

পুণ্ডিবাড়ী, কোচবিহার , পশ্চিমবঙ্গ-৭৩৬১৬৫ UTTAR BANGA KRISHI VISWAVIDYALAYA

P.O. PUNDIBARI, DIST. COOCH BEHAR, WEST BENGAL-736165

প্রফেস্র প্রদ্যুৎ কুমার পাল

নিয়ামক (ভারপ্রাস্ত্র)

Prof. Prodyut Kumar Paul

Registrar (Acting)

ফোন/Phone: 03582-270588 (O) মোবাইল/Mobile: +91 7001363247 ইমেল/E-mail: registrar@ubkv.ac.in registrarubkvv@gmail.com ওয়েবসাইট/Website: www.ubkv.ac.in

Ref. No.: 928/UBKV/Est./Tend (WD)

Date: 24.12.2020

CORRIGENDUM NOTICE AFTER PRE-BID MEETING

Against

Notice Inviting Tender

For

RKVY sponsored project on "ESTABLISHMENT OF A CENTRE OF FLORICULTURE PROMOTION AND ENTREPRENEURSHIP DEVELOPMENT FOR NORTHERN PART OF WEST BENGAL AT UTTAR BANGA KRISHI VISWAVIDYALAYA"

Reference: NIT No. 03 of 2020-21: Ref. No.: 614/UBKV/Est./Tend (WD) Date: 10.12.2020

Zoom Meeting ID:

https://us02web.zoom.us/j/83776561172?pwd=bmZOaEs1TGNjbzIPbIdCU1BkanYvZz09

Meeting ID: 837 7656 1172 Passcode: 765429

Venue: Meeting Room at the Vice-Chancellors' Secretariat at Administrative Building, UBKV, Pundibari

Date: 21.12.2020

Amendment in Bid Document

In connection with the bid document pertaining to <u>Notice Inviting Tender</u> of the RKVY sponsored project on "ESTABLISHMENT OF A CENTRE OF FLORICULTURE PROMOTION AND ENTREPRENEURSHIP DEVELOPMENT FOR NORTHERN PART OF WEST BENGAL AT UTTAR BANGA KRISHI VISWAVIDYALAYA", the following amendments are hereby incorporated based on the Pre-Bid Meeting held with present prospective bidders on 21.12.2020 at 2.00 PM through zoom virtual meeting platform. Amendments in the bid document are stated below —

Sl.	Page	Existing	Amended
No.	number		
1.	1	LAST DATE AND TIME FOR	LAST DATE AND TIME FOR SUBMISSION
		SUBMISSION OF BIDS: 30.12.2020 by	OF BIDS: 13.01.2021 by 2.00PM
	×	2.00PM	[**Necessary changes will be made accordingly in
			the entire tender document]
			*
2.	1	TIME AND DATE OF OPENING OF BIDS:	TIME AND DATE OF OPENING OF BIDS:
		30.12.2020 at 2.30PM	13.01.2021 by 2.30 PM
		0	[**Necessary changes will be made accordingly in
		×	the entire tender document]
. 3.	3	Bids complete in all respect must be delivered	Bids complete in all respect must be delivered to
		to the address mentioned below on or before	the address mentioned below on or before 14:00
		14:00 hrs. (IST) on 30 Dec 2020.	hrs. (IST) on 13 th January, 2021.
4.	3	Bids will be publicly opened in the presence	Bids will be publicly opened in the presence of the
		of the bidders' designated representatives,	bidders' designated representatives, who choose to
		who choose to attend in person at the address	attend in person at the address below at 14:30 Hrs

18 amm 112/21

উত্তৰক কৃষি বিশ্ববিদ্যাল্য

পুণ্ডিবাড়ী, কোচবিহার , পশ্চিমবঙ্গ-৭৩৬১৬৫

UTTAR BANGA KRISHI VISWAVIDYALAYA

P.O. PUNDIBARI, DIST. COOCH BEHAR, WEST BENGAL-736165

প্রফেসর প্রদ্যুৎ কুমার পাল

নিয়ামক (ভারপ্রাস্ত্র) Prof. Prodyut Kumar Paul

Registrar (Acting)

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ওয়েবসাইট/Website: www.ubkv.ac.in

Sl. No.	Page number	Existing	Amended
110.	number	below at 14:30 Hrs (IST) on 30 Dec 2020.	(IST) on 13 th January, 2021.
5.	4	Bidders can also participate in bid opening process over ZOOM virtual meeting platform. Bidder willing to participate virtually in bid opening process may request for Meeting ID and Password through E-mail to: sdey1119@gmail.com on or before 29 Dec 2020.	Bidders can also participate in bid opening process over ZOOM virtual meeting platform. Bidder willing to participate virtually in bid opening process may request for Meeting ID and Password through E-mail to: sdey1119@gmail.com on or before 11 th January, 2021.
6.	4	Bidders willing to participate physically in the bid opening process must contact Works' Department (E- Mail to: sdey1119@gmail.com) on or before 29 Dec 2020.	Bidders willing to participate physically in the bid opening process must contact Works' Department (E- Mail to: sdey1119@gmail.com) on or before 11 th January, 2021.
7.	4	Bid Submission End date: 30.12.2020, Bid Submission End Time: 2:00 PM Bid Opening date: 30.12.2020	Bid Submission End date: 13.01.2021, Bid Submission End Time: 2:00 PM, Bid Opening date: 13.01.2021
8.	6	Scope of Work under the proposed Centre of Floriculture Promotion and Entrepreneurship Development PART - II "The second part during the period of maintenance."	"Regarding Farmers' Training Programme, the training cost will be borne by the Concessionaire from the amount received from the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya for the purpose of annual maintenance and cultivation of the said crops, and the cost of hospitality of the trainees, resource persons will be borne by the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya from the scope of the project." – This portion will be deleted.
9.	7	PART – III) bank guarantee of the same amount (which will be finalized after tendering process) must be maintained throughout the period of this turnkey project.	This portion will be deleted
10.	10	Clause – 9 of ITB Confirm submission of PBG @ 5 (five) % of order value for Performance security in the stipulated form, within 28 days from the date of acceptance of "Letter of Intent". Without submission of PBG, no agreement in connection with this Turnkey Project will be materialized.	Addendum after the word "materialized." – Performance security will be valid upto the entire period of Concession Agreement.
11.	14	Eligibility Criteria of Bidder Signed and photocopy of duly filled PFMS Form of UBKV, Pundibari	This portion will be deleted
12.	17	FORMAT FOR TECHNO-COMMERCIAL BID Clause no. – 5 Farm must have capability for uninterrupted supply of spares, accessories for a period of 10 years (120 months) from the date of	Firm must have capability for uninterrupted supply of spares, accessories for a period of 05 years (60 months) from the date of commencement of production to avoid any operational problem due to obsolesce or any other reason.

উত্তৰঙ্গ কৃষি বিশ্ববিদ্যাল্য

পুণ্ডিবাড়ী, কোচবিহার , পশ্চিমবঙ্গ-৭৩৬১৬৫

UTTAR BANGA KRISHI VISWAVIDYALAYA

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Sl. No.	Page number	Existing	Amended
		acceptance to avoid any operational problem	
13.	17	due to obsolesce or any other reason. FORMAT FOR TECHNO-COMMERCIAL	AVAILIBILITY OF SPARE PARTS: Firm should
		BID	Ensure the availability of spare parts for at least 05
		<u>Clause no. – 12</u> AVAILIBILITY OF SPARE PARTS: Farm	(Five) years from the commencement of production.
		should Ensure the availability of spare parts	production.
		for at least 10 years.	
14.	18	FORMAT FOR TECHNO-COMMERCIAL	Clause no. 18 of FORMAT FOR TECHNO-
		BID	COMMERCIAL BID will be deleted
		Clause no 18 Whether Indemnity Bond will be provided by	
		the Bidder for assuring payment on the cost of	
		replacement of the different parts of Plant &	
		Machineries in the event of transferring the Project Assets to the UBKV at the end of the	
	2	concessionaire period of this turnkey project.	*
15.	22	Point – 12.	This portion will be deleted
		A bank guarantee of the same amount against yearly concession fee offered by the bidder for	
		buy-back of the produce under Phase-III of	
		the work schedule of the project activity will	
		be given for the entire contracted period (5 years) and the necessary document(s) of this	er : **
		bank guarantee will be handed over to the	
		University before initiation of building of	
		infrastructure (Phase – I of work schedule).	· ·
16.	22	Point – 13.	A performance security of the contracted amount
		A performance security of the contracted	for Phase – I in the form of bank guarantee will be
		amount for Phase – I in the form of bank guarantee will be given as per the stated	given as per the stated format upto the entire period of Concession Agreement.
		format upto the period of Phase - I of the	period of concession rigidement.
		project activity.	ja
17.	24	16. TERMS OF PAYMENT:	C. For operation and maintenance works, the
		C. For operation and maintenance works, the contract amount will be paid	contract amount for each year will be paid in two instalments after every six months of
		annually after successful completion of	commencement of production.
		project activity of each year.	•
18.	25	The Concessionaire shall, at its cost and	The Concessionaire shall, at its cost and expense,
		expense, purchase and maintain during the	purchase Insureance Policy in the name of the
		Implementation Period such insurances as are necessary	University (UBKV) and maintain during the Implementation Period such insurances as are
		•	necessary
19.	25	19. Insurances	Addendum in the Clause number 19. Insurances –
			"Any claim during the period of contract if received shall be transferred back to back to the
			Concessionaire."
		18 amin m	
		L. Coming	



UTTAR BANGA KRISHI VISWAVIDYALAYA

P.O. PUNDIBARI, DIST. COOCH BEHAR, WEST BENGAL-736165

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Sl.	Page	Existing	Amended
No.	number	, a	*
20.	26	TERMS AND CONDITIONS	Addendum
		9	Clause Number - 22
			Space for setting up of workers' hurment within
			the project area shall be allowed by the University
			for the period under the contract.

Registrar (Acting)

Uttar Banga Krishi Viswavidyalaya Pundibari, Cooch Behar-736165, WB



COMPETITIVE BIDDING

for

Building Infrastructure, Carrying out of Operation, Maintenance of Crops and lifting of Produce against a yearly guaranteed value for five years under the RKVY sponsored project

"ESTABLISHMENT OF A CENTRE OF FLORICULTURE PROMOTION AND ENTREPRENEURSHIP DEVELOPMENT FOR NORTHERN PART OF WEST BENGAL AT UTTAR BANGA KRISHI VISWAVIDYALAYA"

UTTAR BANGA KRISHI VISWAVIDYALAYA

P.O. PUNDIBARI, DIST. COOCH BEHAR, WEST BENGAL- 736165 ফোন/Phone: 03582-270143 (O) ফ্যাক্স/Fax : 03582-270143 ইমেল/E-mail: registrarubkvv@gmail.com

ওয়েবসাইট/Website: www.ubkv.ac.in

UTTAR BANGA KRISHI VISWAVIDYALAYA

Pundibari: Cooch Behar, West Bengal-736165

COMPETITIVE BIDDING

for

Building Infrastructure, Carrying out of Operation, Maintenance of Crops and lifting of Produce against a yearly guaranteed value for five years under the RKVY sponsored project "ESTABLISHMENT OF A CENTRE OF FLORICULTURE PROMOTION AND ENTREPRENEURSHIP DEVELOPMENT FOR NORTHERN PART OF WEST BENGAL AT UTTAR BANGA KRISHI VISWAVIDYALAYA"

DATE OF COMMENCEMENT OF BIDDING: 10.12.2020

DATE AND TIME OF PRE-BID MEETING: 21.12.2020 at 2.00PM

LAST DATE AND TIME FOR SUBMISSION OF BIDS: 30.12.2020 by 2.00PM

TIME AND DATE OF OPENING OF BIDS: 30.12.2020 at 2.30PM

PLACE OF OPENING OF BIDS: Administrative Building,

Uttar Banga Krishi Viswavidyalaya

Pundibari, Cooch Behar,

West Bengal-736165

ADDRESS FOR COMMUNICATION: Registrar

Uttar Banga Krishi Viswavidyalaya

Pundibari, Cooch Behar, West Bengal - 736165.

Email: registrarubkvv@gmail.com

Website: www.ubkv.ac.in

Ref. No.: 614/UBKV/Est./Tend (WD)

Date: 10.12.2020

Notice Inviting Tender

Sub: Building of Infrastructure, carrying out of operation, maintenance of crops and lifting of produce of Centre of Floriculture for consecutive five years in the University Main Campus Premises on Turnkey basis (and buy-back of produce) against a guaranteed value for five years under the Concession Agreement

Ref: EOI No.: 347/UBKV/Est/EOI-WD Date: 27/06/2019

Govt. of India has sanctioned the project entitled "Establishment of a Centre of a Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at Uttar Banga Krishi Viswavidyalaya" under the Rastriya Krishi Vikash Yojana (RKVY). The project shall be implemented at the Head Quarter of Uttar Banga Krishi Viswavidyalaya, Pundibari; District: Cooch Behar; State: West Bengal.

Uttar Banga Krishi Viswavidyalaya wishes to develop the Project through the intended Indian organization / agency having due expertise and experience in this field based on the basic requirement of the project as set by the Project Implementation Team of UBKV. The intending agencies need to perform the following activities stated herein such as Hydrological and Soil Testing of the site, construction of infrastructure as per layout plan supplied by the University, bed designing, supply of planting material, planting and management of the unit for consecutive five years and Yearly Sales Right (buy-back of produce) against an annual guaranteed value for consecutive five years. Any other services or work not specifically mentioned herein but required for the proper and successful implementation of the project may also be included.

The Registrar, UBKV, on behalf of the Vice Chancellor of the Uttar Banga Krishi Viswavidyalaya (UBKV), invites **competitive Bid** in Two Bid System (i.e. Technical and Financial Bid) from Non-committal EOI eligible or other reputed, experienced and financially sound Principal Project Company/Farm/Individual (not Consortium body) under the CONCESSION AGREEMENT (CA) of the BOT (Built-Operate-Transfer) modelled Turnkey Project for Implementing Commercialisation of Floriculture Hub in the main campus of the University at Pundibari, District: Cooch Behar, West Bengal. This concessionaire BOT modelled Turnkey Project is to be developed for the academic, research and extension purposes of the University (UBKV).

Work Schedule under this Concession Agreement is stated below:-

Sl.	Tender No.	Phase	Work Description	Completi	EMD (in
No.				on Time	INR.)
				(in days)	
1	614/UBKV/Es t./Tend (WD) Date: 10.12.2020	I	Development of infrastructure and supply of planting material for implementing Commercialization of Floriculture Hub on the 1.48 hectares earmarked free-hold state property of the Pundibari Main Campus of UBKV in accordance with the given Layout Plan. The bidder will execute the entire work on <i>Turn-Key Basis</i> in accordance	150 days	EMD of Rs.2,00,000.0 0 (two lacs) is to be paid to the UBKV through online transfer in the Account - 11323855619
			with the Layout Plan provided by the University.		IFSC – SBIN0000058

Sl. No.	Tender No.	Phase	Work Description	Completi on Time	EMD (in INR.)
2		II	Operation & Maintenance for	(in days) Throughout	Evamption of
2		II	Operation & Maintenance for Production of Gerbera, Orchid (Dendrobium, Vanda and Mokara) and Asiatic lily and others during the concession period i.e. 5 (Five) Consecutive Financial Years, by utilizing developed infrastructure, given to concessionaire under the Concession Agreement. It should be assured that the concessionaire utilizes production and maintenance facilities of this project in such manner that will affarm satisfactory efficiency level of operational production & maintenance facilities at the time of transferring or renewing this concessionaire BOT modeled Turn-key Project.	concessional period	Exemption of EMD may be availed on production of valid certificate
3		III	The concessionaire will enjoy the right to sale of produce of Centre of Floriculture Promotion till the pendency of the Contract against payment of annual commitment fees to the University. Minimum guaranteed commitment value is Rs. 25 (twenty five) lacs per year for 5 (five) consecutive years.	Throughout concessional period of 5 (five) years	

- Interested eligible bidders may obtain further information from the Works Department, UBKV, Pundibari, Cooch Behar, West Bengal -736165 (E-mail: sdey1119@gmail.com) and visit the work site as well as inspect the bidding documents from 10 Dec 2020 to 29 Dec 2020, between 14:00 hrs. to 16:00 hrs on all working days.
- A complete set of bidding documents in English language can be downloaded by the bidders from the website www.ubkv.ac.in. Please note that in case of any discrepancy between the documents downloaded by the prospective bidder and the Bidding Documents (hard copy) of UBKV, Pundibari, West Bengal, India, the latter shall prevail.
- Bidders can download complete set of bidding document from UBKV website: https://www.ubkv.ac.in. Tender Fees of Rs. 2,000.00 (two thousand) is to be paid to the UBKV through online money transfer.
- Pre-bid Meeting will be on 21 Dec 2020 at 14.00 hrs over ZOOM virtual meeting platform. Bidder willing to participate in pre-bid meeting may request for Meeting ID and Password through E-mail to: sdey1119@gmail.com on or before 20 Dec 2020.
- Bids complete in all respect must be delivered to the address mentioned below on or before 14:00 hrs.
 (IST) on 30 Dec 2020. Electronic bidding will not be permitted. Late bids will be rejected. Conditional bids will summarily be rejected.

Registrar

Uttar Banga Krishi Viswavidyalaya Pundibari, Cooch Behar West Bengal-736165 Email: registrarubkvv@gmail.com

Website: www.ubkv.ac.in

• Bids will be publicly opened in the presence of the bidders' designated representatives, who choose to attend in person at the address below at 14:30 Hrs (IST) on 30 Dec 2020.

Administrative Building Uttar Banga Krishi Viswavidyalaya Pundibari, Cooch Behar West Bengal-736165

- Bidders can also participate in bid opening process over ZOOM virtual meeting platform. Bidder willing to participate virtually in bid opening process may request for Meeting ID and Password through E-mail to: sdey1119@gmail.com on or before 29 Dec 2020.
- Bidders willing to participate physically in the bid opening process must contact Works' Department (E-Mail to: sdey1119@gmail.com) on or before 29 Dec 2020. To avoid mass gathering, only one duly authorized person / representative of participating agency will be allowed. Such bidders are required to maintain personal protection measure and social distancing norms of the Government of India and Government of West Bengal and must adhere to Covid-19 containment protocol of the University.
- Interested non committal EOI eligible and other Project Company/Farm/Individual are requested to send their sealed two parts bid documents to the Tender Box No. 1, Central Dispatch Section, O/o the Registrar, Administrative Building, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar 736165 as per ITB and AITB annexed herewith either by post or by hand.
- If the table for compliance statement is not completed and sequentially filled up, technical bid will be considered as invalid. Kindly refer to the University website www.ubkv.ac.in [link: tender] for complete tender details. Delayed bid submission will be summarily rejected.
- The successful tenderer shall have to enter into an agreement with UBKV as per mutually accepted terms and conditions prior to commencement of work.
- Bid Submission End date: 30.12.2020, Bid Submission End Time: 2:00 PM Bid Opening date: 30.12.2020 Bid Opening Time: 2:30 PM, Venue of Bid Opening: Administrative Building, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar-736165, WB.
- Sealed outer envelope containing the documents of technical and financial bid separately in sealed envelopes inside, superscribed with the statement "Not to open before the time of the Bid Opening Date", and concerned Tender Notification No., is to be submitted to the aforesaid tender box within last date and time of bid submission.
- The Registrar, UBKV reserves the right to accept or reject any Bid without assigning any reason whatsoever.

Sd/-

The Registrar Uttar Banga Krishi Viswavidyalaya Pundibari, Cooch Behar-736165, WB

Scope of Work under the proposed Centre of Floriculture Promotion and Entrepreneurship Development

Location of the Unit: Instructional Farm, Faculty of Horticulture, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar, West Bengal, PIN - 736165

Estimated area under the Unit -1.48 hectares (14,804.00 Sq. m.)

The tender should be floated on four aspects simultaneously, namely – a) infrastructure development, b) supply of planting material, c) continuous follow up, monitoring and maintenance of the crop for five years and d) buyback of the produce for that five years. Out of which first two aspects namely infrastructure development and supply of planting material will be covered under PART – I and the rest two aspects will be covered under PART–III and PART – III respectively.

The following aspects should be covered in the total process of the selection wherein the Concessionaire has to conform the stipulations mentioned.

PART - I

The first part of the venture includes the development of infrastructure in such a manner that it should be ready for production of finished products, i.e., the cut flowers for which the funding will be done by the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya.

Infrastructure development includes –

- 1. Construction of components (civil, mechanical and electricalworks)
- 2. Installation of equipment
- 3. Commissioning of equipment
- 4. Functioning of the infrastructure (successful running of the protected structures)
- 5. Bed designing and preparation of beds
- 6. Supply of planting materials of commercial elegant cultivars of Gerbera, Dendrobium, Vanda, Mokara, and Asiatic Lilium from reputed source(s)
- 7. Planting of the same

The components may be included for developing infrastructure –

Sl. No.	Component (ISI Marked & BEE Rated)
1	1.5m wide 'V' drain surrounding the area (14,804.00 Sq. m.)
2	Concertina fencing surrounding the area (14,804.00 Sq. m.)
3	Central concrete / gravel road and internal paths within the total area of 14,804.00 Sq. m. as per the
	layout
4	Flower beds alongside the roads and paths
5	Gates (two Nos)
6	Box culverts (2 Nos)
7	Security point
8	Office cum store cum control room and Garage
9	Electricity (including drawing of cables from the nearest source)
10	Internal electrification
11	CCTV surveillance
12	Central water storage unit with Water Tanks
13	Drip irrigation system for the entire unit
14	Control unit / control room for the drip irrigation
15	Water treatment plant
16	Protected seed beds
17	Protected structures – Polyhouses, Mist propagation unit, shade house and houses for ornamentals
18	Potting cum packing shed
19	Automated official working environment
20	Creation of approved detailed topological structure for internal arrangement of facilities

However, the unit should be developed in such a manner that it will work satisfactorily.

The detailed specifications for activities under the tender is stated in ANNEXURE - I attached herewith.

Bidding will be done as per the following format –

Sl.	Name	of	the	Particular	Offered price
No.	Agency				(Rs.)
1				Development of infrastructure and supply of planting material	
				for implementing Commercialization of Floriculture on	
				the 1.48 hectares earmarked free-hold state property of the	
				Pundibari Main Campus of UBKV in accordance with the	
				given Layout Plan.	

PART - II

The second part of execution of the project activity is the maintenance of the developed infrastructure and cultivation of Gerbera, Dendrobium orchids, Vanda orchids Mokara orchids, and Asiatic Lily under the conditional supervision of the concerned scientists of the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya. Bidding will be required for this activity also. The same bidder developed the infrastructure will be invited to perform the second part of the venture (maintenance of the developed infrastructure and cultivation of Gerbera, Dendrobium orchids, Vanda orchids, Mokara orchids and Asiatic Lily) for the next five years. Within the periphery of the maintenance and cultivation work, the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya possesses the right to conduct small evaluation trials (Research on Growth promoter, growth retardant, plant breeding and propagation without hampering the overall production system) on the crops not exceeding 10% of the total area and farmers' training programme on commercial cultivation and maintenance of the crops, the details of which (the research trials as well as schedule and title of training programmes) will be communicated to the Concessionaire at the beginning of each financial year. The expenditure for the research trials will be met up by the Concessionaire from the amount received from the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya for the purpose of annual maintenance and cultivation of the said crops. Regarding Farmers' Training Programme, the training cost will be borne by the Concessionaire from the amount received from the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya for the purpose of annual maintenance and cultivation of the said crops, and the cost of hospitality of the trainees, resource persons will be borne by the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya from the scope of the project. Besides the above mentioned crops, the Concessionaire will also cultivate Asiatic Lily in an area of 300 m² (cost inclusive of supply of planting material and cultivation of Asiatic Lily) for five years. Cost of amenities (Water supply, uninterrupted Power Supply, data charges, etc. will be borne by the Concessionaire on the basis of actual monthly consumption bill to the Concessionaire Authority i.e. UBKV. Book Adjustment against concessionaire fees is not possible in this regards during the whole project period excluding gestation period of this project. The bimonthly activity report should be submitted to the project authority during the period of maintenance.

Bidding will be required as per the format mentioned below

Sl. No.	Name of the Agency	Particular Particular	Offered price (Rs.)
1		Operation & Maintenance for Production of	
		Gerbera, Orchid (Dendrobium, Vanda and Mokara)	
		and Asiatic lily and others during the concession	
		period i.e. 5 (Five) Consecutive Financial Years, by	
		utilizing developed infrastructure, given to	
		concessionaire under the Concession Agreement. It	
		should be assured that the concessionaire utilizes	
		production and maintenance facilities of this project	
		in such manner that will affarm satisfactory	
		efficiency level of operational production &	
		maintenance facilities at the time of transferring or	
		renewing this concessionaire BOT modelled Turn-	
		key Project.	

PART - III

The third part of this venture includes the buy-back guarantee of the produce to be offered by the same Concessionaire on annual basis through an assured value at the time of submission of tender document based on the production capacity of the infrastructure as well as maintenance by the same concessionaire.

The production capacity of the infrastructure developed (commercial floriculture unit) will be—

ESTIMATED PRODUCTION FROM GERBERA IN A PERIOD OF FIVE YEARS <u>UNIT SIZE – 1008 m</u>²

TOTAL AREA – 1008x4=4032m²

Number of plants $-6000 \text{ per } 1008\text{m}^2 = 6000\text{x}4 = 24000$

Year	No. of flowers per plant	Total Gerbera flowers
First year	36	864000
Second year	36	864000
Third year	36	864000
Fourth year	36	864000
Fifth year	36	864000

ESTIMATED PRODUCTION FROM ORCHIDS IN A PERIOD OF FIVE YEARS

<u>Dendrobium species, hybrids and cultivars UNIT SIZE – 1008 m</u>² Number of plants – 10080 (10 / m²)

Year	No. of spikes per plant	Total orchid spikes
First year	2	20160
Second year	4	40320
Third year	6	60480
Fourth year	8	80640
Fifth year	8	80640

<u>Vanda and Mokara UNIT SIZE – 1008 m</u>² <u>Number of plants – Vanda – 3600 + Mokara – 3600</u>

Year	No. of spikes per plant	Total Vanda spikes
First year	4	14400
Second year	4	14400
Third year	4	14400
Fourth year	4	14400
Fifth year	4	14400
Year	No. of spikes per plant	Total Mokara spikes
First year	2	7200
Second year	4	14400
Third year	6	21600
Fourth year	8	28800
Fifth year	(21600

ESTIMATED PRODUCTION FROM LILIUM IN A PERIOD OF FIVE YEARS UNIT SIZE – 300m² **Number of plants** – **6000**

Year	No. of spikes per plant	Total Lilium spikes
First year	1	6000
Second year	1	6000
Third year	1	6000
Fourth year	1	6000
Fifth year	1	6000

Compensation for using right of developed infrastructure and sales right of finished products:

Generally, the concessionaire fees, as a compensation for using leasehold property right of developed infrastructure will be compensated by the concessionaire on the basis of yearly gross turnover of this project during the whole concessionaire period of this project (five consecutive years after creation of the facility). The yearly guaranteed concession fees will be deposited by the successful bidder in the account of the Uttar Banga Krishi Viswavidyalaya at / before the beginning of each financial year. The minimum guaranteed such yearly fees will be given on yearly basis of Rs. 2500000/- (Rupees twenty five lakh only) per year for all the five years and a bank guarantee of the same amount (which will be finalized after tendering process) must be maintained throughout the period of this turnkey project.

The bidding for this part should be done as per the format presented below –

Sl. No.	Name of the concern / agency / company with address	Minimum Reserve Price (Rs.) per year	Offered value by the concern / agency / company (Rs.)
		25,00,000.00 (Rupees twenty five lakh) per year	

BID SUBMISSION FORM

To	
The Registrar	
UTTAR BANGA KRISHI VISWAVIDYALAY	Ϋ́A
(State Agriculture University under the Departm	nent of Agriculture, GoWB)
PUNDIBARI, COOCH BEHAR, WEST BENC	GAL, PIN CODE-736165)
& Maintenance for consecutive five y	For Implementation (Infrastructure Development), Operation years and buy-back of produce for consecutive five years of University Main Campus Premises on Turnkey basis under Pundibari."
Dear Sir,	
After examining / reviewing of "	the Bidding Documents for the tender including "Specifications & Scope of Work", "Eligibility ions of Contract [GCC]", "Special Conditions of Contract Assurance & Testing" and "Scope of Works [SOR]" etc. the we, the undersigned, are pleased to offer to execute the whole Bid Documents, including Addenda / Corrigenda Nos
Commercial / Un-priced Bid", and it shall remark expiry of that period. If our Bid is accepted,	eriod as specified in BDS from the date of opening of "Technomin binding upon us and may be accepted by any time before the we will provide the "Contract Performance Security / Security or as mentioned in Tender Document for the due performance "Letter of Intent" received.
	rd is prepared and executed, the tender document (including cation of Award" shall constitute a binding Agreement between
date of commencement of work. We shall assurthe period between the date of "Letter of Co	cement work schedule, as mentioned in the "LOA", before the re that total pre- commencement work will be completed within onsent" (LOC) and 3 (three) working days before the date of farm that after getting "Letter of Permission for Commencement ander this Concessionaire Agreement.
Bidding Documents but may be inferred to be deemed to be mentioned in Bidding Docume	is not exhaustive and any action and activity not mentioned in included to meet the intend of the Bidding Documents shall be nts unless otherwise specifically excluded and we confarm to pleteness of the Work in all respects within the time frame and
We understand that you are not bound to	accept the lowest priced or any Bid that you may receive.
Place:	[Signature of Authorized Signatory of Bidder]
Date:	Name:
	(IN BLOCK LETTER)
	Designation: Seal:

INSTRUCTIONS TO BIDDER (ITB)

Part - I: Preparation and Compliance

- (1) The tender be sent in a sealed packet containing two separate sealed envelopes (one each for technical bid and price bid) along with prescribed tender fee and Earnest Money Deposit (EMD), duly superscribed with tender notice no. 614/UBKV/Est./Tend (WD) *dated:*10.12.2020 & to the office of the Registrar, UBKV, Pundibari 736165 on or before 30.12.2020 by 2.00PM.
- (2) Acknowledge Phase wise General Terms & Conditions as stated in the Bid documents
- (3) Acknowledge Phase wise Special Terms & Conditions as stated in the Bid documents
- (4) Prepare EMD details as per submission
- (5) We are exempted from Customs Duty, Octroi, Entry Tax etc.; Necessary Certificate will be issued by us, if required. Please quote accordingly.
- (6) Please indicate the applicable GST percentage & HSN code clearly in the GST Invoice, raised by the Concessionaire of this project time-to-time during the whole period of this approved turn key project.
- (7) Please keep and confirm the offer validity minimum 180 days from the date of opening of tender.
- (8) Confirm warranty for minimum 5 (five) years from the date of receipt & acceptance of items, to be installed in the concerned turnkey project.
- (9) Confirm submission of PBG @ 5 (five) % of order value for Performance security in the stipulated form, within 28 days from the date of acceptance of "Letter of Intent". Without submission of PBG, no agreement in connection with this Turnkey Project will be materialized.
- (10) In a Tender, either the Indian agent on behalf of the Principal Service Provider Organization themselves can bid, but both cannot bid simultaneously for the same item/product bid on behalf of another Principal Service Provider Organization in the same tender for the same item/product.
- (11) UBKV, on behalf of Vice Chancellor, UBKV, has the right to cancel the tender without assigning any reason thereof.

Procedure of submission of Bid

- (1) Bid document may be downloaded from the university website i.e. www.ubkv.ac.in.
- (2) The bidder shall complete the offline bid form and the appropriate Price & Offered Concessionaire fees schedule furnished in the offline sealed bidding documents, indicating, inter alia for the project to be constructed, a brief phase-wise description of this turnkey project, place of origin, quantity and prices and all other relevant certificates, formats, declaration, returns, etc. as stated in this tender documents. Any written query against bid documents may be raised by the bidder before one day of the Pre-bid Meeting date either on or off line. Once submitted offline, re-submission, any modification are to be allowed before the offline final submission of bid documents. Offline written bid withdrawal proposal should be reached to the Tendering Authority on or before the date of offline bid closing session. After such closing, withdrawal of proposal cannot be acknowledged. Proof of EMD submission must be attached to the Techno-Commercial Bid ONLY and NOT to the Financial Bid. Bids received without EMD will be rejected. Non-compliance of the above may disqualify your offer for consideration.

INSTRUCTIONS TO BIDDERS:

Part-II (For Bid Submission)

1. Bid document, complete in all respect, as per given format has to be submitted. Incorrect and incomplete documents shall not be accepted.

2. Bid should be enclosed with the following Credential documents-

1 Bidder Name (in Block Letter)	SI.	Description	Criteria
Status of Prospective Bidder Proprietorship Farm / Partnership farm / Limited / Others if Others please Specify: [Enclose Certificate of Registration] /// (No consortium is entertained) Name of Proprietor/Partners/Directors of the farm / Company (in Block Letter) Number of Years in Operation of Similar Type of Business	_		
Same of Proprietor/Partners/Directors of the farm / Company (in Block Letter)	1		
Name of Proprietor/Partners/Directors of the farm /company (in Block Letter) Number of Years in Operation of Similar Type of Business	2	Status of Prospective Bidder	farm / Limited / Others If Others please Specify: [Enclose Certificate of Registration]
A Number of Years in Operation of Similar Type of Business 5 Address of Registered Office: (Head Office) *In case of Partnership farm, enclose letter mentioning current address of the farm and the full names and current addresses of all the partners of the farm. 6 Bidder's Communication Address where order/contract is to be placed 6 Bidder's Communication Address where order/contract is to be placed 6 District City/Town/Village District State PIN/ZIP Code Ph. No. (official) Mob. No.(if any) E- mail address Web Site(if any) City/Town/Village District State PIN/ZIP Code Ph. No. (Official) Mob. No. (if any) E- mail address (if any) The provided by Site (if any) Whether bidder is ISO 9000 company Whether bidder is ISO 9000 company Wes / No. Whether bidder is ISO 9000 company Solvency Certificate from Bank The part of Business Address of Registration Po. (if necessary) [Also, Enclose copy of PAN Card] [Also, Enclose copy of FPF Registration Certificate] [Also, Enclose copy of relevant document]	3		(No consordam is entertained)
(Head Office) *In case of Partnership farm, enclose letter mentioning current address of the farm and the full names and current addresses of all the partners of the farm. State PIN/ZIP Code Ph. No. (official) Mob. No.(if any) E- mail address Web Site(if any) 6 Bidder's Communication Address where order/contract is to be placed City/Town/Village District State PIN/ZIP Code Ph. No. (official) Mob. No.(if any) E- mail address (Filter of the farm) 7 Whether bidder is ISO 9000 company Whether bidder is ISO 9000 company Tes, Bidder to submit requisite certificate as provided by ISO) 8 Bid Currency 9 Solvency Certificate from Bank 10 PAN No. [Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of FPR Registration Certificate] [Also, Enclose copy of relevant document]	4	Number of Years in Operation of Similar Type of Business	
letter mentioning current address of the farm and the full names and current addresses of all the partners of the farm. District	5		
farm and the full names and current addresses of all the partners of the farm. State PIN/ZIP Code Ph. No. (official) Mob. No.(if any) E- mail address Web Site(if any) 6 Bidder's Communication Address where order/contract is to be placed District State PIN/ZIP Code Ph. No. (official) Mob. No.(if any) E- mail address (if any) Ph. No. (official) Mob. No. (if any) E- mail address (if any) 7 Whether bidder is ISO 9000 company Wes / No. (if any) Fer mail address (if any) Yes / No. (if yes, Bidder to submit requisite certificate as provided by ISO) Bid Currency Solvency Certificate from Bank 10 PAN No. Also, Enclose copy of PAN Card] 1 EPF Registration No. (if necessary) Also, Enclose copy of EPF Registration Certificate Also, Enclose copy of relevant document			
PIN/ZIP Code Ph. No. (official) Mob. No.(if any) E- mail address Web Site(if any) 6 Bidder's Communication Address where order/contract is to be placed City/Town/Village District State PIN/ZIP Code Ph. No. (Official) Mob. No.(if any) E- mail address (if any) 7 Whether bidder is ISO 9000 company Whether bidder is ISO 9000 company 8 Bid Currency (if yes, Bidder to submit requisite certificate as provided by ISO) NR only (₹.) 10 PAN No. Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of GST Registration Certificate] Also, Enclose copy of FPF Registration Certificate [Also, Enclose copy of relevant document]		farm and the full names and current	
Ph. No. (official) Mob. No.(if any) E- mail address Web Site(if any) 6 Bidder's Communication Address where order/contract is to be placed City/Town/Village District State PIN/ZIP Code Ph. No. (Official) Mob. No.(if any) E- mail address (if any) 7 Whether bidder is ISO 9000 company 7 Whether bidder is ISO 9000 company 8 Bid Currency Wes / No. (If Yes, Bidder to submit requisite certificate as provided by ISO) 8 Bid Currency INR only (₹.) 9 Solvency Certificate from Bank 10 PAN No. [Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of EPF Registration Certificate] 12 EPF Registration No. (if necessary) [Also, Enclose copy of EPF Registration Certificate] [Also, Enclose copy of PAN Card] [Also, Enclose copy of EPF Registration Certificate]		addresses of all the partners of the farm.	
Mob. No. (if any)			
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Web Site(if any)			
Bidder's Communication Address where order/contract is to be placed District State PiN/ZIP Code			Web Site(if any)
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Mob. No. (if any) E- mail address (if any) 7			
E- mail address (if any) Whether bidder is ISO 9000 company Yes / No (If Yes, Bidder to submit requisite certificate as provided by ISO) Results of INR only (₹.) PAN No. Also, Enclose copy of PAN Card] Cardinates Also, Enclose copy of GST Registration Certificate E- mail address (if any) Yes / No (If Yes, Bidder to submit requisite certificate as provided by ISO) INR only (₹.) Also, Enclose copy of PAN Card] EPF Registration No. (In In I			
7 Whether bidder is ISO 9000 company Yes / No (If Yes, Bidder to submit requisite certificate as provided by ISO) 8 Bid Currency INR only (₹.) 9 Solvency Certificate from Bank 10 PAN No. [Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of GST Registration Certificate] 1 EPF Registration No. (if necessary) [Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]			
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9 Solvency Certificate from Bank 10 PAN No. [Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of GST Registration Certificate] 1 EPF Registration No. (if necessary) [Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]	7	Whether bidder is ISO 9000 company	(If Yes, Bidder to submit requisite certificate as provided by ISO)
10 PAN No. [Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of GST Registration Certificate] 1 EPF Registration No. 2 (if necessary) [Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]			INR only (₹.)
[Also, Enclose copy of PAN Card] 11 GST No. [Also, Enclose copy of GST Registration Certificate] 1 EPF Registration No. 2 (if necessary) [Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]	9	Solvency Certificate from Bank	
11 GST No. [Also, Enclose copy of GST Registration Certificate] 1 EPF Registration No. (if necessary) [Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]	10	PAN No.	
[Also, Enclose copy of GST Registration Certificate] 1	11	CST No	[Also, Enclose copy of PAN Card]
1 EPF Registration No. 2 (if necessary) [Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]		GOT INU.	[Also, Enclose copy of GST Registration Certificate]
[Also, Enclose copy of EPF Registration Certificate] 13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]			
13 ESI code No. (if necessary) [Also, Enclose copy of relevant document]	2	(if necessary)	[Also, Enclose copy of EPF Registration Certificate]
[Also, Enclose copy of relevant document] 14 Whether Micro / Small / Medium	13	ESI code No. (if necessary)	
14 VVIIculei WICO / SITIAII / Wediditi	11	Whother Micro / Small / Medium	[Also, Enclose copy of relevant document]
	14	whether who / Small / wedum	

	Enterprise (Udyog Aadhar Memorandum No.)	(Bidder to submit documents as specified it ITB)
15	Type of Entity	Corporate/ Non-Corporate (As per CGST/SGST/UTGST Act 2017). (In case of Non-Corporate Entity, bidder will submit documentary evidence for same).
16	Whether bidder posses NPOP/NOP standards for offered products (if any)	Yes / No (If Yes, Bidder to submit requisite documents as certified by the APEDA on offered product)
17	Whether bidder is in position to give assurance to provide ISI marked & BEE Star Rated Machines/Equipments or equivalent installed for developing infrastructure of this turnkey project (if any)	Yes / No (If Yes, successful concessionaire will have to submit requisite documents as certified by the ISI & BEE on installable machines/ equipments at the time of concerned in- house quality testing)
18	Whether bidder complies ISO 14020 for environmental protection formalities (optional)	Yes / No (If Yes, Bidder to submit requisite certificate as provided by ISO)

- Phase-wise Bid documents, consists of Technical Specification, Online Transfer Document for EMD and bid security, all other related written & duly signed documents, certificates, returns, formats, declarations, as stated in this tender document are to be put into a sealed envelope, which will be super/subscribed in the Bid Tender title Techno Commercial Documents against Notification another envelope which will be super/subscribed in the title "Financial Bid Documents against Tender envelope, which will be super/subscribed in the statement "Not to open before the time of the Bid Opening Date", and concerned Tender Notification No. etc. boldly.
- 4. The tender shall be submitted in accordance with these instructions and any tender not conforming to the instructions as above is liable to be rejected. These instructions shall form the part of the tender and the contract.
- 5. All information useful for submitting the offline bids is available/obtained at www.ubkv.ac.in
- 6. Incorrect or incomplete tender shall be liable for summarily rejection.
- 7. All movable and erectable infrastructural items should be delivered in terms of FOR at UBKV, Pundibari, Cooch Behar, Pin-736165 and the concessionaire shall be responsible for any damage during the transit of goods.
- 8. The papers of all high-end instruments including warranty card will be prepared in the name of Uttar Banga Krishi Viswavidyalaya and handed over to the University during hand over of the infrastructure at the end of Phase I.
- 9. All the tender documents & Price bid to be enveloped as per this NIT are to be signed by the bidder.
- 10. Interested bonafide and reputed principal service provider / Indian agents (on behalf of their foreign principals) will submit offline bids for this turnkey project along with all requisite documents and copy of online EMD submission reference
- 11. The Bidder(s) may note that OFFLINE BIDS will ONLY be accepted. All the requisite supporting documents mentioned in the bid document should and must be submitted to the Tender Box No.1, placed at the Central Dispatch Section of Registrar Office, Administrative Building, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar-736165,WB within the last date of submission of this tender. The Bids sent through post arrived within the last date of submission of tender shall be accepted/processed, in any case.
- 12. In case, holiday is declared by the Government on the day of opening the bids, the bids will be opened on the next working day at the same time.
- 13. Belated submission of bid shall not be accepted.
- 14. Bidder's eligibility for attending pre-bid meeting is the money receipt/ bank challan of tender fees of the Tender published vide Ref. No. 614/UBKV/Est./Tend (WD) Date: 10.12.2020
- 15. Bidder will have to declare that before commencement of yearly production activities under this concessionaire agreement, Maintenance Schedule of Developing Infrastructure is to be certified by the Concessionaire Authority i.e. UBKV.
- 16. Cost of power consumed by the unit shall be separately payable by the agency on actual basis.
- 17. Contract Agreement Documentation:

The sequence of contract agreement documentation is given here under:

- 1. Issuance of Letter of Intent (LoI) by owner and its unconditional acceptance by the bidder within four weeks from date of issuance of LoI
- 2. Mutual agreement on PERT Chart / Project Execution Plan duly signed and accepted by turnkey contractor and Employer within two weeks from date of acceptance of LoI
- 3. Submission of Contract Performance Security, within 21 days from date of LoI, against concessionaire agreement contract
- 4. Letter of Award (LoA) by owner and its unconditional acceptance by the bidder. Letter of Award shall be issued only after mutual agreement & acceptance on PERT Chart / Project Execution Plan and on timely submission of Contract Performance Security against concessionaire agreement contract. The letter of acceptance of award should be provided within 2 weeks from date of issue of Letter of Award

18. LoA shall include details of

- Pre-bid discussion
- Post-bid negotiation/discussions (if any)
- PERT Chart / Project Execution Plan
- Contract Performance Guarantee
- Tentative Installation & Commissioning Date & Time Schedule
- Operational & Maintenance Budget for Gestation Period
- Name, Designation & Qualifications of the Nodal Officer of the Concessionaire,
- BG for Concessionaire Fees and
- Comprehensive Maintenance Policy for all Installable and Commissionable Machines, Vehicle, Equipments etc.

Note: Contract Agreement shall be signed, on unconditional acceptance of Letter of Award by turnkey contractor, within 14 days from date of issue of Letter of Intent and submission and acceptance of contract performance guarantees (against concessionaire agreement contract).

19. Signing the Contract Agreement:

At the same time as the Employer notifies the successful Bidder that its bid has been accepted through Letter of Award, the Bidder in consultation with the Employer will prepare the Contract Agreement provided in the Bidding Documents, incorporating all agreements between the parties. On unconditional acceptance of Letter of Award, contract agreement shall be signed on submission and acceptance of contract performance security within 2 weeks from date of issue of Letter of Intent.

ELIGIBILITY CRITERIA OF BIDDER

The bidder must have sufficient credential to develop similar kind of units, maintenance of the units and capable to produce sufficient Return on Investment (ROI) for refunding guaranteed yearly concession fees to any state Government / Central Government / Governmental organizations of Central or State / Reputed International Organizations showing end to end solutions.

The following eligibility criteria of interested bidder are needed for submission for bid against Ref. No. 614/UBKV/Est./Tend (WD) Date: 10.12.2020 ☐ Project Company/Farm/individual or their Authorized dealers are eligible to participate in thetender. ☐ Authorized Representatives: Bids of bidder quoting as authorized representative of a Original Project Company/Farm/Individual would also be considered to be qualified, provided: ☐ Their Original Project Company/Farm/Individual meets all the aforesaid criteria without exemption, and the Project Company/Farm/individual furnishes a legally enforceable tender-specific authorization assuring full guarantee and warranty obligations as per the general and special conditions of contract; and the bidder himself should have been associated, as authorized representative of the same or other Project Company/Farm/individual for same set of services as in present bid (Construction of Properties, Production & Maintenance, Sales & Marketing, Transferring used Properties at satisfactory efficiency level as the case may be) for same or similar 'Product' for past five years ending on 31st March, 2020. ☐ Signed and photocopy of valid copy of Farm/Company Registration/Incorporation Certificate. ☐ Signed and photocopy copy of GST Registration and proof of latest quarter GST returns filed copies by the participating Bidder Farm / Company. ☐ Signed and photocopy copy of PAN Card in the name of Farm/Company. ☐ Signed and photocopy copy of certification from CA as a proof for filling Income Tax Return of the bidder farm/company for the last three financial years (i.e., Financial Years-2017-18, 2018-19 and 2019-20). ☐ Signed photocopy / copies of certification from CA as a proof for turnover for last three Financial Years (i.e. Financial Years-2017-18, 2018-19 and 2019-20). The Turnover of the Bidder Company/Farm for participating in this open Tender Enquiry must be more than **Rs.3.00 crores.** For thispurpose a photocopy / copy of letter duly certified by the Chartered Accountant / Company Secretaryfor clearly mentioning the above three financial year's turnover figures must be submitted for necessary references by the bidder. ☐ The bidder must have sufficient credential to develop similar kind of units, maintenance of the units and buyback of produce funded by any state Government / Central Government / Governmental organizations of Central or State / Reputed International Organizations showing end to end solutions. ☐ List of Name of the Organizations and their contact details where the similar nature turnkey projects previously conducted by him as asked in Scope of Work against this Tender Enquiry by any interested bidder for Bidding products to any Government Marketing Agency/Institute/PSU's/Other reputed Institutions in India in Last Three Financial Years (i.e., 2017-18, 2018-19 and 2019-20) must require to be submitted during the pre-bid meeting. ☐ The bidder (Project Company or principal of authorized representative) should have regularly for at least the last three years, ending 31st March 2020 produced/supplied the product mentioned in the Scope of Work of this concessionaire turnkey project(BOT modelled). ☐ The bidder' should have produced/supplied at least **five** of product mentioned in the Scope of Work in at least one of the last three years ending on 31st March 2020 and out of which at least three numbers of offered project of the quoted product/s should be in successful operation for at least two years on the date of bid opening. ☐ Signed and attested legible photocopy /copies of at least three numbers of previous similar working experience for each of participating product concerned, which has been supplied to various reputed Government Organization / Institutions / PSU's / Other reputed Organization / Institutions in India in last Three Financial Years in Chronological Order from FY-2017-2018 to FY-2019-2020 for pre-qualification bid evaluation purpose. □ Signed and attested photocopy of the authorization Letter in the name of Authorized Person allowed by Proprietor / Owner to sign the documents in case the owner/proprietor is not signing the tender document. ☐ Signed and photocopy of duly filled PFMS Form of UBKV, Pundibari □ Documents for execution of such project of a minimum of Rs.10000000/- (Rupees one crore only) in the last three years must be furnished. ☐ The agency may have its own similar kind of infrastructure on commercial basis. ☐ Signed copy of Check list of documents must be submitted.

☐ List of Key Personnel of the Bidder's organization, who have sufficient experience in the similar type of

	concessionaire business along with their qualifications and contact details as mentioned in the Special Terms
	& Condition of this tender document. If the bidder acquired quality assurance certificate (e.g. BIS, BEE,ISI, ISO-9000, ISO-14020 etc.) of his
Ш	business, similar to the business of this turnkey project from the Different Government Certification
	Body/ies during the last three years, then such certificates are to be attached with the techno-commercial bid
	documents
	Bidder should declare that Bidder's Nodal Officer will provide all operational reports to the Concessionaire
	Authority within stipulated time frame, as provided by this Authority time-to-time during the whole period of
	concessionaire turnkey projects for the purpose of fulfillment of overall objectives of this turnkey project.
	Bidders should provide last three years Final Accounts (Balance Sheet and Profit & Loss Account) as per
	respective assessment year IT returns of similar business activities.
	The contractor shall ensure that Nodal Officer from his organization is assigned exclusively for this project.
	They shall have minimum 5 years experience in this type of installation and shall ensure at least one full
	time engineer, as a Nodal Officer who would be exclusively responsible for ensuring strict quality control,
	adherence to specifications and ensuring top class workmanship for the machines & equipments installation
	including electrical works and controls. The names and details of the Service Provider Engineer(s) proposed
	to be deployed should be indicated along with their qualifications and experience. The contractor shall
	arrange to have mechanized & modern facilities of transporting material to place of installation for speedy
	execution of work.
	The offer should be valid for six months or 180 days from the date of opening of the technical bid. In case
	the finalization of the tender is delayed, the Tenderer will be asked to extend the same without any change of
	terms and conditions of the offer. If any change is made, during the original or the extended validity period,
	the offer will be liable for outright rejection without entering into further correspondence in this regard and
	no reference will be made in this regard.
Ш	The Tenderer should submit attested copy of Board Resolution of company or Power of Attorney
	authorizing particular person to sign tender and related documents.
_	The tenderer needs to submit the document for participation in Expression of Interest (optional)
Ш	The Tenderer shall be deemed to have satisfied himself with all the conditions and circumstances affecting
	the prices and the possibility of executing the work. All the Tenderer are requested to duly fill all information as stated in the aforesaid "Bio Data Sheet of
	Bidders". In case the representative is changed during the course of execution of this concessionaire contract
	such changes shall be notified by the successful Tenderer, failing which UBKV shall not accept any
	responsibility.
П	The Tenderer shall specifically note that any over writing or corrections or manuscript in the bid shall be
	ignored and will not be considered authentic unless the same are signed with tenderer's Stamp/Seal.
П	In case of any doubt on interpretation of the terms and condition, the decision of the UBKV will be final and
	binding upon the Tenderer and no dispute in this regard will be entertained.
	The agency must have its own similar kind of infrastructure on commercial basis.
	NOVED A CHARGE CODE WITH CARE
	NON BLACKLISTING CERTIFICATE
	[To be submitted on letterhead of bidder]
	I/We hereby certify that the [Name of the company / farm] has not been ever blacklisted/debarred by
an	y Central/ State Government / Public Undertaking / Institute on any account.
1	I/We also certify that farm will supply the item as per the specification given by UBKV, Pundibari and

also abide by all the terms and conditions stipulated in the Concessionaire Contract.

I/We also certify that the information given in bid is true and correct in all aspects and in any case at a later date it is found that any details provided are false and incorrect, contract given to the concern farm or participation may be summarily terminated at any stage, the farm will be blacklisted and UBKV Pundibari may impose any action as per NIT rules.

Date:	The Bidder:
Place:	Name of the Bidder:
	Business address:

PROCESS OF SELECTION

Two way bidding system will be implemented. The first one will be technical bid document containing essential and desired documents and credentials. Technical bid contains all mentioned techno-commercial documents and documents for participation in Expression of Interest. Eligible bidders in technical bid will be eligible for financial bid. Financial bid evaluation will be done on 100 marks basis. Weightage will be given in every step of activity following this manner –

NAME OF THE CONCERN/ AGENCY/ COMPANY

Sl. No.	Item	Allotted marks	Gradation	Marks scored
1	Evaluation of Technical Bid document (techno-commercial documents and documents for participation in Expression of Interest)	NIL	Eligible / Not Eligible	NIL
2	Evaluation of financial bid document	100		
(i)	Cost of (Development of infrastructure + Bed designing + Supply of Planting Materials + Planting)	40	The lowest bidder (L1) will get 40 marks and subsequently it will be reduced by 0.5 mark for higher quotation upto a difference of each one lakh	
(ii)	Cost of Operation & Maintenance of built up facility of the Turnkey Project at satisfactory level for five years	20	The lowest bidder (L1) will get 20 marks and subsequently it will be reduced by 0.5 mark for higher quotation upto a difference of each one lakh	
(iii)	Yearly Guaranteed Concession Fees from Operation of this turnkey project for five years from the date of commencement of commercial operation	40	The highest bidder (H1) will get 40 marks and subsequently it will be reduced by 0.5 mark for lower quotation upto a difference of each one lakh and it will be considered upto Rs.25 Lakh. Bidding of less than Rs.25 Lakh will get no score	
	Grand total of allotted / secured marks	100		

The cumulative points of financial bid [Number (i) + Number (ii) + Number (iii) = 100] will be considered for ranking of interested agencies.

FORMAT FOR TECHNO-COMMERCIAL BID

Item details and technical specification as mentioned below:

SI. No	Item Description	Qty.	Compliance Yes/No	Deviations, if any
1.	Technical Specification Attached as Annexure- I (Bidder should submit in compliance matrix)			To be mentioned with the compliance matrix
2.	Whether acknowledge the Terms and Conditions of this NIT and submit such acknowledgement along with the other technical bid documents			
3.	Warranty: The period (three years) of the Comprehensive warranty from the date of installation & acceptance			
4.	Installation: Certified that Farm should install the Plant & Machineries at UBKV within150 days from the date of delivery (FOR basis)			
5.	Farm must have capability for uninterrupted supply of spares, accessories for a period of 10 years (120 months) from the date of acceptance to avoid any operational problem due to obsolesce or any other reason.			
6.	AMC/CMC: Farm should quote for AMC /CMC charges after expiry of the warranty period. (Related Offer should be attached herewith for Tender Authority's consideration. It is to be noted that this offer is not optional for successful concessionaire)			
7.	INSTALLATION: Farm will install and commission the Plant & Machineries free of cost. It is to be assured that All machine/Plant & Machineries/ devices should be installed after complying all necessary provisions of NIT			
8.	DELIVERY of Plant & Machineries: Within 45 days from the date of order. Delivery of infrastructure (immovable): Within completion period			
9.	TRAINING: Farm will impart training to all lab staff and students free of cost			
10.	PRE-DISPATCH- Farm should arrange the pre dispatch inspection prior to packing & dispatching of the item. Farm should share the entire detail of the Plant & Machineries/Machine with images, manual, and schematic diagram before packing.			
11.	AFTER SALES SERVICE: Farm should ensure to provide after sales service, as & when required basis			
12.	AVAILIBILITY OF SPARE PARTS: Farm should Ensure the availability of spare parts for at least 10 years.			
13.	SCHEMATIC DIAGRAM: Farm should share the schematic diagram along with the technical bid			
14.	PROJECT CATALOGUE: Farm should submit detailed specification and catalogue of the similar type of turnkey project, which were successfully Performed previously.			
15.	PREVIOUS ORDER COPIES: Farm should share the previous order copies issued by anyGovt. / Autonomous Educational/Research Institute. The list of Plant & Machineries installed at various institutes with contact details should be shared.			
16.	Assure to submit the details of Key Human Work Force along with their qualification and experience			
17.	Whether BG will be provided by the Bidder for assuring yearly guaranteed concessionaire fees			

SI. No	Item Description	Qty.	Compliance Yes/No	Deviations, if any
18.	Whether Indemnity Bond will be provided by the Bidder for assuring payment on the cost of replacement of the different parts of Plant & Machineries in the event of transferring the Project Assets to the UBKV at the end of the concessionaire period of this turnkey project.			
19.	Whether all bank details is to be attached in a stipulated format and submitted the same with technical bid documents			
20.	Whether understand the bid evaluation process after go through this NIT judiciously			
21.	Whether all latest reports, certificates, returns, licenses, patent rights (if any), declarations, undertaking etc. are to be submitted along with this technical bid documents as per the ITB & AITB of this NIT			
22.	Whether Bio-Data Sheet of Bidders has been filled judiciously and no blank place is leftover			
23.	Whether non-blacklisting declaration has been submitted by the bidder along with this technical bid documents			

ADDITIONAL INSTRUCTION TO THE BIDDER

- a) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- b) Please go through the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers (tender system) in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviation from the same may lead to rejection of the bid.
- c) Bidder should submit the standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) with Techno-Commercial bid.
- d) The soft copy of the submitted tender document should be provided in a CD/DVD.
- e) The bidder has to manually sign and submit the required bid documents one by one as indicated in the tender document.
- f) Bidders are requested to note that they should necessarily submit their financial bid in the format provided and no other format is acceptable.
- g) All the documents being submitted by the bidders would be sealed & signed to ensure the secrecy of the data.
- h) The submitted tender documents become readable only after the tender opening by the authorized bid openers.
- i) Kindly add all relevant documents in a single cover file of compliance sheet.
- j) Intending applicants are required to submit their proposal giving details about their organization, experience, technical personal in their organization, proven competence to handle similar major works, etc.
- k) The prospective applicant should visit the work site to understand the nature and scope of work with prior intimation to UBKV authority, Pundibari, Cooch Behar, West Bengal.
- 1) Transfer of Property will be made after completing the Concessionaire Period of this Turnkey Project after getting "Letter of Completion of the Project" from the Concessionaire Authority (CA) i.e. UBKV. All incidental cost in relation with this transfer will be borne by the concessionaire, itself. Process of Transfer should be completed within 28 days from the date of acceptance of the "Letter of Completion of the Project".
- m) If the prospective Bidder finds discrepancies or omissions, in specifications and document or is in doubt as to the true meaning of any part, he shall at once make a request, in writing, for an interpretation/clarification, to UBKV at it's mailing address indicated in Bidding Documents.
- n) Similarly, if a Bidder feels that any important provisions in the documents, such as Governing laws, Taxes and Duties, Defect Liability, Limitation of Liability, Settlement of Disputes, Arbitration, Form of Contact Agreement, Price Adjustment, Bid Guarantees, Contract Performance Guarantee, Compensation for Delay, Payments Terms, Schedule of Execution/Completion of works, will be unacceptable, such an issue should be raised before pre-bid meeting. UBKV, then, will issue interpretation(s) and clarification(s) as he may think fit or modification of the Bidding Documents within 3 working days after the pre-bid meeting. The UBKV shall not oblige to respond to any request for clarification received later than the above period. Further, mere request for clarification received from the Bidder shall not be a ground for seeking extension in the deadline for submission of bids. Written copies of UBKV's response (including an explanation of the query but not identification of its source) will be sent to all prospective bidders that have received the Bidding Documents from the Tendering Authority of UBKV under amendment or addendum.

Note: Verbal clarification and information given by UBKV or his employee(s) or his representative(s) shall not in any way be binding on UBKV.

TERMS AND CONDITIONS

1. INVITATION to TENDER:

In response with the NIT ref. no.....

the big sealed cover, marked with of Turnkey Project entitled "Establishment of a Centre of Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at 1.48 Hectares earmarked Freehold State Property of Main Campus of the Uttar Banga Krishi Viswavidyalaya" under the Rastriya Krishi Vikash Yojana (RKVY) containing the TWO separate envelopes (1) EMD and tender fee cover, (2) Technical Bid cover should be submitted with each marked "Tender Official Documents" with a reference number and name of the NIT (document) and clear identification of the contents of the envelop i.e. "EMD & Tender fee" & "Technical Bid" to the Tender Box No. -1, Central Dispatch Section, O/o the Registrar, Administrative Building, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar-736165.

(A) EMD and Tender fee Cover:

The EMD Cover should contain the documents for online payment of EMD and Tender form Fees. The tender submitted without payment of EMD shall be rejected.

(B) Technical Bid Cover:

Technical bid cover should contain original copy of all documents in compliance with the ITB and all related instruction, declaration, duly filled stipulated formats as disclosed in this tender document along with letter of submission of tender documents within the last date of submission at aforesaid address

(C) Financial Bid:

Financial Bid should contain only rates/prices of each component of this BOT modeled Turnkey Project including all taxes (GST, BCD etc.) and Offering value of Guaranteed Yearly Concessionaire Fees of this Turnkey Project as per stipulated formats. It may be noted that Financial Bid will be submitted only through manual open tender process in physical form and any such offer if received beyond the last date of submission of the techno-commercial documents shall be rejected.

2. THE TENDERING PROCESS:

This tender is being invited through two bid process system. The physical tender should be submitted duly signed and sealed by the Tenderer on each page of the offer. The Tenderer shall submit all the sets of their complete offer in the same sealed envelope. These shall be the legible copies and duly bound. Physical copies of Technical Bid Cover with documents for deposit of EMD along with the tender fees Cover should reach UBKV between date and time shown in the aforesaid Event Date Schedule of Tender.

3. AMENDMENT OF TENDER:

At any time prior to the due date of opening of tenders, UBKV may for any reason either on its own initiative or in response to a clarification requested by Tenderer, modify the Tender conditions and specification by amendment. The UBKV may also modify the time frame and may extend the date of final submission if required.

4. EARNEST MONEY DEPOSIT:

- EMD will be forfeited if the particular offer is rejected by UBKV for any violation of tender terms.
- EMD of the unsuccessful bidders will be returned after placement of order with the successful Tenderer.
- No interest will be payable on EMD.
- In case of any dispute, EMD will not be returned until the settlement of dispute.
- EMD of successful Tenderer will be returned once the successful bidder submits the Performance Security in form of Bank Guarantee.

5. EFFECT AND JURISDICTION OF CONTRACT:

The contract/contracts shall be considered as having come into force from the date of issue of order/orders, which is/are accepted by the Contractor/contractors. The laws applicable by the contract shall be the laws in force in India. The court of Cooch Behar will have the Jurisdiction of all the matters arising under this contract / these contracts.

6. AGREEMENT BOND:

The successful Tenderer only shall be given Performa of Agreement. The agreement should be executed within time limit with the Performance Security Deposit. Related stamp duty fees for such agreement is to be borne by the bidder as per West Bengal Stamp Duty Act and any amendment thereof time-to-time.

7. PERFORMANCE SECURITY DEPOSIT:

The Concessionaire shall for due and punctual performance of obligations during the Project Construction, Implementation and O&M Period upto deliver to UBKV, will submit Performance Security as per the DPR (Detail Project Report).

- a) Conditions for forfeiture of Performance Security:
- i. The contract is terminated before the expiry of contract period.
- ii. The Tenderer fails to supply /complete the work in accordance with the Terms and Conditions of the contract/tender
- iii. The tender is rejected on the ground of giving any information of documents or affidavits which is /are misleading / false / incorrect / contradictory / fabricated.

N.B.: Failure to supply /complete the work in accordance with the terms and Conditions of contract / tender shall be decided by the Chief Executive Officer (Project Coordinator), UBKV.

8. OBLIGATIONS AND UNDERTAKINGS:

Obligations of the Concessionaire during Implementation Period

- (i) The Concessionaire shall, before commencement of implementation of the Project; submit to the Nodal Officer with due regard to Project Completion Schedule and Scheduled Project Completion Date, its construction time schedule, PERT Chart, PERT/CPM etc. as the University Authority deems fit.
- (ii) Have requisite organization and designate and appoint suitable officers/ representatives as it may deem appropriate to supervise the Project and to liaison with the Nodal Officer and to be responsible for all necessary exchange of information required pursuant to this Agreement;
- (iii) Undertake, do and perform all such acts, deeds and things as may be necessary or required to adhere to the Project Construction Completion Schedule and to achieve Project Installation, Commissioning Completion under and in accordance with this Agreement;

Sales Rights

(a) UBKV shall provide exclusive sales rights to the Concessionaire to earn revenue out of sale of phase-wise products from the operational facilities being supplied in this project and which form part of this Project.

Training Rights

(b) Training slot for UBKV for OFT or ELP related to Progressive & Prospective farmers (basically SHG & enthusiastic young backward class farmers) and Student Community services shall be fixed as per Training Schedule. Yearly Time schedule of such trainings is to be provided to the Concessionaire either within 30 (thirty) working days from the date of issuing LOA for this agreement for 1st Year or within 30 (thirty) working days from the last working days of the preceding Financial Year for each subsequent year (Excluding Last FY of the concession period of this agreement concerned) at the earmarked plot of land, as mentioned in the layout-drawings of this projects.

9. MONITORING AND SUPERVISION DURING IMPLEMENTATION:

- (a) The Concessionaire shall submit to the Officer-in-Charge, a programme supported with Bar Chart for implementation of activities in a phased manner so as to cause least inconvenience to the University-people. Most of the implementation work shall be carried out during the time (leaving peak traffic time) keeping in view the safety of the University-people. The Concessionaire shall give to the Officer-in-Charge, its complete programme for different stages of execution, planning, fabrication and erection etc. of the Project. During the Implementation Period, the Concessionaire shall furnish to UBKV monthly reports on actual progress of the Implementation Works and furnish any other relevant information as may reasonably be required by UBKV.
- (b) For the purposes of determining that the Implementation Works are being undertaken in accordance with Specifications and Standards of Good Industry Practice and for quality assurance, the Concessionaire shall carry out such Tests at such time and frequency and in such manner as may be required by the Nodal Officer or as may be necessary in accordance with Good Industry Practice. The Concessionaire shall with due diligence carry out all such Tests in accordance with the instructions and under the supervision of the Officer-in-Charge. The Concessionaire shall promptly carry out such remedial measures as may be necessary to cure the defects or deficiencies, if any, indicated in such Test results. The Nodal Officer shall furnish the results of such Tests to UBKV within seven days thereof and also promptly report to the UBKV the remedial measures taken by the Concessionaire to cure the defects/deficiencies if any indicated in the Test results.

If the Officer-in-Charge reasonably determines that the rate of progress of the construction of the Project is such that the Project Completion is not feasible on or before the Scheduled Project Completion Date, it shall so notify the Concessionaire and the UBKV. Thereupon, the Concessionaire shall within seven (7) days thereof notify the UBKV and the Officer-in-Charge about the steps it proposes to take to expedite progress and the period within which it shall achieve COD.

If the Project infrastructure Completion is not achieved by the Scheduled Project Completion Date for any reason other than Force Majeure or reasons attributable to UBKV, the Concessionaire shall be liable to pay liquidated damages for delay beyond the Scheduled Project Completion Date, an amount of 0.5% of the undelivered store or part thereof for delay of every week or part thereof, provided that such liquidated damages do not exceed an aggregate of 5% of the guaranteed concessional amount to UBKV Provided further that nothing contained in this sub-clause shall be deemed or construed to authorize any delay in achieving Project Completion. Liquidated damages shall be sole and exclusive remedy by UBKV to Concessionaire.

If the entire works are not completed within 150 days from the date of issue of Letter of Commencement of this BOT modelled Project Works, UBKV shall, subject to the provisions of this Agreement relating to excuse from performance of the Concessionaire's obligations hereunder, be entitled to terminate this agreement in accordance with the provisions of the non-political event.

It is worthwhile to say that the Tenderer should keep their existing strength in terms of both operational as well as financial capacity in mind while quoting.

- 10. University reserves the right of using the created facilities for extension activities with prior intimation to the concessionaire for the entire period of the operation and maintenance contract of the crops and infrastructure.
- 11. The concessionaire will transfer the created facility in good working condition upto the satisfaction of the University after successful completion of aforesaid Concession Agreement period.
- 12. A bank guarantee of the same amount against yearly concession fee offered by the bidder for buy-back of the produce under Phase-III of the work schedule of the project activity will be given for the entire contracted period (5 years) and the necessary document(s) of this bank guarantee will be handed over to the University before initiation of building of infrastructure (Phase I of work schedule).
- 13. A performance security of the contracted amount for Phase I in the form of bank guarantee will be given as per the stated format upto the period of Phase I of the project activity.

14. TESTS & QUALITY ASSURANCE PROCEDURE

- (a) At least 15 (fifteen) days prior to the likely completion of each phase of the Project, the Concessionaire shall notify the Nodal Officer and the UBKV the same and shall give notice to them of its intent to conduct Tests. The Concessionaire shall give the Nodal Officer and the UBKV Inspection Committee at least 10 (ten) days prior notice of the actual date on which it intends to commence the Tests and at least 7 (seven) days prior notice of the commencement date of any subsequent Tests. All Tests shall be conducted in accordance with the Applicable Laws and Applicable Permits and relevant specification of testing procedure as stated in IS 16008:2012, provided by the BIS. The Nodal Officer shall have the right to suspend or postpone any Test if it is reasonably anticipated or determined during the course of the Test that the performance of the Project or any part thereof does not meet the Specifications and Standards. The Nodal Officer may designate a representative with suitable qualifications and experience to witness and observe the Tests. The Nodal Officer shall monitor the results of the Tests to determine the compliance of the Project with the Specifications and Standards as per IS 16008:2012 and shall provide to the UBKV the copies of all Test data including detailed Test results. Upon the Nodal Officer determining the Tests to be successful, it shall forthwith issue to the Concessionaire a certificate (the "Test Completion Certificate"). The Nodal Officer may at the request of the Concessionaire issue a provisional certificate of completion ("Provisional Certificate") if the Tests are successful and all parts of Project can be legally, safely and reliably opened for commercial operation though certain works or things forming part thereof are not yet complete. In such an event, the Provisional Certificate shall have appended thereto a list of outstanding items signed jointly by the Nodal officer and the Concessionaire ("Punch List"). All Punch List items shall be completed by the Concessionaire within 30 (Thirty) days of the date of issue of such Provisional Certificate. Upon completion of all Punch List items to the satisfaction of the Officer-in-Charge, it shall issue the Completion Certificate to the Concessionaire with a copy marked to UBKV. In the event of the Concessionaire's failure to complete the Punch List items within the said period of 15 (fifteen) days, UBKV may, without prejudice to any other rights or remedy available to it under this Agreement, have such items completed at the risk and costs of the Concessionaire. The Concessionaire shall reimburse to UBKV on demand the entire costs incurred by UBKV in completing the Punch List items.
- (b) If the Nodal Officer certifies that it is unable to issue the Completion Certificate or Provisional Certificate because of events or circumstances which excuse the performance of the Concessionaire's obligations in accordance with this Agreement and as a consequence thereof the Tests could not be held or had to be suspended, the Concessionaire shall re-schedule the Tests and hold the same as soon as reasonably practicable.
- (c) The Concessionaire shall bear all the expenses relating to Tests under this Agreement.
- (d) Acceptance Test will be conducted as follows
- i. The concessionaire shall be responsible for preparation and submission of detailed UAT schedules/ procedures/ formats. After acceptance of UAT reports by UBKV, the entire infrastructure (including network) would be deemed to have been commissioned.
- ii. For the purpose of Acceptance Testing, concessionaire would be required to demonstrate all instrument and accessories, hardware and software with minimum quantities to carry out the process of acceptance testing for verifying the technical specifications. In case any developmental work is required to be done, the same would be demonstrated over a period of time without hindering the process of acceptance and payment. Once the acceptance is done for certain type of equipment then mass deployment could be done without the need for acceptance again.
- iii. After the successful Uniform Acceptance Testing (UAT), the concessionaire shall be responsible for obtaining installation and commissioning certificate (sign-off) of the complete infrastructure of this project from UBKV. UAT Reporting System will be jointly verified by the competent authority of the University and the eligible representative of Concessionaire.
- iv. Entire system at any particular location/control room, if any, not passing the UAT, shall be rectified by the concessionaire in a timely manner with a request for re-test by UBKV. If any component/system fails the UAT repeatedly, UBKV may ask the concessionaire to remove the device, without any claim for payment to the concessionaire.
- v. On successful UAT by UBKV of the entire system, the event shall be marked as the "date of commissioning" of the project. However, in case of delay/ non-completion of work by the concessionaire at any site(s) due to reasons not attributable to the concessionaire, UBKV shall treat the last day of the successful UAT of the commissioned network (excluding the delayed and non-feasible sites) as the "date of commissioning" of the project.
- vi. Documentation: provide technical documentation with equipment supplied. The technical documentation should include technical manuals and operation manuals.

vii. UBKV reserves the right to inspect equipments and infrastructure. The cost of all such tests shall be borne by the concessionaire. Any inspected good fails to conform the specification after installation, the UBKV may reject them and the concessionaire shall have to replace the rejected goods. Sample approval should be obtained before installation for such material.

15. HANDOVER AND DEFECT LIABILITY PERIOD:

The handing over process shall be initiated at least 6 months before the actual date of expiry of the Concession Period by a joint inspection by the Authority Engineer/ Competent body of the Concessionaire Authority and the Concessionaire. The Authority Engineer shall, within 14 days of such inspection prepare and furnish to the Concessionaire a list of works/jobs/additions/alterations, if any, to be carried out to bring the Project to the prescribed level of service condition at least two months prior to the date of expiry of the Concession Period.

In case the Concessionaire fails to carry out the above works, within the stipulated time period the Authority shall be at liberty to have these works executed by any other Person at the risk and cost of the Concessionaire and any cost incurred by Authority in this regard shall be reimbursed by the Concessionaire to Authority (i.e. UBKV) within 7 days of receipt of written demand. For this purpose, Authority shall without prejudice to any other right/remedy available to it, under this Agreement, have the right to appropriate the Performance Security and/or to set off any amounts due, if any, and payable by Authority to the Concessionaire to the extent required/ available and to recover deficit amount, if any, from the Concessionaire.

16. TERMS OF PAYMENT:

The payment terms for the work are as under:

- A. For construction works and building of infrastructure, the payment will be made in three splits as per submitted RA bills. The payment will be made as per financial norms of the University.
- B. For supply of planting materials, bills will be paid after supply and satisfactory establishment of the same in the field / protected structures.
- C. For operation and maintenance works, the contract amount will be paid annually after successful completion of project activity of each year.
- D. Yearly Guaranteed Concession Fees for buy-back of the produce will be deposited by the agency in the account of the University at the beginning of each year of activity.
- E. The bills for electricity and other amenities mentioned in the document will be paid by the agency time to time as per claim of the University.

17. TAXES AND DUTIES:

The vendor shall be entirely responsible for all taxes, duties, license fees, Cess, road permits etc. incurred until delivery of the contracted Goods/services at the site of the user or as per the terms of tender document if specifically mentioned. The GST rates quoted by the bidders shall be considered for evaluation purpose. In case, GST rates claimed during billing are higher than the prevailing rates, the prevailing rate as per GST Act shall be considered. If it is statutory requirement to make deductions towards such taxes and duties or any other applicable taxes and duties, the same shall be made by the UBKV and a certificate for the same shall be issued to the Contractor.

The Contractor shall be solely responsible for the taxes that may be levied on the Contractor's persons or on earnings of any of his employees and shall hold the UBKV indemnified and harmless against any claims that may be made against the UBKV. The UBKV does not take any responsibility whatsoever regarding taxes under Indian Income Tax Act, for the Contractor or his personnel. If it is obligatory under the provisions of the Indian Income Tax Act, deduction of Income Tax at source shall be made by the UBKV.

In respect of raw materials, intermediary components etc. and bought out items, neither the UBKV nor the Contractor shall be entitled to any claim arising due to increase or decrease in the rate of Tax, introduction of a new Tax or abolition of an existing Tax in the course of the performance of the Contract.

18. USER LICENSE AND PATENT RIGHTS:

The Vendor shall provide licenses for all software products, whether developed by it or acquired from others. In the event of any claim asserted by a third party for software piracy, the vendor shall act expeditiously to extinguish such claim. If the vendor fails to comply and the UBKV is required to pay compensation to a third party resulting from such software piracy, the vendor shall be responsible for compensation including all expenses, court costs and lawyer fees. The UBKV will give notice to the vendor of such claim, if it is made, without delay.

The Vendor shall indemnify the purchases against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the goods, software package or any part thereof.

19. INSURANCES:

Insurance during the Implementation Period

The Concessionaire shall, at its cost and expense, purchase and maintain during the Implementation Period such insurances as are necessary, including but not limited to the following:

- (a) Workmen's compensation insurance;
- (b) Third party insurances
- (c) Any other insurance that may be necessary to protect the Concessionaire as deemed needed by Concessionaire, its employees and its assets (against loss, damage or destruction, at replacement value) including all Force Majeure Events that are insurable and not otherwise covered in items (a) & (b).

The Concessionaire shall, at its cost and expense, purchase and maintain during the Operational Period insurance to cover against:

- (a) loss, damage or destruction of the Project Facility, at replacement value;
- (b) the Concessionaire's general liability arising out of the Concession;
- (c) liability to third parties; and
- (d) any other insurance that may be necessary to protect the Concessionaire and its employees, including all Force Majeure Events that are insurable and not otherwise covered in items (a) to (c).

20. PUBLICITY AND PROMOTIONAL EXPENSES

- (a) All promotion, publicity, advertisement cost will be part of the Selling & Distribution cost of the product concerned.
- (b) The Concessionaire will be free to arrange marketing of the produce in the domestic and international market and launch publicity campaign at its' own cost.

21. EVENTS OF DEFAULT AND TERMINATION:

Event of Default: Event of Default means the Concessionaire Event of Default.

Concessionaire Event of Default

Any of the following events shall constitute an event of default by the Concessionaire ("Concessionaire Events

- of Default") unless such event has occurred as a result of an Event of Default or a Force Majeure Event;
- (1) The Concessionaire fails to commence the Construction Works within 14 days from the Commencement Date.
- (2) The Concessionaire fails to achieve COD within 1 Year from the Commencement Date.
- (3)Any representation made or warranty given by the Concessionaire under this Agreement is found to be false or misleading.
- (4) The Concessionaire creates any Encumbrance on the Project Site/ Project Facility in favour of any Person saves and except as otherwise expressly permitted under Schedules.
- (5) The aggregate shareholding of the members of the Concessionaire falls below the minimum prescribed under Clause 19.1(xi).
- (6) The transfer, pursuant to law of either (a) the rights and/or obligations of the Concessionaire under any of the Project Agreements, or (b) all or material part of the Concessionaire except where such transfer in the reasonable opinion of Authority does not affect the ability of the Concessionaire to perform, and the Concessionaire has the financial and technical capability to perform its material obligations under the Project Agreements.
- (7)A resolution is passed by the shareholders of the Concessionaire for the voluntary winding up of the Concessionaire.
- (8)Any petition for winding up of the Concessionaire is admitted by a court of competent jurisdiction or the Concessionaire is ordered to be wound up by Court except for the purpose of amalgamation or reconstruction, provided that, as part of such amalgamation or reconstruction, the property, assets and undertaking of the Concessionaire are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Concessionaire under this Agreement and the Project Agreements, and provided that:
- (i) the amalgamated or reconstructed entity has the technical capability and operating experience necessary for the performance of its obligations under this Agreement and the Project Agreements;
- (ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and the Project Agreements and has a creditworthiness at least as good as that of the Concessionaire as at the Commencement Date; and
- (iii) each of the Project Agreements remains in full force and effect.
- (9)A default has occurred under any of the Financing Documents and any of the Lenders has recalled its financial assistance and demanded payment of the amounts outstanding under the Financing Documents or any of them as applicable.
- (10) The Concessionaire suspends or abandons the operations of the Project without the prior consent of Authority, provided that the Concessionaire shall be deemed not to have suspended/ abandoned operation if such suspension/ abandonment was (i) as a result of Force Majeure Event and is only for the period such Force Majeure is continuing, or (ii) on account of a breach by Authority of its obligations under this Agreement.
- (11) The Concessionaire repudiates this Agreement or otherwise evidences an intention not to be bound by this Agreement.
- (12) The Concessionaire suffers an attachment being levied on any of its assets causing a Material Adverse Affect on the Project and such attachment continues for a period exceeding 45 days.
- (13) The Concessionaire has neglected or failed to regularly and properly maintain the project units in clean and hygienic conditions and to keep the project units in a state of good repair at its own cost.
- (14) The Concessionaire has delayed any payment that has fallen due under this Agreement and if such delay exceeds 60 (sixty) days.
- (15) The Concessionaire is otherwise in Material Breach of this Agreement and wishes to surrender. The surrender will be accepted for complete package of the project units only and not partly.
- (16) Any breach of terms and conditions of this agreement.

Termination due to Event of Default:

In the event that UBKV believes that the Concessionaire is in material breach of its obligations under the DPR or the Contract, UBKV shall give notice to the Concessionaire and shall give up to 30 day's time to it for curing such breach. In case the breach continues till / after the expiry of such cure period, UBKV will have the option to terminate the Agreement. Further, UBKV may afford a reasonable opportunity to the Concessionaire to explain the circumstances leading to such a breach and may increase the time limit for curing such breach before terminating the Agreement. Any notice served pursuant to this Clause shall give reasonable details of the breach.

LIST OF DOCUMENT TO BE SUBMITTED WITH TECHNICAL BID:

- 1. The intending Tenderer, in case of Original Manufacturers shall upload a self-declaration on their letter-head as PDF file in Cover-I of tender, along with the tender documents, conforming that they are regularly manufacturing, supplying, installing, testing & commissioning of the similar equipment for the last 05 years.
- 2. The intending Tenderer, in case of Authorized Distributor/ Authorized Dealer shall possess valid authorized Distributorship /Dealership license from Original Equipment Manufacturers. The tenderer shall enclose the copy of the same as PDF file in Cover-I of the tender while submitting the tender.
- 3. The components will be in compliance with the specifications mentioned in **the Technical Specifications** of the tender and shall be of the latest technology, best quality and high standards. Mention BEE Star Rating, if it is acquired.
- 4. Any optional accessories/ tooling, besides the standard equipment recommended for the better performance of the unit, if offered, be provided with their full technical details including their use and advantage in a separate sheet with the tender documents.
- 5. PAN Card, GST, Order Copies, Bankers Details, Registration details of the farm/Company, Latest IT clearance Certificate, any other certificates in support of your claim, as mentioned in the General Information of this NIT concerned, Certificate from BEE/BIS about the subject of procurement, if it is recommended by the TC, ISO certificates, Aadhaar Udoyag Memorandum, Certificate from MSME authority/SSI Directorate etc. need to be enclosed in the tender document. It is to be noted that all these documents are to be authenticated by the prospective bidder or authorized representative of the bidder
- 6. Detail Name, Communication Address along with Mobile no., e-mail address, and qualification of Service Providing Engineer/s, who is responsible for quality testing, and after sales service support and his experience certificate in your organization should be enclosed.
- 7. All supportive evidences in connection with your credentials, work completion certificates of previous similar type supplies/jobs, Appreciation from National or International Eminent Bodies regarding the quality of the subject of procurement should be enclosed.
- 8. Any farm recognized by Department of Industrial Policy and Promotion (DIPP) as 'Start-ups' shall be exempted from payment of earnest money deposit detailed above. Supporting Valid Documents is to be submitted to the Tendering Authority along with other tender documents of Technical Bid
- 9. Schedule of Actual After-Sales-Service Period for previously supplied same product concerned to other buyers This information is needed, when the estimated value of tendered subject of procurement is ₹.20 lakhs or above.
- 10. Declaration regarding the following matters -
 - Price Confirmation (Assured that offered price should be the lowest in comparison with any other similar offer, made by you within India)
 - Sole Participation under the Principal Manufacturer of the subject of procurement, in case of participation on this tender processing as Indian Agent of Foreign Principal
 - Proprietary Article Certificate about the subject of procurement, if needed
- 11. Trend projection about the following matters for Last Three Financial Years, if estimated cost of tender is ₹. 20 Lakhs or more:-
 - Annual Sales of the subject of procurement
 - Actual lead time required for supplying subject of procurement under different similar type supply orders, executed by the bidder successfully
- 12. The tenderer must have not been barred by Government of India or any State Government from participating in any tender process during the last two financial years. A declaration to this effect should be made in the tender documents submitted by the bidder.

Comparative Statement for assessing Overall Bid Evaluation Criteria (EVC) under the aforesaid NIT

SI. No.	1 110111	Allotted marks	Bidder's Name (01/0)	Bidder's Name (02/0)	Bidder's Name (03/0)	Bidder's Name (04/0)	Bidder's Name (05/0)
1	Evaluation of	NIL	Eligible / Not	Eligible /	Eligible /	Eligible /	Eligible /
	Technical Bid		Eligible	Not Eligible	Not Eligible	Not Eligible	Not Eligible
	document (techno-						
	commercial documents						
	and documents for						
	participation in						
	Expression of Interest)						
2	Evaluation of financial	100					
	bid document						
2.a.	Cost of (Development of	40					
	infrastructure + Bed						
	designing + Supply of						
	Planting Materials +						
	Planting)						
2.b.	Cost of Operation &	20					
	Maintenance at 90% of						
	built up facility of the						
	Turnkey Project for five						
	years						
2.c.	Yearly Guaranteed	40					
	Concession Fees from						
	operation of this turnkey						
	project for five years						
	from the date of						
	commencement of						
	commercial operation	100					
	Grand total of allotted	100					
	/secured marks			ļ			

MODEL FORM OF WARRANTY CLAUSE

MODEL TORM OF WARRANTT CLAUSE
The contractor / seller / concessionaire hereby declares that the goods / stores / articles sold to the buyer under this Turnkey Project Contract shall be of the best quality (and workmanship) and shall be strictly in accordance with the specifications and particulars contained / mentioned in the clause hereof and the contractor / seller / concessionaire hereby guarantees that the said goods / stores / articles would continue to conform to the description and quality aforesaid for a period of days / months from the date of delivery of the said goods / stores / articles to the Purchaser (UBKV) and that not withstanding the fact that the Purchase (Inspector) may have inspected and / or approved that said goods / stores / articles, if during the aforesaid period of
Signature of the Tenderer
Full Name of the Bidder(s):
Seal:

Declaration by the Bidder

This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained herein and undertake myself / ourselves to abide by them. I also undertake to abide the entire prevailing statutory obligation in time.

` ') No other charges would be payable by C There would be no increase in rates during		
Date:		(Signature of Bidder with seal)	
Place:		Name & Address: Telephone: E-mail: SEAL of the Bidder:	
		l and stamped by the Authorized Signatory of the Bidder should be about the Bidder should be all	
	CERTIFICATE OF PRICE JUSTIFICATION [To be given on letterhead]		
Ref. No.:	•	certify that the control of the	

SIGNATURE AND STAMP

OF THE BIDDER

TENDER ACCEPTANCE UNDERTAKING

(Should be given on Non-Judicial Stamp Paper worth of ₹ 100/- duly Notarized)

10	
The Registrar	
UTTAR BANGA KRISHI VISWAVIDYALAYA	
Pundibari, Cooch Behar-736165	
I,, S/o, F	R/o do hereby solemnly affirm as under:-
That I am a partner / Proprietor / Authorized ren	presentative of M/S.
That I am a partiler / Prophetor / Authorized rep	resentative of W/S.
That the farm has not been blacklisted in the pa	ast by any government / private organization
That the farm has no vigilance case / CBI / FEM	MA case pending against him
That my farm has not been declared defaulter	by any Govt. Agency and that NO case of any nature i.e. CBI /
FEMA / Criminal / Income Tax / VAT / Sales Ta	
Having examined the tender document for "	. " (Subject of Procurement) we the undersigned hereby offer to
	cope of work and conditions set out in the tender document. We
hereby unconditionally accept all the tender cor	•
We enclosed all the relevant documents as per	
•	
We understand that you are not bound to accept	of the lowest or any fender received.
Date:	(Signature of Bidder with seal)
Place:	Name & Address:
	Telephone:
	E-mail:
	SEAL of the Bidder:

Please Note: - The above undertaking duly signed and stamped by the Authorized Signatory of the Bidder should be enclosed with Technical Bid Documents and submitted its original hard copy within Technical Bid Envelope

E-Banking Mandate Form

(To be issued on bidder's letterhead)

I/We hereby authorize UBKV to release any amount due to me/us in the bank account as mentioned above. I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold the UBKV responsible.

(Signature of vendor/customer with seal)

BANK CERTIFICATE

	We certify that, with us and we confirm that the details given above are correct as per our records. Bank stamp
Date:	
Place:	
	(Signature of authorized officer of bank)

FORMAT FOR PERFORMANCE SECURITY

(Information of the Bank Guarantee of any Nationalized Bank) Bank Guarantee Format

Tο

(Insert name and address)

Whereas, <name of the supplier and address> (hereinafter called "the Concessionaire") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for 'Selection of Concessionaire for Implementing Establishment of a Centre of Floriculture Promotion & Entrepreneurship Development for Northern part of West Bengal at Uttar Banga Krishi Viswavidyalaya in Pundibari, Cooch Behar under PPP on BOT model' to Uttar Banga Krishi Viswavidalaya (UBKV) (hereinafter called "The Beneficiary")

And whereas it has been stipulated by in the said contract that the Concessionaire shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head / registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of INR <Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of INR <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the Concessionaire 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 until <Insert Date>) notwithstanding anything contained herein:

Our liability under this bank guarantee shall not exceed INR. <Insert Value> (Rupees < Insert Value in Words> only). This bank guarantee shall be valid up to <Insert Expiry Date>)

It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <Insert Expiry Date>) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)	
Seal:	

<u>Detailed specification of the works to be done for development of infrastructure (Phase – I of work schedule)</u>

- Deep peripheral Earthen Drain of 1.5mtr. width x 0.9mtr. Depth of Trapezoidal profile will be laid out surrounding the proposed site [Refer Fig-1] Earthwork excavation upto 1.5m width and 0.9m depth with JCB and manual dressing surrounding the periphery of the proposed site approximately 560 running meter complete in all respect.
- Concertina fencing with angled iron / PCC pole embedded into the ground up to sufficient depth shall be provided alongside the Earthen Drain to ensure protection against grazing, pilferage and theft.

Concertina Fencing of Coil dia 980 mm diameter wire with htgs spring core wire of diameter 2.59mm, pitch between the barb 24.5 mm, tensile strength will be 1600n/mm^2 (minimum), number of spiral turns per coil is minimum 50, high density 8m stretch should be 'C' clipped with horizontal PBT (R) strands at 1/2 m interval with M.S angle Post "Y" shaped 50mm x 50mm of approx height 1.145m from G.L & grouted 400mm below G.L , 3m apart in P.C.C (1:2:4) as per approved drawing [Fig-2]

Concertina fencing surrounding the unit alongside the Peripheral drain including supply of items (Concertina fencing wire, MS angle, MS angle pillar, items for foundation like cement, stone chips, sand etc.), fitting and fixing of Concertina fencing wire upto a height of 2.1m wielded on MS angle (560m) and foundation work of each MS angle pillar complete in all respect.

• Alongside the boundary, in all the four inner sides 1.5m wide 100 thick Gravel Road over 150 thick Granular Sub Base(compacted) to be developed. Flower bed of 1m width flanked and enclosed by cemented wall will be provided beside the path as per layout which is also separated with dividers at places.

Boundary of 1m wide flower beds with brickwork (Brick, cement and sand, 125mm thick) and cement plastering (cement and sand, 12mm thick) for 550 meter length complete in all respect.

Arrangement for light with post for illumination will be there as and where necessary within the unit

Power drawing and Electrification with cable laying:

- 1). **Power Line** Supply and laying of 3.5 core, 95 sq. mm. Al. XLPE cable through under ground trench with brick protection on the top of the cable as per G.S. from Feeder pillar near Horticulture generator room to the proposed panel to be erected in suitable position inside the Hub. The length of the cable may be 600 mtr. or more depending upon the location of the proposed panel.
- 2). **Panel** supply, Installation, Testing and commissioning of wall / floor mounted industrial type panel board comprising with the following –
- a). **Incomer** 415 volt, 200 amp. TPN SFU (L&T).
- b). **Busbar** 415 volt, 200 amp. Capacity, 4- bar copper busbar.
- c). Change over switch 415 volt, 200 amp, off-load change over switch (L&T).
- d). **Outgoings** i). power supply to each unit should be fed separately by individual required capacity of three phase main switch from the proposed panel (L&T make).
- ii). Separate required capacity of three phase main switch to be used for street light arrangement from the proposed panel (L&T make).
- iii). Earthing 2 (two) sets of copper plate earthing for panel and 2 (two) nos, earthing by 2" dia. G.I. pipe in each individual unit in case of three phase power and 1 (one) no, earthing by 2" dia. G.I. pipe in each individual unit in

case of single phase power.

- e). Digital Volt meter, Ammeter, selector switches, multicolour Pilot Lamp to be provided in the proposed panel.
- 3). Street lights i). 7mtr. Octagonal street light poles with header in C.C. foundation with spike earthing (6' long, 19 mm dia.) of each pole required nos.
- ii). Supply, fitting fixing and connection and testing of 240 volt, 85 Watt LED outdoor street light fittings complete (Philips/ Crompton/ Havell's).
- iii). Supply and laying of 4-core, 10 sq. mm. Al. XLPE cable through underground trench as per G.S. mtr. (approx).
- iv). Loop box in each Street light pole should be provided.
- 4). Cable for Individual Units cable for power connection of each individual unit from proposed panel should be as per the load of the respective unit mtr. (approx). (as per requirement)
- 5). Cable gland, socketting of cable end As per cable size and requirement.

Internal electrification in different unit should be as per requirement.

• CCTV surveillance will be developed for the whole unit.

CCTV surveillance of the unit: The entire area will be under CCTV surveillance with high power Bullet Camera (20 in number each having 40 m distance coverage) with night vision ability (picture quality will be tested during installation) having at least 6mm lens or 2mp resolution, 32 channel DVR-HD-2MP, RT(3+1) Wire coil, Central Adopter for the system, BNC Jack, DC Jack, 4TB surveillance HDD, LG20" LED monitor (HDMI) complete in all respect and ready to start operation during handover.

4.5 meter wide CEMENT CONCRETE ROAD

A central road of 4.5m wide (metal / cement concrete) will divide the plot into two halves as shown in the layout plan

Concrete layer (100 mm 1:2:4 plain Cement Concrete over 150 mm

Compacted Granular Sub Base-Grading-1) over 150 mm of Silver Sand, refer to Fig-3

- 1. The width of the road shall be 4.5 meters with expansion joint on each 5 meters interval.
- 2. During casting of concrete like C.C. (1:2:4) (20mm graded chips concrete) plate vibrator shall be used. Without plate vibrator no casting of concrete will be made.
- 3. 8-10 tons roller shall be used for compacting the sub-base.
- 4. Efforts should be made for 1-3% cambering of the road as desired.
- 5. Minimum seven days curing for the concrete road shall be made.

• 3 m Wide GRAVEL ROAD

The material to be used for the work shall be natural sand, crushed gravel, crushed stone, crushed slag, or combination thereof depending upon the grading required use of material like brick metal, kankar and crushed concrete shall be permitted in the lower sub base. The material shall be free from organic or other deleterious constituents. Refer **Fig-4**

- 1. Spreading and compacting- the sub base material of the specified grading shall be mixed homogenously with the help of motor grader. The required water content shall be determined in accordance with IS:2720 (part 8).
- 2. Immediately spreading the mix, rolling shall be done. For a compacted single layer up to 150mm the compaction shall be done with the help of a vibratory roller of min. 80 to 100KN. Rolling shall commence at the lower edge and proceed towards the upper edge longitudinally for portion having unidirectional cross fall or on super elevation. For carriage way having cross fall on both sides, Rolling shall commence at the edges and progress towards the crown.
- 3. Each pass of the roller shall uniformly overlap not less than one-third of the track made in the preceding pass. The speed of roller shall not exceed 5 KM per hour. Rolling shall be continued till the density achieved is at least 98% of the max. Dry density for the material determined as per IS: 2720 (part8). All loose, segregated or other defective areas shall be made good to the full thickness and re-compacted.
- Construction of 2m Span culvert (2 Nos.) at the main entrance of the unit & at the rear side of the

proposed land [refer - Fig-5]

Concrete to be used for Abutment Wall, Slab & Guard Wall shall be Controlled Cement concrete with well graded stone chips (20mm nominal size) including shuttering with Ply boards and reinforcement (Sail/Tata/RINL) with complete design of concrete as per IS: 456 and relevant special publications, submission of job mix formula after preliminary mix design after testing of concrete cubes as per direction of Engineer-in charge. Consumption of cement will not be less than 300 Kg of cement with Super plasticizer per cubic meter of controlled concrete but actual consumption will be determined on the basis of preliminary test and job mix formula [using concrete mixture].(b) M 25 Grade (ii) N.B. Variety (Stone Metal). P.C.C to be used (1:3:6) with 30 mm downgraded shingles in foundation over Single Brick Flat Soling with picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand. All Exposed Concrete surface in abutment wall & Guard wall shall be plastered finish & neat cement punning to guard wall, complete in all respect.

• There will be decorative gates (sliding / open-able) at two entry points

M.S. or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars with M.S Sheet as approved fitted and fixed with necessary screws and lugs. (ii) Grill weighing above 16 Kg./sq.mtr and above, hanging and locking arrangements shall be made, including supplying fitting and fixing bottom rollers and Priming & Painting with approved colours, complete in all respect

- A security point (made with Reinforced Concrete Column Structure with Ist Class Brick walls in super structure and Roofing with MS prefabricated Tubular truss of Roof slope 1 in 4 both ways, with hollow M.S sections (square or rectangular shape) conforming to IS: 806-1968 & IS:1161-1998 connected to one another with bracket, gusset, cleat as per design, drawing & direction of Engineer-in-Charge. superstructure with Zn-Al alloy (55% Al & 45% Zn) coating of 150 grams per sq. metre, followed by colour coated on both side, steel sheet work having minimum yield strength of 550 Mpa of trapezoidal profile of approved make sheet covering roof having a dimension of 2.5mX2.5m) will be developed at the left side of the eastern entry point with internal electrification, furnishing with 1 wooden table and wooden chair, complete in all respect.
- In the right hand side of the central road, all the building infrastructure of the centre to be developed, that consists of one garage and an office, one store, and the controlling unit of the irrigation and /or fertigation system and other automations of the centre

Office cum store cum control room

Dimension – 13m x 4.5m Reinforced Concrete Column Structure as approved with Ist Class Brick walls in super structure & partition including Aluminum Sliding Windows with M.S Grill as per design, Doors preferably of Flush type & Sal wood Framing and Roofing with Roof slope 1 in 4 both ways with maximum bay length 4.5m with MS prefabricated Tubular truss with hollow M.S sections (square or rectangular shape) conforming to IS: 806-1968 & IS:1161-1998, connected to one another with bracket, gusset, cleat as per design, drawing & direction of Engineer-in-Charge, superstructure with Sheet roofing with Zn-Al alloy (55% Al & 45% Zn) coating of 150 grams per sq. metre followed by colour coated on both side, steel sheet work having minimum yield strength of 550 Mpa of trapezoidal profile of approved make sheet covering roof having a dimension of 13m X 4.5m, painting with weather-shield colours including one toilet, 1000 litre PVC water tank plumbing works and electrical works and furnishing with one secretariat table, one revolving chair and one Godrej Almirah of 150cm x 90cm x 60cm dimension, including approved **P.V.C- False Ceiling** works. False Ceiling made with framework of steel tube of 40mm x 20mm of not less than 18 gauge, the long and cross section will be welded with each other at 1000mm to 1200mm apart the entire framework will be fixed in wall using rawlplug or gutties or screws, etc. and suspended from ceiling with M.S flat 19mm x 3mm as necessary, the entire frame will be painted with red oxide. PRINTED LAMINATED P.V.C Section 150mm x 12mm x 1.00mm (+/- 0.01mm) of approved quality and colour will be fixed on the frame so that the entire framework will not be visible from below P.V.C section will be fixed with the frame with the help of self tapping steel screws only at the Office part (4.5m x 4.5m), complete in all respect.

Garage Room with MS rolling Shutter for the unit

Dimension 6.5m x 6.5m - Reinforced Concrete Column Structure as approved with 1st Class Brick in Foundation upto plinth with M.S Grill around periphery as per design, and Roofing with MS prefabricated Tubular truss with hollow M.S sections (square or rectangular shape) conforming to IS: 806-1968 & IS:1161-1998, connected to one another with bracket, gusset, cleat as per design, drawing & direction of Engineer-in-Charge superstructure with Sheet roofing with Zn-Al alloy (55% Al & 45% Zn) coating of 150 grams per sq. metre (followed by colour coated on both side), steel sheet work having minimum yield strength of 550 Mpa of trapezoidal profile of approved make sheet covering roof having a dimension of 6.5m X 6.5m including electrification complete in all respect.

• After the road, the central water treatment plant will be established which will be connected to central water storage tank and automated irrigation system of the unit

Fertigation system for the whole unit:

Filtration unit, drip system with - drip head, drip manifold, grommets, nipples, elbows, emitters, valves, pressure pumps, pH, EC, Salt meter, fertigation tank, proportioner, Sprinkler attachments with nozzles, back flow preventer etc., pressure tank, stabilizer, tanks, fittings of tanks, isolation transformer, starter, PVC pipe network, power supply and cable laying complete in all respect which will be functional at the very date of installation. The fertigation system must be fitted with a central water storage tank made of corrugated and galvanized steel plate with an additional coating along with pumps and filter arrangement for purification of water. Drip layout for individual protected structures will also be taken into account.

Water treatment plant:

This system will be fitted with a filtration unit comprising of 15cubic meter capacity MS MGF & DMF 1100mm dia x 1500mm HOS MS vessel (2 nos), OC – 500mm dia x 600mm Hos MS vessel (1no), MS pipeline – 65NB & 20NB, Butterfly and Globe valve, PG fittings with Pebble-I, Pebble – II, Gravel, Sand, Green Sand, Anthracite, Carbon etc., Multiple filter in 6/7 layers complete in all respect to provide quality water for irrigation of the entire unit.

Central Water Storage unit:

The filtration unit will be connected to prefabricated water tank (1 no. – 26000 lit capacity with dimension of 3.45m dia & 1 no.-50000 lit capacity with dimension of – 5.65m dia) made of GI corrugated steel sheets on outer ring, Bottom and side protection with geofabric blanket, Aquatex PVC liner and geofabric made anti-algae netting cover assembled and fitted on GI brackets with outlet GM valves including civil foundation works made of brickwork and RCC layer on top of 100mm thick foundation at least 1' above the ground level, complete in all respect. Overhead sprinkler and foggers for irrigation and humidity generation for the orchid houses complete in all respect.

• Protected seed bed for off-season seedling production: [11 number of cement concrete beds of 0.6 m high with GI framework having Polyacrylic / polycarbonate cladding with a central height of 3m covering a dimension of 10 m x 1 m (110m²)]

Permanent seed bed for off-season seedling production:

11 number of cement concrete beds of 0.6 m high from the ground level with GI framework having Polyacrylic / polycarbonate cladding with a central height of 3m covering a dimension of 10 m x 1 m (Total 110m²). The plan is inclusive of earthwork excavation, back filling, PCC works with cement, stone chips and sand (1:3:6), RCC flooring, RCC footing (cement, sand, stone chips, steel rod 10mm), tie beam - 250mmx250mm (cement, sand, stone chips, steel rod 12mm/8mm), plinth columns (cement, sand, stone chips, steel rod 16mm/8mm), Steel Columns (10mm base plate along with nut and bolts), Tubular truss, removable brass made mesh in the drainage hole and filling with growing medium containing 1:1:1:1=soil: sand: well-rotten FYM: Leaf mould.

The structures should be complete in all respect and ready to start operation during handover.

• Open field cultivation of Asiatic Lily:

Dimension 429.3 sq. m (Net area=300 Sq. m) with beds of (1mx15m = 20 in number) 300 sq. m area and 0.3m path between two beds at all sides having lilium bulbs of 20 nos/sq.m (20x300=6000 nos.) along with land development, layout, supply of bulb, supply of Agro-input (FYM -2160Kg, Cocopeat -125 Kg, Fertilizers -20 Kg, Micronutrients -100g, plant protection chemicals, bamboo for staking etc), planting and management.

• Next to the water treatment plant, a commercial nursery unit containing a mist propagation unit of 150m², shade house of 200m² and a packing and potting shed of 100m² (total 450m²) will be constructed

Specification for Mist propagation chamber:

Arch type hi-tech unit having a dimension of 6 m x 25 m (150m²) with central height of 5 m having cement concrete base, curtain wall and flooring with neat finish containing glass dividers. The structure will be made of ISI make GI pipe frame with Fan-pad evaporative cooling system along with misting unit all fitted with controlling devices (temperature controller, humidity controller and piltz timer). Propagation benches will be made of aluminium having dimensions of 7mx1m at the rate of 3 benches per line with 5 such lines meaning 15 such benches fitted at a height of 1 m following moving bench system. Cladding will be done with 200 micron five layered UV stabilized polyfilm.

Structure-[insert pipe - 60mm (25.2m), long column - 76mm (35m), Short Column - 76mm (49m), Bottom Long - 60mm (56m), Bottom short - 60mm, Box purlin - 48mm (72m), Hockey - 48mm, Hockey Member - 48mm, Chord - 32mm (70m), Cross - 33mm (40m), Column Cross 33mm (36m), Runner Purlin Long - 33mm (96m), Runner Purlin short - 32mm (32m), Column Member - 33mm (56m), Door Member - 33mm (4m), PVC Door - 4nos. Top Purlin - 48mm (20m), GI Clamps of 60mm, 48mm, 42mm (250nos), 2mm GI made PVC coated Locking wire - 350m, Aluminum Profile - 196m, 14 Gauge GI wire - 5Kg, GI Nut & Bolts (1300 nos.), Self Drill Screw (600nos)]

Cladding – UV resistant 200 micron 5 layered clear polyethylene film at least 700 sq.mt.

Shading – 50% black / green shadenet on top and sides (at least 450 sq.mt.)

Insect netting – 40 mesh at the sides (at least 200sq.mt.)

Foundation – Telescopic insertion in cement concrete ratio 1:2:4 (Cement: Stone Chips: Sand) (Cement 30 bag: Stone Chips 150cft: Sand 100cft)

Apron sheets – UV stabilised HDPE make (126m)

Flooring – Boulder soling 10mm with PCC 1:4:8 mix of 100mm thick, neat cement punning on floor, skirting work with 10" brickwork around the structure

Brickwork -1 foot height and 5" thick surrounding the base of the poly house Cooling pad with aluminium frame -120sq.ft.]

Exhaust fan of 60" size with 2hp motor with V belt drive, 14440 rpm, with louvered inlet along with galvanized frame for fans – 2 numbers. PVC water tank of 1000 lit with attachment to pad forth rowing of water to the cooling pad. Pumps of 1.5 hp capacity (3nos), Pressure pumps (2nos) foggers, mist heads, misters, piltz timer, controlling unit for misting and fogging operation, Controlling unit fitted with sensors to control fogging, misting and temperature, Roof water harvesting system – 140mm PVC make Tee, cap, elbow and 2000 lit PVC make water storage tank. Structure should be complete in all respect and ready to start operation during handover.

Specification of Shade house:

Rectangular shaped GI structure of 8 m x 25 m (200m²) with a central height of 5m and side height of 3m covered with 200 micron five layered UV stabilized polyfilm and 50% green agro-shade-net fixed on GI structure of 76 mm OD column, 60 mm OD purlins and 48 mm OD supports. Shade net will be fixed with Aluminium profile and GI locking wire.

Structure - [insert pipe - 60mm (25.2m), long column - 76mm (84m), Box purlin - 48mm (72m), Cross - 33mm (40m), Runner Purlin Long - 33mm (948m), Runner Purlin short - 32mm (16m), Door Member - 33mm (4m), PVCDoor - 2nos. Top Purlin - 48mm (20m), Top vent member - 15mm (6m), Runner joint - 20mm (6m), GI Clamps of 60mm, 48mm, 42mm (100nos), 2mm GI made PVC coated Locking wire - 350m, Aluminium Profile - 196m, GI Nut & Bolts (900nos.), Self Drill Screw(600nos)]

Cladding with 50% Agro-shadenet – (550 sq.mt.)

Foundation - Telescopic insertion in cement concrete ratio 1:2:4 (Cement: Stone Chips: Sand) (Cement 10 bags: Stone Chips 100cft: Sand 50cft), arrangement of PVC water tank of 1000 litre capacity and water taps (2nos.) for water supply.

Structure should be complete in all respect and ready to start operation during handover.

Specification of Potting cum packing shed with implement shed and store:

Dimension will be 8 m x 12.5 m (100m²) having RCC foundation with MS fabricated superstructure with Coloured GI roofing. The shed will be prepared including brick work, cemented rack, iron grill windows, plastering, painting, electrification, plumbing and staff toilet which will be completed in all respect. The plan is

inclusive of earthwork excavation, back filling, PCC works with cement, stone chips and sand (1:3:6), PCC flooring with cement, sand and stone chips, RCC footing (cement, sand, stone chips, steel rod 10mm), tie beam - 250mm x 250mm (cement, sand, stone chips, steel rod 12mm/8mm), plinth columns (cement, sand, stone chips, steel rod 16mm/8mm), Casting Columns (cement, sand, stone chips, steel rod 16mm/8mm), brick work in plinth and wall, wooden door and window frame with iron grill, cement plastering in all around and tubular truss.

Structure should be complete in all respect and ready to start operation during handover.

• Three protected structures for house plants and other ornamental crops will be developed each having a dimension of 200m² (total 600m²)

Specification for the structures for ornamental plants

Three structures with benches having dimension of 8mx25m each with a central height of 5m and side heights of 3m, each consists of at least -

Insert pipe – 60mm (25m), long column – 76mm (35m), Short Column – 76mm (40m), Bottom Long – 60mm (50m), Box purlin – 48mm (70m), Hockey – 48mm (72m), Hockey Member – 48mm (18m), Chord – 42mm (60m), Cross – 33mm (20m), Column Cross 33mm (20m), Runner Purlin Long – 33mm (40m), Runner Purlin short – 32mm (16m), Column Member – 33mm (65m), Door Member – 33mm (3m), PVC Door – 2nos. Top Purlin – 48mm (20m), Top vent member – 15mm (6m), Runner joint – 20mm (6m), Cotton pipe – 15mm (48m), GI Clamps of 60mm, 48mm, 42mm (250nos), Aluminium splits – 230m, 14 Gauge GI wire – 5Kg, GI Nut & Bolts (1300 nos.), Self Drill Screw (600nos) [The structure may be developed using hollow square bars]

Cladding – UV resistant Double layer polycarbonate panel fitted with Aluminium splits and GI screws/nut and bolts + 50% green/black agro-shade net at the top + Wirenet fixed at all the sides through wielding + 40mesh insect netting at the sides

Foundation – Telescopic insertion in cement concrete ratio 1:2:4 (Cement: Stone Chips: Sand) (Cement 10 bag: Stone Chips 100cft: Sand 50cft)

Flooring – Boulder soling 10mm with PCC 1:4:8 mix of 100mm thick, neat cement punning on floor (200 sq.mt.), skirting work with 10" brickwork around the structure

Brickwork – 2feet height and 5" thick surrounding the base of the Structure

Growing benches will be made of aluminium having dimensions of 7 m x 1 m at the rate of 3 benches per line with 5 such lines meaning 15 such benches fitted at a height of 1 m following moving bench system including arrangement of PVC water tank of 1000 litre capacity and water taps (2nos.) with pipes for water supply.

Four air circulating Fans will be fitted to the structure for circulation of air.

The structures should be complete in all respect and ready to start operation during handover.

• A protected structure for Dendrobium orchids will be constructed at the other side (left hand side) of the central road of 4.5m width.

Specification of the protected structure for Dendrobium Orchid

Naturally ventilated polyhouse Area – 25m x 40.32m=1008m²: Central height – 5.5m: Side height – 4.5m

Structure – ISI make GI pipe frame along with GI make clamp, bracket, nut and bolt, screws, locking wire, gutter (2 mm thick) with Aluminium profile. Construction of polyhouse structure containing at least - [insert pipe – 60mm (112m), long column – 76mm (165m), Short Column – 76mm (96m), Bottom Long – 60mm (112m), Bottom short –60mm (98m), Box purlin– 48mm (180m), Hockey– 48mm(170m), Hockey Member– 48mm (34m), Chord – 32mm (330m), Cross – 33mm (60m), Column Cross 33mm (72m), Runner Purlin Long – 33mm(144m), Runner Purlin short – 32mm (84m), Column Member– 33mm (240m), Door Member – 33mm (8m), PVC Door – 4nos. Top Purlin– 48mm (12m), Gutter Purlin Long– 48mm (24m), Gutter Purlin Short – 48mm (128m), Top Vent Member – 15mm (30m), Runner Joint– 20mm(24m), GI Gutter (76m), Cotton Pipe – 15mm (144m), GI Clamps of 60mm, 48mm, 42mm (1150nos), 2mm GI made PVC coated Locking wire – 1300m, Aluminium Profile–756m,14 Gauge GI wire–15Kg, GI- Nut & Bolts (4000nos.), Self Drill Screw (2000nos)]

Cladding – UV resistant 200 micron 5 layered clear polyethylene film at least 1900 sq.mt. Shading – 50% black

/ green shade net on top and sides (at least 1600 sq.mt.)

Insect netting – 40 mesh at the sides (at least 400sq.mt.)

Foundation – Telescopic insertion in cement concrete ratio 1:2:4 (Cement: Stone Chips: Sand) Apron sheets – UV stabilised HDPE make (at least 125 sq. mt.)

Brickwork -1 foot height and 5" thick surrounding the base of the polyhouse (at least 131sq.mt.), Air circulators -4 nos

Roof water harvesting system – Roof water harvesting system comprised with 140mm PVC make End Tee (1 no.), End Cap (1no.) and Elbows (2 nos) and 2000 lit PVC make water storage tank (2nos)

Anti-chamber for automation. Dendrobium growing benches made of concrete post and GI framed net or PVC chords – bed size 1m x 22m x 0.5m (total 26 such beds) along with water retaining trough (cement concrete made) at the bottom Coconut husk blocks for Orchids – 2520 pieces, Supply of 10080 Dendrobium plants with root plugs. The structure should be complete in all respect and ready to start operation during handover.

• A protected structure for Vanda and Mokara orchids will be constructed at the other side (left hand side) of the central road of 4.5m width

Specification of the protected structure for Vanda and Mokara Orchid

Naturally ventilated polyhouse Area $-25 \text{m x } 40.32 \text{m} = 1008 \text{m}^2$: Central height -5.5 m: Side height -4.5 m

Structure – ISI make GI pipe frame along with GI make clamp, bracket, nut and bolt, screws, locking wire, gutter (2 mm thick) with Aluminium profile. Construction of polyhouse structure containing at least -

[insert pipe – 60mm (112m), long column – 76mm (165m), Short Column – 76mm (96m), Bottom Long – 60mm (112m), Bottom short – 60mm (98m), Box purlin – 48mm (180m), Hockey – 48mm (170m), Hockey Member – 48mm (34m), Chord – 32mm (330m), Cross – 33mm (60m), Column Cross 33mm (72m), Runner Purlin Long – 33mm (144m), Runner Purlin short – 32mm (84m), Column Member – 33mm (240m), Door Member – 33mm (8m), PVC Door – 4nos. Top Purlin – 48mm (12m), Gutter Purlin Long – 48mm (24m), Gutter Purlin Short – 48mm (128m), Top Vent Member – 15mm (30m), Runner Joint – 20mm (24m), GI Gutter (76m), Cotton Pipe – 15mm (144m), GI Clamps of 60mm, 48mm, 42mm (1150nos), 2mm GI made PVC coated Locking wire – 1300m, Aluminium Profile – 756m, 14 Gauge GI wire – 15Kg, GI Nut & Bolts (4000 nos.), Self Drill Screw (2000nos)]

Cladding – UV resistant 200 micron 5 layered clear polyethylene film at least 1900sq.mt.

Shading -50% black / green shadenet on top and sides (at least 1600 sq.mt.) Insect netting -40 mesh at the sides (at least 400sq.mt.)

Foundation – Telescopic insertion in cement concrete ratio 1:2:4 (Cement: Stone Chips: Sand) (Cement 120 bag: Stone Chips 350cft: Sand 250cft)

Apron sheets – UV stabilized HDPE make

Brickwork – 1 foot height and 5" thick surrounding the base of the polyhouse, Air circulators– 4 nos

Roof water harvesting system – 140mm PVC make Tee, cap, elbow and 2000 lit PVC make water storage tank Prefabricated frame for Vanda orchid made of GI pipes and PVC chords (1.5m x 2m x 22m) – 10 numbers Prefabricated frame for Mokara orchid made of GI pipes, PVC netting and green shade nets (1.5m x 2m x 22m) – 10 numbers. Coconut husk blocks for Orchids. Supply of 3600 Vanda and 3600 Mokara medium sized plants with GI hangers and PVC perforated orchid pots. The structure should be complete in all respect and ready to start operation during handover.

• At the same side, four protected structures for Gerbera each having a dimension of 1008m² will be established at the left hand side of the central 4.5m wide road

Specification of each protected structure for Gerbera

Naturally ventilated polyhouse Area – 25mx40.32m=1008m²: Central height – 5.5m: Side height – 4.5m **Structure** – ISI make GI pipe frame along with GI make clamp, bracket, nut and bolt, screws, locking wire, gutter (2 mm thick) with Aluminium profile. Construction of polyhouse structure containing at least-

[insert pipe – 60mm (112m), long column – 76mm (165m), Short Column – 76mm (96m), Bottom Long – 60mm (112m), Bottom short – 60mm (98m), Box purlin – 48mm (180m), Hockey – 48mm (170m), Hockey Member – 48mm (34m), Chord – 32mm (330m), Cross – 33mm (60m), Column Cross 33mm (72m), Runner Purlin Long – 33mm (144m), Runner Purlin short – 32mm (84m), Column Member – 33mm (240m), Door Member – 33mm (8m), PVC Door – 4nos. Top Purlin – 48mm (12m), Gutter Purlin Long – 48mm (24m), Gutter Purlin Short – 48mm (128m), Top Vent Member – 15mm (30m), Runner Joint – 20mm (24m), GI Gutter (76m), Cotton Pipe – 15mm (144m), GI Clamps of 60mm, 48mm, 42mm (1150nos), 2mm GI made PVC coated Locking wire – 1300m, Aluminium Profile – 756m, 14 Gauge GI wire – 15Kg, GI Nut & Bolts (4000 nos.), Self Drill Screw (2000nos)]

Cladding – UV resistant 200 micron 5 layered clear polyethylene film – (at least 1900sq.mt.)

Shading -50% white / green shadenet on top and sides (at least 1600 sq.mt.) Insect netting -40 mesh at the sides (at least 400sq.mt.)

Foundation – Telescopic insertion in cement concrete ratio 1:2:4 (Cement 120 bag: Stone Chips 350cft: Sand 250cft)

Apron sheets – UV stabilized HDPE made (at least 125 sq. mt.)

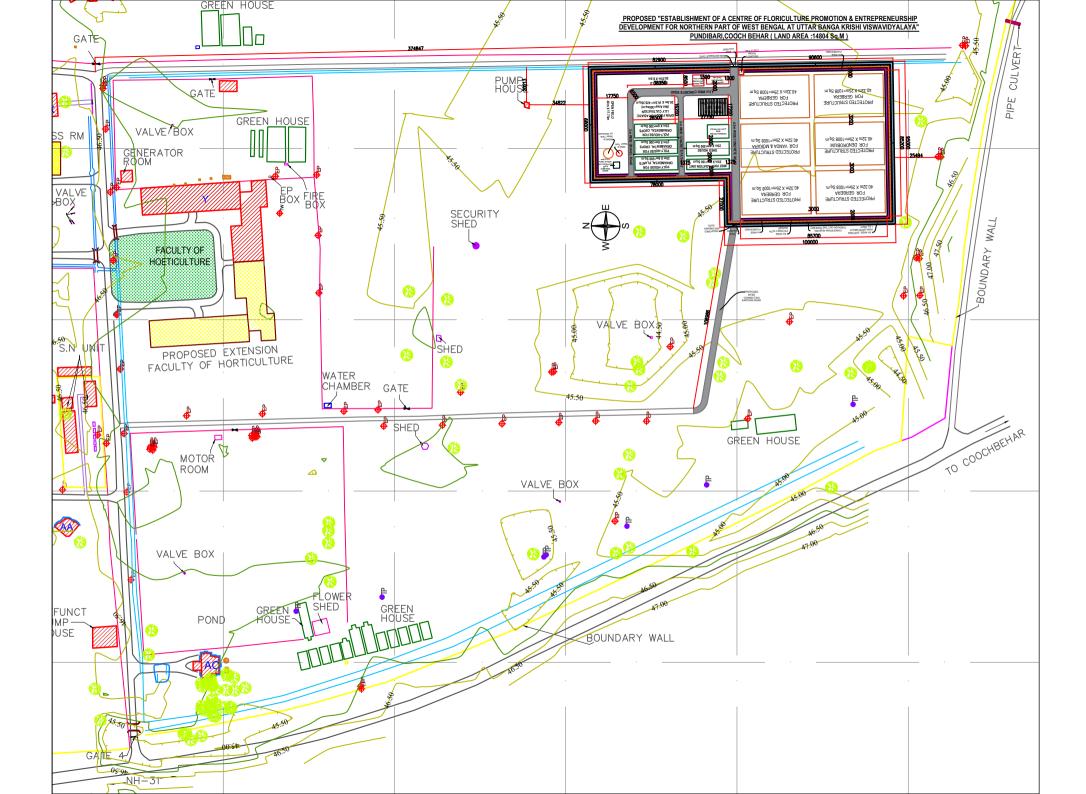
 $\mathbf{Brickwork} - 1$ foot height and 5" thick surrounding the base of the polyhouse (at least 131sq.mt.) Air circulators—4 nos (any good make)

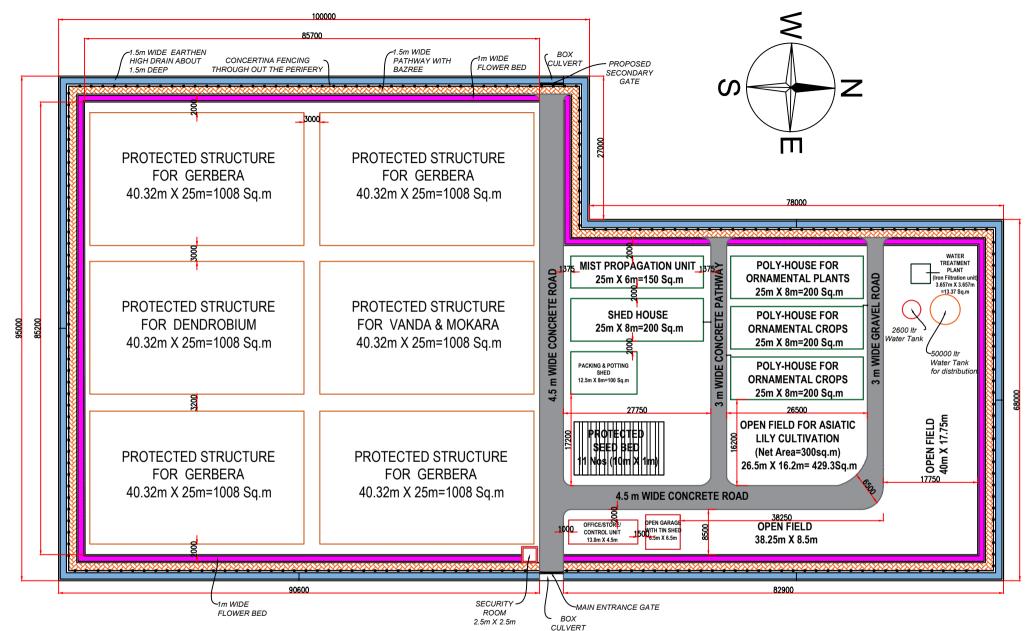
Anti-chamber for automation

Roof water harvesting system comprised with 140mm PVC make End Tee (1 no.), End Cap (1no.) and Elbows (2 nos) and 2000 lit PVC make water storage tank (2nos). Preparation of at least 40 beds with Earth, FYM, Cocopeat and Rice Husk having dimension of 0.6m x 0.3m x 23m each as specified for Gerbera. Fumigation of beds before planting should be done. Supply of 6000 tissue culture Gerbera plants with root plug. The structure should be complete in all respect and ready to start operation during handover.

The ultimate negotiated cost for infrastructure development will be borne by the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya.

The intending agency has to submit the Architectural Design and Details, detailed layout plan, layout of water supply arrangement, electrical connectivity, road network, protected structures etc. time to time as per requirement of the University. After total infrastructure development the title will be handed over to the Concessionaire Authority means Uttar Banga Krishi Viswavidyalaya and payment will be disbursed only after submission of proper documents of handover of the developed infrastructure.



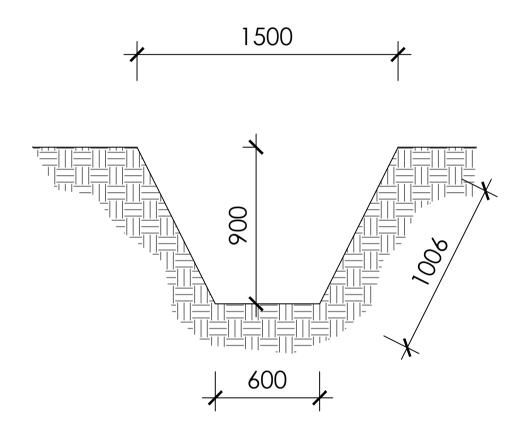


DRAFT LAYOUT OF PROPOSED "ESTABLISHMENT OF A CENTRE OF FLORICULTURE PROMOTION &

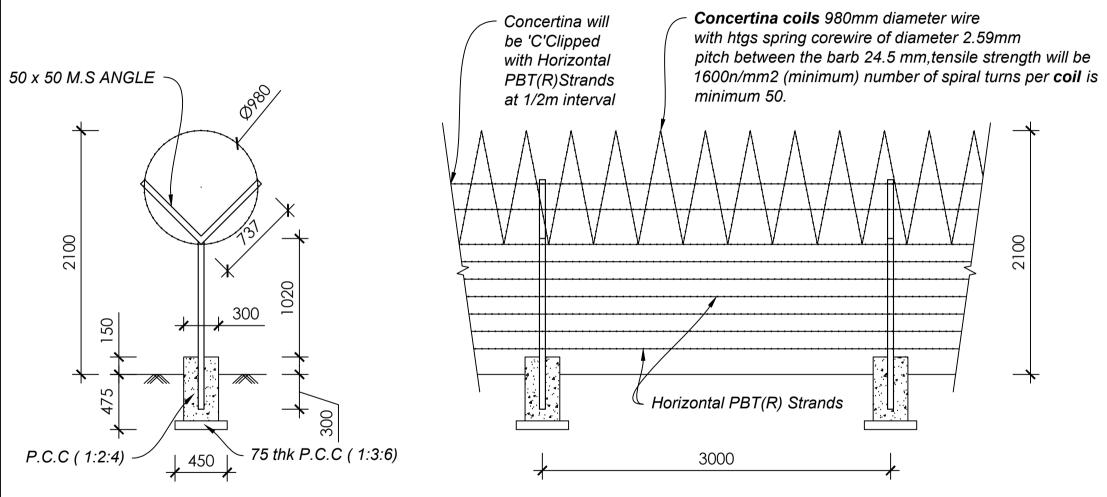
ENTREPRENEURSHIP DEVELOPMENT FOR NORTHERN PART OF WEST BENGAL AT

UTTAR BANGA KRISHI VISWAVIDYALAYA" PUNDIBARI,COOCH BEHAR

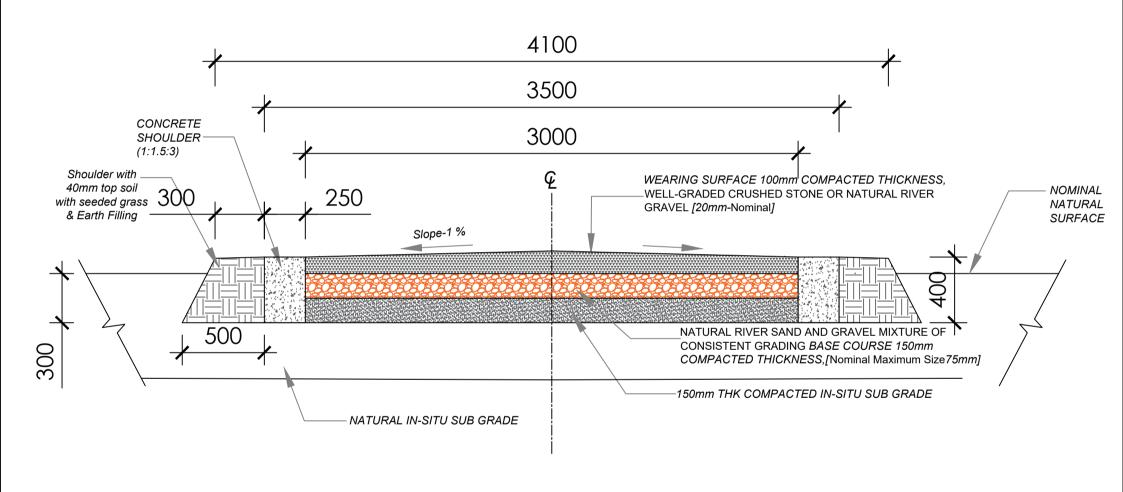
LAND AREA: 14804 Sq.M



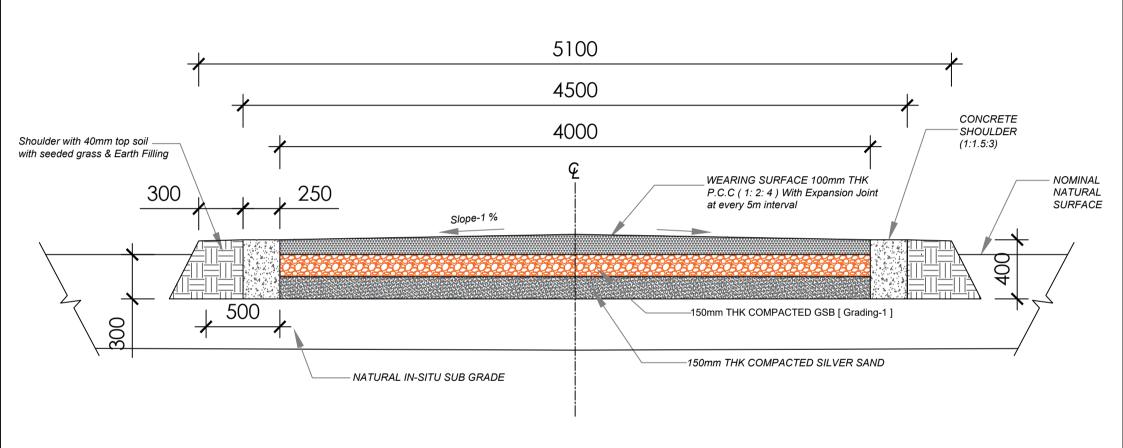
SECTION OF TYPICAL EARTHEN DRAIN[Fig-1]



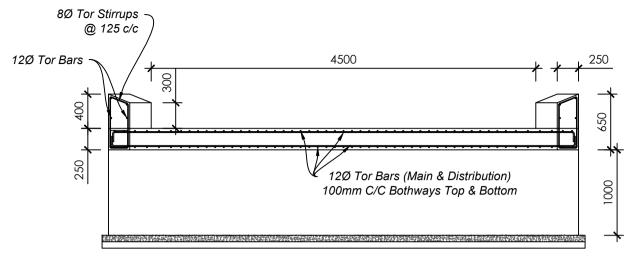
SECTION OF TYPICAL CHAIN LINK FENCING[Fig-2]



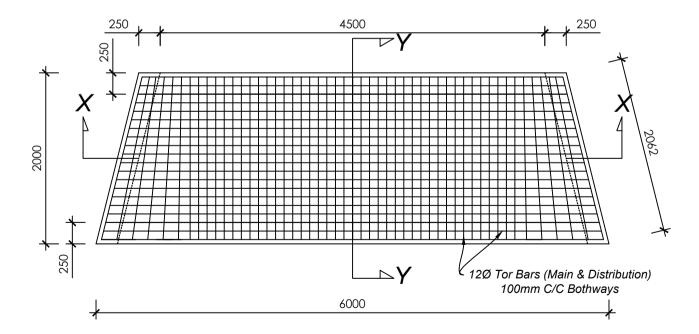
SECTION OF TYPICAL GRAVEL ROAD[Fig-3]



SECTION OF TYPICAL CEMENT CONCRETE ROAD[Fig-4]



SECTIONAL ELEVATION THROUGH [X-X] OF CULVERT [Fig-5]



SECTIONAL PLAN OF 2m SPAN CULVERT(TYPICAL)
[Fig-5]

