

# IRRIGATION DEPARTMENT UTTAR PRADESH



सिंचनेन समृद्धि भवति

## TENDER /AGREEMENT DOCUMENTS

LOT-1

**NAME OF WORK :** चौ० चरण सिंह मध्य गंगा बैराज के बायें  
अफलक्स बंध के कि०मी० 7.760 पर स्पर  
नं०-03 का निर्माण कार्य।

1. Tender Notice No. **02/S.E./2016-17**
2. Date of Opening
3. Name of Contractor
4. Agreement No.
5. Cost of Agreement
6. Earnest Money
7. Date of Start
8. Due date of Completion

**MADHYA GANGA CONST.**  
Div-V, Bijnor.

**MADHYA GANGA CANAL**  
CIRCLE-1 MEERUT

# IRRIGATION DEPARTMENT UTTAR PRADESH



सिंचनेन समृद्धि भवति

## TENDER /AGREEMENT DOCUMENTS

LOT-2

**NAME OF WORK :** चौ० चरण सिंह मध्य गंगा बैराज के बायें  
अफलक्स बंध के कि०मी० 4.480 से कि०मी०  
5.000 तक लार्चिंग एप्रन एवं पिचिंग का कार्य।

1. Tender Notice No. **02/S.E./2016-17**
2. Date of Opening
3. Name of Contractor
4. Agreement No.
5. Cost of Agreement
6. Earnest Money
7. Date of Start
8. Due date of Completion

**MADHYA GANGA CONST.**  
Div-V, Bijnor.

**MADHYA GANGA CANAL**  
CIRCLE-1 MEERUT

## INDEX

Sl. No.	Particulars	Page No.
1.	Tender Notice	
2.	Credentials of Tenderer	
3.	Certificate of Relationship	
4.	Declaration	
5.	Agreement Form	
6.	Details of Machinery & Equipment Immediately Available with the Tenderer for use on this work	
	<b>GENERAL CONDITIONS OF CONTRACT</b>	
7.	Definitions	
8.	General	
9.	Tools, Plant and Equipment	
10.	Time for Completion	
11.	Construction Programme	
12.	Currency of Payment	
13.	Assignment and Subletting of Contract	
14.	Plant, Temporary Works and Materials	
15.	General Obligation of the Contractor	
16.	Purpose of Drawings and Specifications and Performance There to	
17.	Singed Drawings-No Authority to the Contractor	
18.	Copies of Drawing and Specifications	
19.	Plans and Drawings	
20.	Reference Marks and Bench Marks	
21.	Supply of Material by the Department	
22.	Materials, Workmanship, Period, Maintenance and Depect Liability etc.	
23.	Information and Data	
24.	Use and Care of Site	
25.	Protection of Adjoining Premises	
26.	Accidents and Insurance Against Accidents etc. to Workmen	
27.	Certificate of Completion of Works	
28.	Tools and Duties	
29.	Old Curiosities	
30.	Engineer-in-charge's Decision	
31.	Other Contractor	
32.	Other Workmen	
33.	Variations and Extra Item	
34.	Claims	
35.	Measurement and Payment	
36.	Recoveries	
37.	Jurisdictions	
38.	Patents and Copy Rights	
39.	Rules Regarding Labour Laws in Uttar Pradesh	
40.	Safety Provisions	
41.	Taxation	
42.	Trade Tax Deduction	
43.	Sales Tax Clearance Certificate	
44.	Contractor Dying, Becoming Insolvent, Insane or Imprisoned	

45.	Compensation for Delay	
46.	Care of Works and Expected Risks	
47.	Extension of Time for Completion	
48.	Settlement of Disputes	
49.	Arbitration	
50.	Contract Document and Matters to be Treated as Confidential	
51.	Joint Ventures	
52.	Security Deposit for Performances & Security Deposit	
53.	Special Clause	
54.	Inspection of Work by Technical Examiner	
	<b>TECHNICAL PROVISIONS</b>	
55.	General	
56.	Materials	
57.	Plants and Equipments of Government on Hire Basis	
58.	Construction Power	
59.	Site Clearance	
60.	Excavation of Foundations and its Preparation	
61.	Form Work and Scaffolding	
62.	Earth Work for Canal Construction	
63.	Ordinary sand	
64.	Cement Concrete Work	
65.	Laying C.C. Tile Pitching	
66.	Expansion Joint	
67.	M-100 Brick Work in 1 : 4 Cement Mortar	
68.	Paver Block Specification	
69.	Paver Block Dimension	
70.	Testing of paver Block	
71.	Bedding sand Ordinary	
72.	Laying of interlocking Paver Block	
73.	Initial Compaction	
74.	Joint Filling and Final compaction	
75.	General Preparation of painting of New works	
76.	Schedule-B	
77.	Schedule-C	
78.	I D Form No. 111	
79.	Schedule -A	
80.	Drawing	

प्रेषक,

अधीक्षण अभियन्ता  
मध्य गंगा नहर निर्माण मण्डल-प्रथम  
मेरठ

प्रेषित,

सूचना निदेशक,  
सूचना एवं जन सम्पर्क विभाग  
उत्तर प्रदेश, लखनऊ

पत्रांक: /म०ग०म०/टी-९(निविदा)

दिनांक: /

विषय: निविदा सूचना संख्या: ०२/अधी०अभि०/२०१६-१७ प्रकाशित करने के सम्बन्ध में।

महोदय,

संलग्न निविदा सूचना विज्ञप्ति दस प्रतियों में सी०डी० सहित इस अनुरोध के साथ प्रेषित है कि इसे निम्न समाचार पत्रों में अविलम्ब प्रकाशित करवाने की कृपा करें।

क्रम सं०	समाचार पत्र का नाम	भाषा	प्रकाशन का स्थान
1	अमर उजाला	हिन्दी	मुरादाबाद/मेरठ
2	दैनिक जागरण	हिन्दी	मुरादाबाद/मेरठ

संलग्नक : उपरोक्तानुसार।  
विज्ञप्ति पत्र १० प्रतियों में।  
सी०डी० १ नग

अधीक्षण अभियन्ता  
मध्य गंगा नहर निर्माण मण्डल-प्रथम  
मेरठ

पत्रांक: /१(१)म०ग०म०/तदिनांक:

प्रतिलिपि अधीक्षण अभियन्ता, कम्प्यूटर केन्द्र कार्यालय प्रमुख अभियन्ता, सिंचाई विभाग, उ०प्र०, लखनऊ को उपरोक्त निविदा सूचना की हार्ड कॉपी एवं सी०डी० शा०सं०-७६८/०५/२७-सिं-३-८-टी०/८४, दिनांक ०३.०३.२००५ के संदर्भ में सूचनार्थ एवं विभागीय वेबसाइट पर प्रकाशन हेतु प्रेषित है।

संलग्नक: उपरोक्तानुसार।

अधीक्षण अभियन्ता  
मध्य गंगा नहर निर्माण मण्डल-प्रथम  
मेरठ

पत्रांक: /म0ग0म0/तदिनांक:

- प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है :-
- 1 प्रमुख अभियन्ता, एवं विभागाध्यक्ष, सिंचाई विभाग, उ0प्र0, लखनऊ।
  - 2 मुख्य अभियन्ता, (परिकल्प एवं नियोजन) सिंचाई विभाग, उ0प्र0, लखनऊ।
  - 3- मुख्य अभियन्ता, मध्य गंगा नहर परियोजना, सिंचाई विभाग, उ0प्र0, अलीगढ़।
  - 4- मैनेजर उ0प्र0, इलैक्ट्रॉनिक्स कारपोरेशन लि0, लखनऊ को बिड सूचना प्रपत्र तथा सम्बन्धित बिड सी0डी0 सहित टेण्डर की कार्यवाही एवं विभिन्न तिथियों को टेण्डर के सूचारु संचालन हेतु विभिन्न अधिकारियों/कर्मचारियों को नामित करने की आवश्यक कार्यवाही हेतु प्रेषित है।
  - 5- अधीक्षण अभियन्ता, मध्य गंगा नहर निर्माण मण्डल मुरादाबाद, रुड़की।
  - 6- अधीक्षण अभियन्ता, सिंचाई कार्य मण्डल, मुरादाबाद/पूर्वी गंगा नहर निर्माण मण्डल, हरिद्वार, बिजनौर।
  - 7- अधीक्षण अभियन्ता, प्रथम मण्डल, सिंचाई कार्य, मेरठ/ड्रेनेज मण्डल, मेरठ/गंगा नहर संचालन मण्डल, मेरठ।
  - 8- अधिशासी अभियन्ता, मध्य गंगा नहर निर्माण खण्ड-प्रथम, हरिद्वार/खण्ड-3,4 अमरोहा/खण्ड-6, मेरठ/खण्ड-7 बिजनौर/खण्ड-8 व 10 बुलन्दशहर/खण्ड-9 सम्भल/खण्ड-11, 12 अलीगढ़/खण्ड-13 14 गढ़मुक्तेश्वर/खण्ड-15 मुरादाबाद/खण्ड-16 चन्दौसी/मध्य गंगा नहर गुण नियंत्रण खण्ड-2, हरिद्वार/गुण नियंत्रण खण्ड, रुड़की।
  - 9- अधिशासी अभियन्ता, मध्य गंगा नहर निर्माण खण्ड-5, बिजनौर।
  - 10- वरिष्ठ पुलिस अधीक्षक, मेरठ को शा0सं0-6575/सी0एम0-2/89/दिनांक 08.09.1999 के संदर्भ में इस अनुरोध के साथ प्रेषित है निविदा प्राप्त करने की निर्धारित प्रीबिड तिथि 17-02-2017 को कार्यालय अधीक्षण अभियन्ता, मध्य गंगा नहर निर्माण मण्डल-प्रथम, मेरठ के प्रांगण में निविदा स्थल पर कानून एवं व्यवस्था हेतु पर्याप्त पुलिस फोर्स उपलब्ध कराने का कष्ट करें।

संलग्नक: 1 प्रति बिड सूचना।

**अधीक्षण अभियन्ता  
मध्य गंगा नहर निर्माण मण्डल-प्रथम  
मेरठ**

पत्रांक: /म0ग0म0/तदिनांक:

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है :-

- 1 आयुक्त, मेरठ मण्डल, मेरठ।
- 2 आयुक्त, मुरादाबाद मण्डल, मुरादाबाद।
- 3 जिलाधिकारी, मेरठ/बिजनौर।
- 4 मुख्य विकास अधिकारी, मेरठ/बिजनौर।
- 5 जिला सूचना अधिकारी, मेरठ/बिजनौर।

संलग्नक: 1 प्रति निविदा सूचना।

**अधीक्षण अभियन्ता  
मध्य गंगा नहर निर्माण मण्डल-प्रथम  
मेरठ**

**कार्यालय अधीक्षण अभियन्ता**  
**मध्य गंगा नहर निर्माण मण्डल-प्रथम**  
**मेरठ**

**निविदा सूचना संख्या: 02/एस0ई0/2016-17**

महामहिम राज्यपाल उत्तर प्रदेश की ओर से निम्नलिखित कार्यो हेतु ऑन लाईन प्री-क्वालिफिकेशन/टैक्नीकल एंव फाइनेन्शियल बिड, सिंचाई विभाग में वर्गीकृत श्रेणी में पंजीकृत ठेकेदारों से दिनांक: 17-02-2017 को पूर्वाह्न 11:00 बजे तक आमन्त्रित की जाती है। प्री-क्वालिफिकेशन/टैक्नीकल बिड दिनांक: 17-02-2017 को अपराह्न 03:00 बजे मुख्य अभियन्ता, मध्य गंगा नहर परियोजना, सिंचाई विभाग, उत्तर प्रदेश, अलीगढ़ द्वारा निर्धारित समिति द्वारा ऑन लाईन खोली जायेगी। कार्यालय बन्द होने अथवा छुट्टी होने की दशा में यह बिड अगले कार्यालय दिवस में उसी समय खोली जायेगी।

प्री-क्वालिफिकेशन बिड में क्वालिफाई घोषित ठेकेदारों की फाइनेन्शियल बिड दिनांक: 20-02-2017 को 3:00 बजे खोली जायेगी। कार्यालय बन्द होने अथवा छुट्टी होने की दशा में यह बिड अगले कार्यालय दिवस उसी समय खोली जायेगी।

क्र० सं०	कार्य का विवरण	कार्य की अनुमानित लागत (लाख रु० में)	धरोहर राशि (लाख रु० में)	कार्य को पूर्ण करने की अवधि	निविदा प्रपत्र का मूल्य (रु० में)	पंजीकृत श्रेणी	कार्य से सम्बन्धित अधिकारी का पता	
							अधिशारी अभियन्ता	अधीक्षण अभियन्ता
1	2	3	4	5	6	7	8	9
1	चौ० चरण सिंह मध्य गंगा बैराज के बांये अफलबंध के कि०मी० 7.760 स्पर नं० 03 का निर्माण कार्य	334.00	6.68	6 माह	रु० 300.00 +13.5% वैट	“ए” एवं ऊपर	म०गं०न० नि०ख०-5, बिजनौर	अधी०अभि०, म०गं०न० नि०म०-प्रथम, मेरठ
3	चौ० चरण सिंह मध्य गंगा बैराज के बांये अफलबंध के कि०मी० 4.480 से कि०मी० 5.000 तक लांचिंग एप्रन एवं पिचिंग का काय	237.00	4.74	6 माह	रु० 300.00 +13.5% वैट	“ए” एवं ऊपर	--तदैव--	--तदैव--

- (1)- यह निविदा/बिड सूचना उ०प्र० सरकार की वेबसाइट (<http://upgovt.nic.in>) तथा सिंचाई विभाग की वेबसाईट (<http://www.irrigation.up.in>, <http://www.idup.upgovt.in>) पर उपलब्ध है। वेबसाईट से ड्राईगं उपलब्ध न होने की स्थिति में सम्बन्धित अधिशारी अभियन्ता के कार्यालय में देख सकेंगे।
- (2)- यह निविदा सूचना एंव प्रपत्र वेबसाईट <http://etender.up.nic.in> पर उपलब्ध है। निविदा के साथ सिंचाई विभाग की निर्धारित श्रेणी में पंजीकरण प्रमाण-पत्र (IDT-1), (IDT-2) (IDT-3) तथा श्रम विभाग द्वारा जारी पंजीकरण प्रमाण-पत्र, श्रमविभाग द्वारा जारी पंजीकरण प्रमाण-पत्र व अन्य प्रपत्र/अभिलेख की स्कैन्ड प्रति संलग्न किया जाना अनिवार्य है।
- (3)- पंजीकरण प्रमाण-पत्र, जिलाधिकारी द्वारा निर्गत चरित्र प्रमाण-पत्र (IDT-1) हैसियत प्रमाण-पत्र (IDT-2) स्वघोशणा शपथ-पत्र (IDT-3) को मूलरूप में उपलब्ध कराना अनिवार्य है।
- (4)- निविदा/बिड की विस्तृत शर्ते निविदा/बिड प्रपत्र के साथ उपलब्ध होगी।
- (5)- निविदादाता/बिडर को दिनांक: 17-02-2017 को अपराह्न 03:00 बजे तक अधीक्षण अभियन्ता मध्य गंगा नहर निर्माण मण्डल-प्रथम, मेरठ के कार्यालय में पिछले दो वित्तीय वर्षों में किये गये कार्यो के अनुभव प्रमाण-पत्र तथा श्रमविभाग द्वारा जारी पंजीकरण प्रमाण-पत्र मूलरूप में उपलब्ध कराना अनिवार्य है।
- (6)- निविदादाता को अधिशारी अभियन्ता, मध्य गंगा नहर निर्माण खण्ड-5, बिजनौर के पक्ष में राष्ट्रीयकृत बैंक से निर्गत धरोहर धनराशि, टेण्डर सेल VAT सहित तथा IDT-1, IDT-2, IDT-3 निर्धारित श्रेणी का प्रमाण-पत्र, टर्नओवर के मूल प्रमाण-पत्र अधीक्षण अभियन्ता, मध्य गंगा नहर निर्माण मण्डल-प्रथम, मेरठ के कार्यालय में दिनांक: 17-02-2017 को 03:00 बजे तक जमा करने होंगे अन्यथा उनकी निविदा Unresponsive मानते हुये कोई विचार नहीं किया जायेगा तथा विभाग में

उनका पंजीकरण को निरस्तीकरण किया जा सकता है। उपरोक्त की स्कैन्ड कापी निविदा के साथ लगानी अनिवार्य होगी।

- (7)- प्रत्येक निविदादाता को रू0 100/- जूडिशियन स्टैम्प पेपर पर एक रुपये का रसीदी टिकट लगाकर अनुबन्ध लिखना होगा कि दरे 90 दिवस तक मान्य होगी। इससे पहले निविदा/आफर वापस लेने पर धरोहर धनराशि जब्त कर ली जायेगी। इसकी स्कैन्ड कापी आनलाइन निविदा के साथ जमा करनी है। नियमानुसार देय वाणिज्यकर, आयकर, स्टैम्प ड्यूटी, रायल्टी, लेबर सेस प्रचलित टैक्स देय होगा। अनुबन्ध के समय नियमानुसार स्टैम्प ड्यूटी तथा 8 प्रतिशत जमानत की शेष धनराशि भी जमा करना होगी। निविदादाता द्वारा विभागीय लागत से कम लागत की निविदा डालने की दशा में शासनादेश संख्या: 622/23.12.2012-2 ऑडिट/08/टी0सी0, दिनांक: 08-06-2012 के अनुसार "10 प्रतिशत तक न्यूनतम दरें डालने पर 0.50 प्रतिशत कम दर पर तथा 10 प्रतिशत से अधिक दरों पर 1 प्रतिशत प्रति 1 प्रतिशत कम दर पर" पर्फॉरमेंस गारन्टी की अतिरिक्त धरोहर धनराशि जमा कराने के उपरान्त अनुबन्ध गठित किया जायेगा। निविदादाता द्वारा उक्त धनराशि जमा न किये जाने पर उसकी धरोहर धनराशि जब्त कर ली जायेगी।
- (8)- धरोहर धनराशि एन0एस0सी0/एफ0डी0आर0, राष्ट्रीयकृत बैंक अथवा नियमानुसार अनुमन्य अन्य प्रतिभुति के रूप में सम्बन्धित अधिशासी अभियन्ता के पक्ष में बंधक होनी चाहिये। इसकी स्कैन्ड कापी आनलाइन जमा करना अनिवार्य होगा अन्यथा निविदा स्वीकार नहीं की जायेगी।
- (9)- कार्य स्थल की आवश्यकतानुसार कार्य की मात्रा घटायी/बढायी जा सकती है, जिसके लिए ठेकेदार का कोई क्लेम मान्य नहीं होगा।
- (10)- कार्यस्थल पर भूमि क्रय करने के प्रयास किये जा रहे हैं। भूमि की उपलब्धता सुनिश्चित होने के पश्चात ही अनुबन्ध की कार्यवाही की जायेगी।
- (11)- निविदादाता को उपरोक्तानुसार निविदा/बिड के विभिन्न चरणों की तिथियों तथा समय/स्थल की पूर्ण जानकारी निविदा डालने से पूर्व स्वयं प्राप्त करनी होगी। कोई भी जानकारी सम्बन्धित कार्यालय से कार्य दिवसों में प्राप्त की जा सकती है।
- (12)- निविदादाता/बिडर द्वारा निविदा डालते समय प्रक्रिया की पूर्ण जानकारी/ट्रेनिंग अथवा अन्य किसी कारण से शर्तों को पूर्ण न कर पाने/बाधित हो जाने के कारण निविदा न पडने पर विभाग की कोई जिम्मेदारी नहीं होगी।
- (13)- इस निविदा को पूर्ण या आंशिक रूप से निरस्त करने का अधिकार बिना कारण बताये अधोहस्ताक्षरी के पास सुरक्षित रहेगा।
- (14)- यह संज्ञान में आने पर कि किसी निविदादाता द्वारा किसी अन्य सम्भावित निविदादाता को इस निविदा प्रक्रिया में भाग लेने एवं निविदा डालने से रोका गया हो या धमकी दी गई हो तो ऐसे ठेकेदार के साथ यदि अनुबन्ध हो भी गया हो, तो उसके साथ किया गया अनुबन्ध निरस्त किया जा सकता है।
- (15)- Technical Evaluation by Tender Committee will be done off-line Comparative chart would be prepared manually and work list & Award of contract will be available on-line.
- (16)- कोई निविदादाता जो राज्य सरकार द्वारा काली सूची में दर्ज हो वह निविदा प्रक्रिया में भाग नहीं ले सकेगा।
- (17)- राज्य बार कौन्सिल में पंजीकृत कोई भी अधिवक्ता निविदा प्रक्रिया में भाग नहीं ले सकेगा।
- (18)- एक निविदादाता केवल एक ही निविदा डाल सकेगा।
- (19)- यदि कोई निविदादाता निर्धारित विधि एवं प्रक्रिया के विरुद्ध अनुबन्ध करने हेतु सक्षम प्राधिकारी पर दबाव/असम्यक असर डालता है तो प्रश्नगत निविदादाता के न्यूनतम निविदा की स्थिति में भी उसकी निविदा निरस्त की जा सकती है।
- (20)- विशिष्ट परिस्थितियों में निविदा खोलने के तिथि/समय में यदि कोई परिवर्तन होता है तो इसकी सूचना आनलाइन उपलब्ध करा दी जायेगी।
- (21)- प्राप्त सभी निविदा प्रपत्रों का पहले यह निरीक्षण किया जायेगा कि निविदादाता ने IDT-1, IDT-2, IDT-3 तथा निर्धारित प्रतिभूति धनराशि एवं अनुभव प्रमाण-पत्र ठीक-ठीक उपलब्ध कराये हैं या नहीं। इनमें किसी प्रकार की कमी या असंतोषजनक होने की स्थिति में निविदादाता द्वारा दी गयी दरें तुलनात्मक विवरण में अंकित नहीं की जायेगी।



- (22)- आनलाइन विडिंग तथा कार्य से सम्बन्धित प्रक्रिया को स्पष्ट करने हेतु एक प्रीबिड मीटिंग दिनांक 13-02-2017 को अपराह्न 03:00 बजे अधीक्षण अभियन्ता, मध्य गंगा नहर निर्माण मण्डल-प्रथम, मेरठ के कार्यालय में आयोजित की गयी है, जिसमें इच्छुक ठेकेदार भाग ले सकेंगे।
- (23)- निविदादाता को यू0पी0 इलेक्ट्रानिक्स कारपोरेशन लि0 लखनऊ में ई-टेण्डरिंग हेतु पंजीकृत होना आवश्यक होगा। उक्त कारपोरेशन के माध्यम से ई-टेण्डरिंग हेतु प्रशिक्षण की कार्यवाही पूर्ण करनी होगी।
- (24)- निविदादाता की ज्वार्ट वैन्वर की निविदा किसी भी दशा में स्वीकार्य नहीं होगी।
- (25)- ठेकेदार द्वारा विगत पांच वर्षों में समान प्रकृति का एक कार्य करने तथा उसे समय से पूर्ण करने का अनुभव हो। इस कार्य की लागत निविदा के कार्य की अनुमानित लागत के बराबर या उससे अधिक होनी चाहिये। इस हेतु सक्षम अधिकारी का प्रमाण पत्र मान्य होगा।
- (26)- ठेकेदार का पिछले पांच वित्तीय वर्षों में से किसी एक वित्तीय वर्ष का वार्षिक टर्नओवर निविदा के कार्य की अनुमानित लागत के बराबर या उससे अधिक का होना चाहिये। इस हेतु ठेकेदार को अधिकृत चार्टर्ड एकाउन्टेन्ट द्वारा प्रमाणित बेलेन्स शीट की सत्यापित प्रति उपलब्ध करानी होगी।
- (27)- अनुबन्ध गठित होने के पश्चात भी यदि यह तथ्य संज्ञान में आता है कि किसी भी स्तर का उल्लंघन किया गया है तो ऐसे अनुबन्ध को सक्षम अधिकारी द्वारा सकारण आदेश प्रख्यापित कर निरस्त किया जायेगा।

**अधीक्षण अभियन्ता**  
**मध्य गंगा नहर निर्माण मण्डल-प्रथम**  
**मेरठ**

# CREDENTIALS OF TENDERER

(To be filled by the Tenderer)

1. Name of Tenderer :-
  
  
2. Permanent Address :-
  
  
3. Present Postal Address :-
  
  
4. State if you are approved Contractor of the C.P.W.D., State P.W.D., State Irrigation Department, Railway and / or M.E.S. and if so, copy of registration certificate should be attached.
  
  
5. Particulars of previous contract successfully executed should be entered in the form below.

Sl. No.	Name of Department	Name & Description of work	Value Rs.	Period of execution	
				From	To
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

6. Reference / Certificate from your Bankers about your financial position should be attached.

7. List of machinery and equipment which you intend to use on this work to be given in attached Proforma-I.
8. In case tenderer is a firm, enclose photostate / attested copy of partnership deed & Certificate of registration of firm.
9. Certificate :
  - (a) I / We am / are not debarred from tendering for contracts of central / state Govt. departments.
  - (b) I / We hereby certify that information given above is correct. If at any stage, it is found to be incorrect. I / We understand that the contract will be liable to be terminated / rescinded and action could be taken against me / us by the employer.

Dated : .....

Signature of Tenderer

Place : .....

# Certificate of Relationship

To,

The                      Engineer,

.....

.....

.....

Sir,

It is certified that except the person noted below, none of my relatives is employed in Irrigation Department, Uttar Pradesh.

Name

Designation

Place of Posting

.....

Dated : .....

Signature of Contractor .....

Place : .....

Full Address .....

.....

.....

**N.B. :** The following comes under the definition of relationship :-

1. Father, Mother, Sister, Brother, Brother-in-law, Daughter, Father-in-law, Mother-in-law, First cousin of self or wife. The list is illustrative and not exhaustive.

Contractor

**DECLARATION**

We .....

.....

.....

.....

hereby declare that no work shall be taken in hand by me or by my authorized agent unless a proper work order in writing is issued to me by Executive Engineer / S.D.O. In case of default on my part, I fully understand that my security deposits will be forfeited and our name will be removed from the list of approved contractor.

Dated : .....

Signature of Contractor .....

Place : .....

Full Address .....

.....

.....

# AGREEMENT

Tender invited by .....

Tender of .....

Tender Notice No. & Date .....

Name of Tenderer .....

In consideration of the Governor of Uttar Pradesh having treated the tenderer to be an eligible person whose tender may be considered, the tenderer hereby agreed the condition that the proposals in response to the above invitation shall not be withdrawn within three months from the date of opening of tender, also to the condition that if thereafter the tenderer does withdraws his proposal within the said period the earnest money deposited by him may be forfeited by the Government of Uttar Pradesh in description of the later. And the tenderer hereby also declares that if subsequent to the submission of his tender the tenderer amends, alters or modifies the contents of his tender which are not acceptable to the employer the tenderer shall, for the purpose of the aforesaid conditions, be deemed to have withdrawn his proposal.

Signed this ..... day of

Signed by Tenderer .....

The individual, who is proprietor of a firm should furnish the description of the party as under :-

Shri ..... S/o Shri .....

R/o .....

Carrying on business under the firms name of M/s .....

In case of a partnership firm the description of the party should be as under :-

M/s .....

a firm within the meaning of the Indian Partnership Act and having their office at ..... are consisting of the following partners :-

1. Shri ..... S/o ..... R/o .....

2. Shri ..... S/o ..... R/o .....

3. Shri ..... S/o ..... R/o .....

***Details of Machinery & Equipment  
Immediately Available with the Tenderer for  
use on this work***

Name of Tenderer .....

<b>Sl. No.</b>	<b>Name of Equipment</b>	<b>No. of unit</b>	<b>Kind and make</b>	<b>Capacity</b>	<b>Age and condition</b>	<b>Present location</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>

SIGNATURE OF TENDERER

# **GENERAL CONDITIONS OF CONTRACT**

## **1.0 DEFINITIONS**

- (1) In the Contract, as hereinafter defined, the following words and expression shall have the meanings hereby assigned to them, except where the context otherwise requires:—
- a) 'Employer' means the Governor of Uttar Pradesh and the legal successors in title to the Employer, acting through the Superintending Engineer Madhya Ganga Canal Construction Circle-I, Meerut or his authorized representative.
  - b) 'Contractor' means the person or persons, firm or company whose tender has been accepted by the Employer and includes the Contractor's personal representatives, successors and permitted assigns.
  - c) Chief Engineer shall mean the Chief Engineer, Madhya Gnaga, Aligarh.
  - d) 'Engineer-in-Charge' or 'Engineer' means the Executive Engineer, Madhya Ganga Canal Construction Division-5, Bijnor or the Engineer appointed from time to time by the Employer and notified in writing to the Contractor to act as Engineer for the purpose of the Contract in place of the Engineer so designated.
  - e) 'Engineer-in-Charge's representative' or 'Engineer's representative' means any resident engineer or assistant of the Engineer of works appointed from time to time by the Employer or the Engineer to perform the duties set forth in writing whose authority shall be notified in writing to the Contractor by the Engineer-in-Charge.
  - f) 'Works' shall include both Permanent Works and Temporary Works.
  - g) 'Contract' means the Conditions of Contract, specification, Drawings, priced Bill of Quantities, Schedule of Rates and Prices, if any, Tender, Letter of Acceptance and the Contract Agreement, if completed.
  - h) 'Contract Price' means the sum named in the Letter of Acceptance, subject to such additions thereto or deductions there-from as may be made under the provisions hereinafter contained.
  - i) 'Constructional Plant' means all appliances or things of whatsoever nature required in or about the execution or maintenance of the Works but does not include materials or other things intended to form or forming part of the Permanent Works.
  - j) 'Temporary Works' means all temporary works of every kind required in or about the execution or maintenance of the works.
  - k) 'Permanent Works' means the permanent works to be executed and maintained in accordance with the Contract.
  - l) 'Specification' means the specification referred to in the Tender and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by the Engineer.
  - m) 'Drawings' means the drawing referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.
  - n) 'Site' means the land and other places on, under, in or through which the Permanent Works or Temporary Works designed by the Engineer are to be executed and any other lands and places provided by the Employer for working space or any other purpose as may be specifically designated in the Contract as forming part of the Site.
  - o) 'Approved' means approved in writing, including subsequent written confirmation of previous verbal approval and 'approval' means approval in writing, including as aforesaid.
  - p) 'Government' means Government of Uttar Pradesh (India) Department of Irrigation.
  - q) 'I.S.S.' means Indian Standard Specifications published by Bureau of Indian Standard (B.I.S.).
  - r) 'Day' means a day from midnight to midnight.
  - s) 'Week' means seven consecutive days.
  - t) 'Month' means from the beginning of a given date of a calendar month to the end of the preceding date of the next calendar month.



- u) 'Quarter' means a period of 3 months reckoning from the 1st date of January, April, July and October and counted to the last date of March, June, September and December respectively.
- v) 'Rupees' means Rupees of Indian Currency.

**1.1 INTERPRETATIONS**

- (1) Words importing the singular only also include the plural and vice versa where the context so requires, 'he' includes 'she' and vice versa unless this is repugnant to the context.
- (2) Wherever the term 'Specification' is used apart from a specified Standard Specification, it shall mean the specification or plan prepared for a particular site as instructions to the Contractor in executing that item of work.
- (3) The headings in these Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.
- (4) The word 'cost' shall be deemed to include overhead costs whether on or off the site.
- (5) For the purpose of these documents the terms 'bid / Tender', 'bidder / Tenderer', 'Bidding / Tendering' and other similar expressions are synonymous.

**2.0 GENERAL**

The rates given by the contractor will remain firm during the currency of the agreement.

No claim shall be entertained for damage to works or materials or the loss suffered by the contractor owing to floods, rains, fluctuations in market rates or labour and materials or any other reason occurring prior to the final measurement and taking over of the work or part thereof by the Engineer-in-Charge.

**3.0 TOOLS, PLANT AND EQUIPMENT**

The contractor shall arrange for his own machinery and equipment required for timely and successful completion of the work as per specification. Government equipment, if available may be supplied on the discretion of the Engineer-in-Charge to the contractor from the Government godown on written request of the contractor. The contractor shall give receipt for the same as his acknowledgement.

The carriage of the equipment to work site and back to Government godown after use shall be done by the contractor at his own cost. The terms and conditions for hire of the equipment shall be fixed by the Engineer-in-Charge.

**4.0 TIME FOR COMPLETION**

The time for completing the work is including rainy season. The progress of the work shall be maintained generally as per following time schedule.

Sl.No.	Time	Progress of work
1.	Upto ¼ of the total time	25%
2.	Upto ½ of the total time	50%
3.	Upto ¾ of the total time	75%
4.	Upto full time	100%

The liquidated damage will be imposed on the contractor @ 0.25% of the cost of contract/day subject to the maximum 10% of the contract value in case the work progress is delayed from the schedule of progress written above.

**5.0 CONSTRUCTION PROGRAMME**

The contractor shall submit a detailed month wise, construction programme of completion to suit the progress of contract as given earlier for the entire contract period including quarterly requirement of materials to be supplied by the department, within fourteen days after the date of notice to proceed with the work. The programme may be reviewed & revised every month to plan timely action to make up the slippages which occurred in the previous month.

**6.0 CURRENCY OF PAYMENT**

Payment will be made in the Indian currency in which the price has been stated in the bid.

## **7.0 ASSIGNMENT AND SUBLETTING OF CONTRACT**

- (i) Assignment of the contract is not permissible.
- (ii) The contractor shall not without the written consent of the Engineer-in-Charge sublet whole or any portion of the contract. Any subletting shall in no way absolve the contractor of any of his responsibilities under this contract.

## **8.0 PLANT, TEMPORARY WORKS AND MATERIALS**

The contractor shall provide at his own expense all constructional plant, temporary works and materials required for the execution of the work. All constructional plant, temporary works and materials provided by the contractor shall, when brought on to the site, be deemed to be exclusively intended for the execution of the works and the contractor shall not remove the same or any part thereof, without the consent, in writing, of the Engineer-in-Charge.

## **9.0 GENERAL OBLIGATION OF THE CONTRACTOR**

### **(A) General responsibilities:**

- (a) The contractor shall furnish the postal address of his site office. Any notice or instruction to be given to the contractor under the terms of the contract shall be deemed to have served if it has been delivered to his authorized agent or representative at site, or sent by registered letter to the site office, or to the address of the firm last provided by the contractor.
- (b) The contractor shall, subject to the provisions of the contract, and with due care and diligence, execute and maintain the works and provide all labour, including the supervision thereof, materials, constructional plant and all other things, whether of a temporary or permanent nature, required in and for such execution and maintenance, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the contract.
- (c) The contractor shall take responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the contractor shall not be responsible, except as may be expressly provided in the contract, for the design or specification of the permanent works, or for the design or specification of any temporary works prepared by the Engineer-in-Charge.
- (d) The contractor shall promptly inform the Employer and Engineer-in-Charge of any error, omission, fault and other defect in the design or specifications for the works which are discovered when reviewing the contract documents or in the process of execution of the works.

### **(B) Contract Agreement:**

The contractor, within 30 days of receipt of form of agreement annexed (with such modifications as may be necessary) shall enter into and execute a contract agreement to be prepared and completed at the cost of the employer.

### **(C) Inspection of site:**

The Employer shall have made available to the contractor with the Tender documents such data on hydrological and subsurface conditions as shall have been obtained by or on behalf of the Employer from investigations undertaken relevant to the works and the tender shall be deemed to have been based on such data, but the contractor shall be responsible for his own interpretation thereof.

The contractor shall also be deemed to have inspected and examined the site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his tender, as to the form and nature thereof, including the sub-surface conditions, the hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the work, the means of access to the site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his tender.

**(D) Sufficiency of Tender:**

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices stated in the priced bill of Quantities and the Schedule of Rates and prices, if any, which tender rates and prices shall, except in so far as it is otherwise provided in the contract, cover all his obligations under the contract and all matters and things necessary for the proper execution and maintenance of the works.

**(E) Work to be to the satisfaction of the Engineer-in-Charge:**

So far as it is legally or physically possible, the contractor shall execute and maintain the work in strict accordance with the contract to the satisfaction of the Engineer-in-Charge and shall comply with and adhere strictly to the Engineer's instructions and directions on any matter whether mentioned in the contract or not, touching or concerning the works. The Contractor shall take instruction and directions only from the engineer or from engineer's representative.

**(F) Watching and Lighting:**

The contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or the Engineer's Representative, or by any duly constituted authority, for the protection of the works, or for the safety and convenience of the public or others.

**10.0 PURPOSE OF DRAWINGS AND SPECIFICATIONS AND PERFORMANCE THERE TO**

The contractor drawings read together with the contract specifications are intended to show and explain the manner of executing the work and to indicate the type and class of materials to be used.

The works shall be carried out in accordance with the directions of Engineer-in-Charge, in accordance with the drawings and specifications which form part of the contract and in accordance with such further drawings, details and instructions as may, from time to time, be given by the Engineer-in-Charge.

Only stated dimensions are to be taken and not those obtained from scaling off the drawings. In case of any discrepancy between the description of items in the schedule of quantities and the specifications, the latter shall prevail. In case any feature of the work is not fully described and set forth in the drawings and specification, the contractor shall forthwith apply to the Engineer-in-Charge for further instructions, drawings or specifications.

**11.0 SIGNED DRAWINGS—NO AUTHORITY TO THE CONTRACTOR**

Signed drawing alone shall not be deemed to be an order for work unless it is entered in the agreement or schedule of drawings under proper attestation of the contractor and the Engineer-in-Charge or unless it has been sent to the contractor by the Engineer-in-Charge with a covering letter confirming that the drawing is an authority for work in the contract.

**12.0 COPIES OF DRAWING AND SPECIFICATIONS**

Three sets of the drawings, any modified or supplementary drawings, and the specifications shall be furnished free of cost to the contractor.

**13.0 PLANS AND DRAWINGS**

The contractor shall submit the following information, in triplicate, to the Engineer-in-Charge for approval within the time stipulated against each item below:

- (i) A general layout plan of construction plant and equipment for the execution of work within fourteen days from the date of notice to proceed with the work, and
- (ii) Drawings of prints showing the location of major plants and other facilities which he proposed to put up at the site, including any changes in the general layout, at least fourteen days prior to the commencement of the respective work.

#### **14.0 REFERENCE MARKS AND BENCH MARKS**

The basic center lines, reference points and bench marks will be fixed by the department.

The contractor shall establish at his cost, at suitable points additional reference line and bench marks as may be necessary. The contractor shall remain responsible for the efficiency and accuracy of all his bench marks and reference lines. He shall take precautions to see that the lines, points and bench marks fixed by the departments are not disturbed by his work and shall make good any such damage.

#### **15.0 SUPPLY OF MATERIAL BY THE EMPLOYER**

The materials to be supplied by the Government are shown in Schedule 'B' and as directed by Engineer-in-charge as per the site requirement. If the Government is unable to supply the materials properly requested, in such a case the contractor, may obtain the materials from elsewhere subject to approval of the cost, quality and specification of the materials by the Engineer-in-Charge. The employer will provide active help to the contractor for obtaining materials from other sources. The price deference plus / minus will be adjusted by the employer.

The contractor shall be responsible for all transport and storage of the materials from the place of issue and bear all related costs. The Engineer-in-Charge shall be entitled at any time to inspect and examine all such materials. The contractor shall provide reasonable assistance for such inspection or examination as be required.

The materials issued to contractor and not used on the works shall remain the property of the employer. The contractor shall not remove such material from the site without the prior written approval of the Engineer-in-Charge. The contractor shall place firm indent for his monthly requirement of these materials at least one month in advance. The contractor shall keep all accurate record of Government materials used on the works in a prescribed manner.

Whenever materials issued to the contractor are in excess of the requirement the contractor shall return such materials to the place of issue at his cost. The materials returned by the contractor shall be credited to him at the rates at which they were originally issued less the value of any deterioration or damage which may have been caused to the said materials while in the custody of the contractor. On completion of the work, if the contractor fails to return the surplus materials, the Engineer-in-charge, may charge him for such surplus materials not returned at double the issue rates mentioned in Schedule 'B'.

#### **16.0 MATERIALS, WORKMANSHIP, PERIOD, MAINTENANCE AND DEPECT LIABILITY ETC.**

##### **(A) Quality:**

All materials, articles and workmanship shall be of the most suitable quality for the work.

##### **(B) Tests, Inspection, Rejection of Defective Material and Work:**

The Contractor shall without extra cost provide samples and cooperate in the testing of materials and inspection of the works. The Engineer-in-Charge shall have access at all times to the places of storages and where materials are being manufactured and processed for using the works under the contract, to determine whether their manufacture and process are proceeding in accordance with the drawing and specification.

The Engineer-in-Charge shall during the progress of the works have power to order in writing from time to time:-

- a) The removal from the site, within such time or times as may be specified in the order, of any materials which, in the opinion of the Engineer-in-Charge, are not in accordance with the contract.
- b) The substitution of proper and suitable materials and
- c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment made thereof of any work, in respect of materials or work which, in the opinion of the Engineer-in-Charge is not in accordance with the contract.

The Contractor shall carry out such order at no extra cost to the employer. In case of default on the part of the contractor in carrying out such order, the employer shall be entitled to employ and pay other persons to carry out the same and all expense consequent thereon or incidental thereto shall be recoverable from the contractor by the employer or may be deducted by the employer from any money due or which may become due to the contractor.

In lieu of removing work or materials which are not in accordance with the contract, the Engineer-in-Charge may allow such work or materials to remain, and in that case such work may be paid at the reduced rates as may be decided by the Engineer-in-Charge. However, any action by the Engineer-in-Charge under this clause shall not in any way, absolve the contractor from his responsibility, and liabilities as per terms and conditions of the contract.

**(C) Covering of Works:**

No work shall be covered up or put out of view without the approval of the Engineer-in-Charge and the contractor shall afford full opportunity for examination and measurement of such work before it is covered up or put out of view. The contractor shall give due notice to the Engineer-in-Charge whenever such work is ready for examination and the Engineer-in-Charge shall within a reasonable period, arrange for examining and measuring such work, unless he considers it unnecessary and advises the contractor accordingly.

**(D) Opening of works for Inspection:**

The Contractor shall at the request of Engineer-in-Charge open for inspection any work covered up. In the case of work so opened up the Engineer-in-Charge shall promptly, after the receipt of a notice from the contractor that the work has been opened, make or cause the inspection thereof to be made. Should the contractor refuse or neglect to comply with such a request, the Engineer-in-Charge may cause such work to be opened up. If the said work has been covered up in contravention of the Engineer-in-Charge instructions, or if on being opened up, it be found not in accordance with the contract requirements, the expenses of opening and replacing it shall be borne by the contractor. If the work has not been covered up in contravention of such instruction, or it on being opened up, it found to be in accordance with the contract requirements, the expenses shall be borne by the employer.

**(E) Period of Maintenance and Defects Liability:**

The Contractor shall be responsible to make good within such period as may be stipulated by the Engineer-in-Charge any defect which may develop or may be noticed during period of maintenance of 180 days from the certified date of completion and which is attributable to the contractor. All notice of such defect shall be given to the contractor promptly. In case the contractor fails to make good the defects, the Engineer-in-Charge may employ other persons to make good such defects, and all expenses consequent there-of and incidental there-to shall be borne by the contractor.

In the event the Employer takes over portions of work as they are completed, the liability of the contractor under clause for those portions shall extend to a period of 180 days from the actual dates on which portions of the works are taken over.

**(F) Contractor's Superintendence and Supervision:**

- a) The contractor shall provide all necessary superintendence during the execution of the works and as long thereafter as may be necessary for the proper fulfilling of the contractor's obligations under the contract. The contractor or a competent and authorized agent or representative approved of in writing by the Engineer-in-Charge is to be constantly on the works and shall give his whole time to the superintendence of the same.
- b) The contractor shall provide and employ on the site in connection with the execution and maintenance of the works.
- (i) Only such technical assistants as are skilled and experienced in their respective callings and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and

- (ii) Such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the works.

**(G) Construction Plant:**

The Contractor shall provide and install all necessary construction plant and shall use such methods and appliances for the performance of the operations connected with the work awarded under the contract as will secure a satisfactory quality of work and rate of progress which ensure the completion of the work within the time specified.

**(H) Setting out Works:**

The Contractor shall be responsible for the correct setting out of all works at his cost. The contractor shall execute the work true to alignment, grade and levels as shown in the drawings and as directed by the Engineer-in-Charge and shall check these at frequent intervals. The contractor shall provide, all facilities like labour and instruments, and shall cooperate with the Engineer-in-Charge to check all alignments, grades, levels, and dimensions. Such checking shall not absolve the contractor of his own responsibility of maintaining the accuracy of the work.

**17.0 INFORMATION AND DATA**

The information and data furnished herein relative to the works and site conditions are general. It shall be the responsibility of the contractor to fully acquaint himself with the nature and the location of works, quarries, local conditions and other aspects which are relevant to the work.

**18.0 USE AND CARE OF SITE**

The contractor will be permitted to use without charge, the site and the lands for execution of work, labour, staff colonies, site officers, workshops or stores and for related activities. The contractor shall not commence any operation on such lands except with the approval of the Engineer-in-Charge. If these lands are not adequate, the contractor may have to make his own arrangements for additional lands.

The contractor shall not demolish, remove or alter the structures, trees or other facilities on the site without prior approval of the Engineer-in-Charge. All rubbish shall be burnt or removed from the site as it accumulates.

All surface and soil drains shall be kept in a clean, sound and workman like state. All the areas of the contractor's operations shall be cleared before returning them to the Employer. The contractor shall make good any damage or alternations made to areas, property or land handed over to him before these are returned.

**19.0 PROTECTION OF ADJOINING PREMISES**

The contractor shall protect adjoining sites against structural, decorative and other damages that could be caused by the execution of these works and make good at his cost, any such damages.

**20.0 ACCIDENTS AND INSURANCE AGAINST ACCIDENTS ETC. TO WORKMEN**

- a) The employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor or any sub-contractor. The contractor shall indemnify and keep indemnified the employer against all such damages compensation, and against all claims, proceedings, costs, charges and expense whatsoever in respect thereof or in relation thereto.
- b) On the occurrence of an accident arising out of the works which results in death or which is so serious as to be likely to result in death, the contractor shall within twenty four hours of such accident, report in writing, to the Engineer-in-Charge, the facts stating clearly and in sufficient details the circumstances of such accident and the subsequent action. All other accident on the works involving injuries to persons, damage to property other than that of the contractor shall be promptly reported to the Engineer-in-Charge stating clearly and in sufficient details the facts and circumstances of the accidents and the action taken. In all cases the contractor shall indemnify the Employer against all loss or 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 employer as a

consequence of failure to give notice under the workmen's compensation act or failure to conform to the provisions of the said act in regard to such accidents.

- c) In the event of an accident in respect of which compensation may become payable under the Workmen's Compensation Act including all modifications thereof, whether such compensation may become payable by the contractor or by the Government as principal employer, the Engineer-in-Charge may retain out of money due and payable to the contractor such sum or sum of money as may, in the opinion of the Engineer-in-Charge, be sufficient to meet such liability. On receipt of award from the labour commissioner in regard to quantum of compensation, the difference in amount will be reimbursed to or recovered from the contractor.
- d) The contractor shall insure against such liability with an insurer approved by the Government, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him on the works and shall, when required, produce to the engineer or the engineer's representative such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the employer is indemnified under the policy, but the contractor shall require such sub-contractor to produce to the Engineer or the Engineer's representative, when required, such policy of insurance and the receipt for the payment of the current premium.

#### **21.0 CERTIFICATE OF COMPLETION OF WORKS**

- a) When the whole of the works have been substantially completed and have satisfactorily passed any final test that may be prescribed by the contract, the contractor may give a notice to that effect to the engineer or to the engineer's representative accompanied by an undertaking to finish any outstanding work during the period of maintenance. Such notice and undertaking shall be in writing and shall be deemed to be a request by the contractor for the engineer to issue a certificate of completion in respect of the works. The Engineer-in-Charge shall, within twenty-one days of the date of delivery of such notice, issue a certificate of completion stating the date on which, in his opinion, the works were substantially completed in accordance with the contract or give instructions in writing to the contractor specifying all the work which, in the Engineer's opinion, requires to be done by the contractor before the issue of such certificate. The engineer shall also notify the contractor of any defects in the works affecting substantial completion that may appear after such instructions and before completion of the works specified therein. The contractor shall be entitled to receive such certificate of completion within twenty-one days of completion to the satisfaction of the engineer of the works so specified and making good any defects so notified.
- b) If any part of the permanent works shall have been substantially completed and shall have satisfactorily passed any final test that may be prescribed by the contract, the engineer may issue a certificate of completion in respect of that part of the permanent works before completion of the whole of the works and upon the issue of such certificate, the contractor shall be deemed to have undertaken to complete any outstanding work in that part of work during the period of maintenance.
- c) Provided always that a certificate of completion given in respect of any section or part of the permanent works before completion of the whole shall not be deemed to certify completion of any ground or surfaces requiring reinstatement, unless such certificate shall expressly so state.

#### **22.0 TOLLS AND DUTIES**

The contractor shall, unless otherwise specifically provided in the contract, pay all duties, tolls, quarry fees, royalties and other taxes on all materials and articles that he may use.

**23.0 OLD CURIOSITIES**

All old curiosities, relics, coins, minerals and any other item of archeological impotence found in excavation or pulling down shall be the property of the Government and shall be handed over to the Engineer-in-Charge. Should any structure be uncovered, the Engineer-in-Charge's instruction shall be obtained before its demolition or removal.

**24.0 ENGINEER-IN-CHARGE'S DECISION**

It shall be accepted as an inseparable part of the contract that in matters regarding materials, workmanship, removal of improper work, interpretation of the contract drawings and contract specifications, mode of procedure and the carrying out of the work, the decision of the Engineer-in-Charge, which shall be given in writing, shall be final and binding on the contractor.

**25.0 OTHER CONTRACTORS**

When two or more contractors are engaged on work in the same vicinity, they shall work together in a spirit of cooperation and accommodation. The contractor shall not take any steps or actions that may cause disruptions, discontent or disturbance in the neighboring and project localities. In cause of any difficulties amongst the contractors, the Engineer-in-Charge shall direct the manner in which each contractor shall conduct his work so far as it affects the others.

**26.0 OTHER WORKMEN**

The Engineer-in-Charge shall have full authority to depute workmen on the work site to execute other works not included in the contract. The contractor shall afford every reasonable facility during working hours, to enable such workmen to carry out the other works provided that such works shall be carried out in such a manner as not to impede the progress of the work included in the contract. The contractor, however, shall not be liable for any damage which may happen to or be occasioned by such other works, provided he complies with the instructions in connection therewith and provided that the damage is not caused by the contractor or his workmen.

**27.0 VARIATIONS AND EXTRA ITEM**

**(A) Variations:**

- a) All quantities set out in the bill of quantities are the estimated quantities of the work based on preliminary drawings and they are not to be taken as the actual and correct quantities of the works to be executed by the contractor in fulfillment of his obligations under the contract.
- b) The Engineer-in-Charge shall make any variation of the form, quality or quantity of the works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason is shall, in his opinion be desirable, he shall have power to order the contractor to do so and the contractor shall do any of the following:
  - (i) increase or decrease the quantity of any work included in the contract,
  - (ii) omit any such work,
  - (iii) change the character or quality or kind of any such work,
  - (iv) change the levels, lines, position and dimensions of any part of the works, and execute additional work of any kind necessary for the completion of the works, change any specified sequences, method or timing of construction of any part of the works and no such variation shall in any way vitiate or invalidate the contract.

The quantities given in the tender may vary upto any amount on either side. If in case of variation is more than 20% the quantities shall be treated as extra item and the contractor shall not claim any thing on this account.

**(B) Extra items:**

The extra or additional work done or work omitted by order of the Engineer-in-Charge shall be valued at the rates and prices set out in the contract if, in the opinion of the Engineer-in-Charge, the same shall be applicable. If the contract does not contain any rates or prices applicable to the extra or additional work, then rates will be fixed as per clause-16 of I.D. Form No.-111 annexed with the tender.



## **28.0 CLAIMS**

The contractor shall send to the engineer-in-charge all claims for any additional payment to which the contractor may consider him self entitled within a fortnight of the claim as enumerated in Form-111 (Conditions of the contract). He shall also give details of all extra or additional work ordered by the engineer-in-charge which he has executed during the preceding month.

No final or interim claim for payment for any such work or expense will be considered which has not been included in such particulars. Provided always that the engineer shall be entitled to authorize payment to be made to any such work or expense, notwithstanding the contractor's failure to comply with this condition, if the contractor has, at the earliest practicable opportunity, notified the engineer-in-charge in writing that he intends to make a claim for such work.

## **29.0 MEASUREMENT AND PAYMENT**

- a) The engineer-in-charge shall, except as otherwise stated, ascertain and determine by measurement the value in terms of the contracts of work done in accordance with the contract. He shall, when he requires any part or parts of the works to be measured, give notice to the contractor's authorized agent or representative, who shall forthwith attend or send a qualified agent to assist the engineer-in-charge or the engineer's-in-charge representative in making such measurement, and shall furnish all particulars required by either of them. Should the contractor not attend, or neglect or omit to send such agent, then the measurement made by the engineer-in-charge or approved by him shall be taken to be correct measurement of the work. For the purpose of measuring such permanent work as is to be measured by records and drawings, the engineer's-in-charge representative shall prepare records and drawings month by month of such work and the contractor, as and when called upon to do so in writing, shall, within fourteen days, attend to examine and agree such records and drawings with the Engineer's-in-Charge Representative and shall sign the same when so agreed. If the contractor does not so attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the contractor shall, within fourteen days of such examination, lodge with the engineer's-in-charge representative, for decision by the engineer-in-charge, notice in writing of the respects in which such records and drawings are claimed by him to be incorrect.
- b) The works shall be measured net, notwithstanding any general or local custom, except where otherwise specifically described or prescribed in the contract.
- c) Payments will be made to the contractor according to availability of funds.
- d) On completion of the entire work, the contractor will submit his final bill. Payment of this bill shall not be considered conclusive evidence as to the sufficiency of any work or materials or correctness of measurements to which it relates, nor shall it relieve the contractor from his liabilities arising from any defects.
- e) All interim payments shall be treated as advance payments. All payments will be made by cheque.

## **30.0 RECOVERIES**

Any debts due from Indian contractors, advised by the Government, shall be recovered from any bill or money retained from this contract.

## **31.0 JURISDICTIONS**

The contract shall be governed by the laws of India and of Uttar Pradesh for the time being in force and be subject to the jurisdiction of the High Court of judicature at Allahabad.

## **32.0 PATENTS AND COPY RIGHTS**

The contractor shall save harmless and indemnify the employer from and against all claims and proceedings for or on account of infringement of any patent rights, design, trademark or name or other protected rights, design, trademark or name or other

protected rights in respect of any constructional plant, machine, work or material used for or in connection with the works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works or any of them.

### **33.0 RULES REGARDING LABOUR LAWS IN UTTAR PRADESH**

The contractor shall be bound and shall be responsible to comply with the provisions of the labour laws in force in the state of Uttar Pradesh including the Minimum Wages Act to any enactment in suppression, extension or modification thereof which may be passed at any time or from time to time by a competent legislative body and may have effect in the State of Uttar Pradesh and Rules and Regulations made there under or any amendment of modifications thereof for the time being in force; All expenses in connection with the compliance of such laws and rules shall be borne by the contractor, and the contractor shall neither demand nor claim nor shall be entitled to any additional payment for the reason that he failed to take into account any such expenses in his tender of that any subsequent amendments in such laws or rules have changed the basis on which he worked out such expenses shall submitting his tender.

In every case in which by virtue of the provisions of the labour laws in force in the State of Uttar Pradesh and the rules and regulations made there-under, the employer is obliged to pay any sum in the execution of the work. Employer will recover from the contractor the amount so paid, and without prejudice to the other rights of the Department, the Department shall be at liberty to recover such amount or any part thereof by deducting it either from the security money deposited by the contractor or to his credit under clause-1 of I.D. Form No.-111 or from any other sum due by employer to the contractor whether under this contract or otherwise.

### **34.0 SAFETY PROVISIONS**

The contract shall arrange for the safety in his operation as required including the provisions in the safety manual published by the Central Water Commission New Delhi. In case the contractor fails to make such arrangements the engineer-in-charge shall be entitled to cause them to be provided and to recover the cost thereof from the contractor.

For failure to comply with provisions of the safety manual the contractor shall without prejudice to any other liability pay to employer a sum not exceeding Rupees one hundred per day for each day of default.

### **35.0 TAXATION**

#### **(1) Local Taxation:**

The prices bid by the contractor shall include all customs, duties, import duties, business taxes, income and other taxes that may be levied according to the laws and regulations in being as of the date 30 days prior to the closing date for submission of bids on the constructional plant, materials and supplies (both permanent, temporary and consumable) acquired for the purpose of the contract and on the service performed under the contract. Nothing in the contract shall relieve the contractor from his responsibility to pay any tax that may be levied on profits made by him in respect of the contract.

#### **(2) Income Tax:**

- a) Deduction will be made towards income tax at source by the Employer as directed by Income Tax Department from contractors.
- b) The contractor's staff, personnel and labour will be liable to pay personal income taxes in respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

### **36.0 TRADE TAX DEDUCTION**

- (1) Nothing in the contract shall relieve the contractor from the responsibility to pay any trade tax that may be levied under the U.P. Sales Tax Act, 1948 as amended from time to time in performance of this contract. Deduction of an amount equal to that specified in section of the aforesaid act as in force of or as the case may be, shall be made from the payments to be made to the contractor. The amount presently specified in the said section is 4 (four) percent of the amount payable to the contractor and a surcharge of 25 (twenty five) percent on Tax amount. No trade tax shall be deducted on the cost or subject to any amendment to the contractor. Above deductions are subject to any amendments made in future. The trade tax or any other tax as applicable from time to time shall be recovered from the contractor's bill.
- (2) Any tax imposed by U.P. Govt. shall be recovered from contractor's bill.

### **37.0 SALES TAX CLEARANCE CERTIFICATE**

If the contractor is a sales tax assessee, he should produce a valid sales tax clearance certificate before payment of the final bill otherwise the final payment to the contractor will be withheld.

If the contractor is not liable to sales tax assessment, a certificate to this effect from the competent sales tax authorities shall be produced before payment of the final bill otherwise the final payment to the contractor will be withheld.

### **38.0 LABOUR CESS:-**

The Labour Cess as applicable from time to time shall be Recovered from contractor bill.

### **39.0 CONTRACTOR DYING, BECOMING INSOLVENT, INSANE OR IMPRISONED**

In the event of the death or insanity of the contractor, the contract may be terminated by notice in writing, pasted at the site and advertised in the issue of the local newspaper. All acceptable works shall thereafter, be paid at appropriate rates after recovering all the contractor's dues to Government, to the persons entitled to receive and give a discharge for such payments.

If the contractor is imprisoned, becomes insolvent, compounds with his creditors, has a receiving order made against him or carries on business under a receiver for the benefit of the creditors or any them, or being a partnership firm becomes dissolved, or being a corporation goes into liquidation or commences to be wound up not being a voluntary winding up for the purpose only of amalgamation or reconstruction, the Employer shall be at liberty:

- a) To give such liquidator, receiver, or other person in whom the contract may become vested the option of carrying out the contract, or a portion thereof to be determined by the employer, subjects to his providing an appropriate guarantee for the performance of such contract, or
- b) To terminate the contract forthwith by notice in writing to the contractor, the liquidator, the receiver or person in whom the contract may become vested and take further action as provided in the clause 'Default by Contractor' treating as if this termination is ordered under that clause.

### **40.0 COMPENSATION FOR DELAY**

The compensation for delay shall be as per clause-2 of I.D. form No.-111.

### **41.0 CARE OF WORKS AND EXPECTED RISKS**

- (1) From the commencement of the works until the date stated in the certificate of completion for the whole of the works pursuant to relevant clause here of the contractor shall take full responsibility for the care thereof. Provided that if the Engineer-in-Charge shall issue a certificate of completion in respect of any part of the permanent works the contractor shall cease to be liable for the care of that part of the permanent works from the date stated in the certificate of completion in respect of that part and the responsibility for the care of that part shall pass to the employer. Provided further that the contractor take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the Period of maintenance until such outstanding work is completed. In case any damage, loss or injury shall happen to the work, or to any part

thereof, from any cause whatsoever, save and except the excepted risks as defined in sub-clause (2) of this clause, while the contractor shall be responsible for the care thereof the contractor shall, at his own cost, repair and make good the same, so that at completion the permanent works shall be in good order and condition and in conformity in every respect with the requirements of the contract and Engineer's instructions. In the event of any such damage, loss or injury happening from any of the excepted risks, the contractor shall, if and to the extent required by the Engineer-in-Charge and subject always to the provisions of relevant clause here of repair and make good the same as aforesaid at the cost of the Employer. The contractor shall be liable for any damage to the works occasioned by him in the course of any operations carried out by him for the purpose of completing any outstanding work.

- (2) The 'excepted risks' are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or unless solely restricted to employees of the contractor or of his sub-contractors and arising from the conduct of the works, riot, commotion or disorder or use or occupation by the employer of any part of the permanent works, or a cause solely due to the engineer's design of the works, or ionizing radiations or contamination by radio-activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of explosive, nuclear assembly or nuclear component thereof, pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for or insure against all of which are herein collectively referred to as the excepted risks.

#### **42.0 EXTENSION OF TIME FOR COMPLETION**

Time shall be considered as the essence of the contract. Should the amount of extra or additional work of any kind or any cause of delay referred to in these conditions or any cause of delay referred in earlier clauses here of, or exceptional adverse climatic conditions, or other special circumstances of any kind whatsoever which may occur, other than through a default of the contractor, be such as fairly to entitle the contractor to an extension of time for the completion of works, the Employer shall determine the amount of such extension and shall notify the contractor accordingly. Provided that the Employer is not bound to take into account any extra or additional work or other special circumstances unless the contractor has within twenty-eight days after such work has been commenced, or such circumstances have arisen, or as soon thereafter as is practicable, submitted to the engineer's-in-charge representative full and detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

#### **43.0 SETTLEMENT OF DISPUTES**

If the contractor considers any work demanded of him to be outside the requirements of the contract or considers any drawings, record or ruling of the Engineer-in-Charge on any matter in connection with or arising out of the contract or the carrying out of work to be unacceptable, he shall promptly ask the Engineer-in-Charge in writing, for written instructions or decision. Thereupon the Engineer-in-Charge shall give his written instruction or decision within a period of thirty days of such request.

Upon receipt of the written instruction or decision the contractor shall promptly proceed without delay to comply with such instructions or decision.

If the Engineer-in-Charge fails to give his instructions or decision in writing within a period of thirty days after being requested, or if the contractor is dissatisfied with the instructions or decision of the Engineer-in-Charge, the contractor may within thirty days after receiving the instructions or decision appeal to the Superintending Engineer, who shall afford an opportunity to the contractor to be heard and to offer evidence in support of his appeal. The Superintending Engineer shall give a decision within a period of thirty days after the contractor has given the said evidence in support of his appeal.

If the contractor is dissatisfied with this decision, the contractor within a period of thirty days from receipt of the decision shall indicate his intention to refer the dispute to Arbitration failing which, the said decision shall be final and conclusive.

#### **44.0 ARBITRATION**

All the dispute or differences in respect of which the decision has not been final and conclusive shall be referred for arbitration to a sole arbitrator appointed as follows.

Within thirty days of receipt of notice from the contractor of his intention to refer the dispute to arbitration, the Chief Engineer, Madhya Ganga, Aligarh shall send to the contractor a list of three officers of the rank of Superintending Engineer or higher, who have not been connected with the work under this contract. The contractor shall within fifteen days of receipt of this list select and communicate to the Chief Engineer the name of one officer from the list who shall then be appointed as the sole arbitrator. If contractor fails to communicate his selection of name, within the stipulated period, the Chief Engineer shall without delay select one officer from the list and appoint him as the sole arbitrator. If the Chief Engineer fails to send such a list within thirty days, as stipulated, the contractor shall send a similar list to the Chief Engineer within fifteen days. The Chief Engineer shall then select one officer from the list and appoint him as the sole arbitrator within fifteen days. If the Chief Engineer fails to do so the contractor shall communicate to the Chief Engineer the name of one officer from the list, who shall then be the sole arbitrator.

The arbitrator shall be conducted in accordance with the provision of the Indian Arbitration Act, 1996 or any statutory modification thereof. The decision of the arbitrator shall be final and binding on the parties thereto. The arbitrator shall determine the amount of costs of arbitration to be awarded to either parties.

Performance under the contract shall, if reasonably possible, continue during the arbitration proceedings and payments due to the contractor by the employer shall not be withheld unless they are the subject matter of the arbitration proceedings.

All award shall be in writing and in case of claims amounting to Rs. 1.00 lakhs and above, such awards shall state reasons for the amounts awarded.

#### **45.0 CONTRACT DOCUMENT AND MATTERS TO BE TREATED AS CONFIDENTIAL**

All documents, correspondence, decisions and orders concerning to the Contract shall be considered as confidential and / or restricted in nature by the contractor and he shall not divulge or allow access to them by any unauthorized person.

#### **46.0 JOINT VENTURES**

If the contractor is a joint venture, all partners of the joint venture shall be jointly and severally liable to the employer for the execution of the entire contract in accordance with its terms.

#### **47.0 SECURITY DEPOSIT FOR PERFORMANCES & SECURITY DEPOSIT**

The contractor will deposit for performance full security as per clause No.-1 of I.D. form No.-111 and its amendment or as per latest orders of U.P. Irrigation department at the time of entering into the agreement. The E.M.D. already deposited will be adjusted towards the security amount. The security deposit may be in the form of the F.D.R. or in the shape of Bank Guarantee from the Nationalized Bank. The Bank Guarantee proforma is enclosed with the tender.

#### **48.0 SPECIAL CLAUSE**

- a) If there is any discrepancy between the condition of contract and I.D. form No.-111 attached with the tender, the conditions given in I.D. form No.-111 will prevail and will be binding on the contractor.
- b) After completion of the work, testing of the trough / barrels will be made for designed F.S.L. for at least on week time at the cost of the contractor for which he shall not be paid any thing extra. The cost so incurred by the contractor is included in the reverent item of the agreement. If during the testing of the trough / barrels, any defect in noticed, the contractor will repair / rectify the same at his own cost.

**49.0 INSPECTION OF WORK BY TECHNICAL EXAMINER**

The work may be examined by the Technical Examiner or his representatives. If in the opinion of the said examiner or his representatives, the work executed by the contractor is found defective and consequently the penalties are imposed, the penalties so imposed shall be recovered from the contractor. The decision of the Engineer-in-Charge or his representatives shall be final and binding on the contractor in this respect.

- 50.0** If any person whosoever is found actively associated with Mafia and unsocial elements or engaged in organized crime or is a Mafia or mafiso is disqualified from bidding.
- 51.0** Even if it comes to knowledge after award of a contract that the contractor is associated with Mafia and unsocial elements or engaged in organized crime or is a Mafia or mafiso, the contract will be cancelled after serving a showcase notice and if the contractor is found repeating the same, then the proceeding of black listing him shall also be initiated.
- 52.0** If it is found that the contractor or the bidder has threatened the other bidders or prevented them from bidding, the tender / contract will be cancelled.
- 53.0** Any advocate registered in state bar council will not be authorized for bidding. If it comes in knowledge that contractor is a state bar council registered advocate, the contract will be cancelled after having been satisfied of this fact.
- 54.0 Drawf the Chippi grass as per directed by Engineer incharge.

## **TECHNICAL PROVISIONS**

### **1.0 GENERAL**

- 1.01 The work is situated at Left Afflux Bund of Ch.C.S.M.G. Barrage, Bijnor (U.P.) .
- 1.02 The Nearest Railway Station is Bijnor.
- 1.03 The site is Connected from N.H.119
- 1.04 It is understood and agreed that the contractors, have inspected and examined the site and its surroundings and satisfied themselves in respect of the scope of work, the site conditions including, but not restricted to the following which may influence or effect the work or cost there of under the contract.
  - a) Site conditions including access to the site, existing and required roads and other means of transport / communications for use by him in connection with the work.
  - b) Requirement and availability of land and enabling works, colonies, stores and workshops etc.
  - c) Ground conditions, including those bearing upon transportation, disposal, handing and storage of materials required for the work or obtained therefrom.
  - d) Source and extent of availability of suitable materials including required sections of steel, welding materials, equipments etc. and labour (skilled and unskilled) required for work and laws and regulation governing their use and employment.
  - e) The type of equipment and facilities needed preliminary to, for and in the performance of the work and,
  - f) All other informations pertaining to needs for the work, information as to the risks, contingencies and other circumstances which may influence or effect the work or the cost thereof under the contract.
- 1.05 All works shall be carried out in accordance with the detailed specifications hereinafter described. In case specification of any work are not given, the work shall be carried out in accordance with the latest I.D. specifications and provisions of relevant I.S. / I.R.C. specifications, as amended to date or as per instructions of the Engineer-in-charge The order to commence the work shall be given in writing by the Engineer-in-charge Without the written order, the contractor shall not enter upon or commence any portion of the work. If he does so, the contractor shall have no claim to ask for measurement or payment for the work and shall be responsible for any claim damages that may arise due to such unauthorized commencement of work.
- 1.06 The contractor shall start the work under this contract within 30 calendar days after the date of receipt of proceed with the work. Any delay by the Contractor in commencement of the work will render him liable to action.
- 1.07 The Contractor shall at all times maintain the speed of work to conform to the latest operative progress schedule but the Engineer-in-charge may at any time with one month's notice in writing direct the contractor to slow any part or whole of the work for any reason whatsoever (which shall not be questioned) and the Contractor shall comply with such orders of the Engineer-in-charge The compliance of such orders shall not entitle the contractor to any claim or compensation except that reasonable extension of time to be determined by the Engineer-in-charge, will be granted in case slowing down results in delay in final completion of work.
- 1.08 The Engineer-in-charge may order the contractor to suspend any work that may be subject to damage by climatic or weather conditions.
- 1.09 The contractor shall not do any work other than provided in the agreement without the written orders of the Engineer-in-charge No Claim, whatsoever, shall be entertained for any unauthorized work.
- 1.10 No claim shall be entertained for idle labour for any reason except as otherwise provided for in the contract documents.
- 1.11 If the contractor keeps his labour and employees at site, he shall provide, at his own cost, proper arrangements for accommodations, sanitations and water supply etc. and the site shall be kept clean and tidy by the contractor to the satisfaction of the Engineer-in-charge

and as per prevalent labour laws. Jungle and jhund clearance, filling of pits, levelling, dressing and cleaning etc. of the land provided to the contractor for his camp, labour and staff colonies, site offices, work-shops or store etc. and for relative activities shall be done by the Contractor himself for which no extra payment shall be made.

- 1.12 Proper discipline shall be maintained at the work site and in labour camp. If in the opinion of the Engineer-in-charge any employee or agent of the contractor misbehaves or causes hindrance in the execution of work or indulges in undesirable activities in the camp or otherwise makes himself undesirable, the Engineer-in-charge may direct the contractor to remove such person from site or his camp and the contractor shall be liable to carry out such orders. No claims on this account shall be entertained.
- 1.13 All materials arranged by the contractor shall be subject to approval of the engineer-in-charge
- 1.14 No claim shall be entertained by the Government in respect of any theft, loss or damage due to accident occurring for any reason whatsoever. The contractor shall be responsible for the safety of the materials issued to him for the work.
- 1.15 The contractor is to include the whole of the works whether permanent or temporary which are described in or implied by the efficiency, stability and completion of the permanent works, also the performance of all other operations including clearance of site and supplying all materials and things described in or implied by the contractor documents, which may be deemed desirable or required for the completion in all respect of the above works to the entire satisfaction of the Engineer-in-charge and all such matters shall be deemed as included in the contract.
- 1.16 The contractor shall maintain O.K. cards of the works in the performa approved by the engineer-in-charge It shall be the duty of the contractor to get the O.K. card signed by the engineer or his representative before starting any work. No work shall be started without O.K. unless otherwise permitted by the Engineer-in-charge
- 1.17 The contract shall be construed according to an subject to the laws of India and within jurisdiction of Courts of India.
- 1.18 The Engineer-in-charge shall have the right to take possession of or use any completed part of work or any part thereof under construction either temporarily or permanently. Such possession or use shall not be deemed as an acceptance of any work either completed or not completed in accordance with the contract, except where expressly otherwise specified by the Engineer-in-charge.
- 1.19 All the works during the progress and after the completion may be subject to technical audit. Any defects of materials or workmanship discovered during such audit and established as such shall be rectified by the contractor at his own cost. Any recoveries or reduction in rates, considered necessary, shall be made from the contractor from the subsequent bills or securities of the contractor, even if the work been accepted by the Engineer-in-charge.
- 1.20 No Claim for interest or damage will be entertained by the Government with respect to any balance money which may be lying with the Government or may become due owing to any dispute, difference or misunderstanding between the Engineer-in-charge on the one hand and the contractor on other hand or with respect to any delay on the party of the Engineer-in-charge in making periodical or final payment or in any other respect whatsoever.
- 1.21 The rates and prices tendered in the bill of quantities shall, except in so far as it is otherwise provided under the contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the contract.
- 1.22 Running or intermediate payments to the contractor shall be done at reduced rate as decided by the Engineer-in-charge



## **2.0 MATERIALS**

- 2.01 Materials detailed in Schedule 'B' will be issued from the Government godowns in accordance with the terms detailed herein. The contractor will not be entitled to any compensation from the Government for any loss suffered by him on account of delay by the Government in the supply of any materials. In case of such delay in the supply of materials, Government may grant such extension of time as shall appear to be reasonable to the Engineer-in-charge in accordance with the circumstances and merits of the case. The decision of Engineer-in-charge in this regard shall be final and binding on the contractor.
- 2.02 All materials issued to the contractor and not used on the works shall remain the property of the employer but in the custody of the contractor for bonafide use on the works only. The contractor shall not remove such materials from the site without the prior written approval of the engineer-in-charge.
- 2.03 The labour for weighing and counting at the time of taking delivery of the stores by the contractor from Government godowns shall be provided by the contractor at his own expenses. The contractor shall bear all incidental charges for loading unloading, storage and safe custody of all materials supplied to him from Government godowns.
- 2.04 The Government will issue the material at the Government godowns mentioned in schedule 'B'. In case the contractor is issued material from stores other than specified, difference in cartage involved from the site of issue specified above and site of actual issue to work site shall be paid or deducted from the contractor's bill according to the prevalent normal schedule of rates of the concerned circle.
- 2.05 The Government will furnish air entraining agents and other admixtures required to the contractor free of cost at the Government store. The use of such admixtures and agents shall be made as per instructions of Engineer-in-charge. The cost of cartage, storage, handling, batching and mixing shall be borne by the contractor and shall be included by him in unit prices tendered for concrete.
- 2.06 The consumption of materials, which shall be issued to the contractor free of cost shall be checked on the basis of actual consumption. If quantity received by the contractor from the Government is found in excess beyond 2% (two percent) of the quantity actually used, the cost of excess quantity beyond 2% shall be recoverable at double the prevalent stock issue rates at the time of such checking.

## **3.0 PLANTS AND EQUIPMENTS OF GOVERNMENT ON HIRE BASIS**

Government may provide, if available, tractor, dozer, concrete mixer and vibrators to the contractor on hire basis from the stores of Engineer-in-charge. Arrangements for carriage from Government stores to the work site shall be done by the contractor at his own cost. The hire rates at which above equipments shall be provided will be monthly / daily / hourly used rates as fixed by the Engineer-in-charge.

## **4.0 CONSTRUCTION POWER**

The contractor will make his own arrangement to construction power either from U.P. Power Corporation or by his own diesel generating sets. The employer will issue necessary recommendations if required by the contractor to the U.P. Power Corporation for releasing the electric connection.

## **5.0 SITE CLEARANCE**

The work to be done under this section consists of furnishing all plants, labour and materials and executing all works necessary to perform all cleaning operations as hereinafter specified and as directed by the Engineer-in-charge. The area to be occupied by the structure shall be cleared of all specified trees, bushes, roots etc., and other objectionable materials, before starting any work. The land shall be maintained free from any growth and vegetation during the progress of construction by the contractor at his own expenses.

All roots, bushes etc. and other objectionable materials within the areas required to be cleared shall be burnt or otherwise completely removed from the site to the satisfaction of Engineer-in-charge Any disposal in the River Ganga will not be permitted. No payment shall be made for all these operations involved and shall be deemed to be covered in rate of excavation item. However, trees shall be property of the Government.

## **6.0 EARTH WORK**

### **6.01 General Specification for Excavation:**

The work to be done under this section is surface excavation and consists of furnishing all tools, plant, labour and material and performing all works required to do all excavation and maintain the excavation slopes and prepare the foundations as specified in these specification and as may be directed in the field by the engineer-in-charge. The work to be done under this section includes excavation in all type of soil weathered or loose; dry or wet etc.; including all overburden, silt, earth, clay, sand, gravel, soft moorum etc.

Excavation as required shall be done upto the levels showing in the drawings or as directed by engineer-in-charge and shall be so shaped, cleaned and roughly stepped, as to produce the desired surface as shown on the drawings or as directed by the Engineer-in-charge. All work shall be done as per ID Specification.

### **6.02 EARTH WORK IN FILLING**

Earth work in filling in banks shall be done in layers, each layer not exceeding 20 cm in thickness and should be properly watered to maintain the optimum moisture content. Consolidation of every 3<sup>rd</sup> layer (alternate layer) and got approved by Engineer-in-Charge before compacting the next layer. Required quantity of earth should be obtained from borrow-pits, the sites of which should necessarily be approved by Engineer-in-Charge. No borrow-pits should be dug within 4.5 m of toe of the final section of the embankment. Necessary witness should be left for the purpose of measurement of quantity of earth excavated and used in embankment. Proper profiles of embankment shall be maintained. Requisite allowance in height varying from 25 – 50 mm as directed by Engineer-in-Charge shall be left for settlement. Side slopes shall be maintained strictly as per drawings.

6.03 Earthwork in filling shall be measured in compacted volume of finished work in cubic metres.

### **6.04 Compaction:**

Adequate labour and or appropriate arrangements shall be made by the contractor for spreading earth on the embankment in proper layers.

Light compaction of spoil banks shall be done by the contractor by manual labour by making the top surface even and regular. Inner and outer slopes shall be dressed manually, by wooden durmats. The dry density of the earth so compacted shall not be less than 85% of dry density at OMC.

Leveling if necessary on account of any fault of the contractor may be resorted to by the department at his cost which the contractor shall have no objection nor any claims on that account shall be entertained.

### **6.05 Maintenance of Earth During Progress of Work:**

During the execution of work the contractor shall be responsible for the maintenance of works completed by him. Any damage to the work already executed on account of rains, cross drainages and / or flow from adjoining reaches shall be made good by him. All rain washings shall be cleaned and the raincuts repaired by him. No extra payment shall be made to the contractor for these operations.

### **6.06 Mode of Measurement and Payment:**

(a) **Initial Cross Sections** : After clearance of land and removal of humus, cross sections shall be taken at 20 m or closer interval or as decided by the engineer-in-charge. The

levels along the cross sections shall be observed at every 5.0 m. or closer interval on both sides of the centre line and at obligatory points with reference to standard bench marks already established. The contractor or his authorized agent shall remain present during the course of leveling. The cross sections shall be entered direct in measurement book and signed by the contractor or his authorized agent in token of acceptance. The cross sections plotted in ink on graph paper and signed by the contractor shall be kept for safe custody in divisional office alongwith original contract documents. Whenever possible the cross sections shall be drawn in M.B. also.

- (b) The permission to start earth work shall only be given after the above formalities have been completed. It will be incumbent on the contractor to seek permission in writing to start the earth work.
- (c) **Final Cross Section** : In case of final measurements the levels shall be observed in presence of contractor or his authorized agent at points strictly where initial cross section were taken and the quantities of earth work shall be worked out by super-imposing the observed cross sections on the initial cross section already plotted. However if on some particular points extra quantity of earth work is found to have been executed beyond the cross sections shown in the drawings, such objectionable quantities may be excluded from measurements.
- (d) For taking cross sections strictly at the same points reference pillars shall be fixed by the contractor at his own cost. The contractor shall maintain them intact during the progress of his work. In case any damage is done to these pillars the contractor shall replace them promptly. No extra payment shall be made on this account.

**6.07 Disposal** : All suitable material from excavation from the foundation of the structure under this contract shall be used in the back fill so far as practicable and as determined by the engineer-in-charge. Suitable materials obtained from excavation, if used for the purpose said above, shall be allowed free of cost to the contractor. However, the royalty charges shall be paid by the contractor.

All lifts for ascending or descending in excavation work shall be deemed to be included in the tendered rates of earth work in excavation. Where required by the engineer-in-charge, the piles of excavated material shall be levelled and trimmed to reasonably regular lines and the contractor shall be entitled to no additional payment on account of this requirement.

**8. Supplying & Filling Empty Cement Bags with sand/R.B.M./Local Earth Sewing & placing in position:-**

- 8.01 E.C. Bages will be provided by the Department. The river bed material/ Local Earth used for filling shall be free from stone, shingle or boulder not larger than 10mm in any directions, salts, organic or other foreign matter. 12.02 Normally the river bed material/ Local Earth shall be used for filling from the near-by area. However, if such river bed material contains delaterised material etc. the same shall not be used
- 8.02 The empty cement bags shall be properly filled with river bad material.
- 8.03 After filling the E.C. bags shall be properly sewed and placed in stacks.
- 8.04 **Placing of Empty Cement Bags:-**
  - (i) After properly filling & sewing the earth filled cement bags shall be placed in layers in such a manner that the sewed portion of the E.C. bags shall be towards the bank side.
  - (ii) Each sewed portion of the bag should be overlapped by the other.
- 8.05 **Measurements:-**
  - (i) The initial soundings shall be recorded before start of work and shall be signed by both the contractor & Engineer-in-charge.
  - (ii) The final level of the top layer upto existing water level recorded. The final levels shall also be signed by contractor & Engineer-in-charge.

- (iii) The cubical content (in cubic meter) shall be divided by 0.0283 to arrive the number of E.C. bags filled with R.B.M. /Local Earth.
- (iv) The payment shall be made per no. of E.C. bags filled with R.B.M /Local Earth and properly sewed.
- (v) Above water level the cubical content shall be measured by the tape & the cubical content (cum) divided by 0.0283 to arrive the no of E.C. bags filled with R.B.M. /Local Earth.

#### **8.06 Rate**

- (i) The rates shall include all cost of material, taxes, Vat Taxes, royalties, carriage, loading, unloading and stacking at sites including all T&P for proper execution of work.
- (ii) The site of supply may vary within 0.80 Km. nothing shall be paid extra to the contractor for the variation shall be made in presence of the contractor or his authorized representative for acceptance of quantity. He will measurement in measurement book in token of acceptance of measurement.

### **9.0 SUPPLY OF BOULDER:**

#### **9.01 GENERAL:**

Boulder nor quarried stone shall be sound, durable, hard, compact in texture, free from admixture, cracks and free from weathering effects. The quality of boulder shall be subject to the approval of Engineer-in-charge. Any rejected material shall have to be removed by the contractor at his own cost immediately after rejection otherwise it shall be not removed by the Engineer-in-charge at contractor's cost.

#### **9.02 BOULDER 20 to 40 Kg.**

At least 90% (Ninety Percent) of boulder or quarried stone shall weight more than 20 Kg. except those used for filling in the interstices for the purpose of packing. To ensure this random samples from the laid boulder (excluding those filled in the interstices) shall be taken and if the percentage of boulders weighing less than 20 Kg. is found more than 10% (ten percent) by volume, the unit rate of this item shall be suitably reduced by the Engineer-in-charge. The decision of Engineer-in-charge. The decision of Engineer-in-charge shall be final and binding on the contractor.

The boulder not estimating to the specifications may be rejected. The rejected material shall have to be removed from site of work within 3 days of the receipt of written order of Engineer-in-charge, failing which the Engineer Incharge shall dispose off rejected material in any manner. The deems fit and the cost of such removal shall be debited to the contractor. No extra payment shall be admissible for such rejected material.

#### **9.03 STACKS OF BOULDER:**

Stone shall be attacked as solidly and compactly as practicable by filling in small size stone in the interstices of the large. Stone in the interstices of the large. Stone upto the limit specified above and in the form of regular stacks of convenient size of approximately 1.0 M height or as directed by Engineer-in-charge. These stacks deducting 10% (Ten percent) voids. The stacking shall be done near site of work. The contractor shall be required to level the ground to the satisfaction of the Engineer-in-charge before stacking the boulder.

#### **9.04 MEASUREMENTS:**

The measurements shall be made in the presence of the contractor or his authorised representative for acceptance of the quantity supplied. He will sign the measurement in measurement book in token of acceptance of measurement. Minimum 10% deduction for voids shall be made from the measurement of the stack. The contractor shall be responsible for watch and ward of the material supplied by him upto the time of final measurement even though the running payment might have been made before. Any loss through pilferage or otherwise before final measurements and acceptance of material shall be borne by the contractor.

If the stacks are not properly and compactly laid, they shall not be measured until restacked by the contractor as per the directions of the Engineer-in-charge at contractor's cost. If the stacks are not properly laid sample restacking shall be done by the Engineer-in-charge at the cost of the contractor.

**9.05 TENDER RATES:**

The rates shall include all cost of material, taxes, royalties, carriage, weighing, loading, unloading and stacking at site including all T & P for proper execution of works with Sales Tax and Toll Tax etc. The site of the supply may vary within 2 Kms. Nothing extra shall be paid to the contractor for this variation. The work may be examined by the T.A.C. of Uttar Pradesh Irrigation Department or his representatives or by any other competent authority. If in the opinion of the said examiner, the work executed by the contractor is found defective and consequently the penalties are imposed, the penalties so imposed shall be recovered by from the contractor. The decision of the said examiner shall be final and binding on the contractor and no claim on this account shall be entertained.

**10.00 STONE BOULDER PITCHING:**

**10.01 MATERIAL:**

- 10.02** Boulder for pitching shall be sound, tough, durable, resistant, hard, compact in texture, free from cracks and weathering or water effects. The quality of the boulder shall be subject to the approval of Engineer-in-charge. Any rejected material shall have to be removed by the contractor from the work site at his own cost immediately after rejection. Boulders shall not be less than 250 mm in size in atleast one direction out of the remaining two one should not be less than 225 mm and other should not be less than 150 mm. Variation in these dimensions upto 10% can be tolerated but no boulder weighting less than 20 Kg. shall be allowed to be used.
- 10.03** Cost of boulder means the cost of collections of boulder at quarry site, Royalty charges, carriage charges from quarry to work site, loading, unloading & stacking, Bridge toll tax and all other taxes including sales tax etc.
- 10.04** Contractor shall be solely responsible for arranging the material and should satisfy himself with the quality and availability of required quantity of material at the quarry.
- 10.05** The side of the earthen embankment shall be protected by boulder pitching as shown in drawing or as directed by the Engineer-in-charge.
- 10.06** For providing compact pitching with minimum voids, 10 percent under size boulders can be permitted for use in packing the interstices. If percentage of undersize stone is found excessive, the rate shall be suitably deducted or the work may be rejected as considered necessary by the Engineer-in-charge.
- 10.07** The boulder shall be packed as solidly and compactly as practicable and to the satisfaction of the Engineer-in-charge. Defective work, if any, shall have to be corrected by the contractor at his own risk and cost. The top of pitching shall be finished plane and shall present a neat appearance.
- 10.08** The quantity of boulder pitching payable to the contractor shall be computed by actual measurement in cubic meter, as laid at site, with 5.5% deduction for voids. The tendered rates shall include cost of all materials labour and T & P and all other taxes including sales tax etc. for lying and placing in position as per satisfaction and direction of Engineer-in-charge.

**11.00 Laying G.I. WIRE CRATE:**

- 11.01** The size of G.I. wire crate shall be 3.00M x 1.50M x1.00M or as specified in schedule A having 150Mx150M wide rectunglar mesh.
- 11.02** G.I. wire used for making crate shall be of 8 S.W.G. and superior quality.

- 11.03** Wire crate shall be weaved properly and all joints shall be tied with double knots. All care shall be taken to ensure that the knots are tight and secure.
- 11.04** The boulder should be packed properly having minimum voids.
- 11.05** The crate shall be packed on properly prepared required base as per drawing and instructions of Engineer-in-charge.
- 11.06** After packing of crate, the top side of wires crate shall be closed by wire of same crate already left in weaving. All care shall be taken to tie the knot firmly so that the wire crate intact at place of constructions.
- 11.07** The work shall include, the cost of crate, placing in position over properly prepared surface and packing boulder in them, trying properly including cost of all materials, labour, T & P to complete the work. The measurement shall be perprate at work site and rate should be quoted per crate.
- 11.08** For measuring the variations due to mesh size & size of plate the weight of the crate shall be done, choosing the specimen atrandomly. The standard weight of the crate shall be taken as 1.95 Kg. sq. metr.

## **12.0 FORM WORK AND SCAFFOLDING**

- 12.01** Forms for placing concrete whether plain or reinforced shall be provided by the contractor and shall be of hard wooden planking 3 cm thick or of steel plates not less than 3mm thick stiffened by angle iron or other approved material. The shuttering shall be supported on battens, beams, props and wedges and properly cross-braced together so as to make the from work sufficiently rigid, strong and stable to support the wet concrete and workers and vibrations and should not yield on working and laying concrete. Beams for centering shall be carried and supported on the walls with double wedges underneath and supported at intervals with props. Props shall consist of ballies or brick pillars in mud mortar. Ballies props shall rest on double wedges placed over wooden sole planks of 4cm thickness so as to facilitate tightening and casing of the centering and shuttering. In case of brick pillars the wooden sole plank shall be provided at the top of pillars and double wedges inserted in between the sole plank and beam of the centering and shuttering. The type, shape, size, quality and strength of all materials, of which the forms are made shall be different depending upon the requirement of different items of work and shall be subjected to the approval of the Engineer-in-charge

For items of concrete such as concrete foundations, floors, blocks and protection works etc. wooden shuttering may be used for items of concrete such as piers, abutments, transitions, trough, pier cap, beams and slabs of bridges and wing walls etc. steel shuttering fabricated from new steel plates of minimum 3 mm thickness or as approved by the Engineer-in-charge shall be used. However, new steel shuttering fabricated for the work at site may be allowed to be repeated during execution of work after necessary repairs and maintenance. The shuttering fabricated for this work shall be marked with special marking.

- 12.02** Forms shall be used wherever necessary to confine the concrete and shape it, to the required lines or to ensure against contamination of the concrete by material caving or sloughing in from adjacent surfaces left by excavation. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall be maintained rigidly in correct position. Forms shall be substantial and unyielding so that the concrete placed in them conforms to the design, dimensions and contours. Form shall be sufficiently tight to prevent loss of mortar from the concrete. Additional form ties shall be used as and when necessary.
- 13.03** After the forms are erected and before any concrete is placed, the forms shall be inspected for line, level, and grade with respect to the structures, adequacy of bracing, freedom from dirt, fixtures, keyways, openings etc. No concrete shall be placed against the forms unless the forms have been checked and placement of concrete permitted by

the Engineer-in-charge Such inspection and approval shall however not absolve the contractor of his responsibility for the sufficiency and stability of the forms.

- 12.04 Wood sheathing or lining shall be of such kind and quality or shall be so treated with the approval of Engineer-in-charge that there will be no chemical deterioration or discoloration of the formed concrete surfaces. The type and condition of form sheathing and lining, the ability of the forms to withstand distortion caused by the placement and vibration of the concrete and the workmanship used in form construction, shall be such that the formed surface after being finished will conform to the applicable requirements of these specifications pertaining to finished or formed surface. Shuttering for piers, abutments and all other surfaces exposed to view may be of plywood and of quality and strength as specified by the Engineer-in-charge Plywood shuttering used in a working season shall not be allowed to be used in the subsequent working season. New plywood shuttering shall be used in each working season.
- 12.05 Shuttering shall be kept clear of wall bearing and made to rest on cross beams or battens.
- 12.06 Embedded metal rods uses for holding forms shall remain in position and shall terminate not less than 38 mm in the concrete clear of the formed surfaces where the maximum size of aggregate in the concrete is 38 mm or less an not less than 50 mm in the concrete clear of the formed surfaces of the concrete where the maximum size of aggregate is 75 mm or more. Embedded fasteners on the ends of rods shall be such that their removal will leave holes of regular shape. Embedded bolt ties for holding forms will not be permitted in concrete wall to be subjected to water pressure or where the concrete surfaces through which tie would extend, will be permanently exposed. Bolt ties shall be cut off flush with the surfaces of the concrete after the forms are removed.
- 12.07 At the time when concrete is placed in the forms the surface of the forms shall be free from encrustations of mortar, grout or other foreign materials that would contaminate the concrete or interface with the fulfillment of the specification requirement relative to the finish of formed surfaces. Before concrete is placed, the surface of the forms shall be oiled with a commercial form oil or treated with other form coating material that will effectively prevent sticking and will not soften or stain the concrete to become chalky or dust producing. For wood forms, form oil shall consist of straight refined, pale paraffin based mineral oil or other coating material, to the satisfaction of the Engineer-in-charge For steel forms, form oil shall consist of refined mineral oil suitably compound with one or more ingredients which are appropriate for the purpose or other suitable form coating material.
- 12.08 To facilitate satisfactory progress with the specified curing and enable earliest practicable repair of surface imperfections, forms shall be removed as soon as concrete has hardened sufficiently to prevent damage by careful form removal as per approval of Engineer-in-charge Forms on upper sloping faces of concrete such as forms on the water sides of warped transitions, shall be removed as soon as concrete has attained sufficient stiffness to prevent sagging. Any repairs needed for treatment required on such sloping surfaces shall be performed at once and be followed immediately by specified curing. Centering and shuttering shall not be removed before 14 days in R.C.C. beams and 10 days for slabs. In general for loaded concrete work, the supporting timbering shall not be removed for 28 days after laying but when the concrete member does not receive its full stress, supporting timbering may be removed after the 14<sup>th</sup> day only after the approval of the Engineer-in-charge.
- 12.09 Suitable scaffolding for centering and shuttering shall be provided by the contractor whenever necessary and modify or strengthen the scaffolding if required by the Engineer-in-charge but the contractor shall always remain responsible for the safety of workman and works as well as for the payment of compensation for any damage or

injury which may be caused by the failure of scaffolding. Nothing shall be paid on this account by the Government.

- 12.10 Centering shall be removed slowly and carefully without any shock, not earlier than 10 days. After removal of the centering if the work is found defective and rods are exposed and visible to sufficient extent, the work shall be dismantled and reconstructed at contractor's cost. If rods are exposed at few places only, they should be covered with rich cement mortar of 1 : 2 proportion by pressing the mortar into the gaps immediately after removal of the centering while the laid work is green.

12.11 **Measurements and Payments:**

The cost of all labour, T and P, materials for forms for any necessary treatment or coating of forms and removal of forms shall be included in the unit rate tendered in the schedule of quantities and bids for the items for which centering and shuttering is required. The net area of the form work shall be measured in square-metres and paid as per item of bill of quantities.

**13.0 CEMENT CONCRETE WORK**

- 13.01 The work covered by this contract consists of furnishing with cost of all labour, materials and equipments in accordance with the provisions of the conditions of the contract and as per latest I.S. code and performing all works for the manufacturing, transporting, placing, furnishing and curing of concrete of the structures included in this contract. The cost of supplying coarse and fine aggregates including all taxes, octroi charges and royalty shall be included in the unit rates tendered in the schedule of bids for the item or work in which aggregates are used. Unit rate shall include all expenses in screening, washing classifying, blending, storing, handling, hauling and other necessary operation on the aggregates. The contractor shall not be entitled for any compensation on account of the rejection of materials not being of proper specification.

13.02 **Composition:**

Concrete shall be composed of Portland / pozzalona cement, water, fine and coarse aggregates and any admixtures if considered necessary. The design of each concrete mix will be based on the water cement ratio necessary to secure a plastic, workable mix suitable for the specific condition of placement and when properly cured shall give a product having durability and strength in accordance with the requirement of the structures covered by these specifications. Cement in bags will be supplied by the Government as per schedule 'B'. Cement consumption in different grade of concrete is given in schedule-C annexed with this tender. Fine and coarse aggregates and water have to be arranged and supplied by the contractor. The proportioning of cement and aggregates in any particular type of concrete will be by weight. The contractor shall provide all necessary equipment and plant to determine and control the actual amounts of material entering each batch. The proportions will be changed, whenever in the option of Engineer-in-charge such change are necessary in order to maintain the standard of quality required by specifications. The water cement ratio will be fixed by the Engineer-in-charge. The mix design and water cement ratio will be communicated by the Engineer-in-charge to the contractor before the work is taken up and also whenever a change is desired. Required numbers of weigh batchers shall have to be arranged by the contractor at his own cost. The equipment shall be capable to determine accurately and to control the prescribed amounts of the various materials, including water, cement admixture, pozzolona, sand and each individual size of coarse aggregate entering the concrete and combining them to give a uniform mix within the prescribed time and discharging this mix without segregation. The equipment and its operation shall all times be subjects to approval.



Any waste resulting from faulty operation of batching equipment, over batching of material or other causes will be borne by the contractor. All records and charts of the batching operations shall be prepared as required herein and shall become the property of the Government. However in special circumstances, volumetric batching may be allowed by the Engineer-in-charge Hand mixing may be allowed for very small quantity of concrete as per direction of Engineer-in-charge.

13.03 **Quality:**

Sampling for aggregate and cement concrete shall be carried out in accordance with the relevant specification of B.I.S. Samples for testing concrete as mixed will be taken by Government for all classes of mix when being delivered from the mixer of placed in the forms and tested in accordance with the relevant specifications of B.I.S. The contractor shall not be entitled to any payment for samples of materials taken by Government agency for tests. The contractor shall provide such facilities as the Government may consider necessary for the ready procurement of representative test samples. The mixture if found defective on test shall not be used in any case and such defective work produced by the defective mixture will be removed by the contractor at his own cost for which no payment shall be made.

13.04 **Admixtures:**

- (a) The admixtures, if required will be furnished to the contractor free of cost at Government stores. The contractor shall make necessary arrangements for adding and mixing of the admixtures as per instructions of the Engineer-in-charge
- (b) Pozzolona shall be added to the mix as and when directed. The contractor shall make necessary arrangement for adding and mixing of pozzolona as directed. The pozzolona will be supplied at the Government stores.

13.05 **Fine Aggregate:**

- (a) **General :** The term fine aggregate or 'sand' is used to designate the aggregates in which the maximum size of particles is 4.75 millimeters. The contractor shall be responsible for the investigation and procurement of sand of the quality specified herein. Depending upon availability and suitability, it may be necessary to supplement the river sand with manufactured sand from quarried rock. Manufactured sand may have to be used entirely, or blended with river sand to obtain a satisfactory grading of the fine aggregate.

In the case of river sand, the source from which it is obtained shall be subject to the approval of the Engineer-in-charge The fine aggregate, whether it is a river sand, crushed sand or a mixture of both in proportions as required by the Engineer-in-charge, shall comprise of all aggregate particles having a maximum size upto 4.75 mm. The manufactured sand, if used, shall be crushed out of approved stone and the contractor shall take suitable measures to reduce the blowing of dust at each point of handling of this sand.

All fine aggregate obtained from the river bed shall be washed to remove impurities, silt and clay. Aggregate manufactured from natural rocks shall be free from dust by either washing of or any other approved process to the satisfaction of the Engineer-in-charge The fine aggregate shall be clean, free from excess mica, silt particle, organic and chemical impurities.

The sand shall consist of hard, dense, durable, uncoated rock fragments. The maximum percentage of deleterious substance in the sand as delivered to the concrete mixer shall not exceed 5% as specified in I.S. code 383-1970 or as modified in subsequent amendments of the code. Sand may be rejected if it does not conform to the requirements as specified in I.S.: 383-1970 and its subsequent amendments.

- (b) **Grading :** The fine aggregate as delivered to the concrete mixers or as incorporated in the concrete mix shall be well graded within such limits as may be specified by the Engineer-in-charge. During normal operations, the grading of the fine aggregates shall be controlled so that the fineness modulus of sand as delivered to the mixer shall not be less than 2.0. In exceptional cases, the fine aggregate of fineness modulus less than 2.0 may be permitted by the Engineer-in-charge provided that extra cement consumption on this account shall be at contractor's cost. The recovery of cost of cement for such extra consumption will be made at the issue rates as given in schedule 'B'. Any classifying, batching or other operations on the fine aggregates required to meet the gradation shall be done by the contractor and the cost thereof shall be included in the unit prices for the items of work in which the fine aggregate is used.

13.06 **Water:**

Water used for mixing and curing shall conform to latest I.S. code. It shall be clean and free from injurious amounts of oils, acids, alkalis, salts, sugar, organic materials or other substances that may be deleterious to concrete or steel. Potable water is generally considered satisfactory for mixing concrete.

The contractor shall make his own arrangements for pumping of water required for washing aggregate, mixing in concrete and curing etc. including their maintenance and operation at his own cost. Contractor will construct storage tanks at his own cost for construction work.

13.07 **Coarse Aggregate:**

- (a) **General :** The coarse aggregate shall consist of natural or crushed aggregate as determined by Mix design or as directed by engineer-in-charge. The coarse aggregate should be sound and free from flaws, injurious veins, crystals, weathered particles, organic matter and sand, clay, trash etc. and shall be washed before used. Coarse aggregate shall consist of uncoated, hard strong, dense and durable pieces. The percentage of deleterious substances in any size of coarse aggregate as delivered to the mixer shall not exceed 5 percent by weight. The contractor shall have to get the quarry / crushing plant approved by Engineer-in-charge at his own cost.
- (b) **Grading :** The coarse aggregate as delivered to the mixer shall be well graded and within limits as may be specified by the Engineer-in-charge. The aggregate shall be classified into three grades, passing through square mesh screens of the corresponding size so as to produce the following aggregate sizes :

Nominal size	Range	I.S. sieve designation	Percentage passing
Large	80 mm – 40 mm	80 mm	90 – 100
		40 mm	0 – 15
Medium	40 mm – 20 mm	40 mm	90 – 100
		20 mm	0 – 10
Small	20 mm – 4.75 mm	20 mm	90 – 100
		480 micron	0 – 10
		240 micron	0 – 2

Maximum size of aggregate for concrete for some of the important locations / structures will be as given below except for such portions of work where use of smaller or larger maximum size of aggregate is specifically directed by the Engineer-in-charge

- i. Plain concrete underneath the barrel 80 mm
- ii. Reinforced concrete in pier and abutment 80 mm
- iii. Foundation concrete and C.C. in block

	and Toewalls.	80 mm
iv.	Reinforced concrete in barrels, trough, beams, columns, road slabs.	20 mm
v.	Porous Concrete.	10 mm

- (c) **Sampling and Testing :** The sampling and testing such as abrasion test, soundness test and specific gravity test etc. shall be done in accordance with the applicable provisions of I.S.: 383-1970 and any subsequent amendment thereof. The contractor shall provide such facilities as may be considered necessary for the ready procurement of representative test samples from aggregate processing / screening plant, storage piles and batching plant, mixing plant or mixers.
- (d) **Storing and Handling :** The contractor shall keep all time a live storage of coarse aggregate at site so as to last for the works without replenishment for at least one fortnight. The aggregate of the different grades shall be stored in separate stock piles which shall be so located as to prevent mixing of the material of the different pile and also to prevent undesirable material from mixing up with the aggregate in the piles. In case of mixing up, the contractor shall separate the different grades and remove the undesirable material by screening and / or washing. The aggregate shall be so deposited into or removed from stock piles as not to cause any change in uniformity of grading.

#### 13.08 **Concrete Mix Design:**

The employer will arrange the mix design of all proposed grades of concrete. For this the contractor will send all the ingredients of concrete to lab for the mix design as directed by Engineer-in-charge. In case the cement consumption in the proposed mix design is different than quantity of cement proposed in the consumption statement schedule 'C', the quantity may be deducted / added in cement consumption statement

#### 13.09 **Proportioning of Concrete:**

- (a) i. The proportion of all materials, entering in to the concrete shall be as directed by the Engineer-in-charge. The contractor shall provide all necessary equipment and plant to determine and control the actual amount of material entering each batch. The proportions will be changed whenever in the opinion of the Engineer-in-charge, it is necessary in order to maintain the standard of quality required by the specifications.
- ii. Quantity of water to be used for each type of concrete, will be determined by the Engineer-in-charge. Only the quantity of water so fixed will be used for preparing the concrete. The water measuring device to be used by the contractor will be such that it discharges the measured quantity of water in to the mixer quickly without any spillage, and that no leakage occurs from it when it is closed. Adjustment in the mixing water for moisture content in aggregate shall also be made from to time as per direction of the Engineer-in-charge
- iii. Laboratory tests to determine the strength of concrete produced be performed by the Government at frequent intervals. Should these tests indicate the necessity of adding more cement than specified by the Engineer-in-charge, depending upon the size, type and gradation of aggregated and pozzolona used and as per structural requirements as determined by the Engineer-in-charge, he will intimate in writing to the contractor the extra quantity of cement to be added in addition to the proportions fixed and the later will carry out the instructions. The contractor shall be paid extra cost for the use of this additional cement at the issue rate of cement as per schedule 'B'.
- iv. Similarly, if on the basis of laboratory test the contractor is required to use less cement than specified in the proportions, a corresponding reduction in the item rate for the less consumption of cement will be made at the issue rate as per schedule 'B'.

- v. Concrete mixes will be designed to use the largest size and the maximum amount of coarse aggregate placeable in the various parts of the structures. Any variation in the quantities of coarse and fine aggregate or other ingredients due to change in the quantity of cement per cubic meter of concrete or on any other account shall be deemed to be included in the unit rates of respective items of concrete as given in the schedule of bids.

(b) **Batching:**

The coarse and fine aggregates, water and cement entering into the concrete mixer shall be batched and measured by weight for the prescribed mix design. Air entraining admixture of 'Popzzolona' shall be batched or added separately to the mixers as specified and as directed by the Engineer-in-charge.

(c) **Placeability (Workability):**

The concrete mixes which have been designed and tested will be adjusted in the field from time to time to meet the various conditions encountered during the construction as directed by the Engineer-in-charge, unless otherwise provided, the concrete shall be so controlled that the slump at all time is kept between 25 mm to 75 mm when tested in accordance with I.S.: 1199-1959 or its subsequent amendments.

(d) **Batching and Mixing Concrete by Weight:**

- i. Batching of ingredients of concrete shall be done by weight for the prescribed mix design. For weigh batching, the plant should be able to handle all the grades of coarse aggregate, fine aggregate, water and cement, admixtures and pozzolona. Admixtures and pozzolona can be batched by weight separately and added directly to the concrete mixer. The weigh batcher should be capable of weighing, controlling and determining accurately the prescribed amount of various materials for each batch. Facility should be available to obtain sample of each ingredient entering the mixers. Facility shall also be available for periodical checking of correctness of weigh batcher by the Engineer-in-charge. The contractor shall maintain a record of the number of batches mixed and all other details required for checking the correctness of the mix as per directions of the Engineer-in-charge.
- ii. Suitable mixer so as to mix uniformly the various in-gradients and discharging the mix without segregation should be used. Hand mixing may be allowed only for very small quantity of concrete to be placed at a time. Preferably tilting type of mixer should be used. For non-tilting type mixers, suitable device shall be used and care shall be taken to avoid segregation of large size aggregates.
- iii. The water measuring device shall be such that no leakage may occur when the valves are closed and water is discharged quickly into the mixer without any spillage.
- iv. The time for obtaining uniform mix for particular type of job shall be initially prescribed by the Engineer-in-charge and the same time shall thereafter be adhered to for mixing all subsequent batches of that type of concrete unless revised by the Engineer-in-charge. The adequacy of mixing shall be determined in accordance with I.S.: 1199-1959 and its subsequent amendments / revisions.
- v. The Engineer-in-charge may relax any of the conditions mentioned here in above if he is satisfied with the results.

(e) **Conveying:**

Concrete shall be conveyed from the mixer to forms as rapidly as practicable by methods which shall prevent segregation or loss of ingredients. There shall be no vertical drop greater than 1.5 meters except where suitable device is provided to prevent segregation and where specifically allowed by the Engineer-in-charge. Belt conveyers,

chutes of other similar equipment in which the concrete is delivered to the structure in a continuously exposed flow, will not be permitted except for very limited or isolated sections of the work and only if approved by the Engineer-in-charge. Such equipment shall be suitably modified by the contractor at his own cost to prevent segregation to suit the working condition of any specific part of the work of concrete.

13.10 **Placing of Concrete:**

- (a) Concrete shall be placed rapidly into the corners and angles of the forms and around all reinforcement and embedded items without permitting the material to segregate. Concrete shall be deposited as close as possible to its final position in the forms so that movement of concrete within the forms and consequent segregation are reduced to a minimum. The placing of concrete shall be controlled so that the concrete may be effectively compacted into horizontal layers not exceeding 300 mm in thickness with a minimum of lateral movement and accompanying tendency for segregation. Free water collected in depressions in the forms shall be removed by bailing prior to placing of fresh concrete. The method shall be subject to the approval of the Engineer-in-charge. Where the concrete is to be laid in layers, the contractor shall make suitable arrangements to scrub the surface of the previous pour. This scrubbing shall be required to be done soon after the placement of concrete. Fresh layers of concrete shall not be allowed to be laid unless cleaning of the surface of the previous pour has been done as explained earlier. To lay further concrete on old concrete laid during previous working season, the old surface of concrete shall be leaned and raked by chipping and / or sand blasting as directed by the Engineer-in-charge, so as to make it suitable for receiving fresh layer of concrete. No extra charges shall be payable to the contractor for this work.

(b) **Time Interval Between Mixing and Placing:**

Concrete shall be placed before initial set has occurred and unless otherwise authorized by the Engineer-in-charge within thirty minutes of release from mixers.

(c) **Concrete on Earth Foundations:**

Unless otherwise authorized, all concrete shall be placed upon clean, damp surface free from standing / running water and never upon soft mud, dried porous earth or upon fills that have not been compacted up to required density or to the satisfaction of the Engineer-in-charge.

(d) **Lift in Concrete:**

The permissible depth of concrete placed in one lift or course will be determined by the Engineer-in-charge for each structure. Dowels of T.S. bars if required by the Engineer-in-charge in each lift shall be provided by the contractor. These dowels shall be measured and paid under item of reinforcement. All concrete shall be deposited in approximately horizontal layers not exceeding 0.5 meter in thickness unless otherwise specifically authorized or directed by the engineer-in-charge. The placement shall be carried out at such rate all concrete surface shall not have reached their initial set before additional concrete is placed thereon.

Slab shall generally be placed in one course unless the depth is so great that this procedure will produce objectionable results.

(e) **Vibration of Concrete:**

Concrete shall be placed with the aid of mechanical vibrating equipment supplemented by hand spreading and tamping. Vibrator could be petrol / diesel / electric or pneumatic driven. In no case shall vibrators be used to transport concrete inside the forms. The vibrating equipments shall be of the internal type and shall at all times be adequate in number of units and in power of each unit to properly consolidate the

concrete. Additional stand by vibrators be kept to replace those which get damaged or go out of commissioning during operation so that concreting in progress does not suffer. Form vibrators shall not be used unless specifically approved by the Engineer-in-charge. Internal vibrators shall maintain vibration of not less than 7000 impulses per minute, when in operation while submerged in the concrete. The amplitude of vibration shall be sufficient to produce satisfactory compacting. The duration of vibration shall be limited and necessary to produce adequate compaction without causing objectionable segregation. While compacting each layer of concrete, the vibrating head shall touch the concrete in the upper portion of the under laying layer in the same lift. Subsequent layers of concrete shall not be placed until the layers previously placed have been compacted thoroughly as specified. The disturbance to the reinforcement embedded in concrete shall be avoided.

(f) **Finishing of Concrete Lift Surface:**

The top surface or each lift shall be finished by adequate vibration to produce not only the degree of consolidation desired in the surface layer of concrete but also a surface with the desired degree of roughness for bond with the next lift. Surface vibration or surface working including screening of any kind will not be permitted. In placing concrete, coarse aggregate protruding from the surface of the lift shall be pressed down into the mass during the initial compacting or vibrating operations. All top surface not covered by additional concrete or back fill shall be carried out slightly with higher grade as directed by the Engineer-in-charge and struck off by board finish.

After the top surface of the lift is finally compacted, it shall immediately and carefully be protected from pedestrian traffic, running water, heavy rain or any activity upon the surface which may in any manner affect the setting of the concrete.

**Placing Concrete Through Reinforcement:**

In dropping concrete through reinforcement care shall be taken that no segregation of the coarse aggregate occurs.

13.11 **Construction Joints:**

Concrete surface, upon or against which concrete is to be placed and to which new concrete is to adhere, that has become so rigid that the new concrete can not be incorporated integrally with it, shall be defined as a construction joint. All such concrete surface shall be given the treatment detailed below before the subsequent pour of concrete.

- i. All horizontal construction horizontal joints in the work shall be sloped enough to provide free drainage to clean up water. All horizontal joints in exposed faces shall be sharp, level and in straight line. Each joint shall be prepared to receive the succeeding lift by removing all loose or defective concrete coatings, removed by means of air water jet before the concrete has taken its final set. If the surface of a lift is congested with reinforcing steel, is relatively inaccessible or if for any other reason it is considered undesirable to disturb the surface of the lift before final set has taken place, surface cutting by means of air water jet will not be permitted. In such a case use of wet sand blasting will be required after final set. Where it is not practicable to clean the joints after forms are fixed, the joints shall be cleared by air water jet or wet sand blasting and washed at the last opportunity prior to fixing of the forms. The surface of such lift shall again be washed with air water jet just prior to the placing of the successive lift of concrete in order to remove all foreign or loose material which may have accumulated since the first clean up. The surface of the lift when ready will be covered with an initial layer of mortar of 10 mm thickness of the same cement sand proportion as in the concrete, the surface of concrete before placing the mortar shall be thoroughly wet, and free from any standing or excess water. The cement so used be regarded as bonafide

consumption. The cost of mortar shall be treated to be included in the bid prices of cement concrete.

- ii. The methods used in disposing off waste water employed in cutting, washing and rising of concrete surface shall be such that the waste water shall not stain, discolour or affect permanently exposed surface of the structure. The method of disposal of this water shall be subject to the approval of the Engineer-in-charge
- iii. Concrete shall be carefully placed against the faces of the vertical construction joint as not to disturb the water seal etc. whenever the placing of concrete is interrupted long enough so that the concrete has taken its final set the working face joints shall be cleaned and shall receive a coat of 10 mm cement mortar of the same cement sand proportion as in concrete before placing fresh concrete. Suitable shear keys shall be provided in construction joints as per direction of the Engineer-in-charge

13.12 **Replacement of Rejected Concrete:**

Concrete which is not placed and compacted in accordance with these specifications and is, in the opinion of the Engineer-in-charge, of inferior quality shall be removed and replaced by the contractor. The entire cost of removing and replacing such rejected concrete shall be borne by the contractor including cost of all materials required in the replacement.

13.13 **Curing and Protection:**

Concrete shall be suitably protected from injury until final acceptance, giving particular care to all permanently exposed corners and edges. All horizontal surfaces shall be continuously kept wet till the time of next pouring. The surface of all construction joints and all other exposed concrete surface shall ordinarily be kept moist continuously for at least three weeks after placing. The method may be of any approved device. All water used in curing, shall be free from excessive amount of silt, colouring matter and other impurities which may stain the finished work. No fire or excessive heat shall be permitted near or in direct contact with the concrete at any time.

13.14 **Repair of Concrete:**

Repair of concrete shall be performed by skilled workmen and in the presence of an authorized representative of Engineer-in-charge Immediately after removal of form work, the exposed surface will be inspected by a representative of Engineer-in-charge and no repair work will be started till such inspection has been carried out. The contractor shall correct all imperfections in the concrete surface as necessary to produce surface conforming to the requirement specified. Repairs of imperfection on formed concrete shall be completed as soon as practicable after removal of forms and whenever practicable with 24 (twenty four) hours after removal of form. Fines and incrustations shall be neatly remove from surface. Concrete that is damaged from any cause and concrete that is honeycombed, fractured or otherwise defective and concrete which because of excessive surface depression shall be chipped off, repaired and built up to bring the surface to the prescribed lines, with dry pack mortar or concrete as hereinafter specified. Minor honeycombing or surface bubbles may be closed by a slurry of the same cement sand mix as the concrete. Where bulges and abrupt irregularities protrude outside of formed surfaces, the projections shall be reduced by bush hammering and grinding. Off-sets and other abrupt surface irregularities on surface shall be reduced. Dry pack filling shall be used for holes having at least one surface dimension a little greater than the hole depth, for holes left by the removal of fasteners from the ends of form tie rods and for narrow slots cut for repair of cracks. Dry pack shall not be used for filling behind reinforcement or for filling holes that extend completely through a concrete section. Mortar filling placed under impact by use of mortar gun shall be used for holes too wide for dry pack filling and too shallow for concrete filling and not deeper than the far side of

the reinforcement that is nearest the surface. Concrete filling shall be used for holes which are greater in area than 0.1 Sq.m. and deeper than 10 cms and for holes in reinforced concrete which extend beyond reinforcement. All materials, procedure and operations used in the repair of concrete shall be subject to approval of Engineer-in-charge All filling shall be bonded tightly to the surface of the holes and shall sound and free from shrinkage cracks after the filling have been cured and have dried. All filling in surface prominently exposed to view shall contain sufficient white Portland cement to produce the same colour as that of adjoining concrete. The cost of all materials including cement, labour and equipment used in the repair of concrete which is found to be damaged or defective or not with in the specified limits before final acceptance of the work shall be borne by the contractor.

13.15 **Finishing of Concrete Surface:**

Finishing of concrete surface which are prominently exposed to view shall be performed only by skilled workmen according to the direction of the Engineer-in-charge The finish shall have uniform and even surface and colour. The finished surfaces shall have as uniform as possible without any rendering.

13.16 **Strength of Concrete:**

Some cement concrete cubes or cylinders in the standard mould will be cast as per standard procedure for testing of the strength of the concrete, done for the day. These cubes will be cast for the mix at the time of delivery from mixer and will be cured properly in a tank of adequate capacity without any injury to them. All labour, T&P and tank etc. will be provided by the contractor at his own coat. One third cubes will be tested after 7 days and balance cubes after 28 days. The cubes will be marked properly for identification. The average strength of all concrete shall not be less than 95% (Ninety five percent) of the specified strength. If the average strength of particular mix is less than the specified strength, the concrete of that particular mix may either be rejected and got replaced or may be accepted at the discretion of the Engineer-in-charge but payment shall be made at reduced rates in proportion of actual strength.

13.17 **General Appearance and Tolerances:**

It must be ensured that the construction of structures is exactly according to designs and particular attention is to be paid for their general appearance. Bad form work for concrete structures is mainly responsible for unacceptable appearance of structures. Use of steel form work should be made for important structures and these forms should be properly cleaned and oiled before reuse. Many a time these forms are not held in place rigidly and they get displaced during the process of vibration of concrete. The following maximum tolerances are permissible.

<b>Item</b>	<b>Details of item</b>	<b>Tolerances</b>
Linear Lines	in 6 m length	1.25 cm.
	in 12 m length	1.90 cm.
Plumb Lines	in 3 m height	1.00 cm.
	in 6 m height	1.50 cm.
	in 12 m height	2.50 cm.
Cross section	- 6 mm to + 12 mm	
Inside dimension	0.5%	
Thickness of slabs	- 6 mm or 2.5% + 12 mm or 5.0%	whichever is greater



Reinforcement bars	for 2.5 cm. cover	5 mm
	for 5.0 cm. cover	10 mm
	for 8.0 cm. cover	12.5 mm
	for 10.0 cm. cover	25.0 mm
Displacement or eccentricity + 5 cm or 2% whichever is less		

13.18 **Measurement and payment of Concrete:**

- i. Measurement of concrete for payment will be made only to the lines of the structures as indicated in the drawings as subsequently modified by the Engineer-in-charge. In measuring concrete for payment the volume of all recess, passage, openings, cavities and depressions except reinforcement bars, bolts and draining pipe etc. will be deducted. In the event of foundation having been excavated beyond the required lines as per drawings or as directed by the Engineer-in-charge, the contractor shall fill the same with the similar grade concrete as in the foundation and no extra payment shall be made on this account. Any change in the proportion of the concrete mixes will not entitle the contractor to any adjustment in the rates except the cost of cement. Besides the mode or measurement as described above in this para, the quantities of concrete shall also be measured by recording the number of mixes actually placed and used in the concrete. The lesser of the quantities worked out by above alternatives of mode of measurements shall be paid to the contractor.
- ii. The Government will specify strength of concrete to be laid by contractor. Laboratory test as per standard practice would be carried out with the use of specified aggregate and cement to find out the quantity of cement concrete required to give the desired strength of structure. If the consumption of cement is less or more than to specified in the schedule 'C' consultation enclosed with the tender, the cost of the difference in cement consumption shall be deducted or added accordingly.
- iii. The cost of cement consumed in the slurry or cement mortar in construction joints will be recovered at the rate mentioned in schedule 'B'. The proportion of cement and sand in the slurry or cement mortar will be the same as for corresponding concrete. For purpose of measurements of concrete payable to the contractor, the slurry of cement mortar in construction lift joints shall be treated as part of cement concrete.
- iv. All the relevant records regarding the quality of work shall be maintained by the contractor according to the instruction issued by the engineer-in-charge.
- v. Initially only 90% payment for concrete including payment for cement variation if any, will be made to the contractor. Out of the balance 10% payment 5% will be paid after repairs, finishing and proper curing and balance 5% on final clean up of the concrete surfaces.

**14.0 REINFORCEMENT IN CONCRETE WORK**

- 14.01 The contractor shall furnish, cut, bend and place all steel reinforcement including rods, as indicated in the drawing or otherwise required or as directed by Engineer-in-charge. The steel reinforcement will be provided by the employer at the rate and site mentioned in schedule 'B'. This item will include cost, carriage of all materials, shaping, cutting, bending, binding and placing in position of reinforcement steel with the help of spacer blocks and metal chairs including cost of binding wire etc. The contractor shall tender rate per metric tonne of reinforcement including cost of steel. The work shall be carried out as per the latest I.S. code.

14.02 **Quality of Reinforcement:**

All steel used for reinforcement shall be free from oil, greases, dust, mortar, scales, kinks, rust or bends other than those required as per drawings. Reinforcement

drawings showing bar placement details and bar bending details will be furnished by the Engineer-in-charge All bars shall be bent cold to the shapes and dimensions as per drawings and as directed by the Engineer-in-charge Heating of the bars for bending shall not be allowed. The radius of all bends shall not be less than four times the diameter of the bar or as directed by the engineer-in-charge All steel supports, stays, chairs and spacers required to hold the reinforcement in position will be get embedded in the concrete.

14.03 **Placing of Reinforcement:**

- i. Before placing the reinforcement bars in position all bars shall be thoroughly cleaned by wire brush. All bars shall be of the size and length as depicted in the construction drawings and no substitution shall be made unless approved by the Engineer-in-charge
- ii. All reinforcement shall be placed in position well in advance of concreting to permit inspection, checking and measurements in accordance with detailed drawings and secured in position so that these are not disturbed during placing and vibration of concrete.
- iii. Vertical shear steel stirrups and spacers shall be securely fastened to the longitudinal bars by means of binding wire or tack welding, if approved by the Engineer-in-charge Wherever possible the contractor shall remove the spacer blocks, provided their removal does not disturb the concrete. Exposed reinforcement intended for bending or dowelling between two placement of concrete shall be protected from being disturbed and shall be thoroughly cleaned prior to subsequent concreting.

14.04 **Joint in Reinforcement Bars:**

- i. The position of joint in reinforcement bars shall be subjected to the approval of the Engineer-in-charge These shall be suitably staggered to avoid the concentration of joints at one section. Joints in the center of span shall be avoided as far as possible.
- ii. The reinforcement bars shall be joined by simple over lap or welding. The approximate procedure for which different types of joints may be adopted as enumerated below :

Bars below 20 mm diameter	Overlap joint
Bars 20 mm to 25 diameter	Lap welded joint
Bars above 25 mm diameter	welded spliced joint

The range is subject to modification at the discretion of the Engineer-in-charge

iii. **Overlap Joints :**

The minimum length of overlap joints shall be 45 times the diameter of the bar securely tied down by 16 S.W.G., soft annealed steel binding wire or tack welded.

iv. **Welded Joints :**

Reinforcement bars of the diameter 20 mm to 25 mm shall be provided with lap welded joints. The length and thickness of weld shall be such that the strength of joints shall not be less then that of bar. An overlap of 15 times the diameter of the bar shall be provided for lap welded joints.

Reinforcement bar of diameter more then 25 mm shall be provided with welded spliced joints. The splice joint should be such that the strength of the joint shall not be less that of bar.

- v. The welding shall conform to I.S. Code of practice of welding for general construction in steel or its subsequent amendments. The joints shall be staggered in such a way that there should not be more that 33% splice or laps in one line.

The welders shall have the requisite experience and a test certificate of competent authority. Welding electrodes should be of standard and approved make.

14.05 **Measurement and Payment:**

Steel reinforcement shall be placed according to the construction drawings or as per direction of Engineer-in-charge. Measurement of steel shall be made on the basis of the steel actually placed in position in various structure. Standard hooks and overlaps, bends, laps and angle iron used in splices in welded joints, shall also be measured. The payment for the above shall be made at the unit price per metric tonne tendered in the schedule of quantities and bids. No payment shall be made for additional steel used in making of the stay chairs and spacers etc. This use shall however be considered as bonafide consumption of steel. The additional length of the bars placed by the contractor with the directions of the Engineer-in-charge for the defect in placement may be allowed to remain in the structure but will not be measured for payment, however this shall also be treated as bonafide consumption. No extra payment shall be made for welding in welded lap and splice joints. The expenditure on this account shall be included in tendered rates of reinforcement steel.

14.00 **Balla Stud/Screen**

Balli Shall be free from large & dead knots, cracks & wooden bore infection.

These shall be for as possible straight & of uniform section.

The circumference specified shall be mean circumference.

It has 10 to 15 cm dia & 6.00 M long.

Pilling shall be done vertically, spacing of balli 30 to 40 cm C/C and approximate 3.00 M length of balli shall be piled in bed of river.

Bracing shall be done in two rows horizontally & joined horizontal & vertical post by iron long nail in bracing, lapping of balli shall be not more than 50 Cm.

Balli shall be kept in vertical position by tying with 4.00 mm dia G.I. Wire/Coir Rope with Khoonta nails & balli post.

For measurement of pilling, full length of balli shall be recorded in MB as (A) & after pilling height of balli above bed of river recorded in MB as (B) = Difference between A & B = Pilling of balli.

As per ID specification.

15.00 **Payment:**

The work for final payment shall be measured only when the work is completed as per approved drawings.

Running payments will be made to the contractor for the earth work uniformly excavated at the following rates :-

- |       |   |  |
|-------|---|--|
| (i)   | For quantity executed upto 25% of total quantity of earthwork.      | Upto 40% (forty percent of tendered rate)        |
| (ii)  | For quantity executed upto 50% of total quantity of earthwork rate. | Upto 65% (sixty five percent of tendered rate)   |
| (iii) | For quantity executed upto 90% of total quantity of earthwork.      | Upto 75% (seventy five percent of tendered rate) |
| (iv)  | For quantity executed more than 90% of total quantity of earthwork. | Upto 90% (ninety percent of tendered rate)       |

The 'total quantity of earthwork' means the quantity of earthwork in one km. reach of the canal where the earthwork is in progress. The engineer-in-charge reserves the right to make payment at lesser rates than those described in para 16.13 here-in-above.

In case part portions of the work is done or work is left incomplete or otherwise, suitable deductions shall be made in the rate of this item. The decision of the Executive Engineer shall be final and binding to the contractor in such matters.

**16.0 Filter:**

16.01 The graded filter under the boulder pitching shall be provided in layers as shown in the drawing as directed by the Engineer-in-charge. The gradation of different filter materials, to be used is shown in the drawing.

16.02 Before starting laying of graded filter sub grade shall be leveled and dressed. The filter material shall be cleaned thoroughly if necessary to remove any earth, clay and other organic impurities. The gravel shall be composed of good hard tough, stone of the sizes as indicated in drawing or as directed by the Engineer-in-charge. The sand and shingle shall be well graded & the materials shall be got approved by the Engineer-in-charge.

The filter material shall be laid in layers of thickness as shown in the drawing or as directed by the Engineer-in-charge. Each layer shall be well packed, before subsequent layers are laid and special care shall be taken by the contractor to ensure that there is no mixing of any of the layers of filter materials. Care shall also be taken by the contractor after laying of filter to suitably protect the entry of undesirable material by covering with polythene sheets or gunny bags till concrete.

16.03 **Rate:**

The rates for this item shall be per cubic metre including cost of all material and its carriage to site of work, laying, grading, packing and compacting and with all operations of providing graded filter as per drawing and specification.

## SCHEDULE-B

### SCHEDULE OF MATERIALS TO BE SUPPLIED BY GOVERNMENT

Sl. No.	Item of store	Unit	Rate of issue in Rs.	Place of issue
1	2	3	4	5
1.	Boulder 20-40 Kg. wt.	cum	-	
2.	E.C. Bags	Nos		
3.	G.I.Wire Crate Size (3.0x1.50x1.0M)	Nos		

Note :- All The Material will be Arranged by Firm/Contractor.

1. Other material if available in the store of the employer may be issued at stock issue rate if considered necessary and approved by the Engineer-in-Charge.
2. The Government will issue the material at the place shown in schedule above. In case the material is issued from stores other than specified above, difference in cartage charges involved from the site of issue specified above and site of actual issue to work site be paid or deducted from the contractor's bill according to the prevalent schedule of rates of the circle.
3. Contractor shall make his own arrangement of cartage from store to site of work at his own cost. He shall be responsible for any loss to the cement due to rain or dampness from ground or otherwise including pilferage.
4. The contractor shall nominate his authorized agent for signing receipt for materials issued by the employer and such receipt shall be treated signed by the contractor himself.
5. The contractor shall not be allowed to procure the material listed in the schedule above from any other source unless Engineer-in-Charge permits such procurement on account of non-availability of the materials in the employer stores.
6. E.C. Bags shall be returned in good condition, otherwise recovery shall be made with double rate i.e. @ Rs. 4.00/- per bag.
7. Recovery of cement for excess cement consumption shall be made at double the rate of issue.

## SCHEDULE-C

### SCHEDULE OF CONSUMPTION OF MATERIALS

Sl. No.	Item of work	Unit	Consumption of Material		Remark
			Boulder 20-40Kg.wt.	Earth in E.C. Bags	
1	2	3	4	5	6
1.	Boulder 20-40 Kg. wt. in G.I. Wire Crate size (3.00x1.50x1.0M)	cum	4.50 (With Voids) 4.05 (without Voids)	-	
(a)	E.C. Bags	cum	-	0.035	

**Note :-**

1. Consumption of material is subjected to change on the basis of mix design.
2. Adjustment for variation in consumption of material shall be made on plus or minus side on the basis of rate given in schedule-B.
3. Admixture will be issued to the contractor free of cost as & when required by employer.

**SCHEDULE – ‘D’**

**SCHEDULE OF HIRING OF EQUIPMENT BY CONTRACTOR**

No equipment shall be provided by the Department.

Superintending Engineer

Name of Contractor & Signature

**SCHEDULE – ‘E’**

**PARTICULARS OF THE NEAR RELATIVES OF THE TENDERER EMPLOYED IN THE  
IRRIGATION DEPARTMENT**

Sl. No.	Name of near relatives	Designation	Place of posting	Relationship with the tenderer

Signature of Contractor





**SCHEDULE “G”**

Details of Technical Personnel with Tenderer

Name of Tenderer : .....

S. No.	Designation	Name	Qualification	Professional Experience and details of work carried out	Remarks
1	2	3	4	5	6

Signature of Contractor

## **TENDERER'S WARRANTY**

The Superintending Engineer, Madhya Ganga Canal Construction Circle-1, Meerut.  
Tenderer Warranty for the Lot No.....of Tender Notice No. 01/SE/2016-17 of M.G.C.C.C-1, Meerut.

M/s ..... Thereafter called to as the tenderer) being desirous of tendering of the works for which the above mentioned tenders have been invited and having carefully studied all the contract documents and specifications including conditions of the tender paper and local site conditions, do hereby warrant that :-

1. The tenderer is familiar with and undertake to earnest fulfill the all the requirements of the tender.
2. The tenderer has investigated the site and satisfied himself regarding the character of the work and local conditions that may affect the work and its performance.
3. The tenderer is satisfied that the work can be performed and completed as required in the contract.
4. The tenderer accepts all risks directly connected with the performance of the contract.
5. The tenderer has no collusion with other contractors with the said Superintending Engineer (later on) or any his person in undertaking to execute the works tendered for, in accordance with the terms and conditions laid down in the tender documents.
6. The tenderer is financially solvent.
7. The tenderer is experienced and competent to perform the contract to the satisfaction of the Engineer-Incharge.
8. The statements submitted by the tenderer are true.
9. The tenderer is familiar with all general and special conditions, acts and ordinances, rules and regulation of the Municipal, District, State and Central Government and for forest department of U.P. which may affect the work, its performance of the personnel employed therein. For and on behalf of M/s (Seal of Company)

For and on behalf of  
M/s  
(Seal of Company)

Office of the Superintendent Engineer Madhy Ganga Canal Construction Cricle-1, Meerut.  
Technical Bid Qualification

निविदा सूचना संख्या-01/एस0ई0/2016-17 के विभिन्न लाटो हेतु टैक्नीकल बिड निम्नलिखित प्रारूप पर निविदादाता द्वारा कार्यालय मध्य गंगा नहर निर्माण मण्डल-प्रथम, मेरठ में निर्धारित तिथि 24.10.2016 को 11:00 बजे तक सील लिफाफे में समस्त संलग्नक सहित जमा कराना अनिवार्य होगा।

क्र०सं०	विवरण	अभ्युक्ति
1	ठेकेदार/फर्म का नाम एवं पता मोबाईल नं० सहित	पत्राचार का पूरा पता
2	सिंचाई विभाग में पंजीकरण की श्रेणी	प्रमाण-पत्र की अभिप्रमाणित एवं पठनीय छाया प्रति जमा करनी होगी।
3	चरित्र प्रमाण-पत्र	प्रमाण-पत्र की अभिप्रमाणित एवं पठनीय छाया प्रति जमा करनी होगी।
4	हैसियत प्रमाण-पत्र	प्रमाण-पत्र की अभिप्रमाणित एवं पठनीय छाया प्रति जमा करनी होगी।
5	स्व: घोषण पत्र	प्रमाण-पत्र की अभिप्रमाणित एवं पठनीय छाया प्रति जमा करनी होगी।
6	पैन नम्बर	पैन कार्ड की पठनीय छाया प्रति जमा करनी होगी।
7	श्रम विभाग द्वारा जारी प्रमाण-पत्र।	प्रमाण-पत्र की अभिप्रमाणित एवं पठनीय छाया प्रति जमा करनी होगी।
8	धरोहर धनराशि का विवरण	बैंक का नाम, एफ०डी०आर० की सं० एवं दिनांक तथा धनराशि।
9	फर्म/ठेकेदार का पिछले 03 वर्षों का आयकर प्रमाण-पत्र	प्रमाण-पत्र की अभिप्रमाणित एवं पठनीय छाया प्रति जमा करनी होगी।
10	अनुभव प्रमाण-पत्र	निविदा सूचना सं०-01/एस0ई0/2016-17 के बिन्दु संख्या-25 के अनुसार।
11	टर्नओवर सम्बन्धी प्रमाण-पत्र	निविदा सूचना सं०-01/एस0ई0/2016-17 के बिन्दु संख्या-26 के अनुसार।
12	टी० एण्ड पी० का विवरण	दिये गये शैडियूल पर
13	तकनीकी कर्मचारियों का विवरण	दिये गये शैडियूल पर
14	प्री-क्वालीफिकेशन/टैक्नीकल बिड के साथ स्टाम्प पेपर पर यह शपथ-पत्र ठेकेदार द्वारा दिया जाना अनिवार्य होगा :-	
a)	अपनी खुद की मशीनों या किराये पर मशीनों की व्यवस्था कर निर्धारित समय पर कार्य कराये जाने में सक्षम है।	विवरण दिये गये शैडियूल पर दिया जाना अनिवार्य।
b)	इस कार्यालय/खण्ड में मेरे परिवार/रिश्तेदार कार्यरत है, अथवा नहीं ?यदि है तो उसका नाम व विवरण।	विवरण दिये गये शैडियूल पर दिया जाना अनिवार्य।
c)	उक्त टैक्नीकल बिड में दी गई सूचनायें व संलग्नक सही है। किसी प्रकार की त्रुटि पाये जाने पर अनुबंध गठित होने के पश्चात भी अनुबंध निरस्त हो सकता है, की मुझे जानकारी है।	
d)	अतिरिक्त धरोहर धनराशि के सम्बन्ध में शासनादेश संख्या-622/23-12-2012-2आडिट/08 टी०सी०-2, दिनांक 08.06.2012 का अनुपालन किया जायें।	

Signature of Contractor

I.D Form No. 111

**CONDITIONS OF CONTRACT**

Further deposit

Clause 1– The persons whose tender is accepted (herein after called the contractor) shall within one week after his or their tender has been accepted, deposit with the Government of Uttar Pradesh (here in after called the Government) either in cash or in securities as provided in paragraph 614 of the Financial Hand book, Volume VI such sum as will with the earnest money deposited with the tender amount to Rupees ..... and where any securities so deposited is not payable to bearer, the contractor shall endorse or transfer it to the said Government in such a manner that the sum represented by it can be realised without the consent or assistance of the contractor. Apart from the earnest money deposited with the tender, the contractor shall also deposit balance security amount @ 8% of the cost of work at the time of agreement in cash or in the form of Government Securities or Fixed Deposit receipts or Guarantee Bonds of any Nationalised Bank in India.

Deduction from payment

Security Deposit

If the security is furnished in the form of guarantee bonds the contractor undertakes to renew or to furnish fresh guarantee to cover the period of time extension, if any, and failure on his part to do so shall be construed as a breach of this contract and without prejudice to any other remedy provided in these conditions the Engineer-in-Charge shall have right to withheld the payment and deduct the entire security amount from moneys becoming payable to the contractor. The amount of security money shall, if not withheld on the account of breach of contract be refunded after six months of the date of completion of the work or after payment of the final bill, which ever is later, subject to the condition that in case of the building work of the first rainy season comprising of months of June, July, August & September is not fully covered within the period of six months mentioned above, the amount of security money, if not withheld on account of breach of contract, be refunded after the expiry of the first rainy season comprising of the months mentioned above or after the payment of the final bill which ever is later.

Provided that in case the payment of the final bill is not made within six months of the completion of the work, 75% of the amount of the security money can be refunded with the prior approval of the authority next higher to the person accepting the contract on behalf of the Government.

All compensation or other sums of money payable by the contractor to Government under the terms of this contract may be deducted from or realised by the sale of a 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 to the contractor by the Government on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall within 10 days thereafter make good in cash or 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.

**EXPLANATION**– For the purpose of this clause if the work under this contract includes construction, reconstruction of repair or any structure having roof over it, the whole work will be classed as building work.

Clause 2-A— Time is the essence of the contract. The contractor shall commence and shall complete the work covered by the tender on

the dates fixed by the Executive Engineer for the commencement and completion of such work and shall in the interval between those dates keep the work up so the schedule of quantities and dates shown in the Progress Statement to be signed by the contractor and attached to the tender the contractor and attached to the tender. If the work falls in arrears of the Progress Statement either in quantity or in time, then for every day that the work is so in arrears the contractor shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Engineer (whose decision in writing shall be final) may decide, on the estimated cost of the whole work : Provided always that the entire amount of compensation to be paid under the provisions of this clause shall not exceed ten percent of the estimated cost of the work as shown in the tender.

(Clause 2-B— To be used instead of 2-A when the latter is from the nature of the work impracticable).

Compensation for delay.

Clause 2-B— Time is the essence of the contract. The contractor shall complete the work within the period specified in the tender. Such period shall be reckoned from the date on which the order to commence work is given, to the contractor. The Contractor shall at all times during such period proceed with the work with due diligence and he shall pay as compensation an amount equal to one percent or such smaller amount as the Engineer (whose decision in writing shall be final) may decide on the amount of the estimated cost of the whole work as shown in the tender for every day that the work remains uncommenced, or unfinished after the proper dates. And further, in order to ensure good progress during the execution of the work the contractor shall be bound in all cases in which the time allowed of any work exceeds one month to complete one-fourth of the value or quantity (as the ..... Engineer may determine) of the whole of the work before one-fourth of the whole-time allowed under the contract elapsed; one-half of the value or quantity (as the ..... Engineer may determine) of the work before one-half of such time has elapsed; and three-fourths of the value or quantity (as the ..... Engineer may determine) of this work before three fourths of such time has elapsed. If the contractor fails to comply with this condition he shall be liable to pay as compensation an amount equal to one percent of such smaller amount as the ..... Engineer (whose decision in writing shall be final) may decide on the said estimated cost of the whole work for every day that the quantity of work remains incomplete. Provided always that the entire amount of compensation to be paid under the provision of this clause shall not exceed ten percent on the estimated cost of work as shown in the tender.

Action by which whole of security deposit is forfeited.

Clause 3—(i) In any case in which under any clause or clauses of his contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of the security deposit (whether paid in one sum or deducted by installments) the ..... Engineer shall have power to adopt such of the following courses as he may deem best:

(a) He may rescind the contract by giving the contractor notice of rescission signed by the ..... Engineer and may then take the whole of the contractor's security deposit for the use of Government as compensation for the loss caused by the contractor's default.

(b) He may, after giving the contractor ..... days notice in writing of his intention to do so, measure up the work done by

the contractor and then employ and pay labourers and supply or procure materials and carry out all or any part of the work himself on behalf of Government debiting the contractor with the actual cost and crediting him at the contract rates with the value of the work so done, and may postpone till completion of the work so taken over assessment of the compensation to be paid by the contractor. If any work is so taken over by the ..... Engineer the certificate in writing of the ..... Engineer as to its cost and value shall be final and conclusive against the contractor.

(c) He may, after giving the contractor ..... days notice in writing of his intention to do so, measure up the work done by the contractor, take the work out of his hands and give a contract for its completion to another contractor and may postpone till the completion of the work the assessment of the compensation to be paid by the original contractor. If the ..... Engineer elects to give the completion of the work to another contractor, the original contractor shall pay expenses which may be incurred in excess of the sum which would have been paid to him if the whole work had been carried out by him, and a certificate in writing of the ..... Engineer or of the ..... shall be final & conclusive as against the contractor as to the amount of any such expenses.

(ii) If the ..... Engineer does not desire to do so the work, the contractor shall not be entitled 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; and shall not be entitled to recover or be paid or be given credit for any sum for any work therefore actually performed by him under this contract, unless and until the ..... Engineer or ..... acting under his order shall have certified in writing the performance of such work and the value thereof the contractor shall only be entitled to be paid the value as so certified.

(iii) If upon any occasion the ..... Engineer abstains from exercising the powers given to him by this clause, such abstention shall not prevent him from exercising such powers upon a subsequent occasion if the contractor again makes default; nor shall such abstention absolve the contractor from liability to pay compensation for any default which he may have made.

Contractor remains liable to pay compensation if action not taken under clause 3.

Clause 4— If the ..... Engineer exercise any of the powers given to him by clause 3 he may, if he so desires take possession of all or any tools plant materials and stores in or upon the work or the side thereof and belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof, and pay or allow the contractor for the same at the contract rate, or in the case of these not being applicable, at current market rates to be certified by the ..... Engineer, whose certificate thereof shall be final, and if the ..... Engineer does not desire to do so, the ..... Engineer may, by notice in writing to the contractor or his clerk or the work's foreman or other authorized agent, required him to remove such tools, plant, material or stores from the premises (within a time to be specified in such notice); and if the contractor fails to comply with any such requisition, the ..... Engineer may

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

remove them at the contractor's expense and at his risk in all respects by auction or private sale and the certificate of the ..... Engineer as to expenses of any such removal and the expenses of any such sale shall be final and conclusive against the contractor.

Extension of times

Clause 5— If the contractor desires an extension of the time for completion of the work on the ground of any unavoidable hinderance to its execution having arisen, he shall apply in writing to the ..... Engineer within 30 days the existence of such hinderance first becomes known to him and the ..... Engineer shall if in his opinion (which shall be final) reasonable grounds be shown therefor, authorise such extension of time as may, in his opinion be necessary or proper.

Final certificates

Clause 6— On completion of the work the contractor shall send a registered notice to the ..... (thereinafter called Engineer-in-Charge) giving the date of completion and shall also send a copy of such notice to the ..... Engineer, and shall request the Engineer-in-Charge to give a certificate of completion. No such certificate will be given nor shall the work be considered to be complete until the contractor has removed from the premises on which the work has been executed all scaffolding, surplus materials and rubbish, and cleaned all wood-work, door, windows walls floor or other part of any building in, upon or about which the work has been executed or of which he may have had possession for the purpose of the execution thereof, and, if the contractor fails to do so on or before the date fixed for completion of work Engineer-in-Charge may do so, and may sell such scaffoldings and materials as have not been removed by the contractor and contractor shall forthwith pay all expenses so incurred and shall have no claim in respect of any such scaffolding, surplus materials as aforesaid except for any sum actually realized by the sale thereof. On completion the work shall be measured by the Engineer-in-Charge, whose measurements shall be binding and conclusive against the contractor.

Payment on intermediate certificate to be regarded as advances.

Clause 7— In the case of work estimated to cost more than rupees one thousand, the contractor shall, on submitting the bill thereof be entitled to receive a monthly payment proportionate to the part thereof then approved for such purpose by the Engineer-in-Charge, whose certificate of approval and passing of the sum so payable shall be final and conclusive against the contractor. But any such payments will only be made as advances to be credited to Government in the final settlement of accounts, with the contractor and not as payment for work completed and passed, and the making of any such payment shall not either preclude the ..... Engineer or ..... from requiring the contractor to remove or reconstruct or re-erect any work on the ground that such work is bad, unsound, imperfect or unskilled or prevent Government from enforcing any claim against the contractor on account of any default by him or conclude, determine or affect in any way the default by him or conclude, determine or affect in any way the powers of the Engineer-in-Charge under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contractor. The Engineer-in-Charge's certificate of the measurement and of the total amount payable for the work shall be final and binding on all parties.

Inability to complete the work.

Clause 8— If the contractor abandons, or is unable to complete the work, the ..... Engineer may certify in writing the



value of the work done by the contractor towards the completion of the contract. Such a certificate shall be final and conclusive against the contractor and he will not be paid more than the value of such work as so certified irrespective of the contract rates.

Lump sum in estimates.

Clause 9— When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved, or the part of the work in question at the same rates as are payable under this contract for other such items of work, unless the part of the work in question is not in the opinion of the Engineer-in-Charge, capable of measurements in which case the Engineer-in-Charge, may pay such lump sum as he may determine to be the value thereof, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against contractor as to the basis upon which payment is to be made in such cases and as the amount to be paid.

Bill to be submitted monthly.

Clause 10— Every month on or before a date to be fixed by the Engineer-in-Charge the contractor shall if so required, submit a bill for all works executed by him during the previous month and the Engineer-in-Charge shall take or cause to be taken all measurements necessary for checking the contractor's bill and adjusting his claim as speedily as possible. If the contractor does not submit his bill within the time so fixed, the Engineer-in-Charge may after giving the contractor ..... days notice in writing measure or depute some one to measure such work in the presence of the contractor whose signature on the list of measurements shall be sufficient authority to the Engineer-in-Charge to draw up a bill based on such measurements and any bill drawn up shall be binding on the contractor. If the contractor fails to attend when such measurements are taken, such measurements shall be binding on him, and if he attends but refuses to sign the list of measurements, the matter shall be referred to the immediate superior of the Engineer-in-Charge whose decision shall be binding on the contractor.

Bills to be on printed forms.

Clause 11— The contractor shall submit all bills on the printed form which will be supplied to him at the office of the Engineer-in-Charge and all items in such bills shall be charged at the rates specified in the tender or in the case of any extra work ordered in pursuance of these condition; and not mentioned or provided for in the tender, at the rates here-inafter provided for such work.

Stores supplied by Government.

Clause 12— If the specification or estimate of the work provides for the use of any special description of materials to be supplied from the Engineer-in-Charge's store, or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-Charge (such materials and stores and the prices to be charged thereof as hereinafter mentioned being so far as practicable and for the convenience of the contractor specified in the Schedule hereto annexed but not so as in any way to control the meaning or effect of this contract), the contractor shall be supplied with such materials and stores as may from time to time be required by him for the purposes of the contract but only for such purposes and he shall pay for the same at the rates specified in the said Schedule or if no rates are so specified at cost price as defined in clause 13 thereof.

All materials so supplied to the contractor will become the property of the contractor, but shall not on any account be removed from

the site of the work until the whole work is certified to be completed by the ..... Engineer, except with the written permission of the ..... Engineer, and shall at all times be open to inspection by the Engineer-in-Charge. The ..... Engineer shall, however, have the option to take over any such materials, if unused at the time of the completion or termination of the contract at the specified issue rate or the current market rate, whichever is less.

Clause 13— All articles required by the contractor for the construction of the work and which the contractor is to supply himself, shall be obtained by the contractor from the firms which the Director of Industries has made arrangements and if for the supply of any article no such arrangements have been made, any such articles supplied by the contractor shall conform to such specification and/or tests, if any, as may be prescribed by the Director of Industries in consultation with the consuming department.

Stores imported from Europe to be obtained from Government.

Clause 14— The contractor shall obtain from the stores of the Engineer-in-Charge, all such imported stores or materials as may be required in any considerable quantity for the work or any part thereof or for making up articles required therefore or in connection therewith. The value of such stores and articles as may be supplied to the contractor by the Engineer-in-Charge will be debited to the contractor in his account at the rates shown in the Schedule attached to the contract and if they are not entered in the Schedule they will be debited at the cost price, which for the purpose of this contract shall include the cost of carriage and all other expenses whatever which shall have been incurred in obtaining delivery of the same at the stores aforesaid. The ..... Engineer may issue materials to a contractor from existing stock if he ask for any excess of these entered in the schedules. In such cases the price charges will be stock rate or the market rate which ever is greater.

Work to be executed in accordance with specifications, drawings orders, etc.

Clause 15— The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner and in every respect in strict accordance with the specification both as regards materials and otherwise. The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer-in-Charge and lodged in his office, and the contractor shall be entitled to inspect the same during office hours and may at his own expense have copies of the specifications, and of all such designs, drawings and instructions as aforesaid made for his own use.

Alterations, specification and designs.

Clause 16— The Engineer-in-Charge shall have power to make such alteration or additions to, the original specifications, drawing, design and instructions as 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 which, may be given to him in writing signed by the Engineer-in-Charge, and such alternations shall not invalidate the contract; and any additional work which the contractor may be so directed to do 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 per specified in the tender for the main work. The time for the completion of the work shall be extended in the proportion that the additional work bears to the original contract work, and the certificate of the Engineer-in-Charge

Do not invalidate contract

Extension in time in consequence of alterations.

shall be conclusive as to such proportions. If the additional work includes any item for which no rate is specified hereunder, then the contractor shall carry out the work at the rate entered in the Schedule of Rates of the District but if the Schedule does not contain any rate for such work, then the contractor shall not begin such work until a rate in respect of such work has been settled by mutual agreement between him and the Engineer-in-Charge with the approval of the officer accepting the contract, and if they are unable to agree upon a rate within two weeks from the date when the contractor received the order, the Engineer-in-Charge may by a notice in writing cancel the order for such work and carry it out in such manner as he may think best. In the event of a dispute, the decision of the ..... Engineer shall be final and binding on the contractor.

Rates for additional works not in estimate or schedule of rate of the district.

No Compensation or alteration in or restriction of work to be carried out.

Clause 17— The ..... Engineer acting on the written orders of his immediate superior, may at any time by notice in writing to the contractor either stop the work altogether or reduce or cut it down. If the work is stopped altogether, the contractor will only be paid for work done and expenses legitimately incurred by him on, or preparation for the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by the ..... Engineer, whose decision shall be final and binding on the contractor. If the work is cut down, the contractor will be paid for the work as so cut down but in neither case will he be paid any compensation whatsoever for the loss or profit which he might have made if he had been allowed to complete all the work included in the tender.

Action & Compensation payable in case of hand work.

Clause 18— If the Engineer-in-Charge is satisfied that the construction of any part of the work is faulty or that materials used in the same are inferior to those for which the specification provides or that materials or articles provided by the contractor are not in accordance with the contract, he may, notwithstanding that such work materials or articles may have been passed, certified or paid for, serve the contractor with notice in writing specifying the work, materials or articles of which he complains and requiring the contractor to remedy such defects or to replace such materials or articles within a specified period of time.

If the contractor fails to comply, in all respects with the requirements of any such notice within ten days after the expiration of the period specified in that notice, the Engineer-in-charge may himself remedy such defects, or as the case may be, replace such materials or articles, and contractor shall pay all expenses incurred by the Engineer-in-charge in so doing and the certificate in writing of the Engineer-in-charge as to the amount of any such expense shall be final and binding upon the contractor.

Works to be open to inspection.

Clause 19— All works under or in course of execution or executed in pursuance of the contract shall at all times be open for inspection and supervision by the Engineer-in-Charge and his subordinates and the contractor shall at all times during the usual working hours, and on any other occasion of which he shall have had reasonable notice, either himself be present to receive orders and instructions, or have responsible agent duly accredited in writing present for that purpose. Orders given to any such agent have the same effect as order given to the contractor himself.

Clause 19-A— No labourer below the age of 18 years shall be

employed on the work.

Clause 19-B— The contractor shall pay to his labourers a fair wages.

Clause 19-C— The contractor before he commences work shall (a) post in conspicuous place on the work a notice giving the rates of wages have been certified as fair by the ..... Engineer, and (b) send a copy of the notice to the ..... Engineer.

Clause 19-D— The contractor shall be bound and shall be responsible to comply with the provisions of the labour laws in force in the State of Uttar Pradesh including the Minimum Wages Act or any enactment in supersession, extension or modification thereof which may be passed at any time or from time to time by a competent legislative body and may have effect in the State of Uttar Pradesh and the Rules and Regulations made thereunder or any amendments or modifications thereof for the time being in force. All expenses in connection with the compliance of such laws and rules shall be borne by the contractor with the compliance or such laws and rules shall be borne by the contractor, and the contractor shall neither demand nor claim nor shall be entitled to any additional payment for the reason that he failed to take into account any such expenses in his tender or that any subsequent amendments in such laws or rules have changed the basis on which he worked out such expenses while submitting his tender.

In every case in which by virtue of the provisions of the labour laws in force in the State of Uttar Pradesh and the rules and regulations made thereunder, the Government is obliged to pay any sum in the execution of the work, Government will recover from the contractor the amount so paid; and without prejudice to the other rights of the Government, the Government shall be at liberty to recover such amount or any part thereof by deducting it either from the security money deposited by the contractor or to his credit under clause I of these conditions or from any other sum due by Government to the contractor whether under this contract or otherwise.

Clause 19-E— The contractor shall engage labour for the work through nearest Employment Exchange.

Clause 19-F— The contractor will request the Employment Exchange to provide him labour on wages to be maintained by him which shall not be less than fair wages for the locality of the work fixed by the ..... Engineer consultation with the District Magistrate concerned. He will also specify the period of the supply of labour which shall not be less than a week from the date of contractor's request for labour of the Employment Exchange. If the Employment Exchange fails to supply labour within the specified period the contractor will have the option to engage labour from other sources.

Clause 19-G— The labour employed through Exchange will be kept at par with and shall have no preference over the labour engaged by the contractor privately as regards their transport, wages, accommodations, working hours and amenities. The contractor will have the option to dispense with the labour without any reference to the Employment Exchange when such labour is not required for the work or when he is not satisfied with it but he will give due information of the discharge of labour to the Exchange.

Contractor or responsible agent to be present.

Clause 20— In order that the work may be measured and the correct dimensions thereon taken, the contractor shall not cover up any part of the same or otherwise place it beyond reach of measurement until he has either obtained the consent in writing of the Engineer-in-Charge or of his subordinate in-charge of the work or until he has given to the Engineer-in-Charge or to such subordinate five day's notice in writing that the work is ready for measurement. If the contractor covers up any work or places it beyond reach of the measurement without such consent and before the expiration of the period of such notice, the contractor shall either, as he may elect, strip such work at his own expense in order that it may be measured or shall forfeit the price of such work and of the materials used in its construction.

Notice to be given before work is covered up.

Clause 21— All works to be executed under the contract shall be executed under the direction and subject to the approval in all respect of the Engineer-in-Charge 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.

Direction of work.

Clause 22— Except where otherwise specified in the contract the decision of the ..... Engineer for the time being shall be final, conclusive and binding on all parties to the contract upon all questions relating to the meeting of the specifications, designs, drawings and instructions herein-before mentioned. The decision of such Engineer as to the quality of workmanship or materials used on the work, or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, design, drawing, specifications, estimates, instructions, order of these conditions, or otherwise concerning the work or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment of the contract by the contractor, shall also be final, conclusive and binding on the contractor.

Decision of Engineer to be final, contractor liable for damages done and for imperfections.

Clause 23— If the contractor or his work people or servants shall break, deface, injure or destroy any part of a building in which they may be working, or any building, road, fence, enclosure or grass land or ground contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress from any cause due to negligence of responsibility (the decision of the ..... Engineer shall be final), the contractor shall at his own expense make good such damage, or In default, the Engineer-in-Charge may cause the same to be made good and the contractor, shall pay any expenses so incurred and the certificate of the Engineer-in-Charge as to the amount of such expenses shall be final and binding on the contractor.

Contractor to supply plant, ladder, scaffolding etc.

Clause 24— The contractor shall supply at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works requisite for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not or 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, and shall pay for the

<p>and liable for damages arising from non-provision of light, fencing etc.</p>	<p>carriage of all such things to and from the work. The contractor shall also supply without charge workmen with the means and materials necessary for the purpose of setting out works, and for counting weighing and assisting in the measurement or examination of the work, or materials at any time. If the contractor fails to do so, the same may be provided by the Engineer-in-Charge and the contractor shall pay the cost of the same as certified by the Engineer-in-Charge, whose certificate shall be final. The contractor shall also provide all necessary fencing and lights required to protect the public from accident and shall bear the expenses of defence of every suit, action or other proceeding at law that may be brought by any person for injury sustained owing to neglect of the above precautions, and shall also pay any damages and costs which may be awarded in any such suit action or proceeding to any such persons, or which may with the consent of the contractor be paid to compromise any claim by any such person.</p>
<p>Female labour not to be employed.</p>	<p>Clause 25— The contractor shall not employ female labour in the execution of the work or any part thereof within the limits of cantonment.</p>
<p>Work not to sublet. Contract may be rescinded and security deposit forfeited for subletting, bribing or if contractor becomes insolvent.</p>	<p>Clause 26— The contractor shall not assign or sub-let the contract without the written approval of the ..... Engineer and if the contractor does or attempts so to or becomes insolvent or commences any insolvency proceedings or makes attempts to make any composition with his creditors, or if he or any of his servants or agents either directly or indirectly, gives, offers or promises any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or other-wise to any public officer or person in the employ of Government in any way relating to his office or employments, or if any such officer or shall become in any way directly or indirectly interested in the contract without having first obtained the permission in writing of the Government, the.</p> <p>Engineer 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 Government and the same consequences shall ensure as if the contract has been rescinded under clause 3 hereof, and in addition the contractor shall not be entitled to recover or be paid for any work there for actually performed under the contract.</p>
<p>Sum payable by way of compensation to be considered as reasonable compensation with-out reference to actual loss.</p>	<p>Clause 27— Any sum payable by the contractor as compensation under any of these conditions shall be deemed to be reasonable compensation for the act or default in respect of which the same becomes payable without proof of the actual amount or damage of loss sustained.</p>
<p>Changes in constitution of firm.</p>	<p>Clause 28— In the case of a tender by partners, the contractor shall state the name of the members of the firm and shall notify to the Engineer-in-Charge any change in the constitution of the firm as soon as such change occurs.</p>
<p>Action where no specification.</p>	<p>Clause 29— In the case of any class of work for which there in no such specification as is mentioned in rule I, such work shall be carried out in accordance with the district specification, and if there is no district specification, the work shall be carried out in all respect in accordance with instructions and requirements of the Engineer-in-Charge.</p>
<p>Definition of work.</p>	<p>Clause 30— In these conditions unless there is something in the</p>

Contractor's percentage  
whether applied to net /  
gross amount of bills,

subject or context repugnant to such an interpretation, the expression 'works' or 'work' mean the work to be done or executed under the contract whether such work is permanent or temporary and whether it is original, altered, substituted or additional.

Clause 31— The additions and deductions on account of the percentage referred to in the accepted tender will be calculated on the gross, and not the net amounts of the bills for the work done.

Clause 32— (1) In every case in which by virtue of the provisions of section 12, sub-section (1) of the Workmen's Compensation Act, 1932, Government is obliged to pay compensation to a workman employed by the contractor or by any sub-contractor from him in the execution of the work government will recover from the contractor the amount of the compensation so paid; and without prejudice to the rights of the Government under section 12, subsection (2) of the said act, Government shall be at liberty to recover such amount or any part thereof by deducting it either from the security money deposited by the contractor or to his credit under clause 1 of these conditions or from any other sum due by Government to the contractor whether under this contract or otherwise.

(2) Government shall not be bound to contest any claim made against it under section 12, sub-section (1) of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs which government might become liable in consequence of contesting the claim.

Clause 33— Notwithstanding anything stipulated in the aforesaid clauses, Government shall have power to retain any sum due to the contractor(s) and set off all claims against him (them) whether arising out of the particular contract or out of any other transaction or contract held him (them) alone or in partnership with others.

Clause 34— All disputes in respect of this contract arising between contractor and the department shall be referred to next higher department authority to the officer entering into the contract. Either side may go in for the arbitration under relevant Arbitration Act in case of disagreement with the decision of the next higher Department authority as enumerated in clause 42 and 43 of General conditions of contract.

Clause 35— The tendered rate of each item of work shall be complete in itself and independent of other items and no loss or profit will be claimed in the event of exclusion of any item, each item of work shall be executed independently. Any item can vary to any extent. The contractor shall not be entitled to any claim or compensation on this account.

Clause 36— Contractor shall himself make proper living accommodation water and sanitary arrangements etc. For labour which should ordinarily be arranged through employment exchange and shall give preference to ex-service men. He will have to remove undesirable labour if ordered by the department.

Clause 37— No extra payment shall be made to the contractor for making profiles and 'NAMUNAS' in connection with the execution of work.

Clause 38— In case of Violation of condition of contract by the

contractor the contract can be rescinded by the officer entering into the contract without entitling the contractor to any claim whatsoever.

Clause 39— All money found recoverable from the contractor in connection with contract may without prejudice to any other remedy provided by law be recovered as arrears of land revenue.

CLAUSE 40:— The contractor supply every labour employed by him with Wages Card in which the rates of wages, the attendance of the labour and payment will be entered.

CLAUSE 41:— During the course of construction if any emergency for putting forward any claim arises the contractor shall send a registered notice to the Engineer-in-Charge within a fortnight of the origin of the claims. If he fails to do so or if he postpones submission of such claim till completion of work, he will be entitled to no compensation.

CLAUSE 42:— The contractor shall not influence or divert labour borne on the Muster Roll of any contractor by paying higher wages or providing extra facilities without the permission of the ..... Engineer and if he does so contrary to the above, he will be responsible for the loss or damage caused or claimed by the other and the decision of the ..... Engineer as of the amount of damage shall be final and binding on both parties.

CLAUSE 43:— The agreement is subject to the standard specification. The clearance of site shall be done by the contractor at his own expenses.

CLAUSE 44:— The sum of money due and payable to the contractor including security deposits returnable to him under this contract may be appropriated by the Government or any other persons contracting through the secretary and set off against any claims of the purchaser or Govt. or such other persons for the payment of a sum of money arising out of or under any other Govt. or such other person or persons.

CLAUSE 45:— 2.27% Income-Tax on all payment or on the gross value of work done (including cost of materials) or at rate in force as per rules at the time of payment shall be deducted at source of the payment in terms of Income-Tax Act.



## TRADE TAX

The rate quoted by the contractor shall be deemed to be inclusive of The Trade-Tax, if any on the constructional plant, material and supplies (both permanent, temporary and consumables) acquired for the purpose of the contract and on the services performed under the contract. Nothing in the contract shall relieve the contractor from the responsibility to pay any Trade-Tax that may be levied the U.P. Trade-Tax Act 1948 as amended from time to time in performance of this contract. During pursuance of the contract, the Engineer-in-Charge or any other persons responsible for making the payment to the contractor shall at the time of making such payment to the contractor either in cash or in any other manner, deduct an amount equal to that specified in Section 3-D of the aforesaid act as in force for the time being towards part or, as the case may be full satisfaction of the tax payable under the said Act on account of this contract, the amount presently specified in the said Section is 4 (FOUR) per centum of the amount payable to the contractor.

Schedule showing (approximate) materials to be supplied from Public Works Stores for works contracted to be executed and the rates at which they are to be charged for, vide Clause 12 of Conditions :—

Particulars	Rate at which the material will be charged to the Contractor			Place of Delivery
	Unit	Rs.	P.	E.E.
————— As per Schedule 'C' attached —————				

**PUBLIC WORKS DEPARTMENT, UTTAR PRADESH**

**Division .....**

**Name of work .....**

**Name of Contractor .....**

**GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS**

- 1. All works proposed for execution by contract will be notified in a form of invitation to tender passed on a board hung up in the office of and signed by the ..... Engineer.

This form will state the work to be carried out, as well as the date for submitting and opening tender, and the time allowed for carrying out the work, also amount of earnest money to be deposited with the tender, and the amount of security deposit to be deposited by the successful tender and the percentages, if any, to be deducted from bills. This set of contract documents consisting of copies of drawing and details of the proposed work specification, schedules of quantities of various items of work. And a form of the printed conditions of contract together with the form of tender to be used, signed for the purpose of identification by the ..... and approved by the authority competent to make the contract shall be available for public inspection at the office of the ..... during the office hours.

- 2. In the event of the tender being submitted by a firm, it must be signed separately by each member there of, in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of-attorney authorizing him to do so.
- 3. Receipt for payments made account of work when executed by a firm must also be signed by the several partners except where the contractors are decried in their tender as a firm in which case the receipt must be signed in the name of the firm by one of the partners or by some other persons having authority to give effectual receipts for the firm.
- 4. Any contractor who submits a tender shall fill up the prescribed form of tender striking out the alternative offer on page 3 of the form not applicable to the case, Tenderer which propose any alteration in the work specified in the form of notice inviting tender or in the time allowed for carrying out the work or which contents any other conditions of any sort, of are not filled up in English or accompanied by the deposit or earnest money notified, will be liable of rejection. Tenders shall have the name of the work to which they refer written outside the envelope.
- 5. (i) ..... Engineer or his duly authorised assistant will open tender in the presence of any intending contractors who may be present at the time and will enter the amount of several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money forwarded here with shall there upon be given to the contractor, who shall there upon for the purpose of identification, sign copies of the specification and other documents mentioned in rule I. In the event of a tender being rejected the earnest money forwarded with such unaccepted tender shall thereupon be returned to the contractor making the same.

(ii) When tenders are received by ..... he will open and deal with them in the manner specified above, and will submit them to the ..... Engineer for orders. The earnest money if in currency notes shall be credited in the cash-book and

paid into the Treasury, a receipt in account form no. 3 being given to the party tendering. If earnest money is preferred in any of the securities specified in rule 9, it shall be entered in the register of securities account forms 85 and 86. Earnest money received in currency notes shall be returned to unsuccessful tenderness as soon as their tenders are rejected the usual stamp receipt being taken.

6. The accepting authority shall have the right or rejecting all or any of the tenders.
7. The receipt of an accountant or a clerk for the earnest money paid by the contractor will not be considered as any acknowledgement of payment to ..... and the contractor shall be responsible for seeing that he procures a receipt signed by .....
8. The memorandum of work tendered for shall be filled in and completed in the office of the ..... before the tender form is issued.
9. The amount of earnest money should ordinarily be :- Rs.
  - (a) When the amount of the tender does not exceed Rs. 2,000 50.00
  - (b) When exceeding Rs. 2,000 and not exceeding Rs. 5,000 100.00
  - (c) When exceeding Rs. 5,000 and not exceeding Rs. 10,000 200.00
  - (d) For each additional Rs. 5,000 or portion of 5,000 a further sum of 100.00

Such earnest money shall be deposited by the contractor in Government Treasury or sub treasury as laid down in paragraphs 340(b) (1), 344 and 345 (b) of the Financial Handbook Volume V, Part I, Account Rules and receipts treasury challan attached to the tender.

Note:- The Officer calling for the tender may in special cases where it would be inconvenient for tenders to deposit money into Government treasury relax the rule, and permit contractors deposit earnest money with him in cash of currency notes upto a limit of Rs. 100 instead of into a treasury. Such deposits should be treated as "Public Works Department Deposit".

## TENDER OF WORKS

**"I" or "We"**

\* Hereby tender for the execution for the Governor of Uttar Pradesh of the work specified in the underwritten memorandum within the time specified in the memorandum at the rate specified therein, and in accordance in all respects, with the specification, designs, drawings and instructions in writing referred to in rule 1 hereof and in clause 2 of the conditions of contract and with such materials as are provided for by and in other respects in accordance with such conditions so far as applicable.

### MEMORANDUM

(a) General description.

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

(b) Estimated cost                      Rs.

(b) vide Rule 9 on ID form 112/2

(c) Earnest money                      Rs.

(d) Time allowed for the work from date of written order to commence  
Months.

Item No.	Item of work	Approximate number or quantity	Unit	Per	(c) TENDERED		
					Rate -----		
					(d) SANCTIONED		
					(f) in figure		(f) in words
					Rs.	P.	

(c) Strike out the alternative and attach signature to it.

N.B.—(When tender are to be submitted at a percentage above or below the rate in the sanctioned estimate, the information in all the columns should be filled by the .....)

In case of works when contractors are required to quote their own rates for the different items of work the columns (f) should be left blank for tenderers to fill in.

"I" or "We"

\* ..... tender at ..... percent above the rates entered above.

Strike out the alternative and attach signature to it

+ or

\* ..... Tender at the above rates.

Should this tender be accepted \* ..... hereby agreed to abide by the fulfill all the terms and provisions of the conditions of contract annexed to the approved set of contract documents, or in default thereof to forfeit and pay to Governor of Uttar Pradesh or his successor-in-office the sums of money mentioned in the said conditions.

\*\*Give particulars and numbers

The sum of Rs. \*\* ..... is herewith forwarded in currency notes as earnest money the full value of which shall be retained by Government on account of the security deposit specified in clause 1 of the conditions of contract.

Signature of witness to contractor's signature

Dated the ..... day of ....., 200

Witness .....

Address .....

Signature of contractor before submission of tender

Occupation .....

\* .....

+ .....

Here enter recommended or not recommended" signature

Date ..... Sub-Divisional Officer ..... Sub-Division

\* .....

+ .....

signature

Date ..... Executive Engineer ..... Division

\* .....

+ .....

Signature and official designation of the accepting authority

Date ..... Superintending Engineer ..... Circle

\* .....

+ .....

Irrigation Works

The above tender is hereby accepted by me on behalf of Governor of Uttar Pradesh.

.....

.....

Dated the ..... day of ....., 200

## Schedule-A

Name of work :- चौ० चरण सिंह मध्य गंगा बैराज के बायें अफलक्स बंध के कि०मी० 7.760 स्पर  
नं०-03 का निर्माण कार्य।

Lot No-01

Sl. No.	Item	Unit	Qty.	Rate	
				In Fig.	In. Words
1	Earth work in excavation i/c lead & lift 30M and 1.50M, Ramming, dressing i/c cost all material labour T&P and all Taxes etc complete.	cum	4500.00		
2	Earth work in filling in ordinary soil including carriage of Earth 1.0 Km. (Avg.), Leveling, dressing, Compaction i/c cost all material labour T&P and all Taxes etc complete.	cum	5500.00		
3	Supplying & Laying Graded Filter 4mm to 40mm single including cost of all material, i/c cost all material labour T&P and all Taxes etc complete.	cum	750.00		
4	Supplying and laying Boulder Pitching including all cost of material, i/c cost all material labour T&P and all Taxes etc complete.	cum	1325.00		
5	Supply of G.I wire crate of Size 3000x1500x1000mm. of 8 S.W.G Wire double knot 150x150mm mesh including cost of G.I.wire Crate, Boulder, i/c cost all material labour T&P and all Taxes etc complete.	Nos	635		
6	Supplying and laying boulder 20-40kg.wt. including all cost of material, i/c cost all material labour T&P and all Taxes etc complete.	cum	7000.00		
7	Supplying and Placing Earth filled E.C Bags with local earth, sewing and placing in position within 60 M distance, i/c cost all material labour T&P and all Taxes etc complete.	Nos	250000		

**Contractor**

## Schedule-A

Name of work :- चौ० चरण सिंह मध्य गंगा बैराज के बायें अफलक्स बंध के कि०मी० 4.480 से कि०मी० 5.000 तक लाचिंग एग्रन वं पिचिंग का कार्य।

Lot No-02

Sl. No.	Item	Unit	Qty.	Rate	
				In Fig.	In. Words
1	Earth work in filling in ordinary soil including carriage of Earth 1.0 Km. (Avg.), Leveling, dressing, Compaction and all Taxes etc complete.	cum	13000.00		
2	Supplying & Laying Graded Filter 4mm to 40mm single including cost of all material, labour T&P and all Taxes etc complete.	cum	325.00		
3	Supplying and laying boulder Pitching at slope and berm i/a all cost material. Labour and all Taxes etc complete.	cum	650.00		
4	Supplying and placing of boulder 20-40Kg.wt. including of all cost of material, labour T&P, all taxes etc complete.	cum	4000.00		
5	Supply and placing boulder filled G.I. Wire Crate Size of 3000x15000x1000mm of 8.S W.G wire double knot 150x150mm mesh including cost of G,I,Wire Crate, Boulder, labour T&P and all Taxes etc complete.	Nos	1040		

**Contractor**