U.S. Embassy
Proposed BMS Points List

MEINHARDT

NOTE: Respective MEPF equipment schedule and schematics shall govern in case of conflict with the quantities stated in this points lists.

Items	Equipment/Items	DO	DI	AO	AI	High Level Interface	Remarks
MECHANICAL							
1	**CHILLED WATER PLANT SYSTEM**						
1.a	**WATER COOLED CHILLER**	3					
	- Chiller start/stop	X				X	
	- Chiller On/Off Status		X			X	
	- Chilled Water Supply Flow Sensor		X			X	
	- Chilled Water Supply Pressure				X	X	
	- Chilled Water Return Pressure				X	X	The Chiller itself with Chiller Plant Manager shall be of HIGH LEVEL INTERFACE. Chiller Plant Contractor shall ensure this provision. It should be capable of both LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- Chilled Water Supply Temperature				X	X	
	- Chilled Water Return Temperature				X	X	
	- Chilled Water Return Flow Meter					X	
	- Condenser Water Return Flow Sensor		X			X	
	- Condenser Water Supply Pressure				X	X	
	- Condenser Water Return Pressure				X	X	
	- Condenser Water Supply Temperature				X	X	
	- Condenser Water Return Temperature				X	X	
	- Kw-Hr Monitoring				X	X	
1.b	**CHILLED WATER MAINS**						
	- Chilled Water Return Temperature	1			X		
1.c	**PRIMARY CHILLED WATER PUMP w/ VFD (NEW)**	1					
	- Start/Stop	X				X	
	- On/off Status		X			X	
	- Trip Alarm		X			X	PUMP with VFD shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- Pump Speed Control			X		X	
	- Pump Speed Monitoring				X	X	
	- Flow Meter				x	x	
	- Kw-Hr Monitoring				x	x	
	- Pressure Monitoring				x	x	
	- Pressure Monitoring				x	x	
1.d	**PRIMARY CHILLED WATER PUMP (OLD)**	2					
	- Start/Stop	X				X	PUMP shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- On/off Status		X			X	
	- Trip Alarm		X			X	
	- Flow Meter				x	x	
	- Pressure Monitoring				x	x	
	- Pressure Monitoring				x	x	
1.e	**SECONDARY CHILLED WATER PUMP w/ VFD (NEW)**	2					
	- Start/Stop	X				X	
	- On/off Status		X			X	
	- Trip Alarm		X			X	PUMP with VFD shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- Pump Speed Control			X		X	
	- Pump Speed Monitoring				X	X	
	- Flow Meter				x	x	
	- Kw-Hr Monitoring				x	x	
	- Pressure Monitoring				x	x	
	- Pressure Monitoring				x	x	
1.f	**CONDENSER WATER PUMP w/ VFD (NEW)**	1					
	- Start/Stop	X				X	
	- On/off Status		X			X	
	- Trip Alarm		X			X	PUMP with VFD shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- Pump Speed Control			X		X	
	- Pump Speed Monitoring				X	X	
	- Flow Meter				x	x	
	- Kw-Hr Monitoring				x	x	
	- Pressure Monitoring				x	x	
	- Pressure Monitoring				x	x	
1.g	**CONDENSER WATER PUMP (OLD)**	2					
	- Start/Stop	X				X	PUMP shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- On/off Status		X			X	
	- Trip Alarm		X			X	
	- Flow Meter				x	x	
	- Pressure Monitoring				x	x	
	- Pressure Monitoring				x	x	
1.h	**COOLING TOWER**	3					
	- Start/Stop	X				X	Cooling Tower shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- On/off Status		X			X	
	- Trip Alarm		X			X	
	- On/Off Control Valve	X				X	
	- Return Temperature Monitoring				X	X	
	- Flow Sensor		x			x	
	- Pressure Monitoring				x	x	
	- Sump Temperature Monitoring				x	x	
	- Kw-Hr Monitoring				x		
1.i	**SAND FILTER UNIT**	3					Sand Filter Unit shall be of HIGH LEVEL INTERFACE. Contractor shall ensure this provision. It SHOULD BE CAPABLE OF BOTH LONWORKS AND BACNET PROTOCOL. Signal type will be guide in virtual configuration.
	- Start/Stop	X				X	
	- On/off Status		X			X	
	- Trip Alarm		X			X	
1.j	**DIFFERENTIAL PRESSURE TRANSMITTER**	2			X		

1 / EC2-03 BMS POINTS LIST
NTS

UNITED STATES EMBASSY
MANILA, PHILIPPINES

FACILITIES MANAGEMENT

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APPROVED BY :

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SFM	PLS		
DFM	RLW		
CIVIL/STRL			
ELECT'L			
MECH'L			

RevNo	Revision note	Date	Sign.

Project Title

US EMBASSY MAIN CHILLER PLANT ADDITION

Location
ROXAS BOULEVARD, PHILIPPINES

Release For Construction:
FMM FMS

SHEET CONTENT
ELECTRONICS SERVICES
BMS POINTS LIST

Phase
☐ CONCEPT ☐ 35% ☐ 60% ☐ 90% ■ 100% ☐ FINAL

Date 29OCT12	CADD File Name -
Designed PGL	Drawn By MMN
Checked RCM	Drawing Number EC2-03
Project Number MP1044	Sheet Number Sheet 6 of 7
	Contract No. CONTRACT_NO

FOR TENDER