modify the call station to suit the user's requirements by connecting, up to five remote call station extensions, each with 20 free customizable functions and selection buttons., The Call station shall have a built-in numerical keypad; it shall be possible to enable or disable the keypad during configuration</p> <ul style="list-style-type: none"> • Five menu/function keys (pre-programmed) – four buttons shall provide each 1 LED (two LED's shall be 2 green and 2 LED's shall be yellow). • Green led on the microphone which is active during a call • 15 function and speed dial buttons (customizable), two LEDs (green/red) per button. • Button functions shall be programmable such as: <ul style="list-style-type: none"> • Zone select, source select, level control, emergency on/off, message on/off, failure acknowledge/reset. • switching output trigger on/off or 0 to 10V, select scheduled events, scheduled event on/off. • CAT5 cable for data and audio connection to controller (can bus, up to 1000 meter).MAKE/BRAND: Bosch 						
30.3	<p>Item No293</p> <p>SITC of The call station extension shall be EN54-16 Certified. It shall be designed in a robust and modern chassis. It shall expand the call station by 20 customizable functions keys. • 20 free customizable functions keys, and two LEDs per button (green/red). • It shall be possible to program button functions as: • Zone select, source select, level control, emergency on/off, message on/off, failure acknowledge/reset. • switching output trigger on/off or 0 to 10V, select scheduled events, scheduled event on/off. • An LED shall also be programmable for own indication functionalityMAKE/BRAND: Bosch</p>	1.00	NOS	61870.00	60534.00	60534	60534
30.4	<p>Item No294</p> <p>SITC of EN54-24 Certified IP65 rated outdoor surface mount speaker to be supplied with standard U-bracket, Maximum power 22.5 W, Power tapping 15/7.5/3.75/1.9 W, Sound pressure level at rated power / 1 W (1 kHz, 1 m) 98/86 dB (SPL), Opening angle at 1 kHz / 4 kHz (-6 dB) 179° / 101° (hor.) 168° / 35° (ver.)MAKE/BRAND: Bosch</p>	100.00	NOS	9948.00	973300.00	9733	973300
30.5	Item No295	1.00	NOS	238510.00	233358.00	233358	233358

	SITC of EN54 Certified EVAC Router for adding 24 zones in the system and to route 4 channels into, 8 100V audio inputs to 24 loudspeaker line outputs. 2-in-6 matrix. 20 Control Inputs, 26, Control Outputs. Shall support single line switching or redundant group A/B switching, amplifier redundancy. Impedance measurement and Pilot Tone supervision for speaker line monitoringMAKE/BRAND: Bosch						
30.6	Item No296 SITC of 480 W power amplifier in a 3U high housing with 70 V / 100 V and 8 ohm outputs,Dual inputs with priority switching,100 V input for slave operation on 100 V speaker line,Mains, battery back-up, With Following Features: 1.Output power (rms) 480 W 2.Frequency response 60 Hz to 18 kHz (+1 / -3 dB at -10 dB ref. rated output) 3.Distortion <1% @ rated output power, 1 kHz 4.S/N (flat at max volume) >90 dB 5.Battery power supply:24 VDC MAKE/BRAND: Bosch	4.00	NOS	49680.00	194428.00	48607	194428
30.7	Item No. 297 Standard Consistancy, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	10.00	1 Test	1175.00	11500.00	1150	11500
30.8	Item No. 298 Water Absorption, Specific Gravity,Impact Value, Crushing Value.	10.00	1 Test	585	5720.00	572	5720
30.9	Item No. 299 Sieve Analysis.	10.00	1 Test	1260.00	12330.00	1233	12330
31.0	Item No. 300 Abrasion Value.	10.00	1 Test	4880.00	47750.00	4775	47750
31.1	Item No. 301 Flakiness Index & Elongation Index.	10.00	1 Test	870.00	8510.00	851	8510
31.2	Item No. 302 Stripping Value. (for Bituminous Work)	10.00	1 Test	3465.00	33900.00	3390	33900
31.3	Item No. 303 Soundness.	10.00	1 Test	1895.00	18540.00	1854	18540
31.4	Item No. 304 GSB Mix Design./Cement Treated Sub Base (CTSB)	1.00	1 Test	670.00	656.00	656	656
31.5	Item No. 305 Fineness Modulus (Sieve Analysis),Silt & Clay Content	10.00	1 Test	1755.00	17170.00	1717	17170
31.6	Item No. 306 Chloride & Sulphate Content.	10.00	1 Test	735.00	7190.00	719	7190
31.7	Item No. 307 Silt Factor.	10.00	1 Test	5380	52640.00	5264	52640
31.8	Item No. 308 Flexural test (Set of 6 Tiles), Water Absorption (Set of 6 Tiles).Resistance to wear (Set of 6 Tiles).	10.00	1 Test	2630.00	25730.00	2573	25730
31.9	Item No. 309 Flooring of Natural Stone (Kota,Marble, Granite,Tandur.etc.) Water absorption, Specific gravity	10.00	1 Test	3225.00	31550.00	3155	31550
32.0	Item No. 310 Compressive Strength OF C.C. Cube (Set of 3 cubes).	4.00	1 Test	4080.00	15968.00	3992	15968
32.1	Item No. 311	1.00	1 Test	810.00	793.00	793	793

	Concrete Mix Design (With all Tests on basic materials)						
32.2	Item No. 312 Compressive Strength , Water Absorption,(Set of 8 Blocks)	1.00	1 Test	215.00	210.00	210	210
32.3	Item No. 313 Crushing Value/Compressive Strength, Water Absorption & Specific Gravity,	10.00	1 Test	1785.00	17460.00	1746	17460
32.4	Item No. 314 Sieve Analysis.	5.00	1 Test	4280.00	20940.00	4188	20940
32.5	Item No. 315 Liquid limit & plastic Limit.	5.00	1 Test	2155.00	10540.00	2108	10540
32.6	Item No. 316 Compaction Test (Proctor Density).	5.00	1 Test	1935	9465.00	1893	9465
32.7	Item No. 317 Sulphate & Chloride Contents.	5.00	1 Test	17400.00	85120.00	17024	85120
32.8	Item No. 318 Penetration, Softening Point, Flash & Fire Point, Specific Gravity	2.00	1 Test	17400.00	34048.00	17024	34048
32.9	Item No. 319 Extraction Test.(Bituminous mix)	2.00	1 Test	5060.00	9902.00	4951	9902
33.0	Item No. 320 Extraction & Sieve Analysis of Bituminous mix (for BM/DBM/AC) (2 samples of extraction for one sieve analysis including extraction)	2.00	1 Test	6685.00	13082.00	6541	13082
33.1	Item No. 321 Job Mix Design with all Tests on aggregate (Excluding bitumen) for DBM/SDBC/AC/SMA (Stone Mastic Asphalt) (Testing of Bitumen shall be separately Charged)	2.00	1 Mix Design	12280.00	24030.00	12015	24030
33.2	Item No. 322 B. M. Mix Design with all Tests on aggregate (Excluding bitumen) (Testing of Bitumen shall be separately Charged)	2.00	1 Mix Design	19855.00	38852.00	19426	38852
33.3	Item No. 323 Seperation test for modified bitumen.	2.00	1 Test	7850.00	15360.00	7680	15360
33.4	Item No. 324 Density Test . (Set of 3 Blocks),Compressive Strength. (Set of 3 Blocks),Water Absorption Test (Set of 3 Blocks)	1.00	1 Test	7850.00	7680.00	7680	7680
33.5	Item No. 325 PH Value, Sulphate & Chloride Content.	4.00	1 Test	360	1408.00	352	1408
33.6	Item No. 326 Weight per running meter,Diameter of pipe & wall thickness of pipe,	1.00	1 Test	5300.00	5186.00	5186	5186
33.7	Item No. 327 Weight per running meter,Diameter of pipe & wall thickness of pipe	1.00	1 Test	1700.00	1663.00	1663	1663
33.8	Item No. 328 Upto 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress,Weight-Per Meter, Bend / Rebend Test, Proof Stress.)	4.00	1 Test	4675.00	18296.00	4574	18296
33.9	Item No. 329 Above 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress,Weight-Per Meter, Bend / Rebend Test, Proof Stress.)	2.00	1 Test	108600.00	212508.00	106254	212508
34.0	Item No. 330 Reflectance & yellowness index.	1.00	1 Test	80.00	78.00	78	78
34.1	Item No. 331 Retro Reflective Test.	1.00	1 Test	80.00	78.00	78	78
34.2	Item No. 297	81.66	Rmt	1175.00	93909.00	1150	93909

	Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant						
34.3	Item No298 Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.complete.	81.66	Sqm	585.00	46709.52	572	46709.52
34.4	Item No299 Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer spspecifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	54.76	Sqm	1260	67519.08	1233	67519.08
34.5	Item No300 Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete.	967.63	Sqm	4880.00	4620433.25	4775	4620433.25
34.6	Item No301 Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing of stone as per	967.33	Sqm	870.00	823197.83	851	823197.83

	drawing and design, including cleaning, washing and finishing etc. complete.						
34.7	Item No302 Supply & Fixing of Full Body Vitrifid Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	10.32	Sqm	3465.00	34984.80	3390	34984.8
34.8	Item No303 Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment) of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	34.07	Sqm	1895.00	63165.78	1854	63165.78
34.9	Item No304 Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	702.33	Rmt	670.00	460728.48	656	460728.48
35.0	Item No305 Providing 25 mm to 30 mm thick flooring of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. a) One side polish	189.36	Sqm	1755.00	325131.12	1717	325131.12
35.1	Item No306 Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	767.53	Sqm	735.00	551854.07	719	551854.07
35.2	Item No307 CAST IN SITU SAFETY RUBBER FLOORING SYSTEM WITH including 20mm thick SBR Black Rubber Granule and 5MM colour EPDM granule absolute thickness =25mm .(as per drawing attached) etc. including VAT, tax complete. Manufacturers warranty is 5 years.	16.88	Sqm	5380.00	88856.32	5264	88856.32
35.3	Item No308 Accupressure Bed - Providing and fixing Natural Stone pebbles in 1:6 Cement mortar of natural sand of 50mm thick bed as required line,level,	6.08	Sqm	2630	15643.84	2573	15643.84

	shape and size as instructed by Engineer incharge. Item including color pigments, lead lift, curing, cutting, all material and labour with wastage etc. complete all						
35.4	Item No309 Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superintending Engineer.	1139.60	Sqm	3220.00	3589740.00	3150	3589740
35.5	Item No310 Providing and laying RED & BLACK GRANITE cobble stones of 100mm x 100mm x 100mm, 3 line dressing with 12 mm top layer in size of fine cut and well dressed in Grey colour in paving on a bed of min. 40 mm thick cushioning in C.M. 1:4 including neat cement float etc. filling of joints in C.M. 1:2 with grey cement to match the colour of cobble stone in the required pattern, design and as directed by the Engineer incharge, including cleaning, curing etc. complete.	12.83	Sqm	4080.00	51217.36	3992	51217.36
35.6	Item No311 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	216.23	Sqm	810.00	171470.39	793	171470.39
35.7	Item No312 Providing vee pointing with cement mortar 1:3 for stone /Brick masonry including scaffolding and curing etc. complete	79.02	Sqm	215.00	16594.20	210	16594.2
35.8	Item No313 WOODEN FINISH PAINTING OF EXISTING WOODEN FINISH TEXTURED SURFACE CEMENT CONCRETE BENCH including any material, machinery, scaffolding etc. complete. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including cement, Sand, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	1653.80	Sqm	1785.00	2887534.80	1746	2887534.8
35.9	Item No314	270.08	Sqm	4280.00	1131095.04	4188	1131095.04

	Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25 mm dia in three rows, all pipes of 2 mm thick including buffing,fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)						
36.0	<p>Item No315</p> <p>Stamp Concrete of 100mm Thickness - Providing and Laying in-situ M30 Grade unreinforced plain cement stamp concrete of 100mm thickness pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate (natural sand / VSI grade finely washed crushed sand) Confirming to IS 383, as per mixed in a batching and mixing plant / non tilting mixer and weigh batcher as per approved mix design, admixtures, transporting to site in nagpur city with lead upto 20KM (on Inner Ring Road from Avasti nagar to wadi), spreading, laying with approved make pover, compacted and finished in a continous operation, finishing to lines and grades Also Providing, Placing and applying stamp powder which is light fast UV resistant pigment with appropriate chemical compounds of desired colour on base concrete after excess bleed water has evaporated using dry shake method @5kg per sqm. Including texturing, and covering with plastic sheet (min 200 micron thickness) and also applying two coats of UV-stable,30 % solids clear sealer @ 150 to 250 gms per sqm using surface roller and protecting from falling dust,dirt and curring by curring compound / by providing cement vata in cement Mortor 1 :8 @ 0.6m x 0.6m center to center, admeasuring 80mm at bottom and 40mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-incharge or Landscape architect etc. complete. (prior approval of superintending Engineer will be necessary)</p>	461.56	Sqm	2155.00	972968.48	2108	972968.48
36.1	<p>Item No316</p> <p>Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.</p>	578.17	Sqm	1935.00	1094475.81	1893	1094475.81
36.2	<p>Item No317</p> <p>Design Conceptualisation & painting 3D artwork on any surface at all height and locations as directed .</p>	15408.00	Sqm	980	14776272.00	959	14776272
36.3	Item No318	11.13	Cum	17400.00	189477.12	17024	189477.12

	Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)						
36.4	Item No319 Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown /RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with rounded moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete. Skirting Spec.No. : Bd. M.22 B/Page No. 390	6.29	Sqm	5060.00	31141.79	4951	31141.79
36.5	Item No320 Providing&fixing in position 20 +/- 2mm thick machine cut, mirrorpolished, 1st quality granite cladding such as black galaxy or approved equivalent in lift lobby / passage installed in approved pattern and design of size 600 x 1200mm and as directed includingbackingcoat of 1:4 cement plaster of required thickness with stainless steelfasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with with matching pigments. The rate toinclude all curing, polishing at all lift and levels. (Basic rate ofgranite is Rs.3600/-Sq.m.)	60.25	Sqm	6685.00	394095.25	6541	394095.25
36.6	Item No321 Providing & fixing BENCH IN CEMENT MORTOR/CONCRETE WITH WOODEN FINISHING ON ALL EXTERNAL SURFACE. Bench should have min. 2.1m to max. length 2.4m with 0.45m wide seat & 0.40m high back for resting. beach should have 2 to 3 supports/Legs as per requirement from ground in 1:1.5:3 ratio Concrete with 4 bar 12mm as a main & distribution 8mm Tor steel at 150mm c/c. Rate includes proper cleaning of surface by sand paper application of 1 coat of Apex exterior grade primer above that 2 coat of exterior grade Apex Paint as a base coat & 1 coat of Apex Paint for making wooden finish/grains & with 2 final coat of Apex clear polish including Cement, Sand, Aggregate, chemical, adhesive, chickenmesh, primer, paint, polish, paper, etc. all material, labor, scaffolding, excavation, pcc, tor steel etc. all complete. Work done should be as per a approved sample & the instructions of engineer incharge.	8.10	Rmt	12285.00	97362.00	12020	97362
36.7	Item No322 Ss Dust Bin (Refer sketch 10) Product area:0.76Sqm, Capacity in ltrs: 42.0 ltrs, Product height:0.92m	12.00	No	19855.00	233112.00	19426	233112
36.8	Item No323	48.59	Sqm	7800.00	370838.88	7632	370838.88

	Design and engineering, supply and fixing of tensile membrane of high tensile strength, primary and secondary steel, hardware and accessories, including the fabrication of steel structure made out of MS structural steel tubular section of high yield strength as per relevant IS codes. The tensile membrane roof cover shall be of PVC coated polyester composite membrane of approved make and quality including membrane cutting, seaming and HF welding as per manufacturer standards. The membrane shall be fixed to MS structural members with necessary SS plates, lugs, clamping plates as required. The membrane shall be stretched and tensioned as per the design approved. The Membrane shall be flame resistant, fungicide finish, high tear out force and continued tear out force, well weldable, good UV resistance, high water pressure resistance and very low maintenance.						
36.9	<p>Item No324</p> <p>Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Accoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.</p>	132.53	Sqm	7845.00	1017300.28	7676	1017300.28
37.0	Item No325	364.80	Sqm	360.00	128409.60	352	128409.6

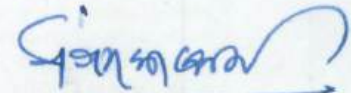
	Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including leaning, preparing the plaster surface, applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE:ForItem Number 15 to 18 prior approval of Superintending Engineer will be necessary						
37.1	Item No326 Providing and laying telephone black / Amba White / Cadburybrown / RBI red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing the sharp edges wherever necessary, curing, etc. complete. Specifications: Bd. M. 12 Spec. No.: As directed by Engineer-In- Charge	0.56	Sqm	5300	2904.16	5186	2904.16
37.2	Item No327 Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	24.62	Sqm	1700.00	40943.06	1663	40943.06
37.3	Item No328 Providing,applying,fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and sg=hade on top face and polymer (service) coating of bottom face as specified using stainless steel screws,nuts,bolts,washers,cleats,weather silicon sealent,backer rods etc .overall weight of the ACP shall not be less than 7.5 Kilogram/ One Square Metre)	61.61	Sqm	4675.00	281804.14	4574	281804.14
37.4	Item No 329 Civil Operation Cost -	60.00	Monthl y	108595.00	6374940.00	106249	6374940
37.5	Item No 330 Garden Maintenace (Including Cost of Water) - 2nd Year	7717.20	Per Sqm/M onth	80.00	601941.60	78	601941.6
37.6	Item No 331 Garden Maintenace (Including Cost of Water) - 3rd Year	9260.64	Per Sqm/M onth	80.00	722329.92	78	722329.92
37.7	Item No 332 Garden Maintenace (Including Cost of Water) - 4th Year	11575.80	Per Sqm/Mo nth	80.00	902912.40	78	902912.4
37.8	Item No 333	13119.24	Per	80.00	1023300.72	78	1023300.72



	Garden Maintenance (Including Cost of Water) - 5th Year		Sqm/Mo				
37.9	Item No 334 Electrical and Public Art Lighting - Comprehensive Maintenance for 2nd Year	1.00	Yearly	2828150.00	2767062.00	2767062	2767062
38.0	Item No 335 Electrical and Public Art Lighting - Comprehensive Maintenance for 3rd Year	1.00	Yearly	4525030	4427289.00	4427289	4427289
38.1	Item No 336 Electrical and Public Art Lighting - Comprehensive Maintenance for 4th Year	1.00	Yearly	6221915.00	6099863.94	6099863.94	6099863.94
38.2	Item No 337 Electrical and Public Art Lighting - Comprehensive Maintenance for 5th Year	1.00	Yearly	7918800.00	7747754.00	7747754	7747754
38.3	Item No 338 Electrical Work - Operation Amount	60.00	Monthly	18400.90	1080130.00	1080130	1080130
Total Amount					1246706093		1219834900 Equip Negotiate Amount

वरील कामाबाबतची पुढील कार्यवाही नियमानुसार संबंधित विभागाने विहित पध्दतीने करावी.


(वासुदेव शिरवळकर)
नगरसचिव
मिरा भाईंदर महानगरपालिका


(संजय बघटकर, भाषणे)
प्रशासक तथा आगुल्य
मिरा भाईंदर महानगरपालिका

प्रत संबंधित विभागाकडे योग्य त्या कार्यवाहीसाठी रवाना