GOVERNMENT OF ODISHA
DEPARTMENT OF WATER RESOURCES

BIDDING DOCUMENT (PRESSURISED UGPL) FOR

EPC CONTRACT

Bid Identification No. : CEBM-RBVN-(GID -01)/2026-27

NAME OF WORK

Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow) system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project

VOLUME – I

CONDITIONS FOR EPC CONTRACT WITH PRICE PROPOSAL (EPC CONTRACT)

Chief Engineer & Basin Manager,
RBVN Basin,Brahmapur

BIDDINGDOCUMENTFOR EPCCONTRACT FOR

Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project

BIDDINGDOCUMENTCONTAINSFOLLOWINGVOLUMES

1. **VOLUME–I CONDITIONSFOREPCCONTRACTWITHPRICEPROPOSAL**

2. **VOLUME–II TECHNICALSPECIFICATIONS**

3. **VOLUME–III MAPS&DRAWINGS**

CONTRACTOR SUPERINTENDING ENGINEER

VOLUME–I

CONDITIONSOFEPCCONTRACTWITHPRICEPROPOSAL FOR

Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow) system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project

Volume–I consistof

Sl.No.	SectionNo.	Particulars
1	1	NoticeInvitingTender
2	SectionI	DetailedNoticeInvitingTender
3	SectionII	InstructiontoBidders
4	SectionIII	Forms&Annexure
5	SectionIV	GeneralConditionsofContract
6	SectionV	SpecialConditionsofContract
7	SectionVI	Appendices
8	SectionVII	ConditionsofContractforO&M
9	SectionVIII	VendorList
10	SectionIX	PriceBid,PaymentSchedules,MileStone

VOLUME – I
CONDITIONS FOR EPC CONTRACT WITH PRICE PROPOSAL

INDEX

Sl. No.	Particulars
1	2
	Notice Inviting Tender
	SECTION-I (DETAILED NOTICE INVITING TENDER)
1.	Introduction
2.	Invitation
3.	Particulars of tender
4.	Down load of tender documents
5.	Pre-Bid Conference
6.	Opening of Tender
7.	General Instructions
	SECTION-II (INSTRUCTION TO BIDDERS)
1.	Special Attention
2.	Definitions
3.	General Description of the work
4.	Brief Description & Scope of work under this tender
5.	Particulars provisional
6.	Communication
7.	General Facilities
8.	Climate and working season
9.	Cost of bidding
10.	Language of tender
11.	Bid validity
12.	Method of tendering
13.	Earnest money deposit
14.	Accompaniments to tender
15.	Submission of tender
16.	Opening of Technical Bid
17.	Evaluation of Technical Bid
18.	Opening of price Bid
19.	Evaluation of price Bid
20.	Process to be confidential
21.	Award of contract
22.	Initial Security deposit
23.	Bid Amount

Sl. No.	Particulars
1	2
24.	No sanction for foreign exchange
25.	Construction Programme
26.	Specific Issues
27.	Corrupt or Fraudulent Practices
28.	Subletting of Contract
29.	Check List
	SECTION-III (FORMS & ANNEXURE)
1.	Form-A : Letter of Submission of Bid
2.	Form-B : Articles of Contract
3.	Form-C : Details of cost of Tender Documents and Bank Guarantee
4.	Form-D : Relation Declaration
5.	Form-E: Details of Machinery & equipment proposed to be deployed for the work.
6.	Form–F: Details of work in hand
7.	Form-G: Details of Financial capability
8.	Form-H: Details of Personnel
9.	Form –I: Additional Information
10.	Form –J: Declaration by affidavit
11.	Annexure – I : Form of Bank Guarantee
12.	Annexure – II : Form of Bank Guarantee – ISD
13.	Annexure – III : Form of Bank Guarantee for Mobilization Advance
14.	Annexure – IV : Form of Solvency Certificate By Banks
15.	Annexure – V : Litigation History
	SECTION-IV (GENERAL CONDITION OF CONTRACT)
	A. General
1.	Interpretation
2.	Engineer-in-Charge's Decision
3.	Delegation
4.	Communication
5.	Sub contracting
6.	Other contractors
7.	Personnel
8.	Contractor's risk
9.	Insurance
10.	Site Inspection
11.	Contractor to construct the works
12.	Diversion of streams/ Nallas/ Drains
13.	Power Supply

Sl. No.	Particulars
1	2
14.	Temporary Diversion (Works on Highways)
15.	Ramps
16.	Monsoon Damages
17.	The works to be completed by the stipulated Completion Date
18.	Safety
19.	Discoveries
20.	Possession of site
21.	Access to site
22.	Instructions
23.	Settlement of disputes
	B. Time for completion
24.	Period of completion
25.	Construction Programme
26.	Speed of work
27.	Suspension of works by Contractor
28.	Extension of completion date
29.	Delays ordered by Engineer-in-charge
30.	Early warning
31.	Management meetings
	C. Quality Control
32.	Identifying defects
33.	Tests
34.	Action in case of improper materials & workmanship
35.	Action and compensation payable in case of bad works
36.	Quality control
	D. Cost Control
37.	Contract price-Schedule of payment-Bill of Quantities
38.	Change in Quantities
39.	Cash flow forecast
40.	Contract price-Schedule of payment-Payment Certificates
41.	Measurements & Payments
42.	Interest on money due to contractor
43.	Commissioning of project
44.	Certificate of completion of works
45.	Taxes included in the bid
46.	Escalation in prices
47.	Liquidated damages for delay

Sl. No.	Particulars
1	2
48.	Rescission of contract
49.	Mobilization Advance
50.	Security Deposits
51.	Cost of repairs
	E. Finishing the Contract
52.	Completion
53.	Takeover
54.	Final Account
55.	Termination
56.	Payment upon termination
57.	Property
58.	Release form performance
	F. Other General Conditions
59.	Water supply
60.	Electrical Power
61.	Land
62.	Approach roads and roads in working area
63.	Payment for camp construction
64.	Explosives and fuel storage tanks
65.	Labour
66.	Safety measures
67.	Fair wage clause
68.	Indemnity Bond
69.	Compliance with Labour regulations
70.	Salient features-Labour law applicable
71.	Liabilities of the contractor
72.	Contractor's staff, representatives and Labour
73.	Accommodation and food
74.	Relationship
75.	Protection of adjoining premises
76.	Work during night (or)on Sundays and Holidays
77	Layout of materials stacks
78	Use of Blasting materials
79	Plant and equipment
80	Steel forms
81	Inconvenience of the Public

Sl. No.	Particulars
1	2
82	Conflict of interest
83	Contract documents and materials to be treated as confidential
84	General obligations of Contractor
85	Security measures
86	Fire fighting measures
87	Sanitation
88	Training of personnel
89	Ecological balance
90	Preservation of existing vegetation
91	Possession of prior to completion
92	Access to contractor's Blocks
93	Drawings to be kept at site
94	B.I.S (ISI) books and OSS to be kept at site
95	Site order book
96	Variation by way of modification, Omissions or Additions
97	Care and Diversion of river/stream
98	Income Tax
99	Royalty charges
100	GST
101	Labour welfare cess
102	Supply of construction material
103	Setting Out
104	Site Data
105	Sufficiency of contract price
106	Un-foreseen difficulties
107	Rights of way and facilities
108	Avoidance of Interference
109	Access route
110	Transport of goods
111	Contractor's equipment
112	Progress reports
113	Designs
114	Programme
115	Change of site
116	Changes in drawing

Sl. No.	Particulars
1	2
	SECTION-V (SPECIAL CONDITION OF CONTRACT)
1.	General
2.	Sufficiency of bid
3.	Major project components and project basic parameters
4.	Scope of work
5.	Tests and quality control
6.	Measurements and payments
7.	Supply of gates & and hydro/electro mechanical plant and machinery
8.	Supplementary requirements
9.	Regulations and bye-laws
10.	Passing of foundation, centering, reinforcement etc.
11.	Signing field books, longitudinal sections, cross- sections and measurement books
12.	Cleaning up
13.	Communications and notices by contractors:
14.	Compensation for delay by department in approval of design drawing
15.	Works to be executed in accordance with specifications, drawings, orders etc.,
16.	Alterations in specifications and designs
17.	Time limit for unforeseen claims
18.	Recovery of dues from the contractor
19.	Works to be open for inspection
20.	Notice to be given before work is covered up
21.	Contractor to supply plant, ladders, scaffolding etc.
22.	Audit and technical examinations:
23.	Permission for crossing railway, NH/SH/ other roads
24.	Land acquisitions
25.	Use of site
26.	Water user association
27.	Availability of power
	SECTION – VI (APPENDIX)
1.	Appendix-S & I (Surveys and Investigation)
2.	Appendix – D&E (Design & Engineering)
3.	Appendix - CW (Civil works)
4.	Appendix- P & EM (Pumps & Electro Mechanical equipment)
5.	Appendix – BPP (Basic Project Profile)

Sl. No.	Particulars
1	2
	SECTION – VII (CONDITIONS OF CONTRACT FOR O&M)
	SECTION – VIII (VENDOR LIST)
	SECTION – IX (PRICE BID)
1.	Appendix- FB (Price Bid)
2.	Appendix-F6(Energy Consumption unit)
3.	Appendix-F (Payment schedule)
4.	Appendix-F1 (Payment for System Connectivity)
5.	Appendix –F2 (Payment schedule for Intake Works, Pump House including all Electro Mechanical Works
6.	Appendix – F3(Payment schedule for communication facilities, Rising Main including all control devices and related civil works)
7.	Appendix–F4 (payment schedule for Construction of the Distribution Network of gravity mains from the delivery chamber, minors and sub-minors and providing and fixing multiple outlets for the irrigation service network upto 1 HaChak which serves the command area of UGPL Irrigation System.)
8.	Form-F 4(a)(O & M Cost form)
9.	Appendix-F 5 -Deleted
10.	Appendix-MS (Mile Stones)

NOTICE INVITING TENDER(NIT)

CONTRACTOR SUPERINTENDING ENGINEER

OFFICE OF THE CHIEF ENGINEER & BASIN MANAGER,
RUSHIKULYA BAHUDA VANSADHARA & NAGAVALI BASIN, BRAHMAPUR.
e-mail id : ce_rvn@yahoo.co.in

Lr. No. /Date.

From,

Er.Jagannath Pani ,
CE& BM, RBVN Basin, Brahmapur

To

The Deputy Secretary to Government
Information and Public Relation Department
Government of Odisha, Bhubaneswar.

Sub. : Publication of e procurement Notice No. CEBM-RBVN(GID-01)/2026-27

Sir,

I am to enclose herewith the e-procurement Notice No. CEBM-RBVN(GID-01)/2026-27 relating to one (01) No. of work of Gajapati Irrigation Division, Paralakhemundi and request that the same may please be published in one most widely circulated National English daily and two most widely circulated Odia Daily news paper in minimum space on or before 13.10.2026 .

Action may please be taken at an early date for publication of the same in Government website with effect from 14.10.2026, 10.00 A.M.

Encl. : e-Procurement Notice No.
CEBM-RBVN(GID-01)/2026-27
(Soft Copy and Hard Copy)

Yours faithfully,

Chief Engineer & Basin Manager
RBVN Basin, Brahmapur

Memo No. / WE Date:

Copy along with hard copy and soft copy of e-procurement notice submitted to the Chief Engineer, Monitoring, O/O Engineer-in-Chief, W/R, Odisha, Secha Sadan, Bhubaneswar for information and necessary action. The tender call notice may please be floated in the Deptt. website (www.dowrodisha.gov.in) at an early date.

Encl. (1) Soft copy and Hard copy of
e-procurement Notice and NIT- 01(one) set.

Chief Engineer & Basin Manager
RBVN Basin, Brahmapur

Contd.to page 2

CONTRACTOR SUPERINTENDING ENGINEER

Memo No. /WE Date:

Copy along with copy of e-Procurement Notice submitted to the F.A-cum-Addl. Secretary Govt, DOWR, Bhubaneswar / Engineer-in-Chief, Procurement, O/o the Engineer-in-Chief, Water Resources, Odisha, Secha Sadan, Bhubaneswar, / Chief Engineer, Minor Irrigation, Odisha, Bhubaneswar for favour of information and necessary action.

Encl.: e-Procurement Notice No. CEBM-RBVN(GID-01)/2026-27

Chief Engineer & Basin Manager
RBVN Basin, Brahmapur

Memo No. /WE Date:

Copy along with copy of e-Procurement Notice forwarded to the Superintending Engineer, Gajapati Irrigation Division, Paralakhemundi for information and necessary action. He is requested to ensure the publication of the above notice in newspaper and floating the same in the DoWR web site www.dowrodisha.gov.in in time. The Superintending Engineer concerned along with DAO & Estimator of the Division should be present in this office on **13.11.2026 at 11.00AM,** while opening the technical bid and for processing the same.

Encl.: Approved Bid Documents for one No. of work.
(Technical & Financial Bid)- 01 (One) set
e -Procurement Notice & NIT 01(one) set.

Chief Engineer & Basin Manager
RBVN Basin, Brahmapur

Memo No Date:

Copy along with copy of enclosure forwarded to the Additional Chief Engineer, Vansadhara Nagaballi Basin, Paralakhemundi / Rushikulya Bahuda Basin, Brahmapur / Additional Chief Engineer, Southern Investigation Circle, Brahmapur / Chief Construction Engineer, Southern (R&B) Circle, Brahmapur / Additional Chief Engineer, Public Health Circle, Brahmapur / Superintending Engineer, Southern Minor Irrigation Circle, Brahmapur / Guard file / Notice Board of this office for wide circulation.

Encl.: As above

Chief Engineer & Basin Manager
RBVN Basin, Brahmapur

CONTRACTOR SUPERINTENDING ENGINEER

OFFICE OF THE CHIEF ENGINEER & BASIN MANAGER,
RUSHIKULYA BAHUDA VANSADHARA & NAGAVALI BASIN, BRAHMAPUR.
e-mail id : ce_rvn@yahoo.co.in

e-procurement Notice No. CEBM-RBVN(GID-01)/2026-27

1. Type of Work :- Irrigation Work.
2. Total No of Works :- 01 (One) No.
3. Amount put to tender :- Rs. **9191.24** Lakh
4. Period of completion :- 24 (Twenty Four) Calendar months.

Procurement Officer	**Bid Identification No.**	**Bid Amount (Rs. In Lakh)**	**Availability & Submission of Bid On -line**
Chief Engineer & Basin Manager RBVN Basin, Brahmapur	**CEBM-RBVN (GID-01) /2026-27**	9191.24	From 14.10.2026, 10.00A.M. to 12.11.2026, 5.00 P.M.

Date of opening of the Technical Bid **13.11.2026 at 11.00 A.M.**

Further details can be seen from the Govt. web site www.dowrodisha.gov.in

Chief Engineer & Basin Manager
RBVN Basin, Brahmapur

CONTRACTOR SUPERINTENDING ENGINEER

SECTION – I

DETAILED TENDER CALL NOTICE (DTCN)

GOVERNMENT OF ODISHA
DEPARTMENT OF WATER RESOURCES

Bid Identification No.- CE&BM,RBVN(GID-01)/2026-27
No._____/ Dated:_____

DETAILED NOTICE INVITING TENDER

Sl. No.	NameofWork	Class/EMD/TenderFee/Period ofcompletion
1	**Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow) system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project**	(1) Class-SuperClassorEquivalent. (2) EMD- Rs. 91,91,300/- (3) The approximate value of work put to tender is Rs. 91,91,24,083/- (4) TenderFee–Rs.10,000/- (Non-Refundable) by Online mode (5)Period of Completion: 24(Twenty Four)calendarmonthsincludingrainyseason.

A.	PeriodofCompletion	:	24(Twenty Four)CalendarMonths.
B.	Date &Time of Availability Of Bid Document in the Portal:	:	Dt.14/10/2026from10.00AMto Dt-12/11/2026upto5.00PM
C.	Period of Sale of Bidding Document:		30 days
D.	Time and Date For Pre-Bid Conference	::	Dt.28.10/2026at11.00AM
E.	Last Date and Time for Receipt of Bids:		Dt.12/11/2026at 5.00PM
F.	PlaceofSale,ReceiptofBids :		On-Line Through e-Procurement.
G.	TimeandDateofOpeningofTechnicalBid:		Dt-13/11/2026 at11.00AM
H.	Place of Opening of Bids	:	O/o the Chief Engineer & Basin Manager, RBVN Basin, Brahmapur

Further detail scan be seen from e-procurement portal **https://tendersodisha.gov.in**

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy submitted to the Principal Secretary to Government, Department of Water Resources, Odisha, Bhubaneswar for favour of kind information and necessary action.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy forwarded to the Director, Information and Public Relations Department, Govt. Of Odisha, Bhubaneswar for information and necessary action.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy forwarded to the Head State Portal, IT Centre, Information & Technology Department, Odisha Secretariat, Bhubaneswar for information & necessary action. It is requested to hoist the tender call notice in official web site of Govt. of Odisha(http//www.orissagov.in) on or before dt _____.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy forwarded to the Director (Monitoring) Office of the Engineer-in-Chief, Water Resources, Odisha, Bhubaneswar to display the tender call Notice in the authorized Govt. web site of Water Resources Department www.dowrorissa.gov.in on or before dt _____.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy forwarded to the Director, Printing, Stationary & Publications, Government Press, Madhupatna (O) Kataka and with a request to publish this notice in the next issue of the Odisha Gazette.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy submitted to the Engineer-In-Chief, Water Resources, Odisha, Bhubaneswar/ Engineer-In-Chief, (P&D) Water Resources, Odisha, Bhubaneswar /All Chief Engineers, WR Deptt./ Works Department / Chief Engineer, Rural Works–1/ Roads / Buildings / N.H. / P.H. (Urban) / Managing Director, IDCO / OCC /OBCC/OLIC for information and necessary action.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____Dtd. _____

Copy forwarded to the Addl. Chief Engineer, VansadharaNagabali Basin, Paralakhemundi/ Superintending Engineer, Gajapati Irrigation Paralakhemundifor information and necessary action.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

Memo No. _____ Dtd. _____

Copy to the Accounts Officer/ Works Branch/ Cash Section/ concerned work files/ Notice Board.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

DETAILEDNOTICEINVITINGTENDER

1.0 Introduction:

Government of Odisha proposes to cover command area of UGPL project under Engineering Procurementand Construction contracts from Nuagaon Barrage. The UGPL project is being planned to cover 1979Ha for providing irrigation facilities to rain-fed uplands of Gosani,Gumma&Kashinagarblocks ofGajapati District. Normally the Irrigation supply for Khariff starts after 20th June and ends by 15th November depending upon water availability & rainfall. Rabi Irrigation shall be provided only on availability of water and Rabi crop planning duly approved by District Authority.

1.1 Through this tender, it is now proposed to take up the schemes. The Broad conceptual layout (BCL) of the project has been prepared based on Topo sheet Planning. Salient features of the project based on the planning is furnished herewith in the Basic Project Profile in the Bidding Document. The locations of schemes are shown in the index map. The salient features and the drawings provided are for guidance only. Since the present tender is an EPC tender, the contractor is to plan and design the schemes after detailed survey and investigation. Depending on site conditions and suitable O&M conditions, ayacut area may be combined up to CCA of 1979 Ha under approval of the Department.

1.2 Major components of the UGPL system are RCC Intake well/Intake system, RCC connecting pipe from intake well to sump well, Pump house, Rising main /Pressure Main from pump house to Delivery Chamber (Optional) Distribution System (Distributary Main, Minors, and Outlets, field automation etc.) Pumping Machinery, Electro- mechanical work inside Pump House & system Networking/Switch yard/PLC including connectivity from selected 132/33 KV Grid Sub-stationand/or Distribution Licensee's 33KV network.

2.0 INVITATION:

2.1 Online open tender for the following work is invited on "EPC mode with single point responsibility" by the Chief Engineer & Basin Manager, RBVN Basin, Brahmapur

2.2 The concerned Bidder shall submit the certificate of registration with concerned State / Central Government / Local Bodies Authority along with the tender.

2.3 The Bidder registered outside Odisha shall get himself registered in "Super" class in the state of Government of Odisha before signing of agreement.

2.4 Failure of taking action specified in Para 2.2 and 2.3 above, the concerned bidder shall be disqualifiedand he/she will be suspended from being eligible for bidding /awardofallfuturecontract(s)fora period ofthreeyears from the date of committing such breach.

3.0 Particulars of Tender

a)	Name of Department	:	Department of Water Resources, Govt. Of Odisha
b)	Tender Notice Number	:	e-Procurement Notice No.CEBM-RBVN-(GID -01)/2026-27 BID identification No. CE&BM,RBVN(GID-01)/2026-27
c)	Period of Contract	:	24(Twenty Four)calendar months including rainy season.
d)	Form of Contract	:	EPC mode
e)	Qualification of bidders tender	:	Open
f)	Tender category	:	Works
g)	EMD/Bid Security	:	As specified in the Bid Document
h)	Cost of Tender Document Online mode	:	Rs. 10000 /- (Non-refundable)through
i)	Bid submission	:	Technical and Price bid by Online
j)	Bid Validity	:	180 days from last date of submission of bid.

k)	Availability of tender online Start Date	:	Dt.14/10/2026 from 10.00 AM
l)	Availability of tender online upto date	:	Dt. 12/11/2026 up to 5.00 PM
m)	Seek clarification start date	:	Dt. 14/10/2026 from 10.00 AM
n)	Seek clarification last date (2 days before pre bid meeting)	:	Dt..26/10/2026 up to 5.00PM
o)	On line submission of bid up to date	:	Dt.12/11/2026 up to 5.00 PM
p)	Pre-Bid meeting	:	Dt. 28/10/2026 at 11.00AM will be held by Chief Engineer & Basin Manager,RBVNBasin, Brahmapur
q)	Technical Bid opening date	:	Dt. 13/11/2026 at 11.00 AM
r)	Place of Technical Bid opening	:	Office of the Chief Engineer& Basin Manager,RBVN Basin,Brahmapur
s)	Price Bid opening Date	:	Date & place of opening of price bid shall be notified by the Tender inviting authority
t)	Initial Security Deposit (ISD)	:	The ISD @ 2% of the contract amount for each part of agreement in the shape of NSC/ Post Office Saving Account/ Post Office Time Deposit Account /KishanVikasPatra/ unconditional and irrevocable Bank Guarantee (BG) pledged in favour of Superintending Engineer, Gajapati Irrigation Division, Paralakhemundi in the standard format on any Nationalized/ Scheduled Commercial Bank located in India counter guaranteed by its local branch at Bhubaneswar with facility of authentication & encashment at State Bank of India Paralakhemundi Main Branch,IFSC Code-SBIN0000151,A/c-35538071969/ e-Bank Guarantee executed on the National e-Governance services Ltd(NeSL) Digital document execution portal/Insurance surety bond issued by an Insurance company authorised by IRDAI
u)	Performance Security	:	5% of the gross amount of bills to be deductedfrom each works bills
v)	Authorities Inviting Bids	:	Chief Engineer & Basin Manager,RBVNBasin,Brahmapur Govt. of Odisha
w)	Address	:	Chief Engineer & Basin Manager,RBVNBasin,Brahmapur, At- Courtpeta square,Brahmapur,Dist-Ganjam,PIN-760004
x)	Contact Details	:	PhoneNo-0680-281144 e-mail-ce_rvn@yahoo.co.in

4.0 Download of Tender Documents

The tender documents are available in electronic form from date14/10/2026 at 10.00 AM & up to 5.00PMon Dt-12/11/2026in the website www.tendersodisha.gov.in.Interested bidders can view these tender documents online, and can download tender documents. Bidders who wish to submit their offer shall deposit specified tender document fees through online mode only.

5.0 PRE-BID CONFERENCE

5.1 A Pre-Bid Meeting, open to all prospective bidders, will be convened by the Chief Engineer& Basin Manager, RBVN Basin, Brahmapur, Odisha, at 11 AM on Dt-28/10/2026in the conference hall of O/o the Chief Engineer& Basin Manager, RBVN Basin,Brahmapur.

5.2 The purpose of this meeting will be to discuss and answer to the queries on any matter that may be raised by the bidder at that stage.

5.3 The bidders are requested to submit any query in writing, on-line in e-procurement portal or e-mail to reach the office of Chief Engineer & Basin Manager, RBVN Basin, Brahmapur,Odisha during the clarification seeking period as mentioned in NIT before pre-bid meeting.

5.4 Any modification of the bid documents that may become necessary as a result of the Pre-Bid Meeting shall be made by the Employer, by issuing an addendum to Bid Documents which eventually become a part of the Agreement.

5.5 The proceedings of the pre-bid Meeting will be uploaded in the website and treated asapartofbid document. Nofurtherinformationrelatingtopre-bidshallbe provided to the bidder.

5.6 Non-attendance at the pre-bid meeting shall not be a cause for disqualification of the bidder.

SUBMISSION OF TENDER:

5.1 The bidders shall submit their tender online only. In case of any failure, malfunction or breakdown of electronic system used during the e-procurement process, the tender inviting authority shall not accept any responsibility for failure or breakdown.

5.2 The e-procurement applications are PKI (Public Key Infrastructure) enabled and supports the digital Signature certificates(DSC) of appropriate class (Class-II or Class-III) issued from a registered Certifying Authority (CA) as stipulated by Controller of Certifying Authorities(CCA), Government of India such as n-code, Sify, TCS, e-Mudhra etc., for signing the bids at the time of submission by contractor. The contactor has to procure digital Signature certificates issued by above authority as per the procedure. Digitally signed bids are to be submitted electronically through e-procurement, without which the tender will not be considered for opening the price Bid.

5.3 Suitable training will be given by State Procurement Cell, NirmanSoudh, Bhubaneswar to the bidders interested to know the procedure of bid submission on e-procurement platform. The telephone No is 18003456765 (Toll free), 0674-2530998.

5.4 The bidders would be required to register on the e-procurement market place www.tendersodisha.gov.in and submit their bid online. The Department will not accept any bid submitted in the paper form. The bidders should quote their Tender contract price at the prescribed field / place provided in the e-market place.

5.5 The bidder may ask question online in the e-procurement portal using his/her DSC, provided the questions are raised within the period of seeking clarification as mentioned in the particular of tender. The officer inviting tender will clarify queries related to the tender.

5.6 Intending bidders can contact the Chief Engineer& Basin Manager, RBVN Basin, Brahmapur/ Gajapati Irrigation Division, Paralakhemundi,for any clarification, and information on any working day during working hours. No clarification will be entertained after the pre-bid meeting.

5.7 The bidders are requested to submit the bids in single stage with two covers. Cover-1: Qualification criteria and Technical bid and Cover-2 : Financial bid in separate

6.0 OPENING OF TENDER

The Technical Bid will be opened on Dt. 13/11/2026at 11.00 AM on website www.tendersodisha.gov.inas mentionedin Para 3.0 (B) above. Intending bidders or their representative who wish to participate in online tender opening can log on to www.tendersodisha.gov.in on the due date and time after online opening of the bid by the authorized officer.Thebidderswho wish to remain present at Office of the Chief Engineer & Basin Manager, RBVN Basin, Brahmapur at the time of tender opening can do so. Only one representative of each firm will be allowed to remain present.The price bid will be opened after Government's decision on technical bid of tender.

7.0 GENERAL INSTRUCTIONS

7.1 The cost of tender document will not be refunded under any circumstances.

7.2 The offer shall be valid for One hundred eighty (180) days from the last date ofsubmission of bid online.

7.3 Tenders without Tender document fees, EMDand which do not fulfill all or any of the condition or submitted incomplete in any respect shall be rejected.

7.4 Conditional tender shall not be accepted.

7.5 Government reserves the right to accept or reject any or all tenders without assigning any reason thereof.

7.6 The bid documentshall form a part of contract and only required documentsneed to be uploaded during online bid submission for evaluation of bid.

7.7 Thebiddersareadvisedtoreadcarefullythe"InstructiontoBidders"containedinthe tender documents at section-II.

7.8 The website address for e -Tendering is www.tendersodisha.gov.in

7.9 The details of the above notice will be available on www.tendersodisha.gov.in

7.10 Defects liability period: 5 (five) years from the date of commissioning of project or 5 (five) khariff water supply seasons whichever is higher.

7.11 Operation & Maintenance period : 5(Five) years from the date of commissioning of project or 5(Five) khariff water supply seasons whichever is higher. O&M period of project shall start after its commissioning. The O&M period includes the defect liability period. The guaranteed energy charges during O&M shall be borne by the department. The energy charges during commissioning shall be borne by the contractor.

7.12 The dates stipulated in the NIT are firm and under no circumstances they will be relaxed unless officially extended/modified.

7.13 Other terms and conditions shall be applied as per terms and condition of the tender documents.

7.14 Joint Venture tender is acceptable. Bids from joint venture of maximum two firms as partners are acceptable.

7.15 The pipe and equipment manufacturer should not have been blacklisted/ debarred/ disqualified/ disallowed to supply pipes in case of EPC contracts/ Turnkey contracts/ Supply Order contracts/ Rate contracts for the entire or any part thereof, by any of the Central/ State Government/ Board/ Corporation/ any procuring entity in India with respect to quality issues in last three years, from the date of the submission of the tender. The tenderer will submit affidavit from the manufacturer of pipes duly notarized (with seal) in respect of the above condition.

Chief Engineer & Basin Manager,RBVNBasin,Brahmapur

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SECTION – II

INSTRUCTION TO BIDDERS

CONTENTS

INSTRUCTION TO BIDDERS

1.0 SPECIAL ATTENTION.

2.0 DEFINITIONS.

3.0 GENERAL DESCRIPTION OF THE WORK.

4.0 BRIEF DESCRIPTION & SCOPE OF WORK UNDER THIS TENDER

4.2 The major components of the project shall include but not limited to

5.0 PARTICULARSPROVISIONAL

6.0 COMMUNICATION

7.0 GENERAL FACILITIES

8.0 CLIMATE AND WORKING SEASON

9.0 COST OF BIDDING

10.0 LANGUAGE OF TENDER

11.0 BID VALIDITY:

12.0 METHOD OF TENDERING

13.0 EARNEST MONEY DEPOSIT (EMD)/Bid security Declaration

14.0 ACCOMPANIMENTS TO TENDER

15.0 SUBMISSION OF TENDER

16.0 OPENING OF TECHNICAL BID

17.0 OPENING OF PRICE BID

18.0 EVALUATION OF PRICE BID

19.0 PROCESS TO BE KEPT CONFIDENTIAL

20.0 AWARD OF CONTRACT

21.0 INITIAL SECURITY DEPOSIT (ISD)

22.0 BID AMOUNT

23.0 NO SANCTION FOR FOREGIN EXCHANGE

25.0 SPECIFIC ISSUES

26.0 CORRUPT OR FRAUDULENT PRACTICES.

27.0 SUBLETTING OF CONTRACT

28.0 CHECK LIST

SECTION – II
INSTRUCTION TO BIDDERS

1.0 SPECIAL ATTENTION

1.1 The tenders are invited on EPC mode with single point responsibility from EPC contractors/firms who are registered as Super Class contractor with Govt. of Odisha. Contractors registered in equivalent grade outside Odisha are also eligible. However, they shall get themselves registered in Super Class in the State of Odisha before signing of agreement.

1.2. The bidder or the partner(s) of the consortium must be in possession of valid HT Electrical Contractor' License issued by Electrical Licensing Board of Odisha (ELBO) failing which he will not be allowed to start. All supervisors of works shall possess appropriate valid supervisory certificate of competency issued by ELBO, Odisha and at least 50% of electrical workmen employed in the project shall possess valid workmen permit issued by ELBO.

1.3. All bidders are urged to submit a written/ online request immediately upon receipt of the tender documents for the matter where drawings/ exhibits (that could not be up loaded in Web due to capacity limitation)/ clarification and/ or additional information are desired, along with the details of work. All such request should reach the authority inviting tender at least two day before the pre-bid conference.

1.4. The bidders are advised to visit the site before quoting the rates for price bid.

They should ascertain all the required data for completion of the UGPL system including power connectivity substation and associated sub-transmission/ HT/LT lines and any such other data required for designing of the line & substation.

1.5. The tender document shall be submitted as per procedure laid down in Section -II, Para No. 15, for submission of tender. Documents shall be typed neatly and legibly and every page shall be consecutively numbered.

1.6. Tender shall be opened as per procedure laid down in Section – II, Para 16.

1.7. All bidders are cautioned that bid containing any deviation from the contractual terms and conditions, specifications or requirements (complete in all respects) shall be rejected as non-responsive.

1.8. Conditional bid will be rejected outright. No condition shall be included in tender.

1.9. Alternative bids are not acceptable.

1.10. Evaluation of bid will be done when tender is considered responsive as per tender conditions.

1.11. Bidder shall have to declare regarding correctness of the information in tenders submitted in the prescribed format or provided an undertaking.

1.12. The Department reserves the right to qualify /disqualify any bidder without assigning any reason thereof.

1.13. Bidders shall be disqualified if they have made untrue or false representation in the forms, statements and attachments required in the bid documents;

Or

Record of poor performance either due to technical or financial or any other reasons.

1.14. If the bidder has submitted tender fee and Bid security/EMD, the request of the bidder for not opening of bid shall not be accepted in any circumstances.

1.15. The bidder shall have to upload all required documents as per Clause No. 14 of Section – II duly scanned with his bid. Only scanned copy uploaded shall be considered. The bid shall be considered non–responsive if any required documents are not uploaded duly scanned during online submission of bid.

1.16. ELIGIBILITY OF BIDDERS

1.16.1. The bidder / firm / company must be registered with Government of Odisha or any other state/UT of India and Central Government with valid registrations.

1.16.2. Self-attested registration documents may be submitted in respect of clause-1.16.1

1.16.3. The bidder/firm/company should not have been black listed in the last five financial years in any department in Govt. of Odisha or in any other state/Union Govt. due to any reasons.

1.16.4. To be eligible for participation in the tender, an Applicant shall fulfil the following conditions of eligibility:

Minimum Technical Capacity in executing eligible projects:

For demonstrating technical capacity and experience (the "Technical Capacity"), the bidder as a prime contractor in the last 5 (five) years (5 years prior to the FY of invitation of tender and including current FY i.e from 2021-22 to 2026-27).

(a) should have Satisfactorily completed (not less than 80% of the original contract value) at least one similar work comprising work of Survey, Design, Supply, Execution, Installation, testing and commissioning of UGPL network in Irrigation projects / water supply project of value not less than **Rs. 36.76** crore (40% of the Contract Value) at financial year 2026-27 (bid invitation year) price level.

Similar nature of work means:

- Pressurized/ Gravity UGPL Irrigation Project
- Water supply project

Weightage of 10% per year shall be given on cost of the satisfactorily completed works of previous years to bring them to the current price level during last five years including current financial year. (Weightage to be given on year-wise break up of cost component of completed work to bring then to current price level).

and

(b) Should have completed supply, laying, jointing, testing &commissioning of MS/DI/GRP/PSC Pipes of **minimum 600 mm & above diameter for a minimum length of 9.89 KM** in any one year during last five financial year& including current FY.

and

(c) Should have completed supply, laying, jointing, Testing & commissioning of HDPE/PVC minimum 110 mm & above diameter for a **minimum length of 39.58 KM** in any one year during last five financial year & including current FY.

(i) All the experience cited for evaluation of technical capacity should be supported with appropriate self-attested client certificate duly signed from an officer not below the rank of Divisional Engineer or equivalent authority (**Experience Certificates from State Government / Central Government /UTs/State PSUs /Central PSUs projects are to be considered only**).The Experience certificate issued by the **State PSUs must carry the counter signature of the concerned Engineer-in-Charge not below the rank of Executive Engineer or equivalent authority.** In that case, both the original State PSU and the authorized Sub-Contractor will be treated at par as prime contractor. *The detail correspondence address/Fax number/phone no./ e-mail Id of officer issuing certificate shall be furnished*.

(ii) Experience cited with out supporting credentials from client shall not be considered for evaluation.

(iii) The projects proposed for assessment of Technical Capacity should be submitted in the prescribed format.

1.16.5. Minimum Financial Capacity:

1.16.5.1. The Applicant should have in the last 5 financial years (from FY2021-22to FY2025-26) achieved a minimum annual turnover of Rs. **68.93**Crore(in all types of Civil Engineering construction work only) at FY 2026-27 (i.e. bid invitation year) price level in any one financial year. Weightage of 10% per year shall be given on financial turnover of pervious years to bring them to current price level.

Note- Annual turnover is the one and half times of the estimated annualized cost of tender.

1.16.5.2. Audited Balance Sheets and Profit and Loss account for the FY 2021-22 to FY 2025-26shall be furnished.

1.16.5.3. Financial Capacity shall be submitted in the manner stated in Annex-3 supported through Annex-4 duly certified by a practicing Chartered Accountant.

1.16.5.4 **Credit Facilities:**

The intending bidders must possess credit facilities of not less than Rs.**18.38**crore and furnish the credentials from any Nationalized / Scheduled Commercial Bank located anywhere in the country with branch at Brahmapur along with the bid against the specific work by mentioning the name of the work and tender identification number in prescribed proforma as mentioned in Annexure 12(A) ofSection-III.

The bank certificate shall be in its standard format of bank or in the prescribed format provided in DTCN.

Further conditional bank certificate and subsequent clarifications issued by Bank authority will not be accepted and the bid will be rejected.

1.16.6 Availability of Plant & Machinery:

The bidder should produce documentary evidence regarding availability of key plant and machineries and equipment in working condition required for execution of the work (either owned in his name or obtained on hire purchase scheme or by hiring from the reputed forms/ Contractor's firm). If the machineries are to be procured for specific period for completion of the work on lease/ rental basis, then a copy of registered MOU must be attached. The contractor should attach an affidavit that the plant and machinery/ equipment are free and will be available during execution of work.

2.0 DEFINITIONS.

In this document the following words and expressions have the meaning hereby assigned to them.

2.1. **Bidder:** firm, Limited Company or Corporation.

2.2. **Contractor:** Shall mean the Bidder whose bid will be accepted by the Owner for the award of the Work and shall include such successful Bidder's legal representatives, successors and permitted assignees.

Prime Contractor- A contractor/agency who has executed directly any work or through an agreement with any Govt. Organization/UTs/Central Govt./Central PSUs/State PSUs.

2.3. **Government / Owner / Employer:** Means the Government of Odisha / Department ofWater Resources (or Employer or Owner).

2.4. **Online:**Any activitythat isdone onwebsite is referred as 'Online' activityfor e.g., Submission of Price Bid online would mean that the Price Bid has to be submitted on the prescribed website.

2.5. **Offline:** Any activity that is done in conventional route is referred as 'Offline' activity fore.g.- Submission of Earnest Money Deposit in Offline fashion would mean the Earnest Money Deposit is to be Submitted in Form of Demand Draft and is to be physically sent to the concerned officer.

2.6. **e-Tender:** Tender in which you can participate online by means of log in on to the respective website is e-Tender.

2.7. **Digital Signature:** Any electronic documents, which contains encrypted message digest usinghash algorithm and Tenders public key is known as Digitally Signed Documents and the process of generating such document is called digitally signing it.

2.8. **Scanned Copy:** Electronic Copy of any document generated using a Scanner is called scanned copy.

2.9. **System:** Means the computer which host's the website (www.tendersodisha.gov.in) where bidders can participate in the tendering process online.

2.10. **Upload:** The process of transferring electronic document from bidder's computer using internet connection to the website is called uploading.

2.11. **Approved / Approval:** Means approval in writing.

2.12. **Construction Plant:** Means all equipment, appliances or things of whatsoever nature required for the execution, completion or maintenance of the work or temporary works but does not include materials or other things intended to form or forming part of permanent work.

2.13. **Contract:** Means the instructions and information for bidders, general and special conditions of contract, specifications, drawings, tender (including schedules of quantities & tender prices), the formal agreement and all addenda and attachments related to the above.

2.14. **Drawings:** Means the drawings referred to in the specifications, any modifications of such drawings approved in writing by the SUPERINTENDING Engineer, and such other drawings as may from time to time be furnished or approved in writing by the Engineer-in-charge.

The contractor will be given a copy of the Government / Department authorization designating the Engineer-in-charge by designation and delegating him his authority at the time when contract is signed. It is however, to be distinctly understood that, no delegation of powers shall be made to such departmental assistants or subordinates, except in respect of supervision to ensure compliance of the contract conditions.

2.15. **Engineer/Engineer-in-Charge:**Means theSuperintending Engineerin chargeof the works, specified partsof theworks underthe contractor suchother departmental Assistant Engineers or Junior Engineers to whom the Engineer-in- charge may have delegated certain duties, acting separately within the scope of the particular duties entrusted to them.

2.16. **Contract Price:** Means the agreed amount stated in the Contract Agreement for the design, execution and completion of the works on EPC mode and the remedying of any defects, and includes adjustments (if any) in accordance with the Contract.

2.17. **Contractor's Equipment:**Means allapparatus, machinery, vehiclesand other things required & brought to site by the contractor, for the execution and completion of the works and the remedying of any defects. However, Contractor's Equipment excludes Temporary works, Employer's equipment (if any) plant, materials and any other things intended to form or forming part of the permanent works.

2.18. **Goods:** Means Contractor's Equipment, Materials, Plant and Temporary Works, or any ofthem as appropriate.

2.19. **Materials:** Means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply only materials (if any) to be supplied by the Contractor under the Contract.

2.20. **Permanent Works:**Meansthepermanentworkstobedesignedandexecutedby theContractor under the Contract.

2.21. **I.S.S/ B.I.S:** Means Indian Standard specifications.

2.22. **Month:**Means fromthe beginningof agiven dateof calendarmonth tothe end of preceding date of the next calendar month.

2.23. **Week:** Means seven consecutive days.

2.24. **Rupees/`:** Means Rupees of Indian Currency.

2.25. **Site:** Means the lands and other places on, under, in or through which, the works are to be executed or carried out and any other lands or places provided by the Owner for the purposes of the contract together with such other places as may be specifically designated in the Contract or subsequently approved as forming part of the site.

2.26. **Superintending Engineer:** Means the Superintending Engineer in overall charge of the works i.e. Engineer-in-Charge.

2.27. **Temporary Works:** Means all temporary works of every kind required for performance of the Contract.

2.28. **Works:** Means the works to be executed in accordance with the contract.

2.29. **Country:** Means the Country in which the site (or most of it) is located, where the Permanent Works are to be executed i.e. INDIA.

2.30. **'Sub-Contractor'** shall mean the person named in the Contract for any part of the Works or any person to whom any part of the Contract has been sub-let by the Contractor with the consent in writing of the Engineer and will include the legal representatives, successors and permitted assigns of such person.

2.31. **'Consulting Engineer'/'Consultant'** shall mean any firm or person duly appointed as such from time to time by the Owner.

2.32. **'Specification'** shall mean the Technical Specifications forming a part of the Contract and such other schedules and drawings as may be mutually agreed upon.

2.33. The term **'Erection Portion'** of the Contract Price shall mean the value of field activities of the Contract including erection, testing and commissioning to be performed at Site by the Contractor.

2.34. **'Manufacturer's Works'** or **'Contractor's Works'** shall mean the place of work used by the Manufacturer, the Contractor, their Collaborators or Subcontractors for the performance of the Works.

2.35. **'Inspector'** shall mean the Owner or any person nominated by the Owner from time to time, to inspecttheequipmentstoresorWorks under the Contract and/or the duly authorized representative of the Owner.

2.36. **'Notice of Award of Contract'/'Letter of Award'/'Telex of Award'** shall mean the official notice issued by the Owner notifying the Contractor that his proposal has been accepted.

2.37. **'Date of Contract'** shall mean the date on which both the parties have signed the ContractAgreement.

2.38. **'Writing'** shall include any manuscript, type-written or printed statement, under or over signature and/ or seal as the case may be.

2.39. Whenthewords'Approved','SubjecttoApproval','Satisfactory','Equalto','Proper''Requested', 'As Directed', 'Where Directed', 'When Directed', 'Determined By', 'Accepted','Permitted' or words and phrases of like import are used, the approval, judgment, direction etc. is understood to be function of the Owner/Engineer.

2.40. **"consumer installation":**means anycomposite electricalunit includingelectric wires, fittings, motors, transformers and apparatus portable and stationary, indoor, outdoor and underground erected and wired by or on behalf of the consumer in one and at the same premises

2.41. 'Completion of **Erection of Sub-Station'** shall mean the erection of all the equipment &accessories within boundaries of sub-station as per the scope of work & dry test run.

2.42. **'Completion of Erection of HT Lines'** shall mean the Completion of erection of line from sub-station or from tapping point to the distribution transformer & dry testing of the same.

2.43. **'Completion of Erection of Distribution Lines'** shall mean Completion of all lines from a distribution transformer to consumer including erection of service lines, if in scope of contractor & dry testing of the same.

2.44. **'Completion of Commissioning'** for electrical works shall mean the Charging & continuous operation of the sub-station, transformers & lines for 48 hours without any interruption.

2.45. **'Guarantee Period'/Maintenance Period'** shall mean the period during which the Contractor shall remain liable for repair or replacement of any defective part of the Works performed under the Contract.

2.46. **'Codes'** of electrical works shall mean the following, including the latest amendments, and/or replacements, if any:

a) International Electro-technical Commission, Geneva, Switzerland i.e. IEC.

b) Indian Electricity Act, 1905, and Rules and Regulations made there under.

c) Indian Factory Act, 1948, and Rules and Regulations made there under.

d) Indian Explosives Act, 1884, and Rules and Regulations made there under.

e) Indian Petroleum Act, 1934, and Rules and Regulations made there under.

f) A.S.M.E. Test Codes.

g) A.I.E.E. Test Codes.

h) American Society of Materials Testing Codes.

i) Bureau of Indian Standards, New Delhi.

j) Other Internationally approved standards and/ or Rules and Regulations touching

3.0 GENERAL DESCRIPTION OF THE WORK:

Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow) system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project

The project wise details are given below.

latitude- 18°55’12.5” N ,longitude- 84°08’25.4”E ,District-Gajapati

SL. No.	Block	Village Name	Approx CCA in Ha.
1.	Gumma	Hatibadigopinathapur	85.685
2.	Gumma	Naraharipur	53.028
3.	Gumma	Padmapur	83.066
4.	Gumma	Jilipadu	66.365
5.	Gumma	Kulanda	21.749
6.	Gumma	Jiba/Dhepaguda	49.281

7.	Gumma	Dhepaguda	21.436
8.	Gumma	Parsurampur	58.128
9.	Gumma	Bidua	113.837
10.	Gumma	Jogipadu	74.566
11.	Gumma	Jami	100.384
12.	Gumma	Khetada	23.696
13.	Gumma	Upalasingh	79.064
14.	Gumma	Jolla	159.759
15.	Gumma	Pulkota	23.351
16.	Goshani	Kharada	23.623
17.	Goshani	Chandankhala	109.921
18.	Goshani	Jajpur	103.376
19.	Goshani	Parikotta	108.304
20.	Goshani	Anarada	36.226
21.	Goshani	Katalkaitha	99.988
22.	Goshani	Jagatsinghpur	48.038
23.	Goshani	Rautapur	68.452
24.	Goshani	Madhusudhanpur	19.662
25.	Goshani	Podani/Katalkaitha	40.549
26.	Goshani	Ranadevi	23.262
27.	Goshani	Badapratapur	51.693
28.	Goshani	Tulasipadu	47.158
29.	Goshani	Relisahi	31.126
30.	Kashinagar	Nilakathapur/ Chitrakaralakkshmipur	53.016
31.	Kashinagar	Chitrakaralakkshmipur/Gunabhadra	60.722
32.	Kashinagar	Ranipeta	40.361
		Total Area (Ha.) =	**1978.872**

4.0 BRIEF DESCRIPTION & SCOPE OF WORK UNDER THIS TENDER

4.1 The project is proposed to be implemented on Engineering, Procurement and Construction (EPC) on single point responsibility. The design is based on a prefeasibility report and topo sheet planning. Detailed survey work has not been done. On the basis of preliminary design done, tentative salient features of the Project have been presented in the Basic Project Profile under Appendix BPP. The bidder shall be responsible for the detailed survey, planning, investigation, designs, estimates, getting approval of the design, drawings, estimates, preparation of technical datasheet, Quality Assurance Programme, construction programme etc. for all components of the project, construction, supply and erection and installation of all Civil, Mechanical, Electrical and Instrumentation Control works of systems as per the work specifications provided in the bid documents, and commissioning of the project on EPC mode followed by operation and maintenance of the entire project in the package for a period of Five years or Five kharif seasons whichever is more.

4.2 **THE MAJOR COMPONENTS OF THE PROJECT SHALL INCLUDE BUT NOT LIMITED TO**

4.2.1 Intake well/Intake system including protection works.

4.2.2 Pump house & Control Room

4.2.3 Pumping Equipment and all electro-mechanical equipment, auxiliaries complete in all respect

4.2.4 Rising main/Pressure mains &Delivery chamber(optional) along with all auxiliary control devices. If no delivery chamber to be provided, then the Rising main/pressure Main should be consideredupto the off take of last Minor.

4.2.5 The pipe distribution network for irrigation up to 1 Ha chak through multiple outlets along with all auxiliaries should also be planned to fill the village tanks in the command area for community use.

4.2.6 Providing permanent service roads for the access to pump house and switch yard for ease of operation & maintenance.

4.2.7 Staff Quarter / Operation room

4.2.8 Instrumentation and control works for flow measurement, vibration, temperature and pressure for the pump and motor assembly, and control parameters of the switch yard.

4.2.9 Power System connectivity to the system through Electrical distribution Sub-Station by connection to nearest EHT grid stations.

4.2.10 Engagement of local NGOs approved by the CE&BM,RBVN Basin, Brahmapur to carry out formation of WUAs, providing training for efficient irrigation, productivity enhancement, value addition, market linkage etc so as to increase the agriculture income and suitability of the farmer in the command area.

4.2.11 Operation & Maintenance of the UGPL system for five years or five Kharif seasons whichever is more.

4.3 DETAIL SCOPE OF WORK :

4.3.1 Survey & Investigation: Survey and Investigation shall include but not limited to following activities Detailed investigation for location of the pump house, distribution chamber alignment of pipe lines, electric lines connecting to the earmarked EHT grid and/or Distribution network, electrical sub stations & sub soil explorations like trial pits, safe bearing capacity of soil strata etc in different locations.

4.3.2 Fixing of permanent & temporary benchmark stones and transferring the values of the levels to them. The permanent bench mark is to be placed near the pump house, distribution chambers and other places of importance.

4.3.3 Collection of revenue village maps sheets, demarcation of command area, contour survey of the command area with contour interval of 0.5m, survey along the alignment of Rising main/Pressure main including alternatives, marking the location of pump house complex showing electrical sub-station, marking the alignment of distribution systems in the village sheet, assessment of the CCA of the project from the records of the rights of villages (R.O.R).

4.3.4 Prepare list of beneficiaries chak wise, with holding area & category (kisam) of land coming under CCA.

4.3.5 Preparation of site survey plans for all crossing of the pipe lines to the rivers, nalas, roads, drain, railway lines existing water, gas & oil pipes etc.

4.3.6 Preparation ofland schedulefor acquisitionof landfrom privateowners &processing it for acquisition till completion of the process. Preparation and processing of proposal and arranging for having clearance for use of land for the project in forest area wherever required. Processing for obtaining right of way / use permission from different Govt., Semi Govt. and private authority.

4.3.7 Preparation of land schedule for alienation of Government land & processing of the same to the appropriate authority.

4.4 DESIGN:

4.4.1 Preparation of separate plan for the pump station, electrical substation, electrical connectivity, Rising main/Pressure main, distribution chambers and distribution networks.

4.4.2 Design of all components and sub components including pump station structure, intake system, crane, pumps, Rising main/Pressure mains, distribution chamber, distribution network, electrical substation, transmission lines etc.

4.4.3 Processing for approval of all the designs & drawings from competent authorities and getting it approved. Chief Engineer & Basin Manager, RBVN Basin, Brahmapur shall be the Design approving authority.

4.5 PROCUREMENT & INSTALLATION:

4.5.1 Preparation of Procurement schedule for machineries and equipment.

4.5.2 Making arrangement for pre-procurement quality verification by third party.

4.5.3 Procurement of the machineries and equipment required for the work as per the specifications of the agreement.

4.5.4 Installation and commissioning of machineries and equipment as per the approved drawings

4.6 WORKS:

4.6.1 Preparation of CPM/PERT chart for scheduling the construction as per the mile stone.

4.6.2 Intake structures including protection works.

4.6.3 Pump station & Pumping Equipment.

4.6.4 Rising main/Pressure mains, distributiontank orchamber, distributionthrough pipe systems including civil, mechanical & electrical equipment.

4.6.5 Electrical Sub-Station & connection to selected EHT grid and/or Distribution networks.

4.6.6 Instrumentation and control works for flow measurement, vibration, temperature and pressure for the pump and motor assembly & control parameters of switch yard.

4.6.7 Construction of permanent approach road to pump house, Delivery chamber(optional)&switchyard , Staff quarter /operation room for ease of operation and maintenance

4.6.8 Construction of fencing for the pump house complex and switchyard.

4.6.9 Arboriculture at pumping station, approach roads & other available Govt. land in the vicinity.

4.6.10 PIMbyEngaginglocal NGOs approved by theCE&BM,RBVNBasin,Brahmapur carry out formationof WUAs, providing training for efficient irrigation, productivity enhancement, value addition, market linkage etc so as to increase the agriculture income and suitability of the farmer in the command area.

4.7 Operation & Maintenance:

4.7.1 Operation &Maintenance ofthe systemis for five years or five kharif water supply seasons whichever is more.

4.7.2 Capacity building of O&M staff of Government staff for the system.

4.7.3 Preparation of operation and maintenance manual of the system.

4.7.4 Continued capacity building and training up to market linkage of WUAs by local NGO.

4.8 Other Responsibilities:

4.8.1 The scope also includes necessary co-ordination and management to obtain consent or permission from affected bodies/ authority/ parties whose damage to property is involved in construction of all the components. The contractor will be responsible for processing all the documents required for permission for right of way/right of use from Govt., Semi Govt. and private parties etc. All statutory charges required to be paid for this shall be borne by the Govt. The Engineer-in-Charge will sign the necessary documents required for permissions/ clearances/land acquisition. Required co-ordination for sanction from the concerned authority &NOC from the concerned authority / field owner for satisfactory completion shall be provided by the bidder. For laying pipeline under railway, roads, existing gas, oil or water pipe lines etc. all the

statutory charges shall be borne by the Govt. For execution of the work, required NOC is to be obtained from the concerned department by the bidder. For Acquisition of land from private land owners, thecontractor isto demarcate the acquisition area, prepare the land acquisition schedules & other schedules prescribed by Govt. & process the acquisition as per the prevailing land acquisition Act of Govt. of Odisha.

4.8.2 The contractor shall be responsible for compensation to be paid for standing crops, trees etc. and the cost there upon shall not be borne the Govt.

5.0 PARTICULARS ARE PROVISIONAL

The particulars of the proposed works given herein as well as in the accompanying brief note are provisional and must be considered only as advance information to assist applicants.

6.0 COMMUNICATION

6.0.1 **Airports:** Bhubaneswar is the nearby airports in Odisha.

6.0.2 **Railways:**Paralakhemundi railway station is the main railway station nearer to the works.

6.0.3 **Roads:** Nearest town approach is Paralakhemundi town which are connected by National highway. The sites of pumping schemes are approachable by MDR, PMGSY roads &Panchayat roads.

6.0.4 **Approach to work site:** The bidder has to make his own arrangement for approaching to the work site from nearest point of connecting roads.

7.0 GENERAL FACILITIES:

7.1 **Transport Communication Facilities:** The contractor has to make arrangement at his own cost to transport all his construction equipment, construction materials and labour to work site.

7.2.1 **Availability of Labour:** Both Semi- Skilled & unskilled labour required for the work are available in project area and it is preferable to engage local labour, However the Contractor must make his own arrangements for labour/ machineries/ equipment.

7.2.2 **Availability of petrol, Diesel and other lubricants:** The nearest petrol pumps for procurement of petrol, diesel and other lubricants are available at nearest State High ways/ National high ways/ Sub- Division/District Head Quarters. The contractor shall make his own arrangement for procurement of same at his own cost required for the machineries and equipment engaged for the work.

7.2.3 **Electricity Supply:** The Contractor shall make his own arrangement forextension of electric connection at his own cost from the Distribution Companies if so required by him.

7.2.4 **Housing Facilities:** Private house may not be available in the vicinity of the work site. The Contractor shall make his own arrangement for housing the labourers, workers and staff at the work site.

7.2.5 **Medical Aid:**The Health Centre is available at Govt. Hospitals at the nearest Block/Sub-Division/District headquarters.However, the Contractor shall make first aid arrangement at his own cost in accordance with rule and regulations of prevailing Labour Act.

7.2.6 **Post, Telegraph & Telephones:** Post,Telegraph,Telephones& Fax are available at Block/ Sub-Division/ District headquarters. Most of the sites are covered by different mobile networks.

8.0 CLIMATE AND WORKING SEASON

8.1 Climate: The Project area has moderate climate with temperature varying from 150C to 470C. The rainy season is generally confined to four months from 15th June to 15th October.

8.2.1 Working Season: Since rainfall is confined mainly to the period starting from middle of June to the middle of October, it may be necessary to close the work of concrete during the monsoon. However, the work of earthwork and pipeline work can be continued in dry spells during the monsoon.

9.0 COST OF BIDDING

All costs and expenses incidental to preparation of the proposals, to attend discussion and conferences, if any, including pre award discussion with the successful bidder, technical and other presentation including any demonstration, etc. shall be borne by the bidders and the Employer shall bear no liabilities whatsoever on such cost and expenses.

10.0 LANGUAGE OF TENDER

Tender documents shall be submitted in prescribed form in English only. All literature or correspondence in connection with tender shall be made in English only.

11.0 BID VALIDITY:

11.1 Bids shall remain valid for a period of not less than **One hundred eighty(180)** days from the last date of submission of Bids.

11.2 During the above mentioned period no plea by the Bidder for any sort of modification of the Bid based upon or arising out of any alleged misunderstanding of misconceptions or mistake or for any reason will be entertained.

11.3 In exceptional circumstances, prior to expiry of the original time limit, the Bid Inviting Officer may request the bidders to extend the period of validity for a specified additional period. Such request to the bidders shall be made in writing.

12.0 METHOD OF TENDERING

12.1 If the tender is uploaded by an individual, it shall be digitally signed by the individual.

12.2 If the tender is uploaded by a proprietary firm, it shall be digitally signed by the proprietor.

12.3 If the tender is uploaded by a firm in partnership, it shall be digitally signed by a partner holding a registered power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the tender, a certified copy of the partnership deed, full name, current address of the firm, current addresses of all the partners of the firm shall also accompany the tender.

12.4 If the tender is uploaded by a limited company or a corporation, it shall be digitally signed by a duly authorized person holding the power of attorney for signing the tender in which case a certified copy of the power of attorney shall accompany the tender. Such limited company or corporation may be required to furnish satisfactory evidence of its existence before the contract is awarded. They should also furnish Articles of Memorandum of Association.

12.5 Each bidder shall submit only one bid for the particular work. A bidder who submits more than one bid in the particular work will be disqualified.

13.0 EARNEST MONEY DEPOSIT (EMD)

13.1 The bid must be accompanied with EMD should be transferred through online mode / NSC/ Post Office Saving Account/ Post Office Time Deposit Account /KishanVikasPatra/unconditional and irrevocable Bank Guarantee (BG) in favour of the Superintending Engineer, Gajapati Irrigation Division, Paralakhemundi as specified in the Bid document in the standard format on any Nationalized/ Scheduled Commercial Bank located in India counter guaranteed by its local Branch at Bhubaneswar with facility of authentication & encashment at State Bank of India Paralakhemundi Main Branch,IFSC Code-SBIN0000151,A/c-35538071969/e-Bank Guarantee executed on the National e-Governance services Ltd(NeSL) Digital document execution

portal/Insurance surety bond issued by an Insurance company authorised by IRDAI.(Standard format for Bank Guarantee is provided at Annexure-6 of SECTION-III in the bid document.)

13.2 (i) The bid without EMD will be summarily rejected.

(ii)The EMD will be forfeited in case, where bidders/tenderers back out from the offer before acceptance of tender by the competent authority.

13.3 The bidder shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor in the following cases:

(i) In case of successful Bidder, if the bidder fails to submit ISD & Additional Performance Security as specified in instructions to bidder.

(ii) In the case of a successful Bidder, if the bidder fails to sign the Contract for whatever the reason.

13.4 If required, the Department may request to extend the bid validity period.

14.0 ACCOMPANIMENTS TO TENDER

The bidder shall have to upload following legible documents duly signed digitally.

14.1 EMD/Bid Security.

14.2 Scanned copy of PAN/GSTN.

14.3 Declaration showing the works on hand with the bidder and the value of works that remain to be executed in each case in prescribed forms required for evaluation of qualification of the bidder.

14.4 Scanned copy of the certificate of Registration as Approved Bidder of concerned State Government / Railway / CPWD / Government bodies.

14.5 Scanned copy of current year solvency certificate & Credit Facility available from any nationalized bank / scheduled bank so as to access the capability of the bidder for execution of work.

14.6 The copy of power of attorney, if power is delegated for signing the bid to other person by the bidder. (As per para 12 of Section-II)

14.7 Forms with Annexure shall have to be submitted in Electronic form and where the space / window of the prescribed form is not sufficient to fill required matter, bidder may submit the details in separate “scanned sheet”. In online submission, the bidders have to mention relevant form number in heading of above mentioned separate “scanned sheet”,

14.8 Other documents as mentioned in Tender Notice.

14.9 All other document mentioned in the tender documents in physical form shall also be uploaded.

15.0 SUBMISSION OF TENDER

15.1 The bidders shall submit their tender online only. In case of any failure, malfunction or breakdown of electronic system used during the e-procurement process, the tender inviting authority shall not accept any responsibility for failure or breakdown other than in those systems strictly within their own control.

15.2 The e-procurement applications are PKI (Public Key Infrastructure) enabled and supports the digital Signature certificates(DSC) of appropriate class (Class-II or Class-III) issued from a registered Certifying Authority (CA) as stipulated by Controller of Certifying Authorities(CCA), Government of India such as n- code, Sify, TCS, e-Mudhra etc., for signing the bids at the time of submission by contractor. The contactor has to procure digital Signature certificates issued by above authority as per the procedure. Digitally signed bids are to be submitted electronically through e-procurement, without which the tender will not be considered for opening the price Bid.

15.3 Suitable training will be given by State Procurement Cell, NirmanSoudh, Bhubaneswarto the bidders interested to know the procedure of bid submission on e-procurement platform. The telephone No is 18003456765 (Toll free), 0674-2530998

15.4 The bidderswould berequired toregister onthe e-procurement market place www.tendersodisha.gov.inand submittheir bid online. The Department willnot acceptany bid submitted in the paper form. The bidders should quote their Tender contract price at the prescribed field / place provided in the e-market place.

15.5 The bidder may ask question online in the e-procurement portal using his/her DSC, provided the questions are raised within the period of seeking clarification as mentioned in the particular of tender. The officer inviting tender will clarify queries related to the tender.

15.6 Intending bidders can contact the office of the Chief Engineer & Basin Manager,RBVN Basin, Brahmapurfor any clarification, information on any working day during working hours. No clarification will be entertained after the pre-bid meeting.

15.7 The bidders are requested to submit the bids in single stage with double covers. One cover (i.eCover-I) is for Technical bid and another cover (i.e Cover-II) is for financial bid.

15.7.1 All Bidders including joint venture should submit the certified copies and fulfil the following criteria.

a) The bid shall include all the informationlisted asbelow :-

(i) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;

(ii) Total monetary value of construction work performed by each partner during the last five years;

(iii) Experience in works of a similar nature and size for each partner in the last five years, and details of works or committed contracts; and clients who may be contacted for further information on those contracts;

(iv) Major items of construction equipment proposed to carry out the Contract;

(v) Qualifications and experience of key site management and technical personnel proposed for the Contract;

(vi) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;

(vii) Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources);

(viii) Authority has the right to seek references from the Bidder's bankers;

(ix) Information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last five years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute if any ;

(x) The proposed methodology and programme of construction including Environmental Management Plan backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

b) Bids from joint ventures are acceptable of tentative project cost **Rs.50.00 Crores and above**.

Bids from joint venture of maximum two firms as partnersare acceptable.

For determining the eligibility of Applicants for their qualification hereunder, the following shall apply:

A. (a) The Applicant for qualification may be a single entity or a group of entities (the "Joint Venture"), coming together to take part in Bid competition. However, no applicant applying individually or as a member of a Joint Venture, as the case may be, can be member of another Applicant. The term Applicant used herein would apply to both a single entity and a Joint Venture.

(b) An Applicant may be a company incorporated under the Indian Companies Act, 1956 or a combination of companies with a formal intent to enter into a Joint Venture agreement or under an existing agreement to form a Joint Venture. A Joint Venture shall be eligible for consideration subject to the conditions as mentioned.

(c) An Applicant shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Applicant found to have a Conflict of Interest shall be disqualified. An Applicant shall be deemed to have a Conflict of Interest affecting the Bidding Process, if:

(i) the Applicant, its Member or any constituent thereof and any other Applicant, its Member or any constituent thereof have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of an Applicant, its Member thereof (or any shareholder thereof having a shareholding of more than 5 per cent of the paid up and subscribed share capital of such Applicant, Member, as the case may be), in the other Applicant, its Member is less than 5 per cent of the subscribed and paid up equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act 1956. For the purposes of Clause mentioned above, indirect shareholding held through one or more intermediate persons shall be computed as follows: (aa) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the intermediary is less than 26% of the subscribed and paid up equity shareholding of such intermediary; or

(ii) a constituent of such Applicant is also a constituent of another Applicant; or

(iii) such Applicant receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Applicant, or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Applicant, its Member thereof; or

(iv) such Applicant has the same legal representative for purposes of this Application as any other Applicant; or

(v) such Applicant has a relationship with another Applicant, directly or through common third party/ parties, that puts either or both of them in a position to have access to each others' information about, or to influence the Application of either or each other; or

(vi) such Applicant has participated as a consultant to the Authority in the preparation of any documents, design or technical specifications of the Project.

(d) An Applicant shall be liable for disqualification if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Applicant, or any of its Members, as the case may be, in any manner for matters related to or incidental to the Project. For

the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Applicant, its Member in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of the NIT

(e) or will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

Explanation: In case an Applicant is a Joint Venture, then the term Applicant as used in this document, shall include each Member of such Joint Venture.

B. The bid and, in case of a successful bid, the Agreement, shall be signed by the lead partner so as to be legally binding on all partners;

C. The partner having the highest share shall be created as the lead partner. The lead partners shall be nominated as being in charge, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;

D. the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge;

E. all partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under [c] above, as well as in the bid and in the Agreement [in case of a successful bid];

F. the joint venture agreement should indicate precisely the role of all members of JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer,

G. the joint venture agreement should be registered in India so as to be legally valid and binding on partners; and

H. a copy of the Joint Venture Agreement entered into by the partners shall be submitted with the bid vide appendix-III. Alternatively, a Letter of Intent to execute a joint Venture Agreement in the event of a successful bid shall be signed by all partners and submitted with the bid, together with a copy of the proposed Agreement

I. “A Bidder may be a firm that is a private entity, a government-owned entity-subject to IIT (Section -2) – or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. The JV shall nominate a Representative from the partners who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.

J. The joint venture should submit the certificates in the forms enclosed in Section-III.

K. In case of a Joint Venture, the JVmust **collectively satisfy the Minimum Technical Capacity, provided that all the Member must individually satisfy at least 20% requirement of Technical capacity**.

Further, the JV must **collectively and individually satisfy Financial Capacity** (i.e. Minimum Annual Turn over, Credit Facility & Bid Capacity) proportionately as defined in the joint venture agreement.The Applicant shall enclose with its application, to be submitted as per the format at Appendix-I of Section-III, complete with its Annexes.

L. The Applicant should submit a Power of Attorney as per the format at Appendix-I of Section-3, authorizing the signatory of the Application to commit the Applicant. In the case of a Joint

Venture, the Members should submit a Power of Attorney in favour of the Lead Member as per format at Appendix-II of Section-III.

M. In case the Applicant is a Joint Venture, it shall comply with the following additional requirements:

a) Number of members in a Joint Venture shall not exceed 2 (two);

b) Subject to the provisions of clause (a) above, the Application should contain the information required for each Member of the Joint Venture;

c) the Application should include a brief description of the roles and responsibilities of individual members, particularly with reference to financial, technical and defect liability obligations;

d) an individual Applicant cannot at the same time be member of a Joint Venture applying for qualification. Further, a member of a particular Applicant Joint Venture cannot be member of any other Applicant Joint Venture applying for qualification;

e) Members of the Joint Venture shall have entered into a binding Joint Bidding Agreement, substantially in the form specified at Appendix-III of Section-III (the "Jt. Bidding Agreement"), for the purpose of making the Application and submitting a Bid in the event of being qualified. The Jt. Bidding Agreement, to be submitted along with the application, shall, interalia :

(i) Convey the commitment(s) of the Lead Member in accordance with this SBD, in case the contract to undertake the Project is awarded to the Joint Venture;

(ii) Clearly outline the proposed roles and responsibilities, if any, of each member;

(iii) Commit the approximate share of work to be undertaken by each member;

(iv) Include a statement to the effect that all members of the Joint Venture shall be liable jointly and severally for all obligations of the Contractor in relation to the Project until the completion of the Project (the "Defects Liability Period") is achieved.

f) Except as provided under this Bidding Documents, there shall not be any amendment to the joint venture Bidding Agreement.

N. Any entity which has been barred by the Central/State Government, or any entity controlled by it, from participating in any project, and the bar subsists as on the date of Application, would not be eligible to submit an application, either individually or as member of a Joint Venture.

O. An Applicant including any member should, in the last 5(five) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant or Member, as the case may be, nor has been expelled from any project or contract by any public entity nor have had any contract terminated by any public entity for breach by such Applicant or Member.

P. The Applicant including any Member may provide details of all their on-going projects along with stage of litigation, if so, against the Authority/Governments.

The Applicant including any member may also provide details of on-going process of blacklisting if so, under any contract with Authority/Government.

Cover-1:Technical bid: This will contain the following documents in three PDF files.

File - I: This shall contain

1. Letter of Submission (Form A),
2. Information of Cost of Bid Document & EMD,
3. Registration Certificate,

4. GST Registration No.,
5. Any other Registration No.(if any)
6. PAN,
7. Latest income tax return certificate,
8. Declaration Affidavit (Form E),
9. No Relationship Certificate (Form D),
10. Power of Attorney (annexure-5).

File-II: This shall contain

1. Assessed Available Bid capacity as specified in clause no. 16.5 under "INSTRUCTION TO BIDDERS",
2. Details of Financial Capacity (annexure-3 & 4),
3. List of works in hand(annexure-2B),
4. List of machinery &Equipment available for the work (annexure-2D),
5. Similar nature of works executed (annexure-2A)
6. Details of personnel to be engaged in this work (annexure-2E), Additional information (annexure-11)
7. Credit Facility as per Annexure-12(A) and Solvency Certificate as per Annexure-12(B) (certificate Attached)
8. Litigation History (annexure-10)

   And any other document required as per bid documents.

File-III: This shall contain

1. Details of technical proposal along with all technical data in the format in accordance with technical specification of bid document describing broadly the technology and methodology of Survey & Investigation, Planning, Design and Construction of major civil works, mechanical and electrical components along with irrigation distribution network of the project including electrical system connectivity for the project to identified EHT sub-station& Commissioning of the total project.
2. The bidder shall furnish the Methodology of the proposed Operation & Maintenance of theProjects for five years with particular reference to minimum Life Cycle Cost of the Projects indicating the energy cost and other O&M expenses separately.
3. A construction programme for completion of the project inTwenty four (24) months is to be furnished.

Cover-2: Financial bid: This will contain Price Bid (Appendix-FB) and Year wise energy consumption during 05 years of operation (Appendix–F-6) & shall be uploaded in two files.

File – I: The Price Bid (Appendix–FB) shall be in intelligent **Excel format**. This is to be downloaded from website, the lump sum price is to be filled up without any change in wording & format and uploaded.

File-II: Year wise energy consumption for 5 years of operation (Appendix– F-6)andotherinformationrequiredbytheBidinconnectionwithfinancialbidaretobeuploaded in **PDF format.**

15.8 The bidder must submit online duly filled in Forms, Schedules, i.e. of Technical bid and Forms and

Annexure of Price Bid etc. All the forms, annexure shall be submitted duly filled in electronic form & shall be available on website.

15.9 The bidder shall fill & submit the required details / data / information in the prescribed form of tender document i.e. Volume– I.

15.10 The bidder shall quote his rate only in Volume–I: Price Bid.

15.11 Tender in offline mode will not be accepted.

15.12 If EMD is not received with the tender as mentioned in Para. 13 of Section - II, tender shall be rejected.

15.13 The employer at its discretion can extend the last date for submission of tender by amending the bidding document in which case all rights and obligations of the employer and bidder will thereafter be subject to the last date as extended.

15.14 All duties, taxes, royalty and other levies payable by the contractor as per State/Central Government rules, shall be deemed to have been included in the contract value except GST quoted by the Bidder. The royalty charges vide Gazette notification dated 31.08.2004 is Annexed. The notification stipulates that the rates shall be increased by 40% from the 4thyear. Accordingly the bidder is to consider the royalty charges in their bid. The royalty charges for the use of earth, excavated from the foundation of the structure shall not be levied. In case of request made by the contractor necessary certificate to avail excise duty exemption shall be provided by the Dept.

15.15 The contractor is expected to quote the bid price in Lump Sum after careful analysis of cost involved for the performance of work complete considering all specification and conditions of contract. In case it is noticed that the price quoted by the Bidder is unusually high or unusually low, unless the Employer is convinced about the reasonableness of bid price on scrutiny of the analysis for such price to be furnished by the Bidder, it will be sufficient cause for the rejection of the bid.

15.16 The department has prepared milestones for executing the work which may be referred while bidding. In case the bidder has alternative plan for milestone, they should submit the indicative milestone at the time of submission of bid and firm mile stone after completion of survey and investigation. The bidder shall pay special attention as regards achieving of critical milestones on schedule, so as to ensure final commissioning on time. The Employer shall critically monitor both the Physical as well as Financial Targets, on monthly and quarterly basis. Shortfalls, if any, in the monthly targets shall be immediately rectified by supplementing the resources by the contractor leading to increase in the progress, at no extra cost to the Employer, so as to achieve the quarterly targets as per schedule.

15.17 The contractor will be responsible for processing of permission for right of way/right of use and land acquisition till the same is obtained. Payment of statutory charges and cost of the land will be the responsibility of Govt. Demarcation of acquisition area, preparation of schedules for acquisition is the responsibility of the contractor. Similarly preparation of all the base papers for right of way/right of usethe NOCfrom different authorities/owners is the responsibility of the contractor. The contractor should be responsible for compensation to be paid for standing crops, trees etc. and the cost there upon will not be borne by the Govt.

16.0 OPENING OF TECHNICAL BID

16.1 The Technical Bid will be opened on dt.13.11.2026 at 11.00 AM onwards on website mentioned in Para 3.0 (q) of NIT. Intending bidders or their representative who wish to participate in online tender opening can log on to www.tendersodisha.gov.in onthe due date and time after online opening of the bid by the authorized officer. The bidders who wish to remain present at Office of the Chief Engineer & Basin Manager, RBVN Basin, Brahmapur at the time of tender opening

can do so. Only one representative of each firm will be allowed to remain present. The price bid will be opened after Government's decision on technical bid of tender. All the statements, documents, certificates and technical proposals will be verified for evaluation. The clarification on particulars, if any required from the Bidders will be obtained by addressing the bidders. The bids will be evaluated against the specified parameter/criteria and the qualified bidders will be identified.

16.2 If any of the Bidders is not present at the time of opening of Bids, the Bid opening authority will, on opening the Bid of the absentee Bidder, read out and record the deficiencies if any, which shall be binding on the Bidder.

16.3 The bids not accompanying with documents as per clause No 14 of "Instruction to Bidders" will be considered as Non Responsive.

16.4 Bid capacity & the technical proposal of the bidders who have paid the requisite EMD & tender fee, submitted registration certificate, Power of attorney, No relationship Certificate, shall be scrutinized.

16.5 To qualify for award of contract each Bidder who meets the minimum qualification criteria will be qualified only if their available bid capacity is more than the employer's estimated cost of the work. The available bid capacity will be calculated as under:

Assessed Available Bid capacity = (A*N*2 - B)

Where, A =Maximum value of the turnover of the bidder in any one year during the last five years updated by giving 10% simple weightage per year to bring it to the present (Year of Invitation of tender) price level

N= Number of years prescribed for completion of the works for which, the bid is invited.

Note: If N < 1, then N value would be considered as 1.

B=Value of existing commitments of on-going works to be completed during the period of completion of the project.

NOTE: The existing Commitment will include works in respect of which LOA has been issued.

The value of existing commitment should be given in shape of affidavit before the Executive Magistrate/Notary mentioning the name of work. If the bidder fails to produce the existing commitments in the prescribed format as mentioned in form-2B of Section-III along with affidavit, his/her bid shall be rejected.

Each page of the affidavit and annexure shall be signed by Executive Magistrate/Notary failing which the bid will be rejected.

16.5 Technical Bids shall be scrutinized in accordance with the conditions stipulated in the Bid document. In case of any discrepancy or non-adherence of conditions, the Bid accepting authority shall communicate the same, which will be binding both on the Bid opening authority and the Bidder. In case of any ambiguity, the decision taken by the Bid Accepting Authority on Bids shall be final.

16.6 Department reserves the right to accept or reject any of the bid for qualification without assigning any reason thereof.

16.7 After opening of the same, the technical evaluation will be carried out & details will be scrutinized by the competent authority. In case of any clarification, same will be obtained from the bidder. After completing the above procedure& evaluation of Technical Bid the bid accepting Authority shall be moved for acceptance of the Technical Bid. The date of opening of online Price Bid will be intimated to the bidders by the bid opening authority on acceptance of the technical bid by bid accepting authority.

17.0 OPENING OF PRICE BID

17.1 On acceptance of the technical bid by the Bid Accepting Authority the date & place of opening of price bid shall be notified by the Bid Inviting Authority. The price bid of technically responsive bidders shall be opened on the notified date & time in presence of bidders or their authorized representatives who wish to be present. The details submitted by the bidders online in **Cover-II Financial Bid** shall be opened.

17.2 The responsive bidder's name and bid price shall be announced.

17.3 If more than one bid is quoted (Decimals up to two numbers will be taken for all practical purposes)either at the estimated cost put to tender or less than the estimated cost put to tender, the tender accepting authority will finalize the tender through a transparent lottery system, where all bidders / their authorized representatives, the concerned Superintending Engineer/Executive Engineer of concerned Division and DAO will remain present.(Works Department OM No. **17941/W, Bhubaneswar Dt. 08.10.26**:

18.0 EVALUATION OF PRICE BID

18.1 The prices shall be considered as filled up by the bidder online in the prescribed Financial Bid Format given in Cover- II: Financial Bid.

(i) The bid is for execution of the work on "EPC" basis. The lump sump price mentioned in Financial Bid (Appendix-FB) shall be considered for evaluation as given below.

(ii) The bidder has to furnish the execution cost in lump sum basis in Item-1 **and O & M cost of the bid for 5 years in item-2** of financial bid in appendix-FB.

(iii) The amount to be quoted by the bidder for O & M shall not be less than 5 % of the quoted execution cost.

If the bidder quoted the rate of O & M cost less than 5% of the quoted execution cost, his/her bid shall be rejected.

(iv) The year wise energy consumption units at the input point of the pumping station, for 5 years of operation, considering 1120 hours of operation per year of the pumps, shall be given by bidder in Appendix-F-6 of Financial Bid & the same shall be in **upward incremental order from 1st year to 5th year** failing which the bid shall be rejected

The unit cost of power is Rs. 4.60/kwh with yearly increment in unit cost of power is 5%. The energy consumption cost shall be derived by multiplying energy consumption unit in kwh with the unit cost of power.

18.2 **Total Cost of the bid for evaluation shall be the sum of the Bid Price quoted in Appendix-FBand total Year wise energy consumption cost for 05 years of operation in Appendix F-6.**

18.3 The tender inviting authority shall evaluate and compare the price bids of all the responsive & qualified Bidders.

18.4 Selection of Bidder among the lowest & equally quoted Bidders will be in the following orders:

18.4.1 The Bidder whose bid capacity is higher will be selected.

18.4.2 In case the bid capacity is also same the Bidder whose annual turnover is more will be preferred.

18.4.3 Even if the criteria incidentally become the same, the turnover on similar works and thereafter machinery available for the work and then the clean track record of the firm will be considered for selection.

18.4.4 In case of any discrepancy between the overall Contract price quoted in words and figures, the price quoted in words shall prevail.

19.0 PROCESS TO BE CONFIDENTIAL

19.1 Information relating to the examination, clarification, evaluation and comparison of Bids and

recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with suchprocess untilthe awardto thesuccessful Bidderhas been announced by the Bid accepting authority.

19.2 Any effort by a Bidder to influence the processing of Bids or award decisions may result in the rejection of his Bid.

19.3 No Bidder shall contact the bid inviting authority or any authority concerned with finalization of Bids on any matter relating to its Bid from the time of the Bid opening to the time the Contract is awarded.

19.4 Before recommending/accepting the Bid, the Bid recommending/accepting authority shall verify the correctness of certificates submitted to meet the eligibility criteria and specifically experience. The authenticated contracts of previous works executed by the lowest Bidder shall be called for.

19.5 If the contract price quoted by a Bidder is found to be either abnormally high or within the reasonable limits but under collusion or due to unethical practices adopted at the time of Bidding process, such Bids shall be rejected.

20.0 AWARD OF CONTRACT

20.1 The Chief Engineer & Basin Manager, RBVN Basin, Brahmapur after evaluation of price bid shall recommend to the Competent Bid Approving Authority for acceptance of the bid to the Bidder who is found qualified as per the Bid conditions and whose price bid is evaluated as the lowest responsive bidder.

20.1.1 Additional Performance Security:

As per the Govt. of Odisha, Works Department Office Memorandum No. 07764600022025-17941/W, Bhubaneswar Dt. 08.10.26:

1. The Additional Performance Security (APS) shall be calculated as a percentage of the accepted Bid Price of the selected bidder.

2. For the purpose of determining the APS, the percentage by which the accepted Bid Price is lower than the Cost Put to Tender shall be calculated and rounded off.

3. The rounded-off percentage so determined shall be referred to as the Rounding Off of Percentage Less (ROPL) of accepted Bid Price and shall form the basis for calculation of the APS in accordance with the applicable incremental rate prescribed under this Office Memorandum.

4. Rounding Off of Percentage Less (ROPL) of accepted Bid Price, i.e. the percentage by which the accepted Bid Price is less than the Cost Put to Tender, shall be as follows:

   - Where the decimal fraction is less than 0.50, the percentage shall be rounded off to the next lower whole percentage.
   - Where the decimal fraction is 0.50 or above, the percentage shall be rounded off to the next higher whole percentage.
   - For avoidance of doubt, 13.25% less shall be reckoned as 13% less, whereas 13.50% less shall be reckoned as 14% less, for the purpose of determining the applicable APS under this Office Memorandum.

5. Calculation of Additional Performance Security:
   - Where the accepted bid price is such that the ROPL is up to (-)10%, no additional performance security is required.
   - Where the accepted bid price is such that the ROPL is below (-)10% but not below (-)20%,

the additional performance security percentage shall be incremented by 0.2% for every percentage of ROPL below (-)10%; for avoidance of doubt, if ROPL is (-)13%, then APS shall be @ 0.2% × (13-10) = 0.6% of accepted bid price.

- Where the accepted bid price is such that the ROPL is below (-)20% but not below (-)30%,the additional performance security percentage shall be incremented by 0.3% for every percentage of ROPL below (-)20% in addition to 2% of the accepted bid price; for avoidance of doubt, if ROPL is (-)24%, then APS shall be @ 0.3% × (24-20) + 2% = 1.2% + 2% = 3.2% of accepted bid price.
- Where the accepted bid price is such that the ROPL is below (-)30% or more, the additional performance security percentage shall be incremented by 0.5% for every percentage of ROPL below (-)30% in addition to 5% of the accepted bid price; for avoidance of doubt, if ROPL is (-)37%, then APS shall be @ 0.5% × (37-30) + 5% = 3.5% + 5% = 8.5% of accepted bid price.

6. The additional performance security shall be treated as part of the performance security.
7. The provision of additional performance security shall be applicable to all forms of tender except Turnkey Tender.
8. Justification for abnormally low bids shall be scrutinized by the Technical Committee and recommended to the Competent Authority for Acceptance of Tender as per Para 6.3.15 of OPWD Code, Vol-I for the approval of the Additional Performance Security (APS).
   An abnormally low bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the Bidder to perform the contract at the offered price.Procuring Entity may, in such cases, seek written clarifications from the Bidder, including detailed price analysis of its Bid price in relation to scope, schedule, resource mobilization, allocation of risks and responsibilities, and any other requirements of the bid document.If, after evaluating the price analysis, the procuring entity determines that the Bidder has substantially failed to demonstrate its capability to deliver the contract at the offered price, the Procuring Entity may reject the Bid/Proposal. However, it would not be advisable to fix a normative percentage below the estimated cost, which would automatically be considered as an abnormally low bid.
9. If more than one bid is quoted (decimal up to two numbers will be taken for allpractical purposes, in percentage rate tenders) as lowest, either at the estimated cost put to tender or less than the estimated cost put to tender, the Tender Accepting Authority will finalize the tender through a transparent lottery system, where all the concerned bidders/their authorized representatives, the concerned SE/EE of the concerned Division and DAO will remain present.
10. If the rate quoted by the SC and ST Category Contractors comes to the rate quoted by the lowest bidder (decimal up to two numbers will be taken for all practical purposes, in percentage rate tenders) after availing 10% price preference as per Para 2 of Works Department Resolution No. 16262 dated 30.10.2018, the tender shall be finalized by the Tender Accepting Authority through a transparent lottery system along with other categories of contractors.
11. Accordingly, the relevant existing codal/contractual provision stands modified with effect from the date of issue of this O.M.
12. However, as regards the bidding process in which the tender has been floated before the issue of this Office Memorandum, the APS shall be calculated as per Works Department O.M. No. 173 dt.03.01.2026 r/w O.M. No. 632/W., dated 09.01.2026 and Corrigendum

No. 14560/W., dated 11.08.2026.

13. In pursuance to Works Deptt. OM No. 2375/W, dt. 03/03/2022, Additional Performance Security (APS) shall be refunded immediately on successful completion of the work within seven (07) days of issuance of Completion Certificate/Provisional Completion Certificate.

The Additional Performance Security (APS) shall be furnished in shape of NSC/ Post Office Saving Account/ Post OfficeTime Deposit Account /KishanVikasPatra/ unconditional and irrevocable Bank Guarantee (BG) pledged in favour ofthe Superintending Engineer, Gajapati Irrigation Division, Paralakhemundi as specified in the Bid document in the standard format on any Nationalized/ Scheduled Commercial Bank located in India counter guaranteed by its local Branch at Bhubaneswar with facility of authentication & encashment at at State Bank of India Paralakhemundi Main Branch,IFSC Code-SBIN0000151,A/c-35538071969/e-Bank Guarantee executed on the National e-Governance services Ltd(NeSL) Digital document execution portal/Insurance surety bond issued by an Insurance company authorised by IRDAI within seven days of issue of Letter of Acceptance (LoA) by the Divisional Officer (by e-mail) to the successful bidder otherwise *the bid of the successful bidder shall be cancelled*. *Further proceeding for blacklisting shall be initiated against the bidder.* If the APS is submitted in shape of Bank Guarantee by the bidder, then the validity of the Bank Guarantee should be for a minimum period equal to the period allowed for completion of the work plus defect liability period of one year and one month extra for transaction period.

20.2 The Bid accepting authority reserves the right to accept or reject any Bid or all Bids and to cancel the Bidding process, at any time prior to the award of Contract, and shall not bear any liability for such decision and shall not have obligation to inform the affected Bidder of the reasons.

20.3 The Bidder whose Bid has been accepted will be notified of the award of the work by the Bid inviting authority, prior to expiry of the Bid validity period by registered letter/Speed Post. This letter (hereinafter and inthe Contract called "Letter of Acceptance") will indicatethe sumthat the Government will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called "Contract Amount").

21.0 INITIAL SECURITY DEPOSIT (ISD)

21.1 When a Bid is to be accepted the concerned Bidder shall attend the office of the Engineer-in-Charge concerned on the date fixed in the Letter of acceptance. Upon intimation being given by the Chief Engineer of acceptance of his Bid, the successful Bidder shall have to pay Initial Security Deposit (ISD). Agreements in two parts, Part-I: Work and Part-II: Operation & Maintenance of the system shall be executed. The agreement amount for Part-I: Work shall be bid amount of Sl.-1 of Price Bid (APPENDIX-FB). The agreement amount for Part-II: Operation & Maintenance of the system shall be the bid amount of Sl.-2 of Price Bid (APPENDIX-FB). The ISD @ 2% of the contract amount for each part of agreement in the shape of NSC/ Post Office Saving Account/ Post OfficeTime Deposit Account /KishanVikasPatra/ unconditional and irrevocable Bank Guarantee (BG) pledged in favour of the Superintending Engineer, Gajapati Irrigation Division, Paralakhemundi as specified in the Bid document in the standard format on any Nationalized/ Scheduled Commercial Bank located in India counter guaranteed by its local Branch at Bhubaneswar with facility of authentication & encashment at State Bank of India Paralakhemundi Main Branch,IFSC Code-SBIN0000151,A/c-35538071969/e-Bank Guarantee executed on the National e-Governance services Ltd(NeSL) Digital document execution portal/Insurance surety bond issued by an Insurance company authorised by IRDAI .

21.2 The **validity of the ISD for Part-I: Work Agreement** shall be for a total period not less than the stipulated period of the completion of the work in question, plus the defect liability period plus three months.

21.3 The **validity of the ISD for Part-II O & M Agreement** shall be for a total period not less than

stipulated period of completion plus the period of O & M plus three months.

21.4 The successful Bidder has to sign the contracts within the date specified in the letter of acceptance**.** The issue of letter of acceptance shall be treated as closure of bid process and commencement of the contract process. On failure to do so his Bid will be cancelled and **the bidder shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor.**

The written contract entered into between the contractor and the Government shall be the foundation of the rights and obligations of both the parties and the contract shall not be deemed to be complete until the contract has first been signed by the contractor and then by the proper officer authorized to enter into contract on behalf of the Government.

21.5 The successful Bidder has to sign the contracts within the date specified in the letter of acceptance.

The issue of letter of acceptance shall be treated as closure of bid process and commencement of the contract process. On failure to do so his Bid will be cancelled duly forfeiting the E.M.D., paid by him without issuing any further notice and action will be initiated for black listing the Bidder.

21.6 The date of **signing of Agreement** shall be treated as date of commencement of work.

22.0 BID AMOUNT

The bid amount to be quoted by the bidder shall be exclusive of GST but inclusive of all statutory taxes, duties & other ancillary works mentioned in the documents. No claim whatsoever in this connection shall be entertained under any circumstances.

23.0 NO SANCTION FOR FOREGIN EXCHANGE

It should be clearly understood that no foreign exchange sanctions will be made available either for purpose of equipment, plants, and machineries, materials of any kind or other things required for execution ofwork.Itshouldbeclearlyunderstoodthatnorequestforimportingequipment, materials, plants, etc. that may be required in carrying out the work even from rupee payment currency will be entertained except specifically mentioned in respective item of the tender documents.

24.0 CONSTRUCTION PROGRAMME

24.1 The Bidder shall include in his Bid, a detailed construction programme of executing the project, describing broadly the Technology and Construction Methodology of Major Components of the Project including survey, investigation, soil exploration, design & Engineering estimation, land acquisition proposal, commissioningof totalproject trialof totaldistribution system. The programme shall be supplemented with Master Control Network.

24.2 The Employer reserves the right to request for changes in the Master control Network during pre-award discussion with the responsive bidder. Mutually agreed Master Control Network shall form part of the Contract.

25.0 SPECIFIC ISSUES

25.1 Every Bidder is expected, before quoting his bid, inspect the site of proposed work. He should also inspect the quarries and satisfy himself about the quality and availability of materials. The best class of materials to be obtained from quarries, or other source shall be used on the work. In every case the material must comply with the relevant standard specifications. Samples of materials as called for in the standard specifications or in the Bid notice or as required by the SUPERINTENDING Engineer, in any case shall be submitted for the SUPERINTENDING Engineer's, approval before the supply to site of work is begun.

25.2 The Bidders particular attention is drawn to the sections and clauses in the standard specifications dealing with.

25.2.1 Test, Inspection and rejection of defective materials and work.

25.2.2 Carriage.

25.2.3 Construction plant.

25.2.4 Water and lighting.

25.2.5 Cleaning up during the progress and for delivery

25.2.6 Accidents.

25.2.7 Delays.

25.2.8 Particulars of payments.

25.3 The contractor should closely peruse allthe specifications clauses, which govern the bid heisbidding.

25.4 The contractor is responsible for the quality of works executed. If any defects are noticed during execution of the work and the defect liability periodafter completion of works, the contractor has to rectify at his own cost

25.5 The contractor shall maintain the system for a period of five years covering at least five Kharif seasons including water supply regulations, maintenance of the system, plantation, beautification measures etc. The contractor will carry out maintenance or repair or rectification works in case of any problem or emergency that may arise when the system is in operation including cost of all labours, materials and equipment. The contractor shall also prepare a operation & Maintenance Manual and train the Govt. staff/selected PaniPanchayat Beneficiaries to carry out subsequent O & M of the system.

25.6 The Bidder will quote lump sum price on the work as a whole.

25.7 Ifany alteration inthecontractform, the conditions of the contract, the drawings, and specifications is found to be made by the Bidder then the Bid will be treated as void.

25.8 A Bidder submitting a quotation which the Bid accepting authority considers excessive and or indication of insufficient knowledge of current Prices or definite attempt of profiteering will render himself liable to be debarred permanently from Bidding or for such period as the Bid accepting authority may decide.

25.9 The Bidder should demonstrate availability (owned or leased or to be procured against mobilization advance) of theKey and critical equipment in the shape of listand declaration supported by ownership documents necessarily be enclosed to the Bid on **Non Judicial Stamp Paper of worth of Rs.100/- stating. "I do hereby solemnly declare that I own _____ procured on lease the following equipment".**

25.10 A prospective e bidder isexpected toexamine allinstructions, terms& conditions, formsandspecifications in the Bid Document and fully inform himself as to all the conditions and matters which may in any way affect the works, his bid or the cost thereof. Further, failure of furnishing all information required by the Bid Document or submission of incomplete offers, conditional bids containing deviations from the bid document shall be rejected as non-responsive.

25.11 It will be imperative for each Bidder to fully inform himself of all local conditions and factors which may have any effect on the execution of the Works covered under the specifications and documents. In their own interest, the bidders are particularly requested to familiarize themselves with the prevailing Income Tax Act, Companies Act, Customs Act, prevailing Labour Laws and other related Acts and Law. Further, thebidders arerequested tocomply withthe InsuranceAct including Workmen's Compensation Actand thirdparty insuranceand otherrelevant provisionsparticularly with reference to the requirements of taking insurance for storage, Civil, Structural and Architectural Work, Erection, testing and commissioning, operation and Maintenance, till the project is handed over to Employer. Employer shall not entertain any request for clarification from the bidders regarding such local conditions. It must be understood and agreed that such factors have properly been investigated and considered by the bidders

while submitting their bids. Failure to do so will not relieve the bidders from responsibility for estimating properly the cost of successfully performing the work and completion time required for the Work. Employer will assume no responsibility for any understanding, or representation concerning conditions made by any of its officers or agents prior to award of the Contract. Neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the Employer, which arises out of lack of such clear knowledge or its effect on the cost of execution of the contract on the part of the bidder. Employer shall not entertain any request for clarifications from the Bidders, regarding any statutory provisions.

25.12 Being an EPC Contract, the Bidder is to take full responsibility for the survey, Investigation, Design & Engineering and execution of entire system including commissioning, Trial run of the system complete including operation & maintenance of the project for a period of 5 years or five Kharif water supply seasons whichever is more from the date of commissioning of the system.

25.13 Survey, Investigation, Designs, Technical Specifications and Technical Parameters shall conform to Bureauof Indian Standard Codes and/or International Standards & practices/C.W.C. Manuals/IRC Codes/Odisha Govt.Department specifications/ Circulars issued by Department from time to time and technical specification of the bid documents.

25.14 It is understood that all plant, equipment, and works connected with the normal efficient execution of the Project are covered in the scope, brought out in Bid Documents. In case of decisions to be taken on issues relating to technical matter of planning, design & construction, decision of Chief Engineer is final & binding on the contractor.

25.15 While working out their price bid, the bidders are required to take into account entire scope of the work defined in Bid documents, additional Infrastructure and other related activities, whatsoever required.

25.16 Bidder shall also include in his price bid, cost of de-mobilization and shipping back the constructionequipment and other equipment/materials etc. from the ProjectSite.

26.0 CORRUPT OR FRAUDULENT PRACTICES.

26.1 TheGovernment requires that the bidder/suppliers/ contractors underGovernment financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government

26.1.1 Define for the purposes of the provision, the terms set forth below as follows:

26.1.2 "Corrupt practices" meansthe offering, giving, receivingor solicitingof anythingof value to influence the action of a Government official in procurement process or in contract execution: and

26.1.3 "Fraudulent practices" means misrepresentation of facts inorder toinfluence a procurement process or the execution of a contract to the detriment of the Government and includes collusive practice among Bidders (prior to or after a Bid submission) designed to establish in Bid prices at artificial non competitive levels and to deprive the Government of the benefits of free and open competition.

26.1.4 Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

26.1.5 Will blacklist/or debar a firm either indefinitely or for a stated period of time, if atany time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a Government Contract.

26.1.6 Furthermore, Bidders shall be aware of the provisions stated in the General Conditions of Contract.

27.0 SUBLETTING OF CONTRACT

No part of the contract shall be sublet without written permission of the Employer nor shall

transfer be made by power of attorney, authorizing others to receive payment on the contractor's behalf. If the prime contractor desires to sublet a part the work he should submit the same at the time of filing Bids itself or during execution giving the names of the proposed sub-contractor along with the details of his qualification and experience. The Bid accepting authority should verify the experience of the sub-contractor and if the sub-contractor satisfies the qualification criteria with reference to the value of work proposed to be sublet, he may permit the same. However, the total value of works to be awarded on subletting shall not exceed 50% of contract value. The extent of subletting shall be added to the experience of the sub-contractor and to that extent deducted from that of the main contractor.

CHECK LIST

DOCUMENT TO BE FURNISHED BY THE BIDDER

The check list has been prepared to facilitate submission of information sheets by the bidders. Other information required for the bid, but not mentioned in the check list shall also be submitted.

Sl. No.	Particulars of Submittal	Bid document Reference: (Clause No. / Vol. No.)	Whether furnished		Reference to uploaded document page No.
			Yes	No	
	Cover-1				
	FILE - I				
1	Letter of submission of Bid	Form-A Section-III- Vol-I			
2	Cost of Bid document	As per DNIT			
3	EMD	As per DNIT			
4	Details of EMD and cost of Bid Document.	Form-C Section-III-Vol-I			
5	Registration Certificate	As per ITB - 15.7 Vol-I			
6	GST Registration No.	As per ITB - 15.7 Vol-I			
7	PAN	As per ITB - 15.7 Vol-I			
8	Income Tax Return Certificate	As per ITB - 15.7 Vol-I			
9	Declaration by Affidavit	As per ITB - 15.7 Vol-I, Form-E ofSection-III, Vol-I			
10	No Relation certificate	As per ITB - 40.7 Vol-I, Form D ofSection-III, Vol-I			
	FILE - II				
1	Bid Capacity	As per 16.5 of ITB of Vol-I			
2	List of Machinery & Equipment	As per ITB - 15.7 Vol-I, Annexure- 2D, Section-III			
3	List of work in Hand	As per ITB - 15.7 Vol-I, Annexure-2B, Section-III			
4	Details of Financial capacity	As per ITB - 15.7 Vol-I, Annexure-3 & 4, Section-III			
5	Details of personnel's	As per ITB - 15.7 Vol-I, Annexure-			

Sl. No.	Particulars of Submittal	Bid document Reference: (Clause No. / Vol. No.)	Whether furnished		Reference to uploaded document page No.
			Yes	No	
		2E, Section-III			
6	Similar nature of works executed	As per ITB 15.7 Vol-I, Annexure-2A			
7	Additional information	Annexure-11, Section-III			
8	Form of BANK Certificate For Credit Facility	As per ITB - 15.7 Vol-I			
9	Litigation History	Annexure-10 of Section-III, Vol-I			
	FILE - III				
	As per Vol.-I				
1	Details of technical proposal along with all technical data describing technology & Methodology of a. Survey & Investigation b. Intake System c. Pump House d. Risingmain/Pressure main e. Deliverychamber(optional) f. Distribution System g. Instrumentationincludingparticularsof pipeline for Rising main/Pressure main, distribution main, minors and sub-minors and type of outletsalong with location, make and type of Anti Surge Devices and Control Valves.	As per ITB 15.7 Vol-I			
2	Methodology of theOperation& Maintenance of the System for 5 Years	As per ITB 15.7 Vol-I			
3	Construction Program for Twenty Four Months	As per ITB 15.7 Vol-I			
4	Milestones for execution of work.	Clause-15-17 Section-II,Vol-I.			
5	Maintenance Personnel	Clause-5.0 Section-VII of Vol.-I			
6	List of Equipment, Tools & Plants and Spare Parts for O&M of the system.	Clause-15.2, Section-VIIofVol-I			
	As per Vol-II – TS				
7	Section-V(A)				
8	Technical Data Sheet for Pumps	Section-V(A) Annexure-I, Vol-II			

Sl. No.	Particulars of Submittal	Bid document Reference: (Clause No. / Vol. No.)	Whether furnished		Reference to uploaded document page No.
			Yes	No	
9	Declaration on the Product offered for Pumps.	Section-V(A) Annexure-III, Vol-II			
10	Motor Performance Format	Clause-6.0 & 7.0 of Section-V(A) of Vol-II			
11	Particulars on H.T. Switch Gear	Clause-9.16.2ofSection-V(B) ofVol-II			
12	Particulars of Soft Starter	Clause-9.16.3 ofSection-V(B) ofVol-II			
13	Particulars of L.T. Switch Gear.	Clause-9.16.4 ofSection-V(B) ofVol-II.			
14	Particulars of Battery	Clause-9.16.5 of Section-V(B) ofVol-II			
15	Particulars of Battery Charger-cum-DCDB	Clause-9.16.6 of Section-V(B) ofVol-II			
16	Particulars of L.T. Cables	Clause-9.16.7 of Section-V(B) ofVol-II			
17	Particulars of H.T. Cables	Clause-9.16.8 of Section-V(B) ofVol-II			
18	Particulars of Cranes and Hoist	Section-V(C) of Clause-13.8 ofVol-II			
	System Connectivity	**Section-VII-A/ Vol-II**			
19	Methodology	Cl 6.0-I, section-VII/ Vol-II			
20	SLD for System Connectivity	Cl 6.0-II, section-VII/ Vol-II			
21	In line with Owner's indicative model				
22	Any other alternate model				
23	SLD of MSDSS (Optional)	Cl 6.0-III, section-VII/ Vol-II			
24	SLD of DSS (Optional)	Cl 6.0-IV, section-VII/ Vol-II			
25	ESC-1	Cl 6.0-V, section-VII/ Vol-II			
26	ESC-2 (Optional)	Cl 6.0-VI, section-VII/ Vol-II			
27	ESC-3 (Optional)	Cl 6.0-VII, section-VII/ Vol-II			
28	ESC-4 (Deviation Schedule)	Cl 6.0-VIII, section-VII/ Vol-II			
29	Details of Spares for O&M	Cl 6.0- IX, section-VII/ Vol-II			
30	Listofspecialtools&tacklesofsystem connectivity.	Chapter-II of Section-VII of Vol-II			
31	Guaranteed Technical Particulars (GTP)[For major items like Power Transformer(Rating 630KVA & 1.6MVA),Distribution Transformers(315KVA&100KVA),AAC& 33 kV VCB]	Chapter-XVIII of Clause-VII of Section-VII of Vol-II			
	Cover – II				
	Financial Bid				
	FILE-I				
1	Price Bid	Appendix-FB of Financial Bid,Vol-I			
	FILE-II				

Sl. No.	Particulars of Submittal	Bid document Reference: (Clause No. / Vol. No.)	Whether furnished		Reference to uploaded document page No.
			Yes	No	
1	Year wise breakup of O&M Cost	DELETED			
2	Year wise Energy Consumption	Appendix-F-6 of Financial Bid,Vol-I			

Note: The contents of the Bid offer document shall be legible & serially numbered

SECTION – III

FORMS & ANNEXURES

CONTENTS
FORMS & ANNEXURES

1	FORM-A	LETTER OF SUBMISSION OF BID
2	FORM-B	ARTICLES OF CONTRACT
3	FORM -C	DETAILS OF COST OF TENDER DOCUMENTS
4	FORM- D	RELATIONSHIP DECLARATION
5	Form – E	DECLARATION BY AFFIDAVIT
6	ANNEXURE – 1	DETAILS OF APPLICANT
7	ANNEXURE – 2A	TECHNICAL CAPACITY OF APPLICANT
8	ANNEXURE – 2B	DETAILS OF WORK IN HAND
9	ANNEXURE – 2C	WORKS FOR WHICH BIDS ALREADY SUBMITTED
10	ANNEXURE – 2D	LIST OF EQUIPMENT/MACHINERY OWNED BY THE BIDDER
11	ANNEXURE – 2E	QUALIFICATION AND EXPRIENCE OF MANPOWER
12	ANNEXURE – 3	FINANCIAL CAPACITY OF BIDDER
13	ANNEXURE – 4	CHARTED ACCOUNTANT CERTIFICATE ON FINANCIAL CAPACITY
14	ANNEXURE – 5	POWER OF ATTORNEY
15	ANNEXURE – 6	FORMAT OF EMD IN SHAPE OF BG
16	ANNEXURE – 7	BANK GUARANTEE FOR INITIAL SECURITY DEPOSIT (ISD)
17	ANNEXURE – 8	REVISED BANK GUARANTEE FORMAT FOR MOBILIZATION ADVANCE PAYMENT
18	ANNEXURE – 9	BANK GUARANTEE FOR PERFORMANCE SECURITY DEPOSIT (PSD)
19	ANNEXURE – 10	INFORMATION ON LITIGATION HISTORY
20	ANNEXURE – 11	ANY OTHER ADDITIONAL INFORMATION
21	ANNEXURE – 12	BANK CERTIFICATE FOR CREDIT FACILITY
22	APPENDIX -I	FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF APPLICATION
23	APPENDIX – II	FORMAT FOR POWER OF ATTORNEY FOR LEAD MEMBER OF JOINT VENTURE
24	APPENDIX -III	FORMAT FOR JOINT BIDDING AGREEMENT FOR JOINT VENTURE
25	APPENDIX - IV	STATEMENT OF LEGAL CAPACITY

FORM-A

LETTER OF SUBMISSION OF BID

(ON BIDDER'S LETTER HEAD)

To

The Chief Engineer& Basin Manager, RBVN Basin, Brahmapur

Sir,

I / We do hereby Bid and if this Bid be accepted, under take to execute and complete the following work "Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project" As provided for in the "conditions of the bid document"

1. I/We have quoted the bid in Price Bid vide Appendix-FB of Price Bid for which l/we agree to execute the work at the quoted lump sum amount under the terms of the contract.

2. In case of any discrepancy between the bid price quoted in words and figures, the bid price quoted in words only shall prevail.

3. I/We agree to keep the offer in this Bid valid for a period of 180 days from the last date of submission of bid, mentioned in the Bid notice and not to modify the whole or any part of it for anyreason within above period. If theBid iswithdrawn by me/us for any reasons whatsoever, the earnest money paid by me/us will be forfeited to Government.

4. I/We hereby distinctly and expressly, declare and acknowledge that, before the submission of my/our Bid I/We have carefully followed the instructions in the Bid document and have read the technical Specification therein and the and that I/We have made such examination of the contract documents and the plans, specifications and of the location where the said work is to be done, and such investigation of the work required to be done, and in regard to the equipment and material required to be furnished as to enable me/us to thoroughly understand the intention of same and the requirements of covenant/contracts, stipulations and restrictions contained in the contract, and in the said plans and specifications and distinctly agree that I/We will not hereafter make any claim or demand upon the Government based upon or arising out of any alleged misunderstanding or misconception /or mistake on my/or our part of the said requirement of covenants/contracts, stipulations, restrictions and conditions.

   I/We have enclosed to my/our application the cost of bid (non refundable) and Earnest Money Deposit without any claim of interest on the department.

5. I/We shall not assign the contract or sublet any portion of the same. In case if it becomes necessary I/We shall submit the same at the time of filing Bids itself or during execution, giving the name of the sub-contractor with details of his qualification and experience and agree to sublet with permission of Bid accepting authority only to such of the sub- contractors who satisfies the qualification criteria in proportion to the value of work proposed to be sublet. No part of work shall be sub-let to other short listed bidders.

6. If upon written intimation to me/us about acceptance my/our bid, by the Authorized officer of Govt. of Odisha, I/We fail to attend the said office on the date herein fixed or and if I/We fail to make the initial security deposit (ISD) to enter into the required contract as defined in the instructions to Bidders, then I/We agree to the forfeiture of the earnest money. Any notice required to be served on me/us here under shall be deemed to have been sufficiently served on me/us if delivered to me/us personally or forwarded to me/us by post (registered/Speed Post/ ordinary/e-mail) or left at my/our address given herein.

I/We fully understand that the written contract to be entered into between me/us and Government shall be thefoundationoftherightsoftheboththeparties and thecontract shallnotbedeemedtobe complete until the contract has first been signed by me/us and then by the proper officer authorized to enter into contract on behalf of Government.

7. I/We declare that I/We agree to recover the salaries of the technical staff actually engaged on the work by the department, from the work bills, if I/We fail to employ technical staff as per the Bid condition.

BIDDERS / CONTRACTOR'S CERTIFICATE

1. I/We am/are prepared to furnish detailed data in support of all my quoted rates, if and when called upon to do so without any reservations.
2. I/We hereby declare that I/We shall not claim any price escalation except as provided in the bidding documents.
3. I/We declare that the I/We shall take up the responsibility for processing for ROW/ROU land acquisition, for execution of all components of work, in the name of Department of Water Resources, Odisha as per conditions bid and arranging and obtaining the land for disposal of spoil/soil not useful for construction purposes shall rest with me/us. Crop compensation for executing the work and O & M of command shall be paid by us.
4. I/We hereby declare that the responsibility of integration and formation of WUAs along with training, capacity building up to market linkages by engaging local NGO approved by the Chief Engineer & Basin Manager, RBVN Basin ,Brahmapur.
5. I/We hereby declare that the responsibility of getting statutory clearances of forest & environment & other department/commission/authority on behalfof the department of Water Resources for execution/completion of work rests on me/us.
6. I/We declare that I/We will execute the work as per the mile stone programme, and if I/We fail to complete the work as per the mile stone program I abide by the condition to recover liquidated damages as per the Bid conditions.
7. I/We declare that I/We will abide for settlement of disputes as per the Bid conditions.
8. I/We have not been black listed in any department in Govt. of Odisha and in any other state/Union Govt. due to any reasons.
9. I/We have not been demoted to the next lower category for not filing the Bids after buying the Bid schedules in a whole year and my/our registration has not been cancelled for a similar default in two consecutive years.
10. I/We hereby certify that all the statement made and information supplied in enclosed Forms and accompanying statements and Annexure are true and correct.
11. I/We agree to disqualify me/us for any wrong declaration in respect of the above and to summarily reject my/our Bid.

Address of the Bidder: Phone No:

Fax No:

E-mail id:

Bidder/Authorized Signatory

SEAL

FORM – B

ARTICLES OF CONTRACT

Articlesofcontractmadethis _____ day of between**His Excellency the Governor of Odisha**(hereinaftercalledGovernor which expression shall, where the context so admits, include his successors in office and assignees) of the one part andof(herein after called the contractor which expression shall, where the context so admit, include his heirs, executors, administrators and legal representative) on the other part.

Whereas the Government of Odisha (herein after called the Government) are desirous of taking up the work of"Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project" and have caused a proposal contained in Basic Project Profile, Instruction to Bidder, Conditions of contract, Special Conditions of Contract, Conditions of Contract for O&M and Price Bid ,Technical Specifications and drawings describing the work to be prepared /to be done.

And whereas the said Basic Project Profile, drawings, Notice inviting Tenders Instruction to Bidders, General condition of Contract, Special conditions ,Price Bid & Technical Specification, Conditions of contract for O & M & other appendices and annexure etc. of contract documents (herein after referred as contract) as have been signed by on behalf of the parties here to.

And whereas for the Part I: Works of Agreement, the contractor has produced

1. Rupees _____ paid by him vide FDR No. _____ Date ___ _____ issued by (Bank) _____ pledged in favour of S.E. _____.
2. Rupees _____ paid byhim vide B G No. _____ Date ___ _____ issued by (Bank) _____ with validity ofall the instruments upto _____ towards Initial security deposit of 2% of contract Amount for **Part I: Works** for the due fulfilment of the contract.

AND

For the Part II: O & M of Agreement the contractor has produced

1. Rupees _____ paid by him vide FDR No. _____ Date _____ issued by (Bank) _____ pledged in favour of S.E _____ and
2. Rupees _____ paid byhim vide B G No. _____date_____ issued by (Bank) _____ with validityofalltheinstrumentsupto _____ towards Initial security deposit of 2% of contract Amount for **Part II: O & M** for the due fulfilment of contract.

And whereas the contractor has agreed that during the course of the contract period an amount at the rate of 5.0 % (five) of the value of work done will be withheld from the bills as Performance Security Deposit.

And whereas the contractor has agreed to execute upon the contract, subject to the Scope of work described in all sections and conditions & specifications forming part of the contract (herein after referred to as the said conditions), and set forth in Appendix-FB of Price Bid, as the price bid and comply with therateofprogressnoted intheconditionsforasumofrupees _____ (Rupees _____) on lump sum basis and such other sum asmay be arrived at under the clauses of the contract documents relating to payment.

And whereas the contractor has agreed to execute the subject work in two parts, namely

Part:I Works for a sum of _____ (Rupees _____) and **(Part:II O&M** for a sum of _____ (Rupees _____), both totalling to a sum

Note: It is hereby agreed as follows:

1. Time shall be considered as the essence of the contract and the contractor hereby agrees to commence the work as soon as the contract is signed and agrees to complete the work within Twenty Four (24) calendar months from the date of such signing the contract and to show the progress as per milestone subject nevertheless to the provisions for extension of time contained in the conditions of contract.
2. The conditions of the bid document & technical specification shall be read and construed as forming part of this contract and the parties here to will respectfully abide by and submit themselves to the conditions and stipulations and perform the contract on their part, respectively.
3. Upon the terms and conditions of this contract being fulfilled and preformed to the satisfaction of the Superintending Engineer, the security deposited by the Contractor as herein before recited or such portion thereof as he may be entitled to under the said condition shall be returned to the contractor as provided in the contract.

Inwitnessthereof,thecontractorM/s. _____ duly represented bySri _____ _____ hashereuntoset hishandandSri _____ Superintending Engineer,Gajapati Irrigation Division ,Paralakhemundiactingonbehalf of and by the order and direction of **his Excellency, the Governor of Odisha** has here unto set his hand the day and year first above written.

Signed by Contractor : _____

Seal

Address: _____

Phone No.: Fax No.: email id:

In the presence of Witness i) Sri _____ Address

Signed by on behalf of Government Sri : _____

Seal

Phone No.: Fax No.: email id:

In the presence of Witness i) Sri _____Address

FORM – C

DETAILS OF COST OF TENDER DOCUMENTS, EMD

SL. No.	Description	Remarks
1	Name of bidder	
2	Details of cost of Tender documents	
3	EMD Details	

Address of the Office

SIGNATURE OF BIDDER

Telephone No:

FORM – D

NO RELATIONSHIP DECLARATION

To,

The Tender Inviting Officer,

……

……

Subject: (Name of the Work)

Reference: (Bid reference number)

Sir,

Pursuant to clause 4.7 of the ITB, it is to inform that I have relative(s) employed as an Officer in the rankofanAssistantEngineer/UnderSecretary underthe _____ Department.His(Their) details are as follows.

Relationship:

Name: Designation

Office Address

Pursuant to clause 4.7 of ITB, I am to submit herewith the names of persons who are working under my firm having near relatives to any gazette officer in the rank of an Assistant Engineer/Under Secretary in theDepartment.

Sl. No.	Name of the my employee and his designation in the firm	Presently working at	Details of his relatives working in the Department
			Relationship Name: Office Address
			Relationship Name: Designation Office Address

I am also duty bound to inform the relationship of any subsequent employment with any gazette officer in the rank of an Assistant Engineer /Under Secretary under the Department. I am aware that any breach of this condition would render my firm liable for penal action for suppression of facts. I am also duty bound to inform that I have no relations with any employee working in the rank of or above the rank of any Assistant Engineer/ Under Secretary under this Department of Water Resources.

Yours Sincerely,

SIGNATURE OF THE BIDDER

FORM – E

DECLARATION AFFIDAVIT

(ONNONJUDICIALSTAMPPAPER)

I / We ……..havegonethroughcarefullyalltheBidconditionsandsolemnly declare that I / we will abide by any penal action such as disqualification or black listing or determination of contract or any other action deemed fit, taken by, the Department against us, if it is found that the statements, documents, certificates produced by us are false / fabricated.

I /we hereby declare that, I / We have not been blacklisted / debarred / Suspended / demoted in any department in Odisha or in any State due to any reasons.

I /we hereby declare that the Technical bid and financial bid are without any deviations and are strictly in conformity with the documents issued by the Employer.

- **Signature of Bidder**

ANNEXURE – 1

DETAILS OF APPLICANT

1. Corporatedetails

a) Nameoftheentity:

b) Legal Status

c) Countryofincorporation/registration:

d) Dateofincorporation/registration:

e) Address of the corporate headquarters and its branch office(s),ifany,in India:

2. Briefdescriptionofthecorebusinessactivitiesoftheapplicant

NameofApplicant	CoreBusinessActivity

3. Detailsoftheauthorizedindividualwhowillserveasthepointofcontact/communication with, and from, the Authority:

(a) Name:

(b) Designation: (c)

Address:

(d) TelephoneNumber: (office)[ ] (mobile)[ ] (e) E-

Mail Address:

(f) FaxNumber:

ANNEXURE – 2A

TECHNICAL CAPACITY OF APPLICANT

DETAILS OF ELIGIBLE SIMILAR PROJECTS EXECUTED IN THE LAST 5 YEARS

Sl. No.	Project Name	Name of the Employer	Description of Work	Contract No.	Value of contract	Date of issue of work order	Actual date of Completion

(Authorised Signatory)

ANNEXURE – 2B

TECHNICAL CAPACITY OF APPLICANT

DETAILS OF WORKS IN HAND

Sl. No.	Name of work	Place	Tendered amount in Crores	Date of issue of LoA	Stipulated period of completion	Amount of work done up to the month previous to the month in which tender are invited in Lakhs	Amount of works to be done during the period of completion of the project. (Exact Yr is to be mentioned By Tender Inviting Authority)	Brief detail of delay if any	Remarks
1	2	3	4	5	6	7	8	9	10

Date : **SIGNATURE OF THE BIDDER**

Note1: Amount of work done in column 7 should be given up to the month previous to the month in which tender invited.

Note2: Necessary certificates in support of amount of work done in col 7 from the officer concerned shall be attached with the tender.

Note3: In Col. 8 amount of works to be done during the completion period for which the bid is invited is to be furnished.

Note-4: The form-2B(Details of work in hand in India)should be furnished in shape of affidavit before the Executive Magistrate/Notary.Each page of the affidavit and annexure shall be signed by **Executive Magistrate/Notary** failing which the bid will be rejected.

Note-5: In case of no Existing commitment, the bidder has to mention NIL in Form 2B Mandatorily.

ANNEXURE – 2C

WORKS FOR WHICH BIDS ALREADY SUBMITTED

WORKS FOR WHICH BIDS ALREADY SUBMITTED

Sl. No.	Description of Work	Place and State	Name & Address of employer	Estimated value of works	Stipulated period of completion	Date when decision is expected	Remarks if any
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

(Authorised Signatory)

ANNEXURE – 2D

LIST OF EQUIPMENT/ MACHINERY OWNED BY THE BIDDER

LIST OF EQUIPMENT / MACHINERY OWNED BY THE BIDDER

Sl. No.	Type of Equipment	Make/ Model	Nos. Owned	Year of Procurement	Present Condition	Present Location	Is it free for deployment in new project	Remarks
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**

(Authorised Signatory)

ANNEXURE – 2E

QUALIFICATION AND EXPERIENCE OF MANPOWER

QUALIFICATION AND EXPERIENCE OF MAN POWER

Sl. No.	Position	Name	Qualification	Years of experience (General)	Years of Experience in the proposed position
1	**2**	**3**	**4**	**5**	**6**

(Authorised Signatory)

NOTE: 1. Qualification and experience of man power available or deployment to be furnished under the following heads:

a) Hydrological, topographic, geological and foundation investigations

b) Design and construction drawings

c) Construction.

2. Curriculum Vitae for each of the members listed in Annex 2 E shall be furnished.

ANNEXURE-3

FINANCIAL CAPACITY OF BIDDER

	Total Annual Turnover from all types of Civil Engineering construction work (RupeesinCrore)				
Year	2021-22	2022-23	2023-24	2024-25	2025-26
A. TurnoverasperAuditedP&Lstatement					
B. Adjustment factor@ 10%	1.61	1.46	1.33	1.21	1.1
C. Adjusted Turnoverat 2026-27(yr of Invitation of Bid) prices(AxB)					
D. Numberofyearswith Adjusted Turnover more than Rs. ……Crore					

(Authorised Signatory)

Instructions:

1. Copies of the audited financial statements for **FIVE (5)** Financial years2021-22 till 2025-26 (Balance Sheet, Profit & Loss Statement etc.) to support the above information relating to the Applicant/each member of the Consortium should be attached.
2. Annual Turnover (Total revenue) shall mean total gross revenue earned from all business- related activities
3. In case the amounts required to be specified above are not in Indian Rupees, please convert other currencies into Indian Rupees using the most recent exchange rate available and specify such exchange rate in your submissions.

SUPERINTENDING ENGINEER

ANNEXURE-4

CHARTERED ACCOUNTANT CERTIFICATE ON FINANCIAL CAPACITY

CERTIFICATE FROM THE STATUTORY AUDITOR/PRACTICING CHARTERED ACCOUNTANT REGARDING FINANCIAL CAPACITY

(On the letter head of the statutory auditor/practicing chartered accountant)

Based on the books of accounts of (insert name of the Applicant) (Applicant) and other published information authenticated by it, this is to certify that:

(a) as on (insert date),the Applicant Turnover in the last five years is as below.

	Total Annual Turnover from all types of Civil Engineering construction work / (RupeesinCrore)				
Year	2021-22	2022-23	2023-24	2024-25	2025-26
A. TurnoverasperAuditedP&LstatementinRupeesCrore					
B. Adjustmentfactor@ 10%	1.61	1.46	1.33	1.21	1.1
C. Adjusted Turnoverat 2026-27(Yr of Invitation of Bid) prices (AxB)in RupeesCrore					
D. Numberofyearswith Adjusted Turnover morethanRs. ……Crore					

(b) The Bidder is not

(i) been or being subject to proceedings for declaration of or been declared bankrupt, wound up, or had or having its affairs administered or conducted by any court, administrator, receiver;

(ii) been declared by a court or other competent authority as being unable to pay its debts, or made any composition or arrangements with creditors or had the repayment of its debts suspended;

(iii) been convicted or otherwise found responsible (or any of its directors, partners, trustees, officers or managers been convicted or found responsible) by any court, tribunal, regulatory, public or other competent authority for a breach of any laws or regulations which:

SUPERINTENDING ENGINEER

(A) related to any act of fraud or dishonesty for which a fine, penalty, damages, compensation or other payment was levied against the Bidder or any of its directors, partners, trustees, officers or managers; or

(B) resulted in the permanent or temporary suspension of the rights of the Bidder to provide any service or carry on any type of business or operations.

Name of the audit firm:

Seal of the audit firm:

Signature:

Name:

Membership Number: Designation:

Date:

ANNEXURE-5

POWER OF ATTORNEY

(on Non-Judicial Stamp paper)

Power of Attorney for signing of Tender

Know all men by these presents, We……..(name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr/ Ms (name), …… son/daughter/wife of …… and presently residing at ……., who is presently employed with us and holding the position of …… , as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Tender for "Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)systemfor CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project"

being developed by the Department of Water Resources, Government of Odisha, and represented by the Chief Engineer & Basin Manager, RBVN Basin, Brahmapur (the "Authority") including but not limited to signing and submission of all applications, bids and other documents and writings, participate in Pre- Bid Conference and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Concession Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into necessary contract / agreement with the Authority.

AND

we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, ……., THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS …… DAY OF ……. 2….. For

…….. (Signature, name, designation and address)

Witnesses: 1.

(Notarised) Accepted ……

(Signature) (Name, Title and Address of the Attorney)

ANNEXURE-6

BANK GUARANTEE FOR EARNEST MONEY DEPOSIT (EMD)

[Ref: - Clause 13.0 of Section – II, Volume – I of Bid Identification No.-CE&BM,RBVN(GID-01)-2026/27]

WHEREAS _____ (name and address of Bidder) (hereinafter called "the Bidder") has submitted their offer dated _____for the work of _____(herein after called the "Bid") against the employer's Bid Identification No_____KNOW ALL MEN by these presents that WE _____of _____(Name of Bank) having Our registered office at _____are bound unto Superintending Engineer, Gajapati Irrigation Division,Paralakhemundi (herein after called "Employer") unconditionally & irrevocably for the sum_____(Rupees _____) for which payment will and truly to be made to the said employer, the Bank binds itself, its successors and assigns by the presents.

Sealed with the

Common seal of the said Bank this _____day of _____20_____

THE CONDITIONS OF THIS OBLIGATION ARE:

(1) If the Bidder If the Bidder withdraws or amends, impairs or derogates from the bid in any respect within the period of validity of this bid.

(2) If the Bidder having been notified of the acceptance of his Bid by the employer during the period of its validity in accordance with Instruction to Bidders of the Bid document.

(a) If the Bidder fails to furnish the initial Security Deposit for the due performance of the contract.

(b) Fails orrefuses to accept/execute the contract.

WE undertake to pay the employer up to the above amount upon receipt of its first written demand, without the employer having to substantiate its demand, provided that in its demand the employer will note that the amount claimed by it, is due to it, owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 60 days after the period of tender validity as specified in DNIT and any demand in respect thereof should reach the Bank not later than the above date.

We _____(Name of Bank) hereby also undertake to have the signature ofBranch Manager issuing Bank Guarantee verified from Local Branch of the Bank in Bhubaneswar, _____(address of Local Branch Bhubaneswar, Odisha) for due authentication.

Our_____Branch at Bhubaneswar (Name & Address of the _____ branch) is liable to pay the guaranteed amount depending on the filing of claim and any part thereof under this Bank Guarantee only and only if it is served upon us by the employer at our Bhubaneswar Branch, a written claim or demand and received by us at our Bhubaneswar branch on or before Dt.

_____otherwise bank shall be discharged of all liabilities under thisguarantee thereafter.

(Signature of the authorized officer of the Bank)

……..

……..

Name and designation of the officer

……..

Seal, name & address of the Bank and address of the Branch

ANNEXURE – 7

BANK GUARANTEE FOR INITIAL SECURITY DEPOSIT (ISD)

[Ref: - Clause 21.0 of Section – II, Volume – I of Bid Identification No. - _____]

Whereas _____ (name and address of contractor) (hereinafter called "the Contractor") has to undertake a contract, in pursuance of Letter of acceptance No. _____ dated _____ of Superintending Engineer,Gajapati Irrigation Division , Paralakhemundi _____ to execute the work "Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project" (hereinafter called "the contract")

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a Nationalized/Scheduled Commercial Bank with branches at Bhubaneswar for the sum specified therein as Initial Security, for compliance with his obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantors and responsible to you, on behalf of the contractor, upto a total of _____ (amount of guarantee) _____ (in word), such sum being payable and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil of argument, any sum of sums within the limits of _____ (amount of guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid upto _____ day of _____ 20_____i.eupto 3 (three) months beyond the date of expiry of the Defects Liability period for the works portion / up to 3 months beyond the O&M period for O&M portion.

We _____ (Name of Bank) hereby also undertake to have the signature of Branch Manager issuing Bank Guarantee verified from Local Branch of the Bank in Bhubaneswar, _____(address of Local Branch Bhubaneswar, Odisha) for due authentication.

Out _____ branch at Bhubaneswar (Name & Address of the _____ branch) is liable to pay the guaranteed amount depending on the filing of claim and any part thereof under this Bank Guarantee only and only if it is served upon us by the employer at our Bhubaneswar Branch, a written claim or demand and received by us at our Bhubaneswar branch on or before Dt. _____ otherwise bank shall be discharged of all liabilities under this guarantee thereafter.

(Signature of the authorized officer of the Bank)

……..

……..

Name and designation of the officer

…….

Seal, name & address of the Bank and address of the Branch

ANNEXURE-8

REVISED BANK GUARANTEE FORMAT FOR MOBILIZATION ADVANCE PAYMENT
[Ref. Clause 49.0, Section – IV, Vol – I of Bid Identification No._____

THIS DEED OF GUARANTEE made on …… day of ……. 20 …….. BETWEEN …… Bank, a Banking Company incorporated under the Banking Companies Act, 19 ……. And having its registered office at ……. In the State of …… (Hereinafter called the 'Guarantor') of the ONE PART AND the Governor of Odisha (hereinafter called the 'Government') of the OTHER PART.

WITNESS AS FOLLOWS:-

In consideration of the Governor of Odisha (hereinafter called the 'Government') having agreed to advance a sum of Rs…… (Rupees ……) to …….. (name and address of the contractor) (hereinafter called "the Contractor") against the work concerned by and under theterms andconditions uponagreement No. …… dated …… made between the contractor and the Governor of Odisha, on production of a bank guarantee for…… (Rupees ……) we hereby guarantee the payment of sums of money that may be due to the Government on account of any breach of the terms and conditions contained in the aforesaid contract on demand with interest at 10% per annum till payment.

2. We hereby further agree that we are aware of all the terms and conditions of the said contract and shall abide by the decision of the Secretary to Government of Odisha, Water Resources Department, as to whether there has been any breach of the terms and conditions of the said contract and as to whether the supplier is liable to pay any sum as so determined.

3. Any demand made to us for payment of any sum in discharge of this guarantee shall be conclusive proof of the fact that there has been a breach of said contract by the suppliers which warrants the enforcement of this guarantee and is binding on the Bank without prejudice to the claims and counter claims of the parties in the proper court of law.

4. This guarantee shall continue to be enforceable till all dues of the Government under or by virtue of the said contract have been fully paid and its claims are satisfied or discharged or till the Water ResourcesDepartmentoftheStateGovernment certifies hetermsand conditions of the said contract have been fully and properly carried out by the said contractor and according discharges the guarantee subject however that the Government has no right under this bond after the expiry of contract period or the extended contract period From the date of its execution, unless the said Government choose to further extend the said period or extended period of guarantee by giving reasonable notice in writing to the bank on account of any special circumstances of which the Government shall be the sole judge.

This guarantee shall be valid until the …… day of ……., 20 ……..

We …… (Name of Bank) hereby also undertake to have the signature of Branch Manager issuing Bank Guarantee verified from Local Branch of the Bank in Bhubaneswar, ……. (address of Local Branch at Bhubaneswar,Odisha) for due authentication.

Our…… branch at Bhubaneswar (Name & Address of the …… branch) is liable to pay the guaranteed amount depending on the filing of claim and any part thereof under this Bank Guarantee only and only if it is served upon us by the employer at our Bhubaneswar Branch, a written claim or demand and received by us at our Bhubaneswar branch on or before Dt…… otherwise bank shall be discharged of all liabilities under this guarantee thereafter.

……

(Signature of the authorized officer of the Bank)

…….

…….

Name and designation of the officer

……

Seal, name & address of the Bank and address of the Branch

ANNEXURE – 9

BANK GUARANTEE FOR PERFORMANCE SECURITY DEPOSIT (PSD)

[Volume – I of Bid Identification No._____]

Whereas _____ (name and address of contractor) (hereafter called "the contractor") has undertaken a contract, in pursuance of Contract No. _____ dated _____ of SuperintendingEngineer, GajapatiIrrigationDivision, Paralakhemundi to execute the work of "Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project"(name of work)(hereinafter called "the contractor").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a Nationalized/Scheduled Commercial Bank with branches at Bhubaneswar,Odishafor the release of Performance Security, for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantors and responsible to you, on behalf of the Contractor, uptoatotal of _____ [amountof guarantee] _____ [in words], such sum being payable and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and withoutcavilorargument,anysumorsumswithinthelimitsof _____ [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid up to _____ day of _____ 20_____ i.e. upto 3 (three) months beyond the date of expiry of the Defects Liability period for the works portion / up to 3 months beyond the O&M period for O&M portion.

We _____ (Name of Bank) hereby also undertake to have the signature of Branch Manager issuing Bank Guarantee verified from Local Branch of the Bank in Bhubaneswar,_____ (address ofLocal BranchBhubaneswar,Odisha)fordueauthentication.

Our _____ branch atBhubaneswar(Name&Addressofthe _____ _____ branch) is liable to pay the guaranteed amount depending on the filing of claim and any part thereof under this Bank Guarantee only and only if it is served upon us by the employer at our Bhubaneswar Branch, a written claim or demand and received by us at our Bhubaneswar branch on or before Dt _____ otherwise bank shall be discharged of all liabilities under this guarantee thereafter.

Signature of the authorized officer of the Bank)

……..

……..

Name and designation of the officer

……

Seal, name & address of the Bank and address of the Branch

ANNEXURE – 10

INFORMATION ON LITIGATION HISTORY

INFORMATION ON LITIGATION HISTORY IN WHICH THE BIDDER IS INVOLVED

ANNEXURE – 11

ANY OTHER ADDITIONAL INFORMATION

ANNEXURE –12 (A)

BANK CERTIFICATE FOR CREDIT FACILITY

This is to certify that M/s …….. is **one of our customer.**

If the contractor for the work namely "**Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project**" is awarded to the above firm, we shall be able to provide overdraft/ credit facilities to the extent of Rs. ……(In words) to meet their working capital requirements for executing the above work.

Place Signature& Seal of Bank Manager

Date [Name & Address of Bank]

***(NOTE**: The bank certificate for credit facility shall be in prescribed format provided in DTCN only, failing which the bid will be rejected.*
Further conditional bank certificate and subsequent clarifications issued by Bank authority will not be accepted and the bid will be rejected.)

ANNEXURE –12 (B)

FORM OF SOLVENCY CERTIFICATE BY BANKS

I, _____ Managing Director / Manager / General Manager / Agent of _____ bank Limited do hereby certify that a _____ [here the Names and addresses of the agency] to be solvent to the extent of _____ [Rupees _____] as disclosed by the information and record which are available with the aforesaid bank.

For the _____ Bank

Date:

Place:

Signature of Bank Manager

[Authorized Signatory]

APPENDIX -I

FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF APPLICATION

Know all men by these presents, We…….. (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr/ Ms (name), …… son/daughter/wife of …… and presently residing at ……., who is presently employed with us/ the Lead Member of our Joint Venture and holding the position of ……. , as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our application for qualification and submission of our bid for the (Name of the project to be inserted) on EPC Contract proposed or being developed by the Water Resources Department, Govt. of Odisha through the Chief Engineer & Basin Manager, RBVN Basin, Brahmapur(the "Employer") including but not limited to signing and submission of all applications, bids and other documents and writings, participate in Pre-Applications and other conferences and providing information/ responses to the Employer, representing us in all matters before the Employer, signing and execution of all contracts and undertakings consequent to acceptance of our bid, and generally dealing with the Employer in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Project with the Employer.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, ……., THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS …… DAY OF …… 2…..

For ……..

(Signature, name, designation and address)

Witnesses:

1.

(Notarised)

2.

Appendix – I

Accepted

.....

(Signature)

(Name, Title and Address of the Attorney)

Notes :

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

Wherever required, the Applicant should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Applicant.

APPENDIX – II

FORMAT FOR POWER OF ATTORNEY FOR LEAD MEMBER OF JOINT VENTURE

Whereas the Water Resources Department, Govt. of Odisha through the Chief Engineer& Basin Manager, RBVN Basin, Brahmapur.("the Employer") has invited applications from interested on parties for the (Name of the project to be inserted) on EPC contract (the "Project").

Whereas, ……., ……., …….and …….. (collectively the "JointVenture") being Members of the Joint Venture are interested in bidding for the Project in accordance with the terms and conditions of the Standard Bidding Document (SBD) and other connected documents in respect of the Project, and

Whereas, it is necessary for the Members of the Joint Venture to designate one of them as the Lead Member with highest share in the joint venture with all necessary power and authority to do for and on behalf of the Joint Venture, all acts, deeds and things as may be necessary in connection with the Joint Venture's bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, ……..having our registered office at ……., M/s. …….. ..... having our registered office at ……., M/s. ..... having our registered office at……., and ……..having our registered office at ……., (herein after collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorize M/S …….. having its registered office at ……., being one of the Members of the Joint Venture, as the Lead Member and true and lawful attorney of the Joint Venture (hereinafter referred to as the "Attorney"). We hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Joint Venture and any one of us during the bidding process and, in the event the Joint Venture is awarded the contract, during the execution of the Project and in this regard, to do on our behalf and on behalf of the Joint Venture, all or any of such acts, deeds or things as are necessary or required or incidental to the qualification of the Joint Venture and submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Joint Venture and generally to represent the Joint Venture in all its dealings with the Employer, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Joint Venture's bid for the Project and/ or upon award thereof till the Contract is entered into with the Employer.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Joint Venture.

APPENDIX II

Page 2

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ……. DAY OF ……. 2.….

For ……..

(Signature)

……..

(Name & Title)

For ……..

(Signature)

……..

(Name & Title)

Witnesses:

1.

2.

……

(Executants)

(To be executed by all the Members of the Joint Venture)

Notes:

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

Also, wherever required, the Applicant should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Applicant.

APPENDIX III

FORMAT FOR JOINT BIDDING AGREEMENT FOR JOINT VENTURE

(To be executed on Stamp paper of appropriate value)

THIS JOINT BIDDING AGREEMENT is entered into on this the …… day of …… 20…

AMONGST

1. {…… Limited, a company incorporated under the Companies Act, 1956} and having its registered office at …… (herein after referred to as the "**First Party**" which expression shall, unless repugnant to the context include its successors and permitted assigns). The **"First Party"** is the lead partner with ..... % share in the joint venture.

AND

2. {…… Limited, a company incorporated under the Companies Act, 1956} and having its registered office at …… (herein after referred to as the "**Second Party**" which expression shall, unless repugnant to the context include its successors and permitted assigns).The "**Second Party"** is the lead partner with ..... % share in the joint venture..

WHEREAS,

(A) THE **Water Resources Department, Govt. of Odisha** represented through the Chief Engineer.....……and having its offices at Office of the……Odisha (hereinafter referred to as the "**Employer**" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited applications (the **Applications**") by its Invitation for Bids (IFB) with Bid Identification No. …….....…… dated ……for qualification of bidders **(Name of the project to be inserted)** on Percentage rate Project (the "**Project**") through a Percentage rate Contract.

(B) The Parties are interested in jointly bidding for the Project as members of a Joint Venture and in accordance with the terms and conditions of the Bid document and other bid documents in respect of the Project, and

(C) It is a necessary condition under the Bid document that the members of the Joint Venture shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Application.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the Bid.

2. Joint Venture

2.1 The Parties do hereby irrevocably constitute a Joint Venture (the "**Joint Venture**") for the purposes of jointly participating in the Bidding Process for the Project.

2.2 The Parties hereby undertake to participate in the Bidding Process only through this Joint Venture and not individually and/ or through any other Joint Venture constituted for this Project, either directly or indirectly.

APPENDIX III

Page 2

3. Covenants

The Parties hereby undertake that in the event the Joint Venture is declared the selected Bidder and awarded the Project, it shall enter into a percentage Contract with the Employer for performing all its obligations as the Contractor in terms of the Contract for the Project.

4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

(a) The First Party shall be the Lead member of the Joint Venture and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Joint Venture during the Bidding Process and until the Appointed Date under the Contract;

(b) The Second Party shall be {the Member of the Joint Venture; and}

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the Bid and the Contract, till such time as the completion of the Project is achieved under and in accordance with the Contract.

6. Share of work in the Project

The Parties agree that the proportion of construction in the Contract to be allocated

among the members shall be as follows:

First Party:

Second Party:

Further, the Lead Member(First Party) shall itself undertake and perform at least **51 (Fifty one)** per cent or above and the Second party shall itself undertake and perform at least **25 (Twenty five)** per cent or above respectively of the total project if the Contract is allocated to the Joint Venture.

7. Representation of the Parties

Each Party represents to the other Party as of the date of this Agreement that:

(a) Such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;

(b) The execution, delivery and performance by such Party of this Agreement has been authorized by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member is annexed to this Agreement, and will not, to the best of its knowledge:

(i) require any consent or approval not already obtained;

(ii) violate any Applicable Law presently in effect and having applicability to it;

APPENDIX III

Page 3

(iii) violate the memorandum and articles of association, by-laws or other applicable organizational documents thereof;

(iv) violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or

(v) create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;

(c) this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and

(d) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Agreement.

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until Project completion (the “Defects Liability Period”) is achieved under and in accordance with the Percentage rate Contract, in case the Project is awarded to the Joint Venture. However, in case the Joint Venture is either not qualified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Applicant is not pre-qualified or upon return of the Bid Security by the Employer to the Bidder, as the case may be.

9. Miscellaneous

9.1 This Joint Bidding Agreement shall be governed by laws of {India/ Odisha}.

9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Employer.

APPENDIX III

Page 4

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED	SIGNED, SEALED AND DELIVERED
For and on behalf of	
LEAD MEMBER by:	SECOND PART
(Signature)	(Signature)
(Name)	(Name)
(Designation)	(Designation)
(Address)	(Address)

In the presence of:

1. 2.

Notes:

1. The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, laid down by the Applicable Law and the charter documents of the executants(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

2. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member.

APPENDIX IV

Page 1

Statement of Legal Capacity

(To be forwarded on the letterhead of the Applicant/ Lead Member of Joint Venture)

Ref. Date:

To,

.....

Dear Sir,

We hereby confirm that we/ our members in the Joint Venture (constitution of which has been described in the application) satisfy the terms and conditions laid out in the Bidding document.

We have agreed that …… (insert member's name) will act as the Lead Member of our Joint Venture.*

We have agreed that …….. (insert individual's name) will act as our representative/ will act as the representative of the Joint Venture on its behalf* and has been duly authorized to submit the Bidding Document.

Further, the authorized signatory is vested with requisite powers to furnish such letter and authenticate the same.

Thanking you,

Yours faithfully,

(Signature, name and designation of the authorised signatory)

For and on behalf

of……..

**Please strike out whichever is not applicable.*

SECTION – IV

GENERAL CONDITIONS OF CONTRACT (GCC)

CONTENTS

A. GENERAL

1.1 Interpretation

2.0 Engineer-in-Charge's Decisions

3.0 Delegation

4.0 Communications

5.0 Sub-contracting

6.0 Other Contractors

7.0 Personnel:

8.0 Contractor’s Risks

9.0 Insurance

10.0 Site Inspections

11.0 Contractor to Execute the Works:

12.0 Diversion of streams / Nallas / Drains:

13.0 Power Supply:

14.0 Temporary Diversions (Works on Highways)

15.0 Ramps:

16.0 Monsoon Damages:

17.0 The works to be completed by the Intended Completion Date:

18.0 Safety:

19.0 Discoveries:

20.0 Possession of the Site.

21.0 Access to the Site

23.0 Settlement of disputes

B. TIME FOR COMPLETION

24.0 Period of completion

25.0 Construction Programme:

26.0 Speed of work:

27.0 Suspension of works by the Contractor:

28.0 Extension of completion date

29.0 Delay Ordered by the Engineer-in-Charge

30.0 Early Warning

31.0 Management Meetings

C. QUALITY CONTROL

32.0 Identifying Defects

33.0 Tests

34.0 Action in case of improper materials and workmanship

35.0 Action and compensation payable in case of bad work

36.0 Quality Control

D. COST CONTROL

37.0 Contract price

38.0 Changes in the Quantities

39.0 Cash flow forecasts

40.0 Price Bid & Payment Schedules

41.0 Measurement & Payments

42.0 Interest on Money due to the Contractor

43.0 Commissioning of Project

44.0 Certificate of Completion of works

45.0 Taxes included in the bid

46.0 Price Adjustment of Contract Price

47.0 Liquidated Damages for delay

48.0 Rescission of Contract

49.0 Mobilization Advance

50.0 Securities Deposit

51.0 Cost of Repairs

E. FINISHING THE CONTRACT

52.0 Completion

53.0 Taking Over

54.0 Final Account

55.0 Termination

56.0 Payment upon Termination

57.0 Property

58.0 Release From Performance

59.0 Water Supply

60.0 Electrical Power

61.0 Land

62.0 Approach Roads And Roads In Work Area

63.0 Payment for Camp Construction

64.0 Explosive Magazines & Fuel Storage Tanks

65.0 Labour

66.0 Safety Measures

67.0 Fair Wage Clause

68.0 Indemnity Bond

69.0 Compliance with Labour Regulations

70.0 Salient features of some major labour laws applicable to establishment engaged in buildings and other construction work

71.0 Liabilities of the Contractor

72.0 Contractor's Staff, Representatives and Labour

73.0 Accommodation and food

74.0 Relationship

75.0 Protection of adjoining premises

76.0 Work during night or on Sundays and holidays

77.0 Layout of materials stacks

78.0 Use of blasting materials

79.0 Plant and Equipment

80.0 Steel forms

81.0 Inconvenience to the public

82.0 Conflict of interest

83.0 Contract documents and materials to be treated as confidential

84.0 General obligations of Contractor

85.0 Security measures

86.0 Fire fighting measures

87.0 Sanitation

88.0 Training of personnel

89.0 Ecological balance

90.0 Preservation of existing vegetation

91.0 Possession Prior to completion

92.0 Access to the Contractor's books

93.0 Drawing to be kept at site

94.0 B.I.S books and Standard specification / OPWD code to be kept site

95.0 Site Order Book

96.0 Variations by way of modification, omissions or additions

97.0 Care and diversion of river / stream.

98.0 INCOME TAX

99.0 Royalty Charges

100.0 GST

101.0 Labour welfare cess

102.0 Supply Of Construction Materials

103.0 Setting Out

104.0 Site Data

105.0 Sufficiency of the contract price

106.0 Unforeseeable Difficulties

107.0 Rights of Way and Facilities

108.0 Avoidance of Interference

109.0 Access Route

110.0 Transport of Goods

111.0 Contractor's Equipment

112.0 Progress Reports

113.0 Design

114.0 Programme

115.0 Charge of site

116.0 Changes in drawing

117. 0 FORCE MAJEURE

SECTION – IV

GENERAL CONDITIONS OF CONTRACT

A. GENERAL

1 . INTERPRETATION

1.1 In interpreting these Conditions of Contract, singularalso means plural, male also means female, and vice-versa. Headings haveno significance. Works have theirnormal meaning under the language of the contract unless specifically defined. The Engineer-in-Charge will provide instructions clarifying queries about the conditions of Contract.

1.2 The documents forming the Contract shall be interpreted in the following order of priority:

a) Articles of Contract

b) Letter of Acceptance, notice to proceed with the works c) Contractor's Bid (Technical bid)

d) Conditions of contract e) Specifications

f) Drawings

g) Any other document listed as forming part of the Contract.

2.0 ENGINEER-IN-CHARGE'S DECISIONS

2.1 Except where otherwise specifically stated, the Engineer-in-Charge will decide the contractual matters between the Department and the Contractor in the role representing the Department.

3.0 DELEGATION

3.1 The Engineer-in-Charge may delegate any of his duties and responsibilities to other officers and may cancel any delegation by an official order issued.

4.0 COMMUNICATIONS

4.1 Communications between parties, which are referred to in the conditions, are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act)

4.2 The contractor at time of signing of Agreement shall furnish the permanent and temporary address of the firm for correspondence. He shall also designate his authorized representative for liaisoningwith the Department. In case of change of authorized representative, the new representative shall be promptly designated. The e-mail address, telephone number and Fax number of the firm & the representative shall also be furnished.

5.0 SUB-CONTRACTING

5.1 If the prime contractor desires to sub-let a part of the work, he should submit the same at the time of filing Bids itself or during execution, giving the name of the proposed Sub-contractor, along with details of his qualification and experience. The Bid Accepting Authority should verify the experience of the Sub-contractor and if the Sub-contractor satisfies the qualification criteria in proportion to the value of work proposed to be sub-let, including his past track record of completion and quality of work, he may permit the same. The total value of works to be awarded on sub-letting shall not exceed 50% of contract value. The extent of subletting shall be added to the experience of the sub-contractor and to that extent deducted from that of the main contractor. No part of the work can be sublet to other short listed bidder of UGPL projects of Odisha.

6.0 OTHER CONTRACTORS

6.1 The Contractor shall cooperate and share the Site with other contractors, Public authorities, utilities, and the Department. The Contractor shall also provide facilities and services for them as directed by the Engineer-in-charge.

7.0 PERSONNEL:

7.1 The Contractor shall employ the required Key Personnel named in the Schedule of Key Personnel to carry out the functions stated in the Schedule or other personnel approved by the Engineer-in-charge. The Engineer-in-Charge will approve any proposed replacement of Key Personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

7.2 Failure to employ the required technical personnel including quality management staff by the contractor, the employer would engage any quality assurance staff for implementing quality management Plan. The amounts spent on such deployment will be recovered from the contractor over and above the provision made in part two of schedule-A from the contractors bills. However, this will not absolve the contractor from the responsibility of quality management on contract works.

7.3 The technical personnel including quality assurance personnel should be on full time and available at site whenever required by Engineer- in -Charge to take instructions.

7.4 The names of the technical personnel including quality assurance personnel to be employed by the contractor should be furnished in the statement enclosed separately.

7.5 In case the contractor is already having more than one work on hand and has undertaken more than one work at the same time, he should employ separate technical and quality assurance personnel on each work.

7.6 If the contractor fails to employ technical and quality assurance personnel the work will be suspended, department will engage technical and quality assurance personnel and recover the cost thereof from the contractor. This will not absolve the contractor from the responsibly of maintaining quality of work and implementing quality management plan.

7.7 If the Engineer-in-Charge asks the Contractor to remove a person who is a member of Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the site forthwith and has no further connection with the work in the contract.

7.8 All Contractor’s personnel employed at the plant/work site at any time during the period covered by the present Contract will be provided by him. The Employer is not liable for personnel in any way and cannot be held responsible in the event of litigation of any sort between the Contractor and members of plant personnel or their representatives.

8.0 CONTRACTOR’S RISKS:

8.1 All risks of loss or damage to physical property and of personnel injury and death, which arise during and in consequence of the performance of the Contractor, are the responsibility of the Contractor.

9.0 INSURANCE:

9.1 The Contractor shall provide, in the joint names of the Department and the contractor, insurance cover from the start date to the end of the Defects Liability Period i.e., for 30 months & for maintenance period of 5years or fiveKharif crop seasons whichever is more for the following events.

(i) Loss of or damage to property in connection with the Contract; and ii. Personal injury or death of persons employed for construction

(ii) Loss of or damage to the Works, Plant and Materials :

(iii) Loss or damage to the Equipment.

The minimum insurance amounts shall be:

a) For the Works, Plant and Materials: Amount fixed by insurance companyfor 5% of the Contract Price.

b) For loss or damage to Equipment: Amount fixed by insurance company for 5% of the Contract Price.

c) For loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection withContract: Amount fixed by insurance company for 2% of the Contract Price.

d) For personal injury or death of the contractor's employees or other people: (e) For death: Insurance coverage of Rs. 5.00 lakhs per occurrence

For injury: Insurance coverage of Rs. 1.00 lakh per occurrence

9.2 Policiesandcertificatesofinsuranceforeventsi&iiaboveshallbedeliveredbythe Contractor to the Engineer-in-Charge at the time of concluding Contract. The policies and certificates of insurance for the events (iii) & (iv) of above clause shall be delivered by the contractor to Engineer-in-Charge on commencement of work& after finalization of planning & design. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred.

(i) The contractor shall furnish insurance policy in force in accordance with proposal furnished in the Bid and approved by-the Department for concluding the contract.

(ii) The contractor shall also pay regularly the subsequent insurance premium and produce necessary receipt to the Engineer-in-Charge, well in advance.

(iii) In case of failure to act in the above said manner the department will pay the premium and the same will be recovered from the Contractors payments.

9.3 Alterations to the terms of insurance shall not be made without the approval of the Engineer- in-Charge.

Any amounts not insured or not recovered from the insurers shall be borne by the Contractor in accordance with their responsibilities under Clause-1.

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of:

a. Death of or injury to any person, or,

b. Loss of or damage to any property (other than the Works),

Which may arise out of in consequent of the Operation and Maintenance of the Facility and the remedying of any defects therein, and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insurers.

The Employer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, The Contractor shall indemnify and keep indemnified the employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Facility. Provided that, in respect

of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor 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 Subcontractor to produce to the Employer, when required, such policy of insurance and receipt for the payment of the current premium.

In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies affected pursuant to the Contract, each will indemnify the other against all losses and claims arising from such failure according to the Contract Conditions.

10.0 SITE INSPECTIONS:

10.1 The contractor should inspect the site and also proposed quarries of choice for materials source of water and quote his bid price including quarrying, conveyance and all other charges etc.

10.2 The responsibility for arranging the land for borrow area rests with the Contractor and no separate payment will be made for procurement or otherwise. The contractor's quoted bid price will be inclusive of land cost.

11.0 CONTRACTORTO EXECUTE THE WORKS:

1.1 The Contractor shall conduct Surveys, detailed investigation, Planning, approval of designs, construction of all component, supply & erection of mechanical and electrical equipment and Commissioning the Work in accordance with the approved specifications and Drawings and work programme.

12.0 DIVERSION OF STREAMS / NALLAS / DRAINS:

12.1 The contractor shall at all time carry out construction of cross drainage works in a manner creating least interference to the natural flow of water while consistent with the satisfactory execution of work. A temporary diversion shall be formed by the contractor at his cost wherenecessary. No extra payment shall be made for this work.

12.2 No separate payment for bailing out sub-soils, water drainage or locked up rain water for diversion, shoring, foundations, bailing of pumping water either from excavation of soils from foundations or such other incidental will be paid. The bid price to be quoted by the contractor is for the finished item of work in situ and including all the incidental charges. The borrow pits are also to be de-watered by the contractor himself at his expense, if that should be found necessary.

12.3 The work of diversion arrangements should be carefully planned and prepared by the contractor and forwarded to the Engineer-in-Charge technically substantiating the proposals and approval of the Engineer-in-Charge obtained for execution.

12.4 The contractor has to arrange for bailing out water, protection to the work in progress and the portion of works already completed and safety measures for men and materials and all necessary arrangements to complete the work.

12.5 All the arrangements so required should be carried out and maintained at the cost of the contractor and no separate or additional payment is admissible.

12.6 Necessary coffer dams and ring bunds have to be constructed at the cost of contractor and some are to be removed after the completion of the work. The contractor has to quote his bid price keeping the above in view.

13.0 POWER SUPPLY:

13.1 The contractor shall make his own arrangements for obtaining power from the Electricity Distribution Company (DISCOM) for carrying out construction work at his own cost. The contractor will pay the bills of DISCOM for the cost of power consumed by him.

13.2 The contractor shall satisfy all the conditions and rules required as per Indian Electricity Act 1910 and under Rule-45(I) of the Indian Electricity Rules, 1956 as amended from time to time and other pertinent rules.

13.3 The power shall be used for bonafide Departmental work only.

14.0 TEMPORARYDIVERSIONS(WORKS ON HIGHWAYS):

14.1 The contractor shall at all time carryout work on the highway in a manner creating least Interference to the flow of traffic while consistent with the satisfactory execution of the same. For all works involving improvements to the existing highway, the contractor shall in accordance with the directions of the Engineer-in-Charge provide and maintain during the execution of the work a passage for traffic, either along a part of the existing carriage way under improvement or along a temporary diversion constructed close to the highway.

14.2 If in the opinion of the Engineer-in-Charge, it is not possible to pass the traffic on part width of the carriage-way for any reason, a temporary diversion close to the highway shall be constructed as directed. It shall be paved with the materials such as hard moorum, gravel and stone, metal to the specified thickness as directed by the Engineer-in-Charge. In all cases, the alignment, gradients and surface type of the diversion including its junctions, shall be approved by the Engineer-in-Charge before the highway is closed to traffic.

14.3 The contractor shall take all necessary measures for the safety of traffic during construction and provide erect and maintain such barricades, including signs, markings, flags lights and information and protection of traffic approaching or passing through the section of the highway under improvement. Before taking up any construction, an agreed phased programme for the diversion of traffic on the highway shall be drawn up in consultation with the Engineer-in-charge.

14.4 The barricades erected on either side of the carriage way portion of the carriage way closed to traffic, shall be of strong design to resist violation and painted with alternative black and white stripe. Red lanterns or warnings lights of similar type shall be mounted on the barricades at night and kept lit throughout from sunset to sunrise.

15.0 RAMPS:

Ramps required during execution may be formed wherever necessary and same are to be removed after completion of the work. No separate payment will be made for this purpose.

16.0 MONSOON DAMAGES:

Damages due to rain or flood either in cutting or in banks shall have to be made good by the contractor till the work is handed over to the Department. The responsibility of de-silting and making good the damages due to rain or flood rests with the contractor. No extra payment is payable forsuch operations and the contractor shall therefore has totake all necessary precautions to protect the work done during the construction period.

17.0 THE WORKS TO BE COMPLETED BY THE INTENDED COMPLETION DATE:

The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the Contractor at the time of agreement, with the approval of the Engineer-in-Charge, and complete the work by the Intended Completion Date.

18.0 SAFETY:

The Contractor shall be responsible for the safety of all activities on the Site.

19.0 DISCOVERIES:

Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Government. The Contractor is to notify the Engineer-in-Charge of such discoveries and carry out the Engineer-in-Charges instructions for dealing with them.

20.0 POSSESSIONOF THE SITE.

20.1 The Department shall give possession of the site to the Contractor. If possession of a part site is given, the Department will ensure that the part site so handed over is amenable to carry out the work at site by the Contractor.

21.0 ACCESS TO THE SITE:

21.1 The Contractor shall provide the Engineer-in-Charge any person authorized by the Engineer-in-Charge, access to the site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

22.0 INSTRUCTIONS:

22.1 The Contractor shall carry out all instructions of the Engineer-in-Charge comply with all the applicable local laws where the Site is located.

23.0 SETTLEMENTOF DISPUTES:

23.1 If any dispute of difference of any kind whatsoever arises between the department and the Contractor in connection with, or arising out of the Contract, whether during the progress of the works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall in the first place, be referred to for settlement by the Engineer-in-Charge who shall, within a period of thirty days of receipt of request of the Contractor to do so, give written notice of his decision to the Contractor. Upon receipt of the written notice of the decision of the Engineer-in-Charge the Contractor shall promptly proceed without delay to comply with such notice of decision.

23.2 If the Engineer-in-Charge fails to give notice of his decision in writing within a period of thirty days after being requested or if the Contractor is dissatisfied with the notice of the decision of the Engineer-in-Charge, the Contractor may within thirty days of receipt of the notice of decision appeal to the Superintending Engineer who will give notice of his decision within thirty days of receipt of the appeal. In case of failure of Superintending Engineer to give the decision within stipulated period or if the contractor is dissatisfied with the decision, he may within thirty days of receipt of such notice, appeal to the Chief Engineer who shall offer an opportunity to the contractor to be heard and to offer evidence in support of his appeal. Chief Engineer, shall give notice of his decision within a period of thirty days after the Contractor has given the said evidence in support of his appeal. Such decision of the Chief Engineer, in respect of every matter so referred to final and binding upon the Contractor and shall forthwith be given effect to by the Contractor, who shall proceed with the execution of the works with all due diligence whether he requires further appeal as hereinafter provided, or not. If the Chief Engineer fails to give notice of his decision, as aforesaid within a period of thirty days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then the contractor within thirty days may refer the matter or matters in dispute to Principal Secretary to Government in Department of Water Resources who shall decide within thirty days of receipt of such reference by the contractor whose decision will be final & binding.

23.3 Arbitration:

In case the Contractor be dissatisfied with any such decision of Government, then the contractor within thirty days may refer the matter or matters of dispute for arbitration. The

arbitration shallbe conducted in accordance with the provisions of Indian Arbitration and Conciliation Act 1996 or any statutory modification thereof.

B. TIME FOR COMPLETION

24.0 Period of completion:

24.1 Time is the essence of the contract. The total period of completion is Twenty Fourcalendar months from the date of **signing of Agreement**, which shall be the date of commencement of work. The period is inclusive of rainy season. After signing the contract, the Engineer-in-Charge shall forthwith notify the contractor to go ahead with the work with issue of work order& the contractor shall forthwith begin the work. The contractor shall furnish a work programme containing CPM/PERT network within fifteen days of signing of contract so as to achieve the mile stones specified in the bid.

24.2 This being aEPC contract, conducting of surveys, investigation, planning and design, preparation of land plan schedules are within the scope of the contract and the contractor shall meticulously plan so as to obtain the required site for carrying out the work.

24.3 The contractor shall bear all costs and charges for special or temporary way leases required by him in connection with access to the site. The contractor shall also provide at his own cost any additional accommodation outside the site required by him for the purposes of the work.

24.4 Incentive for Early Completion: For availing incentive clause in any project which is completed before the stipulated date of completion, subject to other stipulations it is mandatory on the part of the concerned Superintending Engineer to report the actual date of completion of the project as soon as possible through fax or e-mail so that the report is received within 7 days of such completion by the concerned ACE, CE& the Administrative Department. The incentive for timely completion should be on a graduated scale of one percent to 10 percent of the contract value. Assessment of incentives may be worked out for earlier completion of work in all respect in the following scale:

Before 30% of contract period =10% of Contract Value
Before 20 to 30% of contract period=7.S% of Contract Value
Before 10 to 20% of contract period=5% of Contract Value
Before 5 to 10% of contract period=2.5% of Contract Value
Before 5% of contract period=1% of Contract Value, the codal provision as laid by Works Department in their letter No.5288/W Dt.04.05.2016 and OPWD Code Volume-I, Para 3.5.5. and subsequent amendment thereof shall be followed.

25.0 Construction Programme:

25.1 The Contractor shall furnish within fifteen days of signing of the contract a work programme, containing CPM/PERT showing the sequence in which he proposes to carry out the work, monthly progress expected to be achieved, indicating date of procurement of materials plant and machinery. The schedule should be such that it is practicable to achieve completion of the whole work within the time limit fixed and in keeping with the Mile Stone programme specified and shall obtain the approval of the Engineer-in-charge. Further, rate of the progress as in the program shall be kept upto date. In case it is subsequently found necessary to alter this program, the contractor shall submit sufficiently in advance the revised programme incorporating necessary modifications and get the same approved by the Engineer-in-charge. The Engineer-in-Charge will get the program approved by the Chief Engineer before communicating to the contractor.

The Engineer-in-Charge shall have all times the right, without any way violating this contract, or forming grounds for any claim, to alter the order of progress of the works or any part thereof and the contractorshallafterreceiving such directions proceed as per the order directed.

26.0 Speed of work:

26.1 The Contractor shall at all times maintain the progress of work to conform to the latest operative progress schedule approved by the Engineer-in-Charge. The contractor should furnish progress report indicating the programme and progress once in a month. The Engineer-in-Charge may at any time in writing direct the contractor to slow down any part or whole of the work for any reason (which shall not be questioned) whatsoever, 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 of compensation. Such orders of the Engineer-in-Charge for slowing down the work will however be duly taken into account while granting extension of time if asked by the contractor for which no extra payment will be entertained.

26.2 Delays in Commencement or progress or neglect of work :

If, at any time, the Engineer-in-Charge shall be of the opinion that the Contractor is delaying Commencement of the work or violating any of the provisions of the Contract or is neglecting or delaying the progress of the work, he shall so advise the Contractors in writing and at the same time demand compliance in accordance with instructions to Bidder and conditions of Contract. If the Contractor neglects to comply with such demand within seven days after receipt of such notice, it shall then or at any time thereafter, be lawful for the Engineer-in- Charge to take suitable action in accordance with relevant Clauses of contract.

27.0 Suspension of works by the Contractor:

27.1 If the Contractor suspends the works, or sublet the work without sanction of the Engineer-in-Charge, or in the opinion of the Engineer-in-Charge shall neglect or fail to proceed with due diligence in the performance of his part of the Contract as laid down in the Schedule rate of progress, or if he shall continue to default or repeat such default, the Engineer-in-Charge shall take action in accordance with Clauses of termination of contract.

28.0 Extension of completion date:

28.1 No claim for compensation on account of delays or hindrances to the work from any cause whatever shall be accepted. Reasonable extension of time will be allowed by the Engineer-in-Charge or by the officer competent to sanction the extension, for unavoidable delays, such as may result from cause(s), which in the opinion of the Engineer-in-Charge, are undoubtedly beyond the control of the contractor. The Engineer-in-Charge shall assess the period of delay or hindrance caused by any written instructions issued by him.

28.2 The Contractor shall give written notice to the Engineer-in-Charge whenever planning or progress of the works is likely to be delayed or disrupted unless any further drawings or order including a direction, instruction or approval is issued by the Engineer-in-Charge within a reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late. If by reason of any failure or inability of the Engineer-in-Charge to issue within a reasonable time in all the circumstances, any drawing or order requested by the contractor the Contractor suffers delay, thenthe Engineer-in-Charge shalltake such delay into account in determining any extension of time for which no compensation shall be claimed by the contractor.

28.3 In the event ofthe Engineer-in-Charge failing to issue necessary instructions and thereby causing delay and hindrance to the contractor, the latter shall have the right to appeal to the Chief Construction Engineer of the Project whose decision will be final and binding. The contractor shall lodge in writing to the Engineer-in-Charge a statement for time extension for any delay or hindrance referred to above, within fourteen days from its occurrence, otherwise no extension of time will be allowed.

28.4 Whenever authorized alterations or additions made during the progress of the work are of such a nature in the opinion of the Engineer-in-Charge as to justify an extension of time in consequence

thereof, such extension will be granted in writing by the Engineer-in-Charge or other competent authority when ordering such alterations or additions.

28.5 Application for extension of time for the completion of a work on the grounds of unavoidable hindrance or any other grounds shall be submitted by the contractor within 30 days of such hindrance & the Engineer-in-Charge shall authorize or recommend such extension of time as deemed necessary or proper within fifteen days of the receipt of the such an application. In cases where the sanction of the higher authorities to the grant of extension of time is necessary, the Engineer-in-Charge should send his recommendation as expeditiously as possible. The higher authority should communicate his decision within 60 days from the date of receipt on recommendation in his office. If the orders of the competent authority are not received in time, the Engineer-in-Charge may grant extension of time under intimation to the concerned authorities so that the contract might remain in force, but while communicating this extension of time, he must inform the contractor that the extension is granted without prejudice to Government's right to levy compensation under relevant clause of contract.

28.6 The power to grant extension of time vests with the authority who accepted the tender but the period of extension that can be granted by such an authority is limited to the period equivalent to the time originally stipulated in the Agreement for completion of the work beyond this, approval of next higher authority should be obtained before extension of time is granted.

28.7 The application for extension of time and sanction thereto should be made in the prescribed form.

28.8 The delay in completion of the work for which the reasons are attributable to the contractor, the extra amount required for extension of **PMC/ PEC/ TPIA**engaged for this work will be recovered from the contractor executing the EPC work.

29.0 Delay Ordered by the Engineer-in-Charge.

The Engineer-in-Charge may instruct the Contractortodelaythestartorprogressofanyactivity within the Work.

30.0 Early Warning:

30.1 The contractor is to bring to the notice of the Engineer-in-Charge at the earliest opportunity of specific likely future events or circumstances that may adversely affect the Execution of Works.

30.2 The Contractor shall cooperate with the Engineer-in-Charge in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer-in-Charge.

31.0 Management Meetings:

The Engineer-in-Charge may require the Contractor to attend management meetings. The business of a management meeting shall be to review the programme for remaining work and to deal with matters raised in accordance with the early warning procedure. The minutes of the meeting shall be given in writing for follow up by the parties

C. QUALITY CONTROL

32.0 Identifying Defects:

32.1 The Engineer-in-Charge shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer-in-Charge may instruct the Contractor to verify the Defect and to uncover and test any work that the Engineer considers may be a Defect.

33.0 Tests:

33.1 If the Engineer-in-Charge instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect, the Contractor shall promptly comply and pay for the test and any sampling.

34.0 Action in case of improper materials and workmanship:

34.1 If in the opinion of the Engineer-in-Charge any work or part thereof is executed with improper materials or defective workmanship the contractor(s) shall when required by the Engineer-in-Charge , forthwith re-execute the same and substitute proper materials and workmanship and in case of default by the contractor(s) in so doing within a week from the date of the requisition, the Engineer-in-Charge shall have full power to employ other person to re-execute the work and the cost thereof shall be borne by the contractor(s). Every time notice of a Defect is given, the Contractor shall correct the notified defect within the length of time specified by the Engineer-in-Charge's notice

35.0 Action and compensation payable in case of bad work:

If at any time before security deposit is refunded to the contractor it shall appear to the Engineer-in-Charge or his subordinate in charge of the work that any work has been executed with unsound, imperfect or unskilful workmanship or with materials of inferior quality or that any materials or article provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or are otherwise not in accordance with contract, it shall be lawful for Engineer-in-Charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or article complained of may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part as the case may require or if so required shall remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the Engineer-in-Charge in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding ten days during which the failure so continues and in the event of any such failure as aforesaid, the Engineer-in-Charge may rectify or remove and re-execute the work or remove and replace the materials or articles complained, at the cost of the contractor.

The Engineer-in-Charge may also introduce check lists which shall be kept in Bound registers by the construction supervision staff. The contractor may be required to fill up these lists in the first instance and shall be subsequently checked by the Construction / Quality Control Engineers.

36.0 Quality Control:

Quality control monitoring reports, test results, reports - of corrective action etc, shall be furnished to the employer at regular intervals.

Quality Audit shall be got conducted by the Engineer-in-Charge departmentally or by other organization and the contractor shall extend the testing facilities to them also.

The contractor shall produce the Quality records maintained by him to the department or his authorizing agent for the quality audit.

D. COST CONTROL

37.0 CONTRACT PRICE:

37.1 The contract price shall be the total value of work on EPC mode of UGPL system as detailed in the scope of work which includes Operation and Maintenance of the total UGPL Network for five years or five kharif seasons whichever is more from the date of commissioning of the system.

37.2 The essence of the contract is to develop irrigation network for the command areas under Pressurized UGPL system. At the stage of detailed survey, investigation & planning of the Pressurized UGPL system, care will be taken for achieving irrigation to a total CCA of 1979 ha. Depending on the detailed survey there can be variation of CCA.

37.3 The Contract Price shall be related to the CCA of the system and break up of contract price shall be made on the approved CCA after the stage of approval of Survey, Planning and Design of the Pressurized UGPL system (CCA in Ha-1979 Ha).

37.4 The contractor will be paid a firm contract price for completion of all works as specified under the scope of the work under the contract.

37.5 Notwithstanding anything that is stated, the contract price once accepted by the employer shall be final and shall not be subject to any claims on any ground what so ever of the Contractor.

37.6 The contract price of the total work is divided among different component of works as per the percentages specified in Price Bid - Break up of Bid amount and payments will be regulated accordingly.

37.7 The contractor shall pay all duties and taxes in consequence of his obligations under the contract and the contract price shall not be adjusted for such costs.

37.8 Contract price will be paid to the Contractor in Indian Rupees only.

38.0 CHANGES IN THE QUANTITIES:

38.1 Being a lump sum contract on EPC mode, the contractor is bound to complete the entire work under the contract on a firm lump sum price quoted and on a single source responsibility basis. The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the contract price. Therefore the contractor is bound to execute all supplemental works that are found essential, incidental and inevitable for completion of work in all respect during execution of the project and also Operation and Maintenance for a period of fifteen years or fifteen Kharif seasons whichever is more at no extra cost to the employer subject to the stipulation of variation of CCA in clause stated below.

38.2 Variation in CCA: As stated in clause 37.2 there could be variation of CCA after the detailed survey and investigation and planning is done and approved by competent authorities.

38.2.1 The variationintotalCCAofthe project, bothincreaseordecrease upto5% shall be considered acceptable under the contract and the contract price remains unaltered.

38.2.2 In case of variation more than 5%, detected after the detailed survey, investigation and planning and duly approved by competent authorities, additional payment on prorata basis for the CCA beyond 5% shall be made to the contractor in case of increase in CCA, after jointly verified and certified by Water Resources and Revenue authorities on providing irrigation. Similarly in case of decrease in approved CCA beyond 5%, deduction of payment shall be made from the Contractor's bills on prorata basis based on the approved CCA by the competent authority. However the total CCA of the UGPL system shall be finalized only after joint verification and certification by Water Resources and Revenue authorities on providing irrigation. The method of deduction & payment to the contractor shall be decided by the Chief Engineer after finalization of Planning & Design.

38.3 Entrustment of additional items :

38.3.1 Wherever additional items not contingent on the main work and outside the scope of original contract are to be entrusted to the original contractor, entrustment of such items and the price to be paid shall be referred to a committee proposed by Government for final decision and it shall be binding on the contactor.

38.3.2 Entrustment of the additional items contingent on the main work will be authorized by the employer and the contactor shall be bound to execute such additional items at no extra cost to the employer and the cost of such items shall be deemed to have been included in the contract price quoted.

39.0 CASH FLOW FORECASTS:

When the program is updated, the contractor is to provide the Engineer-in-Charge with an updated cash flow forecast.

40.0 PRICE BID & PAYMENT SCHEDULES:

40.1 The bidder shall quote lump sum Bid Price for the entire work and O&M in the prescribed format given in APPENDIX - FB of Price Bid.

40.2 The total work specified under EPC mode contract is divided into four major components of work to facilitate payments component wise as specified in Appendix F under Price Bid. The cost of each of the above components is specified as percentage of the total Bid price.

40.3 The payment for each of the components of works shall be limited to the respective amounts arrived on the basis of percentages specified in Appendix – F.

40.4 The components shown in Appendix F have been further sub-divided into appropriate stages for the purpose of stage payment as specified in Appendix F1 to F4.

40.5 This stage payment shall be limited to the respective amounts arrived on the basis of percentages specified in the Appendix F1 to F4.

40.6 The stage payment mentioned in F1 to F4 may be further sub divided into sub components as percentages by the contractor which shall be duly approved by the Chief Engineer before signing of agreement. The sub-component should have relation to the programme of construction taking due cognizance of interdependency of various activities. The sum of payment for the sub components shall be limited to the respective stage amounts arrived on the basis of percentages specified Appendix F1 to F4.

40.7 Payment shall be released only on the basis of completion of work of respective component /sub-component.

40.8 The Engineer-in-Charge shall check the Contractor's monthly statement within 7 days of submission.

40.9 The value of work executed shall be determined by the Engineer-in-charge.

40.10 The Engineer-in-Charge may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

40.11 The contractor shall be permitted to submit their work bills once in a month and payment will be made after proper check of quantity and quality within seven days.

40.12 The Competent authority is empowered to modify the percentage of components, on approval of design and drawing based on the detailed investigation, detailed drawings and detailed estimation done by the contractor keeping the total price bid unaltered.

40.13 The Chief Engineer is empowered to modify the sub components stage wise keeping the percentages of stages unaltered.

40.14 The contractor shall give "Bill of Quantities" based on the detailed estimates prepared on the basis of approved design, drawings and items of the estimate shall be suitably clubbed or grouped for assessment of value of work done.

41.0 MEASUREMENT & PAYMENTS:

41.1 The contractor shall execute the various components of work as per approved drawings and specifications. The contractor shall arrange to take and record all measurements of work done of various components of work in the Measurement Books/Level field books issued to him and plotted in the cross section sheets and quantities arrived as per actual execution as and when required.

41.2 In respect works, Measurement Books/Level field books have to be issued by the Engineer-in-Charge to Contractor duly certified and numbered for recording measurements and levels. The Measurement Books/Level field books shall be maintained by Contractor and bills are to be submitted to the Engineer-in-Charge by the Contractor along with a true extract of the entire set for checking and making payment. The Engineer-in-Charge has to keep the full set of true extract with him and return the originals to the agency for further use. The entire original record shall be finally handed over for record to the Engineer-in-Charge by the Contractor.

41.3 Measurements will be recorded by the contractor for the finished work only for which all tests are conducted and work done in accordance with specifications and contract conditions by using the materials specified in the contract.

41.4 The contractor shall prepare monthly work bills based on the measurements of work done already recorded as stated above and submit to Engineer-in-Charge duly signed by them or his authorized signatory for arranging payment. Only completed portions of the works will be billed as per Break up of components & sub components by the contractor.

41.5 The Engineer-in-Charge shall exercise check to see that the bill submitted by the Contractor is in accordance with Agreement conditions & certified by the Department quality control authority and or 3rd party quality control monitors if both are deployed on the work.

41.7 The Engineer in Charge should check the claim with reference to the measurements recorded to see that the percentage at which the bill is claimed is clearly traceable into the documents on which payments are to be made. Payments shall be adjusted for recovery of advance payments, liquidated damages in terms of agreement conditions, security deposit for due fulfilment of the contract. Recoveries shall be effected towardsroyaltychargeson the material used and other statutory recoveries as per State and Central Government rules and Acts.

41.8 In case of over payments or wrong payment if any made to the contractor due to wrong interpretation of the provisions of the contract or Contract conditions etc., such unauthorized payment will be deducted in the subsequent bills or final bill for the work or from the bills under any other contracts with the Government or at any time thereafter from the deposits available with the Government.

41.9 Any recovery or recoveries advised by the Government Department either state or central, due to non-fulfilment of any contract entered into with them by the contractor shall be recovered from any bill or deposits of the contractor.

41.10 No claim shall be entertained, if the same is not represented in writing to the Engineer-in- Charge within 15 days of its occurrence.

41.11 The contractor is not eligible for any compensation for inevitable delay in handing over the site or for any other reason. In such case, suitable extensions of time will be granted after considering the merits of the case.

41.12 The Employer shall within 28 days of receiving a Statement and supporting documents, give to the Contractor notice of any items in the Statement with which the Engineer in charge disagrees, with supporting particulars. Payments due shall not be withheld, except that;

a) If anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and / or

b) If the Contractor was or is failing to perform any work or obligation in accordance with the contract and as notified by the Engineer in charge, the value of this work, or obligation may be withheld until the work or obligation has been performed.

The Employer may, in any payment, make any correction or modification that should properly be made, to any amount previously considered due. Payment shall not be deemed to indicate Engineer-in-Charge acceptance, approval, consent or satisfaction.

41.13 All progressive payments made to the Contractor shall be reviewed on quarterly basis and reconciled with the break-up of the schedule. Over payments/under payments made, if any, shall be adjusted in the next interim/final payments

41.14 Measurement shall be signed and dated by both parties on the Site. If there is any dispute in any of the measurements a note to the effect shall be made in the measurement record against the disputed items and such note shall be signed and dated by both parties engaged in taking the measurements and the Parties shall discuss and resolve the same in accordance with relevant clauses of the contract.

42.0 INTEREST ON MONEY DUE TO THE CONTRACTOR:

42.1 No omission by the Engineer-in-Charge to pay the amount due upon certificates shall vitiate or make void the contract, nor shall the contractor be entitled to interest upon any guarantee fund or payments in arrears, nor upon any balance which may, on the final settlement of his accounts, found to be due to him.

No claim/interest on account of delay in payment, which might occur due to reasons beyond the control of the department, shall be entertained.

43.0 COMMISSIONING OF PROJECT:

After completion of a project it shall be run for testing and commissioning in consultation with Engineer- in-Charge and the defects are to rectified promptly. The date of commissioning of the project is to be notified by the Engineer-in-Charge in consultation with the contractor considering the availability of water, crop standing in the field and drainage of the surplus water.Thesystem connectivitytothe132/33kVGrid,Switchyard,Pump,Rising Main/Pressure main, distribution systems are to be trial run and commissioned step by step for entire system.

On the completion or part completion of the work, the completed pipe line distribution system shall be subjected to trial run for 24 hours upto 30 days to locate any defect and excessive seepage, if any. The trial run shall not be deemed as commissioning of the distribution system.

The Engineer-in-Charge shall notify the date on which the system of project was finally commissioned, to all concerned. This date of commissioning of the project shall be considered as the start date of defect liability period and Operation & Maintenance of the project.

44.0 CERTIFICATE OF COMPLETION OF WORKS:

44.1 On request of contractor, on completion of the work, the contractor (s) shall be furnished with a certificate by the Engineer-in-Charge of such completion. But no such certificate shall be given nor shall the work be considered to be complete until the contractor(s) have rectified the defects, removed from the premises on which the work shall have been executed, all scaffoldings, surplus

materials and rubbish and shall have cleaned of dirt from all wood work, doors, windows wall floors or other parts of any structures in or upon which the work has been executed or of which he / they may have had possession for the purpose of executing work, nor until the work shall have been measured by the Engineer-in-Charge or where the measurements have been taken by his subordinate until they receive the approval of the Engineer-in-Charge , the measurements being binding and conclusive against the contractor(s). If the contractor(s) shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning of dirt on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expense of the contractor (s) remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks it and clean off such dirt as aforesaid, and the contractor(s) shall forthwith bear all the expenses to be incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

The completion certificate of the Engineer-in-Charge showing the final balance due or payable to the contractor(s) shall be conclusive evidence of the work having been duly completed and that the contractor(s) shall be entitled to receive payment of the final balance in accordance with such certificate, but without prejudice to the liability of the contractor(s) under the provisions of the clause.

44.2 Similarly, the Contractor may request and the Engineer-in-Charge shall issue a Certificate ofCompletion in respect of :

a) Any section of the Permanent works in respect of which a separate time for completion is provided in the Contract, and

b) Any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer-in-Charge and occupied or used by the Department.

44.3 If any part of the Original/Permanent Works shall have been completed and shall have satisfactorily passed any final test that may be prescribed by the Contract, the Engineer-in-Charge may issue such certificate, and the Contractor shall be deemed to have undertaken tocomplete any outstanding work in that part of the Works during the period of Maintenance.

44.4 Issue of completion certificate shall not free the contractor of its obligation to the execution of the works that may be pointed out by the Engineer-in-charge as essential for the fulfilment of the scope of work in a later date during maintenance period.

45.0 Taxes included in the bid:

45.1 The Bid price quoted by the contractor shall be exclusive of GST for performance of this Contract. The GSTshall be paid extra as per the prevailing rate during the period of execution.

46.0 PRICE ADJUSTMENT (As per Works Department OM No.15847/W dt.19.11.2019)

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

(a) The price adjustment shall apply for the work done from the start date given in the contract data up to end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.

(b) The price adjustment shall be determined during each month from the formula given in following Paras

(c) Following expressions and meanings are assigned to the work done during each month:
R= Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed for extra items under variations.

46.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs

The formula (e) for adjustment of prices are:

i)Adjustment of Other Materials Component

Price adjustment for increase or decrease in thecost of local materials other than cement, steel, bitumen, pipe and POL procured by the contractor shall be paid in accordance with the following formula.

Vm= 0.85 x Pm/100 x R x (M1-M0)/M0

Vm = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.

M0= The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

M1= The all India wholesale price index (all commodities) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

Pm= Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

ii)Adjustment for Cement Component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula.

Vc= 0.85 x Pc/100 x R x (C1-C0)/C0

Vc = Increase or decrease in the cost of work during the month under consideration due to changes in rates for cement.

C0= The all India wholesale price index for Ordinary Portland Cement (OPC) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and industry, Government of India, New Delhi.

C1= The all India wholesale price index for Ordinary Portland Cement (OPC) For the month under consideration as published by the Ministry of Commerce and industry, Government of India, New Delhi.

Pc= Percentage of Cement component of the work.

iii)AdjustmentforSteelComponent

Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula.

Vs= 0.85 x Ps/100 x R x (S1-S0)/S0

Vs= Increase or decrease in the cost of work during the month under consideration due to changes in rates for steel

S0= The all India wholesale price index for steel (mild Steel long products) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and industry, Government of India, New Delhi.

S1= The all India wholesale price index for steel (mild Steel long products) for the month under consideration as published by the Ministry of Commerce and industry, Government of India, New Delhi.

Ps= Percentage of steel component of the work.

Note: For the application of this clause, index of (Mile Steel long products) has been chosen to represent steel group.

iv)Adjustment of Bitumen Component

Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula.

Vb= 0.85 x Pb/100 x R x (B1-B0)/B0

Vb= Increase or decrease in the cost of work during the month under consideration due to changes in rates for bitumen.

B0= The official retail price of bulk bitumen IOC/BPCL depot at nearest center on the day 28 days prior to date of opening of Bids.

B1= The official retail price of bulk bitumen at IOC/BPCL depot at nearest center for the 15th day of the month under consideration.

Pb= Percentage of bitumen component of the work

v):AdjustmenttowardsdifferentialcostofPipes.

Price adjustment for increase or decrease in the cost of pipe shall be paid in accordance with the following formula.

Vpi= 0.85 x Ppi/100 x R x (Pi1-Pi0)/Pi0

Vpi= Differential costof pipe i.e. amount ofincreaseordecrease in rupees to be paid or recovered during the month under consideration..

Ppi= Percentage of pipe component of the work

Pi1= AII India Whole sale price index of pipe for the period under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

Pi0= All India Whole sale price index of pipe on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

46.3 Adjustment of LabourComponent

Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the fallowing formula:

VL= 0.85 x P1/100 x R x (L1-L0)/L0

VL= Increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.

L0= the minimum wages for unskilled labour as Notified by Government of Odisha as prevailed onthelaststipulated date of receipt of tender including extension, if any.

L1= The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last date of the Month previous to the one under consideration.

P1= Percentage of labour component of the work

46.4 Adjustment of POL (fuel and lubricant)Component

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

Vf= 0.85 x Pf/100 x R x (F1-F0)/F0

Vf= Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricants.

F0= the official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC / BPCL/ HPCL at nearest center on the day 28 days prior to the date of opening of Bids.

F1= The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC / BPCL/ HPCL at nearest center for the 15thday of the month under consideration.

Pf= Percentage of fuel and lubricant component of the work

Note:-for the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group

46.5 Adjustment for Plant and Machinery Spares Component

Price adjustment forincreaseordecrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula

Vp= 0.85 x Pp/100 x R x (P1-P0)/P0

Vp= Increase or decrease in the cost of work during the month under consideration due to changes in the rates for plant and machinery spares.

P0= The all India wholesale price index for manufacture of machinery for mining, quarrying and construction on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry , Government of India, New Delhi.

P1= The all India wholesale price index for manufacture of machinery for mining, quarrying and construction for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

Pf= Percentage of plant and machinery spares component of the work.

Note: For the application of this clause, index of manufacturing of machinery for

mining, quarrying andconstruction has been chosen to represent the Plant and machinery Spares group.

Regarding wholesale price Index (WPI) for appropriate commodity for payment of price adjustment, due to change of base year of WPI from 1993-94 to 2004-05 & 2011-12, it is observed that, the commodity 'Bars and Rod','Cement', 'Heavy machinery and parts' included in the list of WPI 1993-94 series are not mentioned as such in the WPI 2004-05 & 2011-12 series. Therefore, the following items in the WPI 2004-05 & 2011-12 series shall be considered corresponding to items in WPI 1993-94series:

Sl. No	ItemінWPI1993-94 series	ItemінWPI2004-05 series	ItemінWPI2011-12 series
1.	Cement	Grey Cement	Ordinary Portland cement
2	Bars&rods	Rebars	Mild steellongproducts
3.	HeavyMachinery&parts	Construction Machinery	Manufacture of Machinery for mining, quarrying &construction.

46.6 APPLICATION OF ESCALATION CLAUSE:

The contractor shall for the purpose of availing reimbursement/refund of differential cost of steel, bitumen, cement, pipe, POL and wages, keep such books of account and other documents as are necessary to show that the amount of increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of Government and further, shall at the request of the Engineer-in-Charge , furnish documents to be verified in such a manner as the Engineer-in-Charge may require any document and information kept. The contractor shall within a reasonable time of 15 days of his becoming aware of any alteration in the price of such material, wages of labour and/or price of POL give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition along with information relating to there to which he may be in a position to supply.

Percentage Table

Sl. No.	Category of Works	% Component (cost wise)		
		Labour (P_i)	**POL (P_f)**	**Steel (P_s) + Cement (P_c) + Bitumen (P_b) + Pipes (P_{pi}) + Plant & Machinery Spare & Component (P_p) + Other Materials***

1	R&B works (% of component)	Road Works	5	5	90
		Bridge Works	5	5	90
		Building Works	5	5	90
2	Irrigation works (% of component)	Structural Work	5	5	90
		Earth, Canal & Embankment Work	5	5	90
3	P. H. Work	Structural Work	5	5	90
		Pipeline Work	5	5	Pipe – 70% *Machinery + Other Material – 20%
		Sewer Line	5	5	Pipe – 70% *Machinery + Other Material – 20%

*Note:- Further break may be worked out considering the consumption of Cement, Steel, Bitumen, Pipe and Machinery spare component in the concerned works and shall be provided in the bid document in shape of **"Schedule of Adjustment Data"** as **" Appendix to Bid"** (Enclosed herewith).

Appendix to Bid
Schedule of Adjustment Data

[For all works, adjustment factor for Labour and POL shall be considered @ 5% each Steel, Cement, Pipes, other materials and Machinery shall contribute to 90% of price Adjustment and shall be calculated for each work separately during preparation of estimate, shall be approved by the authority during technical sanction as a "Schedule of Adjustment Data" and shall form part of Bid document]

Cl. No-46 of F2/P1 Contracts Sl. No.	Index Description	Source of Index	Base Value*	Base Date*	Weightage of Item**
46.3	Other Materials	All India Whole sale price index (all commodities) as published by the Economic Advisor to the Govt. of India, Ministry of Commerce and			12.28%

		Industry.			
46.3.1	Cement	Whole sale price index for Cement (Ordinary Portland Cement) as published by the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			2.35%
46.3.2	Steel	Whole sale price index for Steel (Mild Steel-Long Products) as published by the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			2.15%
46.3.3	Bitumen (VG-30)	Official retail price of bulk bitumen at the nearest IOC/HPCL depot.			
46.3.4	Pipes	Whole sale price index for the type of Pipe under consideration, as published by the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			70%
46.4	Labour	Minimum Wage notified by the Labour and Employee's State Insurance Department of Government of Odisha, India			5%
46.5	POL	Official retail price of HSD at nearest IOCL/HPCL/BPCL Consumer pump Depot.			5%
46.6	Plant and Machinery	Whole sale price index for Manufacture of Machinery for Mining, Quarrying and Construction as published by the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			3.22%
			Total		100%

*Values to be filled up at the time of drawl of Contract

**Values to be filled up in the bid document.

47.0 Liquidated Damages for delay:

47.1 If for any reason, which does not entitle the contractor to an extension of time, the rate of progress of works, or any section of works is at any time, in the opinion of the Engineer-in-Charge too slow to ensure completion by the prescribed time or extended time for completion, Engineer-in-Charge shall so notify the contractor in writing and the contractor shall there upon take such steps as are necessary to expedite progress so as to complete the works or such section by the prescribed time or extended time. The contractor shall not be entitled to any additional payment for taking such steps. If as a result of any notice given by the Engineer-in-Charge under this clause the contractor shall seek the Engineer-in-Charge's permission to do any

work at night or on Sundays, if locally recognized as days or rest, or their locally recognized equivalent, such permission shall not be unreasonably refused.

47.2 If the Contractor fails to complete the work substantially under contract by the stipulated date, he shall pay liquidated damages at the rate of 0.05 percentage of the contract value per day from the date of delaying the said work up to the date of completion and handing over to the Government.

47.3 However also if the contractor fails to complete any part of the work as designated in the mile stone, by the time indicated against such part, he shall pay Liquidated damages at rate of 0.05 percentage of value of that part per day from the date of delaying the said part of the work up to the date of completion of the said designated part.

47.4 The aggregate maximum of liquidated damages payable under this clause shall not exceed 0.05 percentage of contract value per day and shall be subject to the maximum amount of ten percent of the contract amount. In case achieving the final milestone of completion of the contract in schedule period recommendation will be made to the competent authority for refund of the LD imposed for the intermediate milestones.

47.5 Delays requiring payment of liquidated damages amounting to 10% of the contract amount shall be sufficient cause for termination of contract and for forfeiture of security deposit.

48.0 Rescission of Contract

Delays requiring payment of 10% of contract amount as liquidated damages shall be one of the cause for rescission of contract.

To rescind the contract (of which the recession notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence) 20% of the value of left over work will be realized from the contractor as penalty.

In the Event of any of the above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advances on account of or with a view to the execution of the work or the performance of the contract. And in case the contract shall be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under this contract, unless and until the Engineer-in-Charge shall have certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified. (Works Dept. No.10639 dated 27.05.2005).

49.0 Mobilization Advance:

49.1 The contractor is permitted to avail the facility of mobilization advance equivalent to 10% of the contract amount in phases. Payment of the advance will be made on application of contractor and under certification by the Engineer-in-Charge after (i) Execution of the form of contract by the parties there to (ii) provision by the contractor of a Bank Guarantee from any Nationalized / Scheduled Commercial Bank located anywhere in the country with branches at Bhubaneswar with facility of authentication & encashment of the bank guarantee, for an amount equal to the mobilization advance applied for such bank guarantee shall remain valid until the said advance loan has been completely repaid by the contractor out of the current earnings under the contract and certified accordingly by the Engineer-in-charge.

49.2 A form of Bank Guarantee acceptable to Engineer-in-Charge is indicated in Section III under Forms & Annexure. The advance mobilization loan shall be used by the contractor exclusively for mobilization expenditures, including the mobilization of constructional plant, in connection with the works.

49.3 The mobilization advance shall be released by the Engineer-in-Charge in three phases only in first 12 months on request of the contractor against Bank Guarantee as stated above on signing of contract, the contractor, on request, may be allowed to avail mobilization advance amounting to

i) 2% of the contract amount to mobilize the men and machineries for the survey, investigation, planning and design work;

ii) 4% on submission of Design & Drawing of at least 50% of the system and balance

iii) 4% on commencement of works

49.4 Should the contractor misappropriate any portion of the advance loan, it shall become due to the Engineer-in-Charge and payable immediately in one lump by the contractor and no further loan will be considered thereafter.

49.5 The above advance shall bear an interest of 12% per annum. The interest on the amounts paid as advance is chargeable from the date the amount is paid. However if completion is delayed by circumstances beyond control of the contractor for which an extension has been granted by the competent authority the interest charges on such advances shall be waived for the period of extension.

49.6 The value of Bank Guarantee for the advance payment given to the contractor can be progressively reduced by the amount repaid by the contractor as certified by the Engineer-in-Charge.

49.7 Recovery of advances:

a. The advance loan together with interest at the rate of 10% shall be repaid by way of deductions from the intermediate payments under the contract. Deduction shall commence in the next interim payment following that in which the total of all such payments to the contractor have reached 20 percent of the contract amount. The mobilization advance along with interest shall be recovered in such a way that the full amount is recovered.

b. Each instalment of mobilization advance shall be repaid by the contractor no later than 365 (Three hundred & sixty five) days from the respective date of mobilization advance payment. The contractor shall repay each instalment/phase of the advance payment on or before the due date of repayment. In the event of the contractor's failure to make the repayment on time, the employer shall be entitled to encash the bank guarantee for recovery of mobilization advance. The parties expressly agree that for any delay in repayment of the mobilization advance payment, the contractor shall pay interest to the employer for each day of delay, such interest to be calculated @ 18% (eighteen) per annum.

c. If the advance payment has not been fully repaid prior to termination as per the agreement, the whole of the balance mobilization advance, outstanding against the contractor shall immediately become due & payable by the contractor to the employer. Without prejudice to the provisions of clause of termination for contractor's default, the advance payment shall be deemed to carry interest @ 10% per annum from the date of advance payment to the date of recovery by encashment of the bank guarantee for the advance payment. For the avoidance of doubt, the aforesaid interest shall be payable on each instalment/phase of the advance payment regardless of whether the instalment or any part thereof has been repaid to the employer prior to termination."

50.0 SECURITIES DEPOSIT:

50.1 Performance Security Deposit: The department shall retain from each payment due to the contractor, 5% of gross bill amount until completion of the whole of the Works. The retention amount so accumulated may be on request of the contractor converted to interest bearing Fixed Deposit Receipt(FDR), pledged in favour of the SuperintendingEngineer till the total amount of

FDR so converted becomes 2.5% of the contract value. Beyond this the performance Security accumulated can be released to the contractor on his request on writing against production of Bank guarantee on any Nationalised/ Scheduled Commercial Bank located anywhere in the country with branches at Bhubaneswar with facility of authentication& encashment of BG at Paralakhemundi Branch. The total of such release of Performance Security against BG shall not exceed 2.5% of contract amount. The performance Security shall be released after issue of completion certificate by the Superintending Engineer-in-charge after 60 days of defects liability period.

All compensation, Liquidate damages or other sums or money payable by the contractor to Government under the terms of this contract shall be deducted from or recouped by the realization of a sufficient part of his security deposit, or from the interest arising there from or from any sums which may due or may become due by Government to the Contractor on any account whatsoever whether in respect of this contract, or any other contract, or otherwise. In the event of his security deposit being reduced by reason of any such deduction or recoupment as aforesaid, the contractor shall within ten days thereafter, make good the sum or sums required to make good the shortfall in the amount of the security deposit.

All dues under this contract or other contract, or otherwise; shall be recovered from the aforesaid amount of security deposit and the balance shall be refunded after the completion of the defect liability period. While releasing the securities beyond the defect liability period, the sufficiency of securities for the recovery of cost for excess energy consumption beyond the guaranteed power consumption shall be taken into consideration.

51.0 COST OF REPAIRS:

Any Loss or theft or damage to the Works or materials of the Works due to any means except natural calamity between the Start Date and the end of the O & M Periods shall be remedied/replaced by the Contractor at the Contractor's cost.

E. FINISHING THE CONTRACT

52.0 Completion:

52.1 On completion of the work, the contractor (s) shall be furnished with a certificate by the Engineer-in-Charge of such completion. But no such certificate shall be given nor shall the work be considered to be complete until the contractor(s) have rectified the defects, removed from the premises, on which the work shall have been executed, all scaffoldings, surplus materials and rubbish and shall have cleaned of dirt from all wood work, doors, windows wall floors or other parts of any structures in or upon which the work has been executed or of which he / they may have had possession for the purpose of executing work, nor until the work shall have been measured by the Engineer-in-Charge or where the measurements have been taken by his subordinate until they receive the approval of the Engineer-in-Charge , the measurements being binding and conclusive against the contractor(s). If the contractor(s) shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning of dirt on or before the date fixed for the completion of the work, the Engineer-in-Chargemayatthe expense of the contractor (s) remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks it and clean off such dirt as aforesaid, and the contractor(s) shall forthwith bear all the expenses to be incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

52.2 The completion certificate of the Engineer-in-Charge showing the final balance due or payable to the contractor(s) shall be conclusive evidence of the work having been duly completed and that the contractor(s) shall be entitled to receive payment of the final balance in accordance with such

certificate, but without prejudice to the liability of the contractor(s) under the provisions of the clause.

53.0 Taking Over:

The Department shall take over the site and the Works within fifteen days of the Engineer-in-Charge issuing a certificate of successful completion of Operation & maintenance work.

54.0 Final Account:

The Contractor shall supply to the Engineer-in-Charge a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer-in-Charge shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer-in-Charge shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If he final Account is still unsatisfactory after it has been resubmitted, the Engineer-in-Charge shall decide on the amount payable to the Contractor and issue a payment certificate within 90 days of receiving the Contractor's revised account.

55.0 Termination:

The Department may terminate the Contract if the contractor causes a fundamental breach of the Contract.

55.1 Fundamental breaches of Contract include, but shall not be limited to the following.

a) The Contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Engineer-in-Charge.

b) The contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation.

c) The Engineer-in-Charge gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer-in-Charge; and

d) The Contractor does not maintain a security which is required and

e) The Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages is to be paid as defined

f) If the contractor, in the judgment of the Department has engaged in corrupt or fraudulent practices in competing for or in the executing the contract

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.

55.2 Notwithstanding the above the Department or Engineer-in-Charge or Employer may terminate the contract for convenience.

55.3 If the Contract is terminated, the Contractor shall stop work immediately, make the site safe and secured leave the site as soon as reasonably possible.

56.0 Payment upon Termination:

If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer-in-Charge shall issue a certificate for the value of the work done less advance payments received upon the date of the issue of the certificate, less other recoveries due in terms of the Contract, less taxes due to be deducted at source as per applicable laws and less 20 percent of the value of work not completed. Additional Liquidated Damages shall not apply. If the total amount due to the Department exceeds any payment due to the Contractor the difference shall be a debt payable to the Department. In case of default for payment within 28 days from the date of issue of notice to the above effect, the contractor shall be liable to pay interest at 12% per annum for the period of delay.

57.0 Property:

All materials on the site, plant, equipment, Temporary works and works are deemed to be the property of the Department if the Contract is terminated because of Contractor's default.

58.0 Release From Performance:

If the Contractor is frustrated by the outbreak of war or by any other event entirely outside the control of either the Department or the Contractor the Engineer-in-Charge shall certify that the contract has been frustrated. The Contractor shall make the site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all works carried out before receiving it and for any work carried out after wards to which commitment was made:

F. OTHER GENERAL CONDITIONS

59.0 WATER SUPPLY

The Contractor has to make his own arrangements for water required for the work and to the colonies and work sites, which are to be established by the Contractor.

60.0 ELECTRICAL POWER

The Contractors will have to make their own arrangements for drawing electric power from the nearest power line after obtaining permission from the DISCOM at his own cost. In case of failure of electricity, the Contractor has to make alternative arrangements for supply of electricity by Diesel Generator sets of suitable capacity at place of work. If the supply is arranged by the Department, necessary Tariff rates shall have to be paid based on the prevailing rates.

The contractor will pay the bills of DISCOM for the cost of power consumed by him.

The contractor shall satisfy all the conditions and rules required as per Indian Electricity Act 1910 and under rule-45(1) of the Indian Electricity Rules, 1956 as amended from time to time and other pertinent rules.

The power shall be used for bonafide Departmental works only.

60.1 Electric Power for Domestic Supply:

a) The contractor has to make his own arrangements for the supply of electric power for domestic purposes and the charges for this purpose have to be paid by him at the rates as fixed by the DISCOM from time to time.

b) The contractor will have to make his own arrangements to lay and maintain the necessary distribution lines and wiring for the camp at his own cost. The layout and the methods of laying the lines and wiring shall have the prior approval of the Engineer-in-Charge. All camp area shall be properly electrified. All lines, streets, approaches for the camp etc., shall be sufficiently lighted for the safety of staff and labour of the contractor, at the cost of the Contractor and it will be subject to the approval of the Engineer-in-Charge.

61.0 LAND:

61.1 Land for Contractors use:

The contractor will be permitted to use Government land belonging to Water Resources Deptt. Forexecutionofwork.ThecontractorshallbeallowedtouseGovt.landbelongingtoWater Resources Deptt. Free of charge. The Govt.landbelongingtoRevenueDeptt.willbeallowed for use by the Revenue Deptt.on payment of Charge. The contractor shall have to make his own arrangements for acquiring and clearing the site, leveling, providing drainage and other facilities for labour staff colonies, site office, work- shop or stores and for related activities. The Contractor shall apply to the Department within reasonable time after the award of the contract and at least 30 days in advance of its use, the details of land required by him for the work at site and the land required for his camp. Should any private land, which has not been acquired, be required by the contractor for his use, the same may be acquired by the contractor at his own cost by private negotiations and any claim shall not be admissible to him on this account.

The Engineer-in-Charge reserves the right to refuse permission for use of any government land for which no claim or compensation shall be admissible to the contractor. The contractor shall, however, not be required to pay cost or any rent for the Government land given to him.

61.2 Surrender of Occupied Land:

a) The Government land as here in before mentioned shall be surrendered to the Engineer-in-Charge within seven days, after issue of completion certificate. Also no land shall be held by the contractor longer than the Engineer-in-Charge shall deem necessary and the contractor shall on the receipt of due notice fromtheEngineer-in-Charge, vacate and surrender the land which the Engineer-in-Charge may certify as no longer required by the Contractor for the purpose of the work.

b) The contractor shall make good to the satisfaction of the Engineer-in-Charge any damage to areas, which he has to return or to other property or land handed over to him for purpose of this work Temporary structures may be erected by the contractor for storage sheds, offices, residences etc., for non-commercial use, with the permission of the Engineer-in-Charge on the land handed over to him at his own cost. At the completion of the work these structures shall be dismantled site cleared and handed over to the Engineer-in-Charge. The land required for providing amenities will be given free of cost from Government lands if available otherwise the contractor shall have to make his own arrangements.

62.0 APPROACH ROADS AND ROADS IN WORK AREA:

In addition to existing public roads and roads Constructed by Government, if any, in work area all additional approach roads inside work area and camp required by the Contractor shall be constructed and maintained by him at his own cost. The layout design, construction and maintenance etc. of the roads shall be subject to the approval of the Engineer-in-Charge. The contractor shall permit the use of these roads by the Government free of charge.

It is possible that work at, or in the vicinity of the work site will be performed by the Government or by other contractors engaged in work for the Government during the contract period. The contractor shall without charge permit the government and such other contractor and other workmen to use the access facilities including roads and other facilities, constructed and acquired by the contractor for use in the performance of the works.

The contractor's heavy construction traffic or tracked equipment shall not traverse any public roads or bridges unless the contractor has made arrangement with the authority concerned. In case contractor's heavy construction traffic or tracked equipment is not allowed to traverse any public roads or bridges and the contractor is required to make some alternative arrangements, no claim on this account shall be entertained.

The contractor is cautioned to take necessary precautions in transportation of construction materials to avoid accidents.

63.0 PAYMENT FOR CAMP CONSTRUCTION:

No payment will be made to the contractor for construction, operation and maintenance of camp and other camp facilities and the entire cost of such work shall be deemed to have been included in the Bided rate for the various items of work in the schedule of quantities and bids.

64.0 EXPLOSIVE MAGAZINES & FUEL STORAGE TANKS:

No explosive shall be stored within 1/2 (half) KM of the limit of the camp sites. The storage of gasoline and other fuel oils or of Butane, Propane and other liquefied petroleum gases, shall confirm to the regulations of Odisha State Government and Government of India. The tanks, above ground and having capacity in excess of 2000 litres, shall not be located within the camp area, nor within 200m, of any building.

65.0 LABOUR:

The contractor shall, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

Labour importation and amenities to labour and contractor's staff shall be to the contractor's account. His quoted percentage shall include the expenditure towards importation of labour amenities to labour and staff.

The contractor shall, if required by the Engineer-in-Charge, deliver to the Engineer-in-Charge a written in detail, is such form and at such intervals as the Engineer-in-Charge may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the contractor on the Site and such information respecting Contractor's Equipment as the Engineer-in-Charge may require.

65.1 Transportation of Labour:

The contractor shall make his own arrangement for the daily transportation of the labour and staff from labour camps colonies to the work spot and no labour or staff of the contractor shall stay at the work spot. No extra payment will be made to the contractor for the above transportation of the labour and his quoted percentage to the work shall include the transportation charges of labour from colonies to work spot and back.

The contractor will at all times duly observe the provisions of employment of children Act XXVI of 1938 and any enactment or modification of the same and will not employ or permit any person to do any work for the purpose under the provisions of this contract in contravention of said Act. The contractor here by agrees to indemnify the department from and against all claims, penalties which may be suffered by the department or any person employed by the department by any default on the part of the contractor in the observance and performance of the provisions of the employment of children Act. XXVI of1938orany enactment or modification of the same.

The contractor shall obtain the insurance at his own cost to cover the risk on the works to labour engaged by him during period of execution against fire and other usual risks and produce the same to the Engineer-in-Charge concerned before commencement of work.

66.0 SAFETY MEASURES:

The contractor shall take necessary precautions for safety of the workers and preserving their health while working in such jobs, which require special protection and precautions. The following are some of the measures listed but they are not exhaustive and contractor shall add to and augment these precautions on his own initiative where necessary and shall comply with directions issued by the Engineer-in-Charge or on his behalf from time to time and at all times.

1. Providing protective foot wear to workers situations like mixing and placing of mortar or concrete sand in quarries and places where the work is done under much wet conditions.

2. Providing protective head wear to workers at places like underground excavations to protect them against rock falls.
3. Providing masks to workers at granulates or at other locations where too much fine dust is floating about and sprinkling water at frequent intervals by water hoses on all stone crushing area and storage bins abate to dust.
4. Getting the workers in such jobs periodically examined for chest trouble due to too much breathing in to fine dust.
5. Taking such normal precautions like fencing and lightening in excavation of trenches, not allowing rolls and metal parts of useless timber spread around, making danger areas for blasting providing whistles etc.
6. Supply work men with proper belts, ropes etc., when working in precarious slopes etc.
7. Avoiding named electrical wire etc. as they would electrocute the works.
8. Taking necessary steps towards training the workers concerned on the machinery before they are allowed to handle- them independently and taking all necessary precautions in around the areas where machines hoists and similar units are working.

67.0 FAIR WAGE CLAUSE:

The contractor shall not employ for the purpose of this contract any person who is below the age of eighteen (14) years and shall pay to each labourer for work done by such labourers fair wages. PWD No.-22059 Dtd-16.08.77

Explanation – "Fair Wage" means wages, whether for time or piece work prescribed by the state Public Works Department provided that where higher rates have been prescribed under the Minimum Wages Act.1948 wages at such higher rates should constitute fair wages.

The Engineer-in-Charge shall have the right to enquire into and decide ant complaints alleging that wages paid by the contractors to pay labourer for work done by such labourer is less than the wages as per the sub-paragraph (1) above.

(b) The contractor shall not withstanding the provisions of any contract to contrary, cause to be paid a fair wages to labourers indirectly engaged on the work including any labour engaged by his sub-contractors in connection with the said work, as if the labourers had been immediately employed by him.

(c) In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all regulations made by Government in regard to payment of wages period deductions from wages, recovery of wages not paid and deductions unauthorisedly made, maintenance of wage register, wage cards, publications of scale of wages and other terms of employment, inspection and submission of periodical return and all other matters of a like nature.

(d) The Engineer-in-Charge or Sub-divisional Officer concerned shall have the right to deduct, from the money due to the contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages, which are not justified by their terms of the contract or non-observance of the regulations. Money so deducted should be transferred to the workers concerned.

(e) Vis-à-vis, the Government of Odisha, the contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractor.

(f) The regulations aforesaid shall be deemed to be a part of this contract and ant breach thereof shall be breach of this contract.

(g) Under the provisions of the minimum wages Act, 1948 and the minimum wages (Central Rules 1950) the contractor is bound to allow or cause to be allowed to the labourers directly or indirectly employed in the work one day rest for six days continuous work and pay wages at the same rate as for duty. In the event of default the Engineer-in-Charge or Sub-divisional Officer concerned shall have the right to deduct the sum not paid on account of wages for weekly holiday to any labourers and pay the same to the person entitled there to from any money due to the contractor.

(h) The contractor shall at his own expense provide or arrange for the provision of foot wear for any labour doing cement mixing work and black topping of roads (The contractor has undertaken to execute under this contract)to the satisfaction of the Engineer-in-Charged on his failure to do so, Government shall be entitled to provide the same and recover the cost from the contractor.

(i) The contractor shall submit by the 4th & 10th every month to the Engineer-in-Charge true statement showing in respect of the Second half of the proceeding month and the First half of the current month respectively (1)the number of labours employed by him on the work (2)their working hours(3) the wages paid to them (4)the accident that occurred during the said fortnight showing the circumstances under which they happened and the content of damage injury caused by them and (5) the number of female workers who have been allowed maternity benefit according to clause K and the amount paid to them failing which the contractor shall be liable to pay to Government a sum not exceeding Rs.50/- for each default to materially incorrect statement. The decision of the Engineer-in- Charge shall be final in deducting from any bill due to contractor amount levied as fine.

(j) In respect of all labour directly or indirectly employed in the words for the performance of the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all the rule, framed by Government employed by the Odisha Public Works Department and its contractors. This will apply to work places having 50 or more workers.

67.1 Odisha P.W.D./Electricity Department Contractor's Labour Regulation.

Short Title – These regulations may be called "The Odisha Public Works Department/Electricity Department Contractor's Regulations."

1. Definations – In these Regulations, unless otherwise expressed or indicated the following words and expressions shall have the meaning hereby assigned to them respectively that is to say-

(i) "Labour" means works employed by a contractor of the Odisha Public Works Department/Electricity Department directly or indirectly through a sub-contractor or other person, by an agent on his behalf.

(ii) "Fair wages" means wages whether for the time of piece work described by the State Public Works Department/Electricity Department for the area in which the work is done.

(iii) "Contractor" shall include every person whether a sub-contractor or headman or agent employing labour on the work taken on contract.

(iv) "Wages" shall have the same meaning as defined in the payment of Wages Act. and include time and piece rate wages, if any –

2. Display of notices regarding wages, etc.

The contractor shall –

(a) Before he commences his work on contract display and correctly maintain and continue to display, in a clean and legible condition, in conspicuous places on the work, notices in English and in the local Indian language spoken by the majority of the workers, giving the rate of wage prescribed by the State Public Works Department/Electricity Department for the district where the work is done.

(b) Send a copy of such notices to the Engineer-in-Charge of the work.

3. Payment of Wages

(i) Wages due to every worker shall be paid to him direct.

(ii) All wages shall be paid in current coin or currency or in both.

4. Fixation of wage period

(i) The contractor shall fix the wage period in respect of which wages be payable.

(ii) No wage period shall exceed one month.

(iii) Wages of every workman employed on the contract shall be paid before expiry of 3 days, after the last day of the wage period in respect of which the wages are payable.

(iv) When the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the day succeeding the one on which his employment is terminated.

(v) All payment of wages shall be made on a working day.

5. Wages book and wage cards, etc.

(i) The contractor shall maintain a wage book of each worker in such form as may be convenient, but the same shall include the following particulars –

(a) Rate of daily or monthly wages.

(b) Nature of work on which employed.

(c) Total number of days of work during each wage period.

(d) Total amount payable for the work during each wage period.

(e) All deductions made from the wages with an indication in each case of the ground for which the deduction is made.

(f) Wage actually paid for each wage period.

(ii) The contractor shall also maintain a wage card for each worker employed on the work.

(iii) The Engineer-in-Charge may grant an exemption from the maintenance of wage bond, wage cards to a contractor who, in his opinion may not directly or indirectly employ more than 10 persons on the work.

6. Fines deduction which may be from wages

(i) The wages of a worker shall be paid to him without any deduction of any kind except the following.

(a) Fines

(b) Deductions for absence from duty, i.e. from the place or place where by the terms of his employment he is required to work. The amount of deductions shall be in proportion to the period for which he was absent.

(c) Deductions for damages for damage to or loss of good expressly entrusted to the employed person for custody or for loss of money for which he is required to account where such damage or loss is directly attributable to his neglect or default.

(d) Any other deductions which the Odisha Government may from time to time allow.

(i) No fines shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity or showing cause against such fines or deductions.

(ii) The total amount of fines which may be imposed in any one wage period on a work shall not exceed an amount equal to five paise in rupee of the wages payable to him in respect of that wage period.

(iii) No fine imposed on any worker shall be recovered from him by instalments, or after the expiry of 60 days from the date on which it was imposed.

7. Register of fines, etc.

(i) The contractor shall maintain a register of fines and of all deductions for damage or loss. Such Register shall mention the reason for which fine was imposed or deduction for damage or loss was made.

(ii) The contractor shall maintain a list in English and in the local Indian language, clearly defining acts and omissions for which penalty or fine can be imposed. It shall display such list and maintain it in a clean and legible condition in conspicuous places in the work.

8. Preservation of Register

The wage register, the wage cards and the register of fines, deduction required to be maintained under these regulations shall be preserved for 12 months after date of the last entry made in them.

9. Power of Labour Welfare Officer to make investigation or enquiry-

The Labour Welfare Officer or any other persons authorized by the Government of Odisha on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of the fair wage clauses and the provision if these of these regulations.

He shall investigate into any complaint regarding default made by the contractor, sub- contractor in regard to such provisions.

10. Report of Labour Welfare Officers-

The Labour Welfare Officers or others authorised as aforesaid shall submit a report of the results of his investigation or enquiry to the Engineer-in-Charge concerned, indicating the extent, if any, to which the default has been committed with a note that necessary deduction from the contractor's bill be made and the wages and other dues be paid to the labourers concerned.

11. Appeal against the decision of Labour Welfare Officers-

Any persons aggrieved by the decision and recommendation of the Labor Welfare Officer or other person so authorised may appeal against such decision to the Labour Commissioner within 30 days from the date of decision forwarding simultaneously a copy of his appeal to the Engineer-in-Charge concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

12. Inspection of registers –

The contractor shall allow inspection of the wage book and wage cards to any of his workers or to his agent at a convenient time and place after due notice is received, or to the Labour Commissioner or any other person authorised by the Government of Odisha on his behalf.

13. Submission of return –

The contractor shall submit periodical returns as may be specified from time to time.

14. Amendments –

The Government of Odisha may from time to time, add to or amend these regulations and on any question as to the application, interpretation of effect of the regulations, the decision of the Labour Commissioner or any other person authorised by the Government of Odisha in that behalf shall be final.

67.2 Maternity benefit rules for female workers employed by Contractor.

Leave and pay during leave shall be regularized as follows.

1. Leave : i) In case of delivery : Maternity leave not exceeding 8 weeks up to an including the day of delivery or 4th weeks following that day.

ii) In case Miscarriage: Up to 3 weeks from the date of miscarriage.

2. Pay:i) In case of delivery: Leave pay during maternity leave will be at the rate of the women's average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately proceedings the date of which she gives notice that the excepts to be confirmed or at the rate of twelve annas a day whichever is greater.

ii) In case of Miscarriage : Leave pay at the rate of daily earnings calculated on the total wages earned on the date when full time work was done during a period of 3 months immediately preceding the date of such miscarriage.

Condition of the grant of Maternity Leave: No maternity leave benefit shall be admissible to women unless she has been employed for a total period not less than 8 months immediately proceeding the date on which proceeds on leave.

MODEL RULES FOR HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY ODISHA P.W.D ON ITS CONTRACTOR

1. Application: These rules shall apply to construction work in charge of Odisha Public Works Department which are expected to continue for a year or more.
2. Definitions: (i) "Work Place" means a place at which an average of fifty or more workers isemployedinconnectionwithconstructionwork. (ii) Large work place means a place at which an average of 500 or more workers is employed in connection with construction work.
3. First Aid: (a) At every work place there shall be maintained in readily accessible place First-Aid appliances including an adequate supply or sterilizer dressings and sterilized cotton wool. The appliances shall be kept in good order and in large work place they shall be readily available during working hours.

   (b) At large works places, where hospital facilities are not available within easy distance of the works, First-Aid posts shall be established and run by a trained compounder.

   (c) Where large work places are remote from regular hospital an indoor ward shall provided with one bed for every 250 employees.

   (d) Where large work places are situated in cities, towns or in their surplus and no beds are considered necessary owing to the proximity of city town hospital and ambulance shall be provided to facilitate removal of urgent cases to these hospitals. At the work place, some

conveyance facilities such as a car shall be kept ready to take injured person or persons suddenly taken seriously ill, to the nearest hospitals.

4. Drinking Water: In every work place, there shall be provided and maintained at suitable place easily accessible to labour, a sufficient supply of water fit drinking.

   (b)Where drinking water is obtained from an intermittent public water supply each work place shall be provided with storage where such drinking water shall be stored.

   (c)Every water supply of storage shall be at a distance of not less than 60 feet from any latrine, drain or other sources of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells be entirely closed in and be provided with a trap door which shall be dust and water proof.

   (d)A reliable pump shall be fitted to each covered well, the trap door shall be kept locked open only for cleaning or inspection which shall be done at least once 2 months.

   (e)The temperature of drinking water supplied to workers shall not exceed 900 F.

5. Washing and Bathing Place:

   i) Adequate washing and bathing place shall be provided separately for man and women.

   (ii) Such places shall be kept in clean and drained condition.

6. Scale of accommodation in latrines and Urinals: There shall be provided within the premises of every work place latrines and urinals in an accessible places and the accommodation, separately for each of them shall not be less than the following.

   a) Where the number of persons employed does not exceed 50.No. of seats 1.

   b) Where the number of persons employed exceeds 50 but does not exceed 100. No. of seats 3 per 100.

   c) For every additional 100, 3sets

      (In particular cases the Engineer-in-Charge shall have the power to vary the scale where necessary). Latrines and Urinal for women: If women are employed, separate latrines and urinalfor women. If womenare employed, separatelatrines separatefrom that for women and marked in the vernacular in conspicuous letter. For women only shall be provided on the scale laid in rule.

7. Latrines and Urinals: Except in work places provided with water flushed latrines connection with a water borne sewerage system, all latrines shall be provided with receiptable on dry earthen system which shall be cleaned and at least four times daily and at least twice during working hours and kept in a strictly sanitary condition. The receipt tables shall be tarred inside and outside at least once a year.

8. Constructions of latrines: The inside wall shall be constructed of masonry or stone materials and shall be cement washed inside and outside at least once a year. The dates of cement washing shall be noted in register maintained for this purpose and kept available for inspection.

9. Disposal of Excreta:Unless otherwise arrange for by the local sanitary authorities, arrangement for a proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator approved by Asst. director of Public Health or Municipal Medical Officer of Health as the case may be, in whose jurisdiction the work place is situated. After natively excreta may be disposed off putting of a layer of.

10. Night soil at the bottom of pucca tank prepared for the purpose and covering it with a layer of waste or refuse and then covering it up with a layer of 6" of waste or refuse and then covering it up with a layer of each for a fortnight (when it will turn in to manure).
11. Provision of shelters during rest-at every work place, there shall be provided free of cost two suitable sheds and for meals and the other for rest the use of labourers. The height of the shelter shall not be less than 11 feet, from the floor level to the lowest of the roof.
12. Creche: (a) At every work place at which more than 50 women workers are employed, there shall be provided only one creche for the use of children under the age of 6 years, belonging to such women and shall be used for infants games and play and their bed room. The huts shall not be constructed on a lower standard than the following:

    i) Thatched roofs

    ii) Mud floors and walls

    iii) Planks spared over the mud floor and covered with matting

    The hut shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision for sweepers to keep the place clean. There shall be two dais in attendance, sanitary, utensils shall be provided to the satisfaction of the Health Officer ofthe area concerned. The useof the hut shall be restricted to children, their attendants and, mothers of the children.

    (b) Where the number of women workers is more than 50, the Contractor shall provide one but and a Dai to look after the children of women workers.

    (c) The size of creche shall vary according to the number of women workers.

    (d) The creche shall be properly maintained and necessary equipment like toys etc. shall be provided.
13. Canteen: A cooked food Canteen on moderate scale shall be provided for the benefits of workers whenever it is considered expedient.

68.0 INDEMNITYBOND:

The contractor has to furnish the bond at the signing the Agreement.

Name of work- Investigation, Planning, Design, Construction, of items necessary for Pressurized UGPL irrigation system including supply, erection of all mechanical & electrical items, surge protection system, control valves, pipe lines for rising main/pressure main & distribution system to deliver water at chak outlets including power connectivity from grid to pump house by lifting water from reservoir _____ including operation & maintenance for 05(five) years after completion

I _____ Contractor S/o _____ aged _____ Resident of _____ do hereby bind myself to pay all the claims may come (a) under Workmen's Compensation Act. 1933 with any statutory modification thereof and rules there under or otherwise for or in respect of any damage or compensation payable in connection with any accident or injury sustained (b) under Minimum wages Act 1948 (c) under payment of wages Act.1936 (d) under the Contractor labour (Regulation and Abolition) Act. 1970 by workmen engaged for the performance of the business relating to the above contract i.e., failing such payment of claims of workmen engaged in the above work, I abide in accepting for the recovery of such claims, effected from any of my assets with the departments.

69.0 COMPLIANCEWITHLABOURREGULATIONS:

During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notifications that may be issued under any labour law in future either by the State or the Central Government or the local authorityand also applicable labour regulations, health and sanitary arrangements for workmen, insurance and other benefits. Salient features of some of the major labour laws that areapplicableto constructionindustry aregiven below.

The contractorshall keep the Department indemnified in case any action is taken against Department by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Department is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provision stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the contractor, the Engineer-in-Charge/Department shall have the right to deduct any money due to the contractor including his amount of performance security. The Department/Engineer-in-Charge shall also have right to recover from the contractor any sum required or estimated to be required for making good the loss or damage suffered by the Department.

The employees of the Contractor and the Sub-contractor in no case shall be treated as the Department of the Department at any point of time.

70.0 SALIENT FEATURESOFSOMEMAJORLABOURLAWSAPPLICABLETOESTABLISHMENTENGAGEDIN BUILDINGSANDOTHERCONSTRUCTIONWORK:

a) Workmen compensation Act 1923: The Act provides for compensation in case if injury by accident arising out of and during the course of employment.

b) Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if any employee has completed 5 years service or more, or on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments, employing 10 or more employees.

c) Employees P.F. and Miscellaneous provision Act 1952: The Act provides for monthly contributions by the Department plus workers @ 10% or 8.33%. The benefits payable under the Act are:

   i) Pension or family pension on retirement or death, as the case may be.

   ii) Deposit linked insurance on the death in harness of the worker.

   iii) Payment of P.F. accumulation on retirement/death etc.

d) Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinements or miscarriage etc.

e) Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided by the Principal Department by Law. The Principal Department is required to take certificate of Registration and the contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Department if they employ 20 or more contract labour.

f) Minimum wages Act 1948: The Department is supposed to pay not less than the Minimum wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment construction of Buildings, Roads, Runways are scheduled employments.

g) Payment of wages Act 1936: It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made form the wages of the workers.

h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to Male or Female workers and for not making discrimination against Female employee in the matters of transfers, training and promotions etc.

i) Payment of Bonus Act 1965: The Act is applicable to all establishments employing 20 or more employees. The Act provides for payment of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing `3500/- per month or less. The bonus to be paid to employees getting `2500/- per months or above and up to `3500/- per month shall be worked out by taking wages as `2500/- per monthly only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.

j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for solution of Industrial disputes, in what situations a strike or lock- out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

k) Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the State and Central Governmentto 50). The Actprovides forlaying downrules governing the conditions of employment by the Department on matters provided in the Act and get the same certified by the designated Authority.

l) Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and Departments. The Trade Unions registered under the act have been given certain immunities from civil and criminal liabilities.

m) ChildLabour(Prohibition&Regulation)Act1986:TheActprohibitsemploymentofchildren below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes, Employment Child Labour is prohibited in Building and Construction Industry.

n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of service) Act 1979: The Act applicable to an establishment, which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another State). The inter State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home up to the establishment and back, etc.

o) The Building and Other Construction workers (regulation of Employment and conditions of service)Act 1996andtheCessActof1996:Alltheestablishmentswhocarryon any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Department of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Department to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

p) Factories Act 1948: The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to

designated authorities. It is applicable to premises employing 10 person or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

71.0 LIABILITIES OF THE CONTRACTOR:

71.1 Accident Relief and workmen compensation:

The contractor should make all necessary arrangements for the safety of workmen on the occurrence of the accident, which results in the injury or death of any of the workmen employed by the contractor, the contractor shall within 24 hours of the happenings of the accident and such accidents should intimate in writing to the concerned Asst. Engineer / Asst. Engineer-in-Charge of the Department the act of such accident. The contractor shall indemnify Government against all loss or damage sustained by the Government resulting directly or indirectly from his failure to give a intimation in the manner aforesaid including the penalties or fines if any payable by Govt. as a consequence of Govt. failure to give notice under workmen's compensation Act or otherwise conform to the provisions of the said Act. in regard to such accident.

71.2 In the event of an accident in respect of which compensation may become payable under the workmen's compensation Act VIII 23 whether by the contractor, by the Government it shall be lawful for the Engineer-in-Charge to retain such sum of money which may in the opinion of the Engineer-in-Charge be sufficient to meet such liability. The opinion of the Engineer-in- Charge shall be final in regard to all matters arising under this clause.

71.3 The contractor shall at all times indemnify the Govt. of Odisha. Against all claims which may be made under the workmen's compensation act or any statutory modification thereafter or rules there under or otherwise consequent of any damage or compensation payable in consequent of any accident or injuries sustained or death of any workmen engaged in the performance of the business relating to the contractor.

72.0 CONTRACTOR'S STAFF, REPRESENTATIVES AND LABOUR:

a) The contractor shall, at all times, maintain on the works, staff of qualified Engineers, and Supervisors of sufficient experience of similar other jobs to assure that the quality of work turned out shall be as intended in the specifications. The contractor shall also maintain at the works, a Work Manager or sufficient status, experience and office and duly authorize him to deal with all aspects of the day-today work. All communications to any commitments by the Work Manager shall be considered as binding on the Contractor.

b) The Contractor shall at all times submit details of skilled and unskilled labour and equipment employed to the Engineer-in-Charge in prescribed proforma as he may require to assess and ensure the proper progress of work.

c) If the contractor does not employ the technical person agreed to on the work a fine of Rs.25,000/- will be imposed. If he does not employ for 30 days, thereafter it becomes a fundamental breach of contract.

d) The Contractor shall at all times, maintain on the work a staff of qualified Engineers and Supervisors of sufficient experience of similar other jobs to ensure that the quality of workturned out shall be as intended in these-specifications and they shall be present at the work spot during working hours and at the time of inspection by the Department Officers. All orders and direction given to such supervisory or other staff of the contractor to be present on any specified inspection and the contractor shall comply with such requisitions.

e) The contractor shall supply to the Engineer-in-Charge details of name, qualifications and experience in regard to all supervisory staff employed by the contractor and notify the changes when made and satisfy the Engineer-in-Charge regarding the quality and adequacy of staff thus employed.

f) The Engineer-in-Charge will have the unquestionable right to ask for change in the contractor's supervisory staff and to other removal from the work and connection herewith of any of such staff. The contractor shall comply with such order and effect replacement to the satisfaction of the Engineer-in-Charge.

g) The Contractor shall not without written authorization permit entry on site of work of any person authorized agents, engaged in connection with work.

h) All vehicles used by the contractor shall be clearly marked with contractor's name.

73.0 ACCOMMODATION AND FOOD:

The contractor should arrange accommodation he needs, at his own cost. The contractor shall make his own arrangements for supply of food grains, fuel and other provision to his staff and labourers including controlled commodities.

74.0 RELATIONSHIP:

Contractor shall have to furnish information along with Bid, about the relationship he is having with any officer of the Department Government of Odisha of the rank Assistant Engineer and above engaged in the work and any officer of the rank of Assistant Secretary and above of the Department of Government of Odisha.

75.0 PROTECTION OFADJOINING 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.

76.0 WORK DURING NIGHT OR ON SUNDAYS AND HOLIDAYS:

The works can be allowed to be carried out during night, Sundays or authorised holidays in order to enable him to meet the schedule targets and the work shall require almost round the clock working keeping in view:

(i) The provisions of relevant labour laws being adhered to:

(ii) Adequate lighting, supervision and safety measures are established to the satisfaction of the Engineer-in-Charge and

(iii) The construction programme given by the Contractor and agreed upon by the Engineer-in-Charge envisages such night working or working during Sundays or authorised holidays.

77.0 LAYOUT OF MATERIALSSTACKS:

The contractor shall deposit materials for the purpose of the work on such parts only of the ground as may be approved by the Engineer-in-Charge before starting work. A detailed survey, clearly indicating position and areas where materials shall be stacked and sheds built is to be conducted by the contractor at his own cost and only after obtaining necessary approval of the plan for use of sites by the Engineer-in-Charge, the Contractor can use the sites accordingly.

78.0 USE OF BLASTING MATERIALS:

Procurement of blasting materials and its storage is the responsibility of the contractor. The contractor shall engage licensed blaster for blasting operation. The contractor is to act in accordance with Indian Explosive Act and other rules prevailing, during the execution of work. It is the responsibility of the contractor to see, that works by other agencies in the vicinity are not hampered, in such cases if any claim is made by other agencies that should be borne by the contractor. Carriage of blasting materials, from the magazine to the work site, is the responsibility of the contractor.

79.0 PLANT AND EQUIPMENT:

79.1. The contractor shall have sufficient plant, equipment and labour and shall work such hours and shifts as may be necessary to maintain the progress on the work as per the approval progress schedule. The working and shifts hours shall comply with the Govt. Regulations in force.

79.2 It is to expressly and clearly understood that contractor shall make his own arrangements to equip himself with all machinery and special tools and plant for the speedy and proper execution of the work and the department does not undertake responsibility towards their supply.

79.3 The department shall supply such of the machinery that may be available on hire basis but their supply cannot be demanded as matter of right and no delay in progress can be attributed to such non-supply of the plant by the department and the department cannot be made liable for any damage to the contractor. The Contractor shall be responsible for safe custody of the departmental machinery supplied to him (which will be delivered to contractor at the machinery yard at site of work) and he has to make good all damages and losses if any other than fire, wear and tear to bring it to the conditions that existed at the time of issue to the contractor before handing over the same to the department. The hirecharges for the machinery handed over to the contractor will be recovered at the rate prevalent at the time of supply. The contractor will have to execute supplemental contract with Engineer-in-Charge at the time of supply of the machinery.

79.4 The acceptance of departmental machinery on hire is optional to the contractor.

80.0 STEEL FORMS:

Steel forms should be used for all items involving use of centering and shuttering. They shall be such that the concrete surface obtained after removal of centering and shuttering shall be single plane without any dents and undulations.

81.0 INCONVENIENCE TO THE PUBLIC:

The contractor shall not deposit materials at any site, which will cause inconvenience to public. The Engineer-in-Charge may direct the contractor to remove such materials or may undertake the job at the cost of the contractor.

82.0 CONFLICT OF INTEREST:

Any bribe, commission, gift or advantage given, promised or offered by on behalf of contractor or his partner, agent or servant or any one on his behalf to any officer, servant, representatives, agents of Engineer-in-Charge, or any persons on their behalf, in relation to the obtaining or to execution of this, or any other contract with Engineer-in-Charge shall in addition to any criminal liability, which it may occur, subject to the cancellation of this or all other contracts and also to payment of any loss or damage resulting from any such cancellation. Engineer-in-Charge shall then be entitled to deduct the amount, so payable from any money, otherwise due to the contractor under this or any other contract.

83.0 CONTRACT DOCUMENTSAND MATERIALSTOBETREATEDASCONFIDENTIAL:

Alldocuments, correspondences,decisionsandorders,concerningthecontractshallbe consideredasconfidentialand/orrestrictedinnaturebythecontractorandheshallnotdivulge or allow access to them by any unauthorized person.

84.0 GENERAL OBLIGATIONS OF CONTRACTOR:

84.1 The contractor shall, subject to the provision of the contract and with due care and diligence, execute and maintain the works in accordance with specifications and drawings.

84.2 The contractor shall promptly inform the Department and the Engineer-in-Charge of any error, omission, fault and to rectify the 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.

85.0 SECURITY MEASURES

a) Security requirements for the work shall be in accordance with the Governments general requirements including provisions of this clause and the Contractor shall conform to such requirements and shall be held responsible for the actions of all his staff, employees and the staff and employees of his sub-contractors.

b) All contractors' employees, representatives and sub-contractor's employees shall wear identifications badges provided by the contractor. Badges shall identify the contractor, showing and employee's numberand shall be worn at all times while at the site. Individual labour will not be required to wear identification badges.

c) All vehicles used by the contractor shall be clearly marked with contractor's name.

d) The contractor shall be responsible for the security of the works for the duration of the contract and shall provide and maintain continuously adequate security personnel to fulfill these obligations. The requirements of security measures shall include, but not limited to maintenance of order on the site, provision of all lighting, fencing, guard flagmen and all other measures necessary for the protection of the works within the colonies,campsandelsewhereonthesite,allmaterialsdeliveredtothesite,allpersons employed in connection with the works continuously throughout working andnon-working period including nights, Sundays and holidays for duration of the contract.

e) Other contractors working on the site concurrently with the contractor will provide security for their own plant and materials. However, their security revisions shall in no way relieve the contractor of his responsibilities in this respect.

f) Separate payment will not be made for provision of security services and the cost of this work shall be deemed to have been included in the bid.

86.0 FIRE FIGHTING MEASURES:

a) The contractor shall provide and maintain adequate firefighting equipment and take adequate fire precaution measures for the safety of all personnel and temporary and permanent works and shall take action to prevent damage to destruction by fire of trees shrubs and grasses.

b) Separate payment will not be made for the provision of fire prevention measures.

87.0 SANITATION:

The contractor shall implement the sanitary and watch and ward rules and regulations for all employees employed under this contract and if the Contractor fails to enforce these rules, the Engineer-in-Charge may enforce them at the expenses of the Contractor.

88.0 TRAINING OF PERSONNEL:

The contractor, shall, if and as directed by the Engineer-in-Charge provide free of any charge adequate facilities, for vocational training of Government Officers, students, Engineers, supervisors, foremen, skilled workmen etc. not exceeding six in number at any one time on the contractor's work. Their salaries, allowances etc. will be borne by the Government and the training project will be drawn up by the Engineer-in-Charge in consultation with the contractor. Training to WUAs through local NGO as per detail scope of work shall also be taken up.

89.0 ECOLOGICALBALANCE:

a) The contractor shall maintain ecological balance by preventing de-forestation, water pollution and defacing of natural landscape. The contractor shall so conduct his construction operation as to prevent any unnecessary destruction, scarring, or defacing of the natural

surroundings in the vicinity of the work. In respect of the ecological balance, contractor shall observe the following instructions.

i) Where unnecessary destruction, scarring, damage or defacing may occur, as result of the operation, the same shall be repaired replanted or otherwise corrected at the contractor's expense. The contractorshall adoptprecautions whenusing explosives, which will prevent scattering of rocks or other debris outside the work area. All work are including borrow areas shall be smoothened and graded in a manner to conform to the natural appearance of the landscape as directed by the Engineer-in-charge.

ii) All trees and shrubbery which are not specifically required to be cleared or removed for construction purposes shall be preserved and shall be protected from any damage that may be caused by the Contractor's construction operation and equipment. The removal of trees and shrubs will be permitted only after prior approval by the Engineer-in-Charge. Special care shall be exercised where trees or shrubs are exposed to injuries by construction equipment, blasting, excavating, dumping, chemicaldamageorother operation and the contractor shall adequately protect such trees by use of protective barriers or other methods approved by the Engineer-in-Charge. Trees shall not be used for anchorages. The contractor shall be responsible for injuries to trees and shrubs caused by his operations. The term "injury" shallinclude, withoutlimitation bruising, scarring, tearing and breaking of roots, trunks or branches. All injured trees and shrubs be restored as nearly as practicable without delay to their original condition at the contractor's expense.

iii) The contractor's construction activities shall be performed by methods that will prevent entrance or accidental spillage of solid matter contaminants, debris and other objectionable pollutants and wastage into river. Such pollutant and waste include earth and earth products, garbage, cement concrete, sewage effluent, industrial wastes, radio-active substances, mercury, oil and other petroleum products, aggregate residuals, mineral salts and thermal pollutants. Pollutants and wastes shall be disposed off in a manner and at sites approved by the Engineer-in-Charge.

iv) In conduct of construction activities and operation of equipment the contractor shall utilize such practicable methods and devices as are reasonably available to control, prevent and otherwise minimize the air pollution. The excessive omission of dust in to the atmosphere will not be permitted during the manufacture, handling and storage of concrete aggregates and the contractor shall use such methods and equipment as a necessary for collection and disposal or prevention of dust during these operations. The contractor's methods of storing and handling cement shall also include means of eliminating atmospheric discharges of dust, equipment and vehicles that give objectionable omission of exhaust gases shall not be operated. Burning of materials a resulting from clearing of trees, bushes, combustible construction materials and rubbish may be permitted only when atmospheric conditions for burning are considered favourable.

b) Separate payment will not be made for complying with the provisions of this clause and all cost shall be deemed to have been included in the unit rates and prices included in the contract if any provision is not complied with within a reasonable time even after issue of a notice in this respect, the necessary operations would be carried out by the Engineer-in-Charge at the cost of the Contractor, Orders of the Engineer-in-Charge in this respect would be final and binding on the contractor.

90.0 PRESERVATION OF EXISTING VEGETATION:

a) The contractor will preserve and protect all existing vegetation such as trees, on or adjacent to the site which do not unreasonably interfere with the construction as may be determined by the Engineer-in-Charge. The contractor will be held responsible for all unauthorized

cutting or damage of trees, including damage due to careless operation of equipment, stockpiling of materials or trekking of grass areas by equipment Care shall be taken by the Contractor in felling trees authorized for removal to avoid any unnecessary damages to vegetation and trees that are to remain in place and to structures under construction or in existence and to workmen.

b) All the produce from such cutting of trees by the contractor shall remain the property of Government and shall be properly stacked at site, approved by the Engineer-in-Charge. No payment whatsoever shall be made for such cutting and its stacking by the Contractor. If any produce from such cutting is not handed over to the Government by the contractor, he shall be charged for the same at the rates to be decided by the Engineer-in-Charge. The recovery of this amount shall be made in full from the intermediate bill that follows.

c) The contractor shall also make arrangements of fuel deposits for supply of required fuel for the labourers to be employed for cooking purpose at his own cost in order to prevent destruction of vegetation growth in the surrounding area of the work site.

91.0 POSSESSION-PRIOR TO COMPLETION:

The Engineer-in-Charge shall have the right to take possession of or use any completed part of work or works 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 within the interest of Clause 28 of Standard specification except where expressly otherwise specified by the Engineer-in-charge.

92.0 ACCESS TO THE CONTRACTOR'S BOOKS:

Whenever it is considered necessary by the Engineer-in-Charge to ascertain the actual cost of execution of any particular extra item of work or supply of the plant or material on which advance is to be made or of extra items or claims, he shall direct the contractor to produce the relevant documents such as payrolls, records of personnel, invoices of materials and any or all data relevant to the item or necessary to determine its cost etc. and the contractor shall when so required furnish all information pertaining to the aforesaid items in the mode and manner that may be specified by the Engineer-in-Charge.

93.0 DRAWING TO BE KEPT AT SITE:

The contractor is to supply seven sets of corrected drawings for approval of the approving authority. The approving authority will forward four sets of approved drawing to the Engineer- in-Charge and two sets to the contractor for his/their own use. The contractor shall keep one complete set of drawings and specifications in the site in charge of the contractor's agent to whom the instructions can be given by the Engineer-in-Charge.

94.0 B.I.S BOOKS AND STANDARD SPECIFICATION / OPWD CODE TO BE KEPT SITE:

A complete set of Indian Standard specification referred to in "Technical Specifications"andOPWD Code shall be kept at site for reference

95.0 SITE ORDER BOOK:

An order book shall be kept at the site of the work. As far as possible, all orders regarding the work are to be entered in this book. All entries shall be signed and dated by the Department Officer in direct charge of the work and by the contractor or by his representative. In important cases,theEngineer-in-ChargeortheSuperintendingEngineerwillcountersigntheentries, which have been made. The order book shall not be removed from the worksite, except with the written permission of the Engineer-in-Charge. The Site Order Book shall be issued by the Engineer-in-Charge for use at site.

96.0 VARIATIONSBYWAYOFMODIFICATION,OMISSIONSORADDITIONS:

The contractor(s) shall not vary or deviate from the drawings or specifications except upon the express authority of the Engineer-in-Charge which shall be obtained by an order in writing of the Engineer-in-Charge or by plan or drawing expressly given or signed by him or by any subsequent written approval signed by him. For example the foundation shall be carried to the depths in suitable strata, shown in the drawing. But if the Engineer is of opinion that they should be shallower or deeper and so directs the contractor in writing the instruction of theEngineer-in-Charge shall be binding on the contractor.

The Power to make additions and alteration in drawing or specification etc.: The Engineer-in-Charge shall have power to make any alternations in or additions to the original specification, drawing, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor(s) shall be bound to carry out the work in accordance with the instructions which may be given to him/them in writing signed by the Engineer-in-Charge and such alterations shall not invalidate the contract, and any additional work beyond the scope of the work which the contractors may be directed to do in the manner above specified as part of the work or any curtailment of the work from the scope of the work as designed, which may be found necessary during the period of construction shall be carried out or omitted by the contractor(s) on the same conditions in all respects on which he/they agreed to do the main work. If the additional or altered work for which no rates can be arrived from the main work then the contractor shall within seven days of the date of the receipt by him/them of the order to carry out the work, inform the Engineer-in-Charge of the rate which he/they propose to charge for such class of work. If the Engineer-in-Charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such a class of work and arrange to carry it out in such manner as he may consider it advisable. In the event of dispute the decision of the Chief Engineer concerned shall be final. The time limit for the completion of the work shall be extended or curtailed in the proportion to the increase or decrease in its costs. As alteration or curtailment bears to the cost of the original contract work, the certificate of the Engineer-in-Charge as to such proportion shall be conclusive.

97.0 CARE AND DIVERSION OF RIVER/STREAM:

The contractor shall submit details regarding the diversion and care of river or stream during construction of the work along with a separate print-out of the time table showing earliest and latest start and finish dates of various activities. He should submit a detailed labour plan with drawings for the diversion and care of river during construction of work. The above arrangements shall be at contractor's cost.

98.0 INCOME TAX:

a) During the currency of the contract, deduction of income tax as per Income tax Rule shall be made from the gross value of each bill of the contract.

b) The contractor's staff, personnel and labour will be liable to pay personnel income taxes in respect 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.

99.0 ROYALTYCHARGES:

The contractor shall pay the royalty to the competent authority / local body as per rules. The contractor shall furnish quarterly the statement showing quantity of quarried materials from whom purchased (with full address of the seller) & copies of bills for purchase to the District Officer of the Revenue Department authority competent to levy royalty in the area of work. Contractor shall also furnish such additional information as regards royalty payment to the royalty Authority as may be called for. The royalty charges paid shall be borne by the contractor

& shall not be reimbursed by the Engineer-in-Charge. The circular on royalty is enclosed in the technical specification.

The royalty charges vide Gazette notification dated 31.08.2004 is Annexed. The notification stipulates that the rates shall be increased by 40% from the 4th year. Accordingly the bidder is to consider the royalty charges in their bid. The royalty charges for the use of earth, excavated from the foundation of the structure shall not be levied. In case of request made by the contractor necessary certificate to avail excess duty exemption shall be provided by the Deptt.

The contractor shall keep books of accounts and other documents for the purpose of this condition as may be necessary to clearly arrive at such amounts and shall allow inspection of the same by a duly authorized representative of the Employer and further shall furnish such other information/document as the Employer may require from time to time.

100.0 GST:

100.1 GST as applicable shall be deducted at source during the currency of the contract while making payments to the contractor.

100.2 The contractor should produce a valid GST Registration No. before the payment of the final bill;otherwise payment to the contractor will be withheld.

100.3 The tax structure is liable for revision as per the orders of the Government issued from time to time and in such case, the same tax will be deducted at source at the revised rates only while making payment to the contractor.

100.4 Excess recovery due to downward revision in sales tax rates as per orders of Government from time to time will be reimbursed.

101.0 LABOUR WELFARE CESS.

Labour welfare cess @ 1% of gross bill amount is to be deducted during currency of contract.

102.0 SUPPLY OF CONSTRUCTION MATERIALS:

The contractor(s) is/are to provide every article or thing which may be necessary and requisite for the due and proper execution of the several works included in the contract according to the true intent and meaning of the drawings and specifications taken together ,the list of which are to be signed by the concerned Engineer-in-Charge and by the contractors whether the same may or may not have been particularly described in the specification or shown on the approved drawings provided however that the same are reasonably and obviously to be inferred there from. In case of discrepancy between the drawings and the specifications the Engineer-in-Charge shall decide which of the two is to be followed.

103.0 SETTING OUT:

The contractor shall be responsible for the true and proper setting out of the works and the correctness of positions, levels, dimensions and alignments of all parts of the work and for the provisions of all necessary instruments, appliances and labour in connection therewith, If, at any time, during the progress of the work, any errors, appear or arise in the positions, levels, dimensions or alignments of any part of the work, the contractor, on being required to rectify such errors by the Engineer-in-Charge shall at his own expense do so to the satisfaction of the Engineer-in-charge, If however, such error is based on incorrect data supplied in writing by the Engineer-in-charge, the expenses of rectifying the same shall be borne by the Department, The checking of and setting out of any line or level by the Engineer-in-Charge or his representative shall not in any way, relieve the contractor of his responsibilities for their correctness and other things used in setting out of the work, The contractor shall carefully protect and observe all bench-marks, site-nails, pegs and other things used in setting out of the work(s).

104.0 SITE DATA:

The data and information of the Bid Document are based on the Topo sheet planning & preliminary Investigations conducted so far. Variations / alternations in the said data / information in respect of Geology, topography sub soils hydrological conditions etc., which have bearing on the Investigation, planning Design and Construction, cannot be ruled out. The contractor shall, therefore, satisfy himself about the adequacy and accuracy of the said data / information and interpretation thereof and if necessary, by any further Investigations to be conducted by the Contractor. Thus, Employer shall not be responsible for the accuracy / adequacy of the said data / information and interpretation thereof by the Contractor.

105.0 SUFFICIENCYOFTHECONTRACTPRICE:

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Contract Price. Unless otherwise stated in the Contract, the Contract price covers all the Contractor's obligations under the Contract (including those under provisional sums, if any) and all things necessary for the proper surveys, Investigation, planning & design, execution and completion of the Works and the remedying of any defects during construction and maintenance period.

106.0 UNFORESEEABLE DIFFICULTIES:

Except as otherwise stated in the Contract:

a. the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Works:

b. by signing the Contract, the Contractor accepts total responsibility for having foreseen all difficulties and costs of successfully completing.

c. the Works; and the Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs.

107.0 RIGHTS OF WAY AND FACILITIES:

The Contractor shall bear all costs and charges, other than the statutory charges, for special and/or temporary rights-of-way, which he may require, including those for access to the Site. Department shall bear the statutory charges for R. O. R. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the site, which he may require for the purposes of the Works.

Cost of land acquisition as per Land Acquisition Act and Statutory Charges for obtaining the clearance of ROW/ROU from other Govt/semi govt/corporate bodies shall be borne by Govt. Time extension for delay in land acquisition shall be considered by Govt. as per rule on its merit by the competent authority. Liquidated damages shall not be imposed if the delay is not attributable to the contractor and the revised milestone is approved by the competent authority.

108.0 AVOIDANCE OF INTERFERENCE:

The Contractor shall not interfere unnecessarily or improperly with:

a) The convenience of the public, or

b) The access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all -damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

109.0 ACCESS ROUTE:

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

The Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes; the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions; the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route, the Employer does not guarantee the suitability or availability of particular access routes, and Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

110.0 TRANSPORTOFGOODS:

a) The Contractor shall give the Employer, not less than 21 days' notice, of the date on which any Plant or a major item of other Goods will be delivered to the Site;

b) TheContractorshallheresponsibleforpacking,loading,transporting,receiving.Unloading, storing and protection all Goods and other things required for the Works;and

c) The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

111.0 CONTRACTOR'S EQUIPMENT: The Contractor shall be responsible for all his/their equipment.

When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works.

1) 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, except for the purpose of moving it from one part of the site to another, without the consent, in writing, of the Engineer, which shall not be unreasonably withheld.

2) Upon completion of the works the Contractor shall remove from the site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor.

3) The Employer shall not at any time be liable for the loss of or damage to any of the saidConstructional Plant, Temporary Works or materials.

112.0 PROGRESS REPORTS:

Monthly progress reports shall be prepared by the Contractor and submitted to the Employer in six copies. The first report shall cover the period up to the end of the first calendar month following theCommencement Date. Reports shallbe submittedmonthly thereafter, each within 5 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work. The work which is known to be outstanding at the completion date is to be completed stated in the Taking-Over Certificate for the Works.

Each report shall include:

a) Charts and detailed descriptions of progress, including each stage of surveys, Investigation, design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, commissioning and trial operation;

b) Digital photographs showing the status of progress on the Site;

c) For the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:

(i) Commencement of manufacture,

(ii) Contractor's inspections,

(iii) Tests, and

(iv) Shipment and arrival at the Site;

d) The details of Contractor's Personnel and Equipment.

e) Copies of quality assurance documents, test results and certificates of Material;

f) List of Variations, notices given

g) Safety statistics, including details of any hazardous incidents and Activities relating to environmental aspects and public relations; and

h) Comparisonsofactualandplannedprogress,withdetailsofanyeventsor circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

113.0 DESIGN:

113.1 General Design Obligations:

The Contractor shall be deemed to have scrutinized, prior to the Base Date, the Employer's Requirements (including design criteria and calculations, if any). The Contractor shall be responsible for the Investigation planning and Design of the Works and for the accuracy of such Employer's Requirements (including design criteria and calculations), except as stated below.

The Employer shall not be responsible for any error, inaccuracy or omission of any kind in the Employer's Requirements as originally included in the Contract and shall not be deemed to have given any representation of accuracy or completeness of any data or information. Any data or information received by the Contractor, from the Employer or otherwise shall not relieve the Contractor from his responsibility for the Investigation, design and execution of the Works.

113.2 Contractor’s Documents:

The Contractor’s Documents shall comprise the technical documents specified in the Employer's Requirements, documents required to satisfy all regulatory approvals, and the documents.

The Contractor shall prepare all Contractors Documents, and shall also prepare any other documents necessary to instruct the Contractors Personnel.

If the Employer's Requirements describe the Contractor's Documents which are to be submitted to the Employer for review, they shall be submitted accordingly, together with a notice as described below. In the following provisions of this Sub-Clause, (i) "review period" means the period required by the Employer for review, and (ii) "Contractor's Documents" exclude any documents which are not specified as being required to be submitted for review.

The Employers may give notice to the Contractor that a Contractor's Document fails (to the extent stated) to comply with the Contract. If a Contractor's Document so fails to comply, it shall be rectified, resubmitted and reviewed inaccordancewiththisSub-Clause,atthe Contractor's cost.

For eachpartoftheWorks,andexcepttotheextentthattheParties otherwise agree:

a) Execution of such part of the Works shall not commence prior to the expiry of the review periods for all the Contractor's Documents which are relevant to its design and execution.

b) execution of such part of the Works shall be in accordance with these Contractor's Documents, as submitted for review; and if the Contractor; wishes to modify any design or document which has previously been submitted for review, the Contractor shall immediately give notice to the Employer. Thereafter, the Contractor shall submit revised documents to the Employer in accordance with the above procedure.

c) If the Employer's Representative instructs that further Construction Documents are necessary for carrying the works, the Contractor shall upon receiving the Employer's Representative Instructions, prepare such construction documents and shall not be considered as variation. Any such contract (under the preceding paragraph) or any review (under this Sub-Clause - or otherwise) shall not relieve the Contractor from any obligation or responsibility.

113.3 As-Built Documents:

The Contractor shall prepare, and keep up-to-date, a complete set of 'as-built' records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed. These records shall be kept on the Site and shall be used exclusively for the purposes of this Sub-Clause. Two copies shall be supplied to the Employer prior to the commencement of the quantity checks / Verification Tests on Completion.

In addition, the Contractor shall supply to the Employer as-built drawings of the Works, showing all Works as executed, and submit them to the Employer for review under Sub-Clause [Contractor's Documents]. The Contractor shall obtain the consent of the Employer as to their size, the referencing system, and other relevant details.

Prior to the issue of any Taking-Over Certificate, the Contractor shall supply to the Employer the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer's Requirements. The Work shall not be considered to be completed for the purposes of taking-over [Taking Over of the Works and Sections] until the Employer has received these documents.

113.4 Design Error:

If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's Documents, they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause.

114.0 PROGRAMME:

114.1 The Contractor shall submit a time programme to the employer within 15 (fifteen) days after the conclusion of contract / commencement date whichever is earlier and the programme shall be based on the basic time period for completion and milestone as indicated in the Contract Document. Contractor's programme shall beconsidered effective upon acceptance bythe Employer's Representative.

The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Unless otherwise stated in the contract each programme shall include:

(a) The order in which the Contractor intends to carry -out the Works, including the anticipated timing of each major stage of the Works.

(b) The periods for reviews under Clause [Contractor's Documents],

(c) The sequence and timing of inspections and tests specified in the Contract, and

(d) A supporting report which includes:

(e) AgeneraldescriptionofthemethodswhichtheContractorintendsto adopt for the execution of each major stage of the Works, and

(f) TheapproximatenumberofeachclassofContractor'sPersonneland of each type of Contractor's Equipment for each major stage.

The Contractor shall promptly give notice to the Employer of specific probable future events or circumstances, which may adversely affect or delay the execution of the Works. In this event, or if the Employer gives notice to the Contractor that if a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Employer in accordance with this Sub-Clause.

114.2 Rate of Progress:

If, at any time:

(a) actual progress is too slow to complete within the Time for Completion, and/or

(b)progresseshasfallen(orwillfall)behindthecurrentprogrammeunderClause 25.0 [Construction Programme],

then the Employer may instruct the Contractor to submit, a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion of the mile stone and the work.

Unless the Employer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor.

115.0 CHARGE OF SITE

From the commencement of the works to the completion of the same, they are to be under the contractor (s) charge. The Contractor(s) is / are to be held responsible for and to make good all injuries, damages and repair occasioned or rendered necessary to the same by fire or other causes and they are to hold the employer harmless from any claims for injuries to persons or for structural employer harmless from any claims for injuries to persons or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the contractors(s) or of any one in his/their employees during the execution of the works.

116.0 CHANGES IN DRAWING

If at any time before or after the commencement of the work the employer shall for any reason whatsoever.

a) Cause alterations, omissions or variation in the drawings and specification involving any curtailment of the works as originally contemplated or

b) Not required the whole of work as specified in the Bid to be carried out, the contractor(s) shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he/they might have derived from the execution of the work in full as specified in the Bid but which he/they did not derive in consequence of the

curtailment of the works by reason of alterations, omissions or variationsor in consequence of the full amount of the work not having been carried out.

117.0 FORCE MAJEURE

"Force Majeure" means an event beyond the control of the Employer and the Contractor, which makes it impossible or illegal for a party to perform, including but not limited to:

(i) Act of God

(ii) War, hostilities (whether war be declared or not), invasion, act of foreign enemies, mobilization, requisition, or embargo;

(iii) Rebellion, revolution, insurrection, or military or usurped power, or civil war

(iv) Contamination by radioactivity from any nuclear fuel, or from any nuclear waste

(v) from the combustion of nuclear fuel, radioactive toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component ofsuch assembly

(vi) Riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors.

If either party is prevented from or delayed in performing any of his obligations under the Contract by any circumstances of Force Majeure, then he shall notify the other party thereof within seven days, and specify how these circumstances are detrimental in the performance of the Contract.

If the performance of the operation is substantially disrupted for a continuous period of three months by virtue of any event of Force Majeure, then either party may by written notice to the other terminate the Contract. The provisions of Clause 3 shall apply to such terminationas for indemnification.

SECTION – V

SPECIAL CONDITIONS OF CONTRACT

CONTENTS

SPECIAL CONDITIONS OF CONTRACT

1.0 GENERAL

2.0 SUFFICIENCY OF BID

3.0 MAJOR PROJECT COMPONENTS AND PROJECT BASIC PARAMETERS

4.0 SCOPE OF WORK

5.0 TESTS AND QUALITY CONTROL

6.0 MEASUREMENTS AND PAYMENTS

7.0 SUPPLY OF GATES & AND HYDRO/ELECTRO MECHANICAL PLANT AND MACHINERY

8.0 SUPPLEMENTARY REQUIREMENTS

9.0 REGULATIONS AND BYE-LAWS

10.0 PASSING OF FOUNDATION, CENTERING, REINFORCEMENT ETC

11.0 SIGNING FIELD BOOKS, LONGITUDINAL SECTIONS,CROSS-SECTIONSAND MEASUREMENT BOOKS

12.0 QUALITY CONTROL

13.0 CLEANING UP

14.0 COMMUNICATIONS AND NOTICES BY CONTRACTORS:

15.0 COMPENSATION FOR DELAY BY DEPARTMENT IN APPROVAL OF DESIGN DRAWING

16.0 WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS ETC.,

17.0 ALTERATIONS IN SPECIFICATIONS AND DESIGNS

18.0 TIME LIMIT FOR UNFORESEEN CLAIMS

19.0 RECOVERY OF DUES FROM THE CONTRACTOR

20.0 WORKS TO BE OPEN FOR INSPECTION

21.0 NOTICE TO BE GIVEN BEFORE WORK IS COVERED UP

22.0 CONTRACTOR TO SUPPLY PLANT, LADDERS, SCAFFOLDING ETC

24.0 PERMISSION FOR CROSSING RAILWAY, NH/SH/ROADS/CANALS/PIPE LINES Etc

25.0 LAND ACQUISITIONS

26.0 USE OF SITE

27.0 WATER USER ASSOCIATION (PANI PANCHAYAT

28.0 EPC’s associated activities for WUA

29.0 OTHER SPECIAL CONDITIONS

30.0 MODERN TECHNOLOGY

SECTION-V

SPECIAL CONDITIONSOF CONTRACT

1.0 GENERAL

The data and information given in the Contract Document are based on the prefeasibility report by reconnaissance andaBroadConceptualReportpreparedbytheDepartmentbasedontopographicmap study. The Contractor shall therefore, satisfyhimselfaboutthe adequacyandaccuracyofthesaiddata/informationand interpretationthereof andcollect freshdata/additionaldata/information andcarry out/conduct furtherinvestigationand studies. TheEmployershall not beresponsiblefor theaccuracy/adequacyofthe data/informationandinterpretationthereofbytheContractor.

2.0 SUFFICIENCYOFBID

2.1 TheContractor shall be deemed to have visited and carefully examined the Projectsite andit'ssurroundingtohavesatisfiedhimselftothenatureandconditionsofthemeans of transport andcommunications, whether bylandorair, asavailableat present andasto possibleinterruptionstheretoincludingtheaccessandregressconditionsfortheSite. The Contractorisalsodeemedtohavemadeenquiries,examinedandsatisfiedhimselfasto thesites source for obtaining sand, stones, bricks and other materials, the sites for disposal ofsurplusmaterialsandaccommodationfordepots,colonies,workshopsand other infrastructure facilities as may be necessary for executing and completing the Works,asalsothesub-soil waterandvariationsthereof, storms, prevailing winds, climatic conditionsand all othersimilarmattersaffectingtheworksincludinglaw&order.

2.2 AnyneglectoromissionorfailureonthepartoftheContractorinobtainingnecessaryand reliableinformationupontheforegoingoranyothermatteraffectingtheContractshall notrelievehimfromanyrisksorliabilitiesortheentireresponsibilityforthecompletion oftheworksinaccordancewiththeContract.

2.3

NoverbalagreementorinferencefromconversationwithanyofficeroremployeeoftheEmployereitherbeforeorafterthesigningoftheContractshallinanywayaffector modifyanyofthetermsorobligationshereincontained.TheContractorshall alsobedeemedtohaveinspectedandexaminedtheSiteandtohavesatisfiedhimself, before submittinghis Bid, astotheformandnaturethereofincludingthesub-surfaceconditionsandotherlocalconditions,thehydrological, geological andclimaticconditions,theextentandnatureofworkandmaterialsnecessaryforthecompletionoftheWorksoftheentiresystem, themeansofaccesstotheSiteandthelandforaccommodationetc. hemayrequireand, ingeneral,shallbedeemedtohaveobtainedallnecessaryinformation, asto risks, contingenciesandall othercircumstanceswhichmayinfluenceoraffecthisBid.

3.0 MAJORPROJECTCOMPONENTSANDPROJECTBASICPARAMETERS

3.1

ThemajorcomponentsasproposedbytheemployeralongwiththebasicprojectdesignparametersfixedbytheemployerforpressurizedUGPLirrigationsystemisindicatedbelow:

MajorcomponentofPressurizedUGPLirrigationsystem

a. IntakeWorksandPumpingStation

b. Pumpingequipment with electro-mechanical components complete in all respect.

c. Rising main/Pressure main & Delivery Chamber(Optional)

d. Distribution Network through pipe line and accessories.

e. Power System Connectivity to the Project from grid station including switch yard and related equipments.

f. Approach road & Construction of staff quarter/operation room and all other ancillary civil works

g. PIM by own resources of EPC/engaging local NGO/institution dealing with similar works to integrate formation of WUAs,training,capacitybuilding,marketlinkage etc.

3.2 BasicMainParameters

ForBasicParameterspertainingtotheUGPLirrigationsystemreferBasicProjectProfileinAppendixBPPforGuidancewhicharebasedontopomapstudies&Prefeasibility reports.

4.0 SCOPE OF WORK

4.1 General

4.1.1 The major components of works to be executed by the contractor under this contract shall be as described section - wise as follows. Execution of all these works shall include all construction, plant/equipment and materials indigenous or imported, survey, investigation, survey equipment, studies and all services and facilities required for completion of the work.

4.1.2 Any requirements of work whether requested by the Employer or otherwise and whether specifically described in the Contract or not but are necessary or required for the proper completion and functioning of the Works in accordance with the Contract including remedying of any gaps and deficiencies in the Works shall not be deemed to be considered as any change in the Scope of Work and shall not entitle the contractor for any extra payment.

4.2 Survey and Detailed Investigation

4.2.1 The scope of work under this section covers surveys and investigation requirement for detailed planning of the Pressurized UGPL irrigation system covering Intake & related protection works, Location of the Pump House, Delivery Chamber(Optional), fixing alignment of Rising main/Pressure main(When Delivery Chamber is not provided, the Rising Main should be consider upto the last off take of Minor) and pipe line distribution system under this Contract, finalizing location of structures on the pipe line system, grid surveys for structures, Command area survey and longitudinal sections and cross section, marking contours at 0.5 meter interval on the village sheet, land plan schedules and land acquisition proposals including demarcation of land to be acquired by fixing appropriate no of boundary stones etc; for design engineering of the total pipe line system including structures under this Contract; for execution and commissioning of the project. The Contractor shall carryout surveys and detailed investigation required for the whole system under this Contract as per the I.S. Codes, CPHEEO Manual, Standards, Guidelines, Circulars of the Department issued from time to time. This shall not entitle the contractor to additional cost whatsoever other than the contract price. The total scope of services shall be as per Appendix S&I and Instruction to Bidders. Survey is to be carried by the Total Station instrument.

4.2.2 In addition Survey & Investigation shall be done for the Power System Connectivity to the Pressurized UGPL system from the designated 132/33 kV grid referring to the section of SYSTEM CONNECTIVITY: (BASED ON OWNER'S STUDY) as per Appendix BPP.

4.3 Design and Engineering

4.3.1 The present proposal is based on department's preliminary assessment and design. The contractor is free to change the concept and designs provided the irrigation facility is planned and provided to the designed command area so that total CCA in the system is achieved. The planning and design shall have to aim for minimum life cycle cost of the system. The bidder has to provide the guaranteed units of energy consumption per Hr of pumping for irrigation for a life cycle period of 05 years of Pump life which will be considered in bid evaluation. The additional cost due to energy consumption excess over the guaranteed units of consumption stated in the bid shall

be paid by the contractor during the O&M period. The Contractor shall submit design of intake works, pump house and appurtenant works, pumps, Rising main/Pressure main, Delivery Chamber(Optional),(When Delivery Chamber is not provided, the Rising Main should be consider upto the last off take of Minor)distribution system and inline structures, flow measuring devices and pipes for network keeping in view the safety, cost and time effectiveness provided always that the design of the pumps, Rising main/Pressure main, Delivery Chamber(Optional)s(When Delivery Chamber is not provided, the Rising Main should be consider upto the last off take of Minor) and distributions system shall be always in conformity with the basic parameters and in accordance with the Nationally/Internationally accepted practice and for the optimal performance of the works as warranted under the Contract. This shall not entitle the Contractor to additional cost, whatsoever, other than the contract price. The total scope of services under this section shall be as per the Appendix – D&E and Instruction to Bidders. The number of copies of the Reports and other Documents to be submitted to the Engineer-in-Charge by the contractor is also specified in Contract Document.

4.3.2 Data and information related to the Project have been furnished in the bid documents for reference. All additional survey, investigation and testing data and any other data relevant to design shall be collected by the Contractor without any financial burden to the Employer. The data pertaining to the detailed survey made by the contractor to achieve the designed command area shall be used.

4.4 Civil Works

The scope of work under this section detailed in Appendix-CW covers provision of all labour, plant and materials for and execution of all civil works, complete in all respect, as described in conditions of contract and Technical Specifications of Bid Documents including incidentals and all necessary works not shown or specified but reasonably implied or necessary for the proper completion and functioning of the works in accordance with the contract including any amendments thereof.

4.5 PUMPS & ELECTRO MECHANICAL EQUIPMENTS

The scope of work under this section detailed in Appendix-P&EM Provision of all labour, plant and materials for supply and execution of Pumps & electro-mechanical works complete in all respect, as per Technical Specifications of Bid Documents including incidentals and all necessary works not shown or specified but reasonably implied or necessary for the proper completion and functioning of the Works in accordance with the contract including any amendments thereof.

5.0 TESTS AND QUALITY CONTROL

5.1 The Contractor shall be required to carry out all tests in accordance with relevant Clauses of the Conditions of contracts and the Technical Specifications and as per I.S. Codes and CPHEEO Manual.

Employer's authorized representative and/or an outside inspection agency acting on behalf of the Employer shall have access to the site and shall have the power to inspect and examine all works, the materials and workmanship of the project works, during execution. The Contractor shall provide necessary labours tools, scaffolding or any other assistance as desired by the Employer's authorised representative without any extra payment.

5.2 Where the field quality assurance plan provided for witnessing tests/inspection on behalf of the Engineer, the Contractor shall give the Engineer-in-Charge adequate written notice of any inspections/tests.

5.2.1 Where the Engineer or his Representative attends the tests as provided in clause 5.2.1 above, and has any objection to any works or workmanship which in his opinion is not in accordance with the Contract he shall advise the Contractor of his objection during tests/inspections. The Contractor shall give due consideration to such objections and shall make modifications that may be necessary to meet the said objective. The inspection/tests by Engineer/Engineer's

Representative/Agency and/or his countersigning inspection/test certificate(s) thereon shall in no way limit the liabilities and responsibilities, of the Contractor as stipulated in the Contract. The Contractor shall maintain and record all measurements and test results and submit the same to the Employer after completion of such inspection/tests.

6.0 MEASUREMENTS AND PAYMENTS

6.1 The Contractor is entitled for interim payment under various sections of the work in accordance with Clause 41 of the Conditions of Contract. Measurement/verification for interim payment certificate of various items, under various sections of the works, shall be made jointly by the Engineer-in-Charge or his Subordinate Staff and the Contractor or his authorized representative for verifying the claims of the Contractor's interim payment/running bills.

6.2 All items having a financial value shall be measured in the manner as prescribed in specification by the contractor and verified by the Engineer-in-Charge so that a complete record is maintained of all work performed under the Contract.

6.3 Measurement shall be signed and dated by both parties on the Site. If there is any dispute in any of the measurements a note to the effect shall be made in the measurement record against the disputed items and such note shall be signed and dated by both parties engaged in taking the measurements and the Parties shall discuss and resolve the same in accordance with relevant clauses of the contract.

7.0 SUPPLY OF GATES & AND HYDRO/ELECTRO MECHANICAL PLANT AND MACHINERY

7.1 Supply at Site of the Gates and connected Hydro-Mechanical Plant & Machinery, embedded parts and Spares etc., shall be made available two months in advance of the scheduled dates of Installation/erection matching with the progress and availability of Civil Works to take care of any eventualities of hold ups/delays during transit.

7.2 If for any reason, any parts of the Works of the Project are delayed, then the total programme may be re-scheduled by mutual agreement between the Engineer-in-Charge and the Contractor, if necessary, keeping the overall completion schedule of the project unaltered. No extra cost whatsoever, on account of such re-scheduling shall be payable to the contractor.

8.0 SUPPLEMENTARY REQUIREMENTS

8.1 General

The following parts of this Section shall be read in conjunction with the Section IV Conditions ofContract, andSection V: Special Conditionof Contract. The following Clauses shall supplement the provisions of the corresponding clauses of Section IV and V and whenever there is a conflict, the provisions herein shall prevail over those in Section-IV.

8.2 Drawings and Designs:

The Contractor shall formulate submission of proposals for all components of the UGPL irrigation system and System Connectivity for the Project as a whole. The designs, drawings and estimates of Intake Works, Pump house, Pumps, Rising main/Pressure main, Delivery Chamber(Optional), distribution system, Electrical System Connectivity, excavation/earthwork and inline concrete structures to the Engineer-in-Charge for approval. All soft copies and software used for computation shall be made available to the Engineer-in-Charge for vetting of the designs, drawings and estimates by the competent authority. Contractor shall supply to the Engineer-in-Charge 6 (six) copies & CD/DVD/Pen drive and each of the design calculations and drawings for approval. The Contractor shall incorporate all necessary comments of the Engineer's Representative in the above design and drawings, if any, and shall re-submit further 6 (six) copies & CD/DVD/Pen drive each of the revised design and drawings within 10 (ten) days for final approval. The Contractor shall thereafter submit 10 (Ten) copies each of the approved design and 10 (Ten) copies each of the approved drawings together with one copy each of the reproducible tracings to Engineer-in-Charge. Further design calculations and drawings shall be submitted in sequence as per a schedule to be drawn and agreed upon mutually.

The documents and drawings shall be in sufficient detail for review. The scale of the drawing has to be chosen in coordination with the Engineer-in-Charge. The drawings shall be of standardized sizes and as instructed by the Engineer-in-Charge. The drawings shall contain the following basic information in the nameplate:

a) Project name

b) Name and number of the Contract

c) Contractor's name

d) Number and title of the drawing

e) Date and scale

f) Draftsman's name and signature

g) Name of the designer responsible and signature

h) Revision Number (R0 for drawing submitted initially and R1, R2, etc., for Drawings submitted subsequently).

i) Name and designation of checking official and space for signature.

j) Approving authorities name and designation as specified by the Engineer-in- Charge and space for the signature

A blank space 90 x 50 mm shall be provided immediately above the title block for the approval stamp. If required by the Approving Authority, the detailed design and the execution drawings shall be submitted by the contractor to the Approving Authority only after verification by the Consultant(s) notified by the Engineer-in-Charge.

The Contractor shall be responsible for preparation of working drawings and the construction documents for works, as specified in the Contract. Drawings given are indicative, but will form part of the contract.

The contractor shall carry out alignment studies including cost economics by examining all possible alternatives to prepare detailed layout, designs and drawings of all components of the work stated in scope of work. The contractor shall use guidelines in the relevant IS codes, IRC publications and circulars issued by the department from time to time for various components of the works.

All the studies of the system, layout drawings and modifications if required to be prepared for taking up execution of the work, shall be prepared by the contractor and shall be got approved from the competent authority. The contractor will have to submit detailed drawings of each component with appropriate scales, measurements, Reduced Levels, full dimensions, index map locations of components such as godown, dumping area, internal roads, etc., The contractor is expected to organize his work to the best of his knowledge so that final draft of various types of designs and layouts will be submitted to competent authority within stipulated time period.

All the studies layouts, drawings, design notes, which have been submitted to the department, shall become the absolute property of department under the copy right act and the contractor shall not use the same in whole or part thereof elsewhere for any purpose without explicit written permission from the department. In all difference of opinion on technical matters between the contractor and the Engineer-in-Charge, the decision given by the Chief Engineer shall be final and binding on the contractor.

8.3 Contractor’s Work Programme

8.3.1 Within 15 (fifteen) days from the Date of Commencement, the Contractor shall submit to the Employer a work programme showing the sequence in which he proposes to carry out various components for completing the Works as per the Master Control Network within the TIME FOR COMPLETION. The Master Control Network shall indicate the sequence of various activities and

highlight the critical activities including delivery of equipment. Such work programme shall be subject to review and revision by the Employer/Engineer in consultation with the Contractor from time to time in order to achieve completion of the Works within the TIME FOR COMPLETION. The contractor shall also use computer aided project management software to generate Bar Chart based on network technique.

8.3.2 The contractor shall also submit to the Employer/Engineer the information on detailed methodology of carrying out investigation surveys, design engineering, detailed construction methodology along with schedule for deployment of plant & machineries, which shall successively be adjusted in order to meet the actual requirement to complete the works within the TIME FOR COMPLETION along with the work programme.

8.3.3 All the survey & investigation, planning, designs, approval processes, procurement and construction works shall be taken up simultaneously; so that the work can be completed within time for completion.

8.3.4 Effort should be made to execute and complete the work from upstream to downstream of the pipe line distribution system simultaneously. All works should be taken up in a systematic manner such that the objective of providing irrigation supply in the entire command area of the system is achieved.

8.4 Action when the progress of any crucial item of work is unsatisfactory : If the progress of a crucial item of work, which is important for timely completion of work is unsatisfactory, the Engineer-in-Charge shall, not withstanding that the general progress of work is satisfactory, in accordance with relevant clause, be entitled to take action under this clause after giving the contractor 15 days notice in writing and the contractor will have no claim for compensation for any loss sustained owing to such action.

8.5 Programme – Scheduling / Re-Scheduling

8.5.1 The Works shall be executed and performed in accordance with the Master Control Network (Work Programme) which shall clearly indicate the interlinking / interdependencies of all the works of the Contract including relative activities of Civil Works and Electro-Mechanical Works and the Power System Connectivity for the system. The Programme shall be reviewed jointly by the Employer/ Engineer and the Contractor, at least once in a month where-in the hold ups/delays, if any, in the progress of Works, with reference to the agreed Schedule shall be given Special Attention. Necessary modifications (updating / Revisions) of the Programme, within the overall Time for Completion, shall be carried out by mutual agreement between the Employer/ Engineer and the Contractor.

8.5.2 Supply at Site of the Hydro/Electro-Mechanical Plant & Machinery, embedded parts and Spares etc., shall be made available 2 months in advance of the scheduled dates of Installation /erection matching with the progress and availability of Civil Works to take care of any eventualities of hold ups/delays during transit.

8.5.3 If for any reason, any parts of the Works of the Project are delayed, then the total programme may be re-scheduled by mutual agreement between the Employer/ Engineer and the Contractor, if necessary, keeping the overall completion schedule of the project unaltered. No extra cost whatsoever, on account of such re-scheduling shall be payable to the contractor.

8.5.4 Progress Report

The Contractor shall submit to the Engineer, Engineer's Representative and Engineer-in- Charge monthly progress report by 5th day of following months in such form and details as prescribed by Engineer-in-Charge.

8.6 Inspection and tests

Except as otherwise provided, all materials and workmanship. If not otherwise designated by the specifications shall be subject to inspection, examination and test by the Engineer- in-Charge at any and all times during manufacture and/or construction and at any/all places where such

manufacture or construction are carried on. The Engineer-in-Charge shall have the right to reject defective material and workmanship or require its corrections. Rejected workmanship shall be satisfactorily replaced with proper material without charge thereof and the contractor shall properly segregate and remove the rejected material from the premises, if the contractor fails to proceed at once with the replacement of the rejected material and / or the construction of defective workmanship, the Engineer-in-Charge may replace such material and / or correct such workmanship and charge the cost thereof to the contractor.

The Contractor shall be liable for replacement of all defective equipment/machineries/works during the contract period including extended time and Operation and Maintenance period.

The contractor shall furnish promptly without additional charge, all facilities, labour and material necessary for the safe and convenient inspection and tests that may be required by the Engineer-in-Charge.

All inspections and tests by the department shall be performed in such a manner as not to unnecessarily delay the work.

8.7 Damage to Works

The works, whether fully completed or incomplete , all the works, materials, machinery, plants, tools, temporary buildings and other things connected there with, shall remain at the risk and in the sole charge of the contractor until whole of the completed work under the Contract has been delivered to the Engineer-in-Charge. Until suchdelivery of the entire completed work the contractor shall at his own cost take all precautions reasonably to keep all the aforesaid works, materials, machinery, plants, temporary buildings and other things connected there with free from any loss or damage and in the event of the same or any part thereof being lost or damaged, he shall forth with reinstate and make good such loss or damage at his own cost. The complete system shall be insured against all possible risks.

8.8 Examination and tests on Completion

On the completion of the work the Engineer-in-Charge shall make such examination and tests of the work as may then seem to him possible, necessary or desirable, and the contractor shall furnish free of cost any materials, equipment and labour which may be necessary thereof, and shall facilitate in every way all operations required by the Engineer-in- Charge, in making examination and tests.

8.9 Trial run of Pipe line System

On the completion or part completion of the work, the completed pipe line distribution system shall be subjected to trial run for 24 hours up-to 30 days or as decided by Engineer-in-Charge to locate any defect and excessive seepage, if any. The trial run shall not be deemed as commissioning of the distribution system.

8.10 Haul Roads

The Contractor shall have to make the work sites accessible to the departmental officers for inspection by way of constructing/maintaining all weather roads/approaches, the cost of which shall be borne by the Contractor.

8.11 Layout of construction of road

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

be final and the binding on the Contractor.

9.0 REGULATIONS AND BYE-LAWS

The contractor shall conform to the regulation, bye-laws, any other statutory rules made by any local Authorities or by the Government and shall protect and indemnify Government against any claim or liability arising from or based on the violation of any such laws, ordinance, regulations, orders, decrees, etc.,

10.0 PASSING OF FOUNDATION, CENTERING, REINFORCEMENT ETC.

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

11.0 SIGNING FIELD BOOKS, LONGITUDINAL SECTIONS, CROSS- SECTIONS AND MEASUREMENT BOOKS

Before starting the work, and at the end before the work is covered, levels for plotting the longitudinal sections (along the axis as decided by Engineer-in-Charge or his authorised representative) and cross section of the portion of the work shall be taken by authorised Engineer of the contractor in the presence of the Engineer-in-Charge or his authorised representative and the same shall have to be got attested from the Engineer-in-Charge or his authorised representative in token of acceptance.

If the contractor fails to take measurements and sign them, then the measurements recorded by the Engineer-in-charge, or his authorized representative in the authorised books shall be final and binding on the contractor. For this purpose, suitable date or dates shall be fixed by the Engineer-in-Charge and intimated to the contractor. If the contractor, or his duly – authorised agent fails to attend on the appointed date or dates, the levels and measurements shall be taken in his absence and such levels and measurements and longitudinal sections and cross sections based there on shall be final and binding on the Contractor. The levels will be taken on such alignments and cross sections as will be useful for reference permanently. The point of the locations for the levels will depend upon the roughness of the area and will also be at least in conformity with the requirement of specifications for “Excavation” as for as possible.

Similar procedure for record of measurements shall hold good for all other items and activities involved inexecution of the work. All the levels/measurements shall be recorded by the Engineer-in-Charge or his authorised representatives in the authorised level / measurement books.

12.0 QUALITY CONTROL

The contractor shall produce results of quality control tests carried out on the works by his staff and the quality audit conducted by the department or by Engineer’s Representative on these works. If the test result do not fulfil the stipulated criteria laid down in specifications the payment will be limited as per the provisions in the specification(s) and if number of results fail beyond the limit of acceptance, then the contractor shall not be paid unless he rectified all such imperfect work(s). The decision of the Engineer-in-Charge in respect of the matters pertaining to the quality control shall be final and binding on the Contractor.

13.0 CLEANING UP

a) The Contractor shall at all time keep the construction areas and his colony and storage free from accumulation of waste or rejected materials.

b) Prior to the completion of the work, the Contractor shall remove all rubbish from and around the premises and all tools, scaffolding equipment and material which are not part of permanent structures executed or otherwise asked for or as provided under any other Clauses of this contract. The premises will be left in a manner fully satisfactory to the

Engineer-in-Charge.

14.0 COMMUNICATIONS AND NOTICES BY CONTRACTORS:

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

15.0 COMPENSATION FOR DELAY BY DEPARTMENT IN APPROVAL OF DESIGN DRAWING

The contractor shall not be entitled to claim any compensation from department for the loss suffered by him on account of delay by department in approval of alignment, designs & drawings. However this may be considered for grant of time extension.

16.0 WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS ETC.,

The Contractor shall execute the whole and every part of the work in the most substantial and workmen like manner and both as regards materials and otherwise in every respect in strict accordance with specifications. The Contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer or Engineer-in-Charge and lodged in his office, and to which the contractor shall be entitled to have access at such office or on the site of the work for the purpose of inspection during office hours, and the contractor shall, if he so requires, be entitled at his own expense to make or cause to be made copies of specifications and of all such designs, drawings and instructions as aforesaid.

17.0 ALTERATIONS IN SPECIFICATIONS AND DESIGNS

All the SUPERINTENDING Engineers connected with work shall have power to make any alterations in, or omissions from, addition to, or substitutions for the original specifications and approved drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any such instruction which may be given to him in writing signed by the SUPERINTENDING Engineer or Engineer-in-Charge and such alterations omissions, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the contractor may be directed to do in the manner above specified as part of the work, shall be carried out by the contractor on the same conditions, in all respects on which he agreed to do the main work and at the same contract cost.

18.0 TIME LIMIT FOR UNFORESEEN CLAIMS

Under no circumstances whatsoever, shall the Contractor be entitled to any compensation from Government on any account unless the Contractor shall have submitted claim in writing to the Engineer-in-Charge within one month of cause of such claim occurring.

19.0 RECOVERY OF DUES FROM THE CONTRACTOR

Whenever any claim, against the Contractor for the payment of a sum of money arises out of or under the Contract. Government shall be entitled to recover such sum by appropriating, in part or whole, the Security deposit and performance security deposit of the Contractor and to sell any Government promissory notes etc., forming the whole or part of such security. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable, as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other contract with Government. Should thissum be not sufficient to coverthe full amount recoverable from the Contractor then it shall be recovered from him as arrears of land revenue.

20.0 WORKS TO BE OPEN FOR INSPECTION

All works, under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-Charge and his subordinates and the contractor shall at all times during the usual working hours and at all other

times at which reasonable notice of the intention of Engineer-in-Charge or his subordinate to visit the work shall have been given to the contractor, either he himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

21.0 NOTICE TO BE GIVEN BEFORE WORK IS COVERED UP

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

22.0 CONTRACTOR TO SUPPLY PLANT, LADDERS, SCAFFOLDING ETC.

The contractor shall supply at his own cost materials, plant, tools appliances, implements, tackle, scaffolding and temporary works requisite for the proper execution of the work, whether original, altered or substituted and whether included in the specifications 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 together with carriage to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing & assisting in the checking measurement or examinations at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract, or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof. Contractor is liable for damages arising from non-provisions of lights, fencing etc., The contractor shall also provide at his own cost, except when the contract specifically provided other wise and except, for payment due, all necessary fencing and lights required to protect the public from accidents, and shall be bound to bear the expenses or defence of every suit, action or other proceedings of law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings, to any such persons or which may be paid to compromise any claim by any such person.

23.0 AUDIT AND TECHNICAL EXAMINATIONS:

Government shall have the right to cause any audit and technical examination of the works and the final bills of the Contractor including all supporting vouchers, abstracts etc to be made after payment of the final bill and if as a result of such audit and technical examinations any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of overpayment and it shall be lawful for Government to recover the same from him in the manner prescribed in clause "Recovery of dues from contractor" and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Government to the contractor. Provided that Govt. shall not be entitled to recover any sum overpaid, nor the Contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Engineer-in-Charge on one hand and the Contractor on the other hand under any terms of

the Contract, permitting payment for work after assessment by the Engineer-in-Charge.

24.0 PERMISSION FOR CROSSING RAILWAY, NH/SH/ROADS/CANALS/PIPE LINES ETC.

The works of the pipe line systems is likely to have several crossings for Railway, State Highway, Other Roads, other pipelines etc., and as such necessary letter to grant the permission for crossing those premises shall be issued by the respective authorities to the Engineer-in- Charge. The contractor will have to process, follow-up and obtain timely clearance from the concerned authorities. Statutory costs of those crossings will be paid by the Government or will be reimbursed to the contractor if paid by him on production of receipt.

25.0 LAND ACQUISITIONS

a) Processing of land acquisition – After the alignments are finalised, the contractor with the help of Engineer-in-Charge of the work shall start the process of land acquisition. As such the Engineer-in-Charge will submit necessary proposals to the respective authority. However preparing proposals and further follow up for timely acquisition is to be done\watched by the contractor.

b) For any private land, Govt. land and property, required for this work, the process of Land and property acquisitions is to be carried out by the contractor with the help of department. Necessary proposals\letters to concern department will be given by the

Engineer in charge, further follow-up for timely acquisition is to be done\watched by the contractor. Except cost of temporary land acquisition or early mutually agreed acquisition of land and crop compensation, the department shall make payments for acquiring permanent land and property as per Odisha LA Act & Rules. The contractor shall pay cost of temporary land acquisition and crop compensation, if any. Pursuing the land and property acquisition cases, getting the award\approval from competent authority, within the time shall be the whole responsibility of the contractor, the land required for construction before award will be arranged by the contractor to ensure timely completion of the system for which no claim shall be entertained from the contractor.

c) Acquiring forest land is to be avoided while planning the network. However in unavoidable cases if permission is required to use any such forest land, it shall be the responsibility of the contractor. The case of such proposals shall be forwarded by the contractor through the Engineer-in-Charge to the competent authority and the contractor shall submit all documents and reports and pursue for approval. The department shall make payment only for the cost of forest land acquisition as per the Forest authority requisitions. All other cost shall be borne by the contractor.

d) Cost of land acquisition as per Land Acquisition Act and Statutory Charges for obtaining the clearance of ROW/ROU from other Govt/semi govt/corporate bodies shall be borne by Govt. Time extension for delay in land acquisition shall be considered by Govt. as per rule on its merit by the competent authority. Liquidated damages shall not be imposed if the delay is not attributable to the contractor and the revised milestone is approved by the competent authority.

26.0 USE OF SITE

a) All land required for use of Contractor facility shall be arranged by the Contractor from private land owner /revenue department at his own cost and no claim on this account shall be entertained.

b) All areas of operation including those of his staff and labour colonies in case handed over to the contractor by department shall be cleared and handed over back in good condition to the Engineer-in-Charge except the areas under works constructed. The Contractor shall make good to the satisfaction of the Engineer-in-Charge any damage or alterations made to

areas which he has to hand over back or to other property or land handed over to him for the purpose of this work.

c) The lands shall as herein before mentioned be handed over back to the Engineer-in- charge immediately after completion of the work under this contract or the termination of the contract whichever is earlier. Also no land shall be held by the Contractor longer than the Engineer-in- Charge shall deem necessary and the Contractor shall on due notice by the Engineer-in-Charge vacate and return the land which the Engineer- in-Charge may certify as no longer required by the Contractor for the purpose of the works. In case the lands are not handed over back to the department within the time limit specified above, penal rent as may be decided by the Engineer-in-Charge will be recovered from the contractor.

d) The vegetation and forest is noticeable in project area. The Contractor should take utmost care for the preservation of this vegetation and forest. Any damage in this vegetation and forest will have to be compensated by the Contractor and decision of Engineer-in-Charge will be final and binding on Contractor.

27.0 WATER USER ASSOCIATION (PANI PANCHAYAT)

27.1 OdishaPaniPanchayat Act & Rules is to be followed for formation of PaniPanchayat. The Contractor shall prepare Command Area maps on the village maps for minor, sub-minor, with due demarcation of area of WUA with territorial areas on basis of hydraulic boundary.

27.2 The Contractor shall obtain details of names of cultivators, their area under command area as per revenue records and prepare Voter's List of WUA/territorial constituency wise as per the OdishaPaniPanchayat Act & Rules.

27.3 EPC'S ASSOCIATED ACTIVITIESFOR WUA

Objective-

- To handhold the farming community in understanding the project objectives as it has been conceived.
- To help farmers to improve the productivity under existing conditions.
- To convince farmers to set up water user's association in order to ensure equitable distribution of water.
- To help farmers to understand the irrigation technology to grow more with less water.
- To convey Govt. initiation, efforts & objectives among all stakeholders of the project.

The basic idea is to uplift farming community from nil understanding of project and traditional farming methods to level of total understanding of the project objectives and to improve farming practices.

Our communication strategy & method should be in such a way that farmers are educated through a step by step and a gradual process of knowledge & technology access. For this purpose, the EPC contractor can engage Mother NGO/Institution/Enterprises dealing with similar works having enough experience in PIM activities preferably in WRD, Odisha with prior approval of the CE&BM,RBVN Basin, Brahmapur

Level-1 (Within 12th months)

- No understanding among farmers about water sharing.
- Traditional farming practices.
- Rain fed farming. Activity to be Involved

- Cropping pattern and irrigation practices to know the present scenario of the project area- 25% of Command area along with WUA.

Deliverables to Owner

- Submission of present farming practices and report on feasible crops with crop economics suitable for the project

Level-2 (Within 18th months)

Creating awareness

The activities to be involved for this level are-

- Farmers' meetings for creating awareness about the project and Govt. support.
- Identifying volunteer leaders representing maximum of a25Hachaklevel beneficiary farmers.

Promotional inputs plan-

- Two page sample leaflet to give the salient features of the project.
- CDs/PPT presentation during village meetings to explain the objectives & salient features of project- Introductory Presentation, One presentation around 50 volunteer leaders.
- Wall paintings/flex – At least 2 units for each village

Deliverables to Owner

- Submission of documents such as Proceedings of meeting with signature of participants countersigned by any member of Panchayatiraj institution, photographs, sample leaflets,copies of CDs/PPT Presentation etc.

Level-3(Within 24th months)

Knowledge Access

The farmers shall be educated on the following subjects-

- Total understanding of the project objectives in terms of equitable distribution of water to beneficiaries, Kharif and Rabi water sharing among beneficiaries.
- Farming practices including crop planning other than paddy, irrigation &fertigation scheduling.
- WUA and its roles and responsibilities.
- Forming WUA by conducting election with the help of dept. officials following OdishaPaniPanchayat Act & Rules.

The following promotional inputs shall be used at this stage.

- Four-page booklet which details about crop diversification and agronomical aspects of various crop.
- CD/PPT presentation on Project and its advantages during farmers' meetings - At leastone
- meeting for each village.
- Creating Demonstration plot –Shall create demo plots for crops as per new proposed crop pattern.

- Regular meetings with farmers and formation of WUA- One Gram Sabha, One promoter's meetings for each WUA.

Deliverables to Owner

- Report containing no. of PaniPanchayats formed.
- Proceedings of each meeting with signature of participants countersigned by any member of Panchayatiraj institution, photographs, sample leaflets, copies of CDs/PPT Presentation, booklets etc.
- Demo farm completion showcasing low water intensity crops like(DSR, Veg, Oil seeds, pulses etc) and new irrigation methods like Micro.
- Demo farm shall be of minimum 1Ha size.

Level-4(For each O & M Year up to 4thYear)

Demonstration

The farmers shall be given training on the following aspects through demo plots.

- Irrigation duration, irrigation &fertigation scheduling
- Improved farming practices through crop diversification from paddy to non-paddy and less duty cash crop.
- Operation & maintenance of UGPL system components.

The following promotional inputs shall be used at this stage.

- Regular fieldvisits with farmers, office bearers of PP, officers of Agriculture, Horticulture Department, Agro industries & scientists from KrisiVigyan Kendra etc to demo plots- at least 4 field days for each cropping season.
- PPT presentation on Project concept and Operation of the system along with crop & crop economics—At least two meetings for each cropping season around 100 beneficiaries per LIS.
- PPT presentation on crop & crop economics – At least one meeting for each 100 beneficiaries.
- Workshop on market linkage- Minimum two workshops in each cropping season with produce procurement companies.

Deliverables to Owner

- Documents regarding information on field visit to Demo plots with photographs.
- Report on workshop and meeting proceedings with signature of participants countersigned by any member of Panchayatiraj institution, photographs, sample leaflets, copies of CDs/PPT Presentation, booklets etc.

Level-5(On the 5th Year)

Hand Over

- Total understanding about project objectives.
- Total understanding about water sharing through mutual cooperation and need based water application.
- Improved farming practices.

- Crop diversification.
- Improved crop productivity and farmers' profitability through better farm gate prices.

The following promotional inputs shall be used at this stage for hand over.

- Demonstration at Each WUA/ At least one model zone in each WUA.
- Distribution of brochures of suitable crops with their economics as per command area.
- Distribution of O & M manual.
- Farmer meeting on Operation and maintenance of System – 2 meetings for each WUA.
- Workshop on market linkage- Minimum two workshops in each cropping season with produce procurement companies.

Deliverables to Owner

- Submission of consolidated report on Capacity building/Training activities done during Project tenure along with final cropping pattern in the Command area of the project.

28.0 AVAILLABILITY OF POWER

The availability of Power and extent of use in pumping of water is indicated in the section of System Connectivity: (Based on Owner's Study) of the Basic Project Profile Appendix-BPP. The contractor is advised to study the provision while working out the installed capacities of pumps.

29.0 OTHER SPECIAL CONDITIONS

29.1 The contractor shall review all the information / data available with the department and assess the scope of surveys, investigation etc., that are to be carried out to fulfil the obligations under the contract.

29.2 The contractors shall take this into consideration while quoting for the bid. No claims whatsoever on this issue will be entertained during execution.

29.3 The Contractor shall quote the bid price keeping the above aspects into consideration and no claims whatsoever on this issue will be entertained.

29.4 Wherever the Rising main/Pressure main(When Delivery Chamber is not provided, the Rising Main should be consider up to the last off take of Minor)and distribution system and all ancillary works require shifting of H.T./L.T. power lines, towers, Electrical poles, Telephone lines water supply lines and any other facility in way of work etc. either permanently or temporarily the contractor shall arrange for such shifting of power lines towers, electrical poles etc., through concerned authorities of OPTCL/DISCOMS at his own cost. The statutory charges required for the shifting/relocation shall be borne by the Dept. The cost of works will be borne by the contractor. Quantum of such works shall be assessed by the bidder. The Engineer-in-Charge will process the proposals submitted by the contractor to the authorities concerned. The price bid quoted by the Contractor is deemed to be inclusive of such cost and no claims for separate payment will be entertained.

29.5 Wherever the pipe line system is crossing Railway line, the contractor has to prepare necessary proposals for seeking permissions of Railway authorities. The Engineer-in- Charge will process such proposals to the Railway authorities concerned for taking up the work by them as a deposit work duly paying the amount demanded by the railway authorities by the Dept and shall be recovered from the next running bill of the Contractor. The Contractor shall include such cost in the bid price. The contractor is to process for all permissions. Statutory charges will be borne by Department. Delay in getting the permissions will be suitably considered on merit while

giving time extension. No other compensation shall be paid. Only the statutory charges shall be paid by Govt. The cost of works shall be borne by contractor. Application for permission is to be made only after the approval of Planning and Designs made by the contractor based on detailed survey.

29.6 In order to check the accuracy of the investigation work the equipment, labour, required transport and other materials etc., at site of work have to be supplied to the Engineer's Representative without extra cost.

29.7 Cultivator wise register for outlets at 20 ha Chak level with hydraulic particulars has to be prepared and maintained.

29.8 No extra payment will be made to the bidder if there is any change in type of structure, specifications, variation in quantities as per actual site conditions.

29.9 Display Boards should be displayed of size 1.2m x 1.00m on Rising main/Pressure main at change of reaches, off- take structures, road crossing or where ever necessary or by engraving on the structure with enamel painting. Boards / direction boards should also be displayed to facilitate for inspection both at investigation and execution stages.

29.10 During soil exploration by drilling boreholes for foundations, the contractor shall take required no. of Un-disturbed Samples and normal samples and obtain soil classification soil properties and bearing capacity by getting them tested in the soil testing laboratories of Government Labs/Engineering Colleges or other reputed institutes. The contractor shall provide certain U.D. Samples and normal samples to the Engineer-in- Charge also so as to get them tested parallel at any other lab to be selected by the Engineer-in- Charge, if required. The cost of such testing shall be borne by the Contractor.

29.11 The Contractor shall furnish draft reports on design Engineering, drawings, in six copies and soft copy in CD for obtaining the approval of the competent authority. After approval the contractor shall furnish 11 copies of booklets and 1 soft copy in C.D. for record of the department at his cost and no separate payment will be made towards this.

29.12 The contractor shall furnish 10 (ten) copies of Land plan schedules and Land acquisition proposals for obtaining approval of competent authorities.

29.13 The contractor shall fix enamel-coated metallic measuring gauges both on U/s and D/s side of all the structures and at suitable locations as suggested by the Engineer-in- Charge. (See clause 6.0 Appendix D&E).

29.14 The Contractor shall provide and fix chain age cum boundary stone of standard design at a interval of 100 meter along the Rising main/Pressure main, distributaries and minors/sub-minors, 0.2 km and Kilometre stones of standard design along all roads and cost thereof is deemed to be included in the quoted contract price.

29.15 Construction of 6 m wide asphalt road connecting Pump house and switch yard to the nearest service road. The bidder is to assess the length of road from field verification. The section of the road is to be followed as per the site condition and IRC standards for meeting the requirements of pumping station which will be approved by the employer.

29.16 Catch drains are to be provided wherever necessary to facilitate drainage all along the pipe lines within the scope of the contract at no extra cost.

29.17 All the crossings of pipe line system of State Highways, District Roads, Village roads and all other roads/ Cart tracks shall be provided with suitable bridges as per standards of the respective

departments and as per the permissions granted by them. The approaches to these bridges shall be provided as per the standard of their respective departments. The cost of these bridges shall be deemed to have been included in the contract price quoted.

29.18 If the proposed pipe line system is crossing any existing irrigation canals or channels, supply channels or Sources / Streams to Minor Irrigation tanks, suitable structures are to be provided within the quoted contract price by the contractor.

29.19 If the pipe line system is crossing oil pipe lines, gas pipe lines, water supply pipeline, or any other pipe lines, the contractor shall provide suitable crossing in consultation with the authorities concerned after obtaining the approval either by himself or getting them executed by the concerned authorities as a deposit work duly depositing the requisite amount to them. The Engineer-in-Charge will help in processing the proposals to the authorities concerned to obtain their permission. The cost of such crossings shall be deemed to be included in the contract price.

29.20 Diversion of streams that are crossing the proposed pipe line system into nearby stream(s) is not permitted in general. However in exceptional cases, the Engineer-in- Charge may consider such proposals depending upon their feasibility, if the distance between them is not much (i.e., less than 200 m) and also if such diversion will not affect the riparian rights of existing or contemplated sources on D/s side.

29.21 R.R. Masonry / CR Masonry / Brick Masonry Structures shall not be permitted. Brick masonry in buildings and above floor level of pump house may be permitted.

29.22 The contractor has to make his own arrangement for diversion of flow and dewatering of foundation etc. wherever necessary within the quoted contract price.

29.23 The concrete mixes to be adopted for all the structures shall be design mixes only and these design mixes shall be conducted in the reputed laboratories and got approved by the Engineer-in-Charge before adoption.

29.24 In case of pipe line crossing works, drainage works, the contractor shall excavate necessary approach/ Tail channels to these structures to have smooth drainage through the structure. The cost of excavation of such channels shall be borne by the Contractor within quoted contract price. The cost of Land Acquisition for such channels will be borne by the department.

29.25 Operation Schedule for the opening and closing of valves, multiple outlets of the distribution system is to be provided by the contractor. It should be such that it can be adopted easily by the WUA.

29.26 Plantation of selected trees with tree guards of two meter height of brick masonry at an interval of 5 meter on both sides of road, along the periphery of pump house and in premises of residential quarters shall be carried out. The Contract price quoted by the Contractor shall include all these items.

29.27 Milestone to be finalized by Competent Authority after receipt of work programme from the Agency.

i. A tentative work programme with approximate quantity with showing the general methods, arrangements and timing for all the activities in the Works along monthly cashflow forecast should be furnished by the Agency within 15 days of the signing of the contract with respect to preliminary general arrangement drawing (GAD).
ii. If the Agency fails to furnish the tentative work programme with approximate quantity, within 15 days of the signing of the contract, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the

next payment after the date on which the overdue Programme has been submitted. However, no interest whatsoever shall be payable on such withheld amount.

iii. However, the revised work programme with exact quantity should be furnished by the Agency within 15 days of approval of drawing and design and such work programme necessary to ensure completion of the works within the time for completion. The revised work programme should be realistic adhering to the milestone of the work.

iv. If the Agency fails to furnish the revised work programme with exact quantity, within 15 days of approval of drawing and design, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted. However, no interest whatsoever shall be payable on such withheld amount.

v. If the Agency further fails to furnish the revised work programme with exact quantity, within 3 (Three) months of approval of drawing and design, it will attract the clause (c) & (d) of Codal Provisions of Blacklisting Contractors Appendix-XXXIV, Vol-II of OPWD Code. This may be treated as an important condition of contract.

Codal Provisions for Blacklisting Contractors:

(c)Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.

(d)Persistent and intentional violation of important conditions of contract.

30.0 MODERN TECHNOLOGY

The Contractor should adopt the latest/modern methodologies and State of Art Techniques in the investigation, design of pipeline distribution system, structures, better water management etc. and also construction measuring devices, operation and maintenance, monitoring mechanism using computers/RTU/SCADA up to 1 Ha.

SECTION – VI

APPENDICES

APPENDICES

INDEX

Sl. No.	Particulars			Page No.
1	APPENDIX-S&I	:	SURVEYS AND INVESTIGATION SCOPE OF SERVICES	
2	APPENDIX - D&E	:	DESIGN AND ENGINEERING	
3	APPENDIX -CW	:	CIVIL WORKS	
4	APPENDIX- P&EM	:	PUMPS & ELECTRO MECHANICAL EQUIPMENTS	
5	APPENDIX - BPP	:	UGPL NETWORK IN IRRIGATION PROJECTBASIC PROJECT PROFILE	
6	APPENDIX - SC	:	SYSTEM CONNECTIVITY	

APPENDIX - S&I

SURVEYS AND INVESTIGATION SCOPE OF SERVICES

The Contractor's Scope of Services for Survey & Investigation shall include the following activities for:-

1.0 Review and Assessment of Data Requirement.

1.1 Review of available Prefeasibility Report and Broad Conceptual Reports of UGPL Irrigation System and identification of Detailed survey and investigation requirement considered necessary for planning and design , fixing alignment of pipe line system, location of intake and pump house structures, design of Rising main/Pressure main and distribution system including structures, preparation of estimates, for record preparation of land plan schedules and Land Acquisition Proposals including property cases and execution, commissioning and maintenance of the project. Layout/Alignment of all Head works, pipe line system should as for as possible avoid Abadi, Forest Lands, Gochars, devastanam, grave yard and permanent structures.

1.2 Review of technical and design parameters for pipe line system including structures.

1.3 Preparation and submission of Reports on the above for the information to the Engineer- in-Charge.

1.4 Preparation ofworkprogrammesforcarryingoutinvestigationsandstudiesfor the information of the Engineer-in-Charge.

1.5 The contractor shall submit a review report after carrying out the above activities for acceptance of the Engineer-in-Charge.

1.6 Similar Review shall also be done for the Power System Connectivity for the system by reviewing the Owner's study.

2.0 Investigations, Observations and Studies

2.1 Carrying out geo-technical investigations and laboratory tests, analysis and studies including collection of other relevant data as necessary.

2.2 Evaluation of results of investigations and laboratory tests, analysis and studies including collection of other relevant data as necessary.

2.3 Finalisation ofconceptualplanbasedonpreliminary investigation/planning of the Employer. The detailed investigation and geo technical investigations are to be carried out for the total pipe line system under the work of Contract. The conceptual plan shall be onwhole, to the part principle.

2.4 Preparation andsubmissionofreportsonClause 2.1& 2.2above for references, acceptance and record of Engineer-in-Charge.

2.5 Preparation and submission of Reports on point 2.1, 2.2 and 2.4 above for reference, acceptance and record of the Engineer-in-Charge.

3.0 DETAILED INVESTIGATION

3.1 Preparation ofamemorandumonconductingsurveysandinvestigation indicating investigation criteria, methodology to be followed, equipment proposed to be used and method of analysis for all components of the Work (Intake works, Pump house, Rising main/Pressure main and Distribution System, Survey up to 1 Ha chak, Structures on the complete pipe line system).

3.2 Preparation of command survey plans of whole command area on combined village map with contours at 0.5 m intervals marking ridges and valleys showing clearly command area boundary.

3.3 Survey forfixing alignment, takingtrial pits/bore holesandborrowarea survey and obtaining approval of competent authority and fixing permanent benchmarks connected with GTS

Benchmark at pump house, Delivery chamber(optional), suitable places along the alignmentof Rising main/Pressure main and pipe linedistributionsystemas per technical Specification.

3.4 Marking approvedalignments, chakboundaries, positionofMultipleout Lets and structures on command plan, Longitudinal Sections, showing alignment of pipe line, site plan at all structure points.

3.5 Preparing ayacut registers village wise and outlet wise, Panipanchayat wise, Preparingchakstatement, distributory/minor/sub-minor wise, Preparing Outlet register, preparing the village tank register for filling.

3.6 Area survey, grid survey, leveling along nalla/river in the command area. to determine bed slope and cross section of nalla/river for any C.D. works.

3.7 Grid survey for other structures, such as Road crossing, trial pits, core drilling for foundation investigation of structures.

3.8 Preparing land plans, schedules and land acquisition proposals (Private Land, Government Land, Forest Land if any etc.) and Property schedules such as wells, trees, houses etc., if any and submitting the same to Engineer-in-charge.

3.9 All the drawings like command area Plan, longitudinal sections and cross section of all the pipe lines, roads, drains/ Nallas /Rivers, site surveys of all the CD works etc.

3.10 Preparation of ROW/ROU cases for approval by competent authorities.

4.0 Liaison with the Employer and Employer's Representative from the start of investigation to actual Commissioning of the project in full.

5.0 Liaison withrespectivelinedepartmentsofOdishaandownersofElectrical utilities, Railways etc. for approvals and maintain progress of works.

6.0 Preparation of monthly progress reports on the progress of the investigation work.

7.0 No separatepaymentshallbemadeforconductinganyofthe surveys, detailedinvestigation and geo-technical exploration etc., indicatedaboveandneeded for the completion of the project and shall deemed to be included in the quoted price.

APPENDIX - D&E

DESIGN AND ENGINEERING SCOPE OF SERVICES

The Contractor's Scope of Services for Design and Engineering shall include the following activities for the UGPL system:

1.0 Review and Assessment of Data Requirement

1.1 Identification of survey and investigation requirement considered necessary for design, execution, commissioning and operation of the project.

1.2 Review of technical and design parameters for Rising main/Pressure main, distribution system, its structure and Electro-mechanical and Electrical system connectivity Works.

1.3 Preparation and submission of Reports on the above for the information to the Engineer- in-Charge.

1.4 Preparation of work programme for carrying out investigations and studies for the information of the Engineer-in-Charge.

1.5 The contractor shall submit a review report after carrying out the above activities for acceptance of the Engineer-in-Charge.

2.0 Detailed Design

2.1 Preparation of design memorandum indicating design criteria, design parameters, design assumptions, method of analysis on all components of the Work (Head Works, Pumps, Civil work, Rising main/Pressure main, Distribution System, Structure and Electro- mechanical, Electrical system connectivity,Approachroad,Staff quarter/operation room). These design briefs shall be submitted to the Engineer-in-Charge for approval before carrying out detailed design and construction drawings.

2.2 Detailed design for the Civil Works i.e., Head Works, Pump Houses, Delivery chamber(optional), E/M works i.e. pumps, related electrical components and the 33 KV system connectivity, electrical sub stations including drawings required for the execution and the calculations performed and the construction drawings issued shall be submitted to Engineer for his approval.

2.3 Detailed design of pumps and E/M, Parts including drawings required for the execution of the Works and all calculations performed and the construction drawings issued shall be submitted to Engineer-in-Charge for his approval.

2.4 Details of Instrumentation arrangement including drawings required for the execution of the work shall be submitted to the Engineer-in-Charge for his approval.

2.5 Additional designs and modifications, as needed, during construction.

2.6 The contractor shall adopt modern methodology/State of art Techniques in design of pumps, Rising main/Pressure main for the minimum Life Cycle Cost of the UGPL Irrigation System etc.

2.7 Submission of methodology for commissioning of system.

2.8 Submission of Detail estimate on approval of Design.

2.9 Preparation of operation and maintenance Manuals.

3.0 Project Completion Report

3.1 Preparation of as-built drawings for pipe line System, its structures, Pumps & E/M Parts of structures and a Detailed Project Completion Report.

4.0 Design liaison

4.1 Design liaison with Engineer and his representative, Consultant(s) of the Employer and if required with Central Water Commission etc.

4.2 PreparationofMonthlyReportsontheprogressoftheprojectworkasawholeforinformation of the Engineer-in-Charge, in respect of:

a) Investigation & Surveys.

b) Design and engineering.

c) Civil Construction.

d) Pumps & Electro-Mechanical Parts

e) Control arrangement.

f) Technical status (Present status and future programme)

g) PIM Status with milestone achievements.

h) Project status (Time Schedule, achievement of mile-stone, slippage in time schedule with specific reference to activities and acceleration measures proposed)

i) Financial status (Present status and future projection)

j) Deployment of Manpower, Labour, Expatriates staff and Construction Equipment

Furthermore the Report shall include necessary photographs and sketches showing the previous month's progress.

5.0 Supply of Drawings, Reports etc.

5.1 The contractor shall furnish to the Engineer-in-Charge the following number of drawings, reports and other technical documents of the project.

Sl. No.	Particulars	Hard copies	Soft Copies (CD/ Pendrive)	Remarks
1	Drawings for information	6 (six) sets	1 (One)	
2	Drawings for approval	6 (six) sets	1 (One)	1 (One) One hard copy shall be returned to the Contractor with approval or comments.
3	Approved drawings	1+ 10 sets	1 (One) copy in CD	
4	As-built document			Shall be submitted in accordance with relevant clause of Conditions of Contract
5	Review Report/ Design Briefs/ Design Memo/ Design Reports (Draft)	3 (Three) sets	1 (One) copy in CD	One hard copy shall be returned to the Contractor with approval or comments.
6	Review Report/ Design Briefs/ Design Memo/ Design Reports (Final)	1 + 10 sets	1 (One) Copy in CD	
7	Progress Reports (monthly)	6 (Six) sets	Hard Copy	Also through e-mail to respective authority
8	Final design computations	6 (six) sets	1 (One) copy in CD	
9	Detailed Project Completion Report	10 (Ten) sets	1 (One) copy in CD	
10	Detail Estimate	6 (Six) sets	1 (One) copy in CD	
11	Instruction-cum- O&M manual.	10(Ten) sets	1(One) copy in CD	

5.2 Tentative list of design notes and drawings to be submitted by the contractor (civil component)

Sl. No.	Design Note	Title of Drawing
1	Layout Report	Schematic plan and L-section of entire project showing all controlling levels, Intake Arrangement, Pump House, Rising main/Pressure main, Pumping details, Delivery chamber(optional), Distribution System & Electrical System Connectivity.
2	Intake Arrangement	Intake structure,Approach Channel/conduit details, Retaining walls (wherever necessary) ForebayTrash Racks, Gates& hoist
3	Layout of Pump House	General Layout Details of various sections
4	Pump House	1. R.C.C. details of foundation 2. R.C.C. details ofPumpHousestructures, columnsbeamsupto motor floor 3. R.C.C. details of columns, beams above motor floor 4. R.C.C. details of columns gantry beam 5. R.C.C. details of Roof slab, beam
5	Rising main/Pressuremain/Gravity Main	L-section showing all appurtenances details of Anchor blocks / Thrust blocks, Saddle supports expansion joints, all crossings Primary filtration etc.
6	Delivery chamber(optional) Layout & Design	Layout and Structural details of Delivery chamber(optional)
7	Distribution System	Command Area map showing villages, plot boundaries, nalla/river, road, contours, alignment of distribution main, Distribution System Network, outlet positions, chak boundaries &PaniPanchayat/WUAs with market linkage.
8	Surge Analysis	Location of surge protection devices (Air Vessel, One way surge tanks, Valves (Air, Scour),stand pipes etc Structural Design of antisurge devices including foundation.
9	Structural Design Details	Structural DesigndetailsofCDworks&crossings including various appurtenances joining with pipes.
10	Construction of a building (Staff quarter/Operation room)	1.Layout plan with elevation and section etc. 2. Reinforcement details etc 3. Sewerage , Water supply and electrification details etc
11	Construction of approach road at the work site	1.Layout plan of the connectivity showing plantation etc 2.C.S of the road showing the details of sub base and sub grade 3. Cross drainage work details

Note: The list is indicative for design notes and drawing to be submitted by the Contractors. Exact details will be decided as per requirements.

5.3 Tentative list of design notes and drawings per scheme per stage to be submitted by the contractor (Electro-Mechanical Component for Pumps)

Sl. No.	Design Note	Drawings & Details to be covered
1.	Design note of Pumping Machinery & Equipment and Electrical motors and equipments	**1. Layout plan of Pumping Equipment** Details regarding selection of Pumps -nos, accessories, Pump speed based on hydraulic parameters, duty head, frictional losses, discharge efficiency, head, R.P.M.Head range, column/ Delivery pipe dia and details shaft dia, sole plate dimensions
		2. System resistance curves for pumpswith parallel operation Details of system resistance curves for pumps withdifferent conditions of operations.
		3. Layout plan of allied Mechanical equipment Design details and layout indicating relative positionson allied mechanical equipment's, testing methods, tools.
		Type and selection of motors , with minimum KW rating , operating voltage, insulation classification, cooling system,enclosure type and other specifications, testing methods, (including details of K.W. Capacity, operating voltage , KVARrating of capacitors)along with a system for improvement of power factor, of the pump house and sub-station installations during working as well as idle period during initial and ultimate condition of the project.
		4. Cable Layout of Pump house equipments HT/ LT and control cables including cables schedules and wiring diagrams, Layout details of Earthing for pump house. HT, LT, DC Panel battery unit and charger including fixture of switches, breaks, auxiliary transformers, instrumentations with capacity rating, fault level etc. Temperature indicators, Pump Recorder panel with data logger, cable trenches layout, electronic water level indicator etc. including note on Auxiliary transformers earthing, spares& tools, Vectorgroup of transformers, HV/LV andearthing layout, remotecontrol panel, water level indicator ,Temperature Scanner, frictionalrequirements, inter-locks indications, annunciation faces etc. Design Details of Earthing for pump house for design prevailing intial or ultimate condition of operation in efficient manner.

Note: The list is indicative for design notes and drawing to be submitted by the Contractors. Exact details will be decided as perrequirements.

5.4 List of Planning note/ Design notes and drawings to be prepared by the contractor for SystemConnectivity/ Switch Yard for Main Step-Down Sub-Stations / Distribution Sub-Station & major equipments like transformers/circuit breakers for power supply to project.

Sl. No.	DesignNote	Points to be covered
1	PlanningNote	1. Projection of Demand 2. Projection of Main Step-Down Sub-Stations/ Distribution Sub-Stations 3. Sub-Transmission Planning &system connectivity with supporting documents (Load flow Analysis indicating Loss &VR) 4. Location Map with relevant Single Line diagramdrawnonSoI-sheetinscale1:50,000
2	DesignNoteForSub-Station	1. Power Transformer & Protection **scheme** 2. Switch yard equipment including fault level 3. Lightning protection/Earthmat 4. Power/Controlcable design calculation. 5. Switchyard/Controlroom illumination 6. Control Room for MSDSS &Layout indicating relative positions on related equipments etc.
3	Switchyard	1. General Layoutofswitchyardwithluminarylayoutandsinglelin ediagram. 2. Structural drawings of support for each equipment column gantries etc. 3. Cable trenches in switchyard and layout and Cross sectional drawing of cable racking arrangement. 4. Control and protective panel drawings(dimensions) 5. Metering arrangements. 6. G.A.Drawingofeachequipment
4	Drawings	1. General drawingforsupports&structuresfor33kVand11kVO. HLines. 2.G.A.DrawingfordifferentcrossingslikePowerlinesofdiffer entvoltages/Communication lines/Road crossings includingNH/ Railway crossings/Major river cross ings etc. 3. G.A of transformer and tapchanger. 4. G.A.drawing of transformer control panel. 5. GA drawing of 33kV & 6.6kV Circuit Breaker
5	Earthing	1. Layout drawings of earthing arrangements.

Note: The list is indicative for design notes and drawing to be submitted by the Contractors. Exact details will be decided as per requirements

5.5 All Software used shall also be loaded in Engineer and his Representative's computers for design verification and subsequent use at no additional cost.

6.0 No separate payment shall be made for any of the design and engineering works indicated above and needed for the completion of the project and shall deemed to be included in the quoted price.

APPENDIX - CW

CIVIL WORKS

SCOPE OF SERVICES

Civil Works

1. Construction of intake works, approach channel/conduit along with all protection works of the river embankment& reservoir, the pump houses, A 650sqft Operators quarter and Farmer's hall, approach roads to the pump house and switchyard, Fencing of pump house complex and switch yard.
2. Construction of Rising main/Pressure main, construction of Delivery chamber(optional) and entire pipe line distribution network consisting of the Gravity mains, minors and sub minors and multiple outlet structures and all other related structures such as Inspection Chambers, distribution chambers, cross drainage works, road crossings etc. along the distribution network upto 1 Ha chak to irrigate command area of 1979 Ha.
3. Plantation of selected trees at the Pump house and Delivery chamber(optional) and along the road.
4. Construction of all civil works relating to132 kV System Connectivity and electrical sub stations.
5. Trial run and commissioning of entire distribution system including operation and maintenance during construction and defect liability period.

APPENDIX –P&EM

PUMPS & ELECTRO MECHANICAL EQUIPMENTS

SCOPE OF SERVICES

The scope of work in this section includes, but not limited to the following:

Detailing, supply and manufacture, inspection, shop assembly, testing, painting etc. Delivery, transit insurance, collection of equipment and custom clearance (if any), inland transportation to site.

Site storage, includinginsurance, transportationand handling, siteerection, painting, testing and commissioning including provision of labour, plant material etc. for the above.

Handing over to Employer. Supply and installation of all incidentals not specified but are necessary for proper completion and satisfactory functioning of the system.

Detailingofpumphouseillumination,controlpanelwithsupply,erection&commissioning.

Details of the instrumentation required for measurement of flow, temperature, vibration and pressure.

Details of switch yard with design, supply, erection & commissioning of equipments.

Details of alignment of transmission lines from selected grids with design, supply, erection& commissioning of all components

The Contractor shall supply the equipment, which will meet in all respects, the requirements of Employer in regard to performance, durability and satisfactory operation. All the equipment supplied shall conform to the relevant Indian Standards. Wherever, Indian Standards are non-existent or silent, relevant International Standards (as agreed between the Employer and the Contractor) shall be followed. The sizes and numbers of units are based upon Employer's preliminary design and may vary to suit site conditionsand design requirements.

APPENDIX -BPP

PRESSURIZED UGPL IRRIGATION NETWORK SYSTEM BASIC PROJECT PROFILE

1. Introduction

It is proposed to "Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project."This system is primarily aimed for supplementation for Kharrif water demand in the drought prone areas of Gumma ,Goshani&Kashinagar Block of GajapatiDistrict. Normally the Irrigation supply for Khariff starts after 20th June and ends by 15th November depending upon water availability & rainfall. Rabi Irrigation shall be provided only on availability of water and Rabi crop planning duly approved by District Authority.

This tender is invited to takeup UGPL network with CCA of 1979Ha. The Broad conceptual layout (BCL) of all the system has been prepared based on Topo - sheet Planning. Salient features of the system based on the planning, is furnished herewith in Clause 5. The locations of system are shown in the drawing. The salient features and the drawings provided are tentative. To assess the availability of water, water balance study of the system is made. The hydrological data required for assessment of yield and water requirement will be made available by Department. Since the present tender is an EPC tender, the contractor is to plan and design the system after detailed survey and investigation.

Major components of the UGPL system are Intake pipe, Intake pump/Intake system Pump house, Rising main/Pressure main from pump house to Delivery chamber(optional), Distribution System (Distributary Main, Minors, andOutlets etc.) Pumping Machinery, Electrical work inside Pump House & system Networking/Switch yard including connectivity from selected 132/33 KV Grid Sub-station and/or Distribution Licensee's 33KV network.

2.0 GENERAL DESCRIPTION OF THE WORK

The scope of work consists of Investigation, Planning, Design, Construction, of items necessary for UGPL irrigation system including supply, erection & commissioning of all mechanical & electrical items, surge protection system, control valves, pipe lines for Rising main/Pressure main& distribution system to deliver water at chak outlets including power connectivity from identified Grid Sub-station to pump house lifting water from Nuagaon Barrage including operation & maintenance for 5(five)years after completion or five Kharif crop seasons after completion of work whichever is more. On detailed Survey & Investigation by EPC contractor, the CCA of the system can be changed depending on site conditions and suitability of O&M up to maximum CCA.

The scheme wise details are given as below-

Name of the Scheme-

Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project.

Name of the River= Mahendratanaya , Name of the Reservoir = Nuagaon Barrage,District = Gajapati

SL. No.	Block	Village Name	Approx CCA in Ha.
1.	Gumma	Hatibadigopinathapur	85.685
2.	Gumma	Naraharipur	53.028
3.	Gumma	Padmapur	83.066
4.	Gumma	Jilipadu	66.365
5.	Gumma	Kulanda	21.749
6.	Gumma	Jiba/Dhepaguda	49.281
7.	Gumma	Dhepaguda	21.436
8.	Gumma	Parsurampur	58.128
9.	Gumma	Bidua	113.837
10.	Gumma	Jogipadu	74.566
11.	Gumma	Jami	100.384
12.	Gumma	Khetada	23.696
13.	Gumma	Upalasingh	79.064
14.	Gumma	Jolla	159.759
15.	Gumma	Pulkota	23.351
16.	Goshani	Kharada	23.623
17.	Goshani	Chandankhala	109.921
18.	Goshani	Jajpur	103.376
19.	Goshani	Parikotta	108.304
20.	Goshani	Anarada	36.226
21.	Goshani	Katalkaitha	99.988
22.	Goshani	Jagatsinghpur	48.038
23.	Goshani	Rautapur	68.452
24.	Goshani	Madhusudhanpur	19.662
25.	Goshani	Podani/Katalkaitha	40.549
26.	Goshani	Ranadevi	23.262
27.	Goshani	Badapratapur	51.693
28.	Goshani	Tulasipadu	47.158
29.	Goshani	Relisahi	31.126
30.	Kashinagar	Nilakathapur/ Chitrakaralakkshmipur	53.016
31.	Kashinagar	Chitrakaralakkshmipur/Gunabhadra	60.722
32.	Kashinagar	Ranipeta	40.361
		Total Area (Ha.) =	**1978.872**

3.0 BRIEF DESCRIPTION & SCOPE OF WORK UNDER THIS TENDER:

3.1 The project is proposed to be implemented on Engineering, Procurement and Construction (EPC) & commissioning on single point responsibility basis. The design is based on topo sheet planning. Detailed survey work has not been done. On the basis of preliminary design tentative salient features of the system have been annexed in the basic project profile. Upon detailed survey and investigation by the EPCcontractor it may be possible to plan and design the system. An integrated System connectivity for power supply to the system (from identified Grid Sub-Station interface to consumer's installations) has been prepared departmentally based on interactions/discussions with State Transmission Utility OPTCL and concerned Area Distribution Licensees. The bidder shall be responsible for the detailed survey, planning, investigation, designs, getting approval of the design, preparation of technical datasheet, Quality Assurance Programme, construction programme etc. for all components of the project, construction, supply and erection and installation of all Civil, Mechanical, Electrical and Instrumentation Control works

of systems as per the work specifications provided in the bid documents, and commissioning of the project on EPC mode followed by operation and maintenance of the entire project in the package for a period of five years or five khariff seasons which over is more.

3.2 The major components of the project covered under this tender package shall include but not limited to

a) Intake structures system including protection works.

b) Pump house & Pumping Equipment.

c) Rising main/Pressure mains, Delivery chamber(optional) anddistribution through pipe systems including civil, mechanical & electrical equipment.

d) Providing permanent service road for the access to pump house & switch yard for ease of maintenance.

e) Electrical Distribution Sub-Stations, System networking & connectivity with nearest 132/33 KV Grid Sub-Station and associated system protection project.

f) Instrumentation & control works covering pumping system and electrical system.

g) A 650 sqft Operator's quarter in the Pump House Complex

h) Operation &Maintenance ofthesystemis for five years or five kharif seasons whichever is more.

4.0 DETAIL SCOPE OF WORK:

4.1 Survey &Investigation: Survey and Investigation shall include but not limited to following activities,

a) Detailed investigation for location of the pump house, distribution chamber alignment of pipe lines, Distribution Sub-Stations, route alignment of electric lines for system networking & connectivity with the earmarked 132/33KV Grid sub-station & sub soil explorations like trial pits, assessment of safe bearing capacity of soil strata etc in different locations.

b) Fixing of permanent & temporary benchmark stones and transferring the values of the levels to them. The permanent bench mark is to be placed near the pump house, distribution chambers and at other places of importance.

c) Collection of revenue village maps digitization of same, demarcation of command area, contour survey of the command area with contour interval of 0.5m, survey along the alignment of Rising main/Pressure main including marking the location of pump house complex showing electrical sub-station and the residential quarter for operator & watch man, alignment of distribution systems in the village sheet, assessment of the CCA of the system from the Records of the Rights of villages (R.O.R).

d) Prepare list of beneficiarieschak wise, with holding area & category (kisam) of land coming under CCA.

e) Preparation of site survey plans for all crossing of the pipe lines to the rivers, roads, drain, railway lines existing water, gas & oil pipes etc.

f) Preparation of land schedule for acquisition of land from private owners & processing it for acquisition till completion of the process. Preparation and processing of proposal and arranging for having clearance for use of land for the UGPL irrigation system in forest area wherever required. Processing for obtaining right of way / right of use permission from different Govt., Semi Govt. and private authority.

g) Preparation of land schedule for alienation of Government land & processing of the same to the appropriate authority.

4.2 Design:

a) Preparation of separate plan for the pump station, electrical substation, electrical connectivity, quarters, Rising main/Pressure main, distributionchambers and distribution networks.

b) Design of all components and sub components including pump station structure, intake system, EOT crane, pumps, Rising main/Pressure mains, distribution chamber, distribution network, electrical sub-station, Sub-transmission/ HT/LT lines (over head/ underground) including crossings like power lines, P&T lines, railways, NH/roads river, IT application including communication facilities etc.

c) Processing for approval of all the designs & drawings from competent authorities and getting it approved.

d) Integration and coordination for successful formation of WUAs and subsequent activities upto market linkages are by engaging local NGO.

4.3 Procurement & Installation:

a) Preparation of Procurement schedule for machineries and equipments.

b) Making arrangement for pre-procurement quality verification by third party.

c) Procurement of the machineries and equipments required for the work as per the specifications of the agreement for efficient functioning.

d) Installation and commissioning of machineries and equipments as per the approved drawings.

4.4 Works:

a) Preparation of CPM/PERT chart for scheduling the construction as per the mile stone. b) Intake structures including protection works.

b) Pump station & Pumping Equipment.

c) Rising main/Pressure mains & distribution through pipe systems including civil, mechanical & electrical equipment.

d) Electrical Sub-Station, sub-Transmission/ HT LT lines for power supply to the System. f) Instrumentation & control works covering pumping system and electrical system.

e) Construction ofpermanentapproachroadtopump house& Distribution Sub-

f) Stations/switchyard/ control room for ease of operation and maintenance.

g) Construction of a two storied building for accommodation of operator and watchman within pump house complex, Construction of boundary wall for the pump house complex and switch yard.

h) Arboriculture at pumping station, approach roads & other available Govt. land in the vicinity.

i) PIM by Engaging local NGOs approved by the CE&BM,RBVNBasin ,Brahmapur carry out formation of WUAs, providing training for efficient irrigation, productivity enhancement, value addition, market linkage etc so as to increase the agriculture income and suitability of the farmer in the command area.

4.5 Operation & Maintenance:

a) Operation & Maintenance of UGPL irrigation System is for five years or five kharif water supply seasons whichever is more. Electrical installation other than “Consumer’s installation” shall be vested to the appropriate Distribution Licensee of concerned area for O&M.

b) Capacity building of O& M staff of Government staff for the system.

c) Preparation of operation and maintenance manual for the system.

d) Continued capacity building and training upto market linkage of WUAs by local NGO.

4.6 **Other Responsibilities:** The scope also includes necessary co-ordination and management to obtain consent or permission from affected bodies/ authority/ parties whose damage to property is involved in construction of all the components. The contractor will be responsibleprocessing all the papers required for permission for right way/right of use from Govt. Semi.

Govt. and private practice etc. All statutory charges required to be paid for this shall be borne by the Govt. The department will sign the necessary documents required for permissions/ clearances/land acquisition. Required co-ordination for sanction from the concerned authority&NOCfromtheconcerned authority/ fieldownerforsatisfactorycompletionshall be provided by the bidder. For laying pipeline under railway, roads, existing gas, oil or water pipe lines etc. all the charges including statutory charges. On satisfactory completion of the work required NOC is to be obtained from the concerned department by the bidder. For Acquisition of land from private land owners, the contractor is to prepare the land acquisition schedules & other schedules prescribed by Govt. & process the acquisition as per the prevailing land acquisition Act of Govt. Odisha. The Department will sign all the documents required for this purpose. The cost of the land of property as per the Govt. rules in force will be born by the Govt. Processing of the proposal for alienation of Govt. land is also the responsibility of the contractor.

5.0 SALIENT FEATURES OF THE UGPL IRRIGATION SYSTEM OF NUAGAON IRRIGATION PROJECT

The salientfeaturesofthesystembasedontheOwner'sstudyofthe topographic map planning through its consultants is given below for the guidance of the bidder. Some of the data are listed in the Table no. 5.1 & 5.2. However the bidder has to make its own assessment by site visits, preliminary surveys and study of relevant maps and documents for the data for bidding.

TABLE NO. 5.1

DETAILS OF PROJECT LOCATION

1	**Name of the Project**	Nuagaon Irrigation Project
2	**Type of Project**	Irrigation
3	**Location**	
3.1	**River Basin**	
	(a)Name	Vansadhara
	(b)State	Odisha
3.2	**Tributary of Vansadhara**	Mahendratanaya
	District	Gajapati
	Command Area	Goshani, Gumma&Kashinagar blocks of Gajapati District
	Location of the Head works	
	A. Longitude	84°08'25.4"E
	B. Latitude	18°55'12.5" N

TABLE NO. 5.2

TENTATIVE SALIENT FEATURES OF PUMPING STATIONS

1.	CCA	:	1979	Ha
2.	Duty in lps/Ha	:	0.813	lps/Ha
3.	Design Duty Including Over Design Factor (ODF:5%) + Conveyance Losses (CL:5%)	:	0.813	lps/Ha
4.	River Bed Level (RBL)	:	82	m
5.	Low water level (LWL)	:	82	m
6.	Maximum Flood Level (MFL)	:	89.68	m
7.	Highest Level in Ayacut or (Delivery Chamber Level)	:	102.77	m
8.	Minimum depth of water	:	0	m
9.	Pump Floor Level above MFL	:	1.5	m
10.	Pump floor Level	:	91.18	m
11.	Minimum Submergence Required as per CPHEEO:12Bottom RL of Sump (m) Required	:	1.9	m
12.	Bottom RL of Sump (m) Required	:	78	
13.	Minimum Residual Head	:	15	m
14.	Losses(Primary + Secondary Filtration + OMS) @ 2m each		7	m
15.	Static head for Pump(m)(Min. Water level to water level in D.C.)	:	20.77	M
16.	Head Loss (Hazen William)	:	40	
17.	Total Head	:	67.77	M
18.	Duty Point Head	:	68	M
19.	Pump Efficiency	:	81	%
20.	H.P. of Pump per Pump	:	609.76	HP

APPENDIX -SC

SYSTEM CONNECTIVITY

(BASED ON OWNER'S STUDY)

1.0 SYSTEM CONNECTIVITY: (BASED ON OWNER'S STUDY)

Owner has developed an integrated networking for power supply to scheme based on discussion/ interactions with OPTCL (Transmission utility)/GRIDCO & Area Distribution Licensee (OPTCODL).

2.0 System Load:

Projected load of the system to be worked out to maintain design pressure in the UGPL system.

3.0 General Scope:

Planning, design, testing, supply, erection & commissioning of but not limitedto:Main Step-Down Distribution Sub- Station (MSDSS) [33/6.9 kV inrelation to the projected load & voltage regulation]Lay-out of above switch yard.33 kV Sub-Transmission networking/ System Connectivity withidentified EHT Grid Sub-Stations and/or DISCOMs network topology HT Line (6.6 kV) and LT over headlines.Distribution sub-stations DSS (6.6/0.433 kV, 33/0.433 kV) as per the requirements, including conductor/cable and supporting structures.Metering, Protection & control for 33 kV, 6.6 kV & LV systems.Earthing system & earth mat design.

4.0 System networking:

Comprehensive Sub-Transmission planning (33 KV) for power supply to the UGPL project is to be worked out, in terms of the provisions contained under"DISTRIBUTION SYSTEM PLANNING AND SECURITY STANDARDS, "OPERATINGSTANDARDS" issued by OERC. While developing the network scheme, thefollowing broad objectives have been taken into consideration;

- Network development: Concept of Integrated Optimal Strategy & Optimal location of MSDSS/DSS, conserve ROW & minimizes the total life cost (direct plus indirect).
- Direct connectivity from Grid S/S interface for concentrated load-33KV dedicated feeder for Cluster.
- Minimum linkages with DISCOMs network (only for isolated project & out of supply area of Primary step–down substation).
- Project, where dedicated Grid connectivity would not be feasible or not cost effective, solution like connectivity with local distribution 33 KV systems, may be considered, subject to technical feasibility.
- Connectivity with local topology of DISCOM shall be considered as standby mode (open loop arrangement).
- Development of Sub-Transmission System (33 kV) is to ensure quality of supply & technical losses to an optimal minimum value-Energy loading is one of EPC Bid evaluation parameters.
- Network shall ensure quality & reliable power supply. Quality power supply mean voltage regulation within a limit laid by Grid code. Our comfort zone is (-)7%.
- Optimal use of existing network infrastructures of Transmission Utility (OPTCL)and/ or concerned Distribution licensee (subject to meeting KVA-Km criteria &loading).
- Create common asset with reduced financial liability and would take care technical needs of cluster points.
- Compliances with OGC (Odisha Grid Code), Distribution (Supply) Code, Distribution Planning & Security standard of OERC, OERC Distribution(Planning &Operation), CEA (Technical Std for Construction of Plant & Lines) Regulations,2010 & other relevant Regulations in force.

SECTION – VII

CONDITION OF CONTRACT FOR OPERATION & MAINTENANCE

INDEX

SL. NO.	PARTICULARS
1	INTRODUCTION
2	ADMINISTRATIVE PROVISIONS
3	OBJECTIVES OF CONTRACT
4	COMMENCEMENT AND DURATION OF O& M
5	MAINTENANCE PERSONNEL
6	RIGHT TO PERFORM UPON CONTRACTOR'S DEFAULT
7	ACCEPTANCE TESTS ON COMPLETION OF MAINTENANCE PERIOD
8	FORCE MAJEURE
9	ASSIGNMENT
10	LIABILITY
11	INSURANCE
12	MAINTENANCE
13	PERFORMANCE STANDARDS
14	METER READING
15	CONSUMABLES AND UTILITIES SERVICES - SPARE PARTS –STORES
16	INSPECTION
17	LIQUIDATED DAMAGES FOR SUPPLY OF WATER TO MEET THE REQUIREMENT
18	TAXES, LICENSES, PERMITS AND FEES
19	TERMINATION OR FORE CLOSURE OF CONTRACT
20	TRAINING
21	O&M MANUAL
22	HANDING OVER OF SYSTEM

CONDITIONS OF CONTRACT FOR OPERATION & MAINTENANCE

1.0 Introduction:

The contract is for Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project.After completion and commissioning of Pressurized UGPL irrigation system, the Contractor shall be responsible for the operation and maintenance of the system for a period of five years or five Kharif crop seasons whichever is more from the date of issue of commissioning certificate of the system, under the Agreement for O & M of the Pressurized UGPL irrigation system . The Contractor shall be responsible for the operation & maintenance of all components of the project including associated works in accordance with prudent utility practice and PIM activities. The O & M contract will overlap with the defect liability period of five calendar years or five kharif crop seasons from the certified date of commissioning of the system whichever is higher. The Pressurized UGPL irrigation system is primarily aimed for supplementation of Kharif water demand. Normally theKharif water supply starts after 20th June and ends by 15thNov each year depending on water availability and rainfall. Rabi Irrigation shall be provided only on availability of water and Rabi crop planning duly approved by district authority.

2.0 Administrative Provisions: The following additional clauses shall apply during the Operation & Maintenance period.

DEFINITIONS

In this Agreement the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:

1. "Operation and Maintenance" shall mean O&M of the whole Distribution System and the power system connectivity from the Grid stations and covers sourcing of water from the river to the whole Pressurized UGPL irrigation system, delivery water to the 1 Ha Chak of the command area and PIM activities in accordance with Clause-27.3/Section-V/Volume-I.
2. "Operation and Maintenance period" shall mean five years or five Kharif crop seasons whichever is more from the certified date of commissioning of the Pressurized UGPL irrigation system.
3. "Contract" shall mean the agreement between the Employer and the Contractor along with all documents incorporated therein by reference and all documents incorporated by these Conditions of Contract.
4. "Contractor's Equipment" shall mean all equipment, instruments, tools, machinery and the appliances and things of whatsoever nature required for the fulfilment of the Contract or of the Contractor's Obligations, but not including those items which are intended to form, or which form part of the Facility.
5. "Contractor's Obligations" shall mean the obligation to execute the Project in its entirety and shall, without limitation, include the Contractor's Operation and Maintenance.
6. "Date of Taking Over" shall mean the date of Successful Completion of operation & maintenance period as per agreement clause and taking over of the entire work & process by Department.
7. "Defects Liability Period" shall mean the Defects Liability Period of FIVE years for all works commencing on and from Date of commissioning of system including satisfactorily passing tests on completion during which the Contractor shall undertake the responsibilities, and

have the liability for the facility.

8. "Facility" shall mean the entire system to be designed and constructed in accordance with the provisions hereof, including the buildings, structures ,ramps, pits, pipes, fencing, lighting, testing and analysis equipment, tools, computers, software programs, safety equipment, plant machinery, supplies, instruments and inventory incorporated therein, as well as all open areas within the site, and including any additions, modifications, alterations, replacement and repairs as may be made thereto from time to time.

9. "Governmental Authority" shall mean any Indian entity, authority or body exercising SUPERINTENDING, legislative, judicial, regulatory or administrative functions, including, without limitation, any government authority, agency, department, board, commission or instrumentality of Indian or any political subdivision thereof, court and tribunal.

10. "Law" shall mean and include all the provisions of all Indian statutes, regulations, ordinances, codes, official or other standards, administrative or other rules, zoning and other plans and restrictions, building and other permits, judgments awards and decrees of, or agreements with any Governmental, semi-Governmental or quasi-Governmental Authority as currently in effect or as may be in effect from time to time and /or as may be amended or supplemented from time to time.

11. "Maintenance Standard" shall mean the requirements for operating, maintaining, repairing, and renewing the Facility:

    i. As set forth in the O & M Manual; bidder shall furnish this before commissioning of Pressurized UGPL irrigation system.

    ii. Required pursuant to applicable Law;

    iii. As may be necessary for keeping the facility in a satisfactory condition such that the Facility will continuously, comply with the Operation Standard; and

    iv. As may be necessary to ensure that the Facility shall continuously be in an optimum condition andstate in relation with the lifetime of the Facility.

12. "O &M Manual" shall mean the final Manual for the Operation and Maintenance of the entire system of pumping project to be prepared in accordance with the Bid Documents.

13. "Operation and Maintenance Obligations" shall mean the obligation of the Contractor pursuant to the Agreement to operate and maintain the Facility on and from the Date of commissioning of the system until the date of completion of this Agreement.

14. "Operation and Maintenance Price" shall mean the amount payable by the Employer to the Contractor, for the fulfilment of the Contractor's Operation and Maintenance Obligations and PIM activities. This price is the price derived from the Break of the bid Amount of the contract document. 20% of the total O & M cost shall be considered as cost of PIM.

15. "Operation Standard" shall mean : a) The Performance Guarantees; b) All applicable Laws; c) All of the requirements, policies and procedures set forth in the O & M Manual d) All other operational requirements set forth in this Agreement.

16. "Site" shall mean that specific area specified in the Bid Documents and shall include any other places as may be specifically designated by the Employer from time to time as forming part of the Site.

2.1 Scope of Services

2.2 **A.** The scope of services during defects liability period of five years after the certified date of commissioning of the Pressurized UGPL irrigation system.

2.2.1 During the defect liability period, the contractor will have to bear additional responsibility in

addition to normal O & M as defined under clause 2.3 B below.

2.2.2 The responsibility of the contractor during defect liability period will be at par with other general contracts.

2.2.3 During the defect liability period the soundness, longevity, performance and defects will be under scrutiny and observation & any defects noticed will be repaired, replaced and brought to perfect running condition by the contractor at his own cost as per the direction of the Engineer-in-charge. This responsibility will be in addition to the O & M operation as envisaged in the agreement.

2.3 **B.**The duties and responsibility of the contractor under the O & M agreementwill be as under.

2.3.1 TomaintaintheIntakesystem, pumphouse,waterconductorsystem including its structures, valves including UGPL distribution system with CAD network and maintenance of all gates and switch yard.

2.3.2 To provide all services necessary to maintain the project efficiently, maximize the availability of the project, optimize the useful life of the project etc. to maintain the system efficiently.

2.3.3 To provide requisite numbers of qualified (and if required licensed) personnel to perform the services.

2.3.4 To carryout maintenance of the total water conductor system including distribution pipeline and carryout repair and preventive maintenance in accordance with the recommendations of the employer.

2.3.5 To carry out any maintenance or repairs or rectification work in case of any problem or emergency that may arise while the system is in-operation during the maintenanceperiod of five years or fiveKharifcrop seasons whicheverismoreasdirectedbytheemployer/Chief Engineer& Basin Manager,RBVNBasin,Brahmapur.

2.3.6 To provide technical and other assistance to the employer, for managing operational and maintenance problems.

2.3.7 Maintain all roads, yards, walkways, housekeeping and security of the project.

2.3.8 Operationandmaintenanceschedulneedsimprovementforbetter performance.

2.3.9 To prepare Annual Operation Plan and submit to the Employer for approval.

2.3.10 TomaintaineffectivefunctioningofallHydro-MechanicalandElectro- Mechanical works including Rising main/Pressure mains & switch yard etc.

2.3.11 The Energy charges for pumping water for Pressurized UGPL irrigation system to the command areashall be borne by the Department for consumption upto the guaranteed power for actual operation hours of pumps. The year wise energy consumption for 05 years for 1120 hr. of operation per year has been guaranteed by the bidder in Appendix F-6 of price bid. The power consumption per hour of run for a year shall be furnished by the contractor on finalization of design on the basic of guaranteed power given in Appendix F-6 & the KW of the pumps finalized, which will be approved by Chief Construction Engineer. The guaranteed power for actual operation hours of the pumps shall be derived from the guaranteed power per hour of operation so arrived. The power consumption beyond the guaranteed power will be paid by the contractor as penalty during the O&M period of contract.

3.0 OBJECTIVES OF CONTRACT

3.1 Risks and Obligation of the Contractor

For the duration of O&M period of 5(five) years, Contractor shall render and make available to the Employer the following services:

i) Preparation of Operation& Maintenance manual covering the water supply schedules to be furnished prior to commissioning of Pressurized UGPL irrigation system.

ii) Preparation of training manual for training of the staff and the Department &Panipanchayat to be furnished prior to commissioning of Pressurized UGPL irrigation system.

iii) To provide equipment, tools & plant, spares required for smooth Operation & Maintenance list to be furnished along with the Bid.

iv) To provide deployment schedule of personnel to be employed by the contractor for Operation & Maintenance to be furnished along with the Bid.

v) Control and Operation of Pressurized UGPL irrigation system ie. inlet structure, Pumping Stations, switch yard and Pipelines, etc.

vi) Maintenance of all components of including In Pressurized UGPL irrigation system take system, pumping station, switch yard, delivery systems, Buildings, Roads, Distribution system, all installations and equipment etc.

vii) Supply of water to the requirements of crops as per the Operation & Maintenance manual & water supply schedule of the crop seasons every year.

viii) Developing MIS for management of the system and furnishing it before commissioning of system.

The Contractor shall take full responsibility for the care of the Facility and materials and Plant from the date of commissioning of the system until the date of completion of the Operation and Maintenance period, when the responsibility for the care shall pass to the Employer.

If any loss or damage happens to the Facility, or any part thereof, or materials or Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub-Clause of Risks and obligation of the employer, the Contractor shall, at his own cost, rectify such loss or damage so that the Facility conform in every respect with the provisions of the Contract to the satisfaction of the Employer. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligation under Sub-Clause Risks and Obligation of the Contractor.

3.2 Risks and Obligation of the Employer

In case ofnon availability of sufficient quantum of water in the river the Engineer-in- Charge and the Employer will revise the water drawal program which shall be followed by the contractor and the contractor shall not be held responsible for the water availability and consequent less coverage of command area. There is no minimum guaranteed water specified. The pumps will supply the design discharge whenever it runs. Only the running period of the pumps will vary according to water requirement of crops. The energy charges for trial run and commissioning shall be borne by the contractor. Similarly the contractor shall not be responsible for non availability of power in the State Power Grid switch yard during Operation & Maintenance period.

4.0 COMMENCEMENT AND DURATION OF O&M:

On completion of a Pressurized UGPL irrigation system, the trial & commissioning of the System shall be taken up as per relevant conditions of contract.

Should the Engineer-in-Charge wish to propose an extension to the O & M Period, he will give 180 days prior notice of its intention to exercise such option.

Extension of the O&M Period would involve a negotiated revision to the Terms and Conditions of the Agreement. The decision of the Government / department shall be final whether to extend or not the O & M period.

5.0 Maintenance Personnel

The Contractor shall deploy experienced personnel for maintenance of the Pressurized UGPL irrigation system. The deployment schedule indicating the number of the Managers, Supervisors, Pump Operators, Helpers/Fitters, Mechanics, Electrician & other support staff etc. for O&M of the system as a whole in general, responsibility assigned to each of them shall be furnished along with the bid. For effective O&M, local people of the villages of command area may be selected by the contractor who are to be trained during the construction stage for their deployment during the O&M period. The bio-data of allO&M personnel shall be provided to Engineer-in-charge before commencement of operation and maintenance for approval.

Additional staff required for smooth and efficient operation of the system is to be deployed by the contractor as per requirement for which no extra payment will be admissible.

All Contractor's personnel employed at the plant at any time during the period covered by the present Contract will be provided by him. The Employer is not liable for personnel in any way and cannot be held responsible in the event of litigation of any sort between the Contractor and members of plant personnel or their representatives.

All decisions related to staff numbers and qualifications should be approved by the Employer. The Contractor undertakes to comply with applicable legislation and the code of labour law on matters of health, hygiene and safety, and shall assume responsibility for works required in the event of any change in applicable regulations.

6.0 Right to perform upon contractor's default

If at anytime, the Contractor fails to perform and such failure is likely to cause injury to any person or damage to the project, the Employer may, but shall have no obligation to, perform any such obligation of the contractor. The cost to the Employer of affecting such performance would be deducted from the payment due to the Contractor.

No separate payment shall be made for operation and maintenance services during the maintenance period of five years and shall be deemed to be included in the quoted contract price.

7.0 Acceptance tests on completion of maintenance period

Upon completion of prescribed Maintenance period, the acceptance tests shall be carried out before the project is taken over by the Employer. These acceptance tests shall be identical to the test conducted during commissioning of the project. The acceptance test is meant for satisfaction of Employer on smooth running of system before taking over.

The Contactor shall also make available the proof that maintenance of total system was carried out during operation & maintenance period in accordance with the maintenance schedule & O&M manual.

VEHICLE

The contractor has to deploy 4 wheeler of model after 2018 in working condition for smooth operation and maintenance. The vehicle such as Mahindra Jeep (Bolero)/Tata Sumo etc to be deployed for O&M period. All expenditure is to be born by the contractor. The vehicle is to be deployed for minimum 150 days in each year.

8.0 FORCE MAJEURE

"Force Majeure" means an event beyond the control of the Employer and the Contractor, which makes it impossible or illegal for a party to perform, including but not limited to:

i) act of God

ii) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, mobilisation, requisition, or embargo;

iii) rebellion, revolution, insurrection, or military or usurped power, or civil war

iv) contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component of such assembly

v) Riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors.

If either party is prevented from or delayed in performing any of his obligations under the Contract by any circumstances of Force Majeure, then he shall notify the other party thereof within seven days, and specify how these circumstances are detrimental in the performance of the Contract.

If the performance of the operation is substantially disrupted for a continuous period of three months by virtue of any event of Force Majeure, then either party may by written notice to the other terminate the Contract. The provisions of Clause 3 shall apply to such termination as for indemnification.

9.0 ASSIGNMENT

The Contractor will not be entitled to sub-contract any part of his obligation to any third party without prior approval of the Employer.

10.0 LIABILITY

The Contractor will not under any circumstances be liable for costs or loss of profit that the Employer may incur as a result of the unavailability of the plant on account of force majeure.

11.0 INSURANCE

The Contractor shall, without limiting his or the Employer's obligations and responsibilities insure:

a) The Works, together with materials and Plant for incorporation therein, to the full replacement cost (term "cost" in this context shall include profit).

b) The Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

The insurance detailed above shall be in the joint names of the Contractor and the Employer at the Contractor's cost and shall cover the Employer and the Contractor against all loss or damage from whatsoever cause arising, other than as provided in Clause of Risks & Obligations, from the start of the operation and maintenance until the date of completion of operation and maintenance in respect of the Facility or any Section or part thereof as the case may be.

Any amounts not insured or not recovered from the insurers shall be borne by the Contractor in accordance with their responsibilities.

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of:

a. Death of or injury to any person, or,

b. Loss of or damage to any property (other than the Works),

Which may arise out of in consequent of the Operation and Maintenance of the Facility and the remedying of any defects therein, and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause **Risks and Obligation of the Employer.**

The "exceptions" referred to in Sub-Clause 1.2 are:

a. The permanent use or occupation of land by the Works, or any part thereof.

b. The right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land,

12.0 MAINTENANCE

TheContractorshallberesponsibleforcorrectivemaintenanceofcivil,hydraulic,mechanical, electrical and computing equipment as well as miscellaneous equipment as described in Clause below.

The Contractor shall be responsible for carrying out regular servicing and lubrication of rotary machines, complying with maintenance instructions as defined in the Operation and Maintenance manual, and ensuring that electro-mechanical equipment and motors operate correctly at all times.

The Contractor shall ensure that measurement systems operate correctly at all times.

The Contractor is responsible for the maintenance of the landscaped areas inside theEmployer plant fences.

The Contractor shall be responsible for maintenance of civil structures including intakes, pump houses, Delivery chamber(optional), Rising main/Pressure main, distribution main, workshops, garages, roads etc. within the limits of his scope of work, under this Contract.

13.0 PERFORMANCE STANDARDS

The Contractor will operate and maintain in a state of continuous operational readiness allplant and systems of Pressurized UGPL irrigation system to meet the flow requirements. It shall remain the Contractor's responsibility to ensure that plant systems are at all timesable to operate to the maximum capacity of the installed duty plant.

All plant and plant installation shall be operated within their designed limits. The Contractor shall operate the plant strictly within these operating ranges and shall manage the operation of the plant to achieve optimum performance as far as possible.

14.0 Meter reading

All water conveyed by the Contractor shall be metered by the meters installed at the outletof the raw water pumping station. The meters shall be inspected and certified as to its accuracy jointly by the Employer and the Contractor.

The Contractor shall be entitled to appoint a representative who shall together with Employer's representative on the last day of each week or if such day is not a working day on the following day, jointly carry out a reading of water meters and jointly certify the record of such readings.

15.0 CONSUMABLES AND UTILITIES SERVICES - SPARE PARTS –STORES

15.1 Consumables and Utilities Services

Unless stipulated otherwise elsewhere in the document, for the duration of the O &Mperiod, the Contractor will be responsible for the supply and control of lubricants, spare parts and consumable materials excluding electrical power, necessary for the continuous operation of the works.

The Contractor will manage the consumables and utilities services to ensure their most economic consumption and to minimize wastage.

The quantities of all the unutilised spare parts and consumable materials will be fully handed-over to the Employer at the end of the O&M period.

15.2 Spare Parts and Stores

The contractor is to furnish the list of spare parts for use during O&M period of the system along with the bid. The list shall be approved by the Engineer-in-Charge before commencement of O & M period and this shall be binding on both the parties.

The stores inventory, the issuing and recording of spare parts will be the responsibility of the Contractor and shall be verified by the Engineer-in-charge quarterly.

The Contractor is also responsible for providing spare parts and material required for the

operation and maintenance during the operation period, and shall bear the cost for the same, including the cost of storing and safeguarding.

The Contractor will make all necessary arrangements to ensure the continuoussupply of spareparts and material for the works and the rate of supply of these materials shall be in such quantities and amounts as would ensure uninterrupted operation.

Any spare parts used during the O&M period shall be replaced by purchasing new spare parts and total set of spare parts shall be handed over to the Engineer-in-Charge after completion of 5years maintenance period / extended O & M period if any.

15.3 Miscellaneous Equipment

15.3.1 Workshop Equipment

All the necessary and required workshop equipment for the proposed project shall be supplied by the Contractor under this Contract.

16.0 INSPECTION

16.1 General Provisions

The Employer shall check the operation of the plant or designate an organization of his choice to carry out inspections regularly. The Employer or the organization appointed by him shall check that the Contractor is performing the tasks for which he is responsible with due diligence. The Contractor shall at his cost provide all the assistance, to the Employer requires to complete these inspections.

16.2 Measurement and Analysis

The Employer has the right to perform any analysis or inspection he deems necessary. Before any inspection, the Employer shall give a prior written notice of three days to the Contractor and shall cover the costs of such action.

The water quantity shall be measured by flow meters installed at the plant, acceptable to the Employer.

Electromagnetic flow meter is to be provided only at Pump House common header. The flow meters shall be inspected and certified upon their workability by the Employer and the Contractor. Thereafter, the said meters shall be tested and their accuracy verified once in every six (6) months by the Employer and the Contractor. After each inspection, the flow meters shall both be sealed in the presence of representatives of Employer and the Contractor in a manner that is adequate to prevent the tampering of said meters by any person.

The Contractor shall be responsible for the security and protection of flow meters at the designated point. If there is any malfunctioning of the meters, it should be replaced at the Contractor's cost.

16.3 Plant Complex Visits

At the end of each month, or at the initiative of the Employer, a visit shall be organized sothat both parties can check the condition of the installations at the plant complexes.

A report shall be drawn up to record the opinions of both parties. The Employer reserves the right to call in equipment manufacturers or specialized technicians for these visits.

These visits shall provide an opportunity for examining maintenance programs and operating procedures and improvements requiring additional investments.

16.4 Documents to be provided by the Contractor

16.4.1 Operation Log Book

The Contractor shall keep a permanent record of plant operation (logbook). This log book shall be kept at the site and shall be presented on request to representatives or agents approved by the Employer.

On a daily basis, the following information shall be recorded in the log book:

a) Reading from the different meters, indicators and recorders (including but not limited to consumption of energy, volume of water conveyed, operating times of the different items of equipment),

b) Computer documents and tapes produced by monitoring and surveillance equipment which shall be attached to the log book,

c) Report of visits by persons other than those of the Employer and theContractor to the Facility.

The Contractor shall also indicate any significant modifications to the set-up characteristics of the installation, shut-downs, anomalies or incidents that have occurred with respect to operation.

16.4.2 Monthly Report

The monthly report shall include but not be limited to:

i) Volume of water conveyed.

ii) All the problem areas in the facility,

iii) The status and progress of the training programs,

iv) Electricity consumed.

16.4.3 Annual Report of Operation

The Contractor shall provide the Employer by March 31 of the current year (n)with an annual report for the preceding year (n-1). This report shall include:

a. All technical statistics related to plant operation as supplied by the operation;

b. A statement of works carried out during the preceding year n-1 in

16.4.4 FINANCIAL PROVISIONS

The rate quoted by the bidder for O&M shall be derived byEngineer-in-Charge in upward incremental order @10% from 1st year to 5th year at the time of agreement.

16.5 Method of Payment

O & M cost includes cost towards normal O & M and PIM activities of the Pressurized UGPL irrigation system. 20% of the total O & M cost shall be considered as cost of PIM. The Employer will pay the Contractor for the O&M Price on a monthly basis subjected to his delivering the stipulated water quantity to the stipulated CCA and also completion of all PIM activities during O & M period. **The payment for operation and maintenance shall be based on the year wise Breakup of the O&M cost derived by the Engineer-in-Charge in Appendix F-4(a) at the time of agreement**. The O&M price for the is to be fixed on the prorata basis of CCA finalized after Detailed Planning and Design and ayacut jointly verified by competent authority. Payment for the last quarter towards cost of O & M and all PIM activities for that corresponding year shall be made subject to satisfactory completion of associated WUA particulars as reflected in Clause no. 27.3/Section-V/Volume-I at the end of last Quarter.

Invoicing

The Contractor shall prepare and submit to the Employer an invoice at the end of every month of O & M with all documents supporting its calculations for the preceding month. The invoice shall

be submitted between 1st& 5thday of the month.

The Employer shall have seven (7) calendar days from receipt of such invoice to notify in writing to the Contractor its acceptance thereof or the grounds for disputing such invoice. The Employer shall pay to the Contractor all accepted amounts.

17.0 LIQUIDATED DAMAGES FOR SUPPLY OF WATER TO MEET THE REQUIREMENT:

17.1 The contractor shall ensure water supply to the command area as per crop water requirement of approved CCA of the Pressurized UGPL irrigation system during O & M period. For the regular supply during the O&M period, the contractor shall get the demand requirement from the Engineer-in-Charge and run the system accordingly as per the varying demand during the O&M period. Liquidated damages at the rate of 1.0 percent per day of the system wise O & M cost shall be levied on the contractor for non-supply of water as per requirement of the approved CCA due to the system deficiency and or management deficiency till the supply is restored.

17.2 In case the water supply is not restored within three days of breakdown of the water supply system, it will be treated as a system and management deficiency for the purpose of imposition of liquidated damages.

17.3 For Non Compliance of Employment of Key Personnel identified as per schedule, then liquidated damages will be deducted at double the rate of applicable scale of Government department or the rate quoted whichever is higher.

18.0 TAXES, LICENSES, PERMITS AND FEES

These shall be as per General Conditions of Contract

19.0 TERMINATION OR FORE CLOSURE OF CONTRACT

19.1 The department may terminate the contract in event of poor performance of the contractor after sufficient notice given and failure of the contractor to take corrective measures to improve the O&M condition to desired level by giving 15 days notice

19.2 The department reserves the right to foreclose the contract before its schedule period without assigning any reason by giving 30 days notice. The contractor shall have no claim for balance period and shall peacefully handover the project to department as instructed by Engineer-in-Charge.

19.3 Payment will be made on prorate basis after adjustment of any dues or penalty or L.D as applicable arising out of the contract.

20.0 TRAINING

This shall be as per GCC.

21.0 O&M MANUAL

This shall be as per GCC.

22.0 HANDING OVER OF SYSTEM:

Pressurized UGPL irrigation system for the CCA of 1979 Ha shall be handed over to the Engineer-in-Chargeon completionofthestipulatedO&Mperiodas perconditionsof contract. Takingoverschedules istobeapprovedbyChiefEngineer& followed by both the parties.

SECTION – VIII

VENDOR LIST

VENDOR LIST

A. LIST OF ACCEPTABLE MAKES OF EQUIPMENT / MATERIAL

Sl. No.	Product	Name of Manufacturer	Product Brand	Remarks
1	Welding Electrodes	Advani Orlekon ESAB Modi Electrodes, Modinagar Honavar Electrodes Ltd. D & H Secherone Electrodes M/s D& H Welding Electrodes Pvt. Ltd.	Over Cord-S Esab-28/Esab Ferro Speed Plus Steel on ultra Regular-S Medio DH	The Manufacture or product band provided are indicative only. The Chief Engineer& Basin Manager ,RBVN Basin,Brahmapur can add or delete any of this vendor or product during execution period.
2	Ordinary Portland Cement	A.C.C, KONARK, ULTRATECH AMBUJA, RAMCO JAYPEE, LAFARGE		
3	HYSD Bars (TMT)	SAIL (Rourkela), TATA & ZINDAL VIZAG STEEL.		
4	M.S. Plate / H.R. Coil/RS Joist/Channels & Angels	Tata, SAIL, TISCO, ESSAR, Jindal ISPAT Ltd. ,RINL.		
5	External Polyurethane coating	i)Poly coat products, Mumbai ii)Vasu chemicals, Mumbai iii)Sonabarsa Projects, Kolkata. Iv) Demac Chemicals, Pune v) Lalita Infra Projects, Pvt. Ltd, Kolkata. vi) M.P Tar products.		
6	Food Grade Epoxy	i)Demac Chemicals, Pune. ii)Berry Plastics, Delhi. iii)Lalita Infra Projects Pvt. Ltd., Kolkata. iv)Poly coat Products, Mumbai. v) Sonabarsa Projects, Kolkata. vi) Cippy poly urethane Pvt. Ltd, vii) Grauer &Well (I) Ltd. viii) M.P Tar products.		

B. LIST OF APPROVED MAKES OF MECHANICAL EQUIPMENTS &COMPONENTS

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
1	Vertical Turbine Pump	KIRLOSKAR BROTHERS LIMITED WPIL MATHER & PLATT (I) LTD VOLTAS, FLOW MORE LTD.	The Manufacture or product band provided are indicative only. The Chief Engineer& Basin Manager RBVN Basin, Brahmapur can add or delete any of this vendor or product during execution period.
2	Vertical Squirrel Cage Induction Motor(HV/LV) &Other Squireel Cage Motor(LV)	KIRLOSKAR ELECTRIC CO. LTD. SIEMENS INDIA LIMITED CROMPTON GREAVES LIMITED MARATHON (ALSTOM) BHEL ABB	
3	Motorize Valve Actuators	ROTORK LIMITORK AUMA INDIA ANTRIED TECHNIK PVT.LTD	
4	Sluice Valves	INDIAN VALVE COMPANY, NASIK KIRLOSKAR BROTHERS LIMITED DURGA VALVESR & D MULTIPLES HAWA VALVES (INDIA) PVT.LTD. FOURESS ENGINEERING. G. M. DALUI & SONS CHEMFLO INDUSTRIES (INDIA) Pvt. Ltd., HAKOHAV, SAI SANKET.JUPITER Engineering co. Sigma flow Control India Ltd. Kamala Valve & Engg. Calsens Private Ltd.	
5	Butterfly Valves	INDIAN VALVE COMPANY, NASIK KIRLOSKAR BROTHERS LIMITED R & D MULTIPLES FOURESS ENGINEERING PLATEINDIA L & T, CHEMFLO INDUSTRIES (INDIA) Pvt. Ltd., HAKOHAV, SAI SANKET,G. M. DALUI & SONS, JUPITER Engineering.co), Sigma flow control India Ltd. Kamala Valve & Engg. Calsens Private Ltd.	
6	Non – Return Valve	INDIAN VALVE COMPANY, NASIK KIRLOSKAR BROTHERS LIMITED R & D MULTIPLES, FOURESSENGINEERING, CHEMFLO INDUSTRIES (INDIA) Pvt. Ltd., HAKOHAV, SAI SANKET, G. M. DALUI & SONS. JUPITER Engineering.co (upto 600 mm), Sigma Flow Control India Ltd. Calsens Private Ltd.	
7	Kinetic Air Valve	INDIAN VALVE COMPANY, NASIK KIRLOSKAR BROTHERS LIMITED R & D MULTIPLES,FOURESSENGINEERING	
		CHEMFLO INDUSTRIES (INDIA) Pvt. Ltd., ARIFLOW, CONTROL ACCESSORIES, SAI SANKET, G. M. DALUI & SONS.JUPITER Engineering.co. Sigma Flow Control India Ltd. Kamala Valve& Engg. Calsens Private Ltd.	
8	Ultrasonic type Level measurement Device	FISHER ROSEMOUNT FORBES MARSHALL, E&H ABBMILITRONS(TOSHNIWALA),SBEM	

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
9	Electronics Pressure Measurement System	FISHER RESEMOUNT E&H ABB FOXBRO	
10	Electromagnetic flow meter	KROHNE MARSHALL ABB SIEMENS E & H SAI SANKET, SBEM	
11	EOT Crane & Hoist and Motorized Chain Pulley Block	ACME MANUFACTURES ENGINEERS ELECTROMECH ENGINEERS HI-TECH EDDY CRANES ENGINEERS PVT. LTD BRADY AND MORRIS ENGG. PVT.LTD. FAFECO ENGINEERS PVT.LTD ANUPAMINDUSTRIES LTD. JAPSSAFEX BATLIBOIMEKA SUFFIXSTEELAGE INDUSTRIES,JHARSUGUDA, ALPHA SERVICES.	
12	Expansion Bellow	DHRUV D.WREN INDUSTRIES PVT LTD. STANFAB ENGINEERING PVT.LTD. BELOFLEX(B.D ENGINEERS)	
13	Window Air Conditioner	VOLTAS LTD CARRIER AIRCON LTD SAMSUNG	The Manufacture or product band provided are indicative only. The Chief Engineer & Basin Manager RBVN Basin , Brahmapur can add or delete any of this vendor or product during execution period.
14	Tools	TAPARIA ,RECORD LEADER,EVEREST,GEDOR JHALANI MEKASTER	
15	Test Equipment	CIE, CE, MITUTOYO,WACO,SYSTEM, YOFUNG MECO,KEW,ACD	
16	Receiver / Indicator	MASIBUS, ABB NISHKO LECTROTEK	
17	Surge Control Devices	PERFECT ENGINEERING ASSOCIATES PVT. LTD. MANNSMANN JASH ENGINEERING LTD DEMAG, VAN ENGG. COMPANY,ARI, SAI SANKET, BERMAD, SIDOMA	

C. LIST OF APPROVED MAKES OF ELECTRICAL EQUIPMENTS &COMPONENTS

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
1	LIGHTNING ARRESTER	ELPRO OBLUM CGL ABB	The Manufacture or product band provided are indicative only. The Chief Engineer & Basin Manager ,RBVN Basin, Brahmapurcan add or delete any of this vendor or product during execution period.
2	ISOLATOR/ ISOLATOR WITH EARTH SWITCH.	ALSTOM SWITCH GEAR & STRUCTURAL (Pvt.Ltd), HYDERABAD.SIEMENS INDIA GR POWER, HYDERABAD ABB	
3	CONDUCTOR(/AAAC/ACSR)	APAR,GUPTA POWER,,HIGH TECH POWERCON,ERITECH,CABCON, STERLITE.	
4	CT/PT & metering unit.	SIEMEMS ABB JYOTI LTD ALSTOM BHELESUN AE, STARLITE ELECTRICALS, .Kalpa Electrical, Pragati Electrical.	
5	Air Circuit Breaker and Vacuum Circuit Breakers /(Outdoor/Indoor)	SIEMENS System Control ABB SCHNIDER Voltech BEL S&S	
6	Load break switch	ALSTOM CGL BEL AREVA SIEMENS ABB	
7	Power & Distribution Transformers	KIRLOSKAR ELECT. CO. LTD. CROMPTON AND GREAVES T & R (TRANSFORMER & RECTIFIER) BHARAT BIJLEE ALSTOM ABB EMCO IMP DUPONT, BOMBAY.TBEAEnergy (I) pvt. Ltd. Uttam (Bharat) Electricals Pvt. Ltd. Telwani Power Equipments Ltd. Voltech.	
8	HT Panel (Indoor)	SIEMENS BB BHEL CGL SCHNIDER ALSTOM, VENSUN ELECTRIC, BANGALORE. Control Engineering, Chenei. H.T Switch Gear, Indus Electro Control, Voltech.	
9	Motor Control Centre (LT Panel) indoor type without Soft starter	SIEMENS ABB JYOTI LTD L&T BHEL CGL SCHNIDER ELEMBICA Control Engineering, Chenei SAI SANKET. Alfa Automation (P)Ltd.H.T Switch Gear, Indus Electro Controls, Voltech.Technocrat Enterprises.	
10	Direct on line starter	SIEMENS INDUSTRIAL CONTROL SCHNIEDER L&T ABB	
11	Soft Starter	ABB SIEMENS SCHNEIDER JAYASHREE ELECTRON, PVT.LTD,Pune. ELTECH ENGINEERING, Pune.LECON ENERGETIC, Innovative Electrosoft (I) Pvt. Ltd.	The Manufacture or product band provided are indicative only. The Chief Engineer & Basin Manager ,RBVN Basin, Brahmapur can add or delete any of this vendor or product during execution period.

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
12	HT Cables	CCI/NICCO GLOSTER TORRENT POLYCAB UNIVERSAL CABLE GUPTA POWER INFRASTRUCTURE LTD.	
13	LT Cables	CCI/NICCO FINOLEX AVOCAB TORRENT GLOSTER GEMS CAB POLYCAB GUPTA POWER INFRASTRUCTURE LTD.. Vishal Cables, Cords Cable.	
14	Cable glands	COMET HMI	
15	H. T. cable Terminations	RAY CHEM, MAHINDRA CCI CONNECT WELL	
16	LT cable terminations	DOWELLS,JOINT WELL,LOTUS, CONNECT WELL	
17	Indicating meters	AEMP MECO SECUREMETER HPL	
18	Terminal Block	ELMEX C&S (WAGO) TELEMECHANICS WAGO CONNECT WELL	
19	Protective Relays	ABB AREVA SIEMENS SEL (USA) GE (ELEC). Voltech.	
20	ELCB	INDO ASIAN ELCON MDS STANDARD, HAVELLS	
21	Contactors AC / DC /Thermal O/Lrelay fuse / fittings	L & T C & S SIEMENS ALSTHOM SCHNEIDER ABB MARATHON	
22	Switch Fuse Unit	L & T AREVA C & S	
23	MCCB/ACB	L & T CROMPTON GREAVES LTD. INDO ASIAN C&S SIEMENS HAVELLS SCHNIDER MARATHON	
24	Capacitor	BHEL UNIVERSAL ASIAN ELECTRONICS MADHAV CAPACITORS	

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
		SHREEM ELECTRIC ABB HAVELLS SCHNIDER	
25	Indicating lamps	L&T SIEMENS SCHNIDER VAISHANA RASS BINARY	
26	Push button and push button station	L&T SIEMENS TECHNIK BCH GE CONTROL	
27	APFC relay	CSPC ENERCON SIEMENS L&T SCHNEIDER ASIAN	
28	APFC panel	L&T, SIEMENS, ELEMBICA, CROMPTON GREAVES, HITECH ENGINEERING, Shreem Electric Ltd.	
29	Cable tray	INDIANA M M ENGINEERING, MNR Electricals.	The Manufacture or product band provided are indicative only. The Chief Engineer & Basin Manager ,RBVN Basin ,Brahmapur can add or delete any of this vendor or product during execution period
30	PVC conduits and accessories	PRECISION CLIPSAL	
31	Flexible wire(FRLS)	FINOLEX ANCHOR HAVELLS RR CABLE INDO ASIAN POLYCAB AVOCAB	
32	Maintenance free sealed lead acid batteries	AMCO SABNIFE EXIDE	
33	Battery charger & dc distribution board	USHA RECTIFIER AUTOMATIC ELECTRIC SERVILINK ENGINEERS, Voltech, Chloride Power System & Solns.	
34	Lighting fixture	PHILIPS,BAJAJ,CROMPTON, INDO ASIAN,HAVELLS SURYA	
35	Annunciators	MINILEC PEACON ICA	
36	Lightning Protection	RITTMEYER MTL INSTRUMENTS CROMPTON GREAVES	
37	Energy Meters	SIMCO GEC IMP JAIPUR METERS SECUREMETER, L&T	
38	DISC INSULATOR/ PIN INSULATOR (33KV/11KV))	BHEL/WS/MGK/BIRLA/MODERN INSULATOR.Top line ceramics	
39	PLC	SIEMENS/ALLEN-BRADY/ ABB , Mitsubishi Electric India Pvt. Ltd.	
40	RSJ Pole/UC Poles	Vijay Transmission Ltd. Prime Ispat Ltd.	
41	MCB	L&T/ABB/SIEMENS/MDS/HAVELLS/IND OASIAN/Standard Electrical/Scheneider/Legrand/Indo-Kopp/CGL/M&G/MERLIN GERIN/Sprecher & Schuh (S&S)/C&S	

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
		Electric	
42	ACDB/CONSOLE BOX/BMK	Maktel System/SARVANA/Technocart/./Bose Engineers (India) Pvt ltd//,ALFA Automation Pvt. Ltd.//AMARARAJA/Chhabi Electricals	
43	FIRE FIGHTING EQUIPMENT	MINIMAX/CEASE FIRE/M/s Kanadia fyr Fyter Pvt ltd/ NITIN/LIGHTEX/Safex Services Ltd/Zenith	

D. LIST OF APPROVED MAKES OF PIPE

Sl. No.	Mechanical Equipment	Name of Manufacturer	Remarks
1	HDPE	Jain Irrigation Pipes. Oriplast,Time Techno plast Godavary Polymer, Kataria Plastics, Purma plast Ltd.Vijaya Polymer.Mohit Polytech Pvt. Ltd.	The Manufacture or product band provided are indicative only. The Chief Engineer & Basin Manager ,RBVN Basin,Brahmapurcan add or delete any of this vendor or product during execution period.
2	DI PIPES.	ELECTRO STEEL CASTING LTD., KOLKATA TATA METALIKS D.I PIPES LTD., KOLKATA JINDAL SAW LTD., GUJRAT Sri Kalahasthi Pipes Ltd., ELECTRO THERM INDIA LTD., GUJRAT, Rashmi Metaliks Limited.	

2) For other items which are not covered in the vendor list, the material offered shall be in accordance with the REC Specification/ODSSP Specification and procured from a vendor who must have at least five years of experience in manufacturing of the same. The materials shall have been successfully type tested during the last five years from the date of agreement by the EPC Contractor. The Type Test reports shall be submitted by the bidder for approval of the vendor by the Owner.

3) For all items covered under the scope, the manufacturer should have production facility in India for at least Five years from the date of agreement by the EPC Contractor.

SECTION – IX

FINANCIAL BID & MILE STONES

INDEX

SL. NO.	APPENDIX	DESCRIPTION
1	APPENDIX - FB	FINANCIAL BID
	APPENDIX-F-6	BREAK UP OF ENERGY (GUARANTEED UNITS) YEAR WISE
2	APPENDIX - F	PAYMENT SCHEDULE FOR ENGINEERING PROCUREMENT & CONSTRUCTION OF PRESSURIZED UGPL IRRIGATION SYSTEM IMPLEMENTATION OF UNDER GROUND PIPELINE (UGPL) IRRIGATION TO THE COMMAND AREA OF CHHELIGADA IRRIGATION PROJECT IN THE DISTRICT OF GANJAM
3	APPENDIX - F 1	PAYMENT SCHEDULE FOR SYSTEM CONNECTIVITY INCLUDING THE SWITCHYARD AND ELECTRICAL CONNECTIVITY FROM SWITCHYARD TO THE PUMP HOUSE
4	APPENDIX - F 2	PAYMENT SCHEDULE FOR INTAKE WORKS, PUMP HOUSE INCLUDING APPURTENANT WORKS DELIVERY CHAMBER (OPTIONAL)S, CONNECTING ROADS, RESIDENTIAL & NON RESIDENTIAL BUILDINGS AND ALL OTHER ANCILLARY CIVIL WORKS FOR 5YEARS
5	APPENDIX - F 3	PAYMENT SCHEDULE FOR PUMPING MACHINERY AND ALL ELECTRO MECHANICAL WORKS INCLUDING INSTRUMENTATION, RISING MAIN/ PRESSURE MAIN INCLUDING ALL CONTROL DEVICES AND RELATED CIVIL WORKS
6	APPENDIX - F4	PAYMENT SCHEDULE FOR DISTRIBUTIONNETWORKUPTO1HACHAKINCLUDINGTHECONTROLDEVICESANDRELATED CIVIL WORKSETC
7	FORMF-4(a)	O&M COST FORM WILL BE DERIVED BY ENGINEER-IN-CHARGE
8	APPENDIX-F-5	DELETED
9	APPENDIX-MS	MILESTONES

FINANCIAL BID

1.0 General

Details of the Financial Bid has been described under Section-IV clause-40. The work, excluding O&M, has been broadly divided into four components. Each component has been assigned a value in terms of percentage of Bid amount excluding the bid amount for O & M in Appendix-F. In case of any deviation/alterations/modifications of methodology leading to change in components or its quantity or incorporation of new items of work after approval of Detailed design and estimates, the competent authority shall have full powers to revise the percentage breakup of components keeping the contract price same as quoted by the bidder. Each component is further sub-divided into four stages as given below.

Sl. No.	Particulars
1.	Detailed Survey Investigation, Planning & Design and Approval
2.	Procurement of various components, Supply at site, Testing, QA&QC
3.	Construction of the various components, QA & QC
4.	Testing & Commissioning
5.	Formation of WUAs, capacity building, federation, market linkage etc.

The percentage break up of each Component to Stages is given in Appendix F-1 to F-4.The competent authority shall have powers to revise the percentage breakup of the stages within the components, if felt necessary, after approval of the design and drawing. The bidder may furnish further breakup of the stages into sub-components after signing of agreement, which will be approved by the competent authority, keeping the percentages of stages intact, to facilitate payment. This break up to sub-components may be revised if felt necessary by the competent authority. All payment shall be limited to the amount arrived on the basis of percentage of bid value as specified in Appendix-FB to F4.

2.0 Evaluation of Bid

Evaluation of Bid shall be carried out as per Clause 18 of Section II: Instruction to Bidder.

APPENDIX - FB

FINANCIAL BID

Name of work: Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow) system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project.

Bid Identification No.: CE&BM,RBVN(GID-01)/2026-27

Bidder Name :……

SL. NO.	DESCRIPTION OF WORK	RATE IN FIGURES TO BE ENTERED BY THE BIDDER		TOTAL AMOUNT IN WORDS
		Rs.	P.	
1	Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow) system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project on EPC mode and Operation & Maintenance of complete commissioned system for five years or five Kharif Season whichever is more as per the relevant clauses ofTechnical Bid Document.			
2	Operation & maintenance of UGPL irrigation system for 5(five) years or five Kharif water supply seasons whichever is more, after completion as per relevant clauses of the Technical Bid Document.			
Total Bid Amount in Figures				
Total Bid Amount in Words				

APPENDIX – F 6

BREAK UP OF ENERGY (GUARANTEED UNITS) YEAR WISE (TO BE FURNISHED BY THE BIDDER IN COVER –II) PERIOD – 5 YEARS

(To be furnished by the bidder in Cover–II in pdf Format)

Sl.No	Description (Guaranteed Energy Consumption)		Nuagaon
1	1ST Year	Unit	
2	2ND Year	Unit	
3	3rd Year	Unit	
4	4th Year	Unit	
5	5th Year	Unit	
	Total		

APPENDIX – F

PAYMENT SCHEDULE(APPENDIX FTOF4)

FOR ENGINEERING PROCUREMENT &CONSTRUCTIONOFPRESSURIZEDUGPL IRRIGATION SYSTEM FOR –"Construction of distribution system of Nuagaon Barrage Project through UGPL(Pressure Flow)system for CCA of 1979Ha in Gajapati District of state of Odisha including electro-mechanical work, power connectivity, Staff quarter and including survey, investigation, planning, design and estimate of all components with operation and maintenance of the project for a period of five years or five flood seasons whichever is more after successful commissioning of the project"

Sl. No.	Particulars of the component	Percentage of Bid Amount without the O&M
01.	SystemConnectivity includingSurvey,investigation,planning,design,procurement,erection,commissioningof 33KV/6.6 KV/LT OH lines including Sub-station(MSDSS/DSS) from EHT grid S/S interface to secondary side(outgoing gantry) ofMSDSS/DSS including all ancillary civil and electrical works etc. complete.	03
02.	Intake Works, Pump House, Delivery chamber (optional), connectingroads, plantation, and all other ancillary civil works involved in these components complete.	15
03.	Pumping machinery and all Electro Mechanical Works includingelectrical connectivity from switchyard to the pump house, Instrumentation, Rising main/Pressure main including all control devices, including all related civil, electrical and mechanical works etc. complete.	43
04.	Distribution Network upto1 Ha Chak including the control devices andrelated civil works etc. complete.	39
	Total	100

The Chief Engineer shall have full powers to fix interim percentage within the components. In case of any deviation/alternations/modifications of methodology leading to change in components or its quantity or incorporation of new items of work after approval of Detailed design and estimates, the competent authority shall have full powers to revise the breakup components keeping the contract price same as quoted by the bidder. The contractor will submit breakup of the components into subcomponents for cash flow before work is awarded. However the total % of each component as stated above shall remain unaltered which will form part of the contract.

Stages involved in the component

Sl. No.	Particulars of the component
1	2
1	Detailed Survey Investigation, Planning & Design and Approval
2	Procurement of various components, Supply at site, Testing, QA&QC
3	Construction of the various components, QA & QC
4	Testing & Commissioning

APPENDIX – F 1

PAYMENT SCHEDULE FORSYSTEM CONNECTIVITY INCLUDING THE SWITCHYARD AND ELECTRICAL CONNECTIVITYFROM SWITCHYARD TO THE PUMP HOUSE

Sl. No.	Particulars of the component	Percentage of Component Amount
1.	After Detailed Survey & Investigation for Electrical System Connectivity of the Pressurized UGPL irrigation system from the Local Grid Substations, Planning & Design of all components of the System Connectivity including the Main Step down sub-station (MSDS) and connectivity to the pump house from MSDSS as detailed in scope of work as per design criteria detailed in the Technical Specification, approval of design and drawing, IEC & IS standards, CEA(Technical Standards for connectivity to Grid)Regulation2007, CEA(Technical standard for construction of plant and lines) Regulation,2010 and "Distribution System Planning And Security Standards, Operating standards –1999" issued by OERC, Preparation of detail estimate as per Schedule of Rates of Odisha on the basis of approved design & drawing for sanction by competent authority, clubbing of items for record of measure etc. complete and basis of payment, getting approval from competent authorities.	2
2.	After completion of Fabrication/manufacturing and supply of all structural and electrical components relating to system connectivity as per approved design-drawing, specifications, keeping record of all such items procured corresponding to the sanctioned estimates etc. complete. Running Bills will be paid as detailed below :- Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	63
3.	After completion of laying, fixing/erection, testing of all structural, mechanical and electrical components relating to system connectivity of transmission lines of 33kV,11kV, 33kV/6.6kV & 33kV/0.415kV Sub stations of the UGPL irrigation system as per approved design-drawing, specifications and keeping measurement of records of all items corresponding to the items of sanctioned estimates etc. complete. Running Bills will be paid as detailed below :- Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	30
4.	After trial & commissioning of the constructed transmission lines & substations	5
	Total	100

APPENDIX – F 2

INTAKE WORKS, PUMP HOUSE INCLUDING APPURTENANT WORKS DELIVERY CHAMBER (OPTIONAL)S, CONNECTING ROADS, RESIDENTIAL & NON RESIDENTIAL BUILDINGS AND ALL OTHER ANCILLARY CIVIL WORKS

Sl. No.	Particulars of the component	Percentage of Component Amount
1	After Detailed Survey & Investigation for the UGPL irrigation system Planning, design, drawings, Preparation of detail estimate as per Schedule of Rates of Odisha for sanction of competent authority on the basis of approved design-drawing, clubbing of items for record of measurement and basis of payment, getting approval from competent authorities. Preparing land acquisition cases if any (Private land, Government land, Forest land, if any), property cases, if any, such as wells, trees, houses, land in Abadi etc. coming under approved layout & alignment and processing for acquisition and taking over by the Department etc. complete.	2
2	After completion of excavation and earth work of Intake works, pump house , Delivery chamber(optional) ,roads, quarters etc including all appurtenant works and all other ancillary civil works and completion of construction up to Ground Level/ the level of Sub structure, as per approved design-drawing, Tech specifications laid down by the department, relevant I.S. Codes and circulars issued by the Department from time to time keeping record of measurement corresponding to items of sanctioned estimate etc. complete. Running Bills will be paid as detailed below :- Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	30
3	After completion of construction of the Intake works, pump house, Delivery chamber (optional), connecting roads, Quarters, plantation and all other ancillary civil works etc as per approved design-drawing, specification of department, relevant I.S.Code, IRC Publications and circulars issued by the Department from time to time and recording of the measurement of items corresponding to the items of sanctioned estimate etc. complete. Running Bills will be paid as detailed below :- Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	63
4	After trial and commissioning of the constructed Intake works, pump house, the Delivery chamber(optional), connecting roads, plantation, and all other ancillary civil works.	5
	Total	100

APPENDIX – F 3

PUMPING MACHINERY AND ALL ELECTRO MECHANICAL WORKS INCLUDING INSTRUMENTATION,RISING MAIN/PRESSURE MAIN INCLUDING ALL CONTROL DEVICES AND RELATED CIVIL WORKS

Sl. No.	Particulars of the component	Percentage of Component Amount
1	After Detailed Survey & Investigation for the Pressurized UGPL irrigation system Planning, designing of the V.T pumping machinery along with all related electro-mechanical equipment, sourcing of power from the substation planned&designed under the system power system connectivity complete in all respect including control equipment for approval of Design and drawing, Preparation of detail estimate as per Schedule of Rates of Odisha on the basis of approved design-drawing for sanction by competent authority, clubbing of items for record of measurement and basis of payment, getting approval from competent authorities, Preparing land acquisition cases if any (Private land, Government land, Forest land, if any), property cases, if any, such as wells, trees, houses, land in abadi etc. coming under approved alignment of Rising main/Pressure main and processing for acquisition and taking over by the Department etc. complete.	2
2	After completion of Fabrication/manufacturing and supply of vertical turbine pumps with all electro-mechanical components, Rising main/Pressure mains, primary automated filtration system& Instrumentation equipment as per approved design-drawing, Tech specifications laid down by the department, relevant I.S. Codes and circulars issued by the Department from time to time and keeping record of items corresponding to the items of sanctioned estimates etc. complete. Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	73
3	After completion of laying, fixing/erection, testing of all structural, electro-mechanical, control valves & Instrumentation components of the UGPL irrigation system as per approved design-drawing, Tech specifications laid down by the department, relevant I.S.Codes and circulars issued by the Department from time to time and keeping record of items corresponding to the items of sanctioned estimates etc. complete. Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	20
4	After commissioning and trial of the Pumping machinery and all Electro Mechanical Works including instrumentation, Rising main/Pressure main including all control devices.	5
	Total	100

APPENDIX – F 4

PAYMENT SCHEDULE FOR DISTRIBUTION NETWORK UP TO 1 HA CHAK INCLUDING THE CONTROL DEVICES AND RELATED CIVIL WORKS ETC

Sl. No.	Particulars of the component	Percentage of Component Amount
1	After survey, investigation, fixing alignment, design-drawing for Irrigation service network upto1 Ha chak, approval of the design and drawing and raw water filling of village tanks, preparation of detail estimate as per Odisha S.R. on the basis of approved design-drawing for sanction by competent authority, clubbing of items for record of measurement and basis of payment, getting approval from competent authorities as per design criteria of Department, relevant I.S. Codes, IRC Publications and circulars issued by the Department from time to time, preparing ROW cases and permanent land acquisition cases if required (Private land, Government land, Forest land if any), property cases, if any, such as wells, trees, houses, land in Abadi etc. coming under approved alignment of distribution network and processing for acquisition, preparation of chak wise ,minor wise and panipanchayat wise beneficiary list, formation of WUA etc complete.	2
2	After completion of fabrication/manufacturing and supplying of pipes with all accessories for all distributaries, minor and sub-minors, outlets, secondary manual filter system and raw water filling of village tanks as per approved design-drawing, Tech specifications laid down by the department, relevant I.S. Codes and circulars issued by the Department from time to time and keeping record of measurement of items corresponding to the items of sanctioned estimates etc. Complete. Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	73
3	After completion of laying, fixing including all control works and outlets and testing of pipe lines for all distributaries, minors and sub-minors, outlets supply of raw water to village tanks of command area as per approved design- drawing, specifications of Department, relevant I.S.Codes, IRC Publications and circulars issued by the Department from time to time and keeping record of measurement of items corresponding to the items of sanctioned estimates etc. complete. Amount of running Bill = Bill amount as per actual quantity of work executed based on clubbing of items as approved by the competent authorities in S. No. 1 x "A" Where "A" = (Amount derived from percentage of "BID AMOUNT" of this item) ÷ (Estimated amount based on S.R. as per S. No. 1)	20
4	After commissioning and trial of the constructed pipe line system of the distribution network.	5
	Total	100

FORM – F 4 (a)

O& M cost quoted by bidder for 5 year in sl.2 of FB : **Rs…….**		
Year wise O& M cost break up for 05 year		
Year	**% of quoted amount**	**Amount in Rs.**
1st	16.38 %	
2nd	18.02 %	
3rd	19.82 %	
4th	21.8 %	
5th	23.98 %	
	TOTAL	

The amount quoted by the bidder for O&M shall be derived by Engineer-in-Charge in upward incremental order @10% from 1st year to 5th year at the time of agreement as provided in Form-F 4(a).

(The total derived cost for 5 year break up shall not exceed the Year wise O& M cost quoted by bidder in sl.2 of FB)

~~**APPENDIX – F 5**~~

~~**BREAK UP OF O & M COST YEAR WISE (TO BE FURNISHED BY THE BIDDER IN COVER –II)**~~
~~**(To be furnished by the bidder in Cover–II in pdf Format)**~~

DELETED

APPENDIX – MS

MILE STONES

MilestoneNo.	Particular	Milestonetobe achieved asphysical% ofrespectiveitem	Timeinmonthforachievingmilestone from the commencementof work
MS0.	Survey&Investigation,Planning&Designofthe Pressurized UGPLirrigationsystem& System ConnectivityfromdesignatedGridincludingprocessingof LA proposal.	100%	By endof 6thmonth
MS1.	(a) Procurementofpumpingmachinerywithassociated Electro-mechanical equipment for thepumping project andoperation&MaintenanceofProject, Local SCADA, ElectricalpowerConnectivityofthe Pressurized UGPLirrigationsystemtotheswitchyardas designedunderthesystemconnectivity.(Non- Redundant plcbasedcontrol systemhasto be providedforflow,Vibration,Temperatureand	100%	By endof 12thmonth
	(b) ProcurementofMSRisingmain/Pressuremainpipe&allassociated valves,airvalve,anti-surgedevices,flowmetersetc.complete.	100%	
	(c) Procurementofallmaterials&equipment ofsystemconnectivity.	100%	
	(d) Construction of Civil works consisting of Intake works,Pumphouse,ControlRoom, Delivery chamber(optional)Residential &non residential quarters, roads etc	100%	
	(e) Procurementofallpipe lines &accessories of theDistributionsystemtoirrigate1Ha.Chak.	100%	
MS2.	(a) Laying anderectionofallprocureditemin position as specified in (a), (b), (c), (e) of MS1includingall associated items &civil worksnotdetailed.	100%	By endof 21stmonth
	(b) BalanceCivilworkasspecifiedin(d)underMS1 includingallitemsnotdetailed.	100%	
MS3.	Testing&Commissioning ofthesystemConnectivity ofthePressurizedUGPLirrigationsystem.	100%	By endof 24th.month

*The time in month for achieving milestone from the commencement of work will be fixed by the "Tender Inviting Authority" as per the Project Requirement .