[For Authorised Use Only]



MAHARASHTRA KRISHNA VALLEY DEVELOPMENT CORPORATION, PUNE.

(A Govt. of Maharashtra undertaking)

CHIEF ENGINEER (S.P.), WATER RESOURCES DEPARTMENT, PUNE.

SUPERINTENDING ENGINEER, SATARA IRRIGATION PROJECT CIRCLE, SATARA.

EXECUTIVE ENGINEER, URMODI DAM DIVISION, SATARA

TENDER DOCUMENT, SPECIFICATIONS & DRAWINGS

Name of work. :- Construction of Earthwork at Palashi Branch Canal Km. 1 offtaking @ ch.16/980 m.of Man Canal

Estimated Cost: Rs. 53.82 Lakhs

Cost of Booklet: Rs. 5000.00

INDEX

Sr. No.	Particulars		Page No.	
		From	То	
	Press Notice			
	Tender Notice	7	10	
	SECTION - 1	11	11	
	DETAILED TENDER NOTICE, INFORMATION AND INSTRUCTIONS FOR TENDERS			
1	Invitation	12	14	
2	Eligibility	14	14	
3	Details of work	15	15	
4	Blank tender forms Charges for downloading	15	15	
5	Pre-tender conference	15	15	
6	Revision or amendments of tender documents	16	16	
7	Manner of submission of tender and its accompaniments	16	17	
8	Opening of tenders	17	17	
9	Instruction for submission of envelope No.1	17	21	
10	Instruction for submission of envelope No.2	21	22	
11	Tender Units	22	22	
12	Corrections	22	22	
13	Signing of tender documents	22	24	
14	Acceptance of tender	24	24	
15	Validity for 90 days	24	25	
16	Completion of tender documents	25	25	
17	Language	25	25	
18	License under Contract Labour	25	25	
19	VAT Clearance Certificate	25	26	
20	Insurance Policy	26	26	
21	LABOUR WELFARE CESS	26	26	
22	INCORPORATE IN TENDER STAMP DUTY	26	26	

Sr. No.	Particulars		Page No.	
23	Similar type work	27	27	
24	TAX LIABILITY OF SERVICE TAX	27	27	
25	Bank A/c Linked to Unique Indenfication Numbar (Adhar card)	27	27	
	Annex 'A'	27	27	
	Description of project, Status of Project	28	28	
	Climatic conditions, Scope of work	28	28	
1	Details of Works	29	29	
2	Information for obtaining tender papers and its submission	30	30	
3	Work and site conditions	31	31	
4	Period of completion and programme of works	32	32	
5	Updated estimated cost of work	32	32	
6	Earnest money / Security deposit	32	32	
7	Price variation information		33	
	SECTION II		34	
1	B-1 tender form and Tender for works		40	
2	Schedule 'A'		41	
3	Schedule 'B'	42	47	
4	Month wise Work Programme	48	48	
5	Schedule showing items of work and applicable specifications	49	51	
	SECTION III - FORMS	52	52	
	Appendix 'A' to 'E'	53	57	
	Appendix 'F' .	58	58	
	Appendix 'G'	59	60	
	Appendix 'H'	61	61	
	Appendix 'J'	62	63	
	Appendix 'K'	64	64	
	Appendix 'K(a)'	65	65	
	Appendix 'L'	66	66	

Sr. No.	Particulars	Page No.	
	R.A. Bill form	67	72
	SECTION IV	73	73
	Conditions of contract (B-1 Form)	74	106
	SECTION V	107	107
	Special conditions of contract	108	108
1	Contractor to inform himself fully	108	108
2	Contract drawings and specifications	108	108
3	Data and Drawings to be furnished by the Contractor	109	109
4	Errors, Omissions, Discrepancies	109	110
5	Use of site	110	110
6	Contractor not to dispose off soil etc.	111	111
7	Gold / Silver, Minerals, Oils, Relics etc. found on the site	111	111
8	Access to site and work and co-operation with other contractors	111	112
9	Cleaning up	112	112
10	Layout of construction roads	112	112
11	Period and hours of work	112	112
12	Signing fields books, longitudinal section, cross sections and measurement books	112	113
13	Programme of construction	113	114
14	Procurement, storage and maintaining cement store account	114	115
15	Quality Assurance and Testing	115	116
16	Hire of construction equipments	116	117
17	No interest on money due to the contractor	118	118
18	Other contractor for the work	118	118
19	Contract documents and matters to be treated as confidential	118	118
20	Access to the Contractor's Books	118	119
21	Breach on part of Corporation Not to Annual Contract	119	119
22	Local Laws and Taxes etc.	119	119

Sr. No.			Page No.	
23	Personnel of the Contractor	119	120	
24	Death, Bankruptcy etc.	120	120	
25	Notices, How to be given	120	121	
26	Passing of Foundation etc.	121	121	
27	Reference to Standard Specifications	121	121	
28	Communication and Notices by Contractors	122	122	
29	Non-Compliance of Contract Conditions	122	122	
30	Extra Items	122	122	
31	Price Variation	123	128	
32	Compensation for delay in completion of work on corporation account (this clause is applicable only if the estimated cost put to tender is more than Rs.100 Lakhs)	128	128	
33	Digital Photographic Record	128	129	
34	Co-ordination with other contractors	129	129	
35	Undertaking under Contract Labour Act	129	129	
36	Photographs of the Works	129	129	
37	Fencing, Lighting and Ventilation	129	130	
38	Liability for accidents to persons	130	131	
39	The contractor to supply and be responsible for the sufficiency of the means employed	131	131	
40	Covering of work	131	131	
41	Accuracy of lines, levels and Grades Setting Out	131	132	
42	Excavated Material	132	132	
43	Safety Measures	132	133	
44	Maintenance during defect liability period	133	133	
45	Sundays and Holidays	133	134	
46	Bank Guarantee, Renewal & Encashment	134	134	
47	Handing over of work	134	134	

Sr. No.	Particulars	Page No.	
48	Instrumentation	134	135
49	Inspection of Works	135	135
50	Opening out works for Inspection	135	135
51	Removal of imperfect work and / or payment at reduced rates	136	136
52	Jurisdiction of court for disputes	136	136
53	Mode of payment of excavation quantities in running bill and final bill	136	136
54	G.S.T.	137	137
55	Deduction of Income Tax	137	137
56	Mode of payment of the quantities of excavation, masonry and concrete items executed in excess of 125%	137	138
57	Supply of fuel for domestic use	138	138
58	Additional conditions regarding payment of royalty charges as per Bombay Minor Mineral Rules	138	138
59	Excavation by Controlled Blasting and Chiseling	139	140
60	Shifting of electric line	140	140
61	Land Acquisition	140	140
62	Defect liability	140	140
63	Insurance Charges	140	141
64	No Claim for delay in payment	141	141
65	Equipment facility	141	141
66	Quality Assurance and Testing	141	142
67	Labour Welfare Cess	142	142
68	Restrictions on execution of work under clause 38 of conditions of contract.	142	143
69	Price variation shall not paid on insurance & royalty amount	143	143
70	INCORPORATE IN TENDER STAMP DUTY	143	143
71	TAX LIABILITY OF SERVICE TAX	143	143
	VALUM-II - SPECIFICATION	146	185

PRESS NOTICE, TENDER NOTICE

Maharashtra Krishna Valley Development Corporation,Pune-11. <u>E-TENDER NOTICE NO. 7 FOR 2018-19</u>

Main portal:http:\\mahatenders.gov.in

Online application for B-1Tender for below mentioned works is invited by Maharashtra Krishna Valley Development Corporation, Pune from contractors registered in appropriate class with Public Works Department of Government of Maharashtra. The tender documents are available on website from 28/06/2018 to 24/07/2018

Name of work	Estimated cost put to tender (Rs. Lakh)	Earnest Money Deposit (Rs. Lakh)	Time limit for completion	Cost of Blank Tender documents (Rs.)	Class of Registratio n
Construction of Earth work at Palashi Branch Canal Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project)	53.82	0.54	6 months (Including Monsoon)	5000/-	Class - IVA & Above

The contractor's participating first time e-tendering Bids will have to procure digital signature certificates, user name and password from competent authorities as per guidelines mentioned on home page of the website.

Additional details regarding 'e' tendering process are available in tender Document on above Portal. If any assistance is required regarding e-Tendering (upload & download) Please contact NIC E- procurement Toll Free Number (24x7) 180030702232

Bidder quate their rate exclusive of GST

(S.S.Gaikawad)
Executive Engineer,
Urmodi Dam.Division
Satara.Dist.Satara.

(Ph. No.02162-246043, E-Mail: eeurmodi@gmail.com)

MAHARASHTRA KRISHNA VALLEY DEVELOPMENT CORPORATION, PUNE DETAILED TENDER NOTICE NO 7 FOR 2018-19

CIRCLE: - Satara Irrigation Project Circle, Satara.

DIVISION: - Urmodi Dam Division, Satara, Dist-Satara

Online digitally signed application for B-1Tender document for the following work is invited by the Executive Engineer, **Urmodi Dam Division, Satara, Dist- Satara** from the contractors registered with Public Works Department, Govt. of Maharashtra in appropriate class.

Name of work	Estimated cost put to tender (Rs. Lakh)	Earnest Money Deposit (Rs. Lakh)	Time limit for completion	Cost of Blank Tender documents (Rs.)	Class of Registratio n
Construction of Earth work at Palashi Branch Canal Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project)	53.82	0.54	6 months (Including Monsoon)	5000/-	Class - IVA & Above

- 2. The forms of Main Tender documents are available on the e-Tendering website of Govt. of Maharashtra https://mahatenders.gov.in The aspiring Bidders will have to download Main Tender form, from the website mentioned above. The bidder has to fill in Online format and upload information regarding Main Tender Online. Also he has to download the Main Tender application form from website, fill it and upload the scanned copy of duly filled form, alongwith required documents.
- 3. The blank tender forms will have to be downloaded by the contractor only from the website of Govt. of Maharashtra https://mahatenders.gov.in Tender documents download from 28/06/2018 to 24/07/2018 While submitting the duly filled Tender Documents the Bidder are required to Deposit Tender fee amount of Rs.5000/- and E.M.D. of Rs. 0.54 Lakhs through e- payment gateway. The contractor has to prepare & submit Main Tender Documents Online on or before as per schedule.
- For online submission of tender ,Duly filled online tender form should be submitted on or before 24/07/2018 at 16.00 Hrs. on www.mahatenders.gov.in portal .
- 5. E-Opening of tender forms will be done on 26/07/2018 at **11.00** hrs if possible or next suitable Date.

- 6. The contractor should upload the documents in readable form, He should take trial of uploads by taking printout. The unreadable documents will be treated as null & void. The remaining documents will be evaluated. The decision of opening Authority regarding this will be binding to all contractors.
- 7. All rights are reserved to reject any or all Main Tender documents without assigning any reason by the competent authority.
- If any assistance is required regarding e-Tendering (upload & download) Please contact NIC E-procurement Toll Free Number (24x7) - 180030702232
- 10. Any change in schedule will be published on website only.
- 11. It is mandating for agencies to make payment of tender form fee and EMD from their Bank account only.
- 12. GST Applicable for all Govt. work from 01/07/2017
- 13. Bidder quote their rate exclusive of GST. Provision of GST made in recaplition sheet of this work.

_

Note;-The Date of serial No.3 to 5 may be changed.

(S.S.Gaikawad)
Executive Engineer,
Urmodi Dam.Division
Satara Dist.Satara.
(Telephone no. 02162-246043,
Email: eeurmodi@gmail.com)

SECTION - I

DETAILED TENDER NOTICE, INFORMATION AND INSTRUCTIONS FOR TENDERERS

DETAILED TENDER NOTICE

INFORMATION AND INSTRUCTION FOR TENDERERS

Maharashtra Krishna Valley Development Corporation, Pune.

1.0 INVITATION:

1.1 Sealed tenders in B-1 form are invited from the contractors enrolled with the P.W. Department, Government of Maharashtra in appropriate class for the work as stated in **Annex 'A'**.

1.2 Definitions and interpretations:

In this tender document the following terms shall have the meanings hereby assigned to them except where the context otherwise requires.

(a) "Corporation" shall mean the Maharashtra Krishna Valley Development Corporation, Pune acting through its Executive Director, as defined in Maharashtra Act XV of 1996 Maharashtra Krishna Valley Development Corporation, Pune is a body corporate constituted under the Maharashtra Act XV of 1996 and has been established by the notification published in the Gazette Irrigation Department dated 4-4-96. The head quarters of the the Maharashtra Krishna Valley Development Corporation, Pune (MKVDC. Pune or MKVDC for short, and hereinafter referred to only as Corporation) is Pune. The official postal address for correspondence is

The Office Of The Executive Director,
Maharashtra Krishna Valley Development Corporation,
Sinchan Bhavan, Barne Road,
Mangalwar Peth, PUNE-411011.

General Information of Maharashtra Krishna Valley Development Corporation :

The functions and powers of the Corporation have been listed in the Maharashtra Act XV of 1996. In general, it has been entrusted with the work of Investigation, Planning, Designing of Projects, Maintenance of Completed Projects, Construction of Projects and Irrigation Management of the Major, Medium and Minor Projects (command area more than 250 Ha.) in the Krishna River Basin. The projects comprise irrigation, hydroelectric projects alongwith the command area development, and multipurpose schemes. The projects are to be completed so as to utilise water in Krishna basin allotted to Maharashtra State by Krishna Water Dispute Tribunal.

- (b) "Chief Engineer" shall mean Chief Engineer Maharashtra Krishna Valley Development Corporation, Pune / the Chief Engineer, Water Resources Department, Pune / Chief Engineer (Specified Project) Water Resources Department, Pune.
- (c) "Engineer / Engineer-in-charge" shall mean the Executive Engineer in charge of the works and shall also include the superior Officers of the Engineering Departments of the Corporation, i.e. the Superintending Engineer of respective Circle or the Chief Engineer.
- (d) "Engineer's representative" shall mean the Sub-Divisional Engineer / Assistant Executive Engineer / Sub-Divisional Officer / Assistant Engineer (Grade I), who is in direct charge of the works and shall include any Civil Engineer of the Corporation.
- (e) Contractor shall mean the person, firm or company who enters into contract, with the Corporation and shall include their executors, administrators, successors and submitted assignees.
- (f) "Contract" shall mean and include agreement having three volumes as below

Volume I : Tender Documents Volume II : Specifications

Volume III : Drawings

- (g) "Work" shall mean the work to be executed in accordance with contract.
- (h) "Specifications" shall mean the specifications for material and works as specified in Volume-II of the contract.
- (i) "Drawing" shall mean prints of the maps, drawings, plans in Volume-III of the contract and shall include any modifications of such drawings and any further drawings as may be issued by the Engineer-in-charge from time to time.
- (j) "Site" shall mean the land and the other places on, under, in or through which the works are carried out and any other lands or places provided by the Corporation.
- (k) "Defect(s) liability period" shall mean period of **24 months** from the date of issue of completion certificate by the Engineer-in-charge.
- (I) "Website" means website http://wrd.mahatenders.gov.in

Singular and Plural:

Works imparting the singular number shall also include the plural and vice versa where the context requires.

Headings and marginal headings:

The headings and the marginal headings in the contract are solely for the purpose of facilitating references and shall not be deemed to be part thereof or taken into consideration in the interpretation of construction thereof or of the contract.

2. ELIGIBILITY

(1) For works costing less than Rs.100 lakhs

Blank tender forms shall be available on the website to those contractors who are registered on eTendering Portal.

(2) For Works costing between Rs.100 lakhs to Rs.300 lakhs

The eligibility of work shall be decided on the basis of bid capacity of the contractor. The document of assessing the BID capacity is available to the contractor registered in appropriate class with public works department of Govt. of Maharashtra

Contractors registered in appropriate class in P.W.D. of Govt. of Maharashtra & who have adequate BD Capacity for the works as certified by the competent Corporation authority shall only be eligible for bidding.

(3) For Works costing more than Rs.300 lakhs

The eligibility of work shall be decided on the basis of pre qualification of the contractors. The document for assessing the pre qualification will be available to the contractor registered in appropriate class with public works department of Govt. of Maharashtra

Contractors registered in appropriate class in P.W.D. of Govt. of Maharashtra can submit duly filled in pre qualifications document. The competent

Corporation authority will examine, enquire & display the names of pre qualified bidders on basis of document submitted. Pre-qualified contractor can download the tender document from the web site. Only pre qualified Contractors are allowed to bid for this work.

3. DETAILS OF WORK:

The estimated cost, earnest money deposit, class of contractor, period of completion of work and other information is given in <u>Annex 'A'</u> of this Section.

4. CHARGES FOR DOWNLOADING THE TENDER DOCUMENT:

Information regarding the work for which the tenders are invited as well as tender forms can be obtained from website.

The blank tender forms can be downloaded from web site. The Contractor has to pay tender form fee(as specified in Annex-A) through e-payment gateway. The Scanned copy Proof of Deposit such amount should be uploaded. The contractor whose Blank Tender Document Form Fee (Net Banking, NeFT/RTGS) not uploaded, there envelope No.2 will not be opened.

5. PRE-TENDER CONFERENCE:

- (1) Pre-Tender Conference open to all prospective tenderers will be held in the office as stated in Annex A of this Section, wherein the prospective tenderers will have an opportunity to obtain clarifications regarding the work and the tender conditions.
- The prospective tenderers are free to ask for any additional clarification either in writing or orally and the reply to the same will be given by the **Superintending Engineer, Satara Irrigation Project Circle, Satara** in writing and these clarifications referred to as common set of conditions, shall form part of tender documents and which will also be common and applicable to all tenderers.
- (3) The tender submitted by the tenderer shall be based on the clarifications, additional facility issued (if any) by the Corporation and this tender shall be unconditional. Conditional tenders will be summarily rejected as non-responsive.
- (4) All tenderers are cautioned that the tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and conditional tenders will be rejected as non-responsive.
- (5) All tenderers need to download minutes of Pre Bid Conference from Press Notices / Corrigendum Section of Tendering Site. Same should be downloaded & digitally signed by tenderers. Digitally Signed copy of Pre- Bid Meeting needs to be uploaded by Tenderer with online bid.

6. REVISION OR AMENDMENT OF TENDER DOCUMENTS:

Right is reserved to revise or amend the tender documents prior to last date notified for the issue of tenders and such revisions or amendments or extensions shall be communicated to all concerned by e-mail and as may be considered suitable including display on website wrd.mahatenders.gov.in and communicated to all concerned by post and by notice in the press as may be considered suitable.

Tenderer shall be presumed to have carefully examined all documents, forms, statements, special conditions, schedules, drawings and specifications of contract and to have fully acquainted himself with all details of the site, his own quarries for rubble, sand, earthwork etc. locations of material, river and weather characteristics and labour conditions in general and with all the necessary information and data etc. pertaining to and needed for the work prior to tendering of the work.

7. MANNER OF SUBMISSION OF TENDER AND ITS ACCOMPANIMENTS:

Tender is to be prepared & submitted online on the website on or before schedule date and time .

It is compulsory to submit tender form online.

The online submission procedure is given on website.

(a) ENVELOPE NO. 1: Filter Criterion

The contractor has to upload following documents along with tender form & also hard copy of uploaded documents submitted to this office (in 72 hours from submitted the tender)

- Scanned copy of Certificate or certified copy thereof as a registered contractor with PWD of Government of Maharashtra in appropriate class. The certificate should be valid on the date of submission. (No J.V. accepted)
- 2) Scanned copy PAN Card
- Deed of Partnership or Article of Association and memorandum of Association for limited Company.
- 4) Scanned copy of Power of Attorney
- 5) The certificate of Registration under sub-section (1) of Section 5 of Maharashtra State Tax on Professions, Trades, Callings and Employment Act, 1975 [see Rule 3(2)] on P.T.R form-1 and also P.T.E in form-II (see Rule 4 (4) from the Professional Tax Officer of the concerned district.

- 6) Scaned copy of GST registration as per Maharashtra GST Act. 2017.
- 7) Proof of payment of tender form fee/EMD

. (b) ENVELOPE NO. 2 – Financial Bid:

- 1) The tenderer should quote his offer in the form of percentage below or above of estimated cost given in Schedule 'B' at appropriate place in BOQ
- 2) Scanned copy of D.D. of Performance Security Deposit if applicable in the name of Executive Engineer as specified at 9.(ii)(b) of Section I

(c) SUBMISSION OF TENDER:

The Data in the forms in two Envelopes No.1 and 2 shall be prepared and submitted online on or before prescribed date. All Bid documents should be digitally signed by Contractor.

The date and time for submission of online tender shall strictly apply in all cases. The tenderers should ensure that their tender is prepared & submitted online, before the expiry of the date and time. No delay on account of any cause will be entertained for the late receipt of the tender.

(d) Scanned copy of proof of payment towards tender form fee/ EMD should be uploaded

8. OPENING OF TENDERS:

On the date specified in the tender notice; following procedure will be adopted for opening of the tender.

8.1 ENVELOPE NO. 1:

First of all Envelope No.1 of the tenderer will be opened online to verify its contents as per requirements. The tenderer shall meet the requirement. If the various documents mentioned at <u>Sr.No.7(a)</u> above of this <u>Section</u> are not uploaded or verification of the same do not meet the requirements, a note will be recorded accordingly by the tender opening authority and the said tenderer's <u>Envelope No.2</u> will not be considered for further action but the same will be recorded unopened. The decision of online tender opening authority is final in this regard.

8.2 ENVELOPE NO. 2:

This envelope shall be opened online immediately after opening of Envelope No.1 only if the contents of Envelope No.1 are found to be acceptable to the tender opening Authority. The tendered percentage above or below shall then be read out.

9. INSTRUCTIONS FOR SUBMISSION OF ENVELOPE NO.1:

Documents to be submitted in Envelope No. 1 shall conform to the instructions given below-

(i) (a). EARNEST MONEY:

All tenderers shall pay entire E.M.D. as below: E.M.D. amount of 0.54 lakh shall be paid through "E- payment gateway".

(b) REFUND/CONVERSION OF EARNEST MONEY:

This earnest money amount shall not carry any interest whatsoever. The earnest money will be refunded in case of tenderer(s) whose tenders are not accepted, only after uploading of AOC

In the case of successful tenderer, the earnest money will be refunded after completion of contract documents and payment of security deposit as per the provisions made in Para 1.4 (Page No 29) (ii) Security Deposit, EMD amount shall not carry any interest whatsoever.

(ii) (a) SECURITY DEPOSIT:

A sum as mentioned in printed B-1 tender form at Para (d)(i) of Memorandum will have to be deposited in the form of or Demand Draft of Nationalised or Scheduled Bank, by the Contractor at the time of completing the contract documents, if his tender is accepted by the Corporation.

OR

The Initial security deposit may be paid by Demand Draft of **Rs.1.35 lakhs** from any Nationalised or Scheduled Bank's branch situated in the State of Maharashtra

The security deposit will be retained by the Corporation for the due and faithful fulfillment of the contract by the contractor. In addition to the sum as above, sums as Security Deposit will be deducted from running account bills at the rate shown at Memorandum Para (g). The sum of Security Deposit thus deducted from the running account bills, will remain in the form of cash for a period as stated in Clause 20 of B-1 Tender.

(b) PERFORMANCE SECURITY DEPOSIT:

सा.बां. विभाग, शासन निर्णय क्र. बीडीजी.2015/प्र.क्र.2/इमा-2, दि.12/02/2016.

If the tenderer has quoted the offer 1% to 10% below the estimated cost then the tenderer shall have to submit Performance Security Deposit in the form of Demand draft of any Nationalized or Scheduled bank in favour of the **Executive Engineer, Urmodi Dam Division, Satara** for the amount of 1% of estimated cost.

(For example :- If the rates quoted is 7% below, then the amount of Demand Draft should be 1% of the estimated cost.)

The scanned copy of the Demand Draft shall be uploaded and submitted in envelope No. 2 through e-tendering process, while the original Demand Draft shall be submitted in the sealed envelope in the office of the **Executive Engineer, Urmodi Dam Division,Satara** within 5 working days from the last date prescribed for the submission of Hash of tender.

The amount of the demand Draft shall be calculated by the tenderer in accordance with the following manner.

If the offer is more than 10% below the estimated cost then the amount of the demand draft shall be of the value of such percentage(1% +more than 10%)of amount put to tender. (For example :- If the rates quoted is 14% below, which the amount of Demand Draft should be 5% i.e. 1% plus 14%-10% =(1+4)% of the cost put to tender.)

The Demand Draft shall be valid up to 3 months from the date of submission of the tender. It should bear MICR and IFS code.

The scanned copy of the Demand Draft shall be uploaded and submitted in envelope No. 2 through e-tendering process, while the original Demand Draft shall be submitted in the sealed envelope in the office of the **Executive Engineer, Urmodi Dam Division,Satara** within 5 working days from the last date submission of the tender in the envelope with the name of work and tender notice No. written of envelope.

In either case, if the Performance Security Deposit is not furnished as stated above the earnest money shall be forfeited to Govt. or action will be taken as per order the Superintending Engineer Satara Irrigation Project Circle, Satara (As per Govt. corrigendum No Tender 0316/(189/16/)dated14/07/2016 of Water Resources Department)

The work order shall be given to the concerned tenderer after the clearance of the Demand Draft submitted by him. The amount of the performance security shall be refunded as per the tender conditions.

Non submission of additional security deposit / performance security by submission of less amount of the additional security deposit shall be liable to summarily rejection of his tender.

Performance Security Deposit will be refunded after successful completion of the work certificate by the Executive Engineer. .

Note-No Performance Security Deposit if rate quoted 1% below estimated cost.

Note – No performance security deposit if rate quoted 1% below estimated cost.

(iii) INCOME TAX CERTIFICATE:

Income Tax is to be deducted from the sums to be paid to the contractor for the works carried out at 2% of the gross amount, or at the rate revised from time to time, and surcharge on Income Tax as per prevailing Government orders.

(iv) GST: (Goods and Service TAX)

GST (Goods and service Tax) Act. 2017 have come into force with effect from 1st July 2017. Accordingly there is change in the indirect tax regime and the tax rates. State/Central taxes which are subsumed within the GST include central excise duty, state VAT, Central sale Tax, Purchase tax etc.

Provision of GST made in the estimate.It is instructed to bidders to quote their rate exclusive of G.S.T.

It is instructed to the contractor to submit details of payment of GST that include Name of division, GSTIN of Division, Name of work, Gross amount of Bill, GST amount, GSTIN of agency. The actual burden of GST after deducting VAT and /or excise duty will be scrutinised by the E.E. of the Division and paid to the agency.

GST Registration and TDS over GST - It is mandatory for the bidders to register themselves under GST and the documentary proof should be submitted in Envelope -1

The section 51 of the CGST & MGST Act. provides that every department or establishment of the central Government or the State Government to deduct tax at source (TDS) at the rate of 1% each for MGST and CGST from the payment made to the deductee. Thus total value of deduction would be 2%

Note -

- I) In case of interstate supply TDS is 2% under IGST
- TDS certificate in this regard will be issued to the deductee within 5 days of crediting the amount to the Government.

(v) PROFESSIONAL TAX:

A valid Certificate of registration under section 5(1) & 5(2) of Maharashtra State Tax on Professions, Trades, Callings & Employment Act, 1975, in the form

It should also be made clear that the employees shall be all those who receive the wages / salaries from the tenderer and shall include the office & field staff and those operating the machinery / equipment. It should also be insured that the machinery said to be deployable for the subject work is really in the ownership of the tenderer on which the contractor's staff is working.

(vi) JOINT VENTURE:

- 1) If the tenderer has entered into joint venture, the joint Venture deed duly registered with the Registrar of Firms should be enclosed. In absence of which the tender (envelope No. 2) shall not be opened.
- 2) Bidder may be pre-qualified independently or in joint venture but they would be allowed to submit only one bid.
- 3) Sales Tax / Vat Certificate in the name of joint venture firm is essential, otherwise Sales Tax / Vat will be deducted at the rate of 4% of the amount of work executed.

(vii) PROVIDENT FUND:

Certificate for making payment towards Workers Provident Fund from Competent Authority should be produced.

Note: All documents required to be submitted in Envelope No.1 shall be attested by a Gazetted Officer and if required, original copies shall be kept ready at the time of opening the tender.

10. INSTRUCTIONS FOR SUBMISSIONS OF ENVELOPE NO.2:

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

(i) CONTRACTOR TO INFORM HIMSELF FULLY:

The tenderer shall be deemed to have fully acquainted himself 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) CONDITIONAL TENDER:

Conditional tenders will be summarily rejected. The tenders which do not fulfill any of the conditions of the notified requirements laid down in this detailed

tender notice, the general rules and directions for the guidance of the tenderers as mentioned in the B-1 form or are incomplete in any respect are likely to be rejected without assigning reasons therefor.

(iii) TENDERED RATE:

The tenderer should quote his offer in the form of percentage above or below the rates entered in <u>Schedule 'B' in Online B-1 form, in figures and system will convert same in appropriate words in English</u>.

OR

In schedule B in online B-1 form, in figure and sustem convert same in appropriate 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 from 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 one line only as far as possible.

(iv) If the percentage quoted by the tenderer is less than 99 % or more than 110% of the updated estimated cost as stated as sr. no. 5 of Annex- A, then the tenderer shall furnish his detail justification in order to establish the work ability reasonableness of the rates. The tenderer shall also submit additional information in justification of this offer where ever call for by the Corporation, without which the offer will not be considered.

(v) QUANTITIES PUT TO TENDER:

The quantities given in Schedule 'B' as put to tender by the Corporation for various items therein are approximate as some of the items of works put to tender are likely to be executed departmentally, till the contract agency is fixed.

Such quantities which would be executed till the fixation of contract agency will stand deducted from the quantities entered in the Schedule 'B' at the time of completing the tender documents by the contractor. The contractor should take cognizance of this fact and no claims will be tenable on account of such reduction in quantity, there may also be variation in quantities on account of change or modifications in design and no claims will be tenable on account of such reduction / increase in quantity.

The quantities of items on which the Corporation has carried out the work, as measured on the date of work order shall stand deducted from the quantities stipulated in Schedule 'B' as put to tender by the Corporation for the purpose of application of stipulation of Clause 38 of Conditions of Contract of the tender.

11. TENDER UNITS:

The tender has been invited under the Metric System of measurements. The tenderer should particularly note the units mentioned in Schedule 'B' on which rates are to be based.

12. CORRECTIONS:

No corrections should ordinarily be made in the tender documents.

13.1 SIGNING OF TENDER DOCUMENTS:

The tender shall contain the Public Key of Digital Signature Certificate of Contractor. Individual Bid should be hashed & same must be signed by Contractors Digital Signature Certificate.

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 signed by the tenderer with his full dated signature.

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

Scanned image of an attested copy of the partnership deed shall be uploaded. Tender by Company shall be digitally signed by the person 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 a scanned image of 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.

13.2 The successful tenderer will be called for negotiation. The successful tenderer will downloaded three copies of the uploaded tender with original quote. The

negotiation % above and below will be part of the tender agreement after this both the party sign agreement physically.

The tender is also liable to be rejected outright if while submitting -

- i) The tenderer proposes any alteration in the work specified in the tender or in the time allowed for carrying out the work / in any other conditions.
- ii) Any of the pages of tender are removed and / or replaced.
- iii) The percentages are not entered in ink, figures and in words by the tenderer in B-1 from.
- iv) Any erasures are made by the tenderer in the tender.
- v) All corrections and additions or pasted slips are not signed by the tederer.
- vi) Tender in case of firm, each partner of the person holding the power of attorney authorising him to do so there of does not sign or the signature is not attested by a witness in B-1 tender form at the space provided for the purpose and
- vii) Tenderer has not signed declaration at Appendix 'F'
- viii) If contractor have found penalized/ fined for poor performance of work/ bad quality of work/ abandonment of work/ inordinate delay incompletion/ misbehavior during last 3 years before date of submission of tender.

14. ACCEPTANCE OF TENDER:

- 14.1 The authority for acceptance of tender will depend upon the Contractor's offer above/ below, then cost put to tender as per Government rules and regulations.
- a) If the offer of the contractor is less than/ equal to updated cost of work then tender will be accepted by Chef Engineer/ Superintending Engineer/ Executive Engineer, depending upon cost of work.
- b) If the Contractor's offer is above the cost put to tender, tender will be accepted by Chief Engineer/ Superintending Engineer with prior approval of MKVDC.
- c) The work order i) After the tender acceptance letter is issued. Contractor has to complete contract documents & pay security deposit as mentioned in Annex-A.

Acceptance of tender will rest with the authority, <u>as indicated in Annex 'A'</u> 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 <u>email</u>. 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 15 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 earnest money if any, within the stipulated time, paid by him shall be liable to be forfeited to Corporation 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 to whom the Corporation considers suitable.

15. VALIDITY FOR 75 DAYS:

The offer shall remain valid for a period of 75 (Seventy five) days from the date of the opening of tender and thereafter until it is withdrawn by notice in writing by the tenderer, duly addressed to the authority as stated at Sr.No.2.09 of Annex 'A' of this section, and sent by Registered Post Acknowledgment Due (RPAD). If the acceptance of tender is not communicated within 90 days or before and if the offer is withdrawn by the contractor as afforsaid, earnest money paid in cash shall be refunded in full.

16. 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.

17. LANGUAGE:

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

18. LICENSE UNDER CONTRACT LABOUR (REGULATION AND ABOLITION) ACT, 1970:

18.1 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 Corporation. The contractor shall submit the certified copy of registration certificate under ESIS and P.F. Act before payment of first Running Account bill is made. Attested copy of certificate obtained from competent Authority that remittances have been made under E.P.Fund Act should also be produced.

18.2 Changes in the tender document by the contractor are not permitted. If any changes in the tender documents are noticed the tender will rejected out right of necessary action against contractor will be taken. The tender document on Govt. web site shall be treated as certified documents in case of any complaints.

NO CHANGE IN TENDER DOCUMENT

19.1 Since all the tender documents are to be downloaded from website, changes in the tender document by the contractor are not permitted, If any changes in the tender document are noticed, the tender will be rejected outright and necessary action against the contractor will be taken.

The tender documents on government website shall be treated as certified documents in case of any complaints.

20. Insurance Policy:

Contractor shall take out necessary insurance policy / policies viz. Contractor's All Risk Insurance Policy, Erection All risk Insurance Policy etc. as decided by the Directorate of Insurance so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period COMPULSORILY from the 'Director of Insurance, Maharashtra State, Mumbai 400 051' only. Its postal address for correspondence is "264, MHADA, Opp. Kalanagar, Bandra (E), Mumbai 400 051. (Tel. No. 022-26590403 / 26590690) & Fax 022-26592461/ 26590403)". Similarly all workmens 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 agency is not taking proper Insurance Policy 1%of the amount of accepted tender is deducted from first R.A.bill and send it to the Directorate of Insurance fund Maharashtra state, Mumbai.

21. LABOUR WELFARE CESS

21.1 The item deals with the payment of labour welfare cess and as per the relevant provision of prevailing law of central Government and guidelines laid by the Government of Maharashtra towards labour engaged in the construction of various works.

21.2 A sum of the rate of 1% or at the prevailing the rate decided by the Government will be deducted from the bill of contractor till the completion of contract work.

22. Incorporate In Tender Stamp Duty:-

After allotment of tender the contractor shall have to register the work. contract by paying Stamp Duty as per Mumbai Stamp Duty Act 1958 Rule 34.

Stamp duty @ Rs. 500 + 0.1% of the cost above Rs. 10 lakh on accepted tender needs to be paid by the agency in form of stamp paper or online as applicable.

As per Bombay stamp act. 1958 amounted via Maharashtra Act. No XX of 2015 as Maharashtra stamp amendment act. 2015 and provision contained in artical 63, the contractor will have to pay stamp duty on value of accepted tender cost as per prevailing rate declared by Govt. of Maharashtra before work order The contractor quote his rate accordingly and no separate claim will be entertained on this account by the department. The stamp duty can be pay through franking upto 5000/- and through e-SBTR for amount above 5000/- or through any other medium like GRAS as per the extent direction of Govt. of Maharashtra.

23. The Contractor must have completed similar type & of equivalent amount of work in one year & he must submit document proof in this regard.

24. Tax liability of Service Tax.

Currently the corporation is exempted from Tax liability of Service Tax in cost of works of canal & Dam, however in further owing to change in the Service Taxation Policy, any liability arising thereof shall be the liability of the contractor & dues if any will be recovered from the payable amount under the contractor & same shall be agreed by responsibility of the contractor.

25. As Maharashtra Govt. Water Resources Department G.R dated 4/2/2017 Contractor shall make payments 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.

ANNEXURE - A

A. DESCRIPTION OF THE PROJECT:

Urmodi Irrigation Project envisages construction of Storage Reservoir of 9.96 TMC across river Urmodi at village Parali, Tal.& Dist.Satara to Irrigate 8300Ha.in Satara Taluka,9725Ha.from Khatav Taluka and 9725 Ha. from Man Taluka. The work of dam is already completed. From LIS component the work of commissioning one row of rising main is completed and 76 kms of Khatav Canal work is completed. Canal works km. 1 to 31 of Man Canal are in progress

B. STATUS OF THE PROJECT:

Following Proposals are proposed For This work includes Construction of Earth work at Palashi Branch Canal Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project)

The material required for this work is available within reasonable leads. The water required for this work is available within vicinity. However the contractor shall confirm these facts at the time of Quoting this offer.

C. CLIMATIC CONDITIONS:

The work site is situated in moderate climatic zone. The rainy season normally commences early in June & last up to October having a few sporadic pre monsoon & post monsoon showers, some of these can be quite heavy.

The temperature varies from minimum 15 °C in winter to 42 °C in summer

D. SCOPE OF WORK: Construction of Earth work at Palashi Branch Canal Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project)

The above work should be constructed as per design & drawing.

1. DETAILS OF THE WORKS.

1.1	Name of Work		Construction of Earth work at Palashi Branch Canal Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project)
1.2	Estimated Cost		Rs.53.82 Lakhs.
1.3	Tender fee & Earnest Money	1%	Tender Fee Rs. 5000/- (Non Refundable) (Rs. Flve thousand only) Rs. 0.54 lakhs (Rs. Fifty Four thousand only) Tender Fee & E.M.D. amount shall be paid through "E- payment gateway".
1.4	Security deposit	5%	Rs. 2.70 Lakhs
	i) Initial	2.5%	Rs. 1.35 Lakhs in form of D.D. of Nationalized/ Scheduled Bank payable at Satara Branch
	ii) Through R.A.Bill	2%	Rs. 1.35 Lakhs
1.4.1	Additional Security deposit (Performance Security)		As per 9 ii (b) of detailed tender notice.
1.5	Class of Contractor		IVA th & Above
1.6	Period of completion of work		6 Calendar Months (Including Monsoon)

2. INFORMATION FOR OBTAINING PRE-QUALIFICATION DOCUMENTS, TENDER PAPERS AND ITS SUBMISSION.

2.1	Name and address of the	Executive Engineer, Urmodi Dam
	Executive Engineer-in charge of	Division,Satara
	the work issuing tender papers/	Tel. 02162/ 246043
	Tender documents and in whose	Tenders are to be downloaded from web-
	name Earnest & Security Deposit	site and will not be issued by the office.
	is to be pledged.	
2.2	Period of downloading of Tender	28/06/2018 to 24/07/2018 upto
	documents.	16.00 Hrs. on website.
2.3	Cost of application forms for	Rs. 5000/-
	Tender documents.	
2.4	Time and Date of submission	A) For on-line submission on the
	Tender documents (online only)	website Downloading & submission -
		28/06/2018 to 24/07/2018 upto
		16.00 Hrs. on website.
2.5	Date time & place of pre tender	N.A.
	Conference	
2.6	Name and address of the	Executive Engineer, Urmodi Dam
2.0	officer receiving & opening	Division, Satara
	Tender documents	Tel. 02162/ 246043
2.7	Time and date of opening of	
	tender	date
2.8	Extra cost of tender papers/	Tender Documents are to be downloaded
	documents required by post.	from web-site and will not be issued in the
		office.
2.9	The name of authority for	Executive Engineer, Urmodi Dam
	accepting the tender	Division,Satara
		Tel. 02162/ 246043
Note	:- The various dates as mentioned a	above may be changed if required due to

any reason

3. WORK AND SITE CONDITIONS:

3.1	Location	From nearer to village Narawane Tal-Man, Dist- Satara
3.2	Nearest Railway Station	Koregaon which is 65 kms away from work site
3.3	Nearest Airport	Pune ,180 Km away
3.4	Roads	Approachable by all weather roads From satara-Pandharpur-Gondawale-Narawane
3.5	Nearest Telephone facility and Telegraph facility	Wathar Narawane which is 2 kms away
3.6	Nearest petrol and diesel pump	Wadjal which is 10 kms away
3.7	Position of land acquisition	Concents of Farmers are Taken.Proposal of Land Acquasation is started
3.8	Position of funds	

4 PERIOD OF COMPLETION AND CONSTRUCTION PROGRAMME OF WORK:

4.1 Period of completion

06 months including monsoon.

- 4.2 The construction programme is enclosed at the end of Schedule 'B' of tender document based on which the physical programme is prepared. If the tenderer does not agree with this programme, he shall submit his own programme without changing total period of tender alongwith tender documents inclusive of the physical programme subject to the provision that 50% of the work shall be completed in 50% of the contract period.
- 5 updated estimated cost of the work based upon Rs.53.82 Lakhs schedule of rates for the year when tenders were invited.

6 **Earnest money / Security Deposit** (Para 9(i) & (ii) of detailed Tender Notice)

6.1 E.M.D.

Rs. 0.54 Lakhs

Rs. 0.54 lakhs (Rs. Fifty Four thousand only) Tender Fee & E.M.D. amount shall be paid through "E- payment gateway".

6.2 Initial Security Deposit. Rs. 1.35 Lakhs in the form of D.D. An in the name of Executive Engineer, Urmodi Dam Division, Satara.

6.3 Security Deposit is in the form of Demand Draft it should be drawn on

Nationalized or Scheduled Bank Branch situated in State of Maharashtra.

6.4 Name of Executive Engineer-in-charge of the work in whose name Demand Draft is to be drawn

Executive Engineer, Urmodi Dam Division, Satara

Price variation information (vide Para 31 of special conditions of contract)

Sr. No.	Component	Center / Place	Percentage.
1.	Labour Component (K _L)	Solapur	25%
2.	Cement (K _C)	All India Average	18 %
3.	Steel (K _S)	All India Average	12 %
4.	Other materials (K _M)	All India Average	35 %
5.	POL Component (K _F)	Satara	10 %

7-A Cost of cement for mix variation.

i. If the cement is procured by the contractor Rs. 270/ per bag

ii. Star rate of Cement Rs. 5400/- per MT.

iii. Star rate of steel. Rs. 48470/- per MT.for TMT 500 steel

7-B Royalty charges as per actual & applicable G.R. will be deducted from each R.A. bills

SECTION -II

B-1 TENDER FORM

MEMORANDUM

SCHEDULE - 'A'

SCHEDULE - 'B'

MONTHWISE WORKS PROGRAMME

SCHEDULE SHOWING ITEMS OF WORKS AND APPLICABLE SPECIFICATIONS

B-1 TENDER FORM

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS MAHARASHTRA KRISHNA VALLEY DEVELOPMENT CORPORATION

CIRCLE : Superintending Engineer, Satara Irrigation Project Circle, Satara.

DIVISION: The Executive Engineer, Urmodi Dam Division, Satara

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, estimated rates, scheduled rates and any other documents required in connection with the work shall be signed by the Executive Engineer for the purpose of identification and shall also be open for inspection by contractors at the office of the Executive Engineer, during office hours.

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 corporation 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 authorising him to do so <u>as mentioned in detailed tender notice</u>.
- 2A) i) The contractor shall pay along with the tender the sum as stipulated in Annex 'A' to Section I as and by way of earnest money. The contractor may pay the said amount by forwarding alongwith the tender, through e-payment gateway as indicated in Annex A of Detailed Tender Notice.

- ii) The contractor shall also enclose Demand Draft of sum as stipulated in Annex A Sr. No. 1.4.1 if his offer is less than 99% of the updated estimated cost as stated at Sr. No. 5 of Annex A. The said amount of performance deposit 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 Corporation hereunder or in law, Corporation shall be entitled to forfeit the full amount of the earnest money and the additional Security deposit (performance security) 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 theretor.
- 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 <u>up online</u> 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 <u>online</u> form of schedule-B Part-II. Only one percentage on all the estimated rates shall be named. Tenderers who propose any alternation. 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 documents 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 seperate 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 Annex 'A' to section I Detailed Tender Notice or his duly authorised assistant shall open tender <u>online</u>. The system will generate 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 the 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 Corporation unless it is signed by the Executive Engineer.
- 8. No materials of any type required for the work shall be supplied by the Corporation. All the work shall be executed by the tenderer with contractor's 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.
- All work shall be measured net by standard measure and according to the rules and customs of the Corporation and without reference to any local custom.
- Under no circumstances shall any contractor be entitled to claim enhanced rates for items in this contract.
- 11. The measurements of work shall be recorded by Engineer of the Corporation as per the provisions in the MPW manual & MPW accounts code.
- 12. In view of the difficult position regarding the availability of foreign exchange no foreign exchange would be released by the Corporation for the purchase of plant and machinery required for the execution of the work contracted for.
- 13. The contractor will have to construct shed for storing controlled and valuable materials at work site, having double locking arrangement. The materials will be taken for use in the presence of the Corporation person. No materials will be allowed to be removed from the site of works without prior permission of Engineer-in-charge.
- 14. Successful tenderer will have to produce to the satisfaction of the accepting authority a valid and current license issued in his favour under the provision of Contract Labour (Regulation and Abolition) Act, 1970 before starting work, failing which acceptance of the tender will be liable for withdrawal and earnest money will be forfeited to corporation.

B-1 TENDER FORM

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

1. I/We hereby tender for the execution for the Maharashtra Krishna
Valley Development Corporation (here-in-before and here- in-after
referred to as Corporation) 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 (memorandum showing items
of work to be carried out) and in accordance in all respects with the
specifications, designs, drawings and instructions in writing referred
in in Rule 1 hereof.

* in figure as well as in words.

* Amount to be specified in words and in figures.

..... representing the earnest money is herewith forwarded. Additional security deposit (performance security) in the form of Demand Draft as required in view of offer being lower than 1 % below the updated estimated cost as stated at Sr. No. 5 of Annex 'A' is also enclosed. The amount of earnest money shall not bear interest and shall be liable to be forfeited to the Corporation 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 (performance security) 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 be adjusted towards security the 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.

MEMORANDUM

Construction of Earth work at Palashi Branch Canal General description a. Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project) Estimated cost Rs. 53.82 Lakhs b. Earnest money deposit (EMD) C. Rs. 0.54 lakh Earnest money deposit Amount paid through E-Payment (Net Banking ,NeFT/RTGS) gateway. The Scanned Copy of Proof of deposit such amount should be upload. those contractor whose EMD amount is not reflected their tender document Envelop No.2 will not be opened. Rs. 2.70 Lakhs in the form of D.D. Security Deposit (SD) d. (i) Initial Rs 1.35 Lakhs in the form of D.D of any nationalized / scheduled Bank payable at Satara Demand Draft 2.5% Branch. from nationalized / scheduled Bank in maharashtra state. bills Rs 1.35 Lakhs To be deducted from (ii) 2.5% 5% of amount by which will be deducted from R.A. bills (iii) contract cost increases due to stipulations of Clause 14, 38 and extra Items. As applicable Performance security Deposit (If e. required as specified in Para 9(ii)(b) in the form of Demand Draft. Rs. Lakhs Total = f. 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

Contractor

No. of Corrections

measured by the cost of work done is

	completed	d).				
g.	Time allo	wed for completion of	work	06 Calendar months		
	from date	of written work order.		(including monsoon)		
• •				24 Months from the date of issue of completion certificate by the Engineer in charge.		
signatu	ire of Conti	ractor		Signature of Witness		
Addres	ss			Address		
						
Dated t	the	day of	_20	-		
The ab	ove tender	is hereby accepted by	me for	and on behalf of the Corporation.		
Dated t	the	_ day of	_20	<u> </u>		

Signature of the officer by whom accepted.

SCHEDULE - 'A'

APPLICABLE FOR WORKS COSTING LESS THAN RS. 100 LAKHS.

Schedule showing (approximately) the material to be supplied from the store for the work contracted to be executed and the rates which they are to be charged for this work.

Name of Work: Construction of Earth work at Palashi Branch Canal Km. 1 offtaking @ ch. 16/980 m. of Man Canal (Urmodi Irrigation Project)

Particulars	Quantity	material will	Place of delivery	
		Unit	Rate	
	N	JII		
		\\L		
	Particulars		material will to the co	material will be charged to the contractor Unit Rate

SCHEDULE - 'B'

SCHEDULE - B
Name of work. :- Construction of Earthwork at Palashi Branch
m.of Man Canal

Canal Km. 1 offtaking @ ch.16/980

Quantity	Description of item	Unit	Es	Amount	
			In figures	In words	Rs.
1.00	2	3	4	5	6
2126.36	Earth work Item No:1: Excavation in all kinds of soft strata including boulders upto 0.6 m diameter (0.113 cum) for canal, seating of	cum.	78.55	Rs. Seventy Eight and paise Fifty Five only.	167026
	embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment as directed including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., with all leads and lifts etc., complete				
16184.94	Item No:2: Excavation in hard Strata of all toughness by blasting including boulders above 0.6 m dia.(0.113Cum) minimising damage to side slopes of excavation in water prism area by adopting any one or combination of line drilling / pre-splitting / smooth blasting techniques and placing the excavated rock neatly in approved dump area as directed including cost of all materials, machinery, labour, levelling bed etc., with all leads and lifts etc., complete	cum.	298.30	Rs. Two Hundred Ninty Eight and paise Thirty only.	4827968
210.60	Item No. 03: .Providing cut off trench filling using selected impervious soil from approved borrow areas including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods,levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using power roller etc., with all leads and lifts etc., complete	cum.	158.55	Rs. One Hundred Fifty Eight and paise Fifty Five only.	33391

70.24	Item No. 04: Providing hearting embankment using selected impervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges/ sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor etc., with all leads and lifts etc., complete	cum.	49.35	Rs. Fourty Nine and paise Thirty Five only.	3466
364.81	Item No. 5: Providing hearting embankment using selected impervious soil from approved borrow areas in layers including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using power roller etc., with all leads and lifts etc., complete	cum.	149.00	Rs. One Hundred Forty Nine only.	54357
2009.25	Item No. 6: Providing casing embankment using selected pervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading material in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer todensity control of not less than 95 percent or as stipulated using vibratory compactor etc., with all leads and lifts etc., complete	cum.	61.85	Rs. Sixty One and paise Eighty Five only.	124272

143.17	Item No: 7:, Providing casing embankment using selected pervious material from approved borrow areas in layers including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor etc.with all leads and lifts etc., complete	cum.	126.35	Rs. One Hundred Twenty Six and paise Thirty Five only.	18090
718.58	Item No. 8 :Royalty charges (Soil / Murum)	cum.	141.34	Rs. One Hundred Forty One and paise Thirty Four only.	101564
	Item No. 9: Insurence Charges 1 % of total Amount				52286
				Total	5382420
				Say	5382420

Sub-Divisional Officer Divisional Account Officer Executive Engineer

Urmodi Canal Sub Division No.1 Urmodi Dam Division,
Rahimatpur, Satara

- 1. Uantity wise physical and financial monthly programme for the principal items costing 80% of the work cost shall be given and for the balance items costing 20% of the work cost financial work programme be given
- 2. The contractor shall submit his work requirement of funds within 15 days of signing of contract.
- **3.** Bidder quote their rate exclusive of G.S.T.i.e. on Rs 1382788/- (BOQ) G.S.T. will be paid over accepted tender at prevailiry rate

WORK PROGRAMME

Sr	Item in brief	Unit	Estimated	ated Estimate d Amt. in						
No	item in brief	Offic	Qty	Lakhs	1	2	3	4	5	6
1	Excavation	cum	18311		3051	3051	3051	3051	3051	3056
				49.95	8.325	8.325	8.325	8.325	8.325	8.325
2	Embankment	cum	2798		466	466	466	466	466	468
				2.34	0.39	0.39	0.39	0.39	0.39	0.39
	Other items			1.53	0.255	0.255	0.255	0.255	0.255	0.255
	Grand Total			53.82						

Item of work	Applicable Specification.
Item No:1: Excavation in all kinds of soft strata including boulders upto 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment as directed including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., with all leads and lifts etc., complete	Section No.1 General Specification. Section No.2
Item No:2: Excavation in hard Strata of all toughness by blasting including boulders above 0.6 m dia.(0.113Cum) minimising damage to side slopes of excavation in water prism area by adopting any one or combination of line drilling / pre-splitting / smooth blasting techniques and placing the excavated rock neatly in approved dump area as directed including cost of all materials, machinery, labour, levelling bed etc., with all leads and lifts etc., complete	Section No.1 General Specification. Section No.2 Excavation
Item No. 03: .Providing cut off trench filling using selected impervious soil from approved borrow areas including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods,levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using power roller etc., with all leads and lifts etc., complete	Work is carried out as per instruction of Engineer incharge
Item No. 04: Providing hearting embankment using selected impervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges/ sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor etc., with all leads and lifts etc., complete	Section No.1 General Specification. Section No.4 Cement concrete & Govt.of Maharashtra PWD Std.Sp.No.27,29,38 &50
Item No. 5: Providing hearting embankment using selected impervious soil from approved borrow areas in layers including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using power roller etc., with all leads and lifts etc., complete	Section No.1 General Specification. Section No.6
Item No. 6: Providing casing embankment using selected pervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading material in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer todensity control of not less than 95 percent or as stipulated using vibratory compactor etc., with all leads and lifts etc., complete	Section No.1 General Specification. Section No.5

Item No: 7:, Providing casing embankment using selected pervious material from approved borrow areas in layers including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor etc.with all leads and lifts etc., complete	Section No.1 General Specification. Section No.2
Item No. 8 :Royalty charges (Soil / Murum)	Section No.1 General Specification. Section No.16
Item No. 9: Insurence Charges 1 % of total Amount	Section No.1 General Specification. & Section No 17 Of Insurance Work

SECTION-III APPENDIX / FORMS

APPENDIX –' A' DETAILS OF TECHNICAL PERSONNEL WITH THE CONTRACTOR

Vide para 7(v) of Detailed Tender Notice

Sr.	description	Name	Length	Qualificatio	Processional	remark
No	, , ,		of\	n	experience	
			service		and details of	
			in firm		work carried	
					out	
1	2	3	4	5	6	7
1	Project		\			
	manager		,			
2	Works					
	manager					
	(civil senior					
	Engineer)					
3	Engineers					
	(civil)					
4	supervisors					

Note: if there is a no technical personnels with your firm is give details how can you firm manage the same, in remark column.

Contractor No. of Correction

APPENDIX - B'

DETAILS OF PLANT AND MACHINERY IMMIDIATELY AVAILABLE WITH THE TENDERER FOR USE ON THIS WORK

Vide para 7(Vi) of Detailed Tender Notice

Sr.	Name of	No. of	Kind		capacit	Age &	Present	remark
No.	equipment	units	and	١	у	condition	location	
			make	\setminus				
1	2	3	4		5	6	7	8
				,				

Note: if no machinery is available with the film is please give details how you firm will manage the same.

APPENDIX -'C'

DETAILS OF WORKS OF SIMILAR TYPE AND MAGNITUDE CARRIED OUT BY THE TENDERER

Vide para 7(vii) of Detailed Tender Notice

Sr.	name of	place	Tendered	Time in	Date of	Principal
No	work		cost Rs.	months	completion	teatures
			in lakhs	which		
				completed		
1	2	3	4	5	6	7

APPENDIX - 'D'

DETAILS OF OTHER WORKS OF TENDERED FOR AND INHAND ON THE DATE OF SUBMISSION OF TENDER

Vide para 7(viii) of Detailed Tender Notice

_					. \			1.6	
Sr.	name of	place		Works in hand		Work tendered for			remark
No.	work								
			Tendered	Cost of	Anticipated	Estimated	Date by	Stipulated	
			cost Rs.	remaining	date of ∖	cost in	which	date or	
			in lakhs	work in	completion	Rs. lakhs	decision	period of	
				Rs.lakhs	\		is	completion	
					,	\	expected		
1	2	3	4	5	6	7	8	9	10
						\			
						\			
	1	l				 			

APPENDIX – 'E' DETAILS OF PLANT AND MACHINERY PROPOSED TO BE USED FOR WORK BUT NOT IMMIDIATELY

Vide para 7(Vi) of Detailed Tender Notice

				. \					
Sr. No.	name of	No of	Kind or	capacity	If already owned		If to be	remarks	
	equipment	units	make					purchased	
				\				(when	
				\				month	
								and year)	
				\					
1	2	3	4	5	6	7	8	9	10

APPENDIX 'F'

(vide para 35 of Special Conditions of Contract)

DECLARATION OF THE CONTRACTOR

I / We	1.
I / We hereby declare that I / We have made myself / ourselves thoroughly conversant with the local conditions regarding all materials and labour or which I /We have bidded my / our rates for this work. The specifications of this work have been carefully studied and understood by me/us before submitting this tender.	2.
Signature of the Contractor	

APPENDIX 'G'

(vide para 9 (ii) of Detailed Tender Notice)

MODEL FORM OF BANK GUARANTEE BOND

1.	This deed of Guarantee is made on the
	having his head office at
	the demand under the terms and conditions of Agreement dated made between and
	for (hereinafter
	called 'the Agreement') of additional security deposit for the due fulfilment by the said Contractor of the terms and conditions contained in the said Agreement on
	production of a Bank Guarantee for Rs (Rs only).
	(hereinafter referred to as 'the Bank') at the request of
	as Corporation, an amount not exceeding Rs against any loss or damage caused to or suffered by the Corporation by reasons of any
	breach by the said Contractor of any of the terms or conditions contained in the said Agreement.
2.	We (indicate the name of bank) do hereby
	undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Corporation stating that the amount
	claimed is due by way of loss or damage caused to or would be caused to or
	suffered by the Corporation by reason of breach by the said Contractor(s) of any of the terms of 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 under this guarantee shall be restricted to an amount exceeding Rs
3.	We undertake to pay to the Corporation any money so demanded notwithstanding any dispute or dispute raised by the Contractor(s) / Supplier(s) in
	any suit or proceeding pending before any court or tribunal relating thereto, our
	liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment

	making such payment.
4.	We,
5.	We,
6.	This guarantee will not be discharged due to the change in the constitution of the Bank or the change in the constitution of the Corporation/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 Corporation in writing.
Dated	theday of

No. of Correction

Contractor

APPENDIX 'H' PROFESSIONAL TAX CLEARANCE CERTIFICATE

(address), State Tax	to certify that M/sis a re on Professions, Traders, Callings a gistration Certificate Na w.e.f.	gistered denoted in the contract of the contra	ealer under the Maharashtra yments Act No.XVI of 1975,
	ealer has paid all tax dues upto 31st act. The dealer has paid the prof below.		**
Sr. No.	Name of the Employee		Designation
	o Professional Tax dues outstanding s valid for ONE year from the date of i	1 -	ne dealer under the act. This
Place:			
Date:			
Signature			
Profession	al Tax Officer		

APPENDIX 'J' AGREEMENT

	of agreement executed on this the of						
Dam	Dam Division, Satara (hereinafter referred to as MKVDC) of the one part and Shri(Name and address of the tenderer) (hereinafter referred						
to as '	ne bounden') of the other part.						
bound	as in response to the notification No						
earnes	as the bounden has also deposited with MKVDC a sum of Rs						
Now th	ese presents witness and it is mutually agreed as follows:						
1.	In case the tender submitted by the bounden is accepted by the MKVDC and the contract for is awarded to the bounden, the bounden shall within days of acceptance of his tender execute an agreement with the MKVDC incorporating all the terms and conditions under which the MKVDC accepts his tender.						
2.	In case the bounden fails to execute the agreement as aforesaid incorporating terms and conditions, governing the contract, the MKVDC shall have power and authority to recover from the bounden any loss or any damage caused to the MKVDC by such breach, as may be determined by the MKVDC by appropriating the earnest money deposited by the bounden and if the earnest money is found to be inadequate the deficit amount may be recovered from the bounden and his properties, movable and immovable, in the manner hereafter contained.						
3.	All sums found due to the MKVDC under or by the virtue of this agreement shall be recoverable from the bounden and his properties, movable and immovable, under the provisions of the Maharashtra Land Revenue Code for the time being in force as though such sums are arrears of land revenue and in such other manner as the MKVDC may deem fit.						

In witness whereof Shri.	
(Name and designation) for and of behalf of the MKVDC and Sh the bounden have hereunto set the	ri.
hands the days and year shown against their respective signature.	
Signed by Shri date	
In the presence of witness	
1 2	
Signed by Shri date	
in the presence of witness.	
1	

APPENDIX – K

UNDERTAKING

Name of Work:

1.	I/We	
	agree to accept the payments of the work d made available by Maharashtra Krishna Valley D	
	\	·
2.	So	also,
	I/Weagree to complete the work on my own cost and	hereby
	work done for minimum period of three years. I/	···
	account of the pending liabilities with Maharash	•
	Corporation, Pune.	
3.	I/We	
	also agree that we will not claim any price esc	alation for the work done beyond
	the stipulated time limit mentioned in the tender	i.e months from the date of issue
	of work order.	
4.	I/We	
	agree that this undertaking superseeds the d	
	clause No. 17 of Special Conditions of Contract	
	payment of bills, I/We also agree that this un partial of original tender.	dertaking shall lotti a part and
5.	•	
5.	I/We agree that the lead and lift charges of constructions.	
	the agreement and is accepted and no addition	·
	account.	
	Date :	Signature of Contractor
	Place :	

APPENDIX- K (a) UNDERTAKING

I have seen the drawings on web site. I have submitted the tender considering	١g
above drawings as part of it. If my tender is accepted, I will sign the drawing	js
before receiving work order.	

Date :	Signature of Contractor
Place :	
	(Name of Contractor)

APPENDIX – L

FORMAT FOR MAINTAINING RECORD OF IDLE STAFF, LABOUR & MACHINERY

\						
То,						
The Executive	Engineer,					
		•••				
Subject : The	report of idle labou	ır, staff & macl	ninery on the w	vork.		
Sir,						
Due to following	ng reasons –					
*	Shortage of Funds	<u>De</u>	<u>leted</u>			
*	Land Acquisition					
*	Resettlement & R	ehabilitation is	sue			
	ne appropriate reas					
Following labo	our, staff & machin	ery is idle on the	ne work for per	riod To		
Date	I) Name of Idle	II) Details of idle machinery (working)				
	staff & Labour	Type & Reg. No.	Make & Model	capacity	Nos.	
Date Representativ	e	Name	& Signa	ture of C	Contractor /	
ACKNOWLED The report of received.	f idle machinery,	staff & labou	ır for period	pf	is	
Seal						
					`	

No. of Correction

Contractor

FORM - 1 FORM FOR RUNNING AND FINAL ACCOUNT BILL (As referred in Clause 10(A))

FORM 47 (P.W. 410) Running Account Bill

	(Referred in p	aragra	ph 10.2.	11 of M.P.W.A. Code)
		Divisio	n:	
		Sub-D	ivision:	
		Cash E	Book Vou	cher No.:
		for		
		Name	of Contra	actor or Supplier:
		Name	of Work:-	
		Serial	No. of this	s bill:
		No. &	Date of p	revious bill for this work:
		Refere	ence of ag	reement:
		Accep	ted by:	
		Date o	of written o	order to commence work:
		Date o	of complet	tion as stipulated in the contract:
		Extens	sion grant	ed upto:
Transactio	ns of Road side materia	als D	Date of ac	tual completion of work:
entered in	the statement or receip	ts, C	Contractor	r's Ledge Folio No.:
issues and	balances of road meta	l.		
Clerk	Accounta	ınt		
For use in	Divisional Office	F	or use in	Accountant General's Office
Checked		А	udited	Reviewed
A/c. Clerk	Divisional Accountant	Α	uditor	Superintendent / Gazetted Officer

Part I - Account of work executed

Remarks (with reasons for	adjusting payments shown in Column (1))	10		Figure (F) in words
Payment on the basis of actual measurements	Since previous bill	6		
Payment on th measu	Up-to-date	8		
Unit		7		previous Bill (B)
Rate		9		Total Value of work done to date (A) Deduct-Value of work shown on previous Bill Net value of work since previous bill (B)
Items of work (Grouped under Sub- heads or Sub-works of estimate)		5		Figure (D) in words Total Value of v Deduct-Value o Net value of wc
Quantity Item executed up-	measurement book	4	Total	Figure
	Total up- to-date	3	(B)	
Advance payments for work done but not yet measured	Since previous bill	2	(D)	
Advance done bu	Total as per previous bill	1		

No. of Correction

Contractor

Part II - Account of Secured Advances allowed on the security of materials brought to site

Reason for non-clearance of advance when outstanding for more than three months	11	
Reference to Divisional Officer's written orders authorising the advance	10	
Refe Division writth autho ac	6	
Up-to-date amount of advance	80	
Reduced rate at which advance is made	7	
Unit	9	
Description of Materials	5	
Full rate as assessed by the divisional officer	4	
Quantity outstanding including quantity brought to site since previous bill	ဇ	
Deduct quantity utilized in work measured since previous bill	2	
Quantity outstandi ng from previous bill	_	

No. of Correction

Executive Engineer

Contractor

Part III - Certificate and Signature

1. Entries in column (4) to (9) of Part I are based on measurements recorded by (Name and Designation)	Total amount outstanding as per this bill(c)	Figure (E) in words.
on in M. book No Pages and checked % by the Sub-Divisional Officer on	Deduct-amount outstanding as per entry (c) of previous bill.	
	Net amount since previous bill (E)	

Certified (i) that in addition to and quite apart from the quantities of work actually executed as shown in column 4 of part I, some work has been actually done in connection with several items and the value of such work (after deducting therefrom the proportionate amount of secured advance, if any, ultimately recoverable on account of the quantities of the materials used therein) is in no case less than the advance payment as per column 3 of part I, made or proposed to be made for the convenience of the contractor, in anticipation of and subject to the results of detailed measurements, which will be made as soon as possible.

κi

က

Certified (i) that the plus quantities of materials shown in column 3 of Part II, above have been actually brought by the contractor to the site of the work and the contractor has not previously received any advance on their security. (ii) that these materials are of an imperishable nature and are all required by the contractor for use in the work in connection with items for which rates for finished work have been agreed upon and (iii) that a formal agreement in form 50 signed and executed by the contractor in accordance with paragraph 10.2.19 of the M.P.W.A. Code is recorded in the Divisional Office.

Dated Signature of officer authorising 'Dated Signature of officer preparing the bill Dated Signature of the Contractor

* This signature is necessary only when the Officer preparing the bill is not the Officer authorising payment.

No. of Correction Executive Engineer

Contractor

Part IV - Memorandum of Payments

						Rs.	
1.	Total va	lue of	work actually measured, as per account Part-I, Column 8, Entry	/ (A)			
2. Total 'up-to-date' Advane payments for work not yet measured as per Part-I, Column 3, Entry (B)							
3. Total 'up-to-date' Secured advance on security of materials as per Part-II[Column 8[Entry (C)							
4. Total (Items 1+2+3)							
	Figures for 5. Deduct-amount withheld: Rs. Ps.						
	work Ab	stract					
	Rs.	Ps.	a) From previous bill as per Running Account Bill		75		
			b) From this bill		}		
			6. Balance i.e. 'up-to-date' Payments (Item 4-5)	(K)			
			7. Total amount of payments already made as per entry				
			(K) of last Running Account Bill No of				
			forwarded with accounts for.				
			8 Payments now to be made, as detailed Rs.	Rs.	Ps.		
			below: Ps.				
			a) By recovery of amounts creditable				
			to other works or heads of account				
			Total 5(b) + 8(a)(G)				
			b) By recovery of amounts creditable		8		
			to ther works or heads of account				
			C) by cheque*				
			Total 8(b) + (c)(H)				
Da	y Rs.*(l .)	hv	cheque / cas	h	
			·		-	11.	
* H	ere speci	fy the	net amount payable (Item 8(C) Detailed initials of	of the disbu	ırsing officer		
Re	ceivedRs	.()			as	
pe	above M	lemora	andum on account of this work.				
Da	ted			г			
					01		
Stamp							
				L			
Witness Full Signature of the Contractor							
Pa	id hv me	vide o	heque No Date				
. u	o _j 1110,		(Detailed initials of the pers		/ making the n	avments)	
			(Botalioa lilitalio di tilo poro	J., adiadily		~,oii.o)	

Contractor

No. of Correction

FORM - 3 FORM FOR MEASUREMENT SHEET (As referred in Clause 10(A))

Name of Work	:
Place of Work	:
Name of Contractor and Agreement	No.:
Date of Measurements (The above four lines will be repeate	: ed before taking measurements of every work)

Description	No.	Length	Breadth	Depth	Summary

SECTION - IV

CONDITIONS OF CONTRACT

CONDITIONS OF CONTRACT

CLAUSE 1 -

(A) Security Deposit:-

Security Deposit PWD. Resolution No.CAT/1087/CR-94/Bldg.2, dt.14-6-89

The person / persons whose Tender may be accepted (hereinafter called the contractor, which expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators, and assigns) shall (A) within 10 days (which may be extended by the Superintending Engineer concerned upto 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 the form of Demand Draft or Irrevocable Bank Guarantee of Nationalised / Scheduled Bank situated in the State of Maharashtra endorsed in favour of the Executive Engineer a sum sufficient which will make up the initial security deposit specified in the Tender Form at para (e)(i) of memorandum. It shall be lawful for the Corporation at the time of making any payment to the contractor for work done under contract to make up the full amount of Security Deposit as specified in memorandum at para (e)(ii) by deducting a sufficient sum at the rates specified at (g) of memorandum from every such payment as last aforesaid until the full amount of Security Deposit is made up. All compensation or other sums of money payable by the contractor to Corporation under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due or may become due by Corporation to the contractor under any other contract or transaction of any nature on any account whatsoever, and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall, within ten days thereafter, make good in Demand Draft or Government securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to, when paid in Demand Draft may, at the cost of the depositor, be converted, into interest bearing securities from any Nationalised or Scheduled bank's branch situated in the State of Maharashtra provided that the depositor has expressly desired this in writing. The security deposit will not be accepted in form of insurance company's bonds as per Government's order contained CCM/PWD/CAT-4250-S Dated 27.12.1956.

Contractor

No. of Correction

(B) Performance Security Deposit :-

(B) Performance Security Deposit

Non submission of Performance Security Deposit will result into forfeiture of the E.M.D. and his tender will be rejected. It will be released within three months after satisfactory completion of work as certified by the Executive Engineer

(C) Security deposit on account of additional work as per provision of clause 14, 38 and extra items:-

During the course of execution of work if the amount of work is increased as per the provision of <u>clause 14, 38 and due to extra items</u> then additional security deposit will be deducted from the bills as provided in memorandum at d(iii).

CLAUSE 2 -

Compensation for delay

The time allowed for caring out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded with, with all due diligence (time being deemed to be 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 amount of the estimated cost of the whole work as shown by tenderer for every day that the work remains uncommenced or unfinished after the proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete.

The programme for completion of work is attached herewith. The contractor is supposed to carryout the work and keep the progress as per programme attached herewith. The contractor should complete the work as per phase period given below.

1/4 th of the work in	1/4 th of the time
1/2 of the work in	1/2 of the time
3/4 th of the work in	3/4 th of the time

Full work to be completed in Full time limit (including monsoon).

In the event of the contractor failing to comply with this conditions he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Superintending Engineer (whose decision in writing shall be final) may decide of the said estimated cost of the whole work for every day that the due quantity of work remains

Contractor

No. of Correction

incomplete provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10 per cent of the estimated cost of the work as shown in the tender. Superintending Engineer should be the final authority in this respect, irrespective of the fact that the tender is accepted by Chief Engineer / Additional Chief Engineer / Superintending Engineer / Executive Engineer or Assistant Executive Engineer / Deputy Engineer.

CLAUSE 3 -

Action when whole of security deposit is forfeited.

In any case in which under any clause of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of 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 Governor of Maharashtra, shall have power to adopt any of the following courses, as he may deem best suited to the interest of Government.

- (a) To rescind the contract (for which rescission notice in writing to the contractor under the head of Executive Engineer shall be conclusive evidence) and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of Government.
- (b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.
- (c) To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory. staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates

as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor,

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

CLAUSE 4 -

If the progress of any particular portion of the work is unsatisfactory, the Executive Engineer shall notwithstanding that the general progress of the work is in accordance with the conditions <u>mentioned in clause 2</u>, be

Action when the progress of any particular portion of the work is contractor.

entitled to take action as under after giving the contractor 10 days' notice in writing.

The Engineer-in-charge 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 that 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 executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor (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 Government or Corporation under the contract 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 Corporation 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 by 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.

CLAUSE 5 -

In any case in which any of the powers conferred upon the Executive Engineer by <u>clause 3 and 4 hereof</u> shall have become exercisable and the same shall not have been exercised the non-exercise thereof shall not constitute a waving of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of

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

Contractor

No. of Correction

Power to take possession of or require removal of or sale contractor's plant default by the contractor for which under any clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and additional security deposit and the liability of the contractor for past and future compensation shall remain unaffected.

In the event of the Executive Engineer taking action under clause - 3, he may, if he so desires, take possession of all / any tools, plant, materials and stores in or upon the work 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, plant, materials or stores from the premises within a time to be specified in such notice and in the event of the contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractor's expense or sale them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the Executive Engineer as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

CLAUSE 6-

Extension of time

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

CLAUSE 7 -

Completion Certificate

On the completion of the work within a period of 30 days the contractor shall be furnished with a certificate by the Executive Engineer of such completion; but no such certificate shall be given or shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall have been executed all

Contractor

No. of Correction

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 may have had possession for the purpose of executing the work or until the work have been measured by the Engineer-in-charge or where the measurement have been taken by his subordinates until they have received approval of the Engineer-in-charge, the said measurements being binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus material and rubbish and cleaning of dirt on or before the date fixed for the completion of the work the Engineerin-charge may at the expense of the contractor, remove such scaffolding surplus material and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forthwith pay such amount of all expenses so incurred but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

CLAUSE 8 –

Payment on intermediate certificate to be regarded as advances.

No payment shall be made for any work estimated to cost less than rupees ten 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 ten thousand the contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the work then approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actually done and completed and shall not preclude the Engineer-in-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or reerected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the occurring of any claim nor shall it conclude, determine or effect in any other way the powers of the Engineer-in-charge as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for the completion of the work. otherwise in-charge's certificate of the the Engineer

measurements and of the total amount payable for the work shall be final and binding on all parties.

CLAUSE 9 -

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

The rates for several items of work estimated to cost more than Rs.1,000/- agreed to within, shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specifications. In case where the items of work are not accepted as so completed, the Engineer-in-charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on Running Account bill.

CLAUSE 10-

Bill to be submitted monthly.

(A) Before starting of the work all the initial ground levels / foundation levels shall be taken by the authorised Engineer of the Corporation in presence of the contractor or his authorised engineer and same shall be signed by the contractor in token of his acceptance. A computerised L-Section, Cross Sections and Plan showing levels should be prepared by contractor and submitted to Executive Engineer based on above measurements without which work will not be started.

Contractor shall employ a qualified Engineer as his authorised representative to be present while taking measurements by authorised Engineer of the Corporation.

Running Account bill shall be submitted by the contractor in each month on or before 10th day for all work executed in the previous month on the basis of measurements taken by him or his authorised engineer.

The format of <u>Running Account Bills and measurement sheet is as</u> annexed to this documents.

The measurements for payments of Running Account Bills shall be taken by the authorised Engineer of the Corporation in the presence of the contractor or his authorised engineer and shall be recorded in Measurement Book of the Corporation within 10 days after submission of bill by contractor. Based on the above measurements by the contractor shall have to submit his Running Account Bills in the bill format given by the Corporation.

If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge with a prior notice of 7 days to the contractor may depute a subordinate to measure the said work in presence of the contractor or his duly authorised agent whose counter signature to / on the measurements shall be sufficient warrant and

Contractor

No. of Correction

Engineer-in-charge may prepare a bill from such measurements which shall be binding on the contractor in all respects.

If the contractor or his representative doesn't remain present on the date specified for taking measurements as specified above, then the Engineer-in-charge shall order that the measurements be taken in absence on any day after 10 days and in this eventuality the bill prepared by the Executive Engineer shall be binding on the contractor in all respects.

As far as possible the payment of the bills will be made monthly to the extent of availability of funds for the work under this contract.

(B) The Running and final bill shall be submitted by the contractor within one month of issue of the completion certificate <u>pursuant to Clause 7 of this contract</u>. The Final bill shall be paid within 6 months of initial submission subject to the extent of availability of funds for the work under this contract. The procedure enumerated above for the Running account bills shall be applicable to the Running and final bill also.

CLAUSE 11 -

Bill to be on printed forms.

The contractor shall submit all bills on the printed forms in the 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. In the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at the rates hereinafter provided for such work.

CLAUSE 12 -

Stores supplied by Corporation.

If the specification or estimate of the work provides for the use of any special description of material to be supplied from the store of the Corporation or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge (Such material and stores and the prices to be charged therefore as hereinafter mentioned being so far as practicable for a convenience of the contractor but not so as any way to control the me Deleted of this contract specified in the schedule or memorandum hereto annexed) the contractor shall be supplied with such materials and stokes as may be required from time to time to be used by him for the pulpose of the contract only, and value of the full quantity of the materials and stores so supplied shall be set off or deducted from any sums then due, or thereafter to become due to the contractor under the contract, or otherwise or from the security deposit or the proceeds of sale thereof if the security deposit is held in Corporation Securities, the same or sufficient portion thereof shall in

Contractor

No. of Correction

that case be sold for the purpose. All materials supplied to the contractor shall remain the absolute property of Corporation and shall on no account be removed from the site of the work, and shall at all times be open for inspection by the Engineer-in-charge. Any such materials unused and in perfectly good condition at the time of completion or termination of the contract shall be returned to the Corporation store if the Engineer-in-charge so requires by a notice in writing given under his hand but the contractor shall not be entitled to return any such materials except with consent of the Engineer-in-charge and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for any wastage in or damage to any such materials.

Stores supplied by Corporation.

CLAUSE 12 -

All stores of controlled materials supplied to the contractor by Corporation Deleted pt by the contractor under lock and key and will be accessible to inspection by Executive Engineer or his authorised agent at all the times.

CLAUSE 13 -

Works to be executed in accordance with specifications, drawings, orders etc. The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specifications. The contractor shall also confirm exactly fully and faithfully to the designs, drawing and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of the work during office hours. The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost. Further copies of the contract drawings and working drawings if required by him shall be supplied at the rate of Rs. 3,000/- per set of contract drawings and Rs. 200/- per working drawing except where otherwise specified.

Contractor

No. of Correction

CLAUSE 14 -

Alterations in specifications and designs not to invalidate contracts.

The Engineer-in-charge shall have power to make any alteration in or additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by Engineer-in-charge and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates decided as per procedure mentioned in Clause 38(3).

Extensions of time consequence of additions or alterations.

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

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

CLAUSE 15 -

No claim to any payment or compensation for alteration in or restriction of work. (1) If at any time after the execution of the contract documents the Engineer shall for any reason what-so-ever (other than default on the part of the contractor for which the Corporation is entitled to rescind the contract) desires that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all, he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the

Contractor

No. of Correction

work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision' of the Engineer as to the stage at which the work or any part of it, could be or could have been safety stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

- (2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 days' prior notice in writing to the Engineer, within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineer to record the final measurement of the work already done and to pay final bill. Upon giving such notice the contractor shall be deemed to have discharged from his obligations to complete the remaining unexecuted work under the contract. On receipt of such notice the Engineer shall proceed to complete the measurements 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.
- (3) Where the Engineer-in-charge is required 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, salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect or any suspension whatsoever occasioned by unsatisfactory work or any other

default on his part. The decision of the Engineer in this regard shall be final and conclusive against the contractor.

- (4) In the event of -
- (i) Any total stoppage of work on notice from Engineer under sub-clause (1) in that behalf.

OR

No claim to compensation on account of loss due to delay in supply of material by Govt.

(ii) Withdrawal by the contractor from the contractual obligations to complete the remaining unexecuted work <u>under sub-clause (2) on</u> 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 alternation, omission substitution in the specifications, drawings, designs or instructions <u>under clause 14(1)</u> where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25% of the rates for the item specified in the tender is more than Rs. 5000/-.

It shall be open to the contractor, within 90 days from the service of (i) the notice of stoppage of work or (ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of work or (iii) notice <u>under clause 14 (1)</u> resulting in such curtailment to produce to the Engineer satisfactory documentary evidence that he had purchased or agreed to purchase material for use in the contracted work, before receipt by him of the notice of stoppage, suspension or curtailment and require the Government to take over on payment such material at the rate determined by the Engineer, provided, however, such rates shall in no case exceed the rates at which the same was acquired by the contractor. The Government shall thereafter take over the material so offered, provided the quantities offered are not in excess of the requirements of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the Engineer.

CLAUSE 15 A -

configuration compensation on account of loss due to delay in supply of materials by

Corporation.

No. of Correction

The contractor shall not be entitled to claim any compensation from Corporation for the loss suffered by him on account of delay by Corporation in the supply of materials where such delay is caused by

- (i) Difficulties relating to the supply of railway wagons.
- (ii) Force majeure.
- (iii) Act of God

Deleted

(iv) Act of enemies of the State or any other reasonable cause beyond the control of Corporation.

In the case of such delay in the supply of materials, Corporation shall grant such extension of time for the completion of the work as shall appear to the Executive Engineer to be reasonable in accordance with the circumstances of the case. The decision of the Executive Engineer as to the extension of time shall be accepted as final by the contractor and will be governed by the provision of Clause 6.

CLAUSE 16 -

Time limit for unforeseen claims.

Under no circumstances whatever shall the contractor be entitled to any compensation from Corporation on any account unless the contractor shall have submitted a claim in writing to the Engineer-in-charge within one month of the case of such claim occurring subject to provision in Clauses 30 and 40 with all authentic documentary evidences in support of the claim.

CLAUSE 17 -

Action and compensation payable in case of bad work.

If at any time before the security deposit or any part thereof is refunded to the contractor it shall appear to the Engineer-in-charge or his subordinates 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 any 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 notwithstanding the fact that the work, materials or articles complained of may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove or reconstruct the work so specified in whole or in part, as the case may require or if so required, shall remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost

Contractor

No. of Correction

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 percent on the amount of the tender for every day not exceeding 10 days, during which the failure so continues and in the case of any such failure the Engineer-in-charge may rectify or remove and re-execute the work or remove, and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the contractor. Should the Engineer-in-charge consider that any such inferior work or materials as described above may be accepted or made use of it shall be within his discretion to accept the same at such reduced rates as he may fix therefor, subject to Clause -9.

Work to be open to inspection.

Contractor or responsible agent to be present.

Notice to be given before work is covered up.

CLAUSE 18 -

All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his subordinates and the contractor shall at all times during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate to visit the work shall have been given to the contractor either himself be present to receive orders and instructions or have responsible agent duly 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 should provide for safe arrangement for inspection of work at his cost.

CLAUSE 19 -

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

Contractor

No. of Correction

CLAUSE 20 -

Contractor liable for damage done and for imperfections.

If during the period 24 months specified at (i) in memorandum from the date of completion as certified by the Engineer-in-charge pursuant to Clause-7 of the contract after commissioning the work, whichever is earlier in the opinion of the Engineer-in-charge, 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 & setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the Executive Engineer. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefor in the said notice and / or to complete the same as aforesaid as required by the said notice, the Executive Engineer get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of the contractor. The contractor shall forthwith on demand pay to the Govt. / Corporation the amount of such costs, charges and expenses sustained or incurred by the Government / Corporation of which the certificate of the Executive Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and on the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the Government/ Corporation, the same may be recovered from the contractor as arrears of land revenue. The Government / Corporation shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the Government / Corporation to the contractor either in respect of the said work or any other work whatsoever or from the amount of security deposit retained by Government / Corporation.

CLAUSE 21

Contractor to supply plant, ladders, scaffolding etc. The contractor shall supply at his own cost all material (except such special materials, if any as may, in accordance with the contract be supplied from the Corporation stores) plant, tools, appliances, implements, ladders, carriage, tackle, scaffolding and temporary work requisite for the proper execution of the work, whether in the original, altered or substituted from, and whether included in the specification or other documents forming part of the contract or referred to in these

Contractor

No. of Correction

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 therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the materials, failing which the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses 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 cost which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the contractor be paid for compromising any claim by any such person. The contractor shall indemnify the Government / Corporation against all such claims.

CLAUSE 21 (A) –

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

- (a) Suitable scaffolds shall be provided for workmen for all works that can not be safely done from a ladder or by other means.
- (b) A scaffold shall not be constructed, taken down or substantially altered except -
 - (i) under the supervision of a competent and responsible person and
 - (ii) as far as possible by competent workers possessing adequate experience in this kind of work.
- (c) All scaffolds and appliances connected therewith and ladders shall
 - (i) be of sound material,
 - (ii) be of adequate strength having regard to the loads and strains to which they will be subjected, and
 - (iii) be maintained in proper condition.

- (d) Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.
- (e) Scaffolds shall not be overloaded and so far as practicable the load shall be evenly distributed.
- (f) Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffold.
- (g) Scaffold shall be periodically inspected by the competent person.
- (h) Before allowing a scaffold to be used by his workmen the contractor shall, whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations herein specified.
- (i) Working platform, gangways, stairways shall,
 - i) be so constructed that no part thereof can sag unduly or unequally,
 - ii) be so constructed and maintained having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping, and
 - iii) be kept free from any unnecessary obstruction.
- (j) In the case of working platform, gangways, working places and stairways at the height exceeding 3 meters.
 - every working platform and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety.
 - ii) every working platform and gangway shall have adequate width and
 - iii) every working platform, gangway, working places and stairways shall be suitably fenced.

- (k) Every opening in the floor of a building or in a working platform shall except for the time and to the extent required to allow the access of persons or the transport or shifting of materials be provided with suitable means to prevent the fall of persons or materials.
- (I) When persons are employed on roof where there is a danger of falling from a height exceeding 3 meters suitable precautions shall be taken to prevent the fall of persons or materials.
- (m) Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffold or other working places.
- (n) Safe means of access shall be provided to all working platforms and other working places.
- (o) The contractor(s) will have to make payments to the labourers as per Minimum Wages Act.

CLAUSE 21 B -

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

- (a) Hoisting machine and tackle, including their attachments, anchorages and support shall
- i) be of good mechanical construction, sound material and adequate strength and free from patent defect, and
- ii) be kept in good repair and in good working order.
- (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.
- (c) Hoisting machine and tackle shall be examined and adequately tested after erection on a site and before use and be reexamined in position at intervals to be prescribed by the Corporation.

Contractor

- (d) Every chain, ring, hook, shackle swivel and pulley block used in hoisting or lowering materials or as a means of suspensions shall be periodically examined.
- (e) Every crane driver or hoisting appliance operator shall be properly qualified.
- (f) No person who is below the age of 18 years shall be in control of any hoisting machine, including any scaffold winch or give signals to the operator.
- (g) In the case of every hoisting machine and of every chain, ring, hook, shackle, swivel pulley block used in hoisting or lowering or as 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 case of hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated.
- (j) No part of any hoisting machine or of any gear referred to in regulation (g) above shall be loaded beyond the safe working load except for the purpose of testing.
- (k) Motors, gearing transmissions, electric wiring and other dangerous part of hoisting appliances shall be provided with efficient safeguards.
- (I) Hoisting appliances shall be provided with such means as will reduce to a minimum risk of the accidental descent of the load.
- (m) Adequate precaution shall be taken to reduce to a minimum risk of any part of a suspended load becoming accidentally displaced.

CLAUSE 22 -

Measures for prevention of fire.

The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the competent authority under the law. When such permit is given, and also in all cases when destroying

Contractor

No. of Correction

out or dug up trees, brushwood, grass etc. by fire, the contractor shall take the necessary measure to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make his won arrangement for drinking water for the labour employed by him and provide sanitary and other arrangement.

CLAUSE 23 -

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

Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of Corporation property including any damage caused by the spreading of fire mentioned in Clause 22 shall be estimated by the Engineer-in-charge or such other officer as he may appoint and the estimate of the Engineer-in-charge subject to the decision of the Superintending Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which the same will be recovered from the contractor as damages in the manner prescribed in clause 1 or deducted by the Engineer-in-charge from any sums that may be due or become due from Corporation to contractor under this contract or otherwise.

The contractor shall bear the expenses of defending any action or other legal proceeding that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence. The contractor shall indemnify the Corporation against all such legal actions and consequences thereof.

CLAUSE 24 -

Employment of female labour.

DELETED.

CLAUSE 25 -

No work on weekly holidays.

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

Work not to sublet.

CLAUSE 26 -

Contract may be

The contract shall not be assigned or sublet without the written approval of the competent authority who has accepted the tender. And if the contractor shall assign or sublet his contract, or attempt so to do, or

rescinded and security deposit forfeited for 6 photeing it without approval or for bribing a public officer or if contractor becomes insolvent.

No. of Correction

become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors; or attempt so to do or if bribe, gratuity, gift, loan, perquisite reward of advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the contractor or any of his servants or agents to any public officer or person in the employ of Corporation In any way relating to his office or employment or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-charge may thereupon by notice in writing rescind the contract, and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of Corporation and the same consequences shall ensure as if the contract had been rescinded <u>under Clause 3</u> hereof and in addition the contractor shall not be entitled to recover or be paid for any work therefor actually performed under the contract.

CLAUSE 27 -

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

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

CLAUSE 28 -

Changes in the constitution of firm to be notified.

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

CLAUSE 29 -

Direction and control of the Superintending Engineer.

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

Contractor

No. of Correction

CLAUSE 30 (1) -

Direction and control of the Superintending Engineer.

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

CLAUSE 30 (2) -

The contractor may within thirty days of receipt by him of any order passed by the Superintending Engineer of the Circle as aforesaid appeal against it to the Chief Engineer concerned with the contract work or project provided that —

- (a) The accepted value of the contract exceeds Rs. 10 Lakhs (Rupees Ten Lakhs).
- (b) Amount of claim is not less than Rs.1 lakh (Rupees one Lakh).

CLAUSE 30 (3) -

If the contractor is not satisfied with the order passed by the Chief Engineer as aforesaid, the contractor may, within thirty days of receipt by him of any such order, appeal against it to the Executive Director of the Corporation who if convinced that prima-facia the contractor's claim rejected by Superintending Engineer / Chief Engineer is not frivolous and that there is some substance in the claim of the contractor as would merit a detailed examination and decision by the Executive Committee at Corporation level for suitable decision.

CLAUSE 31 -

The contractor shall obtain from the Corporation stores, all stores and articles of international manufacture which may be required for the work or any part thereof or in making up any articles required therefor / or in connection therewith unless he has obtained permission in writing from the Engineer-in-charge to obtain such stores and articles elsewhere. The value of such stores and articles as may be supplied to the

Direction and control of the Superintending Engineer.

Direction and control of the Executive Committee / Claims Committee

Stores of international manufacture to be obtained from the Corporation.

Contractor

No. of Correction

Executive Engineer

Deleted

contractor by the Engineer-in-charge will be debited to the contractor in his account at the rates shown in the <u>schedule in Form 'A'</u> 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.

CLAUSE 32 -

Lumpsums in estimates.

When the estimate on which a tender is made includes lump sums in respect of parts of the work contractor shall be entitled to payment in respect of the item of work involved or the part of the work in question at the same rates as are payable under this contract for each item, or if the part of work in question is not in the opinion of the Engineer-in-charge capable of measurement, the Engineer-in-charge may at his discretion pay the 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 provision of this clause.

CLAUSE 33 -

Actions where no specifications.

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

CLAUSE 34 -

Definition of work.

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

CLAUSE 35 -

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

Contractor

No. of Correction

CLAUSE 36 -

<u>Payment of</u> <u>quarry fees and</u> <u>royalties</u> All quarry fees, royalties, octroi dues and ground rent for stacking materials, If any shall be paid by the contractor as per latest G.R. issued by Govt. of Maharashtra.

The tender rates are inclusive of all the liabilities under Maharashtra Minor Minerals Extraction Rules, 1956, and amendments thereof and the contractor shall take all steps necessary as are essential in terms of Maharashtra Minor Minerals Extraction Rules, 1956, and amendments thereof.

The bill wise royalty charges for construction material payable to the contractor shall be calculated separately from payment made to the contractor and amount so calculated shall be withheld in the form of deposit by the Corporation. The withheld amount shall be returned to the contractor on production of proof of payment of royalty charges to the Revenue Department of Government of Maharashtra certified by concern Tahasildar.If proof of payment is not given, this withheld royalty amount will be remitted to revenue authority & no claim will be enterained.

CLAUSE 37 -

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

CLAUSE 37 (A) -

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

CLAUSE 37 (B) -

The contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site and shall maintain the same in condition suitable for immediate

Compensation under Workmen's Compensation Act.

Contractor

No. of Correction

use at any time and shall comply with the following regulations in connection therewith.

- (a) The workers shall be required to use the equipment so provided by the contractor and the contractor shall take adequate steps to ensure proper use of the equipment by those concerned.
- (b) When work is carried 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 steps shall be taken for the prompt rescue of any person in danger.
- (c) Adequate provision shall be made for prompt first-aid treatment of all injuries like to be sustained during the course of the work.

CLAUSE 37 (C) -

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

CLAUSE 38 – This clause will be applicable as per Govt. G.R.dated 19/09/2017

Claim for quantities entered in the tender or estimates.

Excess quantity shall be executed only after prior permission of the authority granting Administrative Approval to the work. It shall be paid at tender rate only.

CLAUSE 39 -

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

CLAUSE 40 -

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

CLAUSE 41 -

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

Employment of famine Labour etc.

No claim for compensation for delay in starting of work.

No claim for compensation for delay in execution of work.

Contractor

No. of Correction

CLAUSE 42 -

Entering upon or commencing any portion of work.

The contractor shall not enter upon or commence any portion of the 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 for work.

CLAUSE 43 -

Minimum age of persons employed, the employment of donkeys and for other animals and the payment of fair wages.

- (i) No contractor shall employ any person who is under the age of 18 years.
 - No contractor shall employ donkeys or other animals with breeching of string or thin rope. The breeching must be at least three inches wide and should be of tape (Newar).
- (iii) No animal suffering from sores, Lameness or emaciation or which is immature shall be employed on the work.
- (iv) The Engineer-in-charge or his Agent is 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 the Corporation for any delay, caused in the completion of the work by such removal.
- (v) The contractor shall pay fair and reasonable wages which will not be below the minimum 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 appropriate Government Authority concerned with labour who shall decide the same. The decision of the said Authority shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by the Corporation at the sanctioned tender rates.
- (vi) Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban areas.

Contractor

No. of Correction

- (vii) Contractor to take precaution against accidents which takes place on account of labour using loose garments while working near machinery.
- (viii) All facilities provided in the contract labour (Regulation & Abolition Act, 1970), the Maharashtra Contract Labour Regulation and Abolition Rule, 1971, should be provided.

CLAUSE 44 -

Method of payment.

Payment to contractors shall be made by cheque drawn on any Scheduled / Nationalised bank provided the amount exceeds Rs. 500/-, amounts not exceeding Rs. 500 will be paid in cash.

CLAUSE 45 -

Acceptance of conditions compulsory before tendering the work.

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

CLAUSE 46 -

Employment of scarcity labour.

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

CLAUSE 47 -

The price quoted by the contractors shall not in any case exceed the control price, if any, fixed by Government or reasonable price which it is permissible for him to charge a private purchaser for the same class and description, the controlled price or price permissible under Hoarding and Profiteering Prevention Ordinances, 1948, as amended from time to time. If the price quoted exceeds the controlled price or the price permissible under Hording and Profiteering Prevention Ordinance, the contractor will specifically mention this fact in his tender along with the reasons for quoting such higher price. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to conform with the controlled price as permissible under the

Contractor

No. of Correction

Hoarding and Profiteering Prevention Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

CLAUSE 48 -

Government of Maharashtra finance Dept. Circular GST-1017 Pra.Kra.81/Karadhan-1 dated19/08/2017

The tender rates are inclusive of all taxes, rates and cesses and are also be inclusive of the leviable tax in respect of sale by transfer of property in goods involved in the execution of the work contract. Under the section 51 of the circular T.D.S. will be @ 1% each of MGST and CGST or 2% IGST (in case of interstate supply) from every payments made towards such contracts where the agreement amount payable is Rs. 2,50,000/- and more.

CLAUSE 49 -

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

CLAUSE 50 -

The contractor shall employ the unskilled labour to be employed by him on the said work only from locally available labour and shall give preference to those persons enrolled under Maharashtra Government Employment and Self Employment Department's Scheme. Provided, however, that if the required unskilled labours are not available locally, the contractor shall in the first instance employ such number of persons as is available and thereafter may with previous permission, in writing of the Executive Engineer in charge of the said work, obtain the rest of the requirement of unskilled labour from out side the above Scheme.

CLAUSE 51 -

The wages to be paid to skilled and unskilled labourers engaged by the contractor. The contractor shall pay the labourers skilled and unskilled, according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the contractor is located.

Contrctor shall comply with the provisions of apprentices act 1961 and the rules and orders issued there under from time to time if he fails to do so his failure will be a breach of the contract and the Suprintending Engineer may in his discretion cancel the contract. The contractor shall also be liable for any pecuniary

Wages to be paid to the skilled and unskilled labourers engaged by the contractor.

Contractor

No. of Correction

liability arising out on account of any violation by him of the provisions of act.

The contractor shall pay the laboures skilled and unskilled, according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the contractor is in progress.

CLAUSE 52 -

P.W.Dept.No.CAT/ 1284(120)/ Building-2 dated 14-8-85. All amounts whatsoever which the contractor is liable to pay to the Corporation in connection with the execution of the work including the amount payable in respect of (i) materials and / or stores supplied / issued hereunder by the Corporation to the contractor (ii) hire charges in respect of heavy plant, machinery and equipment given on hire by the Corporation to the contractor for execution by him of the work and / or on which advances have been given by the Corporation to the contractor shall be deemed to be arrears of the Land Revenue and the Corporation may without prejudice to any other rights and remedies of the Corporation recover the same from the contractor as arrears of Land Revenue.

CLAUSE 53 -

P.W.Dept.No.CAT/ 1284 (120 Building – 2 dated 14-8-85..

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

CLAUSE 54 -

The contractor shall duly comply with all the provisions of the Maharashtra State Tax on Professions and Traders, Callings and Employment Act, 1975. (See Rule 3(2)). The contractor shall obtain

Contractor

No. of Correction

certificate of registration under this Act and shall produce to Corporation clearance certificate as and when demanded.

CLAUSE 55 -

The contract shall comply with all the provisions of Maharashtra Value Added Tax Act, 2005, Rule 58 on the transfer of goods involved in the execution of work contracts.

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, as decided by the Directorate of Insurance) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period **COMPULSORILY** from the "Directorate of Insurance, Maharashtra State, Mumbai" only. Its postal address for correspondence is "264, MHADA, First floor, Opp. Kalanagar, Bandra (East), Mumbai - 400051." (Telephone No. 020- 26590403 / 26590690 and Fax No.022-26592461 / 26590403) Similarly, all workmen's appointed to complete the contract work are required to insure under workmen's compensation 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 accepted tender amount will be recovered directly from the first bill amount payable to the Contractor 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. The contactor shall renew the insurance policy for the extended period of the contract. The contractor shall also takeout additional insurance policy for the increased contract cost if any

CLAUSE 57 -

- The anti-malaria and other health measures shall be as directed by the Joint Director (Malaria and Filaria) of Health Services, Pune.
- Contractor shall see that mosquitogenic conditions are not created so as to keep vector population to minimum level.
- c) Contractor shall carry out anti malaria measures in the area as per guidelines prescribed under National Malaria Eradication

Condition for Malaria Eradication, Anti-Malaria and Other Health Measures (Govt. of Maharashtra P.W.D. Resolution No. CAT 1086/CR-243

Contractor No. of Correction

- Programme and as directed by the Joint Director (Malaria and Filaria) of Health Services, Pune.
- d) In case of default in carrying out prescribed anti-malaria measures resulting in increase in Malaria incidence, Contractor shall be liable to pay to Government the amount spent by the Government on anti-malaria measures to control the situation in addition to fine.
- e) The contractor shall make sufficient arrangements for draining away the sewerage water as well as water coming from the bathing and washing places and shall dispose of this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient number of sweepers. The contractor shall comply with rules, regulations bye-laws and directions given from time to time by any local or public authority in connection with this work and shall pay fees or charges which are leviable on him without any extra cost to Government. (Govt.of Maharashtra P.W.D. Resolution No.CAT-1080/CR-243/K/Building-2,Mantralaya, Mumbai-32.Dated 11-09-1987)

CLAUSE 58 -

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

CLAUSE 59 – Work contract that is to say contract for works and labour or service involving transfer of property in good weather as goods or in same other form)in execution and includes a sub contact.

- a) where the amount or value set forth in such contract does not exceed rupees Ten lakh (Five hundred rupees)
- b) where it exceed rupees Ten Lakhs (Five hundred rupees plus 0.1% of amount of the above rupees. Ten lakhs subject to maximum of rupees Twenty five Lakhs)

Maharashtra stamp Act (Lx1958)

SECTION - V SPECIAL CONDITIONS OF CONTRACT

SPECIAL CONDITIONS OF CONTRACT

1. Contractor to inform himself fully:

- 1.1 The contractor shall be deemed to have carefully examined the work and site conditions, conditions of contract in B-1 form, the special conditions, the specifications, schedules and drawings and shall be deemed to have visited the work site, investigated his own quarries for rubble and sand and to have fully informed himself regarding the availability of construction materials, and leads involved local conditions, ancillary works required to be done etc. before quoting the offer. The lead and lift charges of construction materials are incorporated in the agreement and no additional claims will be made on this account by the contractor.
- 1.2 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.
- 1.3 The Engineer-in-charge generally means the Executive Engineer directly in charge of the work, but also means the Superintending Engineer, Chief Engineer of Corporation, for exercising powers under this contract.

2. 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, the contractor may be supplied additional copies of contract documents to be charged at the rate of Rs.3,000/- (Rupees Three Thousand 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 for 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 such working drawings free of charge. Should the contractor require any additional copy for his use, the same may be supplied and the contractor will be charged Rs.1,500/-

Contractor No. of Correction Executive Engineer

(Rupees One Thousand Five Hundred Only) per set of contract drawings and Rs.150/- (Rupees One Hundred fifty Only) for each of such additional copy of each drawing.

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

3. Data and Drawings to be furnished by the Contractor:

- a) Prior to the commencement of the work, within one month from the date of his receiving notice to start work, the contractor shall submit to the Engineer-incharge for approval, computerized drawings or prints 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, a layout plan of construction plant and equipment for the execution of the work which the contractor proposes to adopt at site, roadways, temporary bridges, unloading facilities and storage yards, etc. which he proposes to put up at the site.
- **b)** Any changes in the approved layout will be subject to further approval by Engineer-in-charge.
- c) The approval of the drawings, however, will not relieve the contractor of his responsibility from any errors or omissions.

4. 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.
- **a-1)** Between actual scaled and written dimensions or description on drawing and corresponding one in the specification, the latter shall be adopted.
- **a-2)** Between the quantities in the schedule of quantities, and those arrived at from the drawings, the former shall apply.
- **a-3)** 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 items of work. In case

Contractor No. of Correction Executive Engineer

- 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 reference and precaution.

5. Use of Site:

- a) All land required for contractor's own use shall be arranged by the contractor from private land owner/ Revenue Department at his own cost and no claim on this account shall be entertained. If, however, spare land is available with Corporation / Government it may be handed over to contractor at the rates to be decided by the Corporation for such contract work.
- 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 by 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.
- The lands shall as hereinbefore 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 deemed 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 Corporation within the time limit; specified above, penal rent as may be decided by the Engineer-in-charge will be recoverable and further legal action to vacate land will be taken by Engineer-in-Charge.

Contractor

d) If the vegetation and forest is noticeable in project area, the contractor should take utmost care for the preservation of vegetation and forest. Any damage in this vegetation will have to be compensated by the contractor and decision from Engineer-in-charge will be final and binding on contractor. Contractor shall note than any damage to the forest will attract the provision of Forest Conservation Act, 1980.

6. Contractor Not To Dispose Off Soil Etc.:

The contractor shall not sell or otherwise dispose off or remove except for the purpose of this contract, sand, stone, clay, ballast, earth, rock or other substance or materials which may be obtained from the excavation made for the purpose of this contract or any produce from the site. All such substances materials and produces shall be the property of Corporation and shall be disposed off in a manner and at the place shown in the drawings or as and where the Engineer-in-charge may direct.

7. Gold / Silver, Minerals, Oils, Relics etc. found on the site:

All gold, silver, Oil or other minerals 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 Government and the contractor shall duly preserve the same to the satisfaction of 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.

8. 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 Corporation and his workmen or for the workmen of the corporation 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 Corporation 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

Contractor No. of Correction Executive Engineer

work executed by or for the sake of the Corporation 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 Corporation 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.

9. 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.

10. Layout of construction roads:

The contractor shall have to submit detailed plan to the Engineer-in-Charge, showing the layout of the work site, roads and approach roads proposed by him, before he starts the actual work. Such a road layout plan will be scrutinized by the Engineer-in-Charge and any modifications suggested by him will be binding on the contractor. If it is decided by the Engineer-in-Charge to have some of the roads proposed by the contractor as common roads for common use of Corporation and other contractors or convenient and for compact and planned layout of work site, the contractor will be bound to construct them and allow them to be used simultaneously by other contractors and departments. In case of disputes, the decision of the Engineer-in-Charge shall be final and binding on the contractor.

11. 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 and adequate lighting arrangement shall be made as directed by Engineer-in-Charge.

12. Signing Field Books, Longitudinal Sections, Cross Section and Measurement Books:

Before starting the work, and at the end before the work is covered, levels for plotting the longitudinal section (along the axis as decided by the Engineer-in-Charge or his authorized representative) and cross section of the portion of the work shall be taken by the authorized Engineer of the Corporation in the presence of the contractor or his duly authorized representative and the same shall be recorded in the measurement books and field books by the authorized Engineer of the Corporation only. If the contractor fails to sign the levels and measurements recorded by the Engineer-in-Charge or his representative in the authorized books, the same shall be final and binding on the contractor. For this purpose, suitable date or dates shall be fixed by the Engineer-in-Charge and intimated to the contractor at least three days in advance. If the contractor or his duly authorized agent fails to attend on the appointed date or dates, the levels shall be taken in his absence and such levels and longitudinal sections and cross sections based thereon shall be final and binding on the contractor. The levels will be taken on such alignment and cross sections as will be useful for reference permanently and described under specifications for 'Excavation'. The point of locations for the level will depend upon the roughness of the area and will also be atleast in conformity with the requirements of specifications for 'Excavation' as far as possible. Based on the above measurements and levels recorded by the Engineer of the Corporation, the contractor shall prepare computerized drawings of plan, L-Sections, Cross Sections etc. on A-4 size paper and submit the same to Engineer-in-Charge. Thereafter the contractor can prepare, print and submit the Running Bills along with the quality control test result in the standard format for the payment.

13. Programme of Construction:

Work and Progress Schedules:

The construction programme is given at the end of Schedule 'B' of tender Documents based on which the physical programme is prepared. If the Bidder does Not agree with this programme, he shall submit his own programme without changing total period of tender along with tender Documents inclusive of the physical programme as stated above, subject to the provision that 100% of the work shall be completed in contract period.

In case it is subsequently found necessary to alter this programme agreed in contract document, including the changes in the sequence of the items, the contractor shall submit in good time a revised programme incorporating necessary modifications proposed and get the same approved from the Engineer-in-Charge.

Additional detailed programme for each working season, beginning from October, showing the progress to be achieved month by month for controlling items shall also be submitted to the Engineer-in-charge not later than the 31st August preceding the working season and got approved. The Engineer-in-Charge is further empowered to ask for more detailed programme, say week by week, for any items of special importance, and contractor shall supply the same as and when asked for without delay.

The submission of the works programme and approval to it by the Engineer-in-Charge shall not relieve the contractor of any of his duties or responsibilities under the contract, like timely completion, the damages due to flood or other natural calamities etc. The contractor shall not be entitled for any claims for any damages caused, due to particular works programme. It is the entire responsibility of the contractor to frame the programme after anticipating the rains, floods etc. Actual work turned out shall be mainly taken into account and not just the sum of the various payments made to the contractor. The advance on material brought to the site of work will be accounted for while arriving at the progress achieved by the contractor in terms of proportion of the total work tendered for.

14. Procurement, storage and maintaining cement store account:

- **14.1)** Only 43 grade OPC cement shall be used for this work unless otherwise specified by Engineer-in-charge. The cement shall conform to I.S. 8112-1989.
- **14.2)** All cement required for the work under this contract shall be procured, well in advance by the contractor in polythene bags as received from the cement factories.
 - In case, where batching plant is used, the procurement of cement through silo will be permitted if requested by contractor to Engineer-in-charge.
- **14.3)** The contractor shall produce proof of purchase of cement from the cement factories. The purchase bill supported by Delivery Challan and Excise Gate

Pass which shall constitute adequate proof of purchase and shall be enclosed with the Running Account bills of work in which said cement is consumed.

- **14.4)** Cement shall be stored in such a way as to allow the removal and use of cement in chronological order of receipt i.e. first received being first used.
- 14.5) Cement shall be kept in a store under double locking arrangement (one key be operated by contractor and second key be operated by the authorized person of Corporation) so that it can be taken out or fresh stock admitted with the knowledge of supervising staff of the Corporation. The watch and ward of the cement stores shall be the responsibility of the contractor.

14.6) Daily cement consumption report:

Contractor shall maintain daily cement consumption account for each item in format as directed by Engineer-in-charge. The daily quantity executed for all the items executed and cement consumed shall tally with the daily cement issued from store. The report of daily cement consumed, quantity executed shall be maintained by contractor on site and copy signed by the site engineer of the Corporation shall be submitted to Engineer-in-charge. The abstract of item wise daily cement consumption and quantity executed shall be enclosed with bills by the contractor, which will form basis of payment of bills.

- **14.7)** In the event of cement in branded bags remaining surplus due to authorized reduction in quantity of work certified by the Engineer-in-Charge and as noticed after the issue of completion certificate, the contractor may choose any of the following three alternatives:
- (a) To transfer the cement in branded bags, with prior written permission from the Engineer-in-Charge, to any of the contract work with the Corporation and account for the same therein.
- (b) To sell the cement with prior written permission from the Engineer-in-Charge to any of the contractors carrying out the works on contract with the Corporation at a price to be negotiated by both the contractors and account for the same.

15. Quality Assurance and Testing:

It is the responsibility of the contractor to assure the desired quality of work. Whenever the testing of construction materials are required as per the detailed specifications or otherwise required by the Engineer-in-Charge, the same shall be carried out at the laboratory, selected by the Engineer-in-Charge at

Contractor's cost. The other tests of mortar, concrete, colgrout etc. shall be carried out in field laboratory set up by the contractor in presence of quality control representative. Contractor shall through this procedure assure the quality of work. In addition to field tests carried out by contractor in his laboratory, surprise tests will be carried out by quality control wing as directed by Engineer-in-charge and as per quality control directions.

The materials, mixes and any other arrangements, including labourers, shall be supplied by the contractor to the Corporation at contractor's cost. The samples for testing shall be taken in the presence of Engineer-in-Charge or his representative present on site.

The contractor or his authorized representative shall have a free access in these laboratories, to get himself satisfied about procedures of testing etc. Even if the contractor or his representative fails to remain present while collecting samples or testing the results will be considered as authentic and binding on the contractor.

16. Hire of Construction Equipments:

Construction equipment owned by the Corporation, if available and can be given on hire conveniently, will be made available on specific request, to the contractor at rates that will be prescribed by Corporation from time to time. Supervision charges will also be levied as prescribed by the Corporation from time to time. The contractor shall execute the agreement bond as prescribed by the Corporation, and shall agree to the specific rates of hire and supervision charges in force on the day of transaction in writing before machinery is taken out of the Corporation's yard by him. The contractor shall pay irrevocable bank guarantee for a value equal to 25% of the cost of the similar new machinery; for a period equal to period of hire plus three months. Some such items of equipment are indicated below:

Rented Equipment:

- i) Tankers
- ii) Diese Road Rollers
- iii) Tippers
- iv) Dozers
- v) Loader

vi) Seismopactor

The machinery shall be entirely in the custody of the Corporation. It shall be issued to the Contractor at the yard where they are stationed. The machinery will not be allowed to leave the work area on any account. All machinery so hired will be entirely operated and maintained by the Corporation in consideration of the hire charges to be paid by the contractor.

If any equipment is to be used in excess of 8 (eight) hours per day, permission of the Engineer-in-Charge shall be obtained in advance.

Reckoning of working hours will start from the time the machinery leaves Corporation yard, where it has return to it daily, and in other cases, when the machinery actually starts working. Closing time of working will be when it returns to the Corporation yard or actually ceases working for the day, respectively.

Log books shall be maintained by the Engineer or his authorized representative for each piece of equipment in the form laid down by the Engineer. The Contractor or his duly authorized agent shall verify and sign in the log book or on the machinery duty slip in lieu thereof, daily. If the contractor's representative fails to sign the log book, the entries made by the Corporation's representative shall be binding on the contractor. Any complaint or representation regarding the recorded working hours must be submitted in writing within 24 (twenty four) hours of the close of the shift. The Engineer's decision regarding such disputes pertaining to working hours shall be final and binding on the contractor. Complaints or representations made after lapse of 24 (twenty four) hours limit shall not be considered. The log books shall be provided by the Corporation

All expenses in respect of all oil, fuel, grease, cotton waste etc. shall be borne by the Corporation. Crew for operating the equipment shall be provided by the Corporation.

All minor and major repairs shall be carried out by the Corporation, to keep the equipment in working condition. However, in case of any breakage, damages, slips etc. which may occur due to the negligence of contractor's labour, equipment or staff or by reason, for which Corporation personnel are not responsible, the cost of such damages shall be recovered from the contractor. The decision regarding fixing of responsibility for any damages shall rest with

Contractor

No. of Correction

the Engineer-in-Charge and decision given by him shall be binding on the contractor.

Equipment shall be given on hire only when these can be spared. No claim on account of sickness or non-availability of machinery shall be entertained.

In case of damage to the equipment during haulage to site of work from Corporation stores or servicing yard, full cost of repairs shall be recovered from the contractor when damage is due to rough handling. That damage to trucks / tippers due to bad haulage roads will also be recovered from the contractor. Decision of the Engineer-in-Charge regarding of repairs and cause of damage shall be final and binding on the contractor.

A truck, tipper, tanker and any other equipment may be hired for a single day at a time and the minimum charges to be levied will be 8 (eight) hours plus mileage or for 8 (eight) hours when mileage is not applicable.

Compressor and concrete mixers shall not be hired for less than a day time and minimum charges for hire will be that for four hours per day. Crusher shall not be hired for a period less than a month, at a time, and the minimum charges for hire will be those for 25(twenty five) days and 8(eight) hours per day.

17. 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. The payments of the work done will be made as and when the funds are made available by Maharashtra Krishna Valley Development Corporation, Pune.

18. Other Contractor for the work:

Corporation 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 Corporation enter into agreement with 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 cooperation for execution of their works simultaneously and satisfactorily as intended in the designs, specifications and drawings.

Contractor No. of Correction

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 coordination, cooperation 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.

19. 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 unauthorised person.

20. 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 pay-rolls, records of personnel, invoices off materials and any and all other data and documents relevant to 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 specified.

21. Breach on part of Corporation Not to Annul Contract

No breach or non-observance on the part of Corporation 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 Corporation, 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.

Contractor

No. of Correction

22. A. 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.

22. B. Taxes etc.

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 to time.

The contractor shall protect and indemnify Corporation against all claims or liabilities arising from or based on the violation of such laws, ordinances, regulations, bylaws by him or his employee.

23. 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 certificates in format vide Appendix "H".

24. Death, Bankruptcy etc.:

If the contractor shall die or commit any act of bankruptcy or being a corporation, 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 Corporation 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 Corporation, 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 Corporation, by a notice in writing to Contractor or his successor. The power and provisions reserved to Corporation 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.

25. 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 recognized 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.

25.A 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 it's acceptance.

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.

26. Passing of Foundation etc.:

After the completion of the work of excavation, the same will be checked and passed by the Engineer-in-charge as per the powers wasted in them. No masonry or concrete or backfilling 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.

27. 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 everywhere include the details of the standard tests and procedures which are already laid down and available in the current Indian Standard Specifications. Wherever such details are not specified in this contract, the provision under current Indian Standard Specifications and / or the Standard Specifications (1970) of the Government of Maharashtra shall be deemed to be applicable.

28. Communication and Notices by Contractors:

All communications and / or notices pertaining to works and concerning matters, such as passing and approving of foundations, reinforcement and formwork, measurements, mark outs, etc. shall be addressed by the Contractor to the Engineer-in-charge. All such notices communications, etc. shall be addressed in good time so as not to hold up the work.

Contractor

No. of Correction

29. 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 contracts 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 Corporation shall have a lien on all such plants, equipments and materials, from the date of such notice, till deficiencies have been corrected.

30. 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.

31. **Price Variation:**

- (A) If during the operative period of the Contract as defined in condition (i) below, there is any variation in the Consumer Price Index (New Series) for industrial workers for Solapur centre as per the Labour Gazette published by the Commissioner of Labour, Government of Maharashtra and/or in the Whole-sale Price Index for all commodities, prepared by the office of Economic Adviser, Ministry of Industry, Government of India, or in the price of petrol/oil and lubricants and major construction materials like bitumen, cement, steel, various types of metal pipes etc., then subject to the other conditions mentioned below, price adjustment on account of
 - (1) Labour Component
 - (2) Material Component
 - (3) Petrol, Oil and Lubricants (POL) components
 - (4) Bitumen Component
 - (5) H.Y.S.D. and Mild Steel Component
 - (6) Cement Component

(7) C.I. and D.I. Pipes Component

Calculated as per formula hereinafter appearing, shall be made. Apart from these, no other adjustments shall be made to the contract price for any reasons whatsoever component percentages as given below are as of the total cost of work put to tender excluding star rate items. Total of Labour, Material & POL components shall be 100 and other components shall be as per actual.

(1) Labour Component		K_1	25 %	
(2) Material Component		K_2	35 %	
(3) Petrol Oil and Lubrica	nts components	K_3	10 %	
(4) Bitumen Component		-		
(5) TMT Steel Component (So)		K ₄ .	K ₄ . 12 %	
(6) Cement Component (Co)		K ₅ .1	K ₅ .18 %	

(7) C.I. and D.I. Pipes Component Note: 1) If particular component is not relevant same shall be deleted.

2) The Royalty charges, Insurance charges & labour welfare charges as applicable will be deducted from cost of work done while calculating the value of 'P' for each component.

1. Formula for Labour Component-

$$V_1 = 0.85 \times P \times [K_1 / 100] \times [L_1-L_0 / L_0]$$

Where,

- V₁ = Amount of price variation in Rupees to be allowed for Labour Component.
- P = Cost of work done during the quarter under consideration minus the cost of Cement, HYSD and Mild Steel, bitumen, C.I. & D.I. Pipes calculated at the basic star rates as applicable for the tender, consumed during the quarter under consideration.

Cement Rate: Rs. 5400/- M.T Steel Rate: Rs. 37000/- MT.

- K_1 = Percentage of Labour Component as indicated above.
- L₀ = Basic consumer price index for **Solapur** centre shall be average consumer price index for the quarter preceding the month in which the last date prescribed for receipt of tender falls.
- L_1 = The average consumer price index for **Solapur** centre for the quarter under consideration.

2. Formula for Material Component-

$$V_2 = 0.85 \times P \times [K_2 / 100] \times [M_1 - M_0 / M_0]$$

Where.

- V₂ = Amount of price variation in Rupees to be allowed for materials component.
- P = Same as worked out for labour component.
- K_2 = Percentage of Materials Component as indicated above.
- M₀ = The basic wholesale price index for shall be average wholesale price index for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- M_1 = Average wholesale price index during the quarter under consideration.

3. Formula for Petrol, Oil and Lubricant Component

$$V_3 = 0.85 \times P \left[K_3 / 100 \right] \times \left[P_1 - P_0 / P_0 \right]$$

Where,

- V_3 = Amount of price variation in Rupees to be allowed for P.O.L. Component.
- P = Same as worked out for labour component.
- K_3 = Percentage of Petrol, Oil and Lubricant Component.
- P₀ = Average price of H.S.D. at **Vaduj** during the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- P₁ = Average price of H.S.D. at the **Vaduj** during the quarter under consideration.

4. Formula for Bitumen Component

$$V_4 = QB (B_1 - B_0)$$

Where,

- V_4 = Amount of price variation in Rupees to be allowed for Bitumen Component.
- QB = Quantity of Bitumen (Grade ______) in metric tonne used in the permanent works as approved enabling works during the quarter under consideration.
- B₁ = Current, average ex-refinery price per metric tonne of bitumen (Grade _____) under consideration including taxes (Octroi, excise, VAT) during the quarter.
- B₀ = Basic rate of Bitumen in rupees per metric tonne as considered for working out value of P or average ex-refinery price in rupees per metric tonne including taxes (Octroi, excise, VAT) of Bitumen for the grade of bitumen under consideration prevailing quarter preceding the month in which the last date prescribed for receipt of tender falls whichever is higher.

Contractor

No. of Correction

5. Formula for H.Y.S.D. and mild Steel Component:

BASIC RATE: (So)

 $V_5 = S_0 (S/_1 - S/_0) / S/_0 \times T$

Rs. 37000/ M.T.

- V₅ = Amount of price variation in Rupees to be allowed for HYSD / Mild Steel component.
- S_0 = Basic rate of HYSD Stee in Rupees per metric tone as considered for working out the value of P
- $S/_1$ = Average steel index as per RBI Bulletin during the quarter under consideration.
- S/₀ = Average steel index as per RBI bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- T = Tonnage of steel used in the permanent works for the quarter under consideration.

6. Formula for cement component:

BASIC RATE OF CEMENT(Co): Rs.5400/- M.T

$$V_6 = C_0 (C/_1 - Q/_0) / C/_0 \times T$$

Where,

- V₆ = Amount of price escalation in Rupees to be allowed for cement component.
- C_0 = Basic rate of cement in Rupees per metric tonne as considered for working out the value of P.
- $C/_1$ = Average cement index published in the RBI bulletin for the quarter under consideration.
- C/₀ = Average of cement index published in the RBI bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- T = Tonnage of cement used in the permanent works for the quarter under consideration.

7. Formula for C.I. / D.I. Pipe Component

$$V_7 = Qd (D_1 - D_0)$$

Where,

- V₇ = Amount of price escalation in Rupees to be allowed for C.I. / D.I. pipe components.
- Qd = Tonnage of C.I. / D.I. pipes used in the works during the quarter under consideration.
- D₁ = Average Pig Iron price in Rupees per tonne during the quarter under consideration (Published by IISCO)
- D_0 = Pig Iron basic price in Rupees per tonne considered for working out value of P.

(B) The following conditions shall prevail:

- i) The Operative Period of the contract shall mean the period. Commencing from the date of the work order issued to the Contractor and ending on the date on which the time allowed for the completion of the work specified in the Contract 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. The decision of the Engineer-in-charge as regards the Operative Period of the contract shall be final and binding on the contractor. Where any compensation for liquidated damages is levied on the contractor on account of delay in completion or inadequate progress under the relevant contract provisions, the price adjustment amount for the balance of work from the date of levy of such compensation shall be worked out by begging the indices L_1 , M_1 , C_1 , P_1 , B_1 , S_1 , and C/₁ to the levels corresponding to the date from which such compensation is levied.
- ii) This Price variation Clause shall be applicable to all contracts in B₁ / B₂ and C form but shall not apply to piece works. The price variation shall be determined during each quarter as per formula given above in this Clause.
- required to be executed during the completion of work and also on the excess quantities of items payable under the provisions of Clause 38/37 of the Contractor

 No. of Correction

 No. of Correction

Contract, form B_1 / B_2 respectively. Since the rates payable for extra items or the extra quantities under Clause 38/37 are to be fixed as per current DSR or as mutually agreed to yearly revision till completion of such work. In other words, when the completion / execution of extra items as well as extra quantities under Clause 38/37 of the Contract form B_1 / B_2 extends beyond the operative date of the DSR then rates payable for the same beyond the date shall be revised with reference to the current DSR prevalent at that time on year to year basis or revised in accordance with mutual agreement thereon, as provided for in the Contract, whichever is less.

- iv) This clause is operative both ways, i.e. if the price variation as calculated above is on the plus side, payment on account of the price variation shall be allowed to the Contractor and if it is on the negative side the Government shall be entitled to recover the same from the contractor and the amount shall be deductible from any amounts due and payable under the contract.
- v) To the extent that full compensation for any rise or fall in costs to the Contractor is not entirely covered by the provision of this or other Clauses in the Contract, the unit rate and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other actual rise or fall in costs.
- vi) 'Quarter under consideration' means a period of three calendar months starting from January i.e. January to March, April to June, July to September and October to December.
- 32. Compensation for delay in completion of work on corporation account (this clause is applicable only if the estimated cost put to tender is more than Rs.100 Lakhs):

Compensation by way of relief on account of delay in completion of work due to (i) shortage of funds (ii) land acquisition and (iii) resettlement and rehabilitation issues, will be decided as described below.

In case of total stoppage of work, compensation for idle labour, staff associated with this work and working machinery deployed for this work for the period in question for which detailed record should be maintained by Engineer-in-charge based on the daily data submitted by the contractor for which acknowledgment will be issued by the Engineer-in-charge in confirmation after tallying data submitted by Sub-Divisional Engineer / Officer-in-charge of the work who will record this data in authorized measurement book as per

provisions of Appendix-42 of M.P.W. manual. Such compensation may be granted to the contractor after careful scrutiny of the data. The rates of idle staff, machinery, and labour will be adopted as per Corporation / Government guidelines.

Format for maintaining the record of idle labour, staff and machinery is enclosed for ready reference in Appendix 'L' enclosed in this tender document.

Deleted

The appropriate affected period for considering grant of relief shall be decided by the Chief Engineer of the project. However, the admissibility of relief under this Clause will be governed by provisions contained in Clause 15 of Conditions of Contract (B-1 Form).

33. Digital Photographic Record:

The contractor shall maintain digital photographic record of all components of the work showing monthly progress of work. The digital photographic record (C.D. / Pen Drive) shall be submitted in five sets to the Engineer-in-charge. The photographic record should include date and time. The expenses on this account shall be deemed to be included in contract price.

34. Co-ordination with other contractors:

The contractor should note that there will be other agencies including Corporation, working in the same area for works other than that included in this contract. The contractor shall co-operate 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 form ground for any claim or compensation.

Contractor

No. of Correction

35. Undertaking under Contract Labour Act:

The contractor shall furnish the undertaking towards implementation of Contract Labour Act as given in Appendix - 'F'.

36. Photographs of the Works:

The contractor will not be allowed to take photographs showing field work 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 Corporation.

37. Fencing, Lighting and Ventilation:

- a) The Contractor shall be responsible for the proper lighting, fencing, guarding and necessary health and safety measures while executing all works under this contract and for proper provision of temporary roadways, guards, footways, fences, caution notices etc., as far as the same may be rendered necessary by reasons of the work, for the accommodation of workmen, foot passengers or other traffic and of owners and occupiers of adjacent property and of the public and shall remain responsible for any accidents that may occur on account of his failure to take proper and timely precaution.
- b) Maintenance of Services- After all the work under this contract is completed and accepted as such, in case the Engineer-in-charge so directs, the contractor shall maintain the lighting, ventilation, communication facilities etc. upto a date determined by the Engineer-in-charge, bur not longer than for a period of twelve months. All reasonable charges for such maintenance otherwise not required by the Contractor for his purposes under the contract will be borne by Corporation. As regards the reasonableness of such charges, the decision of the Engineer-in-charge shall be final and binding on the Contractor.

38. Liability for accidents to persons:

It shall be contractor's responsibility to protect against accidents on the work site. He shall indemnify the Corporation against any claims for damage to the property, injury to workers or any other persons including Corporation staff working at the site of work, deaths 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 communicated in writing, promptly to the Engineer-in- charge. In all cases the contractor shall indemnify the corporation against all losses or a damage resulting directly or indirectly from the contractor's failure to report in the manner aforesaid. This includes penalties or fines if any, payable by the Government as a consequence of failure to give notice under the Workmen's Compensation Act or failure to confirm 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 Workmen'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 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 though the Corporation is a Principal employer, the complete responsibility of compensation shall be on the contractor.

39. The contractor to supply and be responsible for the sufficiency of the means employed:

The Contractor shall supply & 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 whatever cause they may arise, until the completion of this contract.

40. Covering of work:

The Contractor shall give not less than five days notice in writing to the Engineer-in-charge of the work which is proposed to be covered up or placed beyond the reach of measurements so that the measurements may be taken

before the work is covered up or placed beyond the reach of measurements. No work shall be covered up or placed beyond the reach of measurements, before ensuring that the measurements of work to be covered up are recorded. Any work covered up or placed beyond the reach of measurements without such notice having been given or consent obtained the same shall be uncovered at the Contractor's expenses and in default thereof no payment or allowances shall be made for such work or for materials with which the same was executed.

41. Accuracy of lines, levels and Grades Setting Out:

- a) The contractor shall be responsible for the true and proper setting out of the work and for the correctness of the positions, levels, dimension, alignment of all parts of the work and for the provisions of all necessary instruments, appliances and labour in connection with this.
- b) For the purpose of setting out, one temporary / permanent bench mark shall be established by the Corporation near the site, the value of which shall be given to the contractor, by the Engineer-in-charge. All the setting out shall be with reference to this bench mark and reference line.
- c) If at any time during the progress of works the error shall appear or arise in the position, level, dimension or alignment of any part of the work, the contractor shall rectify such error to the satisfaction of Engineer-in-charge without any extra cost to the Corporation.
- The periodical checking of these by Corporation staff shall not absolve the contractor of his responsibility regarding accuracy as contractor is also responsible to see that the things proceed in such a manner so as to give desired ends product. In case of deviation, the contractor shall make good to the discrepancy at his own cost and without any compensation for the additional work involved. Wherever such discrepancies, if any, are found to arise between the works of different contractors at the junction of their works the relative liability to set right their respective discrepancies shall be fixed by the Engineer-in-charge, whose decision shall be final and binding on the contractors concerned. The Engineer-in-charge shall further have the unquestioned right to rectify the discrepancies and recover the costs from the contractor or contractors according to proportions as he may consider reasonable.

Contractor

e) It is the responsibility of contractor to preserve the benchmark and the reference points established for setting out.

42. Excavated Material:

All the materials available from excavation will be the property of Corporation and shall be disposed off only as directed by the Engineer-in-charge. The materials of approved quality available from the excavation including that carried out by the Corporation may be used by the contractor in the items of works included in Schedule 'B' or for ancillary or preparatory work free of cost. However, the contractor has to pay Royalty charges to Revenue dept. as per prevailing Government orders. Prior approval of Engineer-in-charge for such use shall, however, be taken. The contractor shall make proper arrangement for sorting out and stacking material of approved quality that he proposes to use as aforesaid. Corporation will be free to make use other materials not required or not likely to be required for use by the contractor as will be determined by the Engineer-in-charge.

The excavated material not to be used by the contractor as above or stacked for his use, but remaining unused at site after completion of works, shall be disposed off by the contractor at his own cost in a manner and at place shown in the drawing or as and where the Engineer-in-charge may direct.

The contractor should utilise material available from excavated stuff for backfilling.

43. Safety Measures:

The contractor shall arrange for utmost safety in his operations. In case the contractor fails to make requisite 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 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, underground works etc. 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.

44. Maintenance during defect liability period:

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

From the date of issue of the completion certificate, till the expiry of period specified in memorandum at (h), the Contractor shall be liable for the replacement of any part of 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.

45. 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.

Contractor

No. of Correction

46. Bank Guarantee, Renewal & Encashment:

Bank guarantee shall be given on the stamp paper of Rs.100/- in the form prescribed by the Corporation. The bank guarantee shall be valid for the entire period of contract plus defect liability period. In case the contract period is extended it will be the responsibility of the contractor to get validity of Bank Guarantee extended in view of extension proposed, without which extension will not be granted.

The Engineer-in-charge of the Corporation reserves the right to encash the bank guarantee in the event of breach of any of the term and condition of the contract and failure to perform as per contract.

The Executive Engineer is empowered to approach to the Bank for encashment and may take recourse to approach Reserve Bank of India's Vigilance Branch and 'Ombudsman' as found necessary.

47. Handing over of work:

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

The handing over by the contractor and taking over by the Executive Engineer or his 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, Corporation will not put it into regular use as distinct from casual or incidental one, except as specifically mentioned elsewhere or as mutually agreed to.

48. Instrumentation:

In case, it is proposed to have any instrumentation in work, the instruments and their accessories will be procured and installed by the Corporation 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.

49. 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 Corporation 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.

50. Opening out works for Inspection:

Should the Engineer-in-charge 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-in-charge may direct and the contractor shall make good the same at his cost and to the satisfaction of the Engineer-in-charge.

51. Removal of imperfect work and / or payment at reduced rates:

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-in-charge, whether or not, the value of any such work or 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 approved by the Superintending Engineer whose decision will be final and binding, provided further that the rates fixed by the Superintending 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.

52. Jurisdiction of court for disputes:

Disputes, if any, arising out of this contract shall be subject to the jurisdiction of the High Court of Bombay.

53. Mode of payment of excavation quantities in running bill and final bill:

Payment of work done under items of excavation in soft strata and hard strata will be made at 90% of the contract rate in R.A. bills for all excavated quantities till the final designed cross section of component as decided by the Engineer-in-charge is reached. The component cross section as per design shall be deemed to have been reached only if no work remains to be executed between the two adjacent cross sections. 100% of payment at contract rate in R.A. bills may be released only after the work of excavation is completed between two adjacent cross sections.

53-A. In case of agreement for the "Construction of Earthwork and structures on canal" the following provisions shall apply-

The contractor shall execute the Earthwork and structure simultaneously so that entire work gets completes simultaneously. The percentage progress of structure should be same as that of Earthwork. If the percentage progress of structure do not matches with that of Earthwork, then 20% deduction in the rate (in addition to 10% mentioned in above para) of Earthwork will be effected in running bills of Earthwork and will be withheld by the Engineer-in-charge. Such withheld amount of 20% will be released only when percentage progress of Earthwork and structures are same.

54. GST: (Goods and Service TAX)

GST (Goods and service Tax) Act. 2017 have come into force with effect from 1st July 2017. Accordingly there is change in the indirect tax regime and the tax rates. State/Central taxes which are subsumed within the GST include central excise duty, state VAT, Central sale Tax, Purchase tax etc.

- **55. Deduction of Income Tax** at 2% of the value of the work done will be made from the Contractor's R.A. bills and surcharge at the appropriate rate in Income Tax will be deducted.
- **56.** Mode of payment of the quantities of excavation, masonry and concrete items executed in excess of 125%
- Clause No. 38 of B-1Tender pertains to payment of quantities of different items of schedule 'B' in excess of 125% of the tendered quantities. It is to be clarified that in the case of items of excavation in soft strata and hard strata, in the present tender, this clause will become applicable only if the total quantity of Excavation (i.e. quantity given in Scheduel 'B' Part-1, Excavation in soft strata, quantity given for Excavation in hard strata) exceeds by 125% during execution. For payment of quantity executed in excess of 125% of total quantity of excavation following procedure will apply
- Case 1: Where quantity of excavation executed, exceeds 125% of total of tendered quantity of items of excavation in soft strata and in hard strata, but quantity executed of any one of the individual items is less than or equal to the tendered quantity for that item. All the excess quantity beyond 125% of total tendered quantity in items of excavation if soft strata and hard strata, will be paid by revising the rate of only that item where excess has occured.
- Case 2: Where total quantity of excavation executed for both items (excavation in soft starata and hard strata) exceeds 125% of the total tendered quantity of items of excavation, quantity in excess of 125% of total tendered quantity will be distributed in the Ratio of **Deleted**

Executed quantity of individual item of excavation

Total executed quantity of items of excavation in soft strata and hard strata

and will be paid by revising the rate of individual item as per clause 38 (2), subject of the provision that the revision of rate will be applicable only for the quantity of individual item executed beyond the tendered quantity.

In case of executed quantity less than 75% of the total quantity of excavation in soft strata and hard strata, these will be treated on similar lines as in case (1) and (2) above.

Case 3: Where total quantity of all masonry items taken together exceeds 125% of the total tendered quantities of all masonry items, quantity in excess of 125% of total tendered quantity will be distributed in the Ratio of

Executed quantity of individual item of masonry

Total executed quantity of item's of all masonry items taken together

and will be paid by revising the rate of individual item as per clause 38 (2) subject to the provision that the revision of rate will be applicable only for the quantity of individual item executed beyond the tendered quantity.

In case of executed quantity less than 75% of the total quantity of all masonry items taken together, these will be treated on similar lines as in case (1) and (2) above.

Case 4: Where Total quantity of all concrete items taken together exceeds 125%

of the total tendered quantities of all concrete items, quantity in excess of 125% of total tendered quantity will be distributed in the ratio of

Executed quantity of individual item of concrete

Total executed quantity of items of all concrete items taken together and will be paid by revising the rate of individual item as per clause 38 (20, subject to the provision that the revision of rate will applicable only for the quantity of individual item executed beyond the tendered quantity.

Deleted

In case of executed quantity is less than 75% of the total quantity of all concrete items taken together, these will be treated on similar lines as in case (1) and (2) above.

For payments of quantities in excess of 125% of tendered quantity for items other than excavation, masonry and concrete items, provision of clause 38 (2) of B-1 Tender Form will be applicable.

57. Supply fuel for domestic use

contractor shall make arrangements to supply fuel for domestic use to all the labours engaged on site and prevent the labours from cutting trees for the purpose of fuel. If the contractor's labour found to cut the trees the contractor shall be held responsible for the same and shall be punished as per the provision in Forest Conservation Act, 1980.

58. Royalty Charges :-

Additional conditions regarding payment of royalty charges as per Bombay Minor Mineral Extraction (Amendment) Rules, 2003.

- 1. The royalty charges are to be paid by the Contractor to the Revenue authorities. This is the prime responsibility of Contractor as per Tender CI. No.36.
- Amount as stated in clause 36 of the contract shall be withheld by Corporation / Government for the purpose of payment towards royalty charges. This amount shall be released to the contractor subject to the following conditions.
- a) Contractor shall submit proof of the payment of the royalty charges to the concerned Revenue Authorities acceptable to the Engineer-in-charge.
- b) The total amount that can be released shall be limited to the actual payment made as mentioned in the condition (a).

Contractor No. of Correction

- c) If the actual royalty charges are less than the amount withheld, remaining amount shall be released by the Corporation / Government.
- d) If the actual royalty charges are more than the amount withheld, the contractor shall pay the excess amount to the concerned Revenue Authority without any burden on the Corporation / Government.
- e)The contractor shall indemnify Corporation / Government towards payment of the royalty charges.

59. Excavation by Controlled Blasting and Chiseling:

The Controlled Blasting and Chiseling will be applicable only for the chainage approved by the Chief Engineer.

(A) Controlled blasting-

The rate of excavation by controlled blasting is allowed at following site condition-

- (i) The roads having heavy traffic within 200 metre radius of work.
- (ii) The habitation and public buildings with 200 metre radius of work.
- (iii) The electric lines within 100 metre radius of work.

(B) Chiseling-

The rate of excavation by chiseling is allowed at location where permanent and important structure is within 30 metre radius from work.

- 59.1 Where rate of chiseling and controlled blasting is allowed, the contractor shall be responsible for damage to any type of property or life. If any damage is occurred due to activity of excavation the contractor has to pay the compensation to the concerned party. If he fails, the compensation will be paid by the Corporation and recovered from contractor.
- 59.2 If the excavation by controlled blasting or chiseling is required to be done contractor shall write to the Engineer-in-charge. The Engineer-in-charge will inspect the site and if the work is within the prescribed zone of controlled blasting or chiseling he will submit the proposal for obtaining permission of higher authority.

In such case the contractor shall execute the item of excavation only after approval of controlled blasting or chiseling zone by Chief Engineer. Otherwise the quantity executed will be paid at the rate of ordinary blasting.

- 59.3 Contractor shall note that the rate of controlled blasting will be paid only if he has done the work of excavation by taking proper precaution and methods. If the work in controlled blasting zone is executed by ordinary blasting without any special efforts then payment of excavation will be made at the rate of ordinary blasting, though the work lies within approved zone of controlled blasting or chiseling.
- **59.4** The contractor shall maintain account as the proof to prove that the excavation is done by controlled blasting or chiseling e.g.-
 - (a) For proof of controlled blasting Number of drills, their depth, charge loaded, other precautions taken and quantity executed.
 - (b) For proof of chiseling Method of chiseling, equipment and machinery used and their hours of working, quantity executed.

60. Shifting of electric line:

In case shifting of electric line is necessary, Engineer-in-charge will initiate the proposals to concerned authorities. It will be the responsibility of contractor to make good for early clearance of the proposal so that there should not be any delay in completion of the work. Contractor should pay the required cost of shifting these lines to the concerned authorities. The same will be reimbursed to the contractor by Corporation as per availability of funds.

61 Land Acquisition

The land acquisition procedure will be as per Land Acquisition Act 2013. Necessary land acquisition proposals will be prepared by Engineer-In-Charge. The contractors has to persue land acquisition proposal as directed by Engineer-in-charge. In case land acquisition is to be done by private negotiation, contractor has to pay the compensation amount as directed by Engineer-in-charge in case the funds are not available with the corporation.

The charges including preparation of a land acquisition proposal & compensation paid to land owner will be paid / reimbursed to the contractor as assessed by Engineer-in-charge as per clause — 32. When the Funds gets available with the corporation.

Contractor

No. of Correction

62. Defects Liability :-

Within a period of two years after completion of work if any repair due to the defect in construction, the same will be carried out by the contractor at his own cost. The security deposit amount is only payable after completion of this period

63. INSURANCE CHARGES:-

Additional Condition regarding insurance charges as –

- 1) Insurance charges are to be paid by the contractor to the "Director of Insurance Maharashtra State, Mumbai"
- 2) Insurance amount will be released to contractors per conditions mentioned below
 - a) The contractor shall submit proof of Insurance Policies to the Engineer-In-Charge.
 - b) After verification of record submitted by The Contractor, the total amount that can be released shall be limited to the actual payment made as mentioned in condition(a).
 - c) If the actual insurance charges claimed are less than the provision made in the tender, the amount shall be paid as per actual.
 - d) If the actual insurance charges claimed is more than the provision made in the tender, than the amount shall be paid limited to provision made in the tender.

64. NO CLAIMS FOR DELAY IN PAYMENTS:

- Payment will be made to the contractor as per availability of funds with M.K.V.D.C. Contractor shall have to make himself will in formed about the financial status of M.K.V.D.C. and also about funds availability status for this work.
- 2) Contractor shall not claim any amount in view of condition No. 1 above for any delay in payments, increase in period of contract, interest, price index increase etc. Measurements shall be recorded in the same month when works are carried out. Contractor shall not claim any price escalation based on basis of

date of payment of the bill & price index on the date of measurement shall only be applicable irrespective of date of payment.

3) In case of financial crisis of any other reasons MKVDC reserves the right to withdraw above works under contract clause No. 15.

65. EQUÎRMENT FACILITY:

Contractor shall be required to provide following facilities such as below equipments

66. QUALITY ASSURANCE AND TESTING

It is the responsibility of the contractor to assure the desired quality of work. Whenever the testing of construction materials are required as per the detailed specifications or otherwise required by the Engineer-in-Charge, the same shall be carried out at the laboratory, selected by the Engineer-in-Charge at Contractor's cost. The other field tests of mortar, concrete, colgrout etc. shall be carried out as per specification in field laboratory set up by the contractor in presence of quality control representative. Contractor shall assure the quality of work.

In Additional to field test carried out by contractor in his laboratory, surprise test will be carried out by Q.C.C. wing as directed by Engineer-in-charge and as per Q.C.C. direction for which charges will be borned by contractor.

The materials, mixes and any other arrangements, including labourers, shall be supplied by the contractor to the Corporation at contractor's cost. The samples for testing shall be taken in the presence of Engineer-in-Charge or his representative present on site.

The contractor or his authorized representative shall have a free access in these laboratories, to get himself satisfied about procedures of testing etc. Even if the contractor or his representative fails to remain present while collecting samples or testing the results will be considered as authentic and binding on the contractor.

- 2.0) Mode of Payment Payment of Quality control charges is on No. of test carried out of each test as mentioned in Schedule B.
- 2.1) Contractor has to carry out quality control test as per specifications and as directed by Engineer in charge & quality control and vigilance organization of Govt.

67. Labour welfare cess

The amount of labour welfare cess at the rate of 1% will be recovered from contractors running / final bill as per directions given by the Govt. of Maharashtra vide Marathi Resolution No. Udyog, Urja & Kamgar Vibhag Shasan Nirnay Kra. BCA-2009 / Pra. Kra. 108 / Kamgar 7A dtd. 17 June 2010.

68. Restrictions on execution of work under clause 38 of conditions of contract.

Clause 38 of B-1 tender will be operated as per GOM. Marathi Circular No. Nivida / 0812 / (420 / 2012) Mo.Pra.-1, Mantralay, Mumbai-400032 Dated-11 /10 /2012 .

Contractor can execute any excess quantity of tender item beyond 25% of the stipulated tender quantity only on the written permission of the Engineer in charge of the work as stated in clause 37/38 of B-1/B-2 tender.

Engineer-in Charge cannot issue any written permission to contractor to execute such quantity beyond 25% of tender item except exceptional cases mentioned below

- Earthwork (excavation and backfilling) in COT of Earthen Dam,
- Foundation excavation and concrete of Gravity Dams,
- Cavern support system for Tunnels/ underground caverns,
- Excavation & concrete for foundation of various structures on canals,
- Excavation & Concrete for intake structures / wells for Head Regulator for Dams.
- Bore holes, grouting work on Dam foundation and other Dam construction work.

Any unapproved quantity will Not\be accepted for payment.

Whenever such above exceptional cases crop up and excess is inevitable, concerned project Executive Engineer will obtain joint technical inspection from a committee consisting of Project Superintending Engineer and one more Superintending Engineer under the Region and obtain prior approval of concerned Chief Engineer Before issuing any such written permission to the contractor for executing excess over tender quantity beyond 25%.

No work outside the scope of the work put to tender will be approved for such excess quantity for purpose of clause \$7/38.

69. Price variation shall not paid on insurance and the royalty amount at estimate rate.

70. Incorporate In Tender Stamp Duty:-

Stamp duty @ Rs. 500 + 0.1% of the cost above Rs. 10 lakh on accepted tender needs to be paid by the agency in form of stamp paper or online as applicable. As per Bombay stamp act. 1958 amounted via Maharashtra Act. No XX of 2015 as Maharashtra stamp armament act. 2015 and provision contained in artical 63, the contractor will have to pay stamp duty on value of accepted tender cost as per prevailing rate declared by Govt. of Maharashtra before work order The contractor quote his rate accordingly and no separate claim will be entertained on this account by the department. The stamp duty can be pay through franking

upto 5000/- and through e-SBTR for amount above 5000/- or through any other medium like GRAS as per the extent direction of Govt. of Maharashtra.

71. Tax liability of Service Tax.

Currently the corporation is exempted from Tax liability of Service Tax in cost of works of canal & Dam, however in further owing to change in the Service Taxation Policy, any liability arising thereof shall be the liability of the contractor & dues if any will be recovered from the payable amount under the contractor & same shall be agreed by responsibility of the contractor.

72. As Maharashtra Govt. Water Resources Department G.R dated 4/2/2017 Contractor shall make payments 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.

VOLUME-II SPECIFICATION

INDEX

Sr.N	DETAIL	Page No	Page No
0.		From	То
1	General Specification	147	156
2	Excavation	157	176
3	Embankment	177	182
4	Insurence	183	
5	Labour Welfare Fund	184	
6	Quality assurance and testing	185	

SECTION – 1:

GENERAL SPECIFICATION

- 1.0.0 Scope.
- 1.1.0 General description of the project.
- 1.1.1 Work and site condition.
- 1.1.2 Climate conditions.
- 1.1.3 Labour availability.
- 1.1.4 Location.
- 1.1.5 Rail routes.
- 1.1.6 Roads.
- 1.1.7 Water supply.
- 1.2.0 Electric power.
- 1.3.0 Telephone and telegrams.
- 1.4.0 Colony Establishment of colony.
- 1.4.1 Sanitation and up-keep of colony.
- 1.4.2 Camp regulations,
- 1.4.3 medical aid
- 1.4.4 General
- 1.5.0 Materials
- 1.5.1 Petrol, oil and lubricants.
- 1.5.2 Stone for rubble masonry and for metal.
- 1.5.3 Sand
- 1.5.4 New quarry leads.
- 1.6.0 Precautions during the floods.
- 1.7.0 Contract drawings, working drawings and specifications.
- 1.8.0 Embedded items.
- 1.9.0 Signing the field books, L Sections, Cross sections and Measurement Books.
- 1.10.0 Material (Cement)
- 1.11.0 Steel
- 1.12.0 Royalties.
- 1.13.0 Advance on Construction materials.
- 1.14.0 Payments.
- 1.15.0 No interest on money due to contractor.
- 1.16.0 Difficulties in land Acquisitions.
- 1.17.0 Handing over of completed reaches, and letting out water for irrigation.

<u>SECTION – 1</u> <u>GENERAL SPECIFICATIONS</u>

1.0.0 SCOPE:

The general specifications shall apply to all the items of Schedule 'B' under this Tender.

1.1.0 GENERAL DESCRIPTION OF THE PROJECT:

The information is given in Section IV - work specific information

1.1.1 WORK AND SITE CONDITION:

It shall be presumed that the Contractor has fully informed himself as to the nature and locations of works, general and local conditions and particularly those having bearing on approaches to the site, location of stone and sand quarries, availability and transport of material, tools and plants machinery, disposal area, availability of labour, weather conditions and river stages etc. and has estimated his accordingly. Corporation will bear No responsibility for any lack of such acquaintance with site conditions on the part of the contractor and the consequences there of to the contractor. The information and data about site conditions shown in the drawings and mentioned herein is furnished as a rough guide only but Corporation will Not be responsible for the accuracy thereof or for any deductions interpretations and conclusions drawn there from by the contractor.

Results of trial pits and exploratory bores, taken along the dam axis are as shown in the drawings. The Corporation does Not accept any responsibility for any variation in strata classifications found in actual excavations.

1.1.2 CLIMATIC CONDITIONS:

The information is given in Section IV – work specific information.

1.1.3 LABOUR AVAILABILITY:

Some local unskilled labour may be available during Not agricultural season but skilled labour may Not be available Contractor must however make his own enquiries.

1.1.4 LOCATION:

The information is given in Section IV - work specific information.

1.1.5 RAIL ROUTE:

The information is given in Section IV - work specific information.

1.1.6 **ROADS**:

The information is given in Section IV - work specific information.

1.1.7: WATER SUPPLY:

The contractor will have to make his own arrangement for the water supply required for his work, staff and labour. He will have to provide all arrangement for making water potable and safe for

drinking by his staff, labours and other dependents on Contractor's services. Disinfections of all drinking water by chlorination will be obligatory, on the part of Contractor.

Fresh and potable drinking water shall be made available by the Contractor to all persons working at work spots in clean and hygienic earthen or other pots at all working and in sufficient quantity.

1.2.0 ELECTRIC POWER:

Electric power, if required shall be arranged by the contractor at his own efforts and cost and he shall have to make his own arrangements for laying, installation maintaining the power lines etc. He should observe all requirements of the Indian Electricity Act 1910, 1948, Indian Electricity Rules 1956, and rules in existence and framed from time to time, failure to which Corporation accepts No responsibility for any damage, injury compensation

1.3.0 TELEPHONE AND TELEGRAMS:

Nearest telephone and telegraph facilities are available at the places indicated in Section IV - work specific information .

1.4.0 COLONY

ESTABLISHMENT OF COLONY:

The contractor shall be allowed to construct his own colony for his workers and supervisory staff within the limits of Corporation land, if available.

The land used by the contractor for his staff and labour colony shall be handed over back to the Corporation within three months after the physical completion of work or termination of the contract whichever is earlier duly cleared and fairly brought to the original condition. No structures or constructions shall be left on the left on the land at the time of vacating it without the specific approval of the Engineer-in-charge. The contractor shall prepare and submit his proposed plan of colony layout and get it approved from the Engineer-in-charge before establishing any colony either for the labourers or for the supervisory staff. The contractor shall have to construct and maintain all access and approach roads etc. in his colony areas at his own cost. Any modifications, changes and alterations suggested by the Engineer-in-charge in respect of area of colony, layout of roads etc. will be binding on the contractor and shall have to be done at his cost.

1.4.1 SANITATION AND UP-KEEP COLONY:

The contractor shall be responsible for maintaining satisfactory water supply and sanitary facilities in his labour camp and for his other staff. He will take precautions Not to allow any unhealthy and unsanitary conditions in his camp. The Engineer-in-charge shall have the right to inspect the contractor's colonies at any time and to suggest improvement, modifications etc. with special regards to cleanliness and sanitation, silage water and garbage disposal, any other nuisance, and proper layout, which shall be binding on the Contractor.

Contractor

No. of Correction

Executive Engineer

The contractor shall provide adequate No of portable chemical closets for use, and urinals and water closets, and make proper lighting and scavenging arrangements should be made for female labour.

1.4.2 CAMP REGULATIONS:

The contractor shall be responsible for maintaining law and order in his camp and on his work and to that end shall employ such officers, watchmen labour etc. as required Unauthorized and undesirable persons shall be expelled from the camp and from the works. If in the opinions of Engineer-in-charge any employee or agent of the Contractor misbehaves or causes obstruction in proper execution of work or otherwise makes himself undesirable the Contractor shall on receipt of instructions from the Engineer-in-charge remove him from premises.

1.4.3 MEDICAL AID:

The contractor shall arrange all the necessary medical facilities for his staff and labour at his own cost and to the satisfaction of the Engineer-in-charge.

1.4.4 GENERAL:

The cost of sanitation & supply of drinking water is deemed to have been included in the unit rates of items of work.

1.5.0 MATERIALS:

1.5.1 PETROL, OIL AND LUBRICANT:

The contractor shall have to install his own supply for petrol and diesel at the site. The location of pumps shall have to be got approved from the Engineer-in-charge and usual precautions which are necessary for such installation will have to be taken.

1.5.2 STONE FOR RUBBLE MASONRY AND FOR METAL:

The Contractor shall make his own investigation regarding locations of quarries, quality of stone and adequacy of the various sources of stone in quarry areas known to him. Excavated material of hard rock excavation has been dumped on the site. Contractor can make use of this material. Material has to be sorted out by Contractor at his own cost and should be got approved from the Engineer-in-charge before its use in the work. However it is for Contractor to investigate the quarries which yield stone in sufficient quantities and of required quality. Over burden on quarry shall have to be removed by the Contractor at his own cost.

The location of quarries have to be such that they do Not affect permanent structures and should Not be near the existing or proposed habitations. The locations and size of the quarries shall be subject to the approval of the Engineer-in-charge . However, if a quarry location, approved by the Engineer-in-charge , on it's opening does Not yield adequate or suitable stone, No claims can be raised against the Corporation. In that case other quarries will have to be established by the

Contractor

No. of Correction

Executive Engineer

Contractor at his own cost and risk and the stone got approved from the Corporation for it's quality before using it in the work.

If the stone quarries are located in the lands acquired by the Corporation the Contractor will be allowed to quarry the rubble from these areas. If the quarries located are in private properties, the Contractor shall negotiate with the respective owners and shall attend to legal rights and attend to payments etc. to the concerned parties for operation of these quarries at his own cost. Similarly, he shall make arrangements for roads leading to and from the stone quarries to the work site at his own cost.

1.5.3 **SAND**:

The Contractor is advised to make his own enquiries regarding adequacy, proper quality and cost of sand, approaches to quarries etc. The sand quarry to be used and any change in location shall have prior approval of the Engineer-in-charge.

The Contractor shall, however, obtain permission from Revenue and other authorities before removing the material and shall pay royalty and other taxes. Octroi duty, escort fee, if any, for sand which shall Not be reimbursed. The contractor shall have to make his own enquiries regarding legal rights and attend to the aspect of payments due etc. for the operation of the quarries.

1.5.4. The extent of annual replenishment of the sand sources is unknown. The Contractor may, therefore choose to collect the sand in advance of its use for the work.

The Contractor shall make his own arrangements for quarrying and transport of sand from the quarries to the work site. Approach roads to the quarries shall also be constructed and maintained by the Contractor at his own cost.

All the cost of transport of sand shall be borne by the Contractor and No claims on this account will be entertained.

Use of crushed sand conforming to the required gradation and specifications can be permitted with specific approval of the Engineer-in-charge.

1.6.0 PRECAUTIONS DURING THE FLOODS:

It shall be the responsibility of the Contractor to preserve and maintain in safe condition all materials, machinery and tools from floods and rain and No compensation whatsoever will be payable to him on account of loss due to floods, rain and any other causes.

1.7.0 CONTRACT DRAWING, WORKING DRAWING AND SPECIFICATIONS:

On acceptance of the tenders, sets of copies of contract conditions and drawings to a maximum of three will be supplied to the Contractor free of charge. On request by the Contractor and in the direction of the Engineer-in-charge, the Contractor may be supplied additional copies of

Contractor Documents and drawing to be charged at the rate of Rs.5000/- (Rupees FiveThousand Only) per set.

The drawings which form part of these Contract, show the work to be done in such details as is possible to do for the present. They will be supplemented or superseded by the such additional detailed working drawings as may be necessary at the work progress. The Contractor shall carry out the work in accordance with these additional or revised working drawings, as the case may be and at the applicable rates as per the contract. The Contractor shall be supplied a maximum No of three copies of each of all 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 the Engineer-in-charge and the Contractor will be charges Rs. 300/- (Rupees Three Hundred Only) for each of additional copy of the drawing.

The Contractor shall check all drawings carefully and advise the Engineer-in-charge immediately of any errors or omissions discovered. The Contractor shall Not take advantage of any kind of errors or omissions in the drawings supplied.

1.8.0 EMBEDDED ITEMS:

Before placing concrete and or masonry care shall be taken to see that all embedded items are firmly and securely fastened in place as indicated on the drawing or as directed. All embedded items shall be cleaned free from all foreign matter such as scale, rust, oil paint etc. The Contractor shall be responsible for correctly embedding the parts as directed without any charge the cost of such embedding being deemed to have been included in the item of concrete and or masonry as the case may be. No extra payment will be made for the installation of this embedded work or for delays, or for interruptions arising there from.

1.9.0 SIGNING THE FIELD BOOKS, LONGITUDINAL SECTIONS, CROSS SECTIONS AND MEASUREMENT BOOKS.

Before starting the work for intermediate payments and at the end before the work is covered, levels for plotting the longitudinal section (along the axis as directed by the Engineer-in-charge or his authorized representative) and cross sections of the portions of the work shall be taken by authorized Engineer of the Corporation in the presence of Contractor or his duly authorized representative. The Contractor or his authorized engineer shall have to sign the field books and plans showing longitudinal sections and cross sections of the portion of the work in token of acceptance. If the Contractor fails to sign them, the levels recorded by the Engineer-in-charge or his representative in the authorized books shall be final and binding on the contractor. If the Contractor of his duly authorized agent fails to attend, the levels shall be taken in his absence and such levels and longitudinal sections and cross sections based thereon shall be final and binding on the Contractors. The levels will be taken on such alignments and cross sections as will be used

for reference permanently and will be in harmony with the mode of the measurements for payments and described under Specifications. The point locations for the levels will depend upon the ruggedness of the area and will also be at least in conformity with the requirements of specifications.

1.10.0 CEMENT AND STEEL SUPPLIED BY CORPORATION:

No material will be issued by the Corporation on Schedule 'A'. The Contractor is responsible for all materials including cement, steel, explosives, Hume pipes etc.

CEMENT PROCURED BY CONTRACTOR:

- A) The Contractor shall procure cement 43 grade confirming to I.S. 8112-1989 from recognized manufacturers such as L & T., A.C.C., Narmada, CCI, Rajashree, Manikgarh etc. in standard packing of 50 kg. per bag from the authorized manufactures. The Contractor shall make necessary arrangement at his own cost to the satisfaction of Engineer-in-charge for actual weighment or random sample from the available stock and shall conform with the specifications laid down by the Bureau of Indian Standards Cement shall be got tested in the laboratory under Quality control circle, Pune. In case of any dispute about the results, the cement shall be tested in M.E.R.I., Nashik. Results of M.R.R.I. will be taken as final for acceptance or rejection of cement. The cement bags brought and kept at site godown shall be tested for all the tests as directed by the Engineer-in-charge at least one month in advance before actual use of cement. Cement brought on site shall be as fresh as possible to the satisfaction of the Engineer-in- charge. The cement, if rejected, shall be immediately removed from the site at the Contractor's cost. Cement bags required for testing shall be supplied by the Contractor free of cost. The testing charges for cement will be borne by the Contractor.
- B) The use of admixtures and agents shall be made as per instructions of the Engineer- incharge. The cost of cartage / storing / handling / batching / mixing shall be borne by the Contractor and the cost of admixtures is included in unit prices tendered for concrete.
- C) The Contractor should maintain throughout the tenure of the work adequate stock of the cement (min 30 days requirement) so as to ensure that, at No time, work is stopped for want of cement. At the same, No cement of age older than 60 days from the date of dispatch from the manufacturing unit shall be used on the work. No cement shall be removed from the site without the permission of the Engineer-in-charge. The Contractor shall forthwith remove from the

works area any cement that the Engineer-in-charge may disallow for use on account of failure to meet with the required quality and standard. Cement stock of ONE months requirement shall be kept on site at least one month in advance. Samples for testing of the cement brought to the site shall be given free of cost by the Contractor, as and when required.

- D) The Contractor will have to construct sheds for storing cement having capacity Not less than the cement required for 90 days use at site. The Engineer-in-charge or his representative shall have free access to such stores at all times.
- E) The Contractor shall further, at all times satisfy the Engineer-in-charge on demand, by production of records and books or by submission of returns and other proofs as directed, that the cement is being used as tested and approved by the Engineer-in-charge for the purpose and the Contractor shall at all times keep his records up to date to enable the Engineer-in-charge to apply such checks as he may desire.

1.11.0 STEEL: (Procured By Contractor)

- A) The Contractor shall procure steel from the market. The Contractor shall make necessary arrangement at his own cost for sample from the available stock and shall conform with the specifications laid down by the Bureau of Indian Standards (vide their specification Nos. I.S. 432 (part-I) of 1966, 1786-1979).
- B) The Contractor should store the steel of 60 days requirement at least one month in advance.
 - C) The Contractor will have to construct sheds for storing steel having capacity Not less than the steel required for 90 days use at site. The Engineer-in-charge or his representative shall have free access to such stores at all times.
 - D) The Contractor shall further, at all times satisfy the Engineer-in-charge on demand, by production of records and books or by submission of returns and other proofs as directed that the steel is being used as tested and approved by the Engineer-in-charge for the purpose and the Contractor shall at all times keep his records up-to-date to enable the Engineer-in-charge to apply such checks as he may desire.
 - E) Local Contractors shall procure the steel from main producer such as SAILS, TISCO, ISCO. Rerolled steel will Not be acceptable. They should bring the test certificate of steel procured by them from the manufacturers.
 - F) The steel procured should conform to standard specification of Bureau Indian Standard I.S. No.1786 of 1979 for Tor steel and I.S. 432 of 1966 for mild steel.
 - G) Steel samples required for testing shall be supplied by Contractor free of cost. However the testing charge for steel will be borne by the Corporation. If the test proves unsatisfactory then the charges will be borne by the Contractor.

1.12.0 ROYALTIES:

The Contractor shall arrange for the materials from approved quarries. It is necessary for the contractor to obtain permission from revenue Authorities or other relevant Authority. All quarry fees, royalties, octroi dues and ground rent for staking materials, if any should be paid by Contractor. Amount of royalty charges will be withheld from the respective R.A. Bills and same will be released on production of receipts of paid royalty charges by the Contractor.

1.13.0 ADVANCE ON CONSTRUCTION MATERIALS:

For imperishable materials brought on site by the Contractor and meant to be incorporated or consumed in work, secured advance at 75% (Seventy Five percent) of the cost assessed by the Engineer-in-charge shall be paid provided that such paterials are Not in excess of the requirement of the work. The Contractor shall furnish indenture bond for the amount of the advance in the form of prescribed by Corporation for the same. The recovery of such advance shall be made from each succeeding work bill, at the rates the material have been consumed in the relevant finished item.

1.14.0 PAYMENT

Generally, the Corporation will pay two running bills in a month, i.e. on 10th and 25th day of each month provided that the Contractor submits his bills by these dates. The recoveries for various advance shall be effected from these bills. The total recovery on all accounts shall be limited to 50% (Fifty Percent) of the gross bill and the balance if any, shall be recovered from the succeeding monthly bills.

1.15.0 NO INTEREST ON MONEY DUE TO THE CONTRACTOR:

No omission by the Engineer-in-charge to pay the amount due open measurements or otherwise shall vitiate or make void, the Contractor, Nor shall Contractor be entitled to get 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.

1.16.0 If due to difficulties in land acquisition, land does not become available, the same can not be handed over to the Contractor. In such a situation the Contractor shall not be entitled to any claim. If the lands do not become available up to 50% of the time limit of the tender, the execution of the quantities of works under various items pertaining to such, lengths shall be optional.

1.17.0 HANDING OVER OF COMPLETED REACHES AND LETTING OUT WATER FOR IRRIGATION:

- **1.17.1**. On the request of the Contractor continuous completed reaches of main canal would be taken over by the Corporation provided if it fulfils the condition specified below.
- 1.17.2 .The term 'Completed' under 1.17.1 above should be deemed to be inclusive of structures. The measurements for the work shall be taken by Corporations authorized engineer in the presence of Contractors or his authorized representative and recorded in the authorized books. The Engineer in charge shall obtain the signature of the contractor or his authorized representative on such recorded measurement in token of acceptance. If the contractor fails to accept such measurements, then the Engineer-in-charge will cause to record the measurements which will be final and binding on the Contractor. This Para is applicable to all items.

EXCAVATION:

- 2.1.0 Scope
- 2.2.0. Clearing the site.
- 2.3.0. Line out.
- 2.4.0. Excavation.
- 2.4.1. Scope of work.
- 2.4.2. Excavation in rock.
- 2.4.3. Removal of loose rock etc.
- 2.5.0. Classifications.
- 2.5.3. Pay lines.
- 2.5.4. Bed.
- 2.5.4.1. Extra excavation for B.C.
- 2.5.4.2. Excavation Hard strata.
- 2.6.0. Maintenance of slopes in excavation.
- 2.6.1. Slips Corporation Not responsible.
- 2.7.0. Use of excavated stuff.
- 2.7.2. Deposition of excavated stuff, clear off traffic line etc.
- 2.8.0. Sorting and stacking of materials.
- 2.9.0. Surplus materials.
- 2.9.1. Stacking in stock and waste piles.
- 2.10.0. Mode of measurements, Running payment for excavation.
- 2.11.0. Silting of excavation. Silting of canal due to flood, Corporation Not responsible.
- 2.12.0. Box excavation.
- 2.13.0. Excavation in wet condition and dewatering.
- 2.13.1. Contractor to dewater whenever required.
- 2.14.0. Preparing and testing of foundation (Structures).
- 2.14.1. Scaling and trimming of foundations.
- 2.14.2. Treatment of weak local spots.
- 2.14.3. Final finished surface of foundation.
- 2.14.4. Testing for soundness.
- 2.14.5. Payment lines.
- 2.14.6. Over cuts.
- 2.14.7. Mode of measurements and payments.

- 2.15.0. Blasting.
- 2.15.1. Observing rules regarding blasting.
- 2.15.2. Storing of explosives.
- 2.15.3. Restrictions of blasting.
- 2.16.0 Excavation in hard strata with chiseling and / or Controlled blasting.
- 2.16.1. Canal excavation in hard strata. Chiseling manually or excavation by pneumatic rock breakers.
- 2.16.2. Alternative technique approved by the Engineer-in-charge
- . 2.16.3. Contractor responsible for damage. Payment to cause damage.

2.17.0. RULES FOR BLASTING OPERATIONS:

GENERAL:

- 1.0 Acquaintance with applicable laws and regulations.
- 2.0. Issue of modifications, alterations or new instructions to comply with.

MATERIAL:

- 3.0 Use of black powder and safe explosive.
- 4.0 Use of fuse.
- 5.0 Use of detonators.

PERSONNEL:

- 2.18.0 Excavation by blasting.
- 2.18.1 Insurance of all Supervisors and workmen.
- 2.18.2 Storage-in-charge of
- 2.18.4 Rules regarding store handling supervisors and workmen conversant with.
- 2.18.5 Use of tools or implements.
- 2.18.6 Boxes of explosives.
- 2.18.7 Empty boxes or loose packing material.
- 2.18.8 Lightening conductor.
- 2.18.9 Hanging of Notice regarding prohibition for entrance of persons.
- 2.18.10 Notice regarding different instructions.
- 2.18.11 Inspection of magazine.
- 2.18.12 Use of explosives.
- 2.18.13 Explosives and detonators.
- 2.18.14 Storage of explosives.
- 2.18.15 Storage of explosives, detonators and fuses.
- 2.18.16 Day to day account of explosives.

- 2.18.17 Cleanliness of magazine.
- 2.18.18 No entrance of unauthorized persons.
- 2.18.19 Safety of magazine.
- 2.18.20 Closure of magazine during thunder storm.
- 2.181.21 Use of magazine shoes.

2.19.0. DISPOSAL OF DETERIORATED EXPLOSIVES:

- 2.19.1 Preparation of primers.
- 2.19.2 Charging of holes.
- 2.19.3 Blasting.
- 2.19.4 Electric firing.
- 2.19.5 Precautions after blast and misfire.
- 2.19.6 Precautions after blasting.

SECTION – 2 EXCAVATION

2.0.0 EXCAVATION:

2.1.0. SCOPE:

The item shall include clearing site, excavation to the designed section, removal of the material, their sorting out as specified and their depositing either in spoil banks or in bank work in layers as specified including all leads and lifts.

2.2.0 CLEARING SITE:

The site of excavation shall be cleared of all grass vegetation, fencing, bushes, trees as directed by the Engineer-in-charge. The materials, obtained from such clearance shall be the property of the Corporation and shall be stacked on the maintenance land strips so as Not to cause obstruction to the work.

2.3.0 LINE OUT:

All materials such as pegs, bamboos and strings and templates for making out slopes, and labour required for line out shall be the Contractor at his own cost. The center line of excavation shall be clearly marked by pegs or by stones at each chain or change of direction or at shorter intervals on curves, in the beginning. The final line out will be done by fixing reference stone at suitable distances on either side of the center line, beyond the dam edges so that they are Not disturbed during the construction period. The position of these stones will be marked on the cross section.

No change in the sanctioned plans and designs is permissible without the written permissions of Engineer-in-charge.

Before staring the work, the Contractor shall have to sign the field books and plan showing the working longitudinal sections and cross sections of the portions of the alignment, that he has to tackle. If the Contractor fails to sign them within three days of being called up on to do so, the levels and sections as recorded by Engineer-in-charge or Assistant will be final and binding on the Contractor. Contractor shall provide and maintain the quarry and temporary roads required for conveying and transport of materials at his cost.

For the points which are Not covered by these specifications, the instructions given by the Engineer-in-charge shall be final and binding on the Contractor.

The material available from all excavation and remaining surplus after use on the work from adjacent reaches works etc. can be used by the Contractor free of cost provided these materials are used solely for the specific contract work and prior approval of the Engineer-in-charge is taken.

2.4.0 EXCAVATIONS:

2.4.1. SCOPE OF WORK:

Along the excavation and removal of excavated material and its disposal in a manner hereinafter specified, the rate for the item of excavation will also including ,Clearing of site. Setting out works, profits etc. according to sanctioned plan, or as directed by the Engineer in charge and setting up bench marks and other reference marks.

Providing and subsequently removing shoring and strutting if and when necessary. Bailing and pumping out water during excavation.

Necessary protection including labour, materials and equipments to ensure safety and protection against risk or accident.

Supply of facilities for inspection and measurements at any time to the concerned Corporation officials. Compensation for injury to life and damage to property if any, caused by Contractor's operations connected with this item. Canal section shall be excavated as shown on the drawings or as directed by the Engineer-in-charge. Both edges of the banks, specially the inner one shall be neatly aligned symmetrically to the center line of canal. They shall be absolutely straight reaches and smoothly curved at bends.

Suitable arrangements for drainage shall be provided to take surface water clear of excavation during the progress of work.

Excavation may be carried out by manual labour or by excavating machine.

2.4.2 EXCAVATION IN ROCK:

Excavation in rock shall be such that all sharp points of rock are chipped off so as Not to extend into the dam profile. Blasting in a manner which is likely to produce over breakage which in the opinion of Engineer-in-charge is excessive, shall Not be permitted beyond pay line and No payment will be made for such excess excavation. The material excavated in a chain of 20/30 metres shall be stacked on either side of the chain as specified on the drawing or as directed by Engineer-in-charge.

The excavation shall be carried out according to the design with accurately graded bed fall and side properly slopped as shown in the drawings and as directed by the Engineer-in-charge. The cross section adopted in cutting is likely to change in side slopes according to the depth, of different strata during actual excavation. The Contractor therefore, should get clear instructions from Engineer-in-charge, before commencing any cutting work.

No claims for any variations in quantity of excavation resulting from the deviation from the instructions of the Engineer-in-charge would be accepted. To account for this, the central box

cutting with the canal bed width as its width have to be taken to canal bed level first, before the side slopes are determined and attacked (except for deep cutting of more than 6 m depth). In portions where deep cutting of more than 6 m is to be done, the mode of excavation to be followed must to be approved from the Engineer-in-charge, before starting the work in such reaches and in any case, width of excavation to be tackled initially shall Not be more than bed width + depth.

The excavation should initially be carried out in steps. The steps should have such width and depth that after they are cut, the required final side slopes in attained. Cutting of steps should be done after bed level is reached and after one monsoon. If cutting is in soft strata, cutting of steps should be done just prior of preparing the side slopes for laying lining.

2.4.3 REMOVAL OF LOOSE ROCK ETC.:

Before any work of excavation is taken up, all loose rock, semi-detached rock in/or close to the areas to be excavated, that is liable to fall or otherwise endanger the workmen on the project shall be stripped. The methods employed shall be such as will Not shatter or render unstable and therefore unsafe any rock that was originally sound or safe. Any material Not requiring removal as contemplated herein, but which may later become loosed or unstable shall promptly and satisfactorily removed. The cost of such cleaning shall be deemed to have been included in the unit rates accepted under the different items under excavation.

2.5.0 CLASSIFICATIONS:

The classification of strata shall be as under.

2.5.1 SOFT STRATA:

This shall include all kinds of rock or shale, indurate clay soil silt sand and gravel, soft average and hard murum and any other materials which can best be removed with a shovel after loosening with a pick and / or bar. It shall also include isolated boulders up to 0.1 cubic metre each, which does Not need blasting and can be removed with a pick / bar and shovel.

2.5.2 HARD STRATA:

This shall include all rock occurring in masses in all types of geological formations which could best be Removed by blasting, where such blasting is permissible. It shall also include rock which owing to the .proximity of buildings / structures / electric lines, public roads or for any other reasons has to be cut by means of chisels or wedges. It shall also include boulders in mass and isolated boulders over 0.1 cubic .metre each which required blasting or wedging and breaking for any removal. Merely the use of explosives in excavation shall Not be considered a reason for classification in hard strata unless regular blasting is clearly necessary in the opinion of the Engineer-in-charge. The hardness of strata or material to be excavated, presence of different type of geological constituents requiring increased drilling efforts, consumption of

explosives, labour and use of machinery shall Not be considered as reason for claim/ increase in contract rates. In case of the disputes over the classification of strata met with during execution, the decision of the Engineer-in-charge will be final.

2.5.3 PAYMENT LINE (PAY LINES):

The minimum excavation line is the line within which No unexcavated portion of any kind shall be allowed to remain i.e. a neat profile line for unlined and underside of the lining proposed if any for works of canal and disnet.

Payment shall be made for the work done as per the paylines prescribed in various strata and side slopes as below:

FOR SIDES:

a) In case of hard strata where up to side slopes up to 0.5:1 are provided minimum thickness of 20cm. chip masonry in C.M. (1:8) shall be provided. Pay line for payment for excavation and back fill shall be limited to 30 cm. average. If any over cuts are more than this limit, No payment for additional over cuts and backfill will be paid for.

In case, excavation beyond minimum line of excavation (i.e. underside of lining) is in between 0 to 10 cm. back fill with C.C. (1:3:6) for side lining shall be done and paid for..

- **b)** In case of canal excavation with side slopes 1:1 in hard strata, pay line of 15 cm. shall be permitted for payment of excavation and backfill with C.C. (1:6:12)
- c) In case of canal excavation with side slopes 1:5:1 in hard strata pay line up to 15 cm. shall be permitted for payment of excavation and backfill with chip masonry in C.M. (1:8/1:10). In case the average excavation beyond minimum line of excavation is up to 5 cm. backfill shall be done with C.M. (1:6:12). Apart from the standards given above for the pay lines, the Contractor shall take care to see that the slopes are stable and No accidents or slips would occur. Tolerance for over cut beyond pay lines arising out of peculiar nature of rock at the site and other site conditions shall be decided by the Superintending Engineer In-Charge of the work. Payment for excavation beyond pay lines up to tolerance in such specific cases shall be made @ 60% tender rate of the particular item of the work. No tolerance shall however be permitted in soft strata.

2.5.4 FOR BED:

Pay line in case of bed shall be 15 cm. Extra excavation in bed beyond designed section shall be backfilled with murum.

In case soft strata No pay line is admissible. Extra excavation beyond designed section for sides in soft strata shall be backfilled with murum.

2.5.4.1 EXTRA EXCAVATION FOR BLACK COTTON SOIL:

Whether the canal bed and sides up to T.B.L. are in B.C. soil, extra excavation to 100 cm. depth is to be done for having murum back filling and this will be measured under respective items. Murum filling will be paid under item of casing.

2.5.4.2 While excavating in hard strata, if soft seams are struck, they will be considered as part of hard strata if the depth of individual seams is up to 15 cm. When depth of soft seams is more than 15 cm. it will be paid under item of soft strata.

2.6.0 MAINTENANCE OF SLOPES IN EXCAVATION:

Any shoring and strutting required during excavation and afterwards shall be deemed to be covered by the rates quoted for the items.

2.6.1 SLIPS-CORPORATION NOT RESPONSIBLE:

Slips shall be avoided, but if any slips occur on account of any reason, the excavation shall be promptly restored to stability. No extra claims shall be entertained for such slips.

The Contractor shall have to make good the work at his cost.

2.7.0 USE OF EXCAVATED STUFF:

Excavation shall be done systematically so that only those excavated stuff which will be permitted for use will be used on the banks without double handling.

2.7.2 DEPOSITION OF EXCAVATED STUFF CLEAR OFF

TRAFFIC LINES ETC.:

Disposal of all material from excavation shall be as per approved disposal plan or instructions of Engineer-in-charge, regarding the location and deposition of the stock piles, spoil banks or embankment. Before any excavation is started the deposition of soil shall be carefully planned so as Not to obstruct Normal traffic and traffic lines required for the construction materials, and shall be dumped sufficiently clear off the edges of the excavation so as Not to endanger stability of the slopes of the excavation and also to permit ample space for lorry paths, installation and lifting of pumping devices, stacking construction materials etc. Excavated stuff should Not be dumped near the outlet location.

2.8.0 SORTING AND STACKING OF MATERIALS:

Excavated materials shall be sorted out and stacked as under:

a) SOFT STRATA:

All the excavated materials from the soft strata shall be sorted out. The material Not useful for bank work shall be deposited as directed by the Engineer-in-charge. Material useful in bank work shall be sorted out to be used in hearing or casing. Each stock pile of required material shall be of regular size and Not less than 5 m. in height.

b) HARD STRATA:

Rubble and boulders from hard strata shall be stacked in separate areas as directed by the Engineer-in-charge. Stock Piles shall be of regular shapes, allowing for easy measurement. No stock piles shall measure more than 200 Sqm. in plan and more than 1.5 m. in height, unless specifically permitted by the Engineer-in-charge in writing.

2.9.0 SURPLUS MATERIALS:

The excavated materials, if Not required for embankment, should be stacked in spoil banks with neatly made stable slopes at top and a suitable berm being left between the toe of bank, and edge of excavation, as directed. In partial banks, where a side embankment is required to retain water, it's limit should be lined out before starting the excavation so that the soil may be disposed off properly.

2.9.1 STACKING IN STOCK AND WASTE PILES:

After sorting is done, useful materials of various types shall be stacked in stock piles and rest may be disposed off as directed by Engineer-in-charge.

Useful material shall be stacked in separate areas as directed with reference to the nature of the material. Stock piles shall be of regular shapes allowing for easy measurement. No stock pile shall measure less than 60 m. length and 5 m. height unless specially permitted by the Engineer-in-charge.

The excavated material shall be stacked within the area approved by the Engineer-in-charge. If the excavated material is deposited in unauthorized land, such work will Not be measured for payment unless suitable action as may be directed by the Engineer-in-charge is taken by the Contractor. In addition to Non-payment of such work suitable amounts as directed by the Engineer-in-charge will be recovered from the Contractor as deposited towards any extra cost which Corporation may have to bear on account of the Contractor's unauthorized action.

All the materials available from excavation will be the property of Corporation and shall be deposited as directed by the Engineer-in-charge. The material of approved quality may be used by the Contractor in the item of work included in Schedule 'B' of the tender or on ancillary for preparatory work free of charge even from the surplus laying in the adjoining reaches. Prior approval of the Engineer-in-charge for such free use shall however be taken.

2.10.0 MODE OF MEASUREMENTS:

2.10.1 Classification of the excavation will be made from the cross sections visible at the sides of excavation and from measurements of ridges which shall be left at 20 m. or less as directed by the Engineer-in-charge, which must be removed immediately after the final measurements have been taken except when order are specially given to retain these ridges. No dead man would be allowed. The area shall be worked out generally by ordinate method using primordial formula.

As a rule, measurement of the excavated material on stacks shall Not be permitted. However, when it is Not possible to get a record of the excavated material in cross section, measurement of the excavated material on stacks may be permitted on writing. In such a case the stacks, shall be on level ground rectangular in shape and shall Not be more than 1 metre in height. The deduction for voids at the following percentage shall be made from the gross quantities of stack measurements to arrive at the net quantity.

i) Soft Strata 25%

ii) Hard Strata

40%

2.11.0 SILTING OF EXCAVATION:

SILTING OF CANAL DUE TO FLOODS-CORPORATION NOT RESPONSIBLE:

If excavated pits get silted due to intervening floods, slips or any other cause, till completion of the work, the Contractor shall excavated and restore the pits and section to the required shape and dimensions without any extra cost.

2.12.0 Initially box excavation shall be carried out up to top of hard murum, Thereafter stable slopes may be cut in soft strata as stated hereafter.

On striking hard rock in foundation trench the surface of this rock should be exposed on all area of the trench and it should be brought to the Notice by the Contractor to the Engineer-in-charge who will record levels of the top of hard stratum taken along predetermined sections. Thereafter further excavation in hard strata can be continued up to foundation level to be fixed by the Engineer-in-charge. Failure to do so by the Contractor will Not entitle him to get payment for the work that may have been done under item of hard stratum.

2.13.0 EXCAVATION IN WET CONDITION AND DEWATERING:

Unless otherwise specified, No distinction will be made as to whether the material being excavated is dry, moist or in wet condition. Dealing with the ground water or rainwater collected and its disposal is covered under this relevant item of excavation and will Not be paid for separately.

2.13.1 CONTRACTOR TO DEWATER WHENEVER REQUIRED:

The area under all the works pertaining to this tender and adjoining area as necessary shall be maintained free of water.

The area shall also be maintained free of water after any part of the work is completed for inspection, safety and installation by Corporation, or for any other reasons determined as necessary by the Engineer-in-charge. The sumps shall be well lighted and shall be readily accessible for inspection. The Contractor shall pump out all water from the site and appurtenant works and shall keep the foundation free of water, while excavating, concreting and placing masonry and continue to keep the works free of water for a period as may be required for proper setting of mortar or concrete or otherwise required for the completion of works.

The Contractor shall have to construct and maintain during construction of structures, cofferdams, diversion channels and other diversions or protective works as necessary after approval from Engineer-in-charge. The Contractor shall Not be entitled to any claims or damages on account of or by reason of any amount of water leaking through under or around cofferdams, diversion channels and other diversion or protective works or overtopping of diversion works.

2.14.0 PREPARING AND TESTING OF FOUNDATIONS:

2.14.1 SCALING AND TRIMMING OF FOUNDATIONS:

After rough excavation to the required depth is completed scaling and trimming operations for the removal of all pieces loosened during excavation or partly separated from main rock mass by seams or cracks shall be carried out to the satisfaction of the Engineer-in-charge.

2.14.2 TREATMENT OF WEAK LOCAL SPOTS;

All weathered or partly or decomposed pieces of rock shall be removed so as Not leave on the foundation any rock under than that is an integral part of the rock mass. Areas of low bearing capacity steep inclined seams, faults and crushed zone in an otherwise good foundation, if permitted to be kept shall be cleared out to a sufficient depth and refilled and plugged with masonry or concrete as directed by the Engineer-in-charge.

2.14.3 FINAL FINISHED SURFACE OF FOUNDATION:

The finally prepared foundation shall present a rough surface in cross section to give added resistance to sliding. All smooth surfaces shall be roughened artificially to give a good bond. The surface shall be free from steep angles and the edges of benches shall be chamfered approximately to 45° Pinnacles of sharp projection shall be kNocked off and prominent kNobs flattened.

2.14.4 TESTING FOR SOUNDNESS:

The finally finished foundation rock shall be tested by striking with a heavy hammer and if loose portion of foundation rock is revealed by a hollow sound. It shall be excavated further (without blasting) till a clear ringing sound is obtained.

2.14.5 EXCAVATION OUTLINES AND PAY LINES:

All excavation shall be performed in accordance with the lines, grades, levels and dimensions shown in the drawing or established by the Engineer-in-charge. The dimensions shown in the drawing are tentative. During the progress of work it may be necessary or desirable to vary the slopes or the dimensions of excavation from those specified in the drawing. The side slopes of the excavation shall be as steep as would stand with safety as directed by the Engineer-in-charge. If the slopes established are found to be steeper and likely to slip, they shall be made flatter by removing the additional material and introducing suitable berms if possible and stable

faces established. The additional excavation will be period at the rate accepted for excavation for particular class of material.

Excess Excavation:

No payment shall be made for the work done beyond specified pay line. Normally pay lines for different strata for excavation are defined as the lines starting from the outer dimension of the masonry or concrete at foundation level and sloping up as follows.

a) Soft strata : 1.5:1b) Hard strata : 0.25:1

c) Berms with prior approval.

If in the opinion of Superintending Engineer the sides are unstable and prone for slip, modified pay lines will be laid down with flatter slopes and berms etc. as decided by him.

Any or all excess excavation carried out by the Contractor beyond approved pay lines for any purpose or reason, shall unless ordered in writing be at the expense of the Contractor, and if the unauthorized excavation has to be filled with concrete or masonry or with materials approved as filling so needed shall be carried by the Contractor as per specifications of the respective items of work at his own expense. Tolerance for over cut beyond pay lines arising out of peculiar nature of rock at the site and other conditions shall be decided by the Superintending Engineer-In-Charge of the work. Payment for excavation beyond pay lines up to tolerance line in such specific cases shall be made @ 60@ tender rate of the particular item of the work. No tolerance shall however be permitted in soft strata.

2.14.6 OVER CUT:

Over cut is defined as the quantity of excavation beyond payment lines and the unit rate for the volume payable within pay lines covers the cost of over cut unless otherwise specified.

Over cut in soft strata shall be filled with the specified for the back fill back to the same standard of placement as stipulated for the backfill and is covered by the payment under backfill item up to pay lines unless otherwise specified.

2.14.7 MODE OF MEASUREMENTS:

- ▶ The measurements shall be based on areas of cross-sections taken Normal to the axis of the structure or its part of the original ground surface and the surface of the finally completed excavation within the pay lines, taken at every 10 metres along the axis of structure or its part.
- ► Where there is abrupt change in depth, additional cross sections may be taken at the discretion of the Engineer-in-charge.
- ► Levels along the cross sections shall be taken at every 15 to 20 metres or 5 metres as per exigency of work.
- ▶ Quantities shall be computed from the cross sectional area by the trapezoidal formula.

► The contractor shall execute the Earthwork and structure simultaneously so that entire work gets completed simultaneously with quality.

2.14.7.2 MODE OF PAYMENT

▶ The mode of payment for excavation items (Item No 1, 2) shall be released in following stages.

Sr	Stage	Percentage of Full Rate to	
No		be released	
1.	Running Account Bills	60	
2.	Completion of earthwork to design section	15	
3.	On completion of Box Pushing	15	
4.	In final bill after completion of work	10	

▶ 100 % amount of excavation will be paid in final bill only, if all structures in the contract are completed and Earthwork is completed to design section.

Note: If contractor abandons the work without finalizing the earthwork as per design section or structures in the reach are Not completed, retained amount will Not be released.

▶ Quantities shall be computed from the cross sectional area by the trapezonidal formula and paid on Cum. basis.

2.15.0. BLASTING:

2.15.1 OBSERVING RULES REGARDING BLASTING:

In conducting blasting operations proper precautions shall be taken for the protection of persons, the work and property. All Government laws relating to the design and location of the magazine, transport and handling of explosives and other measures for the prevention of accident shall strictly observed. Warning signs shall be prominently displayed on the magazines, and warning signals given for each blast. Specifications for blasting given under the separate section shall be carefully and rigidly observed.

2.15.2 STORING OF EXPLOSIVES:

Explosives shall be stores in a safe place at sufficient distances from the work and under the special care of watchman so that in case of accidents No damage occurs to the other part of work

explosives, detonators and fuses shall be each separately stored. No objection Certificate from District Magistrate or Inspector of Explosives shall be obtained as required by the Contractor.

2.15.3 RESTRICTIONS OF BLASTING:

- a) Blasting which may disturb or endanger the stability, safety or the quality of the foundation will Not be permitted.
- b) Blasting within 30 metre of masonry work in progress or of a permanent structure shall Not be permitted.
- c) Progressive blasting shall be limited to two third of the total remaining depth of excavation.
- d) No large scale blasting operation will be resorted to when the foundation excavation reaches the last half metre. Only small charges preferably black powder may be allowed so as Not to shatter the foundation.
- e) Rules of blasting are as appended.

2.16.0. EXCAVATION IN HARD STRATA WITH CHISELLING AND/OR CONTROLLED BLASTING:

- 2.16.1 Here the canal excavation in hard strata is involved, where usual blasting operation are likely to damage the adjoining houses, transmission lines or hinder the traffic on important roads. The excavation for a good length is required to be done under controlled blasting conditions and / or chiseling. The item will include excavation in hard strata to the correct sections as shown in the drawings with chiseling and / or controlled blasting and depositing the excavated stuff as and where directed.
- **2.16.2** The Contractor shall obtain written permission of the Engineer-in-charge before undertaking the work under this item for specific reaches.

In addition to the specifications under paras 2.1.0 to 2.12.0 of Section 2. The following specifications will apply to this item.

The holes for blasting will be drilled for a depth of only 40 cm. thus increasing the No of holes and correspondingly decreasing the charge required for each holes.

The holes as far as possible will be slant. All the holes after charging will be covered by grill of steel rods which will be suitably loaded by gunny bags filled with sand or murum.

The steel grill will be so lowered over the holes as Not to cause any damage to the fuse wire or charges and care will be taken to see that the fuse wires remain free. The loading will be sufficient to prevent the overthrow of rock after blasting. In addition to the above loading, the steel grill will be securely anchored to the adjoining rock by clamps. The steel grill shall extend at least 3 metres beyond the area to be blasted.

Chiseling manually or excavation by pneumatic rock breakers will be resorted to as directed by Engineer-in-charge where blasting canNot be permitted.

Contractor

No. of Correction

Executive Engineer

2.16.3 Any alternate technique approved by the Engineer-in-charge may be used, but approval to execute the work by the above mentioned method or alternate technique will Not relieve the Contractor of the responsibility of damage to the power line and properties.

2.17.0. RULES FOR BLASTING OPERATION

GENERAL:

- 1. The Contractor shall acquaint himself with all applicable laws and regulations concerning storing, handling and the use of explosives. All such laws, regulations and rules etc. and current from time to time shall be binding on the Contractor
- 2. The provisions detailed in these rules are supplementary to above laws, rules and regulations etc. and are applicable except where they conflict with the aforementioned laws etc. from time to time. Further, the Engineer-in-charge may issue modification, alterations or new instructions from time to time. The Contractor shall comply with the same without these being made a cause for any claims.

MATERIALS:

- 3. All materials such as explosives, detonators, fuses, tamping materials etc. those are proposed to be used in the blasting operations shall have the prior of the Engineer-in charge.
- 4. Black powder and safe explosives shall be used wherever possible. Explosive with nitroglycerine shall only be used under exceptional cirCumstances and where the above explosives are Not effective.
- 5. The use of fuse with only one protective coat is prohibited. The fuse shall be sufficiently water resistant as to be unaffected when immersed in water for thirty minutes. The rate of burning of the fuse shall be uniform and less than 4 seconds per 25 cms. of length with 10 percent tolerance on either side. Before use, the fuses shall be inspected, and the moist, damaged or broken ones discarded. The rate of burning of all new types of fuses, or when they have been in stock for long shall be tested before use.
- 6. The detonators used shall be capable of giving effective blasting of the explosives. Moist or damaged detonators shall be discarded.

2.18.0. PERSONNEL:

- **2.18.1** Excavation by blasting will be permitted only under personal supervision of component and licensed persons and trained workmen.
- **2.18.2.** All supervisors and workmen in charge of making up, handling storage and blasting work shall be adequately insured by the Contractor.

- 2.18.3 The storage shall be in charge of very reliable person approved by the Engineer-in-charge, who may, if necessary, cause police enquiries being made as to his reliability, antecedents etc. The Contractor shall have to produce a security for the person in charge of explosives if and as required by the Engineer-in-charge of the Civil Authorities of the District.
- **2.18.4** The Contractor shall make sure that his supervisors and workmen are fully conversant with all the rules to be observed in storing, handling and use of the explosives. It should be assured that the supervisor in-charge, is thoroughly acquainted with all the details of the handling of the blasting operations.
- **2.18.5** No tools or implements, other than those of copper, brass, gunmetal or wood shall b allowed inside the magazine. All tools shall be used with extreme gentleness and care.
- 2.18.6 Boxes of explosives shall Not be thrown or dragged along the floor and shall be stacked on wooden trestles. Where there are white ants, the legs of the trestles should rest in shallow copper, lead or brass bowls containing water. Open boxes of dynamite shall never be exposed to the direct rays of the sun.
- **2.18.7** Empty boxes or loose packing material shall Not be kept inside the magazine.
- 2.18.8 The magazine shall have a lightening conductor which shall be got tested at least once a year by any officer authorized by the Engineer-in-charge. The testing fees shall be a charge on the Contractor. The Contractor shall, within 15 days comply with all the recommendations made by the officer testing the lightening conductor, failing which Engineer-in-charge shall be entitled to comply with the same at the Contractor's expenses which shall Not be open to question or may take any action that he may consider fit.
- **2.18.9** A Notice shall be hung near the store prohibiting entrance of unauthorized persons.
- 2.18.10 The following shall be hung in the lobby of magazine.
 - a) A copy of the rules both in English and in the language with which the workers concerned are familiar with.
 - b) A statement showing the up to date stock in the magazine.
 - c) A certificate showing the last date of testing lightening conductor.
 - d) A Notice that smoking is strictly prohibited.
- 2.18.11 The magazine will be inspected at least twice a year by the officer representing the Engineer in-charge, who will see that all the rules are strictly complied with. He will Notify all omissions etc. to the . Contractor, who shall rectify the defect within a period of 15 days from

the date of receipt of the Notice failing which the Engineer-in-charge may take whatever action he considers suitable.

2.18.12 USE OF EXPLOSIVES:

For the transport of the explosives and detonators between the stores and the site, closed and strong container made of a soft material as timber, zinc, copper, leather and the like shall be used.

2.18.13 Explosive and detonators shall be carried in separate boxes and transported separately. For the conveyance of primer, special, containers shall be used.

2.18.14 STORAGE OF EXPLOSIVES:

The Contractor shall build a magazine for storing the explosive. The site of the magazine, its capacity and design shall be subject to approval by the Engineer-in-charge and the inspection of the Controller of Explosive before the construction is taken up. As a rule, the explosives should be stores in a clean, dry well ventilated bullet proof and fire proof building on the isolated site.

- **2.18.15** The explosives, detonator and fuses shall be separately stored.
- 2.18.16 A careful and day to day account of the use of explosives shall be kept by the Contractor in an approved register and in approved manner. The register shall be produced by the Contractor for inspection of the Engineer-in-charge when so required by the later. The Engineer-in-charge may also pay surprise visits to the storage magazine. In case of any unaccountable shortage of the explosive or if the account is Not found to have been maintained in the manner prescribed by the Engineer-in-charge, the Contractor shall be liable to be penalized with forfeiture of the security deposit lodged by him with the Corporation or his tender shall be liable to be cancelled in which case he shall Not be entitled to any compensation for the losses etc. The action taken under clause shall be in addition to that which be taken by the Competent Civil Authorities in court of law.
- **2.18.17** The magazine shall at all times be kept clean.
- **2.18.18** No unauthorized person shall at any time be admitted inside the magazine.
- **2.18.19** The magazine shall, when Not in use of authorized person, be kept well and securely locked.
- **2.18.20** The magazine shall on No account be opened during or in the approach of thunderstorm and No person shall remain in the vicinity of the magazine during such period.
- 2.18.21 Magazine shoes without nail shall at all time be kept in the magazine and wooden tub or cement through 30 cm. High and 45 cm. in diametre filled with water shall be fixed near the door of the magazine.

Contractor

Persons entering the magazine must put on the magazine shoes which shall be provided by the Contractor for the purpose and be careful.

- i) Not to put their feet on the clean floor unless they have the magazine shoes on.
- ii) Not to allow the magazines shoes to touch the ground outside the clean floor.
- ii) Not to allow any dirt or grit to fall on the clean floor. Person with bare feet, shall before entering the magazine, dip their feet in water and then step directly from the tub over the barrier (if there be one) on to the clean floor.

A brush or broom shall be kept in the lobby of the magazine for cleaning out the magazine on each occasion it is opened for receipt, delivery or inspection of explosives. No matches or inflammable material shall be allowed in the magazine. Light shall be obtained from an electric storage battery lantern. No person having article of steel or iron on him shall be allowed to enter the magazine.

Workmen shall be examined before they enter the magazine to see that they have None of the prohibited articles on their person.

Cotton rags waste and articles liable to spontaneous ignition shall Not be allowed inside the magazine. The boxes and containers used shall be kept well closed. Explosives shall be stored and used chronologically to ensure the one received earlier being used first.

A make up house shall be provided at each working place in which cartridge will be made up by a experienced man as required. The make up house shall be separated from other building. Only electric storage battery lamps shall be used in this house.

No smoking shall be allowed in the make up house.

2.19.0. DISPOSAL OF DETERIORATED EXPLOSIVES:

All deteriorated explosives shall be disposed off in an approved manner. The quantity of deteriorated explosives to be disposed off shall be intimated to the Engineer-in-charge prior to its disposal.

2.19.1. PREPARATION OF PRIMERS:

The primers shall Not be prepared near open flames or fires. The work of preparation of primers shall always be entrusted to same personnel. Primers shall be used as soon as possible after they are ready.

2.19.2. CHARGING OF HOLES:

The work of charging shall Not commence before all the drilling work at the site is completed and the supervisor has satisfied himself to that effect by actual inspection. While charging, open lamps shall be kept away. For charging with powdered explosives, naked flames shall Not be allowed. Only wooden tamping rods without any kind of metal on them shall be

allowed to be used. Bore holes must be of such a size that the cartridges can easily pass down them. Only one cartridge shall be inserted at a time and gently pressed then with the tamping rod. The sand, clay or other tamping material used for filling the hole completely shall Not be tamped too hard.

2.19.3 BLASTING:

Blasting shall be carried out during fixed hours of the day which shall have the approval of the Engineer-in-charge. The blasting hours once fixed shall Not be altered without prior approval of the Engineer-in-charge. The site of blasting operations shall be prominently demarcated by red danger flags. The order to fire shall be given only by the Supervisor-in- charge of the work and his order shall be given only after giving the three time to reach safe shelter and after having ascertained that Nobody warning signal is within the danger zone. A bugle with a distinctive Note shall be used to give the warning signals. The bugle shall Not be used for any other purpose. All the labourers shall be made acquainted with the sound of the bugle and shall be strictly warned to leave the work immediately at the first warning signal and to make for safe shelter and Not to leave the shelter until the clear signal has been given. All the roads and footpath leading to the blasting are shall be watched. In special cases suitable extra precautions shall be taken. For lighting the fuses, a lamp with strong flame such a carbide lamp shall be used. The supervisor shall watch the time required for firing the fuses and shall see that all the workmen are under safe shelters in good time.

2.19.4. ELECTRICAL FIRING:

Only the supervisor in charge shall keep key of the firing apparatus and shall keep it always with himself. Special apparatus shall be used as a source of current for the blasting perations, power lines shall Not be tapped for the purpose. All the detonators shall be checked before use. For blasts in one series, only detonators of the same manufacture and of the same group of electrical resistance shall be used. Such of the electrical lines as could constitute danger for work of charging shall be removed from the site. The firing cable shall have proper insulating cover so as to avoid short circuiting due to contact with metallic part of rock. The use of the earth as a return line shall Not be permitted. The firing cable shall be connected to the source of current only after ascertaining that Nobody is in the area of blasting. Before firing the circuit shall be checked by a suitable apparatus. After firing, with or without an actual blast the contact between firing cable and the source of current, shall be cut off before any persons are allowed to leave the shelters. During storms charging with electrical detonators shall be suspended. The charges already placed into the holes shall be blasted as quickly as possible

Contractor

No. of Correction

Executive Engineer

after taking all safety precautions and giving necessary warning and signals, if this is Not possible, the site shall be abandoned till the storm has passed.

2.19.5 PRECAUTIONS AFTER BLAST AND MISFIRE:

If it is suspected that part of the blast has failed to fire or is delayed, sufficient time shall be allowed to elapse before entering the danger zone. When fuses and blasting caps are used, safe time should be allowed and then the supervisor alone shall have the shelter to see the misfire.

Drilling near the hole that has misfired shall Not be permitted until one of the two following operations have been carried out by the supervisor.

- i) The supervisor should very carefully (when the tamping is of damp clay) extract the tamping with a wooden scraper or jet of water or compressed air (using a pipe of soft material) and with draw the fuse with the primer and detonator attached. A fresh primer and detonator with fuse shall then be placed in this hole and fired.
- ii) The Supervisor shall get one foot of the tamping cleared off and indicate the direction by placing a stick in the hole. Another hole may then be drilled at None inches away and parallel to it. This hole should then be charged and fired. The balance of the cartridge and detonators found in the rock shall be removed.

Before leaving his work, the Supervisor should inform the Supervisor of the relieving shift of any case of misfire and shall point out the position with a red cross deNoting the same and also state what action, if any, he has taken in the matter. The Supervisor shall at once report to the office all cases of misfire, the cause of the misfire, and the steps taken in connection therewith.

The names of Supervisor-in-charge of day or night shift may be Noted daily in Contractor's office. If misfire has been found to be due to defective detonator or dynamite the whole quantity of box from which the defective article was taken must be returned to the authority as may be directed by the Engineer-in-charge for inspection to ascertain whether the whole box contains defective material. Re-drilling the holes that have misfired either wholly or partly, shall Not be permitted.

2.19.6 PRECAUTIONS AFTER BLASTING:

After the blast, the Supervisor shall carefully inspect the work and satisfy himself that all the charges have been exploded.

EMBANKMENT

3.0.0 EMBANKMENT

3.1.0 SCOPE OF WORK:

The item shall include contractor's own material brought upto site of work, deposition, spreading in final position and consolidation as hereinafter specified. Wherever the embankment is formed by utilizing excavated stuff from the excavation, the item also includes rehandling and picking up to excavated stuff and its sorting wherever necessary.

3.1.1 CLEARANCE OF SITE:

Before commencing the embankment, the site should be cleared of stones, sand, shrub, vegetation etc. without any charges. If the soil on which the bank is to be placed is not suitable for laying banks, the whole or the portion of the same should be stripped off as directed in writing by the Engineer-in-charge and materials so stripped if suitable shall be utilised for bank work or filling of the stripped up portion, as directed by Engineer-in-charge.

3.1.2 MATERIALS:

The embankment shall be constructed of contractor's own soil, hard murum of approved quality as approved by the Engineer-in- charge and also laid as directed in the appropriate zones of the section, approved by the Engineer-in-charge. Materials harder than soft rock shall not be used for casing except with the written permission of the Engineer-in-charge who may allow hard rock partly to be used on outer slopes of the bank.

3.1.3 ZONING OF EMBANKMENT:

The embankment shall consist of:

1) Soil core

Murum casing as shown in the drawing. SOIL CORE/HEARTING MATERIALS

The zone shall be formed with selected impervious soil as approved by the Engineer-in-charge available from excavation specified in para No. 2.7.1, 2.8.0 (a) and 2.9.0 or available from borrow pits as the case may be. Earth for hearting zone shall be free from roots and vegetable or other organic matter. All clods and lumps upto 5 cm. cubes shall be broken up as the work proceeds. The earth to be used for hearting shall be from the contractor's own quarry approved by the Engineer-in-charge.

MURUM CASING:

Casing shall be of pervious soils consisting of murum of approved quality to the desired section.

Materials for casing shall be free from roots and vegetable mounds or other organic matter. All clods and lumps upto 10 cm. cubes shall be broken up as the work proceeds. The material to be incorporated in the casing zone shall be got classified from the Engineer-in-charge with regard to its suitability before being used in the bank work.

3.1.4 STRETCHES OF EMBANKMENT:

The embankment shall be made of 150 to 250 metre in length and not in small bits.

3.2.0 ALLOWANCE FOR SETTLEMENT:

3.2.1 IN HEIGHT:

The banks will be made to extra height at a rate of 5 cm. per metre of designed height to allow for probable settlement of banks. The widths at base and top in this case remain unchanged. The extra work so done will be measured and paid for under the respective items of banking after deductions of specified shrinkage allowance.

3.3.0 USE OF EXCAVATED MATERIALS:

- **3.3.1** All the materials required for the construction of the appropriate zones of the canal embankment shall come from following sources in order of priority.
 - 1) The materials obtained from the excavation of canal and approved for use in the embankment by the Engineer-in-charge.

After utilising the materials obtained as above the remaining materials required for construction of embankment shall be taken from the approved borrow areas of the contract. The materials so obtained from the borrow areas should also be got approved prior to its use

The material already excavated and stacked along side the cuts in the reaches will be permitted to be used free of cost in the respective zones of the embankment. In respect of suitability of use of such materials, decision of Engineer-in-charge shall be final. The rate of this item includes cost of sorting out of material for casing from the spoil bank.

3.3.2 The quantity of earth work from borrow area mentioned above will be worked out by deducting the total usable soils of excavation in the appropriate zones whether actully used or not. 10 percent wastage for utilisation will be allowed in excavation quantities.

The utilisation of the excavated materials should be so planned that these materials shall be used directly in the embankment with the minimum lead. No charges will be paid for rehandling or if material is used with a longer lead when it can be used within a shorter lead. The quantities to be deducted for the utilisation in embankment in appropriate zones as detailed above will be arrived on the basis of the following conversion table

Sr. No.	Type of material	Excavation	Converted	
		measured in place	compacted banks	
		i.e. direct	measurements for	
		measurements of cut	the purpose of reduction.	
1.	All soft material for hearting	1 cubic metre	0.9 cubic metre	
2.	Hard material for casing	1 cubic metre	1.0 cubic metre	
3.	Soft rock	1 cubic metre	1.2 cubic metre	
4.	Hard rock	1 cubic metre	1.4 cubic metre	

3.4.0 BORROW PITS:

No borrow pits shall be allowed in the Corporation land acquired for the canal branches,

Contractor

No. of Correction

Executive Engineer

minors and sub-minors.

3.5.0 DEPOSITION OF MATERIAL:

All materials obtained from excavation or contractor's own material shall be laid in regular layers not exceeding 23 cm. thickness loose. The layers of earth shall have slight slope towards to centre of bund which shall be formed by dumping earth from the sides towards the centre. During monsoon, a small crown shall be maintained at the middle of the bank work to facilitate easy drainage of rain water. The material shall be laid to the section inclusive of pride. The profiles shall show the total heights and slopes including allowances for settlement, The bank is to be constructed evenly to the full section of the set out. The finished bank work shall be dressed neatly to the sections and slopes shown by the profile.

3.6.0 WATERING AND COMPACTION:

- 3.6.1 Compaction of bank shall be done by 8 to 10 tonnes rollers. Before consolidation, the layer will be moistened with adquate quantity of water to bring the percentage of O.M.C. with variation of 2 percent of O.M.C. The rate of the item includes charges for rolling and for providing sprinkling water with all leads and lifts required for the purpose. Before laying the next layer the previous layer shall be scraped and picking done if required so as to ensure good bond with the new layer. Subsequent layer shall only be allowed after the first layer is satisfactorily consolidated. If Contractor fails to give required compaction, the Corporation shall employ additional rollers at Contractor's cost. The hearting and casing shall be raised simultaneously in order that the whole embankment may be raised evenly.
- 3.6.2 The compaction will have to be uniform over the full width of the bank. The roller should be made to travel over the entire design section of each layer so that the earth is fully onsolidated and leaves no visible marks on the surface or as directed by the Engineer-in-charge. Where, smooth rollers are used, the surface of each layer of compacted material shall be roughened with a harrow and thoroughly harrowed or raked before depositing the succeeding layer of material and care shall be exercised to avoid the occurance of horizontal seams. Earth sork should be continuous from day to day. In case of break in conslidation exceeding four days, the dried surface shall be well watered and harrowed before a fresh layer of earth is laid on it.

The spreading of the next layer shall be carried out only after the whole underlying layer has been property consolidated.

The Contractor shall arrange for the water required for the work and no extra charges will be allowed on this account. Water required to bring up the moisture content to its optimum figure shall be sprinkled Uniformly over the entire area and not poured in ditches. The Contractor should give all facilities for the Corporation staff to conduct the optimum moisture content and dry density tests at site.

3.6.3 TAMPING COMPATION:

In those pArts of the embankment inaccessible to the specified rolling equipment around

and in contact with structures and in proximity of structures where the rolling equipment shall not be permitted to operate, compaction shall be accomplished either with manual or mechanical tampers of approved type. Roller shall not be permitted to operate within one metre of concrete or masonry structures and all fill within this distance shall be tamped by manual or mechanical tampers. All materials to be tamped shall be spread in layers not over 8 cm. thick when loose. The moisture content of the material may be + 2 percent water more than O.M.C. and amount of tamping shall be such as to produce a degree of compaction equal to the specified for rolled fill. Special care shall be exercised to obtain a good contact and bond with surface of concrete and masonry structures.

3.6.4 In order to achieve compaction upto the edges of the embankment, the embankment section shall be widened on inner side by minimum 30 cm. or more to get width required for rolling as directed by Engineer-in-charge. The pride so provided shall not be payable under the item of excavation, initially,. However the payment shall be made for removal of material from pride under the item of excavation of soft strata under canal earthwork and lining. The Contractor may use this material for raising of embankment in the zone above free board, for which payment shall be made under the relevant item of embankment.

Inner section of distributaries or minors (capacity less than 0.15 m/sec) and approaches of structure on canal as directed by Engineer-in-charge shall be completely filled and compacted with murum casing in layers. The quantity of this extra filling shall be paid under the relevent item of embankment. The removal of quantity of extra filled material in the inner side of the section of canal, distributary or minor shall be paid under the item of excavation for soft strata and the material so excavated shall be reused in the embankment and shall be paid under the relevent item of embankment to be constructed. This removal shall be done as per the instructions of Engineer-in-charge.

3.6.5 DRESSING:

DRESSING OF BANK:

After completion of work, the bank including spoil shall be dressed evenly to the required section as directed with no extra cost to Corporation.

3.6.6 The side slope shall be accurately dressed to required slope and section by strecthing string between the template faces. Dressing should be accompanied by watering and ramming, including replacing or refilling the murumy material. Dressing and removal of inner side pride should be done just before commencing the lining as per direction of the Engineer-in-charge

3.7.0 LAYING AND TESTING:

3.7.1 The material placed in the embankment shall be laid in 15 cm layers if plain roller is used and 22 cm layers if sheeps foot roller is used and shall be properly watered and compacted to attain dry density of not less than 95% of the Proctor density for the material under consideration. The soil shall be brought to + 2 percent of O.M.C. as determined in the laboratory by adding the required amount of water either at the borrow pits or on the embankment.

In case of canal embankment a dry density upto 90% of optimum dry density (Standard Proctor density) will be accepted but shall be paid at reduced rate to be approved by the Superintending Engineer.

3.7.2 FIELD DENSITY:

The field density tests shall be conducted to ascertain that a density of 95 percent of the Proctor density is attained. The number of such tests, shall not be less than one for every 500 cubic metres of the rolled or compacted earth work per layer or two per day whichever is more.

3.8.0 MODE OF MEASUREMENTS AND DEDUCTION IN SECTIONAL MEASUREMENTS:

All measurements shall be taken on cross section of bank. For this purpose detailed cross section of the ground shall be taken at the interval of 20 m. or less as directed before a embankment of a particular reach starts. The quantities of bank work shall be worked out on the basis of areas and distances of these cross sections by prismoidal formula. Deduction in quantities of bank work and C.N.S. bank shall be made for shrinkage at the rate of 10 percent of intermediate measurements, **7** percent after one monsoon and 5 percent for final measurements of earth work if the final measurements are taken after two or more monsoon. Unit of measurements for payment should be is one cum.

3.9.0 PROVIDING PERVIOUS MATERIAL HAVING C.N.S. PROPERTIES FOR SUB-GRADE BEHIND LINING:

- **39.1** Most of the proposed embankment quantity under banking item is required for preparing sub-grade behind lining in B.C. zone. As sub-grade in B.C. zone requires a good foundation for good lining, special care will have to be taken for it.
- **3.9.2** The thickness of bed and side sub-grade shall be as per design and drawing or as directed by the Engineer-in- charge in writing.
- 3.9.3 Only approved quality of murum should be used. Murum shall be laid in horizontal layers of 15 to 23 cm. and the same shall be laid for bed first and later for sides. Murum shall be laid in long reaches at a stretch and in any case the reach shall not be less than 100 metre.
- 3.9.4 Each layer will be watered adequately and compacted as specified in this section.

 Mechanical slope compactors shall be used for compaction. In small section where mechanical device cannot be used, manual tamping is allowed provided that compaction is done to the requirement.

- 3.9.5 Sub-grade will be inspected by the Engineer-in-charge or his field officer before the lining work is started and certificate regarding the stipulated thickness and quality of sub-grade will be recorded and kept on records. Testing shall be done as per para 3.7.1 to 3.7.2 and test results shall conform to the standard requirement as stipulated in above paras.
- 3.9.6 Payment will be for one cum. of work done quanity which will be computed by taking actual measurement.
- 3.9.7 Construction of service road along Canal/Distributory/minor.
- i) This work consists of levelling the ground after removing grass etc.
- ii) Filling the ruts and depressions.
- iii) Spreading available spoils for sub-grade and compaction.
- iv) Spreading murum in layers and compaction.
- 3.9.8 After removing bushes and grass the ground will be levelled. Ruts and depressions if any shall be filled with available soil and the entire width of service road will be levelled. Available excavated material from cutting for accomodating back fill, should directly be placed to act as sub grade for murum road, this should be watered and compacted.
- 3.9.9 Murum shall be placed in layers uniformly. After sectioning according to plan the surface will be watered and compacted as specified in this section. After thorough compaction, the surface of road will be finally levelled and dressed according to plans or as directed by Engineer-in-charge.
 - 3.9.10 No payment for this work will be made to the Contractor unless and until trimmingto the canal section in that reach and service road is compacted in all respect.

CONDITIONS RELATING TO INSURANCE OF CONTRACT WORK

4.0 Contractor shall take out necessary insurance policy / policies viz. Contractor's all Risk Insurance Policy, Erection All risk Insurance Policy etc. as decided by the Directorate of Insurance) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period COMPULSARILY from the Director of Insurance, Maharashtra State, Mumbai 400051 only. Its postal address for correspondence is 264, MHADA, Opp. Kalanagar, Bandra (E), Mumbai 400051 (Tel. No. 022-26590403 / 26590690) & Fax 022-26592461 / 26590403). Similarly all workmen 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 the contractor has not taken out the insurance policy from the ' Director 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 Govt. Insurance Fund will be recovered directly from the amount payable to the contractor for the executed contract work and paid to the Directorate of Insurance fund, Maharashtra State, Mumbai. The Director of Insurance reserves the right to distribute the risk of insurance among the other insurers.

The Contractor has to make insurance of work s per Govt. Marathi letter dated 1/7/06. The payment of installment made by the contractor towards this insurance will be reimbursed separately to the contractor by the Engineer-in-charge after verification of original receipt produced by the contractors per Clause-32 of contract.

4.1 Insurance Charges

Additional Conditions regarding payment of Insurance Charges as

- 1) The Insurance Charges are to be paid by the Contractor to the Director of Insurance Maharashtra State, Mumbai.
- 2) The insurance amount will be released to Contractor as per condition mentioned below.
- a) The Contractor shall submit the original proof of Insurance policies to the Engineer-incharge.
- b) After the verification of record submitted by the contractor the total amount that can be released shall be limited to the actual payment made as mentioned in the condition (a)
- c) If the actual insurance charges claimed are less than the provision made in the tender the amount shall be paid as per actual.
- d) If the actual insurance charges claimed are more than the provision made in the tender then the amount shall be paid limited to the provision made in tender.

LABOUR WELFARE FUND

5.0.0 SCOPE OF ITEM:

The item deals with the payment of labour Welfare cess as per the relevant provision of prevailing law of central Govt. and guide lines laid by the Govt. of Maharashtra towards labour engaged in the construction of various of work

5.1.0 A sum at the rate of 1% or at the prevailing rate as decided by the Govt. will be deducted from the bills of the contractor till the completion of the contract work

QUALITY ASSURANCE AND TESTING

6 Quality Assurance and Testing

6.0 Specification

It is the responsibility of the contractor to assure the desired quality of work. Whenever the testing of construction materials is required as per the detailed specifications or otherwise required by the Engineer-in-Charge, the same shall be carried out at the laboratory, selected by the Engineer-in-Charge at Contractor's cost.

The other field tests of mortar, concrete, colgrout etc. shall be carried out as per specifications in field laboratory set up by the contractor in the presence of quality control representatives. Contractor shall assure the quality of the work.

In addition to field tests carried out by contractor in his laboratory, surprise tests will be carried by QCC wing as directed by Engineer-in-charge & as per QCC direction.

The materials, mixes and any other arrangements, including labourers, shall be supplied by the contractor to the Corporation at contractor's cost. The samples for testing shall be taken in the presence of Engineer-in-Charge or his representative present on site.

The contractor or his authorized representative shall have a free access in these laboratories, to get himself satisfied about procedures of testing etc. Even if the contractor or his representative fails to remain present while colleting samples or testing, the results will be considered as authentic and binding on the contractor.

6.1 Mode of Payment

Payment of Quality Control charges is on the basis of item wise as mentioned in Schedule B.

6.1.1 Contractor has to carry out quality control tests as per specifications and as directed by Engineer-in-Charge & quality control and Vigilance organization of Govt. of Maharashtra.