



भारतीय राष्ट्रीय उपभोक्ता सहकारी संघ मर्यादित

National Co-operative Consumer's Federation of India Ltd.

(Under Administrative Control of Ministry of Consumers Affairs, Food & PDS, Govt. of India)

GST NO : 27AAAAN0109N3ZM

२०१, पुनम प्लाझा, ६९४/२ ब, मार्केट यार्ड रोड, पुणे - ४११ ०३७.

201, Poonam Plaza, 694/2B, Market Yard Road, Pune - 411 037.

Tele.: 020-24275787 Telefax: 020-24275776 E-mail : nccfpune@gmail.com

संदर्भ सं. : एन्. सी. सी. एफ / पुणे

Ref. No.: N.C.C.F. / Pune

NCCF/PUNE/BUSS/2022-23 /57

Date – 07.11.22

SHORT TENDER NOTICE

Pune Branch of NCCF invites Tenders from Empaneled Business Associates of NCCF for following work.

1-Name of Work - Providing, fixing, installation, commissioning of latest Advanced specialized Wi-Fi /Wired Transmission control-based security Monitoring & supervision system with smart intelligent interface connectivity Along with all required software, hardware, electronics works & alternative Power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bldg., MERI, Nashik.

2- Estimated Cost of work - Rs. 39,70,687/-

3- Cost of Tender Documents – Rs 2000/- + 360 /-(GST)

4-Earnest Money Deposit (EMD) by online payment or through DD (No interest will be paid) – Rs 40,000/-

5-Date and Time of start of Tender Submission – 31.10.2022.

6-Last Date and Time of Tender Submission –10.11.2022 at 04.30 PM.

7-Date and Time of Tender Opening - 10.11.2022 at 06.00 PM.

8-Place of Tender Opening- Office of Branch Manager Pune, NCCF

9-Account Details for Depositing EMD

Name of Account Holder- NATIONAL CO-OP CONSUMERS FED

Account Number- 16840200000608

Name of Bank and branch- UCO Bank MUKUNDNAGAR-PUNE.

IFSC Code - UCBA0001684

Terms and Conditions:

- 1-For all works having estimated cost of work more than Rs 5.0 Lakh value, Bidders must have an Experience of successful completion of similar nature of work of minimum 25 % of the Tender value in last 5 years. Completion certificate of Competent Authority of Concerned Department shall be enclosed.
- 2- Selection of the bidder will be made on the basis of maximum margin offered for NCCF and lowest rate quoted.
- 3- NCCF Shall be at liberty to distribute 40 % of the total tendered quantity of materials amongst other than L1 bidders subject to acceptance of L1 rates by other than L1 bidders and fulfilment of eligibility criteria by them.
- 4- NCCF shall terminate the empanelment of a Business Associate if they have competed against NCCF in any bid either individually, as a partner or in a Joint Venture.
- 5- First Preference shall be given to the empaneled Business Associate of Tendering Branch of NCCF. Second preference (in case of absence of valid Business Associate of Tendering Branch) shall be given to Empaneled Business Associates of other NCCF Branches and third preference shall be given to Non-Empaneled Business Associates with a condition that they shall apply for empanelment with NCCF within a week of being declared successful bidder by submitting required documents as per NCCF Business guidelines and get themselves empaneled with NCCF before issue of formal Letter of Acceptance.
- 6-All successful bidders will have to deposit a Security Deposit (SD) of 2 % (Nil for empaneled suppliers of NCCF for works up to Rs 10.0 Lakhs) of awarded value. EMD of successful bidders can be included as SD whereas in case of unsuccessful bidders, it will be refunded. No interest will be paid on SD money.
- 7-NCCF shall be at liberty to postpone/ cancel the tender and accept or reject any bid.
- 8- Terms and conditions would remain same as mentioned in the tender schedule enclosed herewith.

DATED – 07.11.22


BRANCH MANAGER

National Cooperative Consumers' Federation of India Ltd

जितिन ग्रोवर / Jitish Grover
शाखा प्रबंधक / Branch Manager
201, POONAM PLAZA, 694/2B,
MARKET YARD ROAD, PUNE-411037

(Page 2 of 2)

**GOVERNMENT OF MAHARASHTRA
WATER RESOURCES DEPARTMENT**

B-1 TENDER FOR

Name of Work- Providing, fixing, installation, commissioning of latest Advanced specialized Wi-Fi /Wired Transmission control based security Monitoring & supervision system with smart intelligent interface connectivity Along with all required software, hardware, electronics works & alternative Power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bldg., MERI, Nashik.

Tender Cost: - Rs. 39,70,687/-

**TENDER DOCUMENTS AND GENERAL
SPECIFICATION AND DRAWINGS**

DIRECTOR GENERAL DTHRS (W.R.D.)

MAHARASHTRA ENGINEERING RESEARCH INSTITUTE
NASHIK-4

SUPERINTENDING ENGINEER

MAHARASHTRA ENGINEERING RESEARCH INSTITUTE
NASHIK-4

EXECUTIVE ENGINEER

CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK-4

INDEX

Sr. No	Particulars	Page No.	
		From	To
	Brief Tender Notice	6	13
	SECTION I		
1	DETAILED TENDER NOTICE	14	19
2	INFORMATION AND INSTRUCTIONS FOR TENDERERS		
3	Qualification Documents Required	20	21
4	General Description of Proposed Work	22	38
5	Printed Form Agreement	39	44
6	Forms	45	
7	Appendix 'A' – Details of works of minimum similar types and magnitude of works in carried out by the contractor.	46	
	Appendix 'B' – Details of other works tendered for and in hand on the date of submission of tender	47	
8	Appendix 'C' – Details of Technical personals with the contractor	48	
9	Appendix 'D' – Details of plants and machinery immediately available with the Tenderer for use on this work.	49	50
11	Appendix 'E' – Declaration of the Contractor	51	
12	Appendix 'F' – Bank Guarantee of the contractor	52	53
13	Appendix 'G' – Indenture for secured advance	54	57
14	Appendix 'H' – Professional tax clearance certificate	58	
15	Appendix 'I' – Undertaking	59	
16	Appendix 'J' – Declaration of the Contractor (Affidavit)	60	
17	Conditions of contract (B-1 Form)	61	89
	General Condition of Contract	90	104

Sr. No	Particulars	Page No.	
		From	To
19	General Technical Condition of Contract	105	117
20	Schedule –A	118	
21	Schedule –B	119	134
22	Schedule –C	135	146
23	Drawings	147	

General Information of Contract

Original Agreement No.	:	B-1/
Name of Work	:	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik
Name of Contractor	:	
Date of Receipt of Tender	:	
No. & Date of Work Order	:	
Amount put to Tender	:	Rs. 39,70,687/-
Percentage quoted	:	
Amount of Contract	:	
Date of Commencement	:	
Time stipulated for completion of work	:	06 (Six) months including monsoon from the date of work order to start work.
Date of completion as per Agreement	:	
Actual Date of Completion	:	
Reference to sanction of tender	:	
Extension of time limit	:	1

		2
I Certified that this original Agreement contains	:	Pages 01 to Fly leaves No. Drawings No.

महाराष्ट्र शासन
कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक
ई- निविदा सुचना क्रमांक 03 सन 2022-2023

कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक जलसंपदा विभाग, महाराष्ट्र शासन हे विषयांकित प्रकारच्या कामांचा पुर्वानुभव असलेल्या अधिकृत ठेकेदारांकडून खालील कामाकरीता ब-1 नमुन्यातील ई-निविदा प्रणालीव्दारे (ऑनलाईन) निविदा मागवित आहेत. निविदा कागदपत्रे शासनाचे संकेतस्थळ <http://mahatenders.gov.in> येथून डाऊनलोड करण्यात यावीत. तसेच निविदा स्विकारण्याचा अथवा नाकारण्याचा अधिकार कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, नाशिक यांनी राखून ठेवला आहे. अट असलेली निविदा स्विकारली जाणार नाही.

अ. क्र.	कामाचे नांव	कामाची अंदाजित किंमत
1	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik	RS.39,70,687/-

निविदा फॉर्म व इतर माहितीसाठी <http://mahatenders.gov.in> वर उपलब्ध राहिल.

टिप : कोणतेही कारण न देता कोणतीही किंवा सर्व निविदा नाकारण्याचा अधिकार खाली सही करणार यांनी राखून ठेवला आहे.

कार्यकारी अभियंता,
 स्थापत्य बांधकामे परिरक्षण विभाग, ,
 नाशिक-4

महाराष्ट्र शासन

महाराष्ट्र शासन कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक
स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक-4

पत्ता - कार्यकारी अभियंता, स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक-4

ई-मेल— eecwmd.nashikwrd@maharashtra.gov.in

दुरध्वनी क्र. 0253-2530670

ई- निविदा सुचना क्रमांक 03 सन 2022-2023

कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक जलसंपदा विभाग, महाराष्ट्र शासन हे विषयांकित प्रकारच्या कामांचा पुर्वानुभव असलेल्या अधिकृत ठेकेदारांकडून खालील कामाकरीता ब-1 नमुन्यातील ई-निविदा प्रणालीद्वारे (ऑनलाईन) निविदा मागवित आहेत. निविदा कागदपत्रे शासनाचे संकेतस्थळ <http://mahatenders.gov.in> येथून डाऊनलोड करण्यात यावीत. तसेच निविदा स्विकारण्याचा अथवा नाकारण्याचा अधिकार कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक यांनी राखुन ठेवला आहे. अट असलेली निविदा स्विकारली जाणार नाही.

अ. क्र.	कामाचे नांव	निविदेची अंदाजित किंमत रु.	ई-निविदा उपलब्ध कालावधी दिनांक	ई-निविदा उघडणे दिनांक
1	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik	रु. 39,70,687/-	31/10/2022 ते 14/11/2022	17/11/2022

खालील ठिकाणी ई-निविदा बाबत सर्व माहिती उपलब्ध आहे.

- संकेतस्थळ <http://mahatenders.gov.in> सदर निविदेसूचनेमध्ये)काही बदल होत असल्यास वरील वेबसाईटवर कळविण्यात येईल(.
- कार्यकारी अभियंता, स्थापत्य बांधकामे परिरक्षण विभाग, नाशिक कार्यालयातील सूचना फलक,
- संकेतस्थळावर प्रसिध्द होणाऱ्या निविदा उघडण्याची तारीख व वेळेनुसार कंत्राटदाराने किंवा त्याच्या अधिकृत प्रतिनिधीने उपस्थित रहावे अन्यथा निविदा उघडल्यास कोणतीही तक्रार स्विकारली जाणार नाही.

जा.क्र. स्था बां प वि/लेखा-1/1767/2022

स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक-4

दिनांक :20/10/2022

कार्यकारी अभियंता,

स्थापत्य बांधकामे परिरक्षण विभाग,

मेरी, नाशिक-4

**GOVERNMENT OF MAHARASHTRA
CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK**

Address : Executive Engineer, CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK Email ID- eevwmd.nashikwrtd@maharashtra.gov.in Telephone No.0253-2530670

E Tender Notice No. 03 2022-2023

Executive Engineer, CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK Government of Maharashtra invites online tender from the experienced contractors of work in the B-1 form for the following work. Tender Documents is available on website <http://www.mahatenders.gov.in>. Executive Engineer, CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK reserve the rights to accept or reject the tender. Conditional tender not accepted.

Sr. No.	Name of Work	Estimated Cost of Tender	e - Tender Available Period : Date	e - Tender Opening Date
1	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik	Rs.39,70,687 /-	31/10/2022 to 14/11/2022	17/11/2022

1. Website : <http://mahatenders.gov.in>
(Any changes in tender notice is available on above website)
2. Office of the Executive Engineer, CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK on Notice Board.

No. CWMD/AB-1/

Civil Works Maintenance Division MERI, Nashik Date:

Executive Engineer,

Civil Works Maintenance Division MERI,

Nashik-4

महाराष्ट्र शासन
कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिक
स्थापत्य बांधकामे परिरक्षण विभाग, मेरी , नाशिक-4.

निविदा सुचना क्रमांक 03 सन 2021-2022

कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी, नाशिकजलसंपदा विभाग, महाराष्ट्र शासन हे कामांचा पुर्वानुभव असलेल्या अधिकृत ठेकेदारांकडून खालील कामाकरीता ब-1 नमुन्यातील ई-निविदा प्रणालीव्दारे (ऑनलाईन) निविदा मागवित आहेत. निविदा कागदपत्रे शासनाचे संकेतस्थळ <http://mahatenders.gov.in> येथून डाऊनलोड करण्यात यावीत. तसेच निविदा स्विकारण्याचा अथवा नाकारण्याचा अधिकार कार्यकारी अभियंता स्थापत्य बांधकामे परिरक्षण विभाग, मेरी , नाशिक यांनी राखुन ठेवला आहे. अट असलेली निविदा स्विकारली जाणार नाही.

अ. क्र.	कामाचे नांव	कामाची अंदाजित किंमत रुपये	बयाणा रक्कम रुपये	निविदा संचाची फी रुपये (Not refundable)	काम पुर्ण करण्याचा कालावधी
1	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik	39,70,687 /-	40,000/-	2000/- + 360/-GST	06 महिने

ई- निविदेची वेळापत्रक

अ.क्र.	स्टेज	कंत्राटदार स्टेज	दिनांक	दिनांक	लिफाफा
1	निविदा प्रकाशित करणे	--	31/10/2022	31/10/2022	
2	--	निविदा खरेदी व डाऊनलोड करणे	31/10/2022	14/11/2022	तांत्रिक व आर्थिक लिफाफा
3	--	निविदा सादर करणे	31/10/2022	16/11/2022	तांत्रिक व आर्थिक लिफाफा
4	--	Geo Tagging कालावधी.	04/11/2022	11/11/2022	तांत्रिक लिफाफा
5	तांत्रिक लिफाफा उघडणे	--	17/11/2022	17/11/2022	तांत्रिक लिफाफा
6	व्यापारी (आर्थिक) लिफाफा उघडणे	--	17/11/2022	17/11/2022	व्यापारी लिफाफा

- सर्व पात्र / इच्छुक निविदाकारांनी निविदा डाऊनलोड करण्यासाठी व निविदा प्रक्रीयेत भाग घेण्यासाठी ई-निविदा प्रणालीचा <https://mahatenders.gov.in> या portal वर enrolled करणे आवश्यक आहे.
- निविदाकारांनी निविदा संदर्भात सर्व दस्तऐवज ऑनलाईन सादर करणे अनिवार्य राहिल. तसेच बयाणा रक्कम व निविदा फॉर्म फी ची रक्कम ऑनलाईन गेटवे पेमेंटस च्या माध्यमातुन सादर करणे आवश्यक आहे. अन्यथा ई- निविदा प्रक्रीयेत त्यांना सहभागी होता येणार नाही.
- सदर निविदा कोणतेही कारण न देता रद्द करण्याचे व याबाबतचा काही खुलासा व स्पष्टीकरण देण्याचा अधिकार म.शासनाचे सक्षम अधिकारी यांनी राखून ठेवले आहे. सदर निविदा स्वीकृतीचे तारखेपर्यंत किंवा त्यानंतरही या निविदा सूचनेत अथवा निविदा कागदपत्रात पूर्ण किंवा अंशतः बदल करण्याचे अधिकार म.शासनाचे सक्षम अधिकारी यांनी राखून ठेवले आहेत.
- सदर कामांच्या निविदेमध्ये Geo Tagging Certificate सादर करणेची अट समाविष्ट असून महाराष्ट्र शासन,जलसंपदा विभाग, शासन शुध्दीपत्रक क्र.निविदा-0417/प्र. क्र247 /मोप्र-1 दि.05.07.2022 नुसार निविदा प्रक्रिया राबवण्यात येईल.
(Geo Tagging कालावधी दि. 04/11/2022 ते 14/11/2022 कार्यालयीन वेळेपर्यंत)
- निविदेतील सदर तरतुदीचे अनुषंगाने कंत्राटदारांनी निविदा भरण्यापूर्वी क्षेत्रिय स्थळाची पाहणी करणे/भेट देणे तसेच Geo Tagging प्रक्रीया राबविणेसाठी खालील 3 (तीन) कार्यस्थळे निश्चित करण्यात आली आहेत.

अ.क्र.	तपशिल	निश्चित केलेली कार्यस्थळे	Geo Tagging Photo संख्या
1.	मेरी विश्रामग्रह		03
2.	सि.डि.ओ.इमारत		03
3.	Hydro Dynamic Department		03

Geo Tagging करणेची प्रक्रीया > Playstore> GPS Map Camera>Geo Tagging Photo & GPS Map Camera>Or any application may use.

निविदेतील तरतुदीनुसार वरील प्रक्रीया पार पाडणेसाठी श्री. शं.के.शेवाळे,उप अभियंता मोबाईल नं. 7620095316 यांची नियुक्ती करण्यात येत आहे. त्यांनी स्वतः किंवा आपले प्रतिनिधी यांनी दिनांक (04/11/2022 ते 14/11/2022) या कालावधीत उपरोक्त निश्चित केलेल्या कार्यस्थळी कार्यालयीन वेळेत उपस्थित राहून निविदेतील तरतुदीनुसार कार्यवाही करावी.

सदरचे Geo Tagging कंत्राटदाराने स्वतः किंवा त्यांच्या प्राधिकृत प्रतिनिधी (Authorized Representative) यांनी स्वतः करावयाची आहे. कंत्राटदाराने किंवा त्यांच्या प्राधिकृत प्रतिनिधी यांनी Geo Tagging केल्याच्या प्रमाणपत्रावर भेटीचा दिनांक व वेळ नमूद करून स्व सांक्षतिक करणे अनिवार्य राहिल. कंत्राटदाराने भरावयाचा Geo Tagging च्या प्रमाणपत्राचा मसुदा निविदा संचालक समाविष्ट असावा.

वरील Geo Tagging प्रमाणपत्र हे लिफाफा क्र.1 मधुन कंत्राटदाराने सादर करणे अनिवार्य आहे. अन्यथा कंत्राटदाराचा लिफाफा क्र.2 उघडण्यात येणार नाही व सदर कंत्राटदाराची निविदा ग्राह्य राहणार नाही.

संपर्कासाठी कार्यालयाचा पत्ता :- कार्यकारी अभियंता, स्थापत्य बांधकामे परिरक्षण विभाग, MERI, नासिक.4 जि. नाशिक,4 (महाराष्ट्र) पिन-422 002. दुरध्वनी क्रमांक 0253-2530670

**GOVERNMENT OF MAHARASHTRA,
Executive Engineer Civil Works Maintenance Division MERI Nashik-4
E-Tender Notice No. 03 For 2022-2023**

Executive Engineer, CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK Government of Maharashtra invites online tender from experienced contractors of subjected work in the B-1 form for the following work Tender Documents is available on website <http://www.mahatenders.gov.in>. Executive Engineer, CIVIL WORKS MAINTENANCE DIVISION MERI NASHIK reserve the rights to accept or reject the tender. Conditional tender not accepted.

sr. No.	Name of Work	Estimated cost (in Rupees)	Earnest Money Rs.(In Rupees)	Tender Form Fee Rs. (in Rupees) (Not refundable)	Time limit in tender (Calendar Months)
1.	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi/Wired Transmission control-based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik	39,70,687 /-	40,000/-	2000/- + 360 /-(GST)	06 (Six)

Tender Schedule

Sr. No	Stage	Vender Stage	Start Date	Expiry Date	Envelopes
1	Main Release Tender	--	31/10/2022	31/10/2022	--
2	--	Main Tender Document Purchases & Downloading	31/10/2022	14/11/2022	Technical & Commercial
3	--	Bid submission	31/10/2022	16/11/2022	Technical & Commercial
4	--	Geo Tagging	04/11/2022	11/11/2022	Technical Envelope
5	Envelope 1 Opening	--	17/11/2022	17/11/2022	Technical Envelope
6	Envelope 2 Opening	--	17/11/2022	17/11/2022	Technical Commercial

Note : -

- 1 All eligible/interested Bidders are required to be enrolled on portal <https://mahatenders.gov.in> before downloading tender documents and participate in e-tendering.
- 2 The tender document Fee and EMD to be paid via online Payment Gateway mode only. EMD exempted Certificate shall be not be accepted. The information of E- Payment Gateway available on E-Tendering website <https://mahatenders.gov.in>
- 3 The Govt. of Maharashtra reserves the right to reject any or all tenders without assigning any reason thereof or to get the clarification on the queries, (if any). Right to revise or amend this notice and or the Bid Documents fully or Partly, prior to the last date notified for submission of offers or on any subsequent date is reserved by the Government.
- 4 The bidder has to submit Geo Tagging Certificate along with tender documents. Tender Procedure will carried out as per Water Resources Department, शासन शुध्दीपत्रक क्र.निविदा-0417/प्र. क्र247 /मोप्र-1 Dated. 05.07.2022

(Geo Tagging कालावधी दि. 04/11/2022 ते 14/11/2022 कार्यालयीन वेळेपर्यंत)

- 5 निविदेतील सदर तरतुदोचे अनुषंगाने कंत्राटदारांनी निविदा भरण्यापूर्वी क्षेत्रिय स्थळाची पाहणी करणे/भेट देणे तसेच Geo Tagging प्रक्रीया राबविणेसाठी खालील 3 (तोन) कार्यस्थळे निश्चित करण्यात आली आहेत.

अ.क्र.	तपशिल	निश्चित केलेली कार्यस्थळे	Geo Tagging Photo संख्या
1.	मेरी विश्रामग्रह		03
2.	सि.डि.ओ.इमारत		03
3.	Hydro Dynamic Department		03

Geo Tagging करणेची प्रक्रीया > Playstore> GPS Map Camera>Geo Tagging Photo & GPS Map Camera>Or any application may use.

निविदेतील तरतुदीनुसार वरील प्रक्रीया पार पाडणेसाठी श्री. शं.के.शेवाळे,उप अभियंता मोबाईल नं. 7620095316 यांची नियुक्ती करण्यात येत आहे. त्यांनी स्वतः किंवा आपले प्रतिनिधी यांनी दिनांक (04/11/2022 ते 14/11/2022) या कालावधीत उपरोक्त निश्चित केलेल्या कार्यस्थळी कार्यालयीन वेळेत उपस्थित राहून निविदेतील तरतुदीनुसार कार्यवाही करावी.

सदरचे Geo Tagging कंत्राटदाराने स्वतः किंवा त्यांच्या प्राधिकृत प्रतिनिधी (Authorized Representative) यांनी स्वतः करावयाची आहे.कंत्राटदाराने किंवा त्यांच्या प्राधिकृत प्रतिनिधी यांनी Geo Tagging केल्याच्या प्रमाणपत्रावर भेटीचा दिनांक व वेळ नमूद करून स्व सांक्षाकित करणे अनिवार्य राहिल.कंत्राटदाराने भरावयाचा Geo Tagging च्या प्रमाणपत्राचा मसुदा निविदा संचातच समाविष्ट असावा.

वरील Geo Tagging प्रमाणपत्र हे लिफाफा क्र.1 मधुन कंत्राटदाराने सादर करणे अनिवार्य आहे.अन्यथा कंत्राटदाराचा लिफाफा क्र.2 उघडण्यात येणार नाही व सदर कंत्राटदाराची निविदा ग्राह्य राहणार नाही.

कार्यकारी अभियंता,
स्थापत्य बांधकामे परिरक्षण विभाग, ,
नाशिक-4.

**GOVERNMENT OF MAHARASHTRA.
INVITATION FOR TENDERS
DETAILED TENDER NOTICE**

1. TENDER SCHEDULE

Online percentage rate tenders in 'B-1' Form are invited by the Water Resources Department for the following work from experienced contractors having experience of subjected work. The name of work, estimated cost, earnest money, security deposit, time limit for completion etc. are as under.

Name of Work :-	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik
Estimated Cost Put to Tender :-	Rs. 39,70,687 /-
Earnest Money Deposit (EMD)	Rs. 40,000/-
ii)Additional Earnest Money Deposit EMD	The contractor should have to submit additional Performance S D as per detailed tender notice, clause 17.1.
Initial Security Deposit	Rs. 40,000/-
Cost of Tender Form	Rs. 2000 /-+Rs.360 /- GST (Not refundable) paid via online payment gateway mode only.
Main tender document purchase & downloading	Refer online schedule on portal http://mahatenders.gov.in
Date and time for online bid data decryption and re-encryption (technical and commercial)	Refer online schedule on portal http://mahatenders.gov.in

Guidelines to Bidders on the operations of Electronic Tendering Management System [ETMS] of Water Resources Department, <http://mahatenders.gov.in>

2(A) Pre-requisites to participate in the Tenders processed by W.R.D.

(i) Enrolment and Empanelment on [ETMS]:-

(a) Enrolment on [ETMS]:-

- I. The Contractors interested in participating in the Tenders of Water Resources Department – processed using the ETMS will have to be Enrolled on the ETMS and have obtained User ID.
- II. Contractors interested in participating in e-tendering system are required to enroll themselves with mahatenders.gov.in and should have digital signature certificate (DSC) registered with mahatenders.gov.in.
- III. After submission of application for Enrolment on the System, the Authorized Representative of the Service Provider will verify the information provided and will approve the Enrolment If the information is found to be complete and in order.

(b) Empanelment on [ETMS]:-

- I. For participating in Limited and Restricted tenders the registered vendors have to apply for Empanelment on the sub-portal of W.R.D.in an appropriate class of registration.
- II. After submission of application for Empanelment on the System, the respective officer from the W. R. D. will verify the information provided and will approve the Empanelment If the information is found to be complete and in order.

(c) For any assistance on the use of ETMS

- III. The Contractors may obtain the necessary information on the process of enrolment and empanelment either from Helpdesk Support Team or may visit the information published under the link Enroll under the section E- Tendering Toolkit for Bidders on the Home Page of the ETMS.

(ii). Obtaining a Digital Signature Certificate (DSC):-

- a. Intending Tenderers should have valid class II/ III **Digital Signature Certificate**

(DSC) obtained from an approved Certifying Authority authorized by the Controller of Certifying Authorities of Government of India through their Authorized Representatives upon receipt of documents required to obtain a DSC.

- b.** In case of requirement of DSC, Intending Tenderers should go to <http://mahatenders.gov.in> and follow the procedure mentioned in the document Procedure for application of DSC.
- c.** The DSC (Class – II or Class – III) is used to encrypt the data/ information and electronically sign the hash value during the Bid downloading & Hash Submission stage.
- d.** The DSC is required to maintain the security of the Bid Data and also to establish the identity of the Contractor transacting on the System.
- e.** In case during the process of preparing and submitting a bid for a particular Tender, the contractor loses his/her DSC (i.e. due to virus attack, hardware problem, operating system problem, etc.), he/she may not be able to submit the Bid online and the Department will not be responsible for that.
- f.** Hence, the Users are advised to store his/ her DSC securely and if possible, keep a backup at safe place under adequate security to be used in case of need.
- g.** In case of online tendering, if the DSC issued to an Authorized user of a Partnership Firm is used for signing and submitting a bid, it will be considered equivalent to a no objection certificate / power of attorney to that User to submit the bid on behalf of the Partnership Firm. The Partnership Firm has to authorize a specific individual via an authorization certificate signed by a partner / partners of the firm (and in case the applicant is a partner, all other partners if the same firm shall authorize himself for DSC) to use the DSC as per Indian Information Technology Act, 2000. Unless the DSC is revoked, it will be assumed to represent adequate authority of the Authority User to bid on behalf of the Firm for the Tenders processed on the Electronic Tender Management System of Government of Maharashtra as per Indian Information Technology Act. 2000.
- h.** Unless the DSC of this Authorized User will be binding on the Firm. It Shall be the responsibility of Partners of the Firm to inform the Certifying Authority or sub Certifying Authority, if the Authorized User changes, and apply for a fresh DSC. The procedure for application of a DSC will remain the same for the new Authorized User.
- i.** The Same procedure holds true for the Authorized Users in Private/ Public Limited

Company. In this case, the Authorization Certificate will have to be signed by the Director of the Company or the Reporting Authority of the Applicant.

- j. For Information on the process of application for obtaining DSC, the Contractors may visit the section DSC on the Home Page of the ETMS .

(iii) Recommended Hardware and Internet Connectivity :-

- a. Intending Tenderers should install the Mandatory Components available on the Home Page of <http://mahatenders.gov.in> under the section **Mandatory Components** and make the necessary Browser Settings provided under section '**Internet Explorer Settings**'
- b. To operate on the ETMS, the Contractors are recommended to use Computer System with at least 1 GB of RAM and broadband connectivity with minimum 512 kbps bandwidth.

(iv) Set up of Computer System for executing the operations on the ETMS .

- a. To operate on the ETMS of GOM, the Computer System of the Contractors is required to be set up. The contractors are required to install Utilities available under the section Mandatory Installation Components on the Home Page of the System.
- b. The Utilities are available for download freely from the above mentioned section. The contractors are requested to refer to the E-Tendering Toolkit for Bidders available online on the Home Page to understand the process of setting up the System, or alternatively, contact the Helpdesk Support Team on information/ guidance on the process of setting up the System.
- c. The Utilities are available for download freely from the above mentioned section. The Contractors are requested to refer to the E-Tendering Toolkit for Bidders available online on the Home Page to Understand the process of setting up the System, or alternatively, contact the Helpdesk Support Team on information / guidance on the process of setting up the System.

2(B) Steps to be followed by Contractors to Participate in the E-Tenders Processed by W.R.D.

(i) Preparation of Online Briefcase :-

- a. All Contractors enrolled on the ETMS of GOM are provided with dedicated briefcase facility to store documents/ files in digital format.
- b. The Contractors can use the online briefcase to store their scanned copies of

frequently used documents/ files to be submitted as a part of their bid response.

- c. The Contractors are advised to store the relevant documents in the briefcase during the Bid Downloading / submission stage.
- d. In Case, the Contractors have multiple documents under the same type (e.g. multiple work Completion Certificates) as mentioned above, the Contractors advised to either create a single [*.pdf]file of all the documents of same type or compress the documents in a single compressed file in [*.zip] or [*.rar] formats and upload the same.
- e. It is mandatory to upload the documents using the briefcase facility. Therefore, the Contractors are advised to keep the scanned copies of original documents ready in their briefcase to ensure timely bid preparation. However he shall attach only required documents
- f. Uploading of documents in the briefcase does not mean that the documents are available to W.R.D.at the time of Tender Opening stage unless the documents are specifically attached to the bid during the online Bid Downloading Hash Submission stage as well as during Decryption and Re-encryption stage.

(ii) Purchase of Tender Documents

The Tender Documents (Tender form, conditions of contract, specifications and contract drawings, etc) can be purchased on the payment of Tender Fee Rs 2000/-+240/-GST (In words Two Thousand Two Hundred Forty rupees only) via online gateway payment mode only in favour of **Executive Engineer, Civil Works Maintenance Division, Nashik** as per the Tender Schedule.

(iii) Download of Tender Documents:-

The tenderer can download the Tender Document & participate in tendering process, only after entering the details of payment of Tender Fee on the e-tendering portal of, GOM i.e. <http://mahatenders.gov.in>

3 EXAMINATION OF DRAWING AND SITE CONDITIONS :

(3.1) The tenderer shall in his own interest carefully examine the drawings, conditions of contract, specifications etc.

(3.2) He shall also inspect the site and acquaint himself about the climate, physical

and all other conditions prevailing at site, the nature, magnitude, special features, practicability of the works, all existing and required means of communications and accesses to site, availability of housing and other facilities, the availability of labour, materials, Power & Water, space for labour's camp, plant, stores and Godown etc.

- (3.3) He shall obtain all necessary information as to the risk, contingencies and other circumstances, which may affect and influence the tender.
- (3.4) Should there be any discrepancy or doubt or obscurity as to meaning of any of the tender document or as to the instructions to be observed by him, he shall set forth in writing such discrepancies, doubts obscurity and submit the same to the Executive Engineer, Civil Works Maintenance Division, Nashik for elucidation as soon as possible.
- (3.5) No claims on any of the above or any other factors will be entertained by the Government.
- (3.6) The tender submitted by the tenderer shall be based on the clarification, additional facility issued (if any) by the Department, and this tender shall be unconditional. Conditional tender will be summarily REJECTED.
- (3.7) All Intending Tenderers are cautioned that the tenders containing any deviation from the contractual terms and condition, specifications or other requirements, and conditional tenders will be treated as non responsive.
- (3.8) Tenderer should visit sites, before filling the tender. i.e.
- (3.9 a) Tenderer or his authorised person with authority letter duly signed should visit above mention locations, MERI site conditions carried out Geo Tagging and submit attested authority letter having date and time of visit mention on it in Drop Box at site Location. Tenderer or his authorised person who visited site location should give his identity to tender inviting officer or his authorized representative present at site location from /02/2022 to / /2022 in working hours.
- (3.9 b) Tenderer should submit above Geo tagging Certificate in envelope No. 01. Otherwise such tender should be consider as INVALID.

4. EARNEST MONEY DEPOSIT (EMD):-

- (4.1) Earnest Money Deposit (EMD.) which should be paid of Rs **40,000/-** in favour of via online gateway payment mode only.
- (4.2) Earnest Money in any other form or cash or cheques will not be accepted.
- (4.3) The amount of EMD will be forfeited, in case a successful contractor does not pay the amount of initial security deposit within the time specified as stipulated by the

Executive Engineer, and complete the contract documents. In all other cases, EMD will be refundable.

- (4.4) This** earnest money amount shall not carry any interest whatsoever. The earnest money will be refunded (and Demand Draft if any, will be released) only after completion of all formalities in case the Tender is accepted or in case of expiry of validity of offer, when specially withdrawn by the tenderer. In the case of successful tenderers, the earnest money will be refunded after completion of contract documents and payment of security deposit as per the provisions made in para (ii) Security Deposit or converted into security Deposit if required.

5 Manner of Submission :

5.1 Uploading of Formats, Templates and Tender Documents:-

(a)The Intending Tenderer shall prepare the Bids in the Templates provided online as part of tender. The Templates shall be either Documents based (in which the Intending Tenderer is required to attach the relevant documents separately) or Forms Based (in which the Intending Tenderer is required to fill in the information in given Formats).

(b) The required Documents (single document or a compressed file containing multiple documents having size of each document not more than 5 MB) available in Brief Case shall be attached against each up loadable option in the Document Based Templates.

The Information being filled in the Form Based Templates shall be encrypted using a valid class II / III DSC. The Formats/ Templates shall be uploaded in Envelope No.1 (Technical Bid) on the Portal <http://mahatenders.gov.in>. The tenderer must upload valid experience certificates of similar type of works.

The first Envelope clearly marked as 'Envelope No. 1' shall contain the following documents. (Original Scanned Documents)

- (i)** Scanned copy of payment of EMD payable to the Executive Engineer. Certificate of exemption for payment of earnest money shall not be accepted. The Contractor should furnish the EMD from the Bank Account in the name of his Firm Only.
- (ii)** Scanned Copies of Original documents defining the constitution or legal status, place of registration under Partnership or Companies Act and principal place of business, written power of Attorney of the signatory of the Bid to commit the Bidder. Since it is the special work in the field of digital electronics which is related to surveillance and safety of the important premises of MERI, bidder must upload Scanned copies of works done certificates of Minimum 3 Similar Type Works in WRD Projects Maharashtra state costing of Rs.30 Lacs duly signed by not below the rank of Executive Engineer, indicating satisfactory installation of similar type of work (Security monitoring & supervision or remote surveillance systems at Remote and Open to Sky Sites in Envelope No.1.) The main component, heart of the

system NVR (Network Video Recorder) must be OEM (Original Equipment Manufacturer's or its Authorized Dealer) & must upload MAF (Manufacture's Authorization Form) of specified companies along with CE, BIS & FCC certifications.

- (iii) Scanned copy of Income Tax PAN Card and latest Income tax returns duly submitted to income Tax Officer of the Circle,
- (iv) Valid Goods & Services Tax Registration Certificate
- (v) Power of Attorney. (if essential)
- (vi) Professional tax clearance up to 31/ 03/ 2021 (as given in the tender form) PTRC/ PTEC registration.
- (vii) The original copies of all documents required & submitted in envelope No.1 shall be kept ready for verification at the time of opening of tender, if required.
- (viii) Duly filled ANNEXURE A TO J
- (ix) Affidavit on Rs 500/- Stamp paper regarding completeness and correctness of documents in the prescribed Proforma vide Appendix M As per PWD Govt. Resolution No.28.11.2018 .Dtd127 /2018/CST
- (x) Attested Geo Tagging Certificate on authorised Letter in head of Tenderer appendix J

(XI) Scanned copy of Original Manufacturer Authorization Letter from OEM (Original Equipment Manufacturer) of Approved makes for Camera & NVR along with Technical Compliance of Specifications for the CCTV Items, on OEM's Letter Head

6.0 Method of applying:

(i) If the application is made by a proprietary firm, it shall be signed by the proprietor above his name and the full name of this firm with its current address.

(ii) If the application is made by a firm in partnership, it shall be signed by all the partners of the firm above their full typewritten names and current address or by a partner holding valid power of attorney by the firm for signing the application a certified copy of the partnership deed, and current address of all the partners of the firm shall also accompany the application.

(iii) If the application is made by a limited company or a Department, it shall be signed by a duly authorized person holding the power of attorney for signing the application, in which case a certified copy of the power of attorney shall accompany the application. Such limited company or Department may be required to furnish satisfactory evidence of its existence before the pre-qualifications awarded.

ONLINE Submission:-

(i). Submission of online Tender Documents {uploading of Formats & Templates} (in Env. no1) and Tender Documents (in Env no 2)} shall be followed by Digitally Signed Bid Hashes (Seals) within the Tender Time Schedule (Key Dates)

(ii) Then the Intending Tenderer is required to enter the date and encrypt the data using the DSC.

(iii) The Hashes are the Thumbprint of electronic Data and are based on one – way algorithm. The Hashes establish the unique identity of Bid Data.

(iv) The Bid hash values are digitally signed using valid Class – II or Class – III DSC issued any Certifying Authority.

(v) After the hash value of bid data is generated, the intending Tenderer cannot make any change / additions in his bid data.

Note -

- (a) The Contractor uploads a single document or a compressed file containing documents against each upload able option.
- (b) The Hashes are the thumbprint data of electronic data and are based on one – way algorithm. The Hashes establish the unique identity of Bid Data.
- (c) The Bid Hash values are digitally signed using valid – Class II or Class III DSC issued any Certifying Authority. The Contractors are required to obtain DSC in advance
- (d) After the hash value of bid data is generated, the intending Tenderer cannot make any change / additions in his bid data
- (e) The Step by step procedure as per system requirement must be followed.

7. Dead line for Submission of Tender

The Engineer-in-Charge may at his discretion extend the deadline for submission of tender by issuing an addendum in which case, all rights and obligations of the Government and Tenderers previously subjected to the original dead line shall therefore be subjected to new deadline as extended.

8. Close for bidding (Generation of Super Hash Values) :

After the expiry of the cut off time of Bid Downloading and Hash Submission stage to be completed by the Intending Tenderer has lapsed, the Tender will be closed by the Tender Authority. The Step by step procedure as per system requirement must be followed.

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

- 9. Decryption and Re-encryption of Bids (Submitting the Bids online)** The Intending Tenderers are expected to get themselves fully conversant with the GOM E-Tender System and latest changes therein. However brief details about E-Tender System, it's requirements, necessary procedure regarding purchase of Tender Forms, downloading of Tender Forms, Submission of Tender Documents, quoting offer etc, has been mentioned below.

- (9.1) After the time for generation of Super Hash values by the Tender Authority from W.R.D. has lapsed, and after making online payment towards Fees of Service Provider, the Contractors are required to decrypt their bid data using their DSC and immediately re-encrypt their bid data using the Public Key of the Tendering Authority. The Public Key of the Tendering Authority is attached to the Tender during the downloading period.
- (9.2) At this time, the Intending Tenderer are also required to upload the files for which they generated the Hash Values during the Bid Downloading and Hash Submission stage.
- (9.3) The Bid Data and Documents of only those Intending Tenderer who have submitted their Bid Hashes (Seals) within the stipulated time (as per the Tender Schedule), will be available for decryption and re-encryption and to upload the relevant documents from Briefcase.
- (9.4) The Step-by-step procedure as per system requirement must be followed.

10. Receipt of Tender After Deadline

The Tenderer will have to carry out their respective tasks within the deadline defined in the Tender Schedule.

11. Department will not be responsible, for non Enrolment and non Empanelment of ETMS, non submitting / uploading tender online due to failure of internet services, or power supply or any other unforeseen or foreseen reasons/causes what-so-ever. No claims on any of the above or any other factors in the regards will not be entertained.

12. Opening of Technical Bid (Envelope No. 1)

- (12.1) Tenders will be opened **as per the Tender Schedule**, in the presence of such intending Tenderers or his/ their authorized representatives who may be present at that time.

(a) The Tendering Authority will first open the Envelope – I documents of all Intending Tenderer and after scrutinizing these documents will shortlist the Intending Tenderer who are eligible for Financial Bidding Process. The Shortlisted Tenderers will be intimated by e-mail.

(b) The Contents in Envelope No. 1 will be verified by the Tender opening authority to check their validity as per requirements. If any particular document of any tender is either missing or does not meet the requirements as specified above then a note to that effect will be recorded by the tender opening authority at the time of short listing of Envelope – 1 and the tenderer will be liable for Rejection.

13.3.1 GENERAL DESCRIPTION:

The enclosed forms should be filled in completely and all questions should be answered. All information requested for in the enclosed forms should be furnished against the respective columns in the form. If any particular query is not relevant it should be stated as **Not Applicable** and only a dash reply will be treated as incomplete. Information in the application or any change(s) made in the prescribed forms will render the application to be rejected as non responsive.

..

- 13.3.2** All the information must be filled in English language only.
- 13.3.3** Information and certificate(s) furnished along with the application form that vouch to the suitability, technical knowhow and capability of the applicant should be signed by the applicant.
- 13.3.4** No further information will be entertained after submission of tender documents unless it is requested by the competent authority.
- 13.3.5** The documents submitted in connection with the tender shall be treated as confidential and will not be returned.
- 13.4.1** If an applicant is judged to be unsound, he will be disqualified.
- 13.4.2** Necessary information will be collected from the details furnished in the proforma and additional information may be called for at the discretion of the competent authority.

A) GENERAL EXPERIENCE:

B) SIMILAR WORKS:

13.5.1 MACHINERY AND EQUIPMENTS REQUIRED:-

As a prime contractor the applicant bidder should have the following minimum machinery.

Sr. No.	Type of Machinery	Nos. of Mech. Required	Mode of Availability
1	2	3	4
	---NIL---		

13.5.2 : KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL-

As a prime contractor the applicant bidder should have the following TECHNICAL PERSONNELS working with him having the qualification mentioned below.

Sr. No.	Particular
	---NIL---

14. Opening of Financial Bid (Envelope No. 2)

- (14.1)** The Envelope No. 2 of the tenderer whose Envelope No. 1 does not contain the specified documents or any of the specified document is missing or do not satisfy the requirements, such tenders will be rejected. The Envelope No. 2 of such tender shall not be opened and a note to that effect will be made online at the time of short listing of Envelope -1
- (14.2)** After the analysis and scrutiny of documents and evaluation with respect to Departmental Requirement is over, the Envelope No. 2 shall be opened as per

tender schedule.

- (14.3)** The Envelope No. 2 of Eligible Tenderers shall be opened serially. The percentage above or below over the estimated cost put to tender by the Department quoted by each Eligible Tenderers shall then be read out by tender opening authority and shall be reflected online for information of those present / participated.

14.4 Tender Liable for Rejection.

Tender is liable for outright rejection if on opening it is found that –

- (a) The Tenderer has not strictly followed the procedure laid down for submission of tender.
- (b) If the tender is **CONDITIONAL**
- (c) If the Tenderer has quoted his offer anywhere else other than specified place provided.
- (d) The Tenderer has not uploaded the main tender documents or Failed to fill the templates as stated and if the tenderer has not uploaded the work done certificates for similar types of works carried out in water resources department signed by not less than Executive Engineer rank of Water Resources Department.
- (e) Any Corrections, modifications, additions, omission or any type of changes in main tender document is not permissible and if it is found at any stage the tender shall be rejected by forfeiting the Security Deposit.
- (f) If an applicant is judged to be unsound, he will be disqualified
- (g) The information given is incomplete / misleading, false, such application will therefore be considered as non-responsive & stand rejected.
- (h) The record of poor performance such as abandoning work, not properly completing contract, inordinate delays in-completion and financial failure, is noticed.

- 15.** The Contractor will have to sign the tender papers and the drawings according to which the work is to be carried out & upload the same as prescribed. He shall also have to give a declaration to the effect that he has fully studied the plans, specifications, local conditions and availability of labour and materials and that he has quoted his rates with due consideration to all these factors.

- 16.** The acceptance of the tender may be intimated to the Contractor / electronically or **otherwise (even may be by e-mail)** and either by the Officer competent to accept the tender or any authority in the department including Government and such intimation shall be deemed to be an intimation of acceptance of the tender given by the authority competent to accept the tender.

17.1 ADDITIONAL PERFORMANCE SECURITY DEPOSIT :

(As per WRD. Government Resolution (Marathi) Nivida 0417/(247/17)/MP dated 30/11/2018 & 23/06/2020)

1. If the tenderer quotes the rate more than 1.0% below the estimated amount put to tender then the contractor has to submit the detailed reasoning for the same with due planning to complete the work. The Engineer – in charge will verify this whether the work

could be completed in the lowest offer (below the estimated amount put to tender) quoted and if the justification given by the tenderer is unsatisfactory, the offer quoted by the tenderer shall not be considered for further tender process.

2. If the tenderer quotes the rate up to 10% below the estimated amount put to tender, the tenderer shall furnish the additional Performance Security Deposit in the form of Bank Guarantee or Demand Draft of amount up to 1% of the estimated amount put to tender (e.g. If offer quoted is (-) 1.0% to (-) 10%, the Performance Security deposit is 1% of the estimated amount put to tender)

3. If the tenderer quotes the rate more than 10% up to 15% below the estimated amount put to tender, the tenderer shall furnish the additional Performance Security deposit in the form of Bank Guarantee or Demand Draft of amount up to 1% plus the equivalent % quoted below 10% of the estimated amount put to tender or minimum amount of Rs.1000/- (e.g. If the offer quoted is (-)14% the Performance Security Deposit = 1% of the estimated amount put to tender up to (-) 10% + addition PSD as(14% - 10% = 4%) i.e. Total 1%+4%=5%.

4. If the tenderer quotes the rate more than 15% below the estimated amount put to tender, the tenderer shall furnish the additional Performance Security deposit in the form of Bank Guarantee or Demand Draft of amount up to 1% plus the equivalent % quoted below 10% plus the equivalent 2% quoted below 15% of the estimated amount put to tender or minimum amount of Rs.1000. (e.g. If the offer quoted is (-)19% the Performance Security Deposit = 1% of the estimated amount put to tender up to (-) 10% + addition PSD as(15% - 10% = 5%) + addition PSD as[2x (19% - 15%) = 8%] i.e. Total 1%+5%+8%=14%.

5. Lowest bidder (L-1) should be submit D.D/ B.G of Additional Performance Security Deposit in the office of the **Executive Engineer, Civil Works Maintenance Division, MERI Nashik Tal. Nashik, Dist- Nashik** payable at Nashik. Within 2 (Two) working days period from the last date of opening of Envelope 2 of the tender.

6. If Lowest Bidder (L-1) is unable to submit D.D/ B.G of Additional Performance Security Deposit within the stipulated period of 02 working days as stated herein above , the EMD of L-1 shall be forfeited and the Second Lowest Bidder (L-2) will be invited with Condition that L-2 should be ready to perform work as per terms & conditions and the offer quoted (% below) by the Lowest Bidder L-1.

5. a) The Additional Performance Security deposit in the form of Bank Guarantee or Demand Draft of shall be in the Name of the **Executive Engineer, Civil Works Maintenance Division, MERI Nashik Tal. Nashik Dist Nashik payable at Nashik.**

b) The Bank Guarantee or Demand Draft shall be drawn from Nationalized Banks or

the Public Schedule Banks.

- c) The Bank Guarantee or Demand Draft shall be valid for the period up to 1 month after the completion of Defect liability Period of the Work from the date of opening of envelope 2
- d) The Demand Draft shall mention the Bank's MICR & ISFC Code Nos.
- e) After the opening of the tenders, the **Executive Engineer, Civil Works Maintenance Division, MERI Nashik Tal. Nashik Dist Nashik** will retain the Bank Guarantee/ Demand Draft of two lowest tenderers who are qualified during the evaluation of Envelope No.1
- f) In case, if the tenderer submits the false documents / Bank Guarantee /Demand Draft or the tenderer has not furnished any documents, Bank Guarantee / Demand Draft as per requirement, the Earnest Money of the tenderer shall be forfeited and the tenderer's registration shall be suspended and tenderer shall be disqualified & prohibited from participation in any tender process of Water Resources Department for the period of next three year.

7. The **Executive Engineer, Civil Works Maintenance Division, MERI Nashik Tal. Nashik, Dist. Nashik** payable at Nashik. will encash the Demand Draft submitted by the eligible tenderer before the issue of work order.

8. After the satisfactory completion of the work as per the tender conditions by the Contractor, the amount of the additional performance security deposit submitted by him shall be released within the period of 3 months from the date of satisfactory completion of the work.

18. SECURITY DEPOSIT: -

(18.1) The Total Security Deposit to be paid by the contractor shall be 2% (Two Percent) of amount put to tender.

(18.2) The Successful tenderer shall have to pay, half of the Security Deposit preferably in the form Demand Draft of any nationalized or any Scheduled Bank drawn in favour of **Executive Engineer, Civil Works Maintenance Division, MERI Nashik payable at Nashik** within 10 days of acceptance of tender, and the balance security deposit will be recovered from running account bills at the percentage as shown in item (d) of the memorandum in printed B-1 form or as may be decided by the Executive Engineer during course of execution of the work looking to the position and circumstances that may prevail, whose orders will be final and binding on the contractor.

(18.3) The Security Deposit for the due performance of the contract shall be as detailed

in the tender documents elsewhere. Fifty percent of the Security deposit will have to deposited within (10) ten days of the acceptance of the tender and the Balance Security Deposit will be recovered from the Running Bills at the rates as specified in the tender form on the cost of work as per CSR prevailing at the time of acceptance of tender. Amount of total security deposit to be paid shall be 2% (Two Percent) of the cost of work worked out as per Current D.S.R. of respective District.

- (18.4)** In the event of the tenderer fails to pay cash security deposit within 10 days (unless extended in writing by the Superintending Engineer,) from the date of receipt of notice (sent by Registered Post) of acceptance of his tender, the amount of EMD shall be forfeited to Government and the acceptance of his tender, shall be considered withdrawn. Except that in the event of the notice of acceptance of the tender not being issued within 60 days of the date of opening of Envelope No. 2 (financial bid). The tenderer shall have the option (to be intimated in writing in good time before the expiry of 60 days period) of withdrawing his tender, in which case the earnest money should be refunded in full. All the tenders shall remain open for acceptance for 60 days from the date fixed for opening of envelope No.2 (financial bid) and thereafter until it is withdrawn by the tenderer by notice in writing as per condition No2 of the Memorandum on

19. Income Tax:-

Income tax @ 2.00 % and surcharge thereon or at the rates amended from time to time as intimated by competent Income tax authority shall be deducted from bill amount, whether measured bills, advance payment or secured advance.

20. GST:-

The tender rates are inclusive of all taxes and cesses excluding and GOODS and SERVICES Tax (GST). The bidder shall quote his offer considering all prevailing taxes excluding GST. As per the guide lines laid down in the Government of Maharashtra resolution No. Tender/ 0417/प्र. क्र- 247/मोप्र-1 Dated 22 May 2018 of Water Resource Department, the provision made in Government Circular No.Sankirna-2017/CR-121(Part- II) Building-2, Dated 19.9.2017 of PWD & the provision made in Government Circular No 0918/(प्र.क्र- 590/18)मोप्र-1 Dated 13.11.2018. The Contractor shall submit the relevant & duly certified documents in support of the payment of GST to the concerned Executive Engineer who on receipt of these documents will scrutinize it through the Divisional Accountant and reimburse the eligible amount for the GST. This condition will supersede all such relevant provision clauses regarding applicability of GST. The GST shall be paid

to the Contractor as per the rate of GST during the period of work done.

For GST the TDS of @ 2.00 % and surcharge thereon or at the rates amended from time to time as intimated by competent authority shall be deducted from bill amount, whether measured bills, advance payment or secured advance for GST.

21. Insurance:-

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

22 BUILDING & OTHER CONSTRUCTION WORKERS WELFARE CESS:-

Building & other Construction workers welfare cess @ 1% or at the rates amended from time to time as intimated by the competent authority of Building and other construction workers welfare Act, 1996 shall be deducted from bill amount, whether measured bill, advance payment or secured advance.

23. The contractor whose tender is accepted is required to note that no foreign exchange will be released by the Department.

24. The e-notice-inviting tender and any amendments to it shall form part of the tender agreement.

25. The Tender Authority is interested to make payment of contractor's bill through **ECS – N.E.F.T./R.T.G.S.** system. For this purpose contractor should open his Bank Account, having core banking facility only.(if possible)

26. TIME LIMIT: -

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

27. TENDER UNITS: -

The tenderer should particularly note that the unit mentioned in the schedule 'B' on which the rates are based. No changes in the units shall be allowed. In the case of difference between the rates written in figures and in words, the correct rate will be the one, which is lower of the two.

28. CORRECTION: -

No correction shall be made in the tender documents. Any corrections that are to be made, shall be made by crossing the incorrect portion and writing the correct portions above with the initials of tenderer.

29. TENDER ACCEPTANCE: -

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

30. POWER OF ATTORNEY: -

- I. If the tenderer is a firm or company, they should in their forwarding letter mention the names of all partners together with the name of the person who holds the power of Attorney authorizing him to conduct all transactions on behalf of the body, along with the tender.
- II. The tenderer may in the forwarding letter mention any points he may wish to make clear but right is reserved to reject the same or the whole of the tenders if the same become conditional tender thereby.
- III. The contractor or the firms tendering for the work shall inform the Department if they appoint their authorized Agent on the work.
- IV. No foreign exchange will be released by the dept. for the purchase of plants and machinery for the work by the contractor.
- V. Any dues arising out of contract will be recovered from the contractor as arrears of Land Revenue if not paid amicably. Moreover, recovery of Government dues from the contractors will be affected from the payment due to the contractor from any other Government works under execution with them.
- VI. All pages of tender document, conditions, specifications correction slips etc. shall be initialed by the tenderer. The tender should bear full signature etc shall be initialed by the tenderer. or his authorised power or Attorney holder in case of firm.
- VII. The Successful tenderers will be required to produce to the satisfaction of the specified concerned authority, a valid and concurrent license issued in his favour.

31. VALIDITY PERIOD:

The offer shall remain open for acceptance for minimum period of 60 days from the date

of opening of Envelope No. 2 (financial Bid) and thereafter until it is withdrawn by the contractor by notice in writing duly addressed to the authority opening the tender and sent by registered post. Acknowledgment due.

32. The right is reserved to revise or amend the contract document prior to the date notified for the receipt of tender or extended date. Such deviations, amendment or extensions, if any, shall be communicated in the form of corrigendum, by letter and / or by notice in newspapers as may be considered suitable.

33. The contractor(s) whose tender is accepted is required to note that no foreign exchange will be released by the Department.

34. The tenderers, who do not fulfill all or any of the conditions or are incomplete in any respect are liable to summarily rejection.

35. Right to reject any or all tenders without assigning reasons therefore is reserved. The acceptance of the tender lies with the Executive Engineer, Civil Works Maintenance Division, Nashik.

36. The Notice inviting tender shall form part of the tender agreement.

37. The successful tenderers will be required to produce to the satisfaction of the specified concerned authority, a valid and concurrent license issued in his favour under the provisions of the Contract Labour (Regulation and Abolition) Act 1970 before starting the work. Failure to do so, acceptance of the tender shall be liable to be withdrawn and earnest money forfeited.

38. INSTRUCTION TO CONTRACTOR: -

1. In case the tenderer whose offer is found lowest is requested to negotiate and reduce the offer & if the contractor, does not respond within a period of 10 days the tender accepting authority without issuing any reminder the right to reject such tender.
2. In case the contractor who is informed of acceptance of his tender, does not remit the initial Security Deposit within a period of 10 days, the tender accepting authority reserves the right to forfeit the Earnest Money Deposit without issuing any reminder to take further action according to the tender provision.
3. **Clarification of offer:** The Tendered who quotes more than 1.0% below the estimated rates must submit an Additional Performance Security Deposits the form of demand draft/ Bank Guarantee from any Scheduled Bank/ Nationalised Bank having branches in Maharashtra in favour of the **Executive Engineer, Civil Works Maintenance Division, Nashik payable at Nashik.** as specified in Tender Data for the stipulated period Failing which the work order will not be

issued to the Tenderer and all his deposits for this work will be forfeited to the absolute disposal of Government.

4. PROFESSIONAL TAX:

Certificate of registration with the professional tax Officer of the district in form IA. Certificate of registration under section 5 (1) and 5 (2) of the Maharashtra Professions, Trades, calling and employment act 1975.)

5. INSTRUCTIONS FOR SUBMISIONS OF ENVELOPE NO. 2:

Documents to be submitted in Envelope No. 2 shall conform to the instruction given below.

i. CONTRACTOR TO INFROM HIMSELF FULLY:

The tenderer shall be deemed to have fully acquainted him with the work and site conditions and carefully examined the special conditions, the specifications, schedules and drawings and shall be deemed to have fully informed himself regarding the local conditions. The tenderer shall also be deemed to have fully acquainted with the various leads and lifts involved in the works and materials of construction as well as shall be deemed to have fully acquainted with his own various quarries for construction materials, their availability and adequacy etc.

ii. TENDERED RATE:

The tenderer should quote his offer in the form of percentage above or below the estimated cost, entered in Schedule 'B', at appropriate place in B-1 form both in figures as well as in words in English. In case there is difference between the percentage quoted as expressed in words and in figures, the percentage as expressed in words will be taken as correct irrespective of whether it is lower or higher than that expressed in figure. No. alteration in the form of tender and in schedule of quantities will be permitted. The percentage mentioned in the tender shall be taken as applying to all conditions of weather and will be inclusive of all taxes if any. The percentage should be written in words in line only as far as possible.

The amount of all items of part – I of Schedule B with percentage (+ or-) will be totaled and this will be considered as the offer of the tenderer.

- iii. If the percentage quoted by the tenderer is less than 10 % of the updated estimated cost as stated at Sr. No. 5 Annex 'A' then the tenderer shall furnish his rate analysis for all items put to tender in Envelope No.2 in Justifications on the workability reasonableness of the rates. Tenderer shall also submit additional information in the analysis of the rates wherever called for by the Department, without which the offer will not be considered.

6. SIGNING OF TENDER DOCUMETS:

The tender shall contain the name, residence and place of business of person or persons making the tender and each page of tender document including drawings, shall be digitally signed by the tenderer or signed, scanned & uploaded.

The tender by partnership firm shall furnish the full names of all the partners in the forwarding letter. The letter shall be signed by the partner or by an authorised representative followed by the name and designation of the person signing.

An attested copy of the partnership deed shall be furnished. Tender by Company shall be signed with the legal name of the company and signed by the persons authorised to sign in the matter.

Whenever whether in the submission of the tender or later, in other matters the signatures are made by one person on behalf of the company the tenderer shall supply an attested copy of the power of attorney.

Witnesses shall be persons of status and probity and their names, occupations and addresses shall be stated below their signatures. All signatures shall be dated. The tender is also liable to be rejected outright if while submitting

- i. The tenderer proposes any alteration in the in the time allowed for carrying out the work, in any other or all the conditions.
- ii. Any of the pages of tender are removed and / or replaced.
- iii. The percentages are not entered in ink, both in figures and in words by the tenderer in 'B-1' form.
- iv. Any erasures are made by the tenderer in the tender.
- v. All corrections and additions or pasted slips are not signed by the tenderer and
- vi. Tender in the case of firm, each partner or the person holding the power of attorney authoring him to do thereof does not sign or the signature is not attested by a witness in B -1 tender form at the space provided for the purpose.

7. ACCEPTANCE OF TENDER:

Acceptance of tender will rest with the authority, as indicated in Annex. 'A' of this Section, who reserves the right to reject any or all tenders without assigning any reasons. The acceptance of tender may be intimated to the contractor by letter. Such intimation shall be deemed to be an intimation of acceptance of tender. The tenderer whose tender is accepted will have to complete the contract form within 10 days of being notified to do so and shall abide by all the rules and regulations and special conditions enumerated therein or attached herewith. In the event of failure of the tenderer to sign the agreement within the stipulated time, the earnest money including Additional Performance Security Deposit if any, paid by him shall be liable to be forfeited to Department and the acceptance of the tender shall be liable to be considered as withdrawn. In that event the work will be awarded to next or any other contractor as Department may decide.

8. COMPLETION OF TENDER DOCUMENT:

While completing tender documents, the contractor must invariably complete

appendices included in the tender documents giving correct information. However this information shall have to be submitted by the contractor in the prescribed formats separately in Envelope No. 1 as per provisions of paragraph 7 of the Detailed Tender Notice.

9. LANGUAGE:

The language of all correspondence regarding this work shall be English only.

10. LICENSE UNDER CONTRACT LABOUR (REGULATION AND ABOLITION) ACT 1970

10.1 The successful tenderer should produce to the satisfaction of the competent authority accepting the tender a valid and current license issued in his favour under the provisions of contract Labour (Regulation and Abolition) Act, 1970 and the Maharashtra Contract Labour (R & A) Rules 1971, before signing the contract. On failure to do so acceptance of the tenderer will be withdrawn and also the earnest money and additional earnest money deposit, if any, will be forfeited to Department. The contractor shall submit the certified copy of registration certificate under ESIS and PF Act before payment of first RA bill is made.

11. TIME LIMIT: -The time limit for the completion of the work is as prescribed in Annex-A

GOVERNMENT OF MAHARASHTRA**CERTIFICATE – A**

(Note All the details must be filled in strike out the item which is not applicable to the tender)

Place

Date

Certified that

1. I/(we) have not been awarded any contract for the construction of Road and allied works under the **Superintending Engineering, Maharashtra Engineering Research Institute MERI Nashik** -as on ----- (date of opening of the subject tender).

I/ (we) have been awarded the following contract (s) for the **Providing, fixing, installation, commissioning of latest Advanced specialized Wi-Fi /Wired Transmission control based security Monitoring & supervision system with smart intelligent interface connectivity Along with all required software, hardware, electronics works & alternative Power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bldg., MERI, Nashik.**under the **Superintending Engineering, Maharashtra Engineering Research Institute MERI Nashik** as on ----- (date of opening of the subject tender)

Estimated cost put to tender-

Contract No. and Date of work order:-

Contract Amount Amount of work executed to date

Name of Division – **Civil works Maintenance Division MERI Nashik**

Name of Circle- **Superintending Engineering, Maharashtra Engineering Research Institute MERI Nashik**

Name of Region- **DIRECTOR GENERAL DTHRS (W.R.D.)**

MAHARASHTRA ENGINEERING RESEARCH INSTITUTE **Nashik.**

I/ (we) have tendered for the following work of under the **superintending Engineering, Maharashtra Engineering Research Institute MERI Nashik**

2. as on ----- (date of opening of the subject tender) and my offer is the lowest responsive offer.

Name of work:-

Tendered Amount

Signature of the Contractor

ANNEX – A (SECTION - I) –**DETAILED TENDER NOTICE, INFORMATION AND INSTRUCTIONS****DESCRIPTION OF THE PROJECT : MERI Building**

- B) STATUS OF THE PROJECT.** work completed
- C) CLIMATIC CONDITIONS :** There are humid climatic conditions.
- D) SCOPE OF THE WORK : -**

1. DETAILS OF WORK :- (Para 1,2,3,5 of Detailed Tender Notice.)

1.1	Name of work :	Providing, fixing, installation, commissioning of latest advanced specialized Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bld., MERI, Nashik
1.2.	Estimated Cost	Rs.39,70,687/-
1.3	Earnest Money (EMD)	Rs.40,000/-
1.4	Security Deposit.	Rs.80,000/-
	i) Initial 1%	Rs.40,000/-
	ii) Through R.A.Bills.1%	Rs.40,000/-
1.6	Period of completion of work:	6 months including monsoon

2. INFORMATION FOR OBTAINING PQ DOCUMENTS, TENDER PAPERS AND ITS SUBMISSION

2.1	Name and address of the Executive Engineer-in-charge of work issuing tender papers and in whose name earnest money and security deposit is to be pledged.	- Executive Engineer, Civil Works Maintenance Division MERI, Nashik
	Period for issue of tender document.	
	Time and date of submission of dully filled tender document	As per e-tender schedule
	Name and address of the officer receiving tender document.	Executive Engineer, Civil Works Maintenance Division MERI, Nashik
2.2	Period for issue of blank tender forms	As per e-tender

		schedule
2.3	Cost of Blank tender form	Rs. 2000/-+ 360/- GST
2.4	Extra Cost if tender papers/ bid capacity prequalification documents required by post (for each)	N. A.
2.5	Time and date of submission of tenders	As per e-tender schedule
2.6	Name and address of the officer receiving and opening the tender document	Executive Engineer, Civil Works Maintenance Division MERI, Nashik
2.7	Time & Date of opening of tenders	As per e-tender schedule
2.8	The name of authority for accepting the tender	Executive Engineer, Civil Works Maintenance Division MERI, Nashik

3. **WORK AND SITE CONDITIONS** :[Para 1.1.0, 1.2.0, 1.3.0 and 1.5.0 of Section – I, General Specifications Vol. II]

3.1	Location -	MERI
3.2	Nearest Railway Station -	Nashik Road
3.3	Nearest Airport -	Ozar
3.4	Roads -	Nashik Dindori Road
3.5	Nearest Telephone and Telegraph facility	Makhmalabad Exchange MERI Post Office
3.6	Nearest Petrol and diesel Pump	Reliance Petrol Pump,RTO Corner
3.7	Position of land Acquisition	Land Acquired.

4.0 **PERIOD OF COMPLETION AND PROGRAMME OF WORK:**

[Para 13 of Special Conditions of Contract]

4.1 Period of Completion – 06 (Six) Months

5 Updated estimated cost of the work based upon Schedule of Rates for the year when tenders were invited (Clause 38 of Section IV (I) Conditions of Contract)

Rs.39,70,687/-

6.0 Earnest Money / security deposit (Para 8 (I) and (ii) of Detailed Tender Notice)

6.1 E. M. D. **Rs 40,000/-**

6.2 Initial Security Deposit **Rs 40,000/-**

6.3 If EMD / Performance Security Deposit / Any Schedule/ Nationalized Security Deposit is in the form of Demand Bank Situated in State of Draft, it should be Drawn on Maharashtra

6.4 Name of Executive Engineer-in-charge of Executive Engineer the work in whose name Demand Draft is to Civil Works maintenance be drawn Division, MERI, Nashik

7.0 Price Variation Information

(Vide para 33 of Special Conditions of Contract)

Govt. Of Maharashtra PWD No. CAT/06/04/148 Build.-2 Mum.-2 Date. 16.5.2005

S.No.	Component	Center / Place	Percentage
1	Fuel Component	Nashik	0.00 %
2	Labour Component	Nashik	0.00%
3	Material Component	Nashik	0.00%

B-1 TENDER FORM***PERCENTAGE RATE TENDER & CONTRACT FOR WORKS***

CIRCLE } : **As stated in Annexe A of Section I Detailed**
 } **Tender Notice.**
DIVISION }

General Rules and Directions for the Guidance of Contractors.

1. All works proposed to be executed by contract shall be notified in a form of invitation to tender pasted on a board hung up in the office of the Executive Engineer and signed by the Executive Engineer.

This form will state the work to be carried out as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of the earnest money and additional earnest money if required to be deposited with the tender, and the amount of the security deposit and additional security deposit if required to be deposited by the successful tenderer and the percentage if any, to be deducted from bills. Copies of the specifications, designs and drawings estimate rates, scheduled rates and any other documents required in connection with the work shall be signed by the Executive Engineer for the purpose of identification and shall also be open for inspection by contractors at the office of the Executive Engineer during office hours. Where the works are proposed to be executed according to the specifications recommended by a contractor and approved by a competent authority on behalf of the Department such specifications with designs and drawings shall form part of the accepted tender.

2. In the event of the tender being submitted by a firm, it must be signed by each partner thereof, and in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so.
- 2A.
- i) The contractor shall pay along with the tender the sum as stipulated in Annexe 'A' to Section 'I' as and by way of earnest money. The contractor may pay the said amount by forwarding along with the tender, Department cash receipt or demand draft drawn on bank and in favour of the Executive Engineer as indicated in Annexe. 'A' of Detailed Tender Notice.
 - ii) The contractor shall also enclose irrevocable bank guarantee of sum as stipulated in Annexe 'A' Sr. No. 1.3.1 if his offer is less than 10% of the updated estimated cost as stated at Sr. No. 5 of Annexe 'A' The said amount of earnest money shall not carry any interest whatsoever.
 - iii) If, after submitting the tender, the contractor withdraws his offer, or modifies the same, or if after the acceptance of his tender the contractor fails or neglects to furnish the balance of security deposit without prejudice to any other rights and powers of the Department hereunder or in law. Department shall be entitled to forfeit the full amount of the earnest money and the additional earnest money deposited by him.
 - iv) In the event of his tender not being accepted, the amount of earnest money deposited by the contractor shall, unless it is prior thereto forfeited under the provision of sub-clause (iii) above, be refunded to him on his passing receipt therefor.

3. Receipts for payments made on account of any work, when executed by a firm, should also be signed by all the partners except where the contractors are described in their tender as firm, in which case the receipt shall be signed in the name of the firm by one of the partners or by some other person having authority to give effectual receipts of the firm.
4. Any person who submits a tender shall fill up usual printed form stating at what percentage above or below the rates specified in schedule B (memorandum showing items of work to be carried out) he is willing to undertake the work. The person who submits the tender shall also fill up printed form of schedule 'B' Part –II. Anticipated Additional items as foreseen by the tenderer shall mention item wise quantity, rate and amount as assessed by him. However the percentage above or below the rates specified in Schedule 'B' (Memorandum showing items of works to be carried out) he is willing to undertake the work, shall applicable only for the items, rates and quantities stipulated in Schedule 'B' Part – I. Only one percentage on all the estimated rates shall be mentioned. Tenderers who propose any alteration except in connection with Schedule 'B' Part – II Anticipated additional items as foreseen by the tenderer in the works specified in the said form of invitation to the tender or in the time allowed or carrying out the work or which contain any other conditions of any sort other than those specified in this tender document will be liable to rejection. No printed form of tender shall include a tender for more than one work but if contractor who wishes to tender two or more works they shall submit a separate tender for each. Tenders shall have the name and number of the work to which they refer, written outside the envelope.
5. The Officer indicated in Annexe. 'A' to Section I – Detailed Tender Notice or his duly authorised assistant shall open tender in the presence of contractors who have submitted tenders or their representatives who may be present at the time and he will enter the amounts of the several tenders in the comparative statement in a suitable form. In the event of tender being accepted, the contractor shall for the purpose of identification, sign copies of the specifications and other documents mentioned in Rule. 1. In event of tender being rejected the competent officer shall refund the amount of the earnest money deposited by the contractor, on his giving a receipt for the return of money.
6. The officer competent to dispose of the tenders shall have right of rejecting all or any of the tenders.
7. No receipt for any payment alleged to have been made by a contractor in regard to any matter relating to this tender or the contract shall be valid and binding on Department unless it is signed by the Executive Engineer.
8. No materials of any type required for the work shall be supplied by the Department. All the work shall be executed by the tenderer with contractors own material (s). The memorandum of work to be tendered for shall be filled in and completed by the office of the Executive Engineer before the tender form is issued. If a form issued to an intending tenderer has not been so filled in and completed he shall request the said office to have this done before he completes and delivers his tender.
9. All work shall be measured net by standard measure and according to the rules and customs of the Department and without reference to any local custom.

10. Under no circumstances shall any contractor be contractor be entitled to claim enhanced rates for items in this contract.
11. All corrections, additions or pasted slips should be initialed.
12. The measurements of work shall be taken according to the usual methods in use in the Department and proposals to adopt alternative methods will be accepted.

The Executive Engineer's decision as to what is the usual method in use in the Department will be final.
13. The tendering contractor shall furnish a declaration along with the tender showing all works for which he has already entered into contract, and value of the work that remains to be executed in each case on the date of submitting the tender.
14. Every tenderer shall submit along with the tender information regarding the income tax the reference to the number of the assessment year and a valid income tax clearance certificate.
15. In view of the difficult position regarding the availability of foreign exchange no foreign exchange would be released by the Department for the purchase of plant and machinery required for the execution of the work contracted for.
16. The contractor will have to construct shed for storing controlled and valuable material at work site, having double locking arrangement. The materials will be taken for use in the presence of the Department person. No materials will be allowed to be removed from the site of works, without prior permission of Engineer-in-charge.
17. Successful tenderer will have to produce to the satisfaction of the accepting authority a valid and current license issued in his favour under the provision of Contract Labour (Regulation and Abolition Act, 1970) before starting work, failing which acceptance of the tender will be liable for withdrawal and earnest money will be forfeited Department.
18. The contractor shall also give the list of machinery in their possession which they propose to use on the work.

B-1 TENDER FORM
PERCENTAGE RATE TENDER AND CONTRACT FOR WORK
Tender for works

1. I/ We hereby tender for the execution for the **GOVERNMENT OF MAHARASHTRA** (here-in-before and here-in-after referred to as Department) of the work specified in memorandum as enclosed within the time specified in such memorandum at *.....% percent below / above the estimated rates entered in Schedule 'B' Part-I and AT PAR with the rates entered in Schedule 'B' Part – II (memorandum showing items or work to be carried out) and in accordance in all respects with the specifications designs, drawings and instructions in writing referred to in Rule 1 hereof. * In figures as well as in words.
2. I/We agree that the offer shall remain open for acceptance for a minimum period of 120 days from the date fixed for opening the same and thereafter until it is withdrawn by me/us by notice in writing duly addressed to the authority opening the tenders and sent by registered post AD or otherwise delivered at the office of such authority. Demand Draft on..... A scheduled Bank or cash Chalan of Department /Bank of Maharashtra. In respect to the sum of **Rs.-----** **in words Rs. -----** representing the earnest money is herewith forwarded.. The performance security deposit in the form of Demand Draft as required in view of the quoted rates are more than 1.0% below the estimated amount put to tender is also enclosed. The amount of earnest money, performance security deposit shall not bear interest and shall be liable to be forfeited to the Department should I/We fail to (i) abide by the stipulation to keep the offer open for the period mentioned above or (2) sign and complete the contract documents as required by the Engineer and furnish the security deposit and additional security deposit if any as specified in item (e) and (f) of the memorandum enclosed within the time limit laid down in clause (1) of Conditions of contract. The amount of earnest money may * **Amount to be specified in words and in figures.**

be adjusted towards the security deposit or refunded to me/us if so desired by me/ us, in writing, unless the same or any part thereof has been forfeited as aforesaid.

3. Should this tender be accepted I/We hereby agree to abide by and fulfill all the terms and provisions of the conditions of Contract included in this booklet so far as applicable and in default thereof to forfeit and pay to Department the sum of money mentioned in the said conditions.

MEMORANDUM

a]	General Description:	
b]	Estimated cost	Rs 39,70,687/-
c]	Earnest money(EM)	Rs. 40,000/- In the form of online gateway payment
d]	Performance security deposit [if required as specified in Para 17.0 in the form of Demand].	As per Para 17.0
e]	Security Deposit (SD)	
	i] Initial 1 %	Rs.40,000/- of D.D From any Nationalized or schedule Banks branch situated in State of Maharashtra.
	ii]To be deducted from bills 1 %	
f]	Additional SD [if required as specified in Para 9 (I) (b) in the form of Bank Guarantee]	Rs.
	Total	Rs. /-
g]	Percentage, if any, to be deducted from bills so as to make up the total amount required as security deposit by the time, half the work as measured by the cost is done.	
h]	Time allowed for the work from date of written order to commence	06 (Six) Calendar months (including monsoon)
	* signature of contractor Address Dated the Day of	* signature of witness Address Occupation

The above tender is hereby accepted by me for and on behalf of the Department.

Date day of 2022 Signature of the Officer by whom accepted.

- To be filled by tenderer.

ANNEXURES

ANNEXURE 'A'**DETAILS OF WORKS OF SIMILAR TYPE AND MAGNITUDE CARRIED
OUT BY THE TENDERER**

Sr. No	Name of work	Place	Tendered cost Rs. In lac.	Time in months which completed	Dated of completion	Principal features.
1	2	3	4	5	6	7

ANNEXURE 'B'**DETAILS OF OTHER WORKS TENDERED FOR AND IN HAND ON THE DATE
OF SUBMISSION OF TENDER**

Sr. No	Name of work	Place	Work in Hand			Works tendered from			Remarks
			Tendered cost Rs. in lac	Cost of remaining work Rs. in lac	Anticipated date of completion	Estimated cost Rs. in lac	Date by which decision is expected	Stipulated date of period of completion	
1	2	3	4	5	6	7	8	9	10

ANNEXURE 'C**DETAILS OF TECHNICAL PERSONNEL WITH THE CONTRACTOR**

Sr. No.	Description	Name	Length of the service in the firm	Qualification	Professional experience and details of works carried out	Remark
1	2	3	4	5	6	7
1)	Project Manager					
2)	Works Manager					
3)	Engineers (Electronics)					
4)	Supervisors					

(Note : If there is no technical personnel with your firm please give details how can your firm manage the same in remark column)

ANNEXURE 'D'**DETAILS OF PLANTS & MACHINERY IMMEDIATELY AVAILABLE
WITH THE TENDERER FOR USE ON THIS WORK**

Sr. No .	Name of equipment	No. of unit	Kind and made the firm	Capacity	Age and condition	Present Location	Remark
1	2	3	4	5	6	7	8

(Note : If no machinery is available with the firm please give details how your firm will manage the same.)

STATEMENT NO.2

Statement for value of 'B' i.e. value of existing commitments and ongoing work/works to be completed in the period stipulated for completion of the work in the present tender. (All certificates regarding this will be required countersigned by engineer-in-charge not below the rank of Executive Engineer.

Sr. No.	Name of Works commitment	Year of commencement of work	Amount of contract Rs. In Lakhs	Expected balance cost as on date..... Rs. In Lakhs	Value of work yet to be completed
1	2	3	4	5	6

1.

2.

3.

Total

It is certified that the above information is true and correct to the best of my knowledge and belief.

Signature of the Contractor

ANNEXURE 'E'**DECLARATION OF THE CONTRACTOR**

1. I/We _____ Contractor (s) here by undertake that I / We shall pay the labourers engaged on the work as indicated Annexure A to Section I – Detailed Tender Notice, wages as per Minimum Wages Act, 1948 and amendments thereto applicable to the zone in which work lies and act accordingly, I/we also undertake to abide by the various laws in fore and extend necessary facilities and amenities to the staff and workers employed by me / us.
2. I/ we hereby declare that / We have made myself/ ourselves thoroughly conversant with the local conditions regarding all materials and labour on which / We have bided my / our rates for this work. The specifications of this work have been carefully studied and understood by me/ us before submitting this tender.
3. I/We hereby declare that all leads charges, lift charges etc. for all construction material are included in my / our tender rate and I/we will not demand any extra charges on this account.
4. I/We undertake to use only the best material approved by Executive Engineer, Civil Works Maintenance Division, Nashik or his duly authorized assistant before starting the work & to abide by his decision. I also undertake that I/we take full precaution to complete the work without disturbing existing structure.

Signature of the Contractor.

ANNEXURE 'F'**MODEL FORM OF BANK GUARANTEE BOND**

1. This deed of Guarantee is made on the -----by ----- having his head office at the -----
(hereinafter called the said contractor (s) from the demand under the terms and conditions of an agreement dated ----- made between ----- and ----- for ----- (hereinafter called 'the agreement') of additional security deposit for the due fulfillment by the said contractor of the terms and conditions contained in the said agreement. On production of bank guarantee for Rs. -- ------(rupees -----only) we, -----) (hereinafter referred to as 'the bank') at the request of ----- (contractors) do hereby undertake to pay to the W.R.D. Department, hereinafter referred to as Department, an amount not exceeding Rs. ----- against any loss or damage caused to or suffered or would be caused to or suffered by the Department by reasons of any breach by the said contractor(s) of any of the terms or conditions constrained in the said agreement.
2. We -----(indicate the name of bank) do hereby undertake to pay amount due and payable under this guarantee without any demand, merrily on a demand from the government stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the government by reason of breach by the said contractor (s) of any of the terms or conditions contained in the said agreement or any reason of the contractor (s) failure to perform the said agreement, any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee, shall be restricted to an amount not exceeding Rs. -----
3. We undertake to pay to the government any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) / supplier (s) in any suit or proceeding pending before any court or tribunal relating there to our liability under this present being absolute and unequivocal. the payment so made by use under this bond shall be a valid discharge of our liability for payment thereunder and the contractor (s) / supplier (s) shall have no claim against us for making such payment.
4. We------(indicate the name of bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till office / Department, of -----
------(indicate the name of Administrative Officer.) certificate

that the terms and conditions of the said Agreement have been fully and properly carried out by said the contractor (s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the -----we shall be discharged from all liability under this guarantee thereafter.

- 5. We------(indicate the name of bank) further agree with the Department that the Department shall have the fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers execrable by the Department against the said contractor (s) and to for or enforce any of the terms and condition relating to the said agreement and we shall not be relived from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act or commission on the part of the Department or any indulgence by the Department to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision have effect of so relieving us.
- 6. This guarantee will not be discharged due to the change in the constitution of the Bank or the in the change in the constitution of the Contractors(s) / Suppliers.
- 7. We------(indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Department in writing.

Dated the ----- day of -----20

for-----

(Indicates the name of Bank.)

ANNEXURE 'G'**INDENTURE FOR SECURED ADVANCES**

(For use in cases in which the contract is for finished work and the Contractor has entered into an Agreement for the execution of a certain specified quantity of work in a given time)

THIS INDENTURE MADE the ----- day of -----between -----(hereinafter called 'the contractor' which expression shall where the context so admits or implies be deemed to include his executors, administrators and assigns) of the one part and The
Executive Engineer,
Civil Works Maintenance Division MERI,

Nashik (hereinafter called as the Department which expression shall where the context so admits or implies be deemed to include his successors in office and assigns) of the other part.

WHEREAS by an agreement dated ----- (hereinafter called 'the said Agreement') the Contractor has agreed. **AND WHEREAS** the Contractor has applied to the Department that he be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works, the subject of the said Agreement for use in the construction of such of the works as he has undertaken to execute at rate fixed for the finished work (inclusive of the cost of material and labour and other charges.)

AND WHEREAS the Department has agreed to advance to the Contractor the sum of Rupees ----- (in words, Rupees -----) on the aforesaid security and has reserved to himself the option of making any further advance or advances on security of aforesaid nature the quantities and other particulars of the materials on the security of which the advance or advance are made being detailed in Part-II of the running account bill for the said works, signed at the time being by the Contractor on.

NOW THIS INDENTURE WITNESS that in pursuance of the said Agreement and in consideration of the sum of Rs. ----- on or before the execution of these presents paid to the Contractor by the Department (the receipt whereof the Contractor booth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid, the Contractor does hereby convenient ant agree with the Department and declare as follows:

1. That the said of Rs. ----- so advanced by the Department to the Contractors as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for non other purpose whatsoever.
2. That the materials detailed in the said running account bill which have been offered to any accepted by the Department as security are absolutely the Contractor's own properly and free from encumbrances of any kind and the Contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property, and free from encumbrances of any kind and the Contractor indemnifies the Department against all claims to any materials in respect of which an advance has been made to him as aforesaid.

Contractor

Correction

Executive Engineer

3. That the materials detailed in the said running account bill and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called 'the said materials') shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Divisional Officer, Division (hereinafter called ' the Divisional Officer') and in the terms of the said Agreement.
4. That the Contractor shall make at his own cost all necessary and adequate arrangement for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid, the said materials shall remain at the site of the said works in the Contractor custody and on his own responsibility and shall at all times be open to inspection by Divisional office for any office authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged, the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Divisional Officer.
5. That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorised by him in that behalf.
6. That the advances shall repayable in full when or before the Contractor receives payment form the Department of the prices payable to him for the said works under the terms and provisions of the said agreement provided that if any intermediate payments are made to the Contractor on account of work done, then on occasion of each such payment, the Department will be at liberty to make a recovery form the Contractor's bill for such payment by deducting therefrom the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials, at the rates at which the amounts of advances made under these presents were calculated
7. That if the Contractor shall at any time make any defaults in the performance or observance of any of the terms and provision of the said agreement or of these presents, the total amounts of the advance or advances that may still be owing to the Department Maharashtra shall immediately of the happening of such defaults be repayable by the Contractor to the Department, together with interest thereon at **20 (twenty)** percent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Department in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the contractor hereby convenience and agree with the Department to repay and pay the same respectively to him according.

8. That the contractor hereby charges all the said materials with the repayment to the Department of the said sum of Rs.-----and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents **PROVIDED ALWAYS** and it is hereby agreed and declared that notwithstanding anything in the said Agreement and without prejudice to the powers contained therein, if and whenever the covenant for payment and Repayment here in before contained shall become enforceable and the money owing shall not be paid in accordance therewith, the Department may at any time thereafter adopt all or any of the following courses as he may deem best:

- a) Seize and utilise the said materials or any part thereof in the completion of the said works in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due in respect of advances under these presents and crediting with the said value of work done, as if he had carried it out in accordance with agreement and at the rates thereby provided. If the balance is against the contractor, he is to pay the same to the Department on demand.
- b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale, retain all the sums aforesaid repayable to the Department under these presents and pay over the surplus (if any) to the Contractor.
- c) Deduct all or any part of the money owing out of the security deposits or any sum due to the Contractor under the said Agreement.

9. That except in the event of such default on the part of the Contractor as aforesaid, interest on the said advance shall not be payable.

10. That in the event of any conflict between the provisions of these present and the said Agreement, the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents, the settlement of which has not been herein before expressly provided for the same shall be referred to the Superintending Engineer (WRD),Maharashtra Engineering Research Institute.Nashik-4, Whose decision on shall he final.

IN WITNESS WHEREOF the said _____ and _____ by the order and under the direction of the Department, set their respective hands the day and year first above written.

Signed, sealed & delivered by the said Contractor in the presence.

Witness

Signature

Name :

Address :

Signed by -----

by the order and direction of the W.R.D. Department in presence of

Witness :

Signature :

Name :

Address :

ANNEXURE 'H'**PROFESSIONAL TAX CLEARANCE CERTIFICATE**

This is to certify that M/s. _____ of (address), is a registered dealer under the Maharashtra State Tax on Professions, Traders, Callings and Employments Act. No. XVI of 1975, holding Registration Certification No.----- w. e. f. -----

The said dealer has paid all tax dues up to 31st March, _____ (previous year) under the act. The dealer has paid the professional tax dues for the employees mentioned below.

Sr. No.	Name of the Employee	Designation

There is Professional Tax dues outstanding against the dealer under the act.

This certificate is valid for ONE year from the date of issue.

Place :

Date :

Signature _____

Professional Tax Officer

Place :-

Date :- / /20.

Signature of Contractor

(Note :- Type the undertaking on contractor's letter head)

ANNEXURE 'I'**Affidavit (on Rs 500/-Stamp paper)**

I.....age.....address.....

(authorized signatory to sign the contract), hereby submit ,vide this affidavit in truth, that I am the owner of the contracting firmauthorized signatory and I am submitting the documents in envelope no 1 for the purpose of scrutiny of the contract. I hereby agree to the conditions mentioned below:-

1. I am liable for action under Indian Penal Code for submission of any false/ fraudulent paper /information submitted in envelope no 1.
2. I have furnished EMD (Earnest Money Deposit) from the Bank Account in the name of my Firm only.
3. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information ,false bill of purchases supporting proof of purchase, proof of testing submitted by any staff , subletting company or by myself ,I will be liable for action under Indian Penal Code .
4. I am liable for action under Indian Penal Code if any paper are found false / fraudulent during contract period and even after the completion of contract.
(Finalisation of final bill)

(Signature of contractor)

(seal of company)

ANNEXURE 'J'

शासन शुद्धीपत्रक क्रमांक:-निविदा ०४१७/प्र.क्र.२४७/मोप्र-१ दिनांक :- ०५ जुलै, २०२२

परिशिष्ट-अ

Certificate of Geo-tagging

- 1) Name of Work
- 2) Tender Notice No.
- 3) Name of person visiting the site
- 4) Date of Visit
- 5) Time of Visit to

I have uploaded Geo-tagged photo in envelope no.1 along with this Certificate.

I have Visited/Studied scope of work,site conditions,Verified provision in tender documents,resources available and difficulties / restriction of site in all respect.

(signature of contractor
or authorized representative)

To,
Executive Engineer,
Civil Works Maintenance Division,
MERI,Nashik-4

Contractor

Correction

Executive Engineer

B-1 TENDER FORM CONDITIONS OF CONTRACT

*(A) Security
Deposit*

Clause – 1 The person / persons whose tender may be accepted (herein-after called the contractor, which expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators and assigns) shall (A) within 10 days (which may be extended by the Superintending Engineer concerned up to 15 days (if the Superintending Engineer thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Executive Engineer in cash or Department securities to the Executive Engineer a sum sufficient which will make up the initial security deposit specified in the tender form at para (d) (I) or memorandum provided always that in the event of the contractor depositing a lump sum by way of security deposit as contemplated at (A) above, then and in such case, if the sum so deposited shall not amount as specified in memorandum it shall be lawful for Department at the time of making any payment to the contractor for work done under the contract to make up the full amount of security deposit as specified in memorandum at para (e) by deducting a sufficient at (g) of memorandum from every such payment as last aforesaid until the full amount of the security deposit is made up. All compensation or other sums of money payable by the contractor to Department under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due or may become due by Department to the contractor under any other contract or transaction of any nature on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall within ten days thereafter, make good in cash or Department securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to, when paid in cash may at the cost of the depositor, be converted into interest bearing Department securities provided that the depositor has expressly desired this in writing.

*B) Additional
performance
Security Deposit*

In case contractor's offer is less than 1.00% of the updated estimates cost as stated at Sr. No. 5 of Annex-A additional performance Security deposit in the form of DD / irrevocable Bank Guarantee for a period equal to period of contract. As stated above shall be submitted to the Engineer-in-charge at the time of completing tender documents.

Non submission of the above Additional performance security deposit will result into forfeiture of the E. M. D. and additional E.M. D.

Contractor

Correction

Executive Engineer

If the amount of the security deposit to be paid in a lump sum and additional performance security deposit in form of DD/ irrevocable Bank Guarantee is not paid within the period specified at (A) above the tender/contact already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts. The amount of the Security Deposit lodged by a contractor shall be refunded along with the payment of the final bill, if the date up to which the contractor has agreed to maintain the work in the good order is over. If such date is not over, only 50% amount of security deposit shall be refunded along with the payment of the final bill. In the event of the contract failing or neglecting to complete rectification work within the period up to which the contractor has agreed to maintain the work in good order then, subject to provisions of Clauses 17 & 20 hereof the amount of Security Deposit retained by Department shall be adjusted towards the excess cost incurred by the Department on rectification work.

The additional performance Security Deposit shall be refunded to the contractor as stipulated in the contract, provided that the Engineer-in-charge, if demanded in writing by the contractor shall, from time to time, release the Additional Security Deposit in parts which are in proportion to the amount of the completed work.

Compensation for delay.

Clause No. 2:- The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall through the stipulated period of the contract be proceeded with, all due diligence (time being deemed to be of the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Superintending Engineer (whose decision in writing shall be final) may decide, of the amount of the estimated cost of the whole work as shown by the tender for every day of that the work remains uncompleted, or unfinished, after the proper dates, And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the

time allowed for any work exceeds one month to complete the part works in specified time slice as per the programme given in Annex-A to Section-1- Detailed Tender Notice / enclosed at the end of Schedule-B.

If the contractor has not achieved the target as per physical programme of all items with respect to time as given in Annex-A to Section - I Detailed tender Notice / enclosed at the end of Schedule - B, then the compensation will be recovered with prior notice to the contractor till the achievement of particular target as decided by the Engineer-in-charge.

In the event of the contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Superintending Engineer (whose decision in writing shall be final) may decide of the said estimated cost of the whole work for every day that the due quantity of work remains incomplete. Provided always that the total amount of compensation to be paid under the provision of this clause shall not exceed 10 percent of the estimated cost of the work as shown in the tender. Superintending Engineer should be the final authority in this respect.

Action when whole of Security deposit is forfeited

Clause No. 3: - In any case in which under any clause or clauses of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit whether paid in one sum or deducted by installments or in the case of abandonment of the work owing to serious illness or death of the Contractor or any other cause, the Executive Engineer, on behalf of the Department shall have power to adopt following course.

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

In case the contractor shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer shall have certificate in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified.

The contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advance on account of or with a view to the execution of the work or the performance of contract. The contractor shall also be not eligible to tender for the work remaining unexecuted under this contract.

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

Clause No. 4:- If the progress of any particular portion of the work is unsatisfactory, the Executive Engineer shall notwithstanding that the general progress of the work is in accordance with the condition mentioned in clause 2, be entitled to take action as under after giving the contractor 10 days notice in writing.

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

In case the cost of the work executed through a new contractor and other allied expenses exceeding the value of such work credited to the contractors, the amount of excess shall be deducted from any money due to the contractor by Department or Department under the contractor or otherwise howsoever or from his security deposit and Additional Security deposit or the sale proceeds thereof provided., however, that the contractor shall have no claim against Department even if the certified value of the work done through a new contractor exceeds the certified cost of such work and allied expenses. The contractor shall have no claims to compensation for any loss sustained by him reason of his having purchased, or procured any materials, or entered into any engagements, or made any advances on account of or with a view to the execution of the work or the performance of the contract.

The contractor of the whole work shall not be considered eligible to tender for the execution of work so withdrawn from this contract. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Contractor

Correction

Executive Engineer

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

Clause No. 5:- In any case in which any of the power conferred upon the Executive Engineer by clauses 3 and 4 hereof shall have become exercisable and the same shall not have been exercised, the non-exercise thereof shall not constitute waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in any future case of default by the contractor for which by any clause hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of Executive Engineer taking action under sub-clause (a) or (c) of clause of 3 he may if he so desires to take possession of all or any tools, plant, materials and stores in or upon the works or the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account at the contract rates or in the case of contract, rates not being applicable at current market rates to be certified by the Executive Engineer whose certificate thereof shall be final. In the alternative, the Executive Engineer may after giving notice, in writing to the contractor or his clerk of the work, foreman or other authorised agent require him to remove such tools and plant, materials or stores from the premises within a time to be specified in such notice, and in the event of the contractor.

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

failing to comply with any such requisition, the Executive Engineer may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects, and the certificate of the Executive Engineer as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Extension of time limit.

Clause No. 6: If the contractor shall desire an extension of the time for completion of work on the grounds of his having been unavoidably hindered in its execution or on any other grounds he shall apply in writing to the Executive Engineer before the expiration of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred which ever is earlier, and the Executive Engineer or in the opinion of Superintending Engineer. Or Chief Engineer as the case may be if in his opinion, there was reasonable grounds for granting an extension grant, such extension as he thinks necessary or proper. The decision of the Executive Engineer / Superintending Engineer/ Chief Engineer shall be final. Extension shall be granted to the contractor on the grounds of unavoidable hindrance in its execution or, on any other reasonable grounds.

Final Certificate

Clause No 7 : On completion of the work the contractor shall be furnished with a certificate by the Executive Engineer (hereinafter called Engineer-in-charge) of such completion but no such certificate shall be given nor shall the work be considered to be completed until the contractor shall have removed from the premises on which the work shall have been executed all scaffolding, surplus materials and rubbish, and shall have cleaned off the dirt from all wood work, doors, windows, walls, floor, or other parts of any building, in or upon which the work has been executed or of which he/they may have had possession for the purpose of executing the work, or until the work shall have been measured by the Engineer-in-charge or where the measurements have been taken by his subordinate until they received the approval of the Engineer-in-charge, the said measurements being binding and concessive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to the removal of scaffolding surplus materials and rubbish, and cleaning of dirt on or before the date fixed for the completion of the work the Engineer-in-charge may, at the expense of the contractor remove such scaffolding, surplus materials and rubbish, and dispose off the same as he thinks fit and clean off such dirt as aforesaid; and the contractor shall forthwith pay the amount of all expenses as incurred but shall have no claim in respect of any such scaffolding or surplus material as aforesaid except for any sum actually realized by the sale thereof.

Payment on intermediate certificate to be regarded as advances.

Clause No. 8 : No payment shall be made for any work, estimated to cost less than rupees one thousand till after the whole of work shall have been completed and a certificate of completion given. But in the case of works estimated to cost more than rupees one thousand, the contractor shall, on submitting a monthly bill therefore as entitled to receive payment proportionate to the part of the work then approved and passed by the Engineer-in-charge, whose certificate of such approval and

passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payment shall be regarded as payment by way of advance against the final payments only and not as payments for work actually done and completed, and shall not preclude the Engineer-in-charge from requiring any bad, unsound, imperfect or unskillful works to be removed or taken away and reconstructed or re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the accruing of any claim, nor shall it conclude, determine, or affect in any other way the powers of the Engineer-in-charge as to final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the contract. The final bill shall be submitted by contractor within one month of the date fixed for the completion of the work, otherwise, the Engineer-in-charge's certificate of the measurements and of the total amount payable for work shall be final and binding on all parties.

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

Clause No. 9 : The rates for several items of work estimated to cost more than Rs. 1000 agreed to within, shall be valid only when the item concerned is accepted as having been completed, fully in accordance with the sanctioned specifications. In case where the items of work are not accepted as so completed the Engineer-in-charge may make payment on account of such item at reduced rates as he may consider reasonable in the preparation of final or on account bills.

Bill I quadruplicate to be submitted monthly.

Clause No. 10:- A bill shall be submitted by the contractor in each month on or before the date fixed by the Engineer-in-charge for all work executed in the previous month, and the Engineer-in-charge shall check the measurement for the purpose of having the same verified.

The measurements for payments of running account bills shall be taken by the contractor's Authorised Engineer in the presence of Engineer-in-charge or his representatives. Based on the above measurements, the contractor shall have to submit his R. A. bills in quadruplicate along with details of measurements and calculations of quantities in Proforma approved by the Engineer-in-charge duly certified by the qualified Engineer of the contractor who is duly authorised by the Executive Engineer. The measurements shall be recorded in the M. B. issued by the Department.

The initial levels before starting the work/foundation levels/final measurements/final levels shall be taken by the Authorised Engineer of the contractor in presence of Engineer-in-charge or his authorised representative and the same shall be got attested from the Engineer-in-charge or his authorised representative in token of acceptance.

Contractor

Correction

Executive Engineer

The Payment of final bill will be made only after

i) detailed scrutiny of the measurements and the acceptance of the bill thereafter, and

ii) the contractor produces the challan of having made the payment into District Treasury in respect of all dues of sales Tax under the "Maharashtra Sales Tax on Transfer of Goods" involved in the execution of works contract (Re-enacted) Act 1989.

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Bills to be on printed forms.

Clause No. 11:- The contractor shall submit all bills on the printed format approved by the Engineer-in-charge. The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender, at the rates here in after provided for such work.

Stores supplied by Department

Clause No. 12:- If the specification or estimate of the works provides and for the use of any special description of materials to be supplied from the store of the Department or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge (such materials and stores, and the prices to be charged therefore as hereinafter mentioned being so far as practicable for convenience of the contractor but not so as in any way to control the meaning or effect of this contract specified in the Schedule or memorandum hereto annexed) the contractor shall be supplied with such materials and stores as may be required from time to time to be used by him for the purpose of contract only and the value of full quantity of the materials and stores so supplied shall be set off or deducted from any sum then due or thereafter to become due to the contractor under the contract or otherwise, or from the security deposit, or the proceed of sale thereof if the Security deposit is held in Department securities, the same or a sufficient portion thereof shall in that case be sold for the purpose. All materials supplied to the contractor shall remain the absolute property of Department and shall on no account be removed from the site of the work, and shall at all times be open for inspection by the Engineer-in-charge. Any such materials unused and perfectly in good condition at the time of completion or termination of the contract shall be returned to the Department stores if the Engineer-in-charge so required by a notice in writing given under his hand, but the contractor shall not be entitled to return any such materials except with consent of the Engineer-in- charge and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for any wastage in or damage to any such materials.

Contractor

Correction

Executive Engineer

Works to be executed in accordance with specification drawings orders etc.

Clause No. 12 (A):- If all stores of controlled materials such as cement, steel, etc. supplied to the contractor by Department should be kept by the contractor under lock and key and will be accessible for inspection by the Executive Engineer or his authorised agent at all the times.

Alteration in specifications and designs not to be invalidate contracts.

Clause No. 13:- The contractor shall execute the whole and every part of the work in the most substantial and workman like manner and both as regard, materials and in every other respect in strict accordance with specifications. The contractor shall also confirm exactly fully and faithfully to the designs, drawings and instructions in writing relating to the work, signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of work during office hours. The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender alongwith the work order free of cost. Further copies of contract drawings and working drawings if required by him shall be supplied at the rate of Rs. 500/- per set of contract drawing and Rs. 100/- per working drawing except where otherwise specified.

Rates for works not entered in estimate or schedule of rates of the District.

Clause No. 14:- The Engineer-in-charge shall have power to make any alterations in or, additions to the original specifications, drawings designs and instructions that may appear to him to be a necessary or admissible during the progress of the work, and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by Engineer-in-charge and such alterations shall

not invalidate the contract and any additional work which the contractor may be directed to do in the manner above specified

as part of the work shall be carried out by the contractor on the same condition in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract then such class of work shall be carried out at the rates entered in the Schedule of rates of the Division or at the rates mutually agreed upon between the Engineer-in-charge and the contractor whichever are Lower. If the additional or altered work for which no rate is entered in the schedule of rates of the Division is ordered to be carried out before the rates are agreed upon then the contractor shall, within 7 days of the date of receipt by him of the order to carry out the work, inform the Engineer-in-charge of the rate which it is his intention to charge for such class of work, and if the Engineer-in-charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry it out such class of work, and arrange to carry out in such manner as he may consider advisable, provided always that the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been determined as lastly herein before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rates as aforesaid according to such rates or rates as shall be fixed by the Engineer-in-charge. In the event of dispute, the decision of the Superintending Engineer of the circle will be final.

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

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

The time limit for the completion of the work shall be extended in the proportion that the increases in its cost occasioned by alterations of addition bears to the cost of the original contract work, and the certificate of the Engineer-in-charge as to such proportion shall be conclusive. However such an extension will be governed by provisions of Clause 6.

Contractor

Correction

Executive Engineer

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

Clause No. 15:-

If at any time after the execution of the contract documents the Engineer-in-charge shall for any reason whatsoever (other than default on the part of the contractor for which the Departments is entitled to rescind the contract) desires that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in the part as required after having due regard to the appropriate stage at which the work should be stopped or suspended so as not cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the Engineer-in-charge as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the Contractor. The contractor shall have

no claim to any payment or compensation, what so ever by reason of or in pursuance of any notice as aforesaid on account of any suspension stoppage or curtailment expect to the extent specified hereinafter.

2. Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far it pertains to the unexecuted part of the work by giving a 10 days prior notice in writing to Engineer-in-charge, within 30 days of the expiry of the said period of 90 days of such intention and requiring the Engineer to record the final measurements of the work already done and requiring the Engineer to record the final bill. Upon giving such notice the Contractor shall be deemed to have been discharged from his obligation to complete the remaining unexecuted work under this contract, On receipt of such notice the Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the

contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.

Contractor

Correction

Executive Engineer

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

4. In the event of :

- i) Any total stoppage of work on notice from the Engineer under the sub clause (1) in that behalf.
- ii) Withdrawal by the Contractor from the contractual obligation to complete the remaining unexecuted work, under sub-clause (2) on account of continued suspension of work for a period exceeding 90 days

Or

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

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

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

Contractor

Correction

Executive Engineer

- i). Difficulties relating to the supply of railway wagons.
- ii). Force -Majeure
- iii). Act of God.
- iv). Act of enemies of the Sate or any other reasonable cause beyond the control of Department.

In the case of such delay in the supply of materials Department shall grant such extension of time for the completion of the works as shall appear to the Executive Engineer to be reasonable in accordance with the circumstances of the case. The decision of the Executive Engineer as to the extension of time shall be accepted as final by the Contractor. And will be governed by the provision of clause 6.

Time limit for unforeseen claim

Clause No. 16:- Under no circumstances whatever shall contractor be entitled to any compensation from Department on any account unless the contractor shall have submitted a claim in writing to the Engineer -in-charge within one month of the cause of such claim occurring.

Action and compensation payable in case of bad work.

Clause No. 17:- If at any time before security deposit or any part thereof is refunded to the contractor, it shall appear to the Engineer-in-charge or his sub-ordinate-in-charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that, contracted for , or are otherwise not in accordance with the contract, it shall be lawful for the Engineer-in-charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained or may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify or remove or reconstruct the work so specified in whole or in part, as the case may required, or if so required, shall remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost; and in the event of his failing to do so within a period to be specified by the Engineer - in – charge in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of one per cent on the amount of the estimate for everyday not exceeding ten days, during which the failure so continues and in the case of any such failure the Engineer - in - charge may rectify or remove, and re-execute the work or remove and replace the materials or articles complained of, as the case may be, at the risk and expense in all respects of the contractor. Should the Engineer-in-charge consider that any such inferior work or materials as described above may be accept the same at such reduced rates as he may fix there for.

Work to be open to inspection.

Clause No. 18:- All works under or in courses of execution or executed in perseverance of the contract shall at all time be open to the inspection supervision of the Engineer-in-charge and his subordinates and contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorised agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

Contractor or responsible agent to be present.

Notice to be given before work is covered up.

Clause No. 19:- The contractor shall give not less than five days notice in writing to the Engineer-in-charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is so covered up or placed beyond the reach or measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained, the same shall be uncovered at the contractor's expense, and in default thereof no payments or allowance shall be made for such work or for the materials with which the same was executed.

Contractor liable for damage done and for imperfections for 36 months after certificate

Clause No. 20:- If during the period of 24 months from the date of completion as certified by the Engineer-in-charge present to Clause - 7 of the contract or 24 months after commissioning the work, whichever is earlier in the opinion of the Executive Engineer, the said work is defective in any manner whatsoever, the contractor, shall forthwith on receipt of notice in that behalf from the Executive Engineer, duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under, the supervision of the Executive Engineer.

In the event the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefor in the said notice and/or to complete the same as aforesaid as required by the said notice, the Executive Engineer get the same executed and of carried out departmentally or by any other agency at the risk on account and at the cost of the contractor. The contractor shall forthwith on demand pay to the Department the amount of such costs, charges and expenses sustained or incurred by the Department of which the certificate of the Executive Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the Department, the same may be recovered from the contractor as arrears of land revenue.

The Department shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the Department to the contractor either in respect of the said work or any other work whatsoever or from the amount of security deposit retained by Department.

Contractor to supply plant, ladders, scaffolding etc.

Clause No. 21:- The contractor shall supply at his own cost all materials, (except such special materials, if any as may, in accordance with the contract, be supplied from the Department Stores) plant, tools, appliances, implements, ladders carriages, tackles, scaffolding and temporary work requisite for the proper execution of the work, whether in the original, altered or substituted form and whether included in the specifications or other documents form in part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with the carriage therefor to and from the work. The contractor shall also supply without charge the requisite number of person with the means and materials necessary for the

And is liable for damages arising from non provisions of lights fencing etc

. purpose of setting out works and counting. Weighting and assisting in the measurement or examination at any time and from time to time of the work or the materials failing which the same may be provided by the Engineer-in-charge at the expense of the contractor and expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to perfect the Public from accident & shall also be bound to bear the expenses of defense of every suit action or other legal proceeding that may be brought by any person for injury sustained owing to neglect of the above precautions and to

pay any damages and costs which may be awarded in any such suit action or proceedings to any person, or which may with the consent of the contractor be paid for compromising any claim by any such person.

Clause No. 21 (a) :- The contractor shall provide suitable scaffolds and working platform, gangways and stairways and shall comply with the following regulations in connection therewith.

- a. Suitable scaffolds shall be provided for workman for all works that cannot be safely done from a ladder or by other means.
- b. A scaffold shall not be constructed, taken down or subsistent altered except.
 - i. Under the supervision of a competent and responsible person and.
 - ii. as far as possible by competent workers possessing adequate experience in this kind of work.
- c. All scaffolds and appliances connected there with and all ladder shall.
 - i. be of sound materials.
 - ii. be of adequate strength having regard to the and strains to which they will be subject and.
 - iii. be maintain in proper condition.
- d. Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.
- e. Scaffolds shall not be over-load and so far as practice the load shall be evenly distributed.
- f. Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.
- g. Scaffolds shall be periodically inspected by a competent person.
- h. Before allowing a scaffold to be used by his workmen the contractor shall whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations herein specified.
 - I. Working platform, gangway, Stairways.
 - i. be so constructed that no part thereof can sag unduly .
 - ii. be so constructed and maintained having regard to the prevailing conditions as to reduce as far as practicable risks or persons stripping or slipping and.
 - iii. be kept free from any unnecessary obstruction.
 - j. in the case of working platform. gangways, working places and stairways at a height exceeding 3 meters.
 - i. every working platform and every gangways shall be closely boarded unless other adequate measures are taken to ensure safety.
 - ii. every working platform, and gangways shall have adequate width and
 - iii. Every working platform, gangways working place and stair way shall be suitably fenced.
 - k. Every opening in the floor of a building or in working platform shall except for the time and to the extent required to allow the access of persons or the transport or

Contractor

Correction

Executive Engineer

shifting or materials, be provided with suitable means to prevent the fall of persons or material.

- i. When persons are employed on a roof where there is a danger of falling from a height exceeding Three meters suitable precautions shall be a taken to prevent the fall of persons or material.
- m. Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.
- n. Safe means of access shall be provided to all work platforms and other working places.
- o. The contractor (s) will have to make payments to the labour as per Minimum Wages Act

Clause No. 21 (b):- The contractor shall comply with the following regulations as regards the Hoisting Appliance to be used by him.

- a. Hoisting machines and tackle including their attachments, anchorages and supports shall.
 - i. be of good mechanical construction sound material and adequate strength and free patent defect and
 - ii. be kept in good repair and in good working order.
- b. Every rope used in hoisting or lowering materials or as a means of suspension shall be suitable quality and adequate strength and free from patent defect.
- c. Hoisting machines and tackle shall be examined and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the Department.
- d. Every chain ring, hook, shackle, swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined and rectified if necessary.
- e. Every crane driver or hoisting appliance operators be proper qualified.
- f. No person who is below the age of Eighteen years shall be in control of any hoisting machine, including any scaffold, which or give signals to the operator.
- g. In the case of eve hoisting machine and of every chain, ring, shackle swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe working load shall be ascertained by adequate means.
- h. Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load.
- i. In the case of a hoisting machine having a variable safe working load each safe working load and the conditions under which it is applicable shall be clearly indicated.
- j. No part of any hoisting machine or of any gear referred to in regulation (g) above shall be loaded beyond the safe working load except for the purpose of testing.

Contractor

Correction

Executive Engineer

- k. Motors gearing, transmissions, electric wiring and other dangerous parts of hoisting appliance shall be provided with efficient safe guards.
- l. Hoisting appliance shall be provided with such means as will reduce to a minimum the risk of the accidental descent of the load.
- m. Adequate precaution shall be taken to reduce to a minimum the risk at any part of a suspended load becoming accidentally displaced.

Measures for prevention of fire

Clause No. 22:- The contractor shall not set fire to any standing jungle trees brushwood or grass without a written permit from the Executive Engineer. When such permit is given and also in all cases when destroying out or dug up trees, brushwood, grass etc. by fire, the contractor shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make his own arrangements for drinking water for the labour employed by him.

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

Clause No. 23:- Compensation for all damage done intentionally or unintentionally by contractor's labour whether in or beyond the limits of Department property including and damage caused by the spreading of fire mentioned in clause 22 shall be estimated by the Engineer-in-charge or such other officer as he may appoint and the estimate of the Engineer -in-charge subject to decision of the Superintending Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the contractor as damages in the manner prescribed in clause. 1 or deducted by the Engineer-in-charge from any sums that may be due or become due from Department to contractor under this contract or otherwise.

The contractor shall bear the expenses of defending any action or other legal proceedings that may be brought by any person for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damage and cost that may be awarded by the court in consequence.

Employment of Female labour

Clause No. 24:- DELETED

Work on weekly Holidays

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

Contractor

Correction

Executive Engineer

Work not to be sublet.

Clause No. 26:- The contract shall not be assigned or sublet without the written approval of the Engineer-in-charge. And if the contractor shall assign or sublet his contract or attempt to do so or become insolvent or commence, any proceedings to get himself adjudicated and insolvent or make any compositions with his creditors, or attempt so to do or if bribe, gratuity, gift loan perquisite, reward or advantages pecuniary or otherwise shall either directly or indirectly be given, promise or offered by the contractor or any of his servants or agents to any Department Officer or person in the employment of Department in any way relating to his office or employment, or if any such officer or persons shall become in any way directly or indirectly interested in the contract, the Engineer-in-charge may there upon by notice in writing rescind the contract, and the security Deposit and additional Security Deposit of the contractors shall there upon stand forfeited & be absolutely at the disposal of Department & the same consequences shall ensure as if the contract had been rescinded under clause 3 hereof & in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

Contract may be rescinded security Deposit forfeited for subletting it without approval or for bribing public officer or if contract or becomes insolvent

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

Clause No. 27:- All sums payable by contractor by way of compensation under any of these condition shall be considered as a reasonable compensation to be applied to the use of Department without reference to the actual loss or damage sustained and whether any damage has or has not been sustained.

Change in constitution of firm to be notified.

Clause No. 28:- In the case of tender by the partners and change in the constitution of a firm shall be forthwith notified by the contractor to the Engineer-in-charge for his information.

Works to be under direction of Superintending Engineer

Clause No. 29:- All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Superintending Engineer or the Circle, for the time being, who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried out.

Direction and control of the Superintending Engineer.

Clause No. 30:- (1) Except where otherwise specified in contract and subject to the powers delegated to him by Department under the code, rules then in force the decision of Superintending Engineer of the circle for the time being shall be final conclusive and binding on all parties of the contract upon all questions relating to the meaning of the specification, designs, drawing, and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of, or relating to the contract, designs, drawings, specifications, estimate's, instructions, orders or these conditions or otherwise concerning the work or the execution or failure to execute same whether arising during the progress of work or after the completion or abandonment thereof.

Clause No. 30(2):- The contractor may within 30 days of receipt by him of any order passed by the Superintending Engineer of Circle as aforesaid appeal against it to the Chief Engineer concerned with the contact work or project provided that.

- a) The accepted value of the contact exceed Rs.10 lakhs (Rs. Ten Lakhs.)
- b). Amount of claim is not less than Rs. 1.00 lakh (Rs. One lakh).

Clause No. 30(3):- If the contractor is not satisfied with the order passed by the Chief Engineer as aforesaid the contractor may within 30 days of receipt by him of any such order, appeal against it to the Executive Director, GOVERNMENT OF MAHARASHTRA, who if convinced that prima-facie the contractor's claim rejected by Superintending Engineer / Chief Engineer is not frivolous and that there is some substance in the claim of contractor as would Merit detailed examination and decision, by the Executive Committee / Standing Committee, shall put up to the Executive Committee / Standing Committee at Department level for suitable decision.

Stores of European or American Manufacture to be obtained from Department.

Clause No. 31:- The contractor shall obtain from the Department, stores all stores and articles of European or American manufacture which may be required for the work therefor connection therewith, unless he has obtained permission in writing form the Engineer-in-charge to obtain such stores and articles elsewhere. The value of such stores and articles may be supplied to the contractor by the Engineer-in-charge will be debited to the contractor in his account at the rates shown in the schedule in form A attached to the contract and if they are not entered in the said schedule, they shall be debited to him at cost, price which for the purpose of this contract shall include the cost of carriage and other expenses whatsoever, which shall have been incurred in obtaining delivery of the same at the stores aforesaid.

Contractor

Correction

Executive Engineer

Lump sums in Estimates.

Clause No. 32:- When the estimate on which a tender is made includes lump sum in respects of part of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for each item, or if the part of the work in question is not in the opinion of the Engineer-

in-charge capable of measurement, of Engineer-in-charge may at his discretion pay the lump sum amount entered in the estimate and the certificate in writing of the Engineer-in-charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of this clause.

Action where no Specification

Clause No. 33:- In the case of any class of work for which there is no such specification as is mentioned in Rule-1 such work shall be carried out in accordance with the Divisional specifications, and in the event of there being no Divisional specifications, than in such case the work be carried out in all respects in accordance with all instructions and requirements of the Engineer-in-charge.

Definition of work

Clause No. 34:- The expression 'Works' or 'Work' where used in these conditions, shall unless there be something in the subject or context repugnant to such construction, be constructed to mean the work or works contracted to be executed under or in virtue of the contract. Whether temporary or permanent and whether original altered substituted or additional.

Contractor percentage whether applied to net or gross amount of bill

Clause No. 35:- The percentage referred to in the tender shall be deducted form/added to the gross amount of the bill before deducting the value of any stock issued.

Payment of quarry fees, and Royalties.

Clause No. 36:- All quarry fees, royalties, and ground rent for stacking materials if any should be paid by the contractor, and take all steps necessary as are essential in terms of Maharashtra Miner Mineral Extraction Rules.

Compensation under the Workmen's Compensation Act

Clause No. 37:- The contractor shall be responsible for and shall pay any composition to his workmen payable under the Workmen's Compensation Act, 1923 (VIII of 1923) thereafter called the said Act) for injuries caused to the workmen if such compensation is payable and or paid Department as principal under sub-section (1) of section 12 of the said Act on behalf of the contractor it shall be recoverable By Department from the contractor under sub-section (2) of the said section, and such compensation shall be recovered in the manner laid down in clause 1 above.

Contractor

Correction

Executive Engineer

Clause No. 37(A):- The contractor shall be responsible for and shall pay the expenses of providing medical aid to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by Department the same shall be recoverable from the contractor forthwith and be deducted without prejudice to any other remedy of Department from any amount due or that may become due to the contractor.

Clause No. 37(B):- The contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use to the persons employed on the site and shall maintain the same in condition suitable for immediate use at any time and shall comply with the following regulations in connection therewith.

- a) The workers shall be required to use the equipments so provided by the contractor and the contractor shall take adequate steps to ensure proper use of the equipment by those concerned.
- b) When work is carried on in proximity to any place where there is a risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary step shall be taken for the prompt rescue of any person in danger.
- c) Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

Clause No. 37(C):- The Contractor shall duly comply with the provisions of "The Apprentices Act 1961" (III of 1961) the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all the liabilities and penalties provided by the said Act and Rules"

Claim for quantities entered in the tender or estimates.

Clause No. 38:- :- This clause -38 shall be operative As Per Govt Circular no. 0812(420/2012) Major Project-1,Dt 11/10/2012.and Govt Resolution No Tender 1213(735/13) Mp1,22/12/2017.

- 1) Quantities shown in the tender are approximate and no claim shall be entertained for quantities of work executed being either more or less than those entered in the tender or estimate.
- 2) Quantities in respect of the several items shown in the schedule B Part I of the tenders are approximate and no revision in the tendered rates shall be permitted in respect of any of the items. So long as, subject to any special provision contained in the specifications prescribing a different percentage of permissible variation the quantity of the item does not exceed the tender quantity by more than 25 percent and so long as the value of the excess quantity beyond this limit at the rate of the item specified in the tender is not more than Rs. 5000/-
- 3) The contractor shall if ordered in writing by the Engineer so to do, carry out any quantities in excess of the limit mentioned in sub clause (2) hereof on the same condition as and in accordance with the specification in the tender and at the rates (i) derived from the rates entered in the current schedule of rates and in the absence of such rates, (ii) at the rates prevailing in the market. The price variation clause shall be applicable with the initial basic index existing on the date when quantity exceeds/ decreases more than 25% in schedule B Part – I. The rates once decided as above shall not be revised till completion of the quality under that item.
- 4) In case the quantity of any item reduces by more than 25% the rates of such item shall be revised as per provisions of sub clause 3 of clause. 38. However, the total payment of such item shall be limited to seventy five percent of estimated cost of that item put to tender.

Employment of famine labor etc.

Clause No. 39:-The contractor shall employ any famine, convict or other labour or a particular kind or class if ordered in writing to do so by the Engineer – in – charge.

Claims for compensation for delay in starting the work.

Clause No. 40:- No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance work, on account of any delay in according sanction of estimate.

Contractor

Correction

Executive Engineer

Claim for compensation for delay in execution of work

Clause No. 41:- No compensation shall be allowed for any delay in the execution of the work on account of water, 'standing in borrow pits or compartments. The rates are inclusive for hard or cracked soil', excavation in mud, sub-soil, water or water standing in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.

Entering upon or commencing any portion of work.

Clause No. 42:- The contractor shall not enter upon or commence any portion of work except with the written authority and instructions of the Engineer-in-charge or of his subordinate in charge of the work. Failing such authority the contractor shall have no claim to ask for measurements of or payment of work.

Minimum age of persons employed. the employment of donkeys & or other animals

Clause No. 43:-

- i. No contractor shall employ any person who is under the age of 14 years.
- ii. No contractor shall employ donkeys or other animals with breeching of string or thin rape. The breeching must be at least three inches wide & should be of tape (Nawar)
- iii. The Engineer-in-charge or his Agent is authorised to remove from the work any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by Department for any delay caused in the completion of the work by such removal.
- iv. The Contractor shall pay fair and reasonable wages to the workmen employed by him, in the contract undertaken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable, the dispute shall be Referred without delay to the Executive Engineer who shall decide the same. The decision of Executive Engineer shall be conclusive and binding on the contractor but such decision shall not in any way effect the conditions in the contract regarding the payment to be made by the Department at the sanctioned tender rates.
- v. Contractor shall provide drinking water facilities to the workers, similar amenities shall be provided to the workers engaged on large work in urban areas.
- vi. The Contractor should take precautions against accidents which take place on account of labour using loose garments while working near machinery.

Methods of Payment

Clause No. 44:-Payment to contractors shall be made by cheque drawn on united Wester Bank provided the amount not exceeding Rs.500/ Amounts not exceeding Rs. 500 will be paid in cash.

Acceptance of condition compulsory before tendering the work.

Clause No. 45:-Any contractor who does not accept these conditions shall not be allowed to tender for works.

Employment of scarcity labour

Clause No. 46:-If Government declares a state of scarcity or famine to exist in any village situated within 16 km. of the work the contractor shall employ upon such parts of the work, as are suitable for unskilled labour, any person certified to him by the Executive Engineer, or by any person to whom the Executive Engineer may have delegated this duty in writing, to be in need

Clause No. 47:-The price quoted by contractor shall not in any case exceed the control price. if any fixed by Department or reasonable price which it is permissible for his to charge a private purchaser for the same class and description the controlled price or the price permissible under of Hoarding and Profiteering Ordinance, 1948 as amended from time to time. If the price quoted exceed the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the contractor will specifically mentioned this fact in his tender along with the reasons for quoting such higher prices. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to confirm with the controlled price on the permissible under the Hoarding and Profiteering prevention Ordinance. This discretion will be exercised without prejudice to any other that may be taken against the contractor.

Clause No. 48:-The rates to be quoted by the contractor must be inclusive of Maharashtra GST Act 2017, No extra payment on this account will be made to the contractor.

“ The tender rates are inclusive of all taxes, rates, cesses and are also inclusive of the livable tax in respect of sale by transfer of property in goods involved in the execution of a work contract under the provision of rule 58 of Maharashtra Maharashtra GST Act 2017, for the purpose of levy of Tax.

Clause No. 49:-In case of materials that may remain surplus with the contractor from those issued for the work contracted for the date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of GST will be recovered on such sale.

Contractor

Correction

Executive Engineer

Clause No. 49 (a) :- Contractor should note that recovery at penal rate of twice the issue rate will be affected if the contractor's do not return the surplus materials and GST and income tax will also be recovered from them.

Clause No. 50:- The Contractor shall employ the unskilled labour to be employed by him on the said work only from locally available labours and shall give preference to those persons enrolled under Maharashtra Government Employment and self Employment Department's scheme.

Provided, however, that if the required number of unskilled labour from that district is not available, the contractor shall in the first instance employ such number of persons as is available and thereafter may with the previous permission in writing of the Executive Engineer-in-charge of the said work, obtain the rest of his requirement of unskilled labour from outside the above scheme .

Clause No. 51:-Wages to be paid to the skilled and unskilled labourers engaged by the contractor.

The contractor shall pay the labourers-skilled according to the wages prescribed by Minimum Wages Act. 1948 applicable to the area in which the work of the Contractor is in located.

Clause No. 52:-All Amount whatsoever which the Contractor is liable to pay to the Department in connection with the execution of the work including the amount payable in respect of (I) material and / or stores supplied issued here under by the Department to the contractor (ii) hire charges in respect of heavy plant machinery and equipment given on hire by the Department to the contractor for execution by him of the work and /or on which advances have been given by the Department to the contractor shall be deemed to the arrears of land revenue and the Department may without prejudice to any other rights and remedies of the Department recover the same from the contractor as arrears of land revenue.

Contractor

Correction

Executive Engineer

Clause No. 53:-The contractor shall duly comply with all the provisions of the contractor Labour (Regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra Labour (Regulation and Abolition) Rules, 1972 as amended from time to time and all other relevant status and statutory provisions concerning payment of wages particularly to workman employed by the contractor and working on the site of the work. In particular the Contractor shall pay wages to each worker employed by him on the side of the work at the rates prescribed under the Maharashtra Contract Labour (Regulation and Abolition) Rules, 1971. If the contractor fails or neglects to a pay wages at the said rates or makes short payment and the Department makes such payment of wages in full or part thereof less paid by the contractor, as the case may be the amount so paid by the Department to such workers shall be deemed to be arrears of land revenue and the Department shall be entitled to recover the same as such from the Contractor or deduct the same from the amount payable by the Department to the Contractor here under or from any other amount's payable to him by the Department.

Clause No. 54:- The contractor shall engage apprentice such as brick layer carpender, wiremen, pluber, as well as blacksmith by recommended by the Stage Apprenticeship Advisor Director of Technical Education, Dhobi Talaw, Mumbai – 400001. In the construction work (as per Government of Maharashtra, Education Department No. TSA/5170/t/5689, dated 7.7.1972).

Clause 55 :- The contractor Shall duly comply with all the Provisions of goods and service tax act 2017.The tender rates are inclusive of all taxes,Rates,cases except goods and Service Tax (GST).

The GST shall be payable on the acceptable contract value at prevailing Rate separately after production of valid tax invoice. The contractor shall have to pay all the Tax including GST at Prevailing rate.

Clause 56 :-**CONDITIONS RELATING TO INSURANCE OF CONTRACT WORK**

The Contractor shall take out necessary insurance Policy / Policies (viz. Contractor's All Risks Insurance Policy, Erection All Risks Insurance Policy etc. as decided by the Directorate of Insurance) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and value and complete contract period COMPULSORILY from the "Directorate of Insurance, Maharashtra State, Mumbai" only. Its postal address for correspondence is "264, MHADA, First Floor, Opposite Kalanagar, Bandra (East), Mumbai – 400 051." (Telephone Nos. 022-265 90 403 / 265 90 690 and Fax No. is 022- 265 92 461 / 295 90 403). Similarly all workmen's appointed to complete the contract work are required to insure under workmen's compensation Insurance Policy. Insurance Policy / Policies taken out from any other company will not be accepted. If any Contractor has not taken out the insurance policy from the "Directorate of Insurance, Maharashtra State, Mumbai" or has effected Insurance with any Insurance Company, the same will not be accepted and 1% of the tender amount or such amount of premium calculated by the Government Insurance Fund will be recovered directly from the amount payable to the Contractor for the executed contract work

Contractor

Correction

Executive Engineer

and paid to the Directorate of Insurance Fund, Maharashtra State, Mumbai. The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.

Clause 57 :-

The contractor shall duly comply with all the provisions of the Maharashtra GST Act 2017 on Professions and traders ceilings and employment act 1975 (See Rule 3(2)). The Contractor shall obtain certificate of registration under this act and shall produce to the Department clearance certificate as and when demanded.

Clause 58 :-

The contractor shall duly comply with all the provisions of the Maharashtra GST Act 2017 on the transfer of goods involved in the execution of works contracts (re-enacted) act 1989. He shall obtain registration under this act that he is a registered dealer (inform if, rule 4(i), His final bill under this contract will not be paid unless all the dues of GST under the act are paid by him in the district treasury.

The Department will inform to the concerned Dy. GST Commissioner about the details of the contract awarded to the contractor. Amount of Tax @2% will be deducted from his final bill under this contractor and will be paid in to district treasury.

Clause 59:-

Contractor shall make payment of salaries and wages to all the employees and Labouers through bank account linked to Unique Identification Number (AADHAR CARD).and shall submit a Certificate accordingly to the Engineer – in – Charge. The Certificate shall be submitted by the contractor within 60 days from the commencement of contract. if the time period of contract is less than 60 days, the such certificates shall be submitted within 15 days from the date commencement of contract. (जलसंपदा विभाग शासन निर्णय क्र संकिर्ण2016/प्रक्र.839/2016/मोप्र-1 दि 4.2.2017)

Executive Engineer
Civil Works Maintenance
Division, Nashik.

Contractor

Correction

Executive Engineer

GENERAL CONDITIONS OF CONTRACT

1. CONTRACTOR TO INFORM HIMSELF FULLY:

The contractor shall be deemed to have carefully examined the work and site conditions, the special conditions, the specifications, schedules and drawings and shall be deemed to have visited the work site, his own quarries for rubble and sand and to have fully informed himself regarding the availability of construction materials, local conditions, ancillary works required to be done etc. before quoting the offer.

If he shall have any doubts as to the meaning of any portion of the special conditions or the scope of work or the specifications or any other matter concerning the contract, he shall in good time set forth the particulars thereof and submit them to the Engineer-in-charge. The Engineer-in-charge generally means the Executive Engineer directly in charge of the work, but also means the Superintending Engineer, Chief Engineer of Department, for exercising powers under this contract.

2.0 CONTRACT DRAWINGS AND SPECIFICATIONS :

2.1 On acceptance of the tender, three sets of contract drawings, and working drawings as well as one certified copy of the accepted tender will be supplied to the contractor free of charge within one week. On request by the contractor and at the discretion of Engineer –in-charge, the contractor may be supplied additional copies of contract documents to be charged at the rate of **Rs. 500/- Rs. Five hundred only.** per set

2.2 The drawings, which form, part of this contract show the works to be done in such details as possible to do for the present. They will be supplemented or superseded by such additional detailed drawings as may be necessary as the work progresses. The contractor shall carry out the work in accordance with these additional and / or revised drawings as the case may be at the applicable rates as per the contract. The contractor shall be supplied a maximum number of three copies of each of the such working drawings free of charge. Should the contractor require any additional copy for his use, the same may be supplied at the discretion of Engineer-in-charge and the contractor will be charged RS. 500/- per set of contract drawings and RS. 100/- for each of such additional copy of each drawing.

2.3 The contractor shall check all drawings carefully and intimate the Engineer-in-charge immediately any errors or omissions discovered. The contractor shall not take advantage of any kind of errors or omissions in the drawings supplied.

2.4 The Drawings of works are tentative. The contractor will have to procure all designs and drawings of all, at his own cost. Delay in procurement of design and drawings will be the responsibility of the contractor , and no claim on this account shall be entertained.

3.0 DATA AND DRAWINGS TO BE FURNISHED BY THE CONTRACTOR :

a) Prior to the commencement of the work, the contractor shall submit to the Engineer-in-charge for approval, drawings or prints on white ammonia paper of size 1020 mm x 690 mm or 510 mm x 345 mm as may be suitable in triplicate showing the location of major plant workshop, if any, roadways, temporary bridges, unloading facilities and storage yards, etc. which he proposes to put up at the site.

b) Then contractor shall submit to the Engineer-in-charge for approval within one month from the date of his receiving notice to start work, a layout plan of construction plant and equipment for the execution of the work, which the contractor proposes to adopt at site.

c) Any changes in the approved layout will be subject to further approval.

Contractor

Correction

Executive Engineer

- d) The approval of the drawings, however, will not relieve the contractor of his responsibility from any errors or omissions.

4.0 ERRORS, OMISSIONS, DISCREPANCIES:

- a) In case of errors, omissions and / or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications, the following orders of preference shall apply.

Between actual scaled and written dimensions or description on drawing and corresponding one in the specification, the latter shall be adopted.

Between the quantities in the schedule of quantities and those arrived at from the drawings, the former shall apply.

Between the written description of the item in the schedule of quantities and the detailed specifications of the same item, the latter shall be adopted.

- b) The information in connection with the works and work site as well as specifications are contained in this book of contract in general and in particular in two parts, viz. Special conditions and specifications for item of work. In case of any discrepancy or repugnancy in the clauses in these sections, the specifications will prevail over special conditions.
- c) The special conditions of contract and the specifications shall prevail over various clauses of B-1 tender form.
- d) In all cases of omissions and / or doubts or discrepancies; in the dimensions or description of any item, a reference shall be made to the Engineer-in-charge whose elucidation, elaboration or decision shall be considered as authentic and final subject of the Clause 30 of B-1 form. The Contractor shall be held responsible for any errors that may occur in the work through lack of such reference and precaution.

5.0 USE OF SITE :

- a) All land required shall be arranged by the contractor from private landowner / Revenue department at his own cost and no claim on this account shall be entertained.
- b) All areas of operation, including those of his staff and labour colonies, in case handed over to the Contractor shall be cleared and handed over back in good condition to the Engineer-in-charge, except the areas under works constructed from the Engineer-in-charge. The contractor shall make good, to the satisfaction of the Engineer-in-charge, any damage or alterations made to areas, which he has to hand over back or to other property or land handed over to him for the purpose of this work.
- c) The lands shall as herein before mentioned be handed over back to the Engineer-in-charge within three months after the completion of the work under this contract or the termination of the contract whichever is earlier. Also no land shall be held by the Contractor longer than the Engineer-in-charge shall deem necessary and the Contractor shall, on due notice by the Engineer-in-charge vacate and return the land which the Engineer-in-charge may certify as no longer required by the Contractor for the purpose of the works. In case the lands are not handed over back to the Department within the time limit; specified above, penal rent as may be decided by the Engineer-in-charge will be recoverable.
- d) The vegetation and forest is noticeable in project area. The contractor should take utmost care for the preservation of this vegetation and forest. Any damage in this vegetation and forest will have to be compensated by the contractor and decision from Engineer-in-charge will be final and binding on contractor.

6.0 GOLD / SILVER, MINERALS, OILS, RELICS, ETC. FOUND ON THE SITE :

All gold, silver, oil or other mineral of any description and all precious stones, coins treasure, relics, antiquities and other similar things which shall be found in or upon the site, shall be property of Department and the Contractor shall duly preserve the same to the satisfaction of

Contractor

Correction

Executive Engineer

the Engineer-in-charge and shall from time to time, deliver the same to such person or persons as the Engineer-in-charge may appoint.

7.0 ACCESS TO SITE AND WORK AND CO-OPERATION WITH OTHER CONTRACTORS

The Engineer-in-charge may, if he considers fit, from time to time, enter on any lands which may be in the possession of the Contractor under the contract for the purpose of executing any works not included in the contract and may execute such works not included in this contract by agents or by other contractors at his option and the contractor shall in accordance with the requirements of Engineer-in-charge afford all reasonable facilities for execution of the works, including occupation of lands by structures or otherwise to any other contractor employed by the Department and his workmen or for the workmen of the Department who may be employed in the execution on or near the site of work not included in the contract, or of any contract in connection with or specially to the works and in default, the contractor shall be liable to the Department for any delay or expenses incurred by reason of such default. The contractor shall not however, on account of any such modified, new or extra work executed by or for the sake of the Department be entitled to claim relief from the obligation to execute the works. The contractor shall also co-operate with other contractors with all fairness and mutual understanding and use the common facilities like access roads to quarries, water supply arrangements etc.

The contractor shall also not cause advertently or inadvertently any obstruction or impediments in the progress of the other works being executed by Department or through other agencies. In the event of dispute regarding the claim, the responsibility, liabilities etc. in respect of such facilities, the decision of the Engineer-in-charge shall be final.

8.0 CLEANING UP :

- a) The contractor shall at all times keep the construction areas and his colony and storage free from accumulation of waste or rejected materials.
- b) Prior to the completion of the work, the contractor shall remove all rubbish from and around the premises and all tools, scaffolding equipment and materials which are not part of permanent structures except otherwise asked for or as provided under any other clauses of this contract, the premises will be left in a manner fully satisfactory to the Engineer-in-charge.

9.0 PERIOD AND HOURS OF WORK :

The work shall be done usually during the day time. In the interest of progress if it is felt necessary to work during night, the contractor shall obtain specific permission of the Engineer-in-charge. If the work is to be done at night, prior permission of Engineer-in-charge should be obtained and adequate lighting arrangement shall be made as directed by the Engineer-in-charge.

10.0 PROGRAMME OF CONSTRUCTION:

Programme of Work

4. The Quality Control Unit/Division/Circle may all for the reports as in 1 to 3 above. The same should be produced by the concerned.

11.0 BILLS AND PAYMENTS :

- 1) Two running payment in a month will be permitted. First Bill shall be submitted by the contractor by 10th day of the month, payment of this bill shall be effected as stated in Clause 10 of B-1 form. Second bill if necessary, shall be submitted by the contractor by the 25th day. Payment thereof shall be effected as stated above. Non-submission of the bill on the scheduled dates may absolve the Department of the liability to make payment.
- 2) The format of running bill on which the bills are to be submitted by the contractor will be supplied to the contractor by the Department. Printed copies of the bill forms as per this format shall be arranged by the contractor at his cost. The bills in five copies shall be submitted to the concerned Deputy Engineer, in the standard proforma only.

Contractor

Correction

Executive Engineer

- 3) The final bill shall be submitted within one month of the date of issue of completion certificate. The final bill shall be paid within six months of initial submission.
- 4) From the quantities payable in the RA Bill the 10% quantity shall be withheld and this withheld quantity will be payable after the successful testing of the canal for designed discharge with the Final Bill.
- 5) This Remodeling work the discharge capacity of canal should be increased up to required designed discharge in this reach of Canal. The Final Bill of the work will be paid after the testing of the canal.

12. SECURITY DEPOSIT :

The security deposit accumulated from deductions from the running account bills may from time to time and at any time, on application by and at the cost of the Contractor, be converted into interest bearing Department securities, approved by and in the name of the Department. Should the market value of the securities fall, for any reason whatsoever below that specified, the contractor shall make good the same in cash or as may otherwise be acceptable whenever called upon to do so or to replace the security by other acceptable to the Engineer-in-charge.

The Contractor shall bear all charges for commission and brokerage incidental to the purchase, safe custody, withdrawal and collection of interest on these securities.

13. NO INTEREST ON MONEY DUE TO THE CONTRACTOR

No omission by the Engineer to pay the amount due upon measurements or otherwise shall vitiate or make void the contract nor shall the contractor be entitled to interest on any guarantee bond or payment in arrears nor on any balance which may on the final settlement of his account be found due to him.

14. OTHER CONTRACTOR FOR THE WORK :

Department has the right to split-up the project work detailed in the **Work and Site Conditions**, into distinct items and this contract shall apply only to those items which shall have been specified in this contract.

Should Department enter into other contractors for specified items of the project work each contractor shall co-operate with others to the fullest extent and shall allow others every facility and co-operation for execution of their works simultaneously and satisfactorily, as intended in the designs, specifications and drawings.

Should there be a dispute or disagreement between the contractors for any cause whatsoever, the same shall be referred to the Engineer-in-charge whose decision regarding the co-ordination, co-operation and facilities to be provided by any of the contractors to others shall be final and binding on all parties and such a decision or decisions shall not vitiate any contract nor absolve the contractor of his responsibilities under the contract nor form the grounds for any claim of compensation.

15. CONTRACT DOCUMENTS AND MATTERS TO BE TREATED AS CONFIDENTIAL :

All documents correspondence, decisions and other matters concerning the contract shall be considered as of confidential and restricted nature by the contractor and he shall not divulge or allow access thereto to any unauthorized person.

16 ACCESS TO THE CONTRACTOR'S BOOKS :

Whenever it is considered necessary by the Engineer-in-charge to ascertain the actual cost of execution of any particular item of work or supply of plant or material he shall direct the Contractor to produce the relevant documents, such as payrolls, records of personnel, invoices of materials and any and all other data and documents relevant to

Contractor

Correction

Executive Engineer

the item or necessary to determine its cost etc. and the contractor shall when so required furnish information, pertaining to the aforesaid items in the mode and manner that may be specified.

23. BREACH ON PART OF Government NOT TO ANNUAL CONTRACT:

No breach or non-observance on the part of Department of any of the conditions contained herein shall annul this contract or discharge the Contractor from the observance and performance thereof, but on application to the Engineer-in-charge, an extension of time may be given to the Contractor in respect of such breach or non-observance by the Department, which shall be governed by Clause 6 of B-1 form.

The Contractor shall not, however, be entitled to consideration or any extension of time for any item of the work unless the contractor shall have made an application in writing to the Engineer-in-charge within one month of the arising of the cause needing such extension, but the Engineer-in-charge may at his discretion, which shall be conclusive, waive the condition regarding this period of one month.

17 LOCAL LAWS :

All local laws in force at the time of entering into the contract and those enacted thereafter shall be binding on the Contractor and he shall abide by the same.

All import and excise duties, sales tax, local panchayat tax and other taxes shall be borne by the Contractor and they shall be deemed to have been covered by his quoted tender rates, except that the contractor shall not be liable to any land tax for the land handed over to him for the operation in connection with this contract or for his colony or appurtenant works constructed by him for the purpose of this contract.

The contractor shall also be liable to all relevant provisions of the Indian Income Tax Act, which may be applicable to him from time to time. The contractor shall protect and indemnify Department against all claims or liabilities arising from or based on the violation of such laws, ordinances, regulations, bylaws by him or his employee.

18. PERSONNEL OF THE CONTRACTOR :

The Contractor shall, at all times, maintain on the work, a staff of duly qualified engineers and supervisors of sufficient experience of similar other jobs, to assure that the quality of work turned out shall be as intended in the specifications. The Contractor shall also maintain at the work, a Works Manager of sufficient status, experience and office, and duly authorise him to deal with all aspects of the day to day work. All communications to and commitments by this Works Manager shall be absolutely binding on the Contractor.

The Contractor shall supply to the Engineer-in-charge details of names, qualifications and experience in regards to all supervisory staff employed by the Contractor and notify changes when made, and satisfy the Engineer-in-charge regarding the quality and sufficiency of staff thus employed.

The Engineer-in-charge will have the unquestionable right to ask for changes in the quality and number of contractor's staff. The contractor shall on the written directives of the Engineer-in-charge, remove from the works any person employed thereon, who may in the opinion of the Engineer-in-charge be incompetent or has misconducted himself. Such person shall not be employed again, on the work, without the written permission of the Engineer-in-charge. The contractor shall have to submit information regarding proof of payment of Professional Tax and the clearance certificate in format vide Appendix 'T'.

19. DEATH, BANKRUPTCY ETC. :

Contractor

Correction

Executive Engineer

If the contractor shall die or commit any act of bankruptcy or being a Department, commences winding up except for reconstruction purposes or carry on its business under a receiver, the executors, successors or other representatives in law of the estate of the contractor or any such receiver, liquidator or any person whom the contract may become vested, shall forthwith give notice thereof in writing to the Department and shall for one month, during which he shall take all reasonable steps to prevent a stoppage of work, have the option of carrying out this contract subject to his or their providing such guarantee as may be required by the Department, but not exceeding value of the work for the time being remaining unexecuted. In the event of stoppage, of work, the period of the option under this clause shall be fourteen days only. Should the above option be not exercised, the contract may be terminated by Department, by a notice in writing to Contractor or his successor. The power and provisions reserved to Department in this contract of taking of the work out of the Contractor's hand shall immediately become operative. Copy of such notice shall be pasted on work site and advertised in newspaper.

20. NOTICES, HOW TO BE GIVEN :

Where any legal or other notice or any other document or any other direction is to be given to or served upon the Contractor, it shall be deemed to be duly given or served, if it shall have been either delivered to him personally or to his recognised agent or Works Manager (including in the case of company, the Secretary of such Company) or delivered at or sent through the post, addressed to the last known place of business, or abode of the Contractor, a notice or other documents which shall be so given to or so served on any one of the partners in such firms, shall be deemed to have been given or served on all of them.

Work order Book:

The Contractor shall maintain bound work order book at work site as the Engineer-in-charge may direct. This work order book shall have machine numbered pages in triplicate. The contractor shall make them available to the Engineer-in-charge or his representative, whenever called for.

Executive Engineer or his representative may record order about works, in this book, leaving the original copy in the book and removing the second and third copy with him. The contractor or his authorised representative shall also sign this work order, in token of its acceptances.

All orders recorded in these work order book, shall be deemed to have been served on the contractor. On completion of the work all the work order books may be handed over to the Executive Engineer.

In the event of refusal of the Contractor's representative on the spot to sign the work order book, Engineer-in-charge shall take the necessary further steps in respect of further communication and control, modification or stoppage of work as deemed fit at the entire responsibility of the contractor.

21. PASSING OF FOUNDATION ETC. :

Contractor

Correction

Executive Engineer

After the completion of the work of excavation, the same will be checked and passed by the Executive Engineer. No masonry or concrete or back filling shall be laid unless the foundation is so passed. No concreting shall commence unless the centering and the reinforcement is checked and passed by the Engineer-in-charge.

22. REFERENCE TO STANDARD SPECIFICATIONS :

The specifications of the work as enclosed with this contract document are drawn with a specific reference to site conditions and do not every where include the details of the standard test and procedures which are already laid down and available in the current Indian Standard Specifications. Whenever such details are not specified in this contract, the provision under current Indian Standard Specifications and / or the Standard Specifications (1970) of the Department of Maharashtra shall be deemed to be applicable.

23. COMMUNICATIONS AND NOTICES BY CONTRACTORS

All communications and / or notices pertaining to works and concerning matters, such as passing and approving of foundation, reinforcement and formwork, measurements, mark outs, etc. shall not be addressed by the Contractor to an Officer below the rank of Sub-Divisional officer. All such notices communications, etc. shall be addressed in good time so as not to hold up the work.

24. NON-COMPLIANCE OF CONTRACT CONDITIONS :

If the contractor shall neglect or fail to proceed with the works, with due diligence or he violates any of the provisions of the contract, the Engineer-in-charge may give notice to the contractor, identifying deficiencies in performance and demanding corrective action. The Engineer-in-charge, shall also clearly state in the notice the nature of action that shall be taken, if contractor fails to fulfill by necessary corrective action.

Depending on nature of default the Engineer-in-charge at his discretion shall have two options, regarding action to be taken in case of default by contractor. He shall withhold any of the payments due to the contractor or shall terminate the contract in whole or in part. But Engineer-in-charge shall, clearly mention in his notice, the action that shall be taken if the contractor fails to take the corrective action. The period of 14 days shall be given to the contractor to take such corrective action after the issue of such notice.

No claims, for compensation of any sort, from contractor will be entertained for withholding the bills indefinitely till specified requirements are complied with by the contractor.

After the issue of the notice about default by the contractor, the contractor shall not remove, from the site any plant, equipment and materials. The Department shall have a lien on all such plants, equipment's and materials, from the date of such notice, till deficiencies have been corrected.

25. EXTRA ITEMS :

Extra items of work shall not vitiate the contract. The contractor shall be bound to execute extra items of work as directed by the Engineer-in-charge. The rates for extra items will be governed by the provisions of clause 14 and 30 of conditions of contract.

26. PRICE VARIATION :

If during the operative period of the contract as defined in condition(I) below, there shall be any variation in the Consumer Price Index (New Series) for Industrial workers for Centre as shown in para 7 of Annex "A" to Section –I Detailed Tender Notice , as per

Contractor

Correction

Executive Engineer

- i) Publication by Labour Bureau, Ministry of Labour, Govt. of India.
- ii) Publication by Ministry of Industrial development, Govt. of India.
- iii) Publication of wholesale price index for all commodities prepared by the office of Economic Adviser, Ministry of Industry, Govt. of India. as compared to the respective figure therefore, on the date 30 days before the last date prescribed for receipt of tender and / or in the price of Petrol / Oil and lubricants, than subject to the prices mentioned below, price adjustment on account of.
 - i) **Labour component : 0.00 %**
 - ii) **Material component 0.00 %**
 - iii) **Petrol, Oil and Lubricants Component 0.00 %**

Which respectively are as indicated in para 7 of Annex "A" to Section , 1 Detailed Tender Notice, of the total cost of work put to tender, calculated as per the formula hereinafter appearing, shall be made (total of all these five components will be 100)

Contract price shall be adjusted for increase or decrease in rates and price of labour, cement steel, other materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in the contract data.

- a) The cost of materials and electrical energy supplied by a the employer, if any, at fixed prices and the amount of royalty charges shall be excluded from the scope of price adjustment.
- b) The price adjustment shall apply for the work done from the start date given in the contract data up to end of the initial intended completion date of extensions granted by the employer and shall not apply to the extension is necessitated on account of default of the contractor.
- c) The price adjustment shall be determined during each quarter from the formula given in the contract data.
- d) Following expressions and meanings are assigned to the work done during each quarter.

P = Total value of work done during the quarter excluding cost of materials and electrical energy supplied by the Employer at fixed prices and the amount of royalty charges. It would include the value of materials on which secured advance has been granted, if any during the quarter. Less the value of materials in respect of which the secured advance has been recovered, if any during the quarter.

Adjustment for Labour Component : i) Price adjustment for increase or decreases in the cost due to labour shall be paid in accordance with the following formula.

$$V_L = 0.85 \times P \times \frac{K_L}{100} \times \frac{L_1 - L_0}{L_0}$$

- V_L = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour.
- V_0 = the average consumer price index for industrial workers for the centre as specified in Annex "A" for the quarter preceding the date of Acceptance of tender as published by Labour Bureau, Ministry of Labour Government of India.
- L_1 = the average consumer price index for industrial workers for the centre as specified in Annex "A" for the quarter under consideration as published by Labour Bureau, Ministry of Labour Government of India.
- K = Percentage of labour component of the work.

Contractor

Correction

Executive Engineer

Adjustment for fuel component

- iv) Price adjustment for increase or decreases in the cost of POL (fuel and lubricant) shall be paid in accordance with the following formula

$$V_F = 0.85 \times P \times \frac{K_E}{100} \times \frac{F_1 - F_0}{F_0}$$

- V_F = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for Fuel and Lubricants.
- F_0 = the average official retail price as stated in Annex "A" on the day thirty days prior to the date of Acceptance of tender.
- F_1 = the average official retail price of HSD at the existing consumer pumps of IOC at the place as stated in Annex "A" for the 15th day of the middle calendar months of the quarter under consideration.
- K_F = Percentage of fuel and lubricant component of the work.

Note : For the application of this clause, the price of high speed Diesel oil has been chosen to represent fuel and lubricants group.

Adjustment for other material component :

- v) Price adjustment for increase or decreases in the cost of local materials other than cement, steel bitumen and POL, procured by the contractor shall be paid in accordance with the following formula

$$V_m = 0.85 \times P \times \frac{K_m}{100} \times \frac{F_1 - F_0}{F_0}$$

- V_m = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local materials other than cement, steel bitumen and POL.
- M_0 = the all India average wholesale price index (all commodities) for the quarter proceeding the date of Acceptance of tender as published by the Ministry of Industrial Development, Government of India, New Delhi.
- M_1 = the all India average wholesale price index (all commodities) for the quarter under consideration as published by the Ministry of Industrial Development of India, New Delhi.
- K_m = Percentage of local material component (Other than cement, steel, bitumen and POL) of the work.

The percentages of Labour (KL), Cement (KC), Steel (KS),, othe materials (Km), and POL (KF), are as specified in para 7 of Annex "A" of Section – I Detailed Tender Notice.

While working out the value of work done during a quarter the value of materials on which secured advance has been granted during the quarter, should be added and the value of materials for which such secured advance has been recovered during the quarter should be deducted.

II) Conditions referred to in Paragraph I:-

- i) The Operative Period of the contract shall mean the period commencing from the date of the work order issued to the Contractor and ending on the date when the time allowed for the work specified in the Memorandum under Tender for work expires, taking into consideration the extension of time, if any, for completion of the work granted by Engineer-in-charge under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contractor.

Contractor

Correction

Executive Engineer

Price variation shall be calculated, in accordance with the formulae mentioned above separately for labour, materials and POL components.

- ii) The escalation is not payable for the extra items or the extra quantities under clause 38 since the rates for them are to be fixed as per the current DSR or as mutually agreed without yearly revision.
- iii) This Clause is operative both ways, i.e. if the Price Variation in the said Wholesale price index for all commodities, consumer price index (New series) or prices of HSD for the place shown in para 7 of Annex "A" to section I of Detailed Tender Notice , is on the plus side, payment on account of the price variation shall be allowed to the plus side, payment on account of the price variation shall be allowed to the contractor and if it is on the negative side the Department shall be entitled to recover the same from the contractor and the amount shall be deductible from the contractor's bill for the respective period in which there are fluctuations.

27. CO-ORDINATION WITH OTHER CONTRACTORS :

The contractor should note that there will be other agencies including Department, working in the same area for works other than that included in this contract. The contractor shall co-operative with these agencies to the fullest extent and shall allow them reasonable facility and co-ordination for execution of work, simultaneously and satisfactorily as intended in the contract conditions, specifications and drawings.

Should there be a dispute or disagreement between the contractor and other agencies for any cause whatsoever, the same shall be referred to the Engineer-in-charge whose decision regarding Co-ordination and facilities to be provided by all the contractors to others shall be final and binding on all parties and, such decision shall not vitiate any contract or absolve the contractor of his responsibility under the contract, and shall not from ground for any claim or compensation.

28. UNDERTAKING UNDER CONTRACT LABOUR ACT :

The Contractor shall furnish the undertaking towards implementation of contract Labour Act as given in Appendix = F.

29. PHOTOGRAPHS OF THE WORKS :

The contractor will not be allowed to take photographs showing fieldwork or the general location of the work. The Engineer, may however, at his discretion, allow a few construction photographs to be taken for the purpose of the contractor's record. Prior approval of the Engineer-in-charge should be obtained in such cases and also in case such photographs are to be exhibited in public literature and calendars etc. in all such cases, negatives of the photos shall be submitted to the Engineer, after taking approved number of copies and the negative will become the absolute property of the Department.

30. DATA, DRAWINGS TO BE FURNISHED BY THE CONTRACTOR :

a) Prior to the commencement of the work the contractor shall submit to the Engineer-in-charge for approval, drawings or prints in white ammonia paper of size 1020 mm x 690 mm or 510 mm x 345 mm as may be suitable, in triplicate, showing the location of major plant, workshop, if any, roadways, temporary bridges, unloading facilities and storage yards etc. which he proposes to put at the site and the contractor is supposed to plan with respect to the land provided and it shall not be responsibility of the Department to make available the land suitable to the plan submitted by the contractor.

b) The contractor shall submit to the Engineer-in-charge for approval within one month from the date of his receiving notice to start work.

Contractor

Correction

Executive Engineer

i) A layout plan of constructions plants and equipments for the execution of the work which the contractor proposes to adopt at site and

Any changes in the approved layout will be subject to further approval from the Engineer-in-charge.

d) The approval of the drawings, however, will not relieve the contractor of his responsibility from any errors or omissions.

31. LIABILITY FOR ACCIDENTS TO PERSONS :

It shall be contractor's responsibility to protect against accidents on the work site. He shall indemnify the Department against any claims for damage to the property, injury to workers or any other persons, death etc.

On the occurrence of an accident resulting in death or which is so serious as to be likely to result in death, the contractor shall within 24 hours, report in writing to the Engineer-in-charge, the facts stating clearly about the circumstances in which accident has occurred and the subsequent action taken. Other minor accidents causing minor injuries and loss to property should be communicate in writing, promptly to the Engineer-in-charge. In all cases the contractor shall indemnify the Department against all losses or damages resulting directly or indirectly from the contractor's failure to report in the manner aforesaid. This includes penalty or fines if any, payable by the Department as a consequence of failure to give notice under the Workmen's compensation Act or failure to conform to the provisions of the said Act in regard to such accidents.

In the event of accident in respect of which compensation may become payable under the Workman's Compensation Act VIII, of 1923 including all subsequent modifications thereof, Engineer-in-charge may retain the sums of money as may in the opinion of the Engineer-in-charge be sufficient to meet such liability out of the amounts payable to the contractor. These sums shall be recovered from the immediate payment due to the contractor in one installment or in more than one installment. The decision of the Engineer-in-charge regarding this shall be final and binding on the contractor. On receipt of award from the Labour Commissioner, the balance amount shall be reimbursed to or recovered from the contractor.

It should be noted that the Department is a Principal employer the complete responsibility of compensation shall be on the contractor.

32 THE CONTRACTOR TO SUPPLY AND BE RESPONSIBLE FOR THE SUFFICIENCY OF THE MEANS EMPLOYED :

The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, machinery, tools, implements and generally of all the means irrespective of whether such means may or may not have been approved of or recommended by the Engineer-in-charge and the contractor must accept all risks of accidents or damages from whatsoever cause they may arise, until the completion of this contract.

33. SAFETY MEASURES :

The contractor shall arrange for the safety in his operations as required including the provisions in the safety manual published by the Central Water and Power Commission, New Delhi. (Jan. 1962 Ed.) In case the contractor fails to make such arrangements the Engineer-in-charge shall be entitled to cause them to be provided and to recover the cost thereof from the contractor. The following are some of the measures listed, but the same are not exhaustive and the contractor shall add to and suggest these precautions on his

Contractor

Correction

Executive Engineer

own where necessary and should comply with the directions issued by the Engineer-in-charge in this behalf from time to time and at all times. Providing protective head guard to workers in the works like deep excavation to protect them against fall of overburden materials.

Getting the workers in such jobs periodically examined for chest trouble due to too much breathing in fine dust.

Taking such normal precaution like fencing and lighting to excavations or trenches, not allowing, nails or metal parts or useless timber spread around, marking danger area for blasting whistles etc.

Providing sufficient suitable and safe accesses to all work spots including ladders gangways, platforms, etc. avoiding naked wires, etc. such would electrocute the workers.

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

34. MAINTENANCE:

After the works are completed in all respects in accordance with the contract condition, a completion certificate will be issued by the Engineer-in-charge.

From the date of issue of the completion certificates, till the expiry of 12 calendar months, the Contractor shall be liable for the replacement of any part of plant or work found to be defective from the causes arising from faulty materials or workmanship or other causes, for which in the judgment of the Engineer-in-charge, the Contractor is responsible and for making good any damage arising there from. Contractor has to maintain his staff / machinery at site of work during construct in and also in adequate number of radiation of water through river after the completion of work. To maintain designed canal discharge @ site of work to the disposal of Engineer – in – charge . if any problem arises during water releases at the said work necessary work should be carried out @ contractors cost to maintain designed discharge as per instruction of Engineer – in – charge.

35. SUNDAYS AND HOLIDAYS:

No work shall be done on weekly local holidays or on other Government holidays duly Gazetted or on holidays observed by local usage without the prior sanction of the Engineer-in-charge. Withholding of such sanction shall not form any grounds for compensation or extension of time limit. If on the other hand, the Engineer-in-charge directs that the work shall be proceeded with on days and during hours otherwise not permissible under this contract, the Contractor shall proceed with the works as directed, without in any way violating this contract or forming any grounds for compensation or claim. The contractor shall, in his dealing with labour at all times during the period of this contract, have due regard to local festivals, religious and other customs.

36. HANDING OVER OF WORK:

All the work and materials, before being finally taken over by Department will be the entire liability of the contractor for guarding, maintaining and making good any damages of any magnitude. Interim payments made for such work will not alter this position.

The handling over by the contractor and taking over by the Executive Engineer or his authorised representative will be always in writing of which copies will go to the Executive Engineer or his authorised representative and the contractor. It is however, understood that before taking over such work, Department will not put it into regular use

Contractor

Correction

Executive Engineer

as distinct from casual or incidental one, except as specifically mentioned elsewhere or as mutually agreed to.

37. INSTRUMENTATION:

In case, it is proposed to have any instrumentation, in work, the instruments and their accessories will be procured and installed by the Department as per programme framed by the Engineer-in-charge. Care should be taken by the contractor to protect these instruments as well as their connections during various construction operations. The contractor shall also extend all facilities for installation and observation of these instruments. All the operations required for facilitating the installation of the instruments shall stand included in the relevant items of tender. No claim, however shall be entertained due to any delay or obstruction that might be created due to installation or observation.

38. INSPECTION OF WORKS:

The Engineer or his duly authorised representative shall have at all times full power to inspect the work, whenever in progress either on the site, in the contractor's premises or the work site. Further, contractor shall not without written authorisation, permit entry on site of work of any person except authorised representative of the Department or the Engineer or the contractor's staff and labour directly engaged on and in connection with the work.

The contractor shall, at his cost, provide all necessary facilities for proper inspection and supervision of the work gangways, platforms, scaffolding and ladders, etc. of suitable dimensions and sufficiently strong at appropriate locations and all accesses to passages etc. shall be well lighted and maintained in good order. The Engineer's decision about the sufficiency and adequacy thereof shall be final.

The contractor shall, during working hours, maintain supervisor of sufficient training and experience to supervise various items and operations of the work and the said supervisors shall remain present during inspections of the Engineer. All orders and directions given to such supervisors or other staff of the contractor shall be deemed to have been given to the contractor directly. Further the Engineer may, by due notice to the contractor, to be present on any specified inspection and the contractor shall comply with such directions.

39. OPENING OUT WORKS:

Should the Engineer consider, if necessary, in order to satisfy himself as to the quality of work the contractor shall at any time during the continuance of the contract pull down or cut into any part of the work, and make such openings into and to such an extent through the same as the Engineer may direct and the contractor shall make good the same at his cost and to the satisfaction of the Engineer.

40. REMOVAL OF IMPERFECT WORK:

If it shall appear, that the work has been executed with unsound, imperfect or of an inferior quality or otherwise not in accordance with the contract documents, the contractor shall at his own cost rectify, reform, remove or reconstruct the same, wherein whole or in part as may be, directed by the Engineer, whether or not, the value of any such work of material shall have been included in any payment made to the contractor. The decision of the Engineer-in-charge shall be final and binding on the contractor. The Executive Engineer may, if he thinks fit, allow such work to be paid at reduced rates and his decision will be final and binding, provided further that the rates fixed by the Engineer, be not acceptable to the contractor, he shall have the option to replace the defective work or materials with ones in accordance with the specified standards.

Contractor

Correction

Executive Engineer

41. JURISDICTION OF COURT FOR DISPUTES:

Disputes, if any, arising out of this contract shall be subject to the jurisdiction of the court of Nashik.

42. INSURANCE:

Contractors shall take out necessary insurance Policy / Policies so as to provide adequate insurance cover for excavation of the award contract work from the "Director of Insurance Maharashtra State, Mumbai 400 051 only. It's postal address for correspondence is "264 MHADA, Opp. Kalanagar, Bandra (E), Mumbai – 400 051 (Tel. No. 6438403) (Fax) 6438461/6438690. Insurance Policy / Policies taken out from any other company will not be accepted. However, if the contractors desire to effect insurance with the local office the insurance company, the same should be under the co-insurance cum-servicing arrangements approved by the Director of insurance. The policy taken out by the contractors is on co-insurance basis. (G.I.F. 60% and insurance Company 40%) the same will not be recovered directly from the amount payable to the contractors for the executed contract work which may be noted.

**43. Cess on Building & Construction Labour Welfare as per
कामगार कल्याण उपकर**

महाराष्ट्र शासन, उद्योग, उर्जा व कामगार विभाग, मंत्रालय, मुंबई यांचे जा.क्र.बीजीए-(इमारत)२००९/प्र.क्र.१०८/कामगार-७ अ, दि.३/७/२०१० व शासन बांधकाम सार्वजनिक बांधकाम विभाग, मंत्रालय मुंबई यांचेकडील जा.क्र.संकीर्ण-१०/०९/प्र.क्र.२७७/इमारती २, दि.१७/८/२०१० अन्वये इमारत व इतर बांधकाम व इतर बांधकाम कामगार कल्याण उपकर अधिनियम १९९६ मधील तरतुदींच्या अनुषंगाने राज्यामध्ये एक टक्का उपकर खाजगी व शासकीय बांधकामाच्या एकुण मुल्यानुसार (जमिनीचे मूल्य वगळून) तसेच संबंधीत आस्थापाने कामगारांना किंवा त्याच्या नातलगांना कामगारांसाठी नुकसान भरपाई अधिनियम १९२३ मधील तरतुदीनुसार कोणत्याही प्रकारची भरपाई दिलेली असेल ती रक्कम वगळून उर्वरित बांधकाम मुल्यांकन एक टक्का उपकर वसूल करण्यात येईल व सदर रक्कमेचा परतावा मिळणार नाही. कंत्राटदाराने संबंधित अभिकरणात सदर उपकर थेट भरावयाचा असून याबाबतची तरतुद "शेड्यूल बी" मध्ये अंतर्भूत दरामध्ये विचारात घेण्यात आली आहे. सदर रक्कम कंत्राटदाराने न भरल्यास ही उपकराची रक्कम कंत्राटदाराच्या देयकातुन थेट वसूल करण्यात येईल.

44. ROYALTIES:

All quarry fees, royalties, octroi/cess dues and ground rent for stacking materials, if any, shall be paid by the contractor in advance to the revenue authority & obtain required permission on failing this no claim on account of any penalties levied on contractor or department by revenue authority will be entertain by dept. The amount of royalty shall be deducted from R.A. bill as per the rate decided by the Revenue Department time to time and will be released only after submission of receipt from Revenue Authority and if the contractor fails to submit the receipts the same amount will be directly paid to the Revenue Authority.

45 A. ROYALTY, and Testing Charges:

All testing charges for required quantity of testing, and Royalty on account of extraction of construction material payable under minor mineral act prevailing in the state are included in schedule of rates, any such due payable to Govt, or any other Agency / Organisation , if not paid by contractor and claimed by such authority, same shall be deducted from the contractor's bill and reimbursed to the claimant

45 B. Tender Percentage for Royalty and Testing Charges -:

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The percentage rate figure (above or Below percent) accepted by the Bidder in the form of bid shall not be applicable on the item of Royalty and, Testing charges included in schedule "B"

46 C. Stamp Duty

a) A stamp duty as per rule will be paid by the contractor.

b) as per the prevailing provision of the stamp act, stamp duty is to be levied on this contract as per the order received under Govt of Maharashtra, Revenue and Forest Department, circular dated 18.03.2021. Receipt / receipt of stamp duty should be immediately submitted to this office before starting the work.

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B.GENERAL TECHNICAL SPECIFICATIONS

Name of Work :-

Technical Specifications

Schedule-Item No.	Specification No.	
1	--	<p>1.2 Conduits (Concealed type) Specification No (WG-MA/CC) 1.2.1 Concealing PVC Conduits in RCC work Scope: Providing specified PVC conduit and laying / erecting in RCC work, such as slab, beam, column before casting as per approved Method of Construction along with of all required material including hardware, binding wire, fish wire; accessories such as deep / long neck PVC junction boxes, PVC / MS junction / draw-in boxes, check-nuts, flexible PVC pipe, drawing fish-wires and making all piping rigid, removing debris from site and supervising the work during casting to confirm rigidity, continuity and avoid damages.</p> <p>Material: PVC Conduit: PVC pipe of minimum 20mm dia and above depending on No. of wires to be drawn (refer Table No.1/2); ISI mark, HMS grade (2mm thick), accessories for PVC pipes of the same make that of pipe; Couplers, long Bends, deep Junction boxes of required ways and resin / adhesive to make all joints rigid.</p> <p>Junction boxes / Draw-in boxes: Junction box shall be 5 sided with removable top plate and of suitable size to accommodate No. of entries; PVC or fabricated from 16g CRCA sheet steel with earth terminal duly treated with antirust treatment and painted with two coats of red oxide paint. There shall be knockout holes in required numbers and dia. for entry of conduit pipes and arrangement to fix cover plates on it.</p> <p>Hardware: ‘U’ nails, plumbing and general use nails of required sizes, washers, check-nuts, steel binding wire, steel fish wire etc.</p> <p>Method of Construction: Concealing of PVC conduits: General: Work shall be done in co-ordination with civil work and to suite final approved layout. Size of conduit shall be correct depending on number of wires to be drawn. (Table No 1/2 for PVC conduits) Separate pipe shall be used for each phase in single phase distribution and for power and light distribution and also for wiring for other utilities like data, telephone, TV cabling, etc. The distance between pipes shall not be less than 300 mm or anti electrostatic partition is to be provided. Adequate use of conduit accessories shall be made at required locations. Entries in wall shall be at level of corresponding conduit with colour coding as per Table No. 1/4. (For Visual identification) Flexible conduits shall be used at expansion joints. Erection shall be done as per the layout finalized, with minimum sharp bends, with junction boxes at angular junctions and for straight runs at every 4.25m, in such manner so as to facilitate drawing of wires. All PVC conduit bending shall be done with Bending Spring. All joints shall be made rigid with resin.</p> <p>Concealing of PVC conduits: In RCC work: Work shall be commenced after fixing of steel re-enforcement on centering material. Conduits shall be firmly fixed on steel of RCC work by binding wire. Fixing of conduits shall be such that it will remain rigid during casting of slab, beam, and column even after use of vibrator. Deep junction boxes and other draw-in boxes shall be such that their open end and centering material will not have gap in between so as to avoid concrete entering inside even after fixing covers to steel re-enforcement; and be filled with dry sand. Open ends of conduits; to be concealed in walls, shall be provided with couplers / sockets at ends and be flush with bottom of beam, and located at the center of the beam. As far as possible</p>

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	<p>bunching / grouping of conduits shall be avoided so that it will not affect strength of RCC work especially in beams. Suitable steel fish wire shall be drawn through in the conduits for drawing of wires later on.</p> <p>1.2.2 Concealing PVC Conduits in walls / flooring</p> <p>Scope: Providing specified PVC conduit and erecting / laying in wall, flooring by making chases / grooves / entries as per approved Method of Construction along with of all required material including hardware such as 'U' nails, binding wire, fish wire; accessories such as PVC / MS junction boxes / inspection boxes, check-nuts, flexible PVC pipe, glands, drawing fish-wires Page 6 of 189 and making all piping rigid, refinishing the surface with cement mortar, removing debris from site.</p> <p>Material: PVC Conduit: PVC pipe minimum 20mm dia and above depending on No. of wires to be drawn (refer Table No.1/2), ISI mark, HMS grade (2mm thick), accessories for PVC pipes of the same make that of pipe; Couplers, long Bends, Junction boxes of required ways, type and resin / adhesive to make all joints rigid.</p> <p>Junction boxes / Draw-in boxes: Junction box shall be 5 sided with removable top plate and of suitable size to accommodate No. of entries; PVC or fabricated from 16g CRCA sheet steel with earth terminal duly treated with antirust treatment and painted with two coats of red oxide paint. There shall be knockout holes in required numbers and dia. for entry of conduit pipes and arrangement to fix cover plate on it.</p> <p>Hardware: 'U' nails, plumbing and general use nails of required sizes, washers, check-nuts, steel binding wire 20g, steel fish wire, etc.</p> <p>Other material for Surface finishing: Cement, sand, putty, and water.</p> <p>Method of Construction: Concealing of PVC conduits: (General) Work shall be done in co-ordination with civil work to suite final approved layout. Size of conduit shall be correct depending on number of wires to be drawn. (Table No 1/2 for PVC conduits) Separate pipe shall be used for each phase in 1-ph distribution and for power and light distribution and also for wiring for other utilities like data, telephone, TV cabling, etc. for which the distance between pipes shall not be less than 300 mm or anti electrostatic partition is be provided. Adequate use of conduit accessories shall be made at required locations. Entries in wall shall be at level of corresponding conduit with colour coding as per Table No.1/4. (For Visual identification) Flexible conduits shall be used at expansion joints. Erection shall be done as per the layout finalized, with minimum sharp bends, with junction boxes at angular junctions and for straight runs at every 4.25m, in such manner so as to facilitate drawing of wires. All bending of conduits shall be done with Bending Spring. All joints shall be made rigid with resin.</p> <p>Concealing of PVC Conduits In walls / flooring: Chases shall be made in walls of adequate width, with cutter and chiseling through it. Necessary finishing of the wall surface shall be done. Work in flooring shall not disturb RCC work, Conduits of adequate size shall be erected with use of appropriate accessories, and 'U' nails. All joints shall be made rigid with resin. Draw-in / inspection boxes shall be fixed with check-nut, flush with surrounding surface and earthed.</p> <p>1.2.3 Rigid Steel Conduits in RCC work</p> <p>Specification No (WG-MA/CC)</p> <p>Scope: Concealing of Rigid Steel Conduits: In RCC work: Providing specified Rigid Steel conduit and laying / erecting in RCC work, such as slab, beam, column before casting as per approved Method of Construction along with continuous earth wire and all required material including earth clips, hardware, binding wire, fish wire; accessories such as deep junction boxes, MS draw-in / junction / inspection boxes, check-nuts, flexible PVC pipe, drawing fish-wires and making all piping rigid, removing debris from site and supervising the work during casting to confirm rigidity, continuity and avoid damages.</p> <p>Material: Rigid Steel conduit: Rigid HG steel screwed conduit, minimum 20mm dia. and higher depending on No. of wires to be drawn as per Table No. 1/1, 16 gauge, ERW grade duly processed for anti-rust treatment and painted with black enamel paint, accessories for rigid steel conduits such as check nuts, long bends, deep junction boxes for slab, regular junction boxes for walls; of required ways, all of the same make.</p> <p>Earth continuity wire:</p>
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		<p>GI wire of 2.5 sq. mm; GI earth clips 22g, 10mm width, for fixing earth wire along the conduits.</p> <p>Junction boxes / Draw-in boxes: Junction box shall be 5 sided with removable top plate and of suitable size to accommodate No. of entries; fabricated from 16g CRCA sheet steel with earth terminal duly treated with antirust treatment and painted with two coats of red oxide paint. There shall be knockout holes in required numbers and dia. for entry of conduit pipes and arrangement to fix cover plate on it.</p> <p>Hardware: U' nails, plumbing and general use nails of required sizes, washers, check-nuts, steel binding wire 20g, fish wire, etc.</p> <p>Method of Construction: Concealing of Rigid steel Conduits: General: Work shall be done in co-ordination with civil work to suite final approved layout. Conduit shall be duly screwed and size of conduit shall be correct depending on number of wires to be drawn. (Table No.1/1, for Steel conduits) Separate pipe shall be used for each phase in 1-ph distribution and for power and light distribution and also for wiring for other utilities like data, telephone, TV cabling, etc. for which distance between pipes shall not be less than 300 mm or anti electrostatic partition is to be provided. Adequate use of conduit accessories shall be made at required locations. Entries in wall shall be at level of corresponding conduit with colour coding as per Table No. 1/4. (For visual identification). Flexible conduits shall be used at expansion joints. Erection shall be done as per the layout finalized, with minimum sharp bends, with junction boxes at angular junctions and for straight runs at every 4.25m, in such manner so as to facilitate drawing of wires. All bending of conduits shall be done approved manner without changing the cross-section.</p> <p>In RCC work: Work shall be commenced after fixing of steel (re-enforcement) on centering material. Conduits shall be firmly fixed with steel in slab by binding wire. Fixing of conduits shall be possibly done with welding tags so that it will remain rigid during casting of slab, beam, and column even after use of vibrator. Deep junction boxes and other draw-in boxes shall be such that their open end and centering material will not have gap in between so as to avoid concrete entering inside even after fixing covers to steel re-enforcement; and be filled with dry sand. Open ends of conduits; to be concealed in walls, shall be provided with couplers / sockets at ends and be flush with bottom of beam, and located at the center of the beam. As far as possible bunching / grouping of conduits shall be avoided so that it will not affect strength of RCC work especially in beams. Suitable steel fish wire shall be drawn through the conduits for drawing of wires later on.</p> <p>1.2.4 Rigid steel Conduits in walls / flooring Specification No (WG-MA/CC) Scope: Concealing of Rigid steel Conduits: In walls / flooring: Providing specified Rigid Steel Conduits and erecting in wall, flooring by making chases / grooves / entries as per approved Method of Construction along with continuous earth wire and all required material including earth clips hardware such as 'U' nails, binding wire, fish wire; accessories such as MS junction / inspection boxes, check-nuts, flexible PVC pipe, drawing fish-wires and making all piping rigid, refinishing the surface with cement mortar, removing debris from site.</p> <p>Material: Rigid Steel conduit: Rigid steel HG conduit minimum 20mm dia. and 16 gauge, ERW grade duly processed for anti-rust treatment and painted with black enamel paint, accessories for rigid steel conduits such as check nuts, long bends, deep junction boxes for flooring, regular junction boxes for walls; of required ways all of the same make.</p> <p>Earth continuity wire: GI wire of 2.5 sq. mm, GI earth clips 22g, 10mm width, for fixing earth wire along the conduits.</p> <p>Junction boxes / Draw-in boxes: Junction box shall be 5 sided with removable top plate and of suitable size to accommodate No. of entries; fabricated from 16 SWG CRCA sheet steel with earth terminal duly treated with antirust treatment and painted with two coats of red oxide paint. There shall be knockout holes in required numbers and dia. for entry of conduit pipes and arrangement to fix cover plates on it.</p> <p>Hardware: 'U' nails, plumbing and general use nails of required sizes, washers, check-nuts, steel binding wire 20g, GI fish wire, etc.</p> <p>Other material for Surface finishing: Cement, sand, putty and water.</p>
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		<p>Method of Construction: Concealing of Rigid Steel Conduits: General: Work shall be done in co-ordination with civil work to suite final approved layout. Size of conduit shall be correct depending on number of wires to be drawn. (Table No.1/1, for Steel conduits) Separate pipe shall be used for each phase in 1-ph distribution and for power and light distribution and also for wiring for other utilities like data, telephone, TV cabling, etc; for which the distance between pipes shall not be less than 300 mm or anti electrostatic partition is to be provided. Adequate use of conduit accessories shall be made at required locations. Entries in wall shall be at level of corresponding conduit with colour coding as per Table No. 1/4. (For Visual identification) Flexible conduits shall be used at expansion joints. Erection shall be done as per the layout finalized, with minimum sharp bends, with junction boxes at angular junctions and for straight runs at every 4.25 metre, in such manner so as to facilitate drawing of wires. All bending of conduits shall be done approved manner without changing the cross-section.</p> <p>Concealing of Rigid Steel Conduits in walls/ flooring: Chases shall be made in walls of adequate width, with cutter and chiseling through it. Necessary finishing of the wall surface shall be done. Work in flooring shall not disturb RCC work, Conduits of adequate size shall be erected with use of appropriate accessories, and hardware like 'U' nails, etc. Draw-in / inspection boxes shall be fixed with check-nut, flush with surrounding surface and earthed.</p> <p>Testing: Earth continuity: Earth continuity shall be ensured at termination point of Earth wire, between the ends of metal conduit.</p> <p>Mode of Measurement: Measurement shall be carried out on the basis per running meter length of conduit.</p>
2	--	As per Schedule B Item No 2 Description
3	--	<p>1.3 Bunch of wires: Specification No (WG-MA/BW) Scope: Bunch of wires: Providing specified wires and drawing them through provided conduits / trunking and / or as directed; with coded ferrules, harnessing the bunch of wires with necessary material when used in panel boards, duly connecting / terminating with lugs, and testing for safety and beneficial use.</p> <p>Material: Wires: in conduits / trunking / panel boards Mains / Sub-mains / Circuit mains (comprising phase and neutral wires): PVC insulated wire of specified size, minimum FR grade insulation, copper conductor of electrolytic tough pitch (ETP) grade, having insulation of 1.1 kV grade, ISI marked, of required colour coding as per Table No 1/5.</p> <p>Wires: open PVC insulated and PVC sheathed wire of specified size, minimum FR grade insulation, copper conductor of electrolytic tough pitch (ETP) grade, having insulation of 1.1 kV grade, ISI marked, of required colour coding as per Table No 1/5.</p> <p>Earth Continuity Wire: PVC insulated wire minimum FR grade insulation copper conductor of electrolytic grade, having insulation of 1.1 kV grade, of green / green yellow colour, ISI marked, of specified size but not less than 2.5 Sqmm as per Table No 1/5.</p> <p>Lugs: Copper lugs of appropriate size & type Other material: Rubber grommet, bush, harnessing material, flexible conduit etc.</p> <p>Page 9 of 189</p> <p>Method of Construction: Bunch of wires: Drawing of wires: General Specified wires shall be drawn with adequate care. Correct colour coding as per Table No. 1/5, shall be used for phase, neutral and earth. Wires shall not have intermediate joint in between terminals of the accessories. Earth-wire and Return wire (neutral) may be looped only within circuit. For lighting load or single-phase distribution wires of two different phases shall not be drawn in single pipe. Wires shall be terminated in the terminals of accessories only, with appropriate type and size of lugs.</p> <p>Drawing of wires: through PVC conduits Bush shall be used at pipe opening to protect wire insulation from getting damaged due to sharp edges. Number of wires shall not exceed with respect to size of pipe as per Table No. 1/2.</p>

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		<p>Drawing of wires: through Rigid Steel conduits Bush shall be used at pipe opening to protect wire insulation from getting damaged due to burrs / sharp edges. Number of wires shall not exceed with respect to size of pipe as per Table No. 1/1.</p> <p>Open Wire bunch: Open wires shall be erected with due care so as to avoid chances of any mechanical injury. Harnessing shall be done with required material in an approved manner in panel boards or where ever necessary. For covering lead wires flexible conduit shall be used with gland as per necessity.</p> <p>Testing: Insulation resistance test: All wiring shall be tested with 500V Meggar between phases, phase – neutral and to Earth. IR value shall not be less than 1M-ohm.</p> <p>Earth continuity: Earth continuity shall be ensured between termination points of Earth wire.</p> <p>Polarity Test: Test shall be carried out for ensuring the correct polarity in switch and plug.</p> <p>Mode of Measurement: Measurement shall be carried out on the basis per running meter length of single wire or bunch as specified.</p>
4	--	As per Schedule B Item No 4 Description
5	--	As per Schedule B Item No 5 Description
6	--	As per Schedule B Item No 6 Description
7		As per Schedule B Item No 7 Description
8	--	<p>A) UTP Networking Cable General: All material shall conform to relevant standard as per ISO/IEC11801, CENELEC EN50173 & TIA/EIA 568-B2-1; CUL listed & ETL verified. Material and Work not qualifying to any provision mentioned above shall be to the satisfaction of Engineer in Charge.</p> <p>Scope: Specification No (WG-COC/NC) To lay the cables for Computers on surface of wall or ceiling concealed in slab, wall, under flooring etc, through existing metallic conduits, rigid PVC conduits, PVC trunking, with all necessary hardware, material, etc. as specified. The cable shall be used only for connections between Information Outlet & Patch/ Multimax Panel. (Exception: For making MDIX patch cord)</p> <p>Material: UTP cable: 4 pairs, 100 ohms, unshielded twisted pair (UTP), each pair separated by a PE former (Star shaped) solid 23AWG tinned copper conductor rated for temperature of 75°C, PVC insulated grey colour with following types as in the table 1.12/1</p> <p>Table 1.12/1 Sr. No. Type Class Tested frequency 1 Cat 6 E 350MHz 2 Cat 6+ E 500MHz</p> <p>1 The Category 6 cable and Category 6 channel components shall be manufactured by a single manufacturer. The manufacturer shall warrant the Category 6 channel cable, components, and applications for a period of 20 years. 2 The Delay Skew on the 100 meter channel shall not exceed 30 ns 3 The 20 year warranty shall be a transferable warranty and has component replacement policy in case of manufacturing defect 4 Category 6, 100mtr channel, 4-connection model should guarantee 400% margin over standard NEXT specification across swept frequency 5 Category 6, 100mtr channel, 6-connection model should guarantee +4dB margin over standard NEXT Specification across swept frequency (1~250MHz) 6 The high performance Category 6 UTP cable 23AWG shall be of the traditional round design with Mylar bisector tape Non-Plenum rated. 7 The cable shall support Voice, Analog Baseband Video/Audio, Fax, Modem, Switched-56, T-1, ISDN, RS-232, RS422, RS-485, 10BASE – T Ethernet, Token Ring, 100Mbps TP-PMD, 100BASE-T Ethernet, 155 Mbps ATM, AES/EBU Digital Audio, 270 Mbps Digital Video, 622 Mbps 64-CAP ATM and emerging high-bandwidth applications, including 1 Gbps Ethernet, gigabit ATM, IEEE 1394B S100 and S400, as well as all 77 channels (550 MHz) of analog broadband video.</p>

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		<p>8 The cable jacket shall comply with Article 800 NEC for use as a non-plenum cable. The 4 pair UTP cable shall be UL® and c (UL®) Listed Type CM.</p> <p>9 Performance shall be characterized to 550 MHz to support high-bandwidth video applications</p> <p>Non Plenum CAT6 UTP Cable</p> <p>1 Weight=25.3 lb (1000 ft)</p> <p>2 Jacket Thickness=.022 in</p> <p>3 Outside Diameter=0.232 in</p> <p>4 Conductor Diameter=.022 in</p> <p>5 Insulation Type=High density Polyethylene</p> <p>6 Jacket Material=PVC</p> <p>7 Maximum Pulling Tension=25 lbs</p> <p>8 Nom. Velocity of Propagation=0.69</p> <p>9 Max DC Resistance=9.83 Ohms/100m</p> <p>10 Mutual Capacitance @ 1 kHz = 4.95 nF/100m</p> <p>11 Operating Temperature= -20 to 60° C</p> <p>12 The high performance Category 6 UTP cable shall be of the traditional round design with Mylar bisector tape.</p> <p>13 The 4 pair UTP cable shall be UL Type CM (non-plenum)</p> <p>14 Performance shall be characterized to 550 MHz to support high-bandwidth video applications</p> <p>Method of Construction: The cable shall be laid in provided separate casing n capping/ PVC conduit/ trunking 400mm away from electrical cables wherever required without sharp bends. The cable shall be spliced at both the ends for punching/ crimping at keystone jacks/ UTP connectors.</p> <p>Mode of measurement: Executed quantity shall be measured on running metre basis.</p>
9	--	<p>UTP Patch cord</p> <p>Scope: Specification No (WG-COC/PC) Structured cabling, to make connections from switch to patch panel or information outlet to computer</p> <p>Material: UTP Patch Cord: Assembly (conforming to EIA/TIA 568B-2-1) of Cat 6 type 4 unshielded twisted pair 24-26AWG (0.51mm-0.40mm), each pair separated by a PE former (Star shaped) 100 ohms stranded wire PVC insulated cables with modular RJ-45 polycarbonate UL94V housing 15milliohms gold over nickel contacts (superior three piece connector) crimped on both ends with T568A & T568B wiring schemes with 8P8C connection. The cord shall be branded. The cords shall be used in structured cabling in accordance with following table 1.12/2.</p> <p>Table 1.12/2</p> <p>1 All patch cords shall exceed TIA/EIA and ISO/IEC Category 6/Classs E specifications.</p> <p>2 All patch cords shall be backward compatible with Category 5 and Category 5E systems.</p> <p>3 The patch cords shall incorporate an anti-s snag feature that provides maximum protection from snagging during moves and re-arrangements.</p> <p>4 Patch cords shall be UL listed, UL-C certified and AUSTEL approved.</p> <p>5 Patch cords shall support network line speeds in excess of 1 gigabit per second.</p> <p>Physical Specifications: Contact Material: Phosphor Bronze Contact Plating: Gold 50 micro-inch (1.27 microns) Nickel 100 micro –inch (2.54 microns) Insertion Life: 750 minimum Plug Material: Polycarbonate UL-rated 94 V-O Operating Temperature: 14°F to 140°F (-10°C to 60°C)</p> <p>Method of construction: The patch cord shall be erected for making connections from switch to patch panel or from computer to information outlet.</p> <p>Mode of measurement: Executed quantity shall be counted on number basis</p>
10	--	<p>UTP connector (RJ-45) (UTPC)</p> <p>General: All material shall conform to relevant standard as per TIA/EIA 568-B2-1.</p> <p>Scope: Specification No (WG-NAS/UTPC) To make MDIX (Cross) patch cord required for cascade connections of switches &</p>

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		<p>routers.</p> <p>Material: UTP connector: Assembly of Gold over nickel contacts with 1.5A current carrying capacity, 30V with 15milli ohms contact resistance, 8P8C connection easy to crimp with crimping tool in polycarbonate UL94V housing.</p> <p>Method of construction: The UTP cable shall be spliced, untwisted not more than 12mm, inserted into the connector with sequence as shown in the diagram _____ as per EIA/TIA 568 B.2-1 & crimped firmly with crimping tool.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>B) Information Outlet (Ethernet) (IO) General: All material shall conform to relevant standard as per TIA/EIA 568-B2-1.</p> <p>Scope: Specification No (WG-NAS/IO) For connecting computers to wired LAN or external wireless Ethernet interface in Wireless LAN.</p> <p>Material: Information Outlet Flush/ Surface type: Spring shuttered front access, high impact plastic body FR grade with high performance unshielded RJ-45 keystone jack (conforming to EIA/TIA 568-B.2-1 Cat 6), 15 milliohms contact resistance, gold over nickel spring contact, 1.5A current carrying capacity, with T568A/T568B wiring option, insulation displacement connector for cable crimping to accept 22-26AWG solid wire for connections up to Gigabit Ethernet.</p> <ol style="list-style-type: none"> 1. All Category 6 outlets shall meet or exceed Category 6 transmission requirements for connecting hardware, as specified in TIA/EIA 568-B.2-1 Commercial Building Telecommunications Cabling Standard and ISO/IEC 11801:2002 Second Edition. 2. The Category 6 outlets shall be backward compatible with Category 5E, 5 and 3 cords and cables. 3. The Category 6 outlets shall be of a universal design supporting T568 A & B wiring. 4. The Category 6 outlets shall be capable of being in a modular patching situation or as a modular telecommunication outlet (TO) supporting current 10BASE-T, Token Ring, 100 Mbps TP-PMD, 155 Mbps ATM, 622 Mbps ATM using parallel transmission schemes and evolving high-speed, high-bandwidth applications, including Ethernet, 1000BASE-T and 1.2 Gbps ATM. 5. The Category 6 outlets shall be capable of being installed at either a 45° or a 90° angle in any M-series modular faceplate, frame, or surface-mounted box avoiding the need for special faceplates. 6. The Category 6 outlets shall have improved pair splitters and wider channel for enhanced conductor placement. The outlet shall also have a low-profile wire cap, which protects against contamination and secures the connection. Multicolored identification labels shall be available to assure accurate installation. <p>Hardware: Sheet Metal (SM) screws of required sizes, plugs, wooden gitties, etc.</p> <p>Method of construction: The Information outlet shall be fixed on the wall with sheet metal (SM) screws, rawl plugs/wooden gitties and making due connections as per EIA/TIA 568 B.2-1 by splicing the UTP cable, untwisted up to 12mm & punching the 4 pairs in the keystone jack with the help of punching tool. Not a single wire shall be left without connections.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>C) Keystone jack (RJ-45) (KJ) Scope: Specification No (WG-NAS/KJ) Structured cabling, to provide connections to switch/ server from desktop computers/ Wireless devices in the patch panel.</p> <p>Material: Keystone jack: High impact plastic body FR grade with high performance unshielded RJ-45 keystone jack (conforming to EIA/TIA 568-B.2-1 Cat 6), 20milli ohms contact resistance, gold over nickel spring contact, 1.5A current carrying capacity, with T568A/T568B wiring option, insulation displacement connector for cable crimping to accept 22- 26AWG solid wire for connections up to Gigabit Ethernet</p> <p>Method of construction: The keystone jack shall be fixed with the help of its self-locking arrangement in provided patch panel before making due connection as per EIA/TIA 568 B.2-1 by splicing UTP cable, untwisted up to 12mm & punching the 4 pairs in the keystone jack with the help of punching tool.</p>
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		<p>Not a single wire shall be left without connections. Mode of Measurement: Executed quantity shall be counted on number basis. D) Patch Panel (PP) Scope: Specification No (WG-NAS/PP) Structured cabling for the installation of keystone jacks. Material: Patch Panel: Three piece structure including front panel, cable management plate with pre-fitted Bclip to help in routing cables & metal case of 1.6mm thick Mild Steel powder coated panel of size 442.6mm X 44.5mm with the provision for 1 to 24 high density keystone jacks 1. 24 and 48 port patch panels with 110 IDC connector terminations on rear 2. The patch shall have electrical performance guaranteed to meet or exceed TIA/EIA 568-B.2-1 Category 6 and ISO/IEC Category 6/Class E specifications. 3. The panel shall have vertical and horizontal cord organizers available as to improve patch cord management. Page 44 of 189 4. The panel shall be available in 24-port and 48-port configurations with universal A/B labeling and 110 connector terminations on rear of panel allowing for quick and easy installation of 22 to 24 AWG cable. 5. The patch panel shall have a black powder finish over high-strength steel. 6. The panel shall be equipped with a removable rear mounted cable management bar and front and rear labels. 7. The panel shall be UL listed, UL-C certified and ACA approved. 8. The panel shall support network line speeds in excess of 1 gigabit per second and be backward compatible with Category 5e, 5 and 3 cords and cables. 9. The Category 6 modular jack panels shall meet or exceed the Category 6/Class E standards requirements in ISO/IEC 11801, CENLEC EN 50173 and TIA/EIA and shall be UL Listed. 10. The panels shall be either wall or 19-inch rack mountable. 11. The panels shall meet the following specifications: Performance Specifications: High Performance Premium Performanc e Category 6 Patch Panel Solution Solution Category 6 Channel (4 Connectors) Typical Worst Guaranteed Guaranteed Pair Margin* Margin** Margin** Insertion Loss 64.3% 5.0% 7.5% NEXT 6.6 dB 6.0 dB 7.0 dB PSNEXT 7.3 dB 7.5 dB 8.5 dB ELFEXT 6.4 dB 6.0 dB 8.0 dB PSELFEXT 6.1 dB 8.0 dB 10.0 dB Return Loss 6.6 dB 4.0 dB 4.0 dB Frequency Range 1-250 MHz 1-250 MHz 1-250 MHz Operational Specifications: Operating Temperature Range: 14°F to 140°F (-10°C to 60°C) Storage Temperature Range: -40°F to 158°F (-40°C to 70°C) Humidity: 95% (non-condensing) Nominal Solid Conductor Diameter: 0.025 to 0.020 in (0.64 to 0.51 mm) (22 to 24 AWG) Nominal Stranded Conductor Diameter: 0.025 to 0.020 in (0.64 to 0.51 mm) (22 to 24 AWG) Insulation Size: 0.042 in (1.08 mm) (22 to 24 AWG) Maximum DOD Insulation Types: All plastic insulates (including PVC, irradiated PVC, Polyethylene, Polypropylene, PTF Polyurethane, Nylon, and FEP) Insertion Life: 750 minimum insertions of an FCC 8-Position Telecommunications Plug Front Panel: Black powder painted steel. Plastic: High-impact, flame retardant, UL-rated 94V-0</p>
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		<p>thermoplastic</p> <p>Hardware: Chromium plated brass nuts & bolts with special type of U shaped square washers of required sizes. Page 45 of 189</p> <p>Method of construction The Patch Panel shall be firmly secured in U Rack (Networking Cabinet) with 4 nos. of chromium plated brass nuts & bolts.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>E) Lightguide Interconnect Unit (LIU)</p> <p>General: All material shall conform to relevant standard as per IEEE, EIA/TIA, CENELEC</p> <p>Scope: Specification No (WG-NAS/LIU) To terminate the fibre backbone cables & the equipment cables.</p> <p>Material: Lightguide Interconnect Unit: Wall mount type Lightguide Interconnect Unit with dimensions shown in the table, an interfacing unit for fibre cables coming in from field & those originating from the equipments. consisting of fibre spools to provide minimum bending radius & splice trays as splice cover for pigtail splicing, two compartment design with adaptor panel in the centre, compartmentalizing the box, complete aluminium housing, fully powder coated, two doors enclosure with lock & key, rubber grommets at the cable entry points for tight sealing; Splice trays of 140 x125 x 10mm complete aluminium body fully powder coated with provision for fibre splices fully cushioned splice holder containing grooves for fixing splice protective sleeves; FR grade high impact resistance plastic two halves design stackable sufficient room for excess cable.</p> <p>Sr. No. Ports Dimensions Fibre splices 1 12 300 x 300 x 80mm 6 2 24 370 x 350 x 80mm 12</p> <p>Hardware: Sheet Metal (SM) screws of required sizes, plugs, wooden gitties, etc.</p> <p>Method of Construction: Supplying & erecting Lightguide Interconnect Unit (LIU) on wall with cable termination complete with sheet metal screws of required size, plugs/ wooden gitties.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>Fibre Accessories</p> <p>F) ST "D" type Multimode Adaptor (MMA)</p> <p>General: All material shall conform to relevant standard as per IEEE, EIA/TIA 568-B.3</p> <p>Scope: Specification No (WG-NAS/MMA) To couple two connectors together i.e. to provide optical connectivity between fibre cable & fibre switch/ fibre module. Page 46 of 189</p> <p>Material: ST "D" type multimode adaptor consists of Die cast zinc alloy housing Nickel plated, thread type mounting, washer, nut, 2 nos. of rubber plugs, high precision mechanical design Zirconium/ Phosphor Bronze sleeve having insertion loss < 0.3dB max, return loss < -40dB.</p> <p>Method of Construction: Supplying & fixing ST " D" type with threads in provided Lightguide Interconnect Unit on adaptor panel with nut & washer. The adaptor which is not in use shall be plugged with rubber plugs on both the sides to avoid dust accumulation in the adaptor.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>G) ST "D" type Multimode Connector for LIU (MMA-LIU1)</p> <p>General All material shall conform to relevant standard as per IEEE, EIA/TIA 568-B.3</p> <p>Scope: Specification No (WG-NAS/MMA-LIU1) To terminate the optical fibre cables in Lightguide Interconnect Unit (LIU)</p> <p>Material: 1. ST "D" type Multimode connector consists of bayonet coupling, 2.5mm Zirconium Ferrule, wide range of Ferrule selection, pre-radiused ferrule to provide fast physical contact polishing, insertion loss < 0.5dB. 2. Distilled water (as lubricant & flushing agent between each polishing process). 3. Epoxy or Anaerobic adhesive (to bond the fibre inside the ferrule).</p> <p>Tools to be used: • Carbide cleaving tool with 30 deg tip (to cut off the fibre to the desired height above</p>
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		<p>the ferrule)</p> <ul style="list-style-type: none"> • Portable Microscope (200X minimum) • Polishing kit (includes a polishing puck, pads & an assortment of diamond, aluminium oxide & silica films) <p>Method of Construction: The fibre shall be stripped & cleaved. Epoxy and polish connectors field-installed to terminate backbone and distribution cables. Epoxy and polish fibre termination include the following steps: injecting the connector ferrule with epoxy, curing, scribing the protruding fibre(s) from the ferrule, and polishing the ferrule end-face. The correct amount of epoxy must be injected into the ferrule and cured for the specified time and temperature before the ferrule end-face is scribed and polished. Air bubbles shall be avoided in the epoxy to avoid micro-bending and increased loss. The cured epoxy securely bonds the fibre to the ferrule over the operating temperature minimizing relative fibre movement. The connectors with fibre cable shall be tested for loss test with Optical Time Domain Reflectometer (OTDR) & recording the results.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>H) No Epoxy No polish ST "D" type Multimode Connector (MMA-LIU2)</p> <p>Scope: Specification No (WG-NAS/MMA-LIU2) To terminate the optical fibre cables in Lightguide Interconnect Unit (LIU) Page 47 of 189</p> <p>Material: <i>ST "D" type Multimode connector</i> with Factory pre-polished fibre stub end face consists of bayonet coupling, 2.5mm Zirconium Ferrule, insertion loss < 0.5dB</p> <p>Tools to be used: Carbide cleaving tool with 30 deg tip (to cut off the fibre to the desired height above the ferrule)</p> <p>Method of Construction: The no Epoxy no polish connectors field-installed to terminate backbone and distribution cables. The fibre shall be striped, cleaved, inserted into the connector & mechanically secured. The connectors with fibre cable shall be tested for loss test with Optical Time Domain Reflectometer (OTDR) & recording the results.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>I) Power over Ethernet Adaptor (PoEA)</p> <p>General: All material shall conform to relevant standard as per IEEE, TIA/EIA.</p> <p>Scope: Specification No (WG-NAS/PoEA) To provide DC power supply to Ethernet devices, which do not have external/ built-in power supply.</p> <p>Material: <i>Power over Ethernet Adaptor</i> with output voltage of 5V DC or 12V DC (selectable) with input of 48V DC consists of Power over Ethernet base unit, Power over terminal unit, AC to DC power adaptor, DC power cable & Ethernet cable.</p> <p>Method of Construction: Supplying & connecting Power over Ethernet Adaptor with all its connections of base unit, terminal unit & AC to DC power adaptor for supplying power to Access Point, Router or Wireless Ethernet Transceiver complete.</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>J) Tri-Mode Dual band Wireless PCI LAN Card (LANC1)</p> <p>General: All material shall conform to relevant standard as per IEEE 802.11 xs.</p> <p>Scope: Specification No (WG-NAS/LANC1) Making provision of Wireless LAN connectivity for desktop PCs in difficult places where signal strength is low.</p> <p>Material: <i>Wireless PCI 32 bit interface LAN card</i> covering 100 metres (indoor) transmission speed of 108Mbps to connect 802.11b, 802.11g & 802.11a networks operating in two non-interfering bands 2.4 GHz & 5GHz with 4dBi to 5dBi gain Omni directional dipole antenna & driver.</p> <p>Method of Construction: Supplying & fixing Tri-mode dual band wireless PCI LAN card in desktop computer with installation of driver & configuration for TCP/IP address complete. Page 48 of 189</p> <p>Mode of Measurement: Executed quantity shall be counted on number basis.</p> <p>K) Wireless PCI LAN Card (LANC2)</p> <p>General: All material shall conform to relevant standard as per IEEE 802.11g.</p>
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		<p>Scope: Specification No (WG-NAS/LANC2) Making provision of Wireless LAN connectivity for desktop PCs. Material: <i>Wireless PCI 32 bit interface LAN card</i> to connect 802.11g networks operating in 2.4 GHz band covering 100 metres range (indoor), transmission speed of 54Mbps with external dipole antenna, detachable reverse SMA connector & driver. Method of Construction: Supplying & fixing Wireless PCI LAN card in desktop computer with installation of driver & configuration for TCP/IP address complete. Mode of Measurement: Executed quantity shall be counted on number basis. L) Manageable Wireless LAN Access Point (LAP1) General: All material shall conform to relevant standard as per IEEE 802.11b/g & IEEE802.3/u Scope: Specification No (WG-NAS/LAP1) To provide wireless access to the WLAN network. Material: <i>Wireless Access Point</i> consists of 108Mbps turbo mode handling heavy data payloads, 2dBi gain detachable dipole antenna with reverse SMA connector, external AC to DC 5V adaptor. Method of Construction: Supplying & connecting Wireless Access Point with AC to DC adaptor to Ethernet switch with due configuration for TCP/IP address complete. Mode of Measurement: Executed quantity shall be counted on number basis. M) High Performance Manageable Wireless LAN Access Point with PoE (Power over Ethernet) (LAP2) General: All material shall conform to relevant standard as per IEEE 802.11b/g, IEEE 802.3/u & IEEE 802.3af Scope: Specification No (WG-NAS/LAP2) To provide high performance wireless access to the WLAN network. Page 49 of 189 Material: <i>Wireless Access Point</i> consists of 108Mbps turbo mode handling heavy data payloads, dual 5dBi gain detachable dipole antenna with reverse SMA connectors, Power over Ethernet 10/100 Base-Tx port. <i>Note: To connect the Access Point, availability of PoE Ethernet Switch or PoE adaptor is essential.</i> Method of Construction: Supplying & connecting Wireless Access Point to PoE Ethernet switch or Ethernet Switch through PoE Adaptor with due configuration for TCP/IP address complete. Mode of Measurement: Executed quantity shall be counted on number basis. N) Dual Band High Performance Manageable Wireless LAN Access Point with PoE (Power over Ethernet) (LAN3) Scope: Specification No (WG-NAS/LAP3) To provide high performance wireless access to the WLAN network. Material: <i>Wireless Access Point</i> consists of 108Mbps turbo mode handling heavy data payloads operating in 2.4 GHz & 5 GHz bands, dual 5dBi gain detachable dipole antenna with reverse SMA connectors, Power over Ethernet 10/100 Base- Tx port. <i>Note: To connect the Access Point, availability of PoE Ethernet Switch or PoE adaptor is essential.</i> Method of Construction: Supplying & connecting Wireless Access Point to PoE Ethernet switch or Ethernet Switch through PoE Adaptor with due configuration for TCP/IP address complete. Mode of Measurement: Executed quantity shall be counted on number basis.</p>
11		As per Schedule B Item No 11 Description
12		As per Schedule B Item No 12 Description
13	--	As per Schedule B Item No 13 Description
14	--	As per Schedule B Item No 14 Description

Contractor

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15		As per Schedule B Item No 15 Description
16	--	As per Schedule B Item No 16 Description
17	--	As per Schedule B Item No 17 Description
18	--	As per Schedule B Item No 18 Description
19	--	As per Schedule B Item No 19 Description
20		As per Schedule B Item No 20 Description
21		As per Schedule B Item No 21 Description

Signature of Contractor No. of Corrections

Executive Engineer

List of Approved Makes

Name of Work :- Providing, fixing, installation, commissioning of latest Advanced specialized Wi-Fi /Wired Transmission control based security Monitoring & supervision system with smart intelligent interface connectivity Along with all required software, hardware, electronics works & alternative Power backup etc. complete at Hydro Dynamic Department, MERI Rest house & CDO office Bldg., MERI, Nashik.

Sr Nos	Item Particulars	Approved Makes
1	CCTV Cameras	With MAF From OEM(Original Equipment Manufactures) of Matrix,Uniview,Wbox Companies Along With CE,BIS,and FCC Certifications.
2	NVR	With MAF From OEM(Original Equipment Manufactures) of Matrix,Uniview,Wbox Companies Along With CE,BIS,and FCC Certifications.
3	HDD	Seagate or equivalent make approved by Engineer in Charge
4	46" inch Full HD LCD Display	Samsung, Sony,LG,Panasonic,Haier Or equivalent.

NOTE :- Before Delivery of the Material at site, the contractor shall approve the Makes from the Engineer In Charge

SCHEDULE – ‘A’

Schedule showing (approximately) the materials to be supplied from the stores for the work contracted to be executed and the rates at which they are to be changed for the work of

Sr. No	Particulars	Quantity	Unit	Rate at which the material will be charged to contractor		Place of delivery
				In figures	in word	
1	2	3		4	5	6
--- N I L ---						

Executive Engineer,
Civil Works Maintenance Division
MERI, Nashik.

SCHEDULE B

Name Of Work Providing, fixing, installation, commissioning of latest advanced specialised Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete & two years free of cost maintainance of the same at Hydro Dynamic Department, Meri Rest house & CDO office Bld.,Meri, Nashik

Item No	Quantity	Items of work	Estimated Rates In Rs.		Unit	Amount (Rs)
			In Figures	In words		
1	23.00	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining Latest advanced Digital Transmission Control Protocol based Infrared, stationary Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of branded companies alongwith CE, BIS & FCC certification for monitoring & supervision of entrance & exit gates / roads & essential locations for security of different locations etc. complete.	33999	Rupees ThirtyThree Thousand Nine Hundred NinetyNine Only	no.	781977.00

Signature of Contractor No. of Corrections

Executive Engineer

2	1.00	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based Remotely controllable high speed mini dome outdoor Pantiltzoom Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of Specified branded companies along with CE, BIS & FCC certification along & Weatherproof & Vandal proof housing for monitoring & supervision of complete site for overall security of site etc.complete.	89999	Rupees EightyNine Thousand Nine Hundred NinetyNine Only	no.	89999.00
3	1.00	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 16Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	79999	Rupees SeventyNine Thousand Nine Hundred NinetyNine Only	no.	79999.00

Contractor

Correction

Executive Engineer

4	2.00	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 8Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	54999	Rupees FiftyFour Thousand Nine Hundred NinetyNine Only	no.	109998.00
5	8.00	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance Recording & Storage Unit storage capacity of minimum 1 TB (Tetra Byte) etc. Complete.	4999	Rupees Four Thousand Nine Hundred NinetyNine Only	TB	39992.00
6	48.00	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance lan to media convertor Connection device with metal cover etc. Complete	5699	Rupees Five Thousand Six Hundred NinetyNine Only	no.	273552.00
7	14.00	Providing, fixing & installation of high quality, latest & advance 12 VDC, 10 Amp Industrial Grade Switch Mode Power supply with Battery Charger; Input voltage up to 300 VAC (Battery Charging 6 Amp & Main O/P 4 Amp)	14999	Rupees Fourteen Thousand Nine Hundred NinetyNine Only	no.	209986.00

Contractor

Correction

Executive Engineer

8	22.00	Providing, fixing & installation of high quality, latest & advance Industrial Grade, durable 5 V Dc to Dc Switch Mode power supply etc. Complete.	2199	Rupees Two Thousand One Hundred NinetyNine Only	no.	48378.00
9	42.00	Splicing (making joints of optical fiber cable) of FR grade pvc armored multimode armored multimode optical fiber cable with the help Splicing machine etc. Complete.	5300	Rupees Five Thousand Three Hundred Only	no.	222600.00
10	11.00	Supplying and erecting 12V/100Ah SMF battery with battery terminal wire, duly charged with 24 months warranty complete..	10885	Rupees Ten Thousand Eight Hundred EightyFive Only	no.	119735.00
11	7.00	Supplying and erecting 12 V/150Ah tubular battery with battery terminal wire, duly charged complete with 36 months warranty complete	18877	Rupees Eighteen Thousand Eight Hundred SeventySeven Only	no.	132139.00
12	3.00	Supplying, installing, testing and commissioning of single phase, 230V, 50 Hz, 800 to 900VA digital pure sine wave inverter. based on Insulated Gate Bipolar Transistor (IGBT) technology complete as per specification no. AP-INV	8554	Rupees Eight Thousand Five Hundred FiftyFour Only	no.	25662.00

Contractor

Correction

Executive Engineer

13	3.00	Supply, Installation, Testing, Intgeration & Commissioning of 46" LCD monitor for Surveillance of IP based digital Remote Surveillance System	84062	Rupees EightyFour Thousand SixtyTwo Only	no.	252186.00
14	11.00	Supplying and fixing 15U wall mount rack (Dimension-DxWxH – 500x600x767 mm) as per specification No. WG-NAS/RAK	12329	Rupees Twelve Thousand Three Hundred TwentyNine Only	no.	135619.00
15	3.00	Supplying and fixing 24 U floor mount rack (Dimension-DxWxH – 800x600x1265 mm) as per specification No. WG-NAS/RAK	49619	Rupees FortyNine Thousand Six Hundred Nineteen Only	no.	148857.00
16	474.00	Supplying and installing cat-6 LSZH cable suitable for networking as per specification no. WG-COC/NC	66	Rupees SixtySix Only	mtr	31284.00
17	61.00	Supplying and fixing 1 m UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC	233	Rupees Two Hundred ThirtyThree Only	no.	14213.00

Contractor

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Executive Engineer

18	6.00	Supplying, fixing, and configuring 8-ports managed gigabit, Layer-2 switch, 10/100/1000 base-T, POE smart switch plus 2 SFP erected in provided rack complete.	25482	Rupees TwentyFive Thousand Four Hundred EightyTwo Only	no.	152892.00
19	17.00	Supplying, fixing, and configuring 10G Base -SR (SFP+) simplex MM transceiver erected in provided rack complete.	29027	Rupees TwentyNine Thousand TwentySeven Only	no.	493459.00
20	19.00	Supplying and plugging 3 m fibre patch cord LC-LC MM (50) OM3 LSZH duplex complete as per specification no. WG-COC/FPC	3203	Rupees Three Thousand Two Hundred Three Only	no.	60857.00
21	14.00	Supplying and fixing IP66 enclosure for fibre splicing complete	9175	Rupees Nine Thousand One Hundred SeventyFive Only	no.	128450.00

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22	960.00	Supplying and erecting LSZH armoured multimode optical fibre cable with 6 fibres, core dia 50/125 µm (OM3), suitable upto 10 GBPS, ethernet distance at 850 nm of wavelength, on wall/ceiling or laid in provided pipe/trench as per specification no. WG-COC/OFC LSZH	200	Rupees Two Hundred Only	Mtr	192000.00
23	3.00	Supplying and erecting 5m HDMI cord low voltage grade minimum 4k compliant to be laid in provided conduits with male/female 19 pin HDMI connectors complete.	2259	Rupees Two Thousand Two Hundred FiftyNine Only	no.	6777.00
24	670.00	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	40	Rupees Fourty Only	mtr	26800.00
25	469.00	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	96	Rupees NinetySix Only	mtr	45024.00

Contractor

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26	96.56	Supplying and erecting iron work, sheet metal work consisting of CRCA sheets, various sections of iron, plates, chequered plates, rods, bars, MS pipes, etc. for panel board or any other purpose with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority.	186	Rupees One Hundred EightySix Only	Kg	17960.16
27	9.66	Supplying and erecting GI sheet 1.6 mm (16 SWG) having zinc coating of 350 microns with galvanization process compliance to IS 2629:1985 to be used for fabrication of boxes panel boards etc. including cutting, bending, drilling, welding, riveting etc. and painting with one coat of red lead paint and 2 coats of enamel paint.	2560	Rupees Two Thousand Five Hundred Sixty Only	Sq. mtr.	24716.80
28	1.00	Excavating soft murum / soft soil road by chiselling for preparing pit for poles stay or earth plates or for laying cables, pipes & clearing the site by removing debris & making the site good complete.	232	Rupees Two Hundred ThirtyTwo Only	Cu. Mtr.	232.00

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29	1.00	Making cement concrete foundation in 1:2:4 cement concrete with foundation bolts and nuts complete. (cost of wooden box is included)	5011	Rupees Five Thousand Eleven Only	Cu. Mtr.	5011.00
30	204.00	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V 2 core 4 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	113	Rupees One Hundred Thirteen Only	mtr	23052.00
31	480.00	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	161	Rupees One Hundred SixtyOne Only	Mtr	77280.00
Total Rs.						3970686.96
						3970687.00

Rupees ThirtyNine Lakh Seventy Thousand Six Hundred EightySeven Only

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SCHEDULE B								
Name of Work =								
Providing, fixing, installation, commissioning of latest advanced specialised Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete & two years free of cost maintainance of the same at Hydro Dynamic Department, Meri Rest house & CDO office Bld.,Meri, Nashik								
Item no.	Item	Qty	Qty	Qty	Total Qty	Rate in Rs.	Unit	Amount in Rs.
		Hydro Dynamic Dept., Nashik	Meri Rest house, Nashik	CDO Bld., Nashik				
1	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining Latest advanced Digital Transmission Control Protocol based Infrared, stationary Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of branded companies alongwith CE, BIS & FCC certification for monitoring & supervision of entrance & exit gates / roads & essential locations for security of different locations etc. complete.	9.00	7.00	7.00	23.00	33999.00	no.	781977.00

Contractor

Correction

Executive Engineer

2	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based Remotely controllable high speed mini dome outdoor Pantiltzoom Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of Specified branded companies along with CE, BIS & FCC certification along & Weatherproof & Vandal proof housing for monitoring & supervision of complete site for overall security of site etc.complete.	1.00	0.00	0.00	1.00	89999.00	no.	89999.00
3	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 16Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	1.00	0.00	0.00	1.00	79999.00	no.	79999.00
4	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 8Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	0.00	1.00	1.00	2.00	54999.00	no.	109998.00
5	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance Recording & Storage Unit storage capacity of minimum 1 TB (Tetra Byte) etc. Complete.	4.00	2.00	2.00	8.00	4999.00	TB	39992.00
6	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance lan to media convertor Connection device with metal cover etc. Complete	20.00	14.00	14.00	48.00	5699.00	no.	273552.00

Contractor

Correction

Executive Engineer

7	Providing, fixing & installation of high quality, latest & advance 12 VDC, 10 Amp Industrial Grade Switch Mode Power supply with Battery Charger; Input voltage up to 300 VAC (Battery Charging 6 Amp & Main O/P 4 Amp)	8.00	2.00	4.00	14.00	14999.00	no.	209986.00
8	Providing, fixing & installation of high quality, latest & advance Industrial Grade, durable 5 V Dc to Dc Switch Mode power supply etc. Complete.	14.00	2.00	6.00	22.00	2199.00	no.	48378.00
9	Splicing (making joints of optical fiber cable) of FR grade pvc armored multimode armored multimode optical fiber cable with the help Splicing machine etc. Complete.	26.00	4.00	12.00	42.00	5300.00	no.	222600.00
10	Supplying and erecting 12V/100Ah SMF battery with battery terminal wire, duly charged with 24 months warranty complete..	7.00	1.00	3.00	11.00	10885.00	no.	119735.00
11	Supplying and erecting 12 V/150Ah tubular battery with battery terminal wire, duly charged complete with 36 months warranty complete	3.00	2.00	2.00	7.00	18877.00	no.	132139.00
12	Supplying, installing, testing and commissioning of single phase, 230V, 50 Hz, 800 to 900VA digital pure sine wave inverter. based on Insulated Gate Bipolar Transistor (IGBT) technology complete as per specification no. AP-INV	1.00	1.00	1.00	3.00	8554.00	no.	25662.00
13	Supply, Installation, Testing, Intgeration & Commissioning of 46" LCD monitor for Surveillance of IP based digital Remote Surveillance System	1.00	1.00	1.00	3.00	84062.00	no.	252186.00
14	Supplying and fixing 15U wall mount rack (Dimension-DxWxH – 500x600x767 mm) as per specification No. WG-NAS/RAK	7.00	1.00	3.00	11.00	12329.00	no.	135619.00

Contractor

Correction

Executive Engineer

15	Supplying and fixing 24 U floor mount rack (Dimension-DxWxH – 800x600x1265 mm) as per specification No. WG-NAS/RAK	1.00	1.00	1.00	3.00	49619.00	no.	148857.00
16	Supplying and installing cat-6 LSZH cable suitable for networking as per specification no. WG-COC/NC	172.00	182.00	120.00	474.00	66.00	mtr	31284.00
17	Supplying and fixing 1 m UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC	25.00	17.00	19.00	61.00	233.00	no.	14213.00
18	Supplying, fixing, and configuring 8-ports managed gigabit, Layer-2 switch, 10/100/1000 base-T, POE smart switch plus 2 SFP erected in provided rack complete.	3.00	2.00	1.00	6.00	25482.00	no.	152892.00
19	Supplying, fixing, and configuring 10G Base -SR (SFP+) simplex MM transceiver erected in provided rack complete.	12.00	2.00	3.00	17.00	29027.00	no.	493459.00
20	Supplying and plugging 3 m fibre patch cord LC-LC MM (50) OM3 LSZH duplex complete as per specification no. WG-COC/FPC	12.00	2.00	5.00	19.00	3203.00	no.	60857.00
21	Supplying and fixing IP66 enclosure for fibre splicing complete	9.00	2.00	3.00	14.00	9175.00	no.	128450.00
22	Supplying and erecting LSZH armoured multimode optical fibre cable with 6 fibres, core dia 50/125 µm (OM3), suitable upto 10 GBPS, ethernet distance at 850 nm of wavelength, on wall/ceiling or laid in provided pipe/trench as per specification no. WG-COC/OFC LSZH	710.00	100.00	150.00	960.00	200.00	Mtr	192000.00
23	Supplying and erecting 5m HDMI cord low voltage grade minimum 4k compliant to be laid in provided conduits with male/female 19 pin HDMI connectors complete.	1.00	1.00	1.00	3.00	2259.00	no.	6777.00

24	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	271.00	225.00	174.00	670.00	40.00	mtr	26800.00
25	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	207.00	120.00	142.00	469.00	96.00	mtr	45024.00
26	Supplying and erecting iron work, sheet metal work consisting of CRCA sheets, various sections of iron, plates, chequered plates, rods, bars, MS pipes, etc. for panel board or any other purpose with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority.	96.56	0.00	0.00	96.56	186.00	Kg	17960.16
27	Supplying and erecting GI sheet 1.6 mm (16 SWG) having zinc coating of 350 microns with galvanization process compliance to IS 2629:1985 to be used for fabrication of boxes panel boards etc. including cutting, bending, drilling, welding, riveting etc. and painting with one coat of red lead paint and 2 coats of enamel paint.	9.66	0.00	0.00	9.66	2560.00	Sq. mtr.	24716.80
28	Excavating soft murum / soft soil road by chiselling for preparing pit for poles stay or earth plates or for laying cables, pipes & clearing the site by removing debris & making the site good complete.	1.00	0.00	0.00	1.00	232.00	Cu. Mtr.	232.00
29	Making cement concrete foundation in 1:2:4 cement concrete with foundation bolts and nuts complete. (cost of wooden box is included)	1.00	0.00	0.00	1.00	5011.00	Cu. Mtr.	5011.00

Contractor

Correction

Executive Engineer

30	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V 2 core 4 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	204.00	0.00	0.00	204.00	113.00	mtr	23052.00
31	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	310.00	80.00	90.00	480.00	161.00	Mtr	77280.00
						Total Amount		3970686.96
						Say Rs.		3970687.00

Contractor

Correction

Executive Engineer

Executive Engineer,
Civil Works Maintenance Division
MERI, Nashik.

- Note 1 All work shall be carried out with contractor's own material as per the specifications Vol.II
- Note 2 All the columns in the Schedule "B" Part II should be filled in ink and the total of the entries in the last columns should be struck by the contractor under his signature.
- Note 3 Rate quoted include clearance of the site (prior to commencement of work and it's close) in all respects and hold good for work under all conditions of site, moisture weather etc.
- Note 4 The tender % as quoted by the tenderer in the space provided for in the Memorandum of works shall be applicable only for the items, rates and quantities stipulated in Schedule "B" part I as put to tender by Department.
- Note 5 All the additional item(s) as many as foreseen by the tenderer with quantity (es), rate(s), amount and the detailed description shall be entered in to by the tenderer in the space provided below Schedule "B" Part II Anticipated additional items as foreseen by the tenderer. The tenderer are free to attach additional sheets. If required by him and sign the sheet, which will form part of the tender.

Signature of Contractor No. of Corrections

Executive Engineer

Schedule C

Name of Work =

Providing, fixing, installation, commissioning of latest advanced specialised Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete & two years free of cost maintainance of the same at Hydro Dynamic Department, Meri Rest house & CDO office Bld.,Meri, Nashik

Sr. No.	Description of Item	Specifications
1	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining Latest advanced Digital Transmission Control Protocol based Infrared, stationary Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of branded companies alongwith CE, BIS & FCC certification for monitoring & supervision of entrance & exit gates / roads & essential locations for security of different locations etc. complete.	High quality, latest & advance, Out door IP66 (Weatherproof), OnVIF BULLET CAMERA must be Original Equipment Manufacturer's (OEM) of specified branded makes alongwith CE, BIS & FCC certification & minimum specifications - 4.0 Megapixel, IR Bullet, IR Distance 30 to 50m, PoE, Onvif, 2.7~ 13.5 mm motorised Varifocal with P-Iris, 1/2.8" CMOS Sensor with EXMOR Technology for Exceptional low light performance, True WDR with smart variation of exposure time & rectification of over-exposed & under-exposed areas, Latest H.265 compression technique which saves up to 50% on bandwidth & storage, Adaptive & smart Streミング which reduces frame rate during no activity period & divides a single bitrates based on its importance, Greater Coverage, Intellignet Video analytics - Motion & Intrusion detection with Real time notification.
2	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based Remotely controllable high speed mini dome outdoor Pantiltzoom Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of Specified branded companies along with CE, BIS & FCC certification along & Weatherproof & Vandal proof housing for monitoring & supervision of complete site for overall security of site etc.complete.	High quality, latest & advance IP67 (Weatherproof), OnVIF Outdoor Pan Tilt Zoom (PTZ) cameras must be Original Equipment Manufacturer's (OEM) of specified branded makes alongwith CE, BIS & FCC certification & minimum specifications - 2.0 Megapixel, IR Distance upto 100 mtr, PoE, 25X Optical zoom, Pan / Tilt Range Pan: 360° endless; Tilt: - 15° ~ 90°(Auto Flip), True WDR with smart variation of exposure time & rectification of over-exposed & under-exposed areas, Latest H.265 compression technique which saves up to 50% on bandwidth & storage, Adaptive & smart Streミング which reduces frame rate during no activity period & divides a single bitrates based on its importance, Weatherproof & Vandal proof housing, people flow counting and alert feature with greater coverage, Intellignet Video analytics - Motion & Intrusion detection with Real time notification.

Signature of Contractor No. of Corrections

Executive Engineer

3	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 16Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	High quality, latest & advance 16 Chanel Network Video Recorder (NVR) must be Original Equipment Manufacturer's (OEM) & must have Manufacturer's Authorisation Form (MAF) of makes Matrix/Uniview/Wbox alongwith CE, BIS & FCC certification with minimum Specifications - Latest H.265 compression technique which saves up to 50% on bandwidth & storage, VIDEO Input 8 IP Channels ,Output HDMI (2.0) – 1 Port, 4K Decoding Technique for high resolution images with greater details, 12MP Recording Capability, Adaptive Recording(Automatically Reduces the Number of Frames Captured Per Second Where There is No Motion, Thereby Saving Storage Space up to 60%), Camera-Wise Recording Retention which enables flexibility of recording retention days based on priority of camera, Saving 30% of storage space & High-Throughput for higher up-link & down-link speed ,up to 512 Mbps Throughput.
4	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 8Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	High quality, latest & advance 8 Chanel Network Video Recorder (NVR) must be Original Equipment Manufacturer's (OEM) & must have Manufacturer's Authorisation Form (MAF) of makes Matrix/Uniview/Wbox alongwith CE, BIS & FCC certification with minimum Specifications - Latest H.265 compression technique which saves up to 50% on bandwidth & storage, VIDEO Input 8 IP Channels ,Output HDMI (2.0) – 1 Port, 4K Decoding Technique for high resolution images with greater details, 12MP Recording Capability, Adaptive Recording(Automatically Reduces the Number of Frames Captured Per Second Where There is No Motion, Thereby Saving Storage Space up to 60%), Camera-Wise Recording Retention which enables flexibility of recording retention days based on priority of camera, Saving 30% of storage space & High-Throughput for higher up-link & down-link speed ,up to 512 Mbps Throughput.
5	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance Recording & Storage Unit storage capacity of minimum 1 TB (Tetra Byte) etc. Complete.	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance Recording & Storage Unit storage capacity of minimum 1 TB (Tetra Byte) - from factor 3.5 inch, support for advance format (AF) - Yes, Supporting recording technology - CMR, Camerras supported upto 64, drive bays supported - 8, interface transfer rate (Max) buffer to host - 6 GB/S, cache (MB) - 64, avarage power requirement 3 vatt read/write - 3.8, Idie 3.2, stand by & sleep - 0.6

Contractor

Correction

Executive Engineer

6	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance lan to media convertor Connection device with metal cover etc. Complete	High quality, latest & advance Lan to media convertor Connection device with metal cover. Category 6 keystone jacks are RJ45 8P 8C 50u jacks suitable for 22-26 AWG stranded and solid wire, compatible with both 110 & Krone punch down tool. They are capable of re-termination. They are available in universal labels color coded for T568A and T568B wiring schemes and fit in high density keystone patch panel. It complies with ANSI/TIA/EIA-568-C.2 standard and ROHs Housing type : PC, UL94V-2, Contact Bracket : PC, UL 94V-2. Transparent color, Material : Phosphor Bronze with Nickel plated, 50 micro-inch Gold plated on Plug contact area. IDC CAP: PC, UL94V-2, IDC Life: 200 times Min, Insertion Cycles: 750 times.
7	Providing, fixing & installation of high quality, latest & advance 12 VDC, 10 Amp Industrial Grade Switch Mode Power supply with Battery Charger; Input voltage up to 300 VAC (Battery Charging 6 Amp & Main O/P 4 Amp)	Providing, fixing & installation of high quality, latest & advance 12 VDC, 10 Amp Industrial Grade Switch Mode Power supply with Battery Charger; Input voltage up to 300 VAC (Battery Charging 6 Amp & Main O/P 4 Amp)
8	Providing, fixing & installation of high quality, latest & advance Industrial Grade, durable 5 V Dc to Dc Switch Mode power supply etc. Complete.	High quality, latest & advance, Industrial Grade, durable 5 V Dc to Dc Switch Mode power supply suitable . Input voltage 50 Vdc +/- 10%, 85% efficiency Overload & Short circuit (Through CC/CV Mode) DC Fuse over voltage protection / over current protection, Operating Temperature 0 to 55 deg C
9	Splicing (making joints of optical fiber cable) of FR grade pvc armored multimode armored multimode optical fiber cable with the help Splicing machine etc. Complete.	Splicing (making joints of optical fiber cable) of FR grade pvc armored multimode armored multimode optical fiber cable with the help of High quality, latest & advance, Industrial Grade Splicing machine.
10	Supplying and erecting 12V/100Ah SMF battery with battery terminal wire, duly charged with 24 months warranty complete..	Supplying and erecting 12V/100Ah SMF battery with battery terminal wire, duly charged with 24 months warranty complete..
11	Supplying and erecting 12 V/150Ah tubular battery with battery terminal wire, duly charged complete with 36 months warranty complete	Supplying and erecting 12 V/150Ah tubular battery with battery terminal wire, duly charged complete with 36 months warranty complete
12	Supplying, installing, testing and commissioning of single phase, 230V, 50 Hz, 800 to 900VA digital pure sine wave inverter. based on Insulated Gate Bipolar Transistor (IGBT) technology complete as per specification no. AP-INV	Supplying, installing, testing and commissioning of single phase, 230V, 50 Hz, 800 to 900VA digital pure sine wave inverter. based on Insulated Gate Bipolar Transistor (IGBT) technology complete as per specification no. AP-INV

Contractor

Correction

Executive Engineer

13	Supply, Installation, Testing, Intgeration & Commissioning of 46" LCD monitor for Surveillance of IP based digital Remote Surveillance System	Supply, Installation, Testing, Intgeration & Commissioning of 46" LCD monitor for Surveillance of IP based digital Remote Surveillance System
14	Supplying and fixing 15U wall mount rack (Dimension-DxWxH – 500x600x767 mm) as per specification No. WG-NAS/RAK	Supplying and fixing 15U wall mount rack (Dimension-DxWxH – 500x600x767 mm) as per specification No. WG-NAS/RAK
15	Supplying and fixing 24 U floor mount rack (Dimension-DxWxH – 800x600x1265 mm) as per specification No. WG-NAS/RAK	Supplying and fixing 24 U floor mount rack (Dimension-DxWxH – 800x600x1265 mm) as per specification No. WG-NAS/RAK
16	Supplying and installing cat-6 LSZH cable suitable for networking as per specification no. WG-COC/NC	Supplying and installing cat-6 LSZH cable suitable for networking as per specification no. WG-COC/NC
17	Supplying and fixing 1 m UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC	Supplying and fixing 1 m UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC
18	Supplying, fixing, and configuring 8-ports managed gigabit, Layer-2 switch, 10/100/1000 base-T, POE smart switch plus 2 SFP erected in provided rack complete.	Supplying, fixing, and configuring 8-ports managed gigabit, Layer-2 switch, 10/100/1000 base-T, POE smart switch plus 2 SFP erected in provided rack complete.
19	Supplying, fixing, and configuring 10G Base -SR (SFP+) simplex MM transceiver erected in provided rack complete.	Supplying, fixing, and configuring 10G Base -SR (SFP+) simplex MM transceiver erected in provided rack complete.
20	Supplying and plugging 3 m fibre patch cord LC-LC MM (50) OM3 LSZH duplex complete as per specification no. WG-COC/FPC	Supplying and plugging 3 m fibre patch cord LC-LC MM (50) OM3 LSZH duplex complete as per specification no. WG-COC/FPC
21	Supplying and fixing IP66 enclosure for fibre splicing complete	Supplying and fixing IP66 enclosure for fibre splicing complete

Contractor

Correction

Executive Engineer

22	Supplying and erecting LSZH armoured multimode optical fibre cable with 6 fibres, core dia 50/125 µm (OM3), suitable upto 10 GBPS, ethernet distance at 850 nm of wavelength, on wall/ceiling or laid in provided pipe/trench as per specification no. WG-COC/OFC LSZH	Supplying and erecting LSZH armoured multimode optical fibre cable with 6 fibres, core dia 50/125 µm (OM3), suitable upto 10 GBPS, ethernet distance at 850 nm of wavelength, on wall/ceiling or laid in provided pipe/trench as per specification no. WG-COC/OFC LSZH
23	Supplying and erecting 5m HDMI cord low voltage grade minimum 4k compliant to be laid in provided conduits with male/female 19 pin HDMI connectors complete.	Supplying and erecting 5m HDMI cord low voltage grade minimum 4k compliant to be laid in provided conduits with male/female 19 pin HDMI connectors complete.
24	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	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
25	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With PVC accessories on wall /ceiling as per specification No: WG-MA/CON.
26	Supplying and erecting iron work, sheet metal work consisting of CRCA sheets, various sections of iron, plates, chequered plates, rods, bars, MS pipes, etc. for panel board or any other purpose with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority.	Supplying and erecting iron work, sheet metal work consisting of CRCA sheets, various sections of iron, plates, chequered plates, rods, bars, MS pipes, etc. for panel board or any other purpose with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority.
27	Supplying and erecting GI sheet 1.6 mm (16 SWG) having zinc coating of 350 microns with galvanization process compliance to IS 2629:1985 to be used for fabrication of boxes panel boards etc. including cutting, bending, drilling, welding, riveting etc. and painting with one coat of red lead paint and 2 coats of enamel paint.	Supplying and erecting GI sheet 1.6 mm (16 SWG) having zinc coating of 350 microns with galvanization process compliance to IS 2629:1985 to be used for fabrication of boxes panel boards etc. including cutting, bending, drilling, welding, riveting etc. and painting with one coat of red lead paint and 2 coats of enamel paint.

Contractor

Correction

Executive Engineer

28	Excavating soft murum / soft soil road by chiselling for preparing pit for poles stay or earth plates or for laying cables, pipes & clearing the site by removing debris & making the site good complete.	Excavating soft murum / soft soil road by chiselling for preparing pit for poles stay or earth plates or for laying cables, pipes & clearing the site by removing debris & making the site good complete.
29	Making cement concrete foundation in 1:2:4 cement concrete with foundation bolts and nuts complete. (cost of wooden box is included)	Making cement concrete foundation in 1:2:4 cement concrete with foundation bolts and nuts complete. (cost of wooden box is included)
30	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V 2 core 4 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	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V 2 core 4 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
31	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-CT	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

Contractor

Correction

Executive Engineer

Specifications

Name of Work =

Providing, fixing, installation, commissioning of latest advanced specialised Wi-Fi /Wired Transmission control based security monitoring & supervision system with smart intelligent interface connectivity along with all required software, hardware, electronics works & alternative power backup etc. complete & two years free of cost maintainance of the same at Hydro Dynamic Department, Meri Rest house & CDO office Bld.,Meri, Nashik

Sr. No.	Description of Item	Specifications
1	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining Latest advanced Digital Transmission Control Protocol based Infrared, stationary Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of branded companies alongwith CE, BIS & FCC certification for monitoring & supervision of entrance & exit gates / roads & essential locations for security of different locations etc. complete.	High quality, latest & advance, Out door IP66 (Weatherproof), OnVIF BULLET CAMERA must be Original Equipment Manufacturer's (OEM) of specified branded makes alongwith CE, BIS & FCC certification & minimum specifications - 4.0 Megapixel, IR Bullet, IR Distance 30 to 50m, PoE, Onvif, 2.7~ 13.5 mm motorised Varifocal with P-Iris,1/2.8" CMOS Sensor with EXMOR Technology for Exceptional low light performance, True WDR with smart variation of exposure time & rectification of over-exposed & under-exposed areas, Latest H.265 compression technique which saves up to 50% on bandwidth & storage, Adaptive & smart Streaming which reduces frame rate during no activity period & divides a single bitrates based on its importance, Greater Covrage, Intellignet Video analytics - Motion & Intrusion detection with Real time notification.
2	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based Remotely controllable high speed mini dome outdoor Pantiltzoom Security Monitoring & Supervision devices with Original Equipment Manufacturer's (OEM) of Specified branded companies along with CE, BIS & FCC certification along & Weatherproof & Vandal proof housing for monitoring & supervision of complete site for overall security of site etc.complete.	High quality, latest & advance IP67 (Weatherproof), OnVIF Outdoor Pan Tilt Zoom (PTZ) cameras must be Original Equipment Manufacturer's (OEM) of specified branded makes alongwith CE, BIS & FCC certification & minimum specifications - 2.0 Megapixel, IR Distance upto 100 mtr, PoE, 25X Optical zoom, Pan / Tilt Range Pan: 360° endless; Tilt: - 15° ~ 90°(Auto Flip), True WDR with smart variation of exposure time & rectification of over-exposed & under-exposed areas, Latest H.265 compression technique which saves up to 50% on bandwidth & storage, Adaptive & smart Streaming which reduces frame rate during no activity period & divides a single bitrates based on its importance, Weatherproof & Vandal proof housing, people flow counting and alert feature with greater covrage, Intellignet Video analytics - Motion & Intrusion detection with Real time notification.

Contractor

Correction

Executive Engineer

3	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 16Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	High quality, latest & advance 16 Chanel Network Video Recorder (NVR) must be Original Equipment Manufacturer's (OEM) & must have Manufacturer's Authorisation Form (MAF) of makes Matrix/Uniview/Wbox alongwith CE, BIS & FCC certification with minimum Specifications - Latest H.265 compression technique which saves up to 50% on bandwidth & storage, VIDEO Input 8 IP Channels ,Output HDMI (2.0) – 1 Port, 4K Decoding Technique for high resolution images with greater details, 12MP Recording Capability, Adaptive Recording(Automatically Reduces the Number of Frames Captured Per Second Where There is No Motion, Thereby Saving Storage Space up to 60%), Camera-Wise Recording Retention which enables flexibility of recording retention days based on priority of camera, Saving 30% of storage space & High-Throughput for higher up-link & down-link speed ,up to 512 Mbps Throughput.
4	Providing, Fixing, Installation of Latest advanced Digital Transmission Control Protocol based 8Ch Network Video Recorder with Original Equipment Manufacturer's (OEM) of Matrix/Uniview/Wbox companies alongwith CE, BIS & FCC certification etc. complete	High quality, latest & advance 8 Chanel Network Video Recorder (NVR) must be Original Equipment Manufacturer's (OEM) & must have Manufacturer's Authorisation Form (MAF) of makes Matrix/Uniview/Wbox alongwith CE, BIS & FCC certification with minimum Specifications - Latest H.265 compression technique which saves up to 50% on bandwidth & storage, VIDEO Input 8 IP Channels ,Output HDMI (2.0) – 1 Port, 4K Decoding Technique for high resolution images with greater details, 12MP Recording Capability, Adaptive Recording(Automatically Reduces the Number of Frames Captured Per Second Where There is No Motion, Thereby Saving Storage Space up to 60%), Camera-Wise Recording Retention which enables flexibility of recording retention days based on priority of camera, Saving 30% of storage space & High-Throughput for higher up-link & down-link speed ,up to 512 Mbps Throughput.
5	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance Recording & Storage Unit storage capacity of minimum 1 TB (Tetra Byte) etc. Complete.	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance Recording & Storage Unit storage capacity of minimum 1 TB (Tetra Byte) - from factor 3.5 inch, support for advance format (AF) - Yes, Supporting recording technology - CMR, Camerras supported upto 64, drive bays supported - 8, interface transfer rate (Max) buffer to host - 6 GB/S, cache (MB) - 64, avarage power requirement 3 vatt read/write - 3.8, Idie 3.2, stand by & sleep - 0.6

Contractor

Correction

Executive Engineer

6	Providing, Fixing, Installation, Commissioning, Testing, Training & Maintaining of high quality, latest & advance lan to media convertor Connection device with metal cover etc. Complete	High quality, latest & advance Lan to media convertor Connection device with metal cover. Category 6 keystone jacks are RJ45 8P 8C 50u jacks suitable for 22-26 AWG stranded and solid wire, compatible with both 110 & Krone punch down tool. They are capable of re-termination. They are available in universal labels color coded for T568A and T568B wiring schemes and fit in high density keystone patch panel. It complies with ANSI/TIA/EIA-568-C.2 standard and ROHs Housing type : PC, UL94V-2, Contact Bracket : PC, UL 94V-2. Transparent color, Material : Phosphor Bronze with Nickel plated, 50 micro-inch Gold plated on Plug contact area. IDC CAP: PC, UL94V-2, IDC Life: 200 times Min, Insertion Cycles: 750 times.
7	Providing, fixing & installation of high quality, latest & advance 12 VDC, 10 Amp Industrial Grade Switch Mode Power supply with Battery Charger; Input voltage up to 300 VAC (Battery Charging 6 Amp & Main O/P 4 Amp)	Providing, fixing & installation of high quality, latest & advance 12 VDC, 10 Amp Industrial Grade Switch Mode Power supply with Battery Charger; Input voltage up to 300 VAC (Battery Charging 6 Amp & Main O/P 4 Amp)
8	Providing, fixing & installation of high quality, latest & advance Industrial Grade, durable 5 V Dc to Dc Switch Mode power supply etc. Complete.	High quality, latest & advance, Industrial Grade, durable 5 V Dc to Dc Switch Mode power supply suitable . Input voltage 50 Vdc +/- 10%, 85% efficiency Overload & Short circuit (Through CC/CV Mode) DC Fuse over voltage protection / over current protection, Operating Temperature 0 to 55 deg C
9	Splicing (making joints of optical fiber cable) of FR grade pvc armored multimode armored multimode optical fiber cable with the help Splicing machine etc. Complete.	Splicing (making joints of optical fiber cable) of FR grade pvc armored multimode armored multimode optical fiber cable with the help of High quality, latest & advance, Industrial Grade Splicing machine.
10	Supplying and erecting 12V/100Ah SMF battery with battery terminal wire, duly charged with 24 months warranty complete..	Supplying and erecting 12V/100Ah SMF battery with battery terminal wire, duly charged with 24 months warranty complete..
11	Supplying and erecting 12 V/150Ah tubular battery with battery terminal wire, duly charged complete with 36 months warranty complete	Supplying and erecting 12 V/150Ah tubular battery with battery terminal wire, duly charged complete with 36 months warranty complete
12	Supplying, installing, testing and commissioning of single phase, 230V, 50 Hz, 800 to 900VA digital pure sine wave inverter. based on Insulated Gate Bipolar Transistor (IGBT) technology complete as per specification no. AP-INV	Supplying, installing, testing and commissioning of single phase, 230V, 50 Hz, 800 to 900VA digital pure sine wave inverter. based on Insulated Gate Bipolar Transistor (IGBT) technology complete as per specification no. AP-INV

Contractor

Correction

Executive Engineer

13	Supply, Installation, Testing, Intgeration & Commissioning of 46" LCD monitor for Surveillance of IP based digital Remote Surveillance System	Supply, Installation, Testing, Intgeration & Commissioning of 46" LCD monitor for Surveillance of IP based digital Remote Surveillance System
14	Supplying and fixing 15U wall mount rack (Dimension-DxWxH – 500x600x767 mm) as per specification No. WG-NAS/RAK	Supplying and fixing 15U wall mount rack (Dimension-DxWxH – 500x600x767 mm) as per specification No. WG-NAS/RAK
15	Supplying and fixing 24 U floor mount rack (Dimension-DxWxH – 800x600x1265 mm) as per specification No. WG-NAS/RAK	Supplying and fixing 24 U floor mount rack (Dimension-DxWxH – 800x600x1265 mm) as per specification No. WG-NAS/RAK
16	Supplying and installing cat-6 LSZH cable suitable for networking as per specification no. WG-COC/NC	Supplying and installing cat-6 LSZH cable suitable for networking as per specification no. WG-COC/NC
17	Supplying and fixing 1 m UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC	Supplying and fixing 1 m UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC
18	Supplying, fixing, and configuring 8-ports managed gigabit, Layer-2 switch, 10/100/1000 base-T, POE smart switch plus 2 SFP erected in provided rack complete.	Supplying, fixing, and configuring 8-ports managed gigabit, Layer-2 switch, 10/100/1000 base-T, POE smart switch plus 2 SFP erected in provided rack complete.
19	Supplying, fixing, and configuring 10G Base -SR (SFP+) simplex MM transceiver erected in provided rack complete.	Supplying, fixing, and configuring 10G Base -SR (SFP+) simplex MM transceiver erected in provided rack complete.
20	Supplying and plugging 3 m fibre patch cord LC-LC MM (50) OM3 LSZH duplex complete as per specification no. WG-COC/FPC	Supplying and plugging 3 m fibre patch cord LC-LC MM (50) OM3 LSZH duplex complete as per specification no. WG-COC/FPC
21	Supplying and fixing IP66 enclosure for fibre splicing complete	Supplying and fixing IP66 enclosure for fibre splicing complete

Contractor

Correction

Executive Engineer

22	Supplying and erecting LSZH armoured multimode optical fibre cable with 6 fibres, core dia 50/125 µm (OM3), suitable upto 10 GBPS, ethernet distance at 850 nm of wavelength, on wall/ceiling or laid in provided pipe/trench as per specification no. WG-COC/OFC LSZH	Supplying and erecting LSZH armoured multimode optical fibre cable with 6 fibres, core dia 50/125 µm (OM3), suitable upto 10 GBPS, ethernet distance at 850 nm of wavelength, on wall/ceiling or laid in provided pipe/trench as per specification no. WG-COC/OFC LSZH
23	Supplying and erecting 5m HDMI cord low voltage grade minimum 4k compliant to be laid in provided conduits with male/female 19 pin HDMI connectors complete.	Supplying and erecting 5m HDMI cord low voltage grade minimum 4k compliant to be laid in provided conduits with male/female 19 pin HDMI connectors complete.
24	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	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
25	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With PVC accessories on wall /ceiling as per specification No: WG-MA/CON.
26	Supplying and erecting iron work, sheet metal work consisting of CRCA sheets, various sections of iron, plates, chequered plates, rods, bars, MS pipes, etc. for panel board or any other purpose with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority.	Supplying and erecting iron work, sheet metal work consisting of CRCA sheets, various sections of iron, plates, chequered plates, rods, bars, MS pipes, etc. for panel board or any other purpose with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority.
27	Supplying and erecting GI sheet 1.6 mm (16 SWG) having zinc coating of 350 microns with galvanization process compliance to IS 2629:1985 to be used for fabrication of boxes panel boards etc. including cutting, bending, drilling, welding, riveting etc. and painting with one coat of red lead paint and 2 coats of enamel paint.	Supplying and erecting GI sheet 1.6 mm (16 SWG) having zinc coating of 350 microns with galvanization process compliance to IS 2629:1985 to be used for fabrication of boxes panel boards etc. including cutting, bending, drilling, welding, riveting etc. and painting with one coat of red lead paint and 2 coats of enamel paint.

Contractor

Correction

Executive Engineer

28	Excavating soft murum / soft soil road by chiselling for preparing pit for poles stay or earth plates or for laying cables, pipes & clearing the site by removing debris & making the site good complete.	Excavating soft murum / soft soil road by chiselling for preparing pit for poles stay or earth plates or for laying cables, pipes & clearing the site by removing debris & making the site good complete.
29	Making cement concrete foundation in 1:2:4 cement concrete with foundation bolts and nuts complete. (cost of wooden box is included)	Making cement concrete foundation in 1:2:4 cement concrete with foundation bolts and nuts complete. (cost of wooden box is included)
30	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V 2 core 4 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	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V 2 core 4 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
31	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-CT	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

Contractor

Correction

Executive Engineer

