ANNEXURE B

ई –निविदा (तकनीकी ऑफर)

All the technical requirements & Specifications under annexure B are the minimum requirement.
Filling Specification below the minimum requirement is subject to rejection

TECHNICAL REQUIREMENTS

S.NO.	Specifications	Conformance Yes/NO	Deviation if any
A	**GENERAL REQUIREMENTS**		
1	It is intend to purchase CCTV System to cover sensitive areas of the Markfed paddy storage center and the connectivity of all the cameras to NVR through wireless system for Completion of project. All the NVR laying in different block and again connected through LAN network to the main security office or desired by the purchase committee.		
2	Application of the CCTV Surveillance should include the generating Alarms, recording on the basis of motion detection and private zone masking.		
3	The recording of CCTV camera should be clear and the recording resolution should minimum 2 mega pixel quality. The NVR also give the 25 fps per channel on live display and recording.		
4	The recording and display can be viewed on network and by the individual department where the NVR are installed.		
5	The recording of the NVR can be viewed on the remote location on network. The recording also should be remote location.		
6	The bid must be complete with all equipment's and requires accessories along with necessary power system plugs. Video connectors and brackets.		
7	The authorization that the items quoted by bidder are in production and latest in this technology as on delivery of the material .The after sale service support by minimum 1 year.		
8	The all outdoor weather proof housing should IP66 with heavy duty brackets.		
9	The CCTV cameras, NVR should be the reputed brands like AXIS, PANASONIC, PELCO, CP PLUS, SONY, DAHUA, INFONOVA, BOSCH, HIKVISION Company		
10	CAMERA and NVR should be of same makes.		

TECHNICAL SPECIFICATION

S.N-	Specification	Conformation Yes/No.	Deviation if any
B	**2 MP FUII HD WDR IP IR BULLET NETWORK CAMERA**		
1	Image Sensor : 1/2.8" 2 Megapixel PS CMOS		
2	Minimum Illumination : 0.006Lux/F1.4(Color);oLux/F1.4 (IR on)		
3	Shutter Speed : Auto/Manual, 1/1-1/100000s		
4	White Balance : Auto/Natural/Street Lamp/Outdoor/Manual		
5	Lens : 2.7mm-12mm motorized Lens, Auto Iris		
6	Gain Control (AGC) : Auto/Manual		
7	Video Compression : H.265+/H.265/H264+/H.264		
8	S/N Ratio : More than 50 dB		
9	Back Light Compensation : BLC/HLC/WDR (120dB)		
10	Video Streaming : Main Stream : 1080P(1-50/60fps), Sub Stream: D1(1-50/60fps)m Third Stream: 1080P(1-25/30fps)		
11	Resolution : 1080P(1920x1080)/720P(1280x720)/D1(704x576)CIF 352x288		
12	Special Feature : Privacy Mask, Motion Detection, Active Tampering Alarm		
13	ICR : Auto (ICR)/Color/B/W		
14	Audio Input : 1Ch.		
15	Audio Output : 1 Ch.		
16	Audio Compression : G.711a.G.711Mu/AAC/G.726		
17	Watermark : Support		
18	Protocol : HTTP; HTTPs; TCP; ARP;RTSP;RTP;UDP;SMTP;FTP;DHCP;DNS;SSL;IGMP;DDNS;PPPOE; IPv4/v6; Qos; UPnP; NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP, ONVIF (Profile S), PSIA, CGI		
19	Smart Detection : Tripwire, Intrusion, Object Abandoned/Missing, Fact Detect		
20	Ethernet : RJ-45 (10/100Base-T)		
21	User Account : 20 User		
22	Smart Phone : Iphone, Ipad, Android Phone		
23	IR : IR Range of 50 Mtr.		
24	Micro SD : Micro SD, Max 128 GB		

25	Operating Temperature : -30 degree C to + 60 degree C (-22 degree F to + 140 degree F)/ Less than 95% RH		
26	Power Source : DC12V, PoE (802.3af)		
27	Approved Makes : Axis, Panasonic, pelco, CP plus, Sony, Dahua, Infonova, Bosch , Hikvision Company		
28	Power Consumption : <11.5W		
29	Weatherproof Standard : IP66 , IK10		
30	Casing ; Aluminium Alloy		
C	**2 MP FULL HD IP PTZ NETWORK CAMERA**		
1	Image Sensor : 1/2.8" 2 Megapixel PS CMOS		
2	Effective Pixels : 1920(H) x 1080(V)		
3	S/N Ration : More than 55 dB		
4	Minimum Illumination : Color:0.005 Lux@F1.6; Olux@F1.6(IR on)		
5	Focal Length : 4.8mm-120mm		
6	Focus Control : Auto/Manual		
7	White Balance : Auto, ATW, Indoor, Outdoor, Manual		
8	Angle Of View : H:59.2 degree - 2.4 degree		
9	Close Focus Distance : 100mm-100mm		
10	AGC Control : Auto/Manual		
11	Back Light Compensation : BLC/HLC/WDR (120dB)		
12	Optical Zoom : 25x		
13	Digital Zoom : 16x		
14	Pan Travel : 0 degree to 360 degree endless		
15	Tilt travel : - 15 degree to 90 degree, auto flip 180 degree		
16	Manual speed : Pan: 0.1 to 300 degree/s; Tilt 0.1 degree to 200 degree/s		
17	Presets : 300		
18	Preset speed : Pan 400 degree/s,Tilt:300 degree/s		
19	Privacy Masking : Up to 24 areas		
20	Special Features : Tripwire, Intrusion, Abandoned/Missing, Face Detection		
21	Power up Action : Auto restore to previous PlZ and lens status after power failure		
22	Idle Motion : Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period		
23	Day/ Night:IR cut filter: Auto(ICR)/color/B/W		

24	Video compression: H.265/H.264/MJPEG		
25	Video Streaming : Main stream: 1080p/720p/1.3m (1-50/60fps), Sub stream : 1 D1/CIF (1-25/25/30fps,)Sub stream 2 : 1080p/1.3mm/720p/D1/CIF (1-25/30fps)		
26	Networking : RJ-45(10/100Base-T)		
27	Protocols : Ipv4/IPv6, HTTP, HTTPs, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter , Qos, Banjour 802.1x, ONVIF (Profile S), PSIA, CGI		
28	Max. Remote Users : 20 User		
29	Operating Temperature : -40 degree C to 70 degree C/ Less than 90% RH, Inbuilt fan and Heat Resistance.		
30	Smart Phone : Iphone, Ipad, Android, Windows Phone		
31	Weather Proof Standard : IP66		
32	Power Source : AC24V/3A(+ - 10%), ,PoE +(802.3at)		
33	Power Consumption : 13W 23W (IR on)		
34	Approved Makes : Axis, Panasonic, pelco, CP plus, Sony, Dahua, Infonova, Bosch, Hikvision		
35	IR : IR Range of 150 Mtr.		
D	**NETWORK VIDEO RECORDER 16 CHANNEL**		
1	Processor : Dual - core embedded processor		
2	Operating System : Embedded LINUX		
3	IP Camera Input : 16 channel		
4	User Interface : GUI		
5	Video Output : ! HDMI, 1 VGA		
6	Compression : H.265./H264		
7	Video Resolution : 3840x2160, 1920x1080, 1280x1024, 1280x720, 1024x768		
8	Video Recording : 200 mbps		
9	Video Display Split : 1/4/8/9/16		
10	Motion Detection : MD Zones : 396(22x16)		
11	Video Loss : Supports		
12	Camera Blank : Support		
13	Hard Disk : 8 SATA III Ports, up to 48TB		

14	Smart Phone : IPhone, IPad, Android, Phone		
15	Trigger Events : Recording, PTZ, Tour, Alarm out, Video Push, Email, FTP, Snapshot, Buzzer & Screen tips		
16	Recording Mode : Manual Schedule (Regular, Continuous), MD (Video detection : Motion detection, Tempering, Video Loss), Stop		
17	Search Mode : Time/Date, Alarm, MD & Exact search (Accurate to Second), Smart search		
18	Playback : Play, pause, stop, rewind, fast, play, next file, previous file next camera, previous camera, full screen repeat, shuffle, backup selection, digital zoom		
19	Backup Mode : USB Device/Network		
20	Interface Ports : 1HDMI, 1VGA, 3USB Ports (2USB2.0, 1USB.0), 1RS232, 2RJ45		
21	Record Interval : 1-120min(Default:60Min), Pre-record: 1-30 sec, post-record:10-300 sec		
22	Max. User Account : 128 users		
23	Ethernet : 2 RJ - 45 port (10/100M/1000Mbps,), 2 Ethernet ports joint Working or 2 independent 1000 Mbps Ethernet ports		
24	Protocols : HTTP, TCP/IP, ipv4/IPv6, UPNP , RTSP , UDP , SMTP , NTP , DHCP, DNS , IP filter , PPPOE , DDNS , FTP , Alarm server , ONVIF version 2.4		
25	Power supply : AC 100V- 240 V , 50-60 Hz		
26	Power consumption : < 12W (Without HDD)		
27	Working Temperature : -10 to + 55 Degree C / 10-90% RH / 86 -106 Kpa		
28	Approved Makes : Axis, Panasonic, pelco, CP plus, Sony, Dahua, Infonova, Bosch, Hikvision Company		
E	**5 PORT FAST ETHERNET SWITCH WITH 4 POE**		
1	Power Supply : Power Adaptor		
2.	Network Standard : Support IEEE 802.3802.3u/IEEE802.3ab/IEEE802.3z/Ieee802.3x		
3	Packet Forwarding Rate : 0.74Mpps		

4	Exchange Capacity : 1.0Gbps		
5	MAC Address List : 2K		
6	Transmission Distance : 1-4 port: default, 0.100m, CCTV: 0.25m, UPLINK: 100m		
7	Ethernet Speed : 1-4 port: default 10 100mbps, CCTV: 10mbps, UPLINK port 100mbps		
8	Packet Buffer :768K		
9	PoE Power Budget : 60 W		
10	Ethernet Port Light : 2pcs(Yellow & Green) on RJ45 Yellow indicates PoE, Indicates Link Act		
11	Surveillance Module Light : 1pc (Green) Indicates CCTV		
12	Power Source : DC 48V-54V		
13	Operating Temperature : -10 degree C to 55 degree C		
14	Power Consumption : <5W		
15	Pluse Group : Level 3 Standard: IEC61000 4 4		
16	Storage Temperature : -40 degree C to 85 degree C		
17	ESD : Contract Discharge 6KV, Air Discharge Level 8KV, Standard IEC61000-4-2		
18	Anti-thunder level : Common Mode 6KV, Standard:IEC61000 4 5		
F	**HARD DISK (4TB)**		
1	Should be 4TB		
2	Should have surveillance		
3	Approved Makes : SEAGATE/WESTERN DIGITAL/ TOSHIBA		
G	**LED MONITOR (HD)**		
1	Screen Size Minimum 21" or Above		
2	Resolution 1366x768 (HD)		
3	Brightness (cd/m2) 250		
4	Viewing Angle 178x178 degree		
5	Frame Rate 8.5		
6	Aspect Ratio : 16:9		
7	Approved Makes : Sony/LG/Samsung		

H	**NETWORK LAN CABLE**		
1	Lan Cable should be Cat6		
I	**NETWORK U-RACK**		
1	Minimum 6 U-RACK		
J	**PVC CONDUIT PIPE**		
1	Outer Dia 1.25 mm		
2	Color white heavy duty with all related accessories		
3	Size 3/4"		
K	**POWER CABLE**		
1	PVC insulated and working temperature higher than 60 degree		
2	Two core inner conductor 1sq mm		
3	Insulation Resistance more than 10 m ohm		
4	Approved Makes FINOLEX /HAVELLS		
L	**POLE**		
1	Height Minimum 25 feet from ground		
2	With Wireless Device & camera fixing brackets		
M	**WIRELESS DEVICE**		
1	Should be support 4 camera & NVR		
2	Should be wireless connectivity point to point		
3	Range should not be less than 1 km		
N	**NETWORK VIDEO MANAGEMENT & ANALYTIC SOFTWARE**		
1.	"VMS (Video Management System) and Analytics Software should be ONVIF (Open Network Video Interface Forum) Complaint and of the same OEM as that of CCTV Camera.		