



March 16, 2022

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region

THRU : The Assistant Regional Director for Management Services

FROM : The OIC – PENR Officer

SUBJECT : **REQUEST FOR FUNDS FOR IMPROVEMENT AND MAINTENANCE OF THE DENR-PENRO MARINDUQUE CENTRALIZED CLOSED-CIRCUIT TELEVISION (CCTV) SYSTEM**

The existing centralized Closed-Circuit Television (CCTV) System to facilitate the effective and efficient monitoring and recording of events inside and outside the Office premises of the DENR-PENRO Marinduque was fully operational since 2018.

As of to date, there are thirty four (34) CCTV cameras installed: sixteen (16) outdoor cameras and eighteen (18) indoor cameras, one (1) 18-channel DVR and one (1) 16-channel NVR requiring frequent improvement, repair and maintenance in order to ensure that all are properly working and in good state. Likewise, replacement of two (2) DVR/NVR and one (1) CCTV Power Supply Unit (PSU) and procurement of large capacity and reliable storage are deemed necessary to avoid recurrent malfunctions and ensure adequate storage of recorded CCTV footages.

Funds for the safety and security system equipment was proposed in the submitted FY 2022 Work and Financial Plan (WFP) last year. However, it was not included in the approved FY 2022 WFP under the Support to Operations - Data Management Including Systems Development and Maintenance, thus, the replacement and maintenance of the existing CCTV System cannot be done that may result to recurrent malfunctions or worse breakdown. When this happen, the CCTV System will lose its purpose of capturing and recording unexpected and unnecessary incidents inside and outside the Office.

In this regard, this Office is requesting for funds for the procurement of additional CCTV equipment and supplies to be used solely for the improvement and maintenance of the existing CCTV System for the current year with the total maximum amount of **Three Hundred Ten Thousand Pesos (Php310,000.00)**.

Attached are photos of the existing Closed-Circuit Television (CCTV) System, inventory of all CCTV cameras and the proposed technical specifications of the CCTV System for your reference.

For consideration and approval.








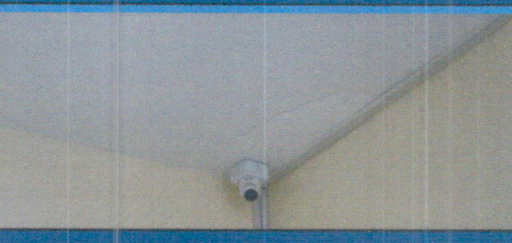

IMELDA M. DIAZ

Table 9. List of Existing CCTV Cameras and Peripherals as of CY 2021




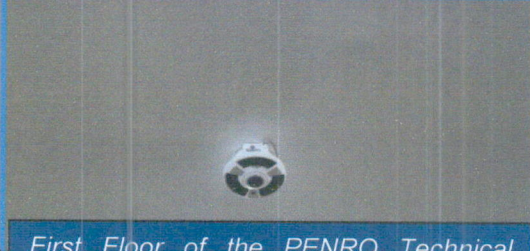

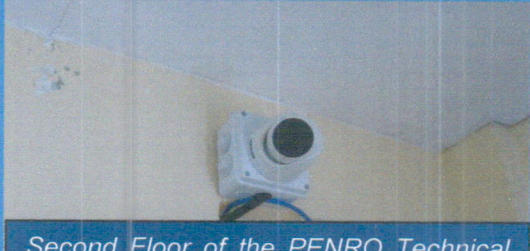



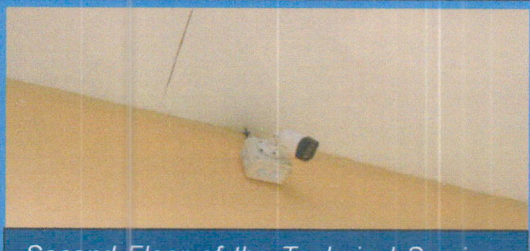
	Description	Qty	Location	Remarks
1	Hikvision Analog Camera (Dome Type)	1	Second Floor of the PENRO Main Building facing the PENRO Office	Serviceable
2	Hikvision Analog Camera (Dome Type)	1	First Floor of the PENRO Main Building facing the Admin and Finance Section	Serviceable
3	Hikvision Analog Camera (Dome Type)	1	First Floor of the PENRO Main Building facing the Receiving Area	Serviceable
4	Hikvision Analog Camera (Bullet Type) Indoor	1	First Floor of the PENRO Main Building facing the MSD and Cashier Offices	Serviceable
5	Dahua Analog Camera (Bullet Type) Indoor	1	Second Floor of the PENRO Main Building facing the PENRO Planning Section	Serviceable
6	Hikvision Analog Camera (Bullet Type) Indoor	1	Second Floor of the PENRO Main Building facing the PENRO Environmental and Mining Section	Serviceable
7	Dahua Analog Camera (Bullet Type) Indoor	1	First Floor of the PENRO Technical Services Building facing the TSD Office	Serviceable
8	Hikvision Analog Camera (Bullet Type) Indoor	1	First Floor of the PENRO Technical Services Building facing the Conservation and Development Section	Serviceable
9	Hikvision Analog Camera (Bullet Type) Indoor	1	Protected Area Satellite Office	Serviceable
10	Hikvision IP Camera (Dome Type)	1	Protected Area Satellite Office	Serviceable
11	Fish Eye 360 Analog Camera Indoor	1	First Floor of the Technical Services Building (Open Space)	Serviceable
12	Fish Eye 360 Analog Camera Indoor	1	Records Room, First Floor of the Technical Services Building	Serviceable
13	Hikvision IP Camera (Dome Type)	1	First Floor of the PENRO Technical Services Building facing the Regulation and Permitting Section	Serviceable
14	Hikvision Analog Camera (Dome Type) Indoor	1	First Floor of the PENRO Technical Services Building facing the NGP Room	Serviceable
15	Hikvision Analog Camera (Dome Type)	2	Second Floor of the PENRO Technical Services Building facing the PENRO Conference Hall	Serviceable
16	Hikvision Analog Camera (Bullet Type) Indoor	1	First Floor of the PENRO Main Building facing the Hallway	Serviceable
17	Dahua Analog Camera (Bullet Type) Indoor	1	Second Floor of the Technical Services Building facing the backdoor of down stairs	Serviceable
	INDOOR CCTVs	18		

	Description	Qty	Location	Remarks
18	Hikvision IP Camera (Dome Type) Indoor	1	Back Door of the Protected Area Satellite Office	Serviceable
19	Hikvision Analog Camera (Dome Type) Indoor	1	Main Entrance of the PENRO Technical Services Building	Serviceable
20	Hikvision Analog Camera (Dome Type) Indoor	1	Back Door of the PENRO Technical Services Building	Serviceable
21	Hikvision Analog Camera (Dome Type) Indoor	1	Back Door of the PENRO Main Building	Serviceable
22	Hikvision IP Camera (Dome Type) Indoor	1	Left Side of the PENRO Main Building facing the MRF Area	Serviceable
23	Hikvision IP Camera (Dome Type) Indoor	1	Left Side of the PENRO Main Building facing the "Bahay Kubo"	Serviceable
24	Hikvision IP Camera (Dome Type) Indoor	1	Left Side of the PENRO Main Building facing the Lumber Shed	Serviceable
25	Hikvision IP Camera (Bullet Type)	1	Front of the PENRO Main Building facing the Protected Area Satellite Office	Serviceable
26	Hikvision IP Camera (Bullet Type)	1	Front of the PENRO Main Building facing the Main Entrance	Serviceable
27	Hikvision IP Camera (Bullet Type)	1	Front of the PENRO Main Building facing the Parking Area	Serviceable
28	Hikvision IP Camera (Bullet Type)	1	Second Floor of the PENRO Main Building facing the Balcony	Serviceable
29	Hikvision IP Camera (Bullet Type)	1	Front of the PENRO Technical Services Building facing the Main Gate	Serviceable
30	Hikvision IP Camera (Bullet Type)	1	Right Side of the PENRO Technical Services Building facing the Main Road	Serviceable
31	Hikvision IP Camera (Bullet Type)	1	Side of the PENRO Technical Services Building facing the Main Road	Serviceable
32	Hikvision IP Camera (Bullet Type)	1	Left Side of the PENRO Technical Services Building facing the Main Road	Serviceable
33	Dahua CCTV IP Camera (Bullet Type)	1	Back Door of the PENRO Main Building facing the Generator Set	Serviceable
OUTDOOR CCTVs		16		
TOTAL CCTV CAMERAS		34		
34	DVR (18 channels)	1		Serviceable
35	NVR (16 channels)	1		Serviceable
36	Hard Disk (6TB)	1		Serviceable
37	Hard Disk (4TB)	2		Serviceable
38	Hard Disk (2TB)	1		Serviceable
39	Hard Disk (1TB)	4		Serviceable




Pictures of the CCTV cameras installed inside the Office premises

	
<i>Second Floor of the PENRO Main Building facing the PENRO Office</i>	<i>First Floor of the PENRO Main Building facing the Admin and Finance Section</i>
	
<i>First Floor of the PENRO Main Building facing the Receiving Area</i>	<i>First Floor of the PENRO Main Building facing the MSD and Cashier Offices</i>
	
<i>Second Floor of the PENRO Main Building facing the PENRO Planning Section</i>	<i>Second Floor of the PENRO Main Building facing the PENRO Environmental and Mining Section</i>
	
<i>First Floor of the PENRO Technical Services Building facing the TSD Office</i>	<i>First Floor of the PENRO Technical Services Building facing the Conservation and Development Section</i>

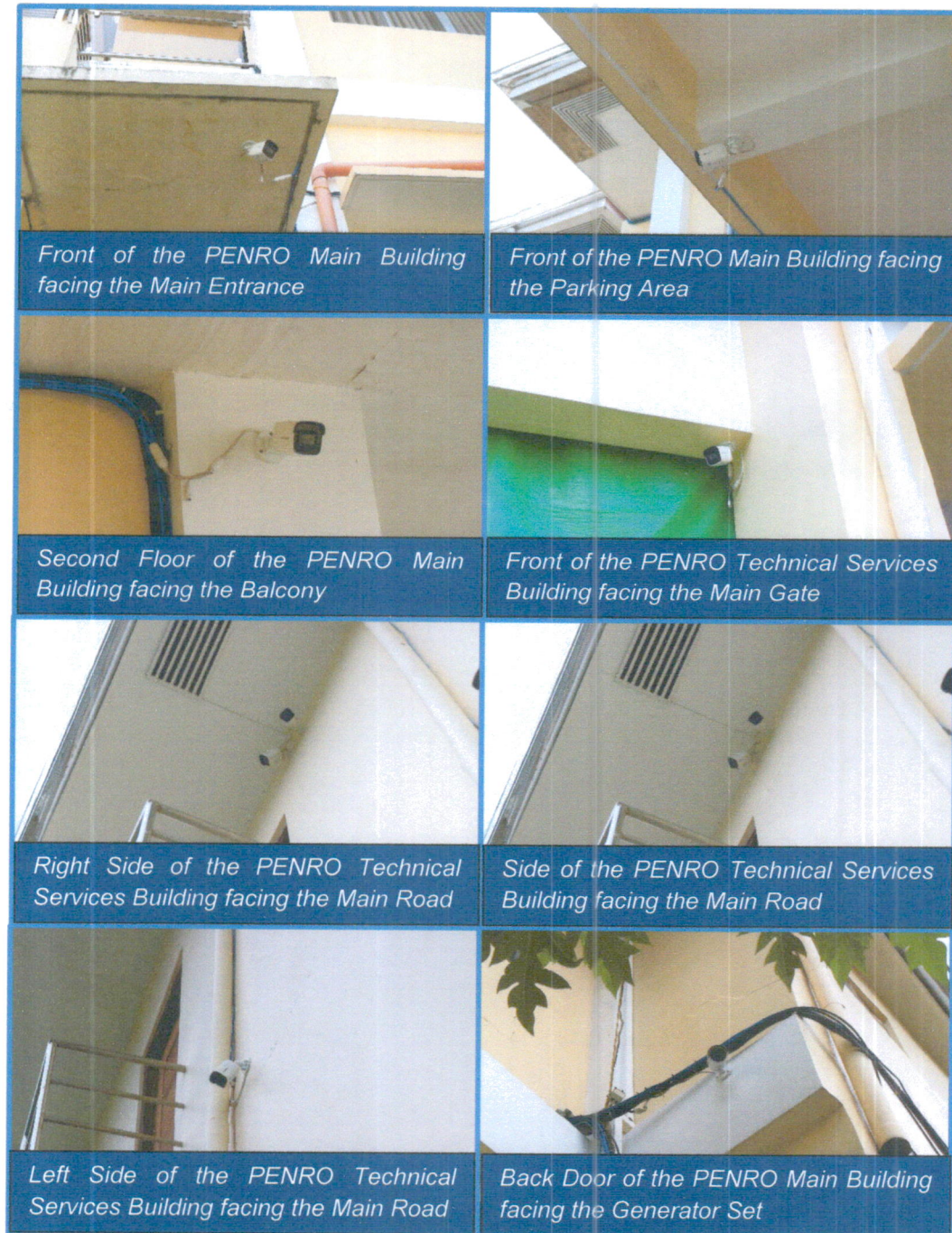
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Protected Area Satellite Office	First Floor of the Technical Services Building (Open Space)
	
Records Room, First Floor of the Technical Services Building	First Floor of the PENRO Technical Services Building facing the Regulation and Permitting Section
	
First Floor of the PENRO Technical Services Building facing the NGP Room	Second Floor of the PENRO Technical Services Building facing the PENRO Conference Hall
	
Second Floor of the PENRO Technical Services Building facing the PENRO Conference Hall	
	
First Floor of the PENRO Main Building facing the Hallway	Second Floor of the Technical Services Building facing the backdoor of down stairs

Pictures of the CCTV cameras installed outside the Office premises

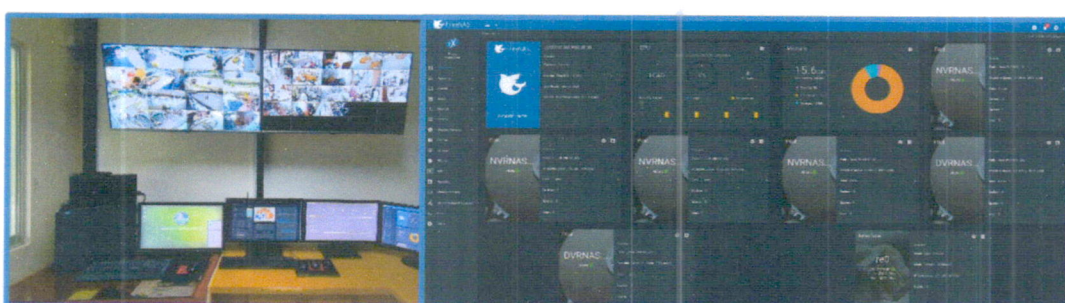
	
<i>Back Door of the Protected Area Satellite Office</i>	<i>Main Entrance of the PENRO Technical Services Building</i>
	
<i>Back Door of the PENRO Technical Services Building</i>	<i>Back Door of the PENRO Main Building</i>
	
<i>Left Side of the PENRO Main Building facing the MRF Area</i>	<i>Left Side of the PENRO Main Building facing the "Bahay Kubo"</i>
	
<i>Left Side of the PENRO Main Building facing the Lumber Shed</i>	<i>Front of the PENRO Main Building facing the Protected Area Satellite Office</i>

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Moreover, events inside and outside the Office premises were captured and recorded by the CCTV. In the event that a certain incident happened, the person involved can request for a CCTV Event Playback once the Service Request Form was accomplished and approved.

Pictures of the CCTV monitors located at the PENRO ICT Server Room, 2nd Floor of the PENRO Main Building



IT Equipment and Peripherals Needed for CCTV System

Province: DENR-PENRO MARINDUQUE

Equipment/Peripherals	Description	Quantity	Unit Price	Total	Purpose	End-User (Section/Unit)
NVR	<input type="checkbox"/> Brand and Model: Hikvision DS-7632NI-K2/16P <input type="checkbox"/> Up to 32 channel IP cameras can be connected <input type="checkbox"/> Supports decoding H.265+/H.265/H.264+/H.264 video formats <input type="checkbox"/> Up to 4K high-definition live view, storage and playback <input type="checkbox"/> Up to 8-ch @ 1080p decoding capacity <input type="checkbox"/> Up to 256 Mbps high incoming bandwidth ensures IP cameras can be connected <input type="checkbox"/> 1 HDMI and 1 VGA interfaces: both interfaces support independent video output <input type="checkbox"/> 2 HDDs for continuous video recording <input type="checkbox"/> Plug & Play with 16 Power-over-Ethernet (PoE) interfaces	1	26,000.00	26,000.00	Improvement and maintenance of the existing CCTV System for the current year	DENR-PENRO Marinduque - ICT Unit
DVR	<input type="checkbox"/> Brand and Model: Hikvision DS-7232HQHI-K2 <input type="checkbox"/> 32 channels and 2 HDDs 1U DVR <input type="checkbox"/> Efficient H.265 pro+ compression technology <input type="checkbox"/> Encoding ability up to 1080p @ 15 fps <input type="checkbox"/> 5 signals input adaptively (HDTVI/AHD/CVI/CVBS/IP) <input type="checkbox"/> Up to 40 network cameras can be connected	1	20,000.00	20,000.00		
CCTV SAN	<input type="checkbox"/> Brand and Model: Hikvision DS-AT1000S/288 <input type="checkbox"/> 16*18 TB IoT SMR enterprise HDD <input type="checkbox"/> IoT fully sealed helium HDD technology <input type="checkbox"/> Surveillance-specialized direct storage (Direct Streaming mode) <input type="checkbox"/> Highly cost efficient, safe and reliable <input type="checkbox"/> Energy saving and space saving <input type="checkbox"/> Easy operation and maintenance <input type="checkbox"/> SMR HDD providing 5-year warranty	1	200,000.00	200,000.00	Improvement and maintenance of the existing CCTV System for the current year	DENR-PENRO Marinduque - ICT Unit

IT Equipment and Peripherals Needed for CCTV System

Province: DENR-PENRO MARINDUQUE

Equipment/Peripherals	Description	Quantity	Unit Price	Total	Purpose	End-User (Section/Unit)
RACK-MOUNT DC CCTV POWER SUPPLY	<input type="checkbox"/> Brand and Model: ENFORCER® Rack-Mount DC CCTV Power Supply PH-U1612-PULQ <input type="checkbox"/> 12 Amps at 12VDC <input type="checkbox"/> 12.6~13.5 VDC field adjustable output <input type="checkbox"/> Compact 1U height fits into standard 19" equipment racks <input type="checkbox"/> Dual-color LED status indicator for each output: o Blue: Normal o Red: Fuse tripped <input type="checkbox"/> 3 Amps per output <input type="checkbox"/> Outputs protected by PTC fuses rated at 3A each <input type="checkbox"/> Flexible cable management options: <input type="checkbox"/> 2 Cable-management brackets with 3 different mounting points <input type="checkbox"/> 2 Cable-management hooks with 3 different mounting points <input type="checkbox"/> Rack-mount options: <input type="checkbox"/> Facing forward – easy access to indicator LEDs <input type="checkbox"/> Facing backward – easy access to connections <input type="checkbox"/> Removable screw terminal blocks for convenient installation and reliable connections	1	50,000.00	50,000.00	Improvement and maintenance of the existing CCTV System for the current year	DENR-PENRO Marinduque - ICT Unit
CCTV CABLE	<input type="checkbox"/> Brand and Model: Nexen RG6 Siamese Cable 305 meters <input type="checkbox"/> RG6 Siamese Coaxial Cable with 2 Power Cable <input type="checkbox"/> Core Conductor: #18 solid CCS <input type="checkbox"/> Dielectric: Foamed PE <input type="checkbox"/> Shield: 100% Bonded Aluminum Foil + Braid <input type="checkbox"/> Outer Jacket: Black UV resistant PVC <input type="checkbox"/> DC Power: 2 * #18 AWG Stranded CCA Red/Black <input type="checkbox"/> Length: 305 Meters	2	7,000.00	14,000.00	Improvement and maintenance of the existing CCTV System for the current year	DENR-PENRO Marinduque - ICT Unit
GRAND TOTAL				310,000.00		

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