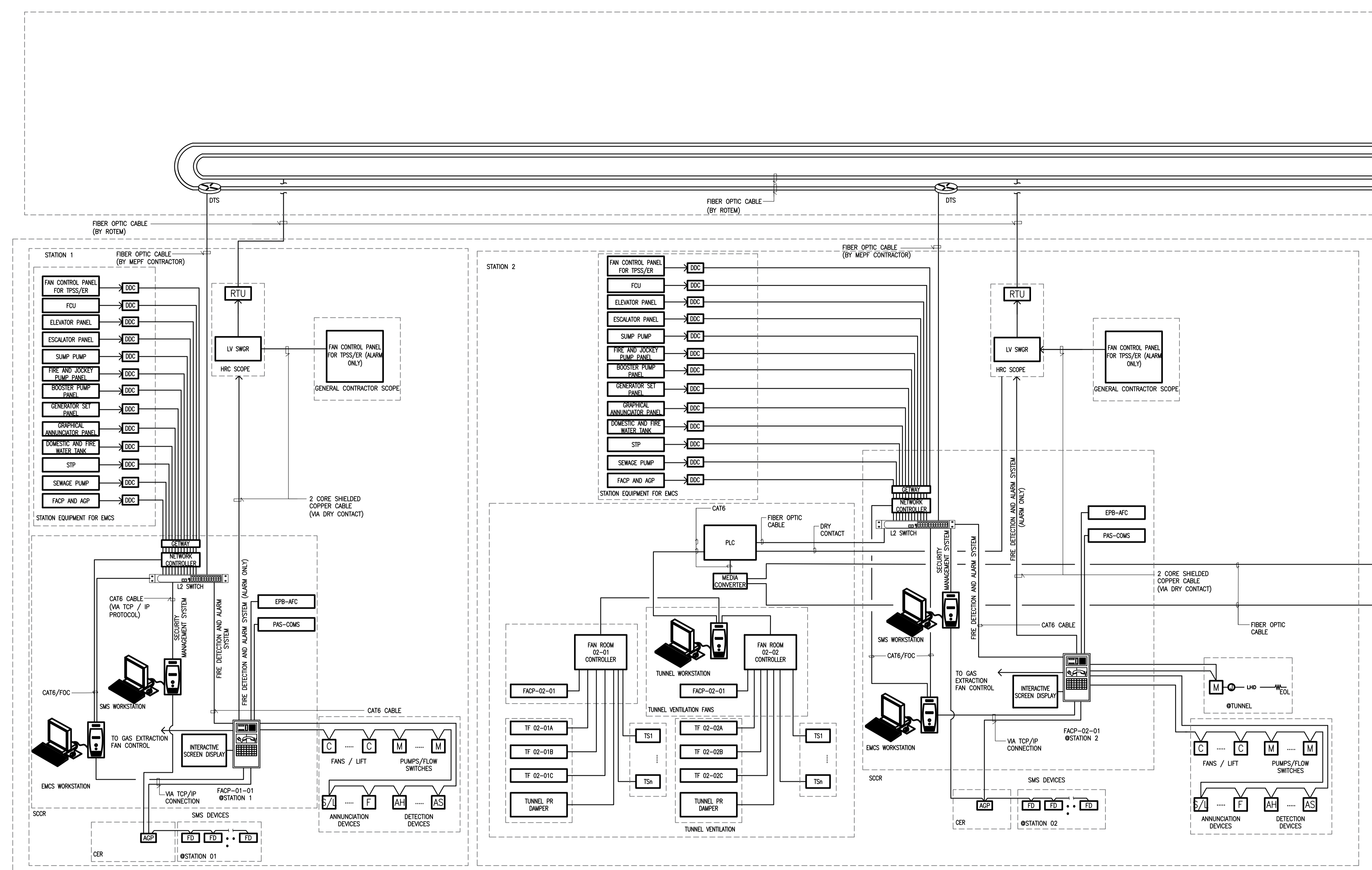


MODE OF OPERATION:  
 \* IN CASE OF TRAIN EMERGENCY/FIRE MODE, LINEAR HEAT DETECTOR'S WILL SEND A SIGNAL FROM OUR ASSIGNED FACP FOR TUNNEL STATION. FACP SHALL SEND A SIGNAL DIRECTLY TO OUR VCP'S AND CONTROL MODULES TO SUPERVISE THE FANS AND LIFE-SAFETY REQUIREMENTS.

- LEGEND:
- ADDRESSABLE CONTROL MODULE
  - ADDRESSABLE HEAT DETECTOR
  - COMMUNICATIONS SERVER
  - FIELD DEVICES
  - FIRE ALARM CONTROL PANEL
  - NETWORK ROUTER
  - NETWORK SWITCH
  - REMOTE TERMINAL UNIT
  - SIGNALING MODULE
  - VENTILATION CONTROL PANEL
  - ACCESS GATHERING PANEL
  - TEMPERATURE SENSOR  
n - DENOTE NUMBER OF SENSORS

- ABBREVIATION:
- DTS DATA TRANSFER SWITCH
  - RTU REMOTE TERMINAL UNIT

- NOTE:
- THE NETWORK SWITCH SHALL BE INSTALLED IN THE COMMUNICATIONS EQUIPMENT RACK AND POWERED BY UPS.
  - CABLE MATERIAL AND CABLE INSTALLATION SHALL BE PROVIDED BY MEFP CONTRACTOR.



BY CIVIL WORKS (EE)

MATCHLINE-A  
MATCHLINE-B

**1** AUXILIARIES NETWORK INTERFACING ARCHITECTURE  
 D-STA-IE-13004A NTS

**SMC - MRT7**

Approved

Approved with comments

Disapproved, for resubmission

Disapproved, for workshop

FEBRUARY 27, 2024

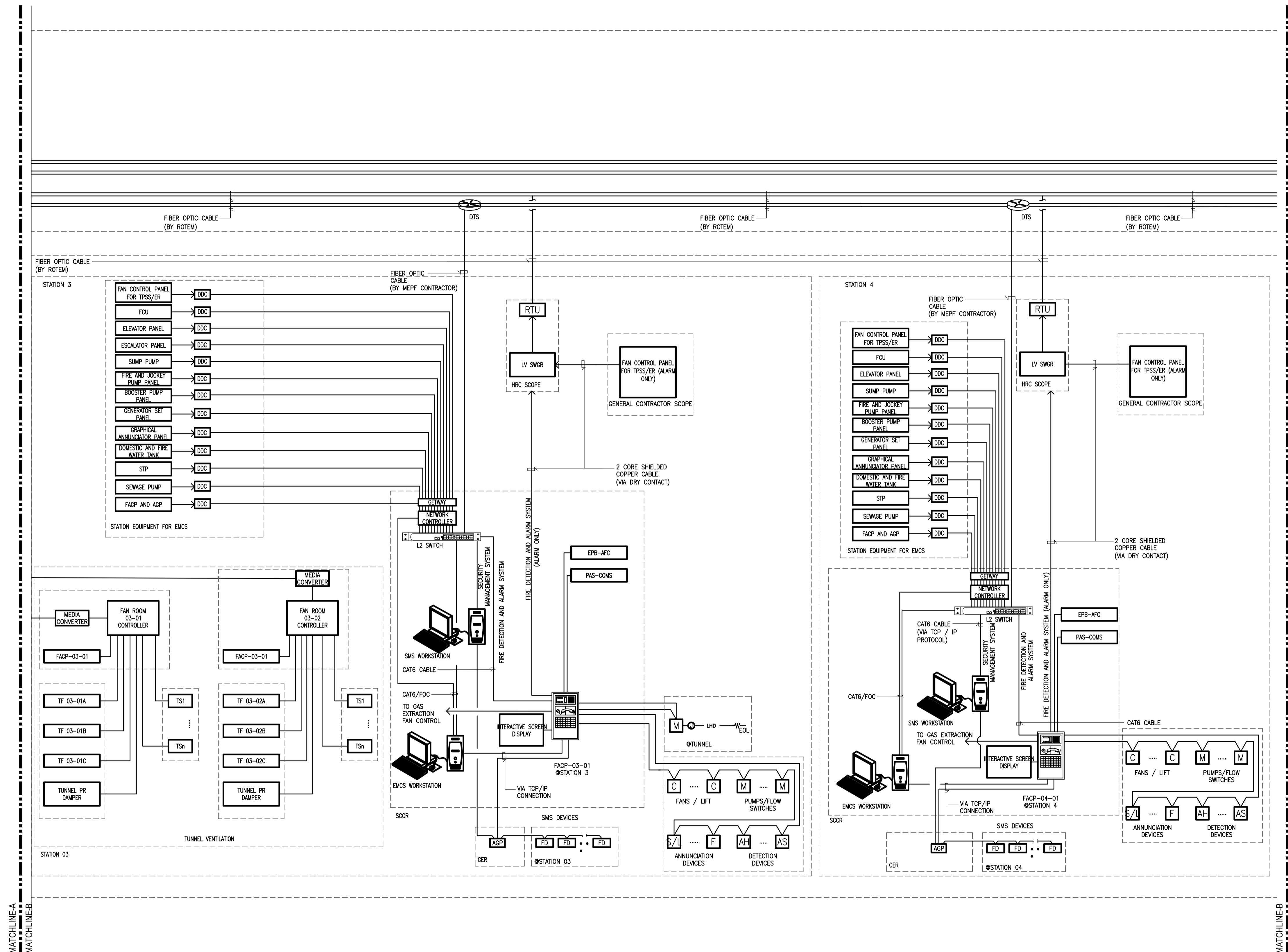
PROJECT TITLE: <b>THE MRT 7 PROJECT</b>	SHEET CONTENTS: AUXILIARIES NETWORK INTERFACING ARCHITECTURE PART A	SHEET NO. 01 OF 06	DESIGN CONTRACTOR: <b>PKII PHILKOEI INTERNATIONAL, INC.</b> <i>In association with MEIN+HARDT</i> ERWIN V. JUNISA PROFESSIONAL ELECTRONICS ENGINEER	CONCESSIONAIRE: <b>MRT7</b> SMC MASS RAIL TRANSIT 7 INC. HYUNG-WOOK KIM PROJECT DIRECTOR	GRANTOR: REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION RECOMMENDING APPROVAL: JORJETTE B. AQUINO PROJECT MANAGER ASSISTANT SECRETARY FOR RAILWAYS APPROVED: CESAR B. CHAVEZ UNDERSECRETARY FOR RAILWAYS
LOCATION: QUEZON CITY- SAN JOSE DEL MONTE BULACAN	DWG. NO. D-STA-IE-13004A	REV. NO. A	PRC NO.: 862 PTR NO.: 10074084 PLACE: MAKATI CITY	IAPOA NO.: DATE: 02 JAN. 2024 T.I.N. NO.: 157-691-905	
REVISION HISTORY					
REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT	
A	24FEB09	ISSUED FOR CONSTRUCTION	RVC	MSM	EW
5	24JAN10	ISSUED FOR APPROVAL	RVC	MSM	EW
4	23JUN20	ISSUED FOR APPROVAL	RVC	MSM	EW
3	23APR27	ISSUED FOR APPROVAL	RVC	MSM	EW
2	22DEC16	ISSUED FOR APPROVAL	RVC	MSM	EW
1	22OCT10	ISSUED FOR APPROVAL	RVC	MSM	EW
0	22MAY20	FOR COORDINATION	RVC	MSM	EW

MODE OF OPERATION:  
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  - ADDRESSABLE HEAT DETECTOR
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  - NETWORK ROUTER
  - NETWORK SWITCH
  - REMOTE TERMINAL UNIT
  - SIGNALING MODULE
  - VENTILATION CONTROL PANEL
  - ACCESS GATHERING PANEL
  - TEMPERATURE SENSOR  
n - DENOTE NUMBER OF SENSORS

- ABBREVIATION:
- DTS DATA TRANSFER SWITCH
  - RTU REMOTE TERMINAL UNIT

- NOTE:
- THE NETWORK SWITCH SHALL BE INSTALLED IN THE COMMUNICATIONS EQUIPMENT RACK AND POWERED BY UPS.
  - CABLE MATERIAL AND CABLE INSTALLATION SHALL BE PROVIDED BY MEFP CONTRACTOR.



1 AUXILIARIES NETWORK INTERFACING ARCHITECTURE  
 D-STA-IE-13004B NTS

**SMC - MRT7**

Approved

Approved with comments

Disapproved, for resubmission

Disapproved, for workshop

FEBRUARY 27, 2024

REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT
A	24FEB09	ISSUED FOR CONSTRUCTION	RVC MSM EW	
5	24JAN10	ISSUED FOR APPROVAL	RVC MSM EW	
4	23JUN20	ISSUED FOR APPROVAL	RVC MSM EW	
3	23APR27	ISSUED FOR APPROVAL	RVC MSM EW	
2	22DEC16	ISSUED FOR APPROVAL	RVC MSM EW	
1	22OCT10	ISSUED FOR APPROVAL	RVC MSM EW	
0	22MAY20	FOR COORDINATION	RVC MSM EW	

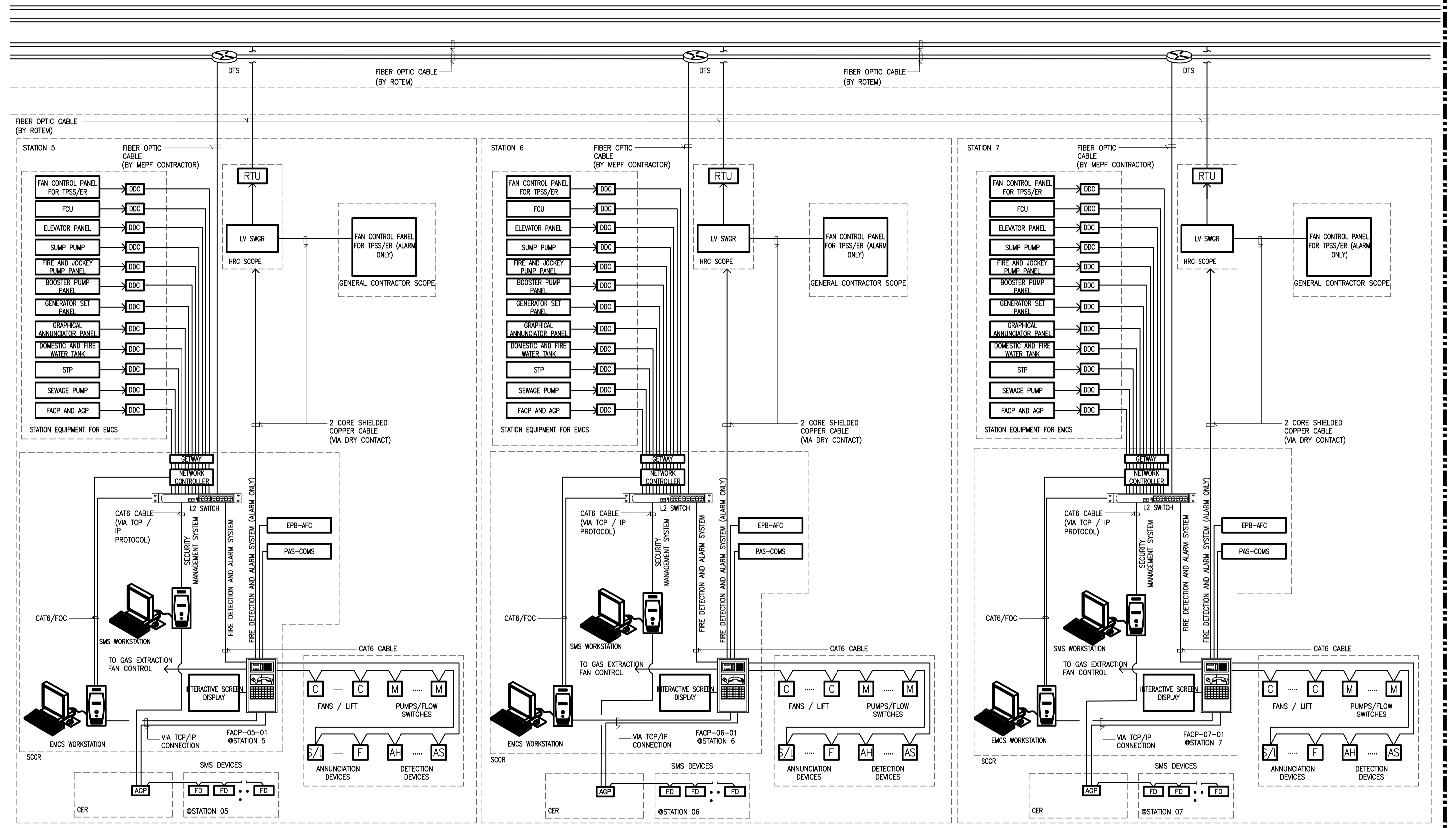
PROJECT TITLE:	SHEET CONTENTS:	SHEET NO.:	DESIGN CONTRACTOR:	CONCESSIONAIRE:	GRANTOR:
THE MRT 7 PROJECT	AUXILIARIES NETWORK INTERFACING ARCHITECTURE PART B	02 OF 06	PKII PHILKOEI INTERNATIONAL, INC. In association with MEIN+HARDT ERWIN V. JUNASA PROFESSIONAL ELECTRONICS ENGINEER	MRT7 SMC MASS RAIL TRANSIT 7 INC. HYUNG-WOOK KIM PROJECT DIRECTOR	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION RECOMMENDING APPROVAL: JORJETTE B. AQUINO PROJECT MANAGER ASSISTANT SECRETARY FOR RAILWAYS APPROVED: CESAR B. CHAVEZ UNDERSECRETARY FOR RAILWAYS
LOCATION: QUEZON CITY- SAN JOSE DEL MONTE BULACAN	DWG. NO.: D-STA-IE-13004B	REV. NO.: A	PRC NO.: 862 PTR NO.: 10074084 PLACE: MAKATI CITY	IAPOA NO.: DATE: 02 JAN. 2024 T.I.N. NO.: 157-691-905	

MODE OF OPERATION:  
 \* IN CASE OF TRAIN EMERGENCY/FIRE MODE, LINEAR HEAT DETECTOR'S WILL SEND A SIGNAL FROM OUR ASSIGNED FACP FOR TUNNEL STATION. FACP SHALL SEND A SIGNAL DIRECTLY TO OUR VCP'S AND CONTROL MODULES TO SUPERVISE THE FANS AND LIFE-SAFETY REQUIREMENTS.

- LEGEND:
- ADDRESSABLE CONTROL MODULE
  - ADDRESSABLE HEAT DETECTOR
  - COMMUNICATIONS SERVER
  - FIELD DEVICES
  - FIRE ALARM CONTROL PANEL
  - NETWORK ROUTER
  - NETWORK SWITCH
  - REMOTE TERMINAL UNIT
  - SIGNALING MODULE
  - VENTILATION CONTROL PANEL
  - ACCESS GATHERING PANEL
  - TEMPERATURE SENSOR  
n - DENOTE NUMBER OF SENSORS

- ABBREVIATION:
- DTS DATA TRANSFER SWITCH
  - RTU REMOTE TERMINAL UNIT

- NOTE:
- THE NETWORK SWITCH SHALL BE INSTALLED IN THE COMMUNICATIONS EQUIPMENT RACK AND POWERED BY UPS.
  - CABLE MATERIAL AND CABLE INSTALLATION SHALL BE PROVIDED BY MEFP CONTRACTOR.



1 AUXILIARIES NETWORK INTERFACING ARCHITECTURE  
 D-STA-IE-13004C NTS

**SMC - MRT7**

Approved

Approved with comments

Disapproved, for resubmission

Disapproved, for workshop

FEBRUARY 27, 2024

REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT
A	24FEB09	ISSUED FOR CONSTRUCTION	RVC MSM EW	
5	24JAN10	ISSUED FOR APPROVAL	RVC MSM EW	
4	23JUN20	ISSUED FOR APPROVAL	RVC MSM EW	
3	23APR27	ISSUED FOR APPROVAL	RVC MSM EW	
2	22DEC16	ISSUED FOR APPROVAL	RVC MSM EW	
1	22OCT10	ISSUED FOR APPROVAL	RVC MSM EW	
0	22MAY20	FOR COORDINATION	RVC MSM EW	

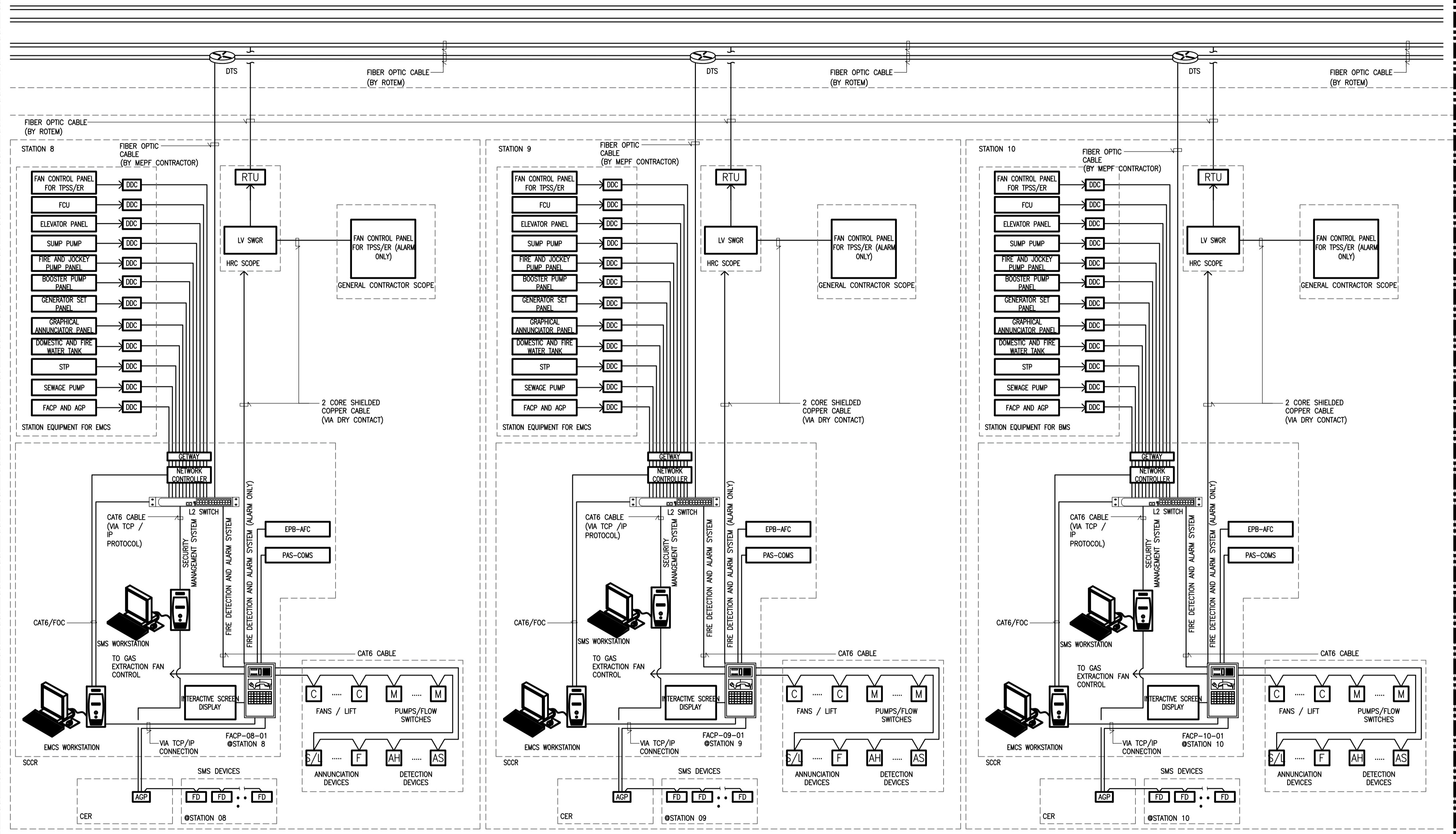
PROJECT TITLE:	SHEET CONTENTS:	SHEET NO.	DESIGN CONTRACTOR:	CONCESSIONAIRE:	GRANTOR:
THE MRT 7 PROJECT	AUXILIARIES NETWORK INTERFACING ARCHITECTURE PART C	03 OF 06	PHILKOEI INTERNATIONAL, INC. In association with MEIN+HARDT ERWIN V. JUNASA PROFESSIONAL ELECTRONICS ENGINEER	MRT7 SMC MASS RAIL TRANSIT 7 INC. HYUNG-WOOK KIM PROJECT DIRECTOR	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION RECOMMENDING APPROVAL: JORJETTE B. AQUINO PROJECT MANAGER ASSISTANT SECRETARY FOR RAILWAYS APPROVED: CESAR B. CHAVEZ UNDERSECRETARY FOR RAILWAYS
LOCATION:	DWG. NO.:	REV. NO.:	PRC NO.: 862 PTR NO.: 10074084 PLACE: MAKATI CITY	IAPOA NO.: DATE: 02 JAN. 2024 T.I.N. NO.: 157-691-905	
QUEZON CITY- SAN JOSE DEL MONTE BULACAN	D-STA-IE-13004C	A			

MODE OF OPERATION:  
 \* IN CASE OF TRAIN EMERGENCY/FIRE MODE, LINEAR HEAT DETECTOR'S WILL SEND A SIGNAL FROM OUR ASSIGNED FACP FOR TUNNEL STATION. FACP SHALL SEND A SIGNAL DIRECTLY TO OUR VCP'S AND CONTROL MODULES TO SUPERVISE THE FANS AND LIFE-SAFETY REQUIREMENTS.

- LEGEND:
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  - COMMUNICATIONS SERVER
  - FIELD DEVICES
  - FIRE ALARM CONTROL PANEL
  - NETWORK ROUTER
  - NETWORK SWITCH
  - REMOTE TERMINAL UNIT
  - SIGNALING MODULE
  - VENTILATION CONTROL PANEL
  - ACCESS GATHERING PANEL
  - TEMPERATURE SENSOR  
n - DENOTE NUMBER OF SENSORS

- ABBREVIATION:
- DTS DATA TRANSFER SWITCH
  - RTU REMOTE TERMINAL UNIT

- NOTE:
- THE NETWORK SWITCH SHALL BE INSTALLED IN THE COMMUNICATIONS EQUIPMENT RACK AND POWERED BY UPS.
  - CABLE MATERIAL AND CABLE INSTALLATION SHALL BE PROVIDED BY MEFP CONTRACTOR.



1 AUXILIARIES NETWORK INTERFACING ARCHITECTURE  
 D-STA-IE-13004D NTS

**SMC - MRT7**

Approved

Approved with comments

Disapproved, for resubmission

Disapproved, for workshop

FEBRUARY 27, 2024

REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT
A	24FEB09	ISSUED FOR CONSTRUCTION	RVC MSM EW	
5	24JAN10	ISSUED FOR APPROVAL	RVC MSM EW	
4	23JUN20	ISSUED FOR APPROVAL	RVC MSM EW	
3	23APR27	ISSUED FOR APPROVAL	RVC MSM EW	
2	22DEC16	ISSUED FOR APPROVAL	RVC MSM EW	
1	22OCT10	ISSUED FOR APPROVAL	RVC MSM EW	
0	22MAY20	FOR COORDINATION	RVC MSM EW	

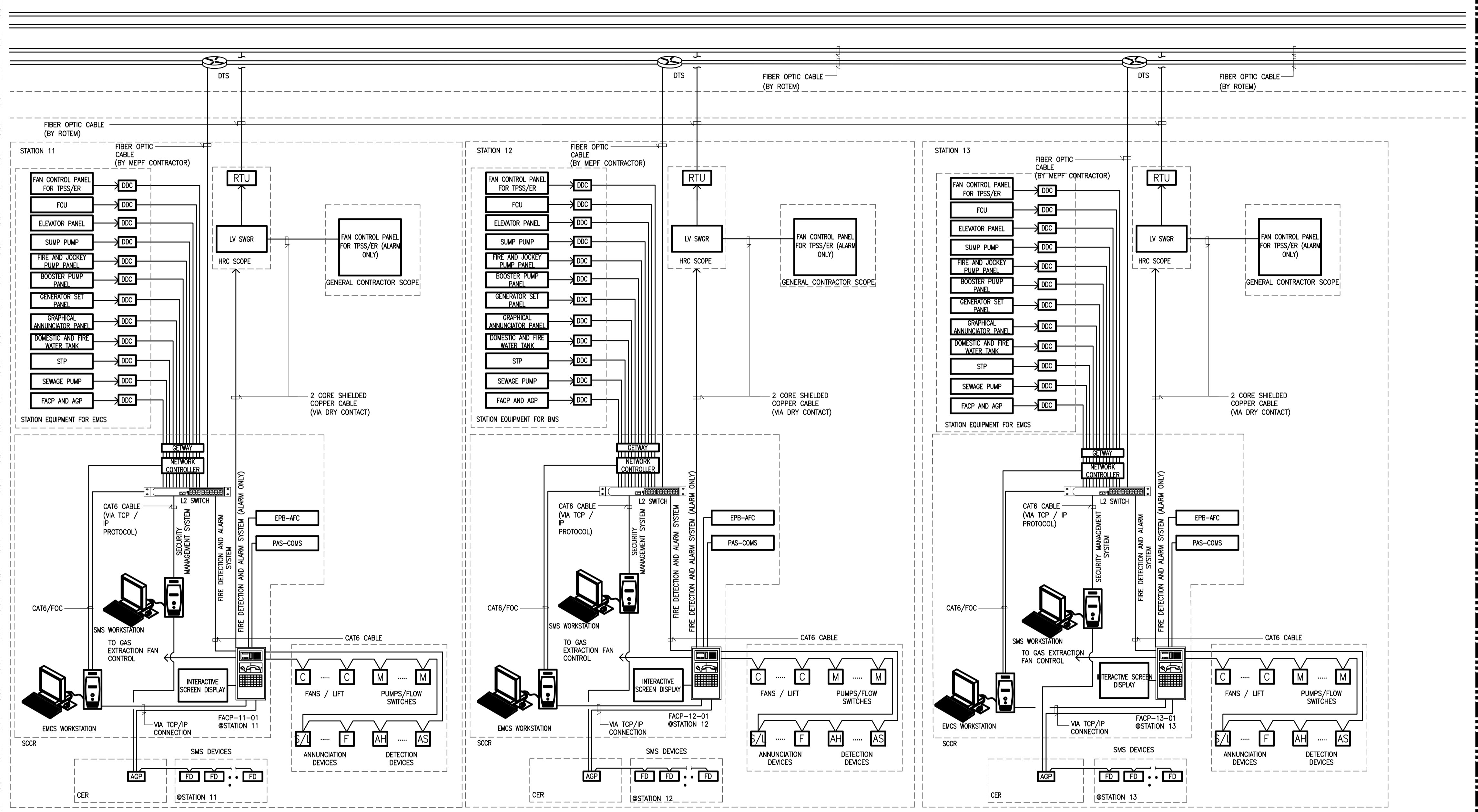
PROJECT TITLE: <b>THE MRT 7 PROJECT</b>	SHEET CONTENTS: AUXILIARIES NETWORK INTERFACING ARCHITECTURE PART D	SHEET NO. 04 OF 06	DESIGN CONTRACTOR: PKII PHILKOEI INTERNATIONAL, INC. In association with MEIN+HARDT ERWIN V. JUNASA PROFESSIONAL ELECTRONICS ENGINEER	CONCESSIONAIRE: MRT7 SMC MASS RAIL TRANSIT 7 INC. HYUNG-WOOK KIM PROJECT DIRECTOR	GRANTOR: REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION RECOMMENDING APPROVAL: JORJETTE B. AQUINO PROJECT MANAGER ASSISTANT SECRETARY FOR RAILWAYS APPROVED: CESAR B. CHAVEZ UNDERSECRETARY FOR RAILWAYS
LOCATION: QUEZON CITY- SAN JOSE DEL MONTE BULACAN	DWG. NO. D-STA-IE-13004D	REV. NO. A	PRC NO.: 862 PTR NO.: 10074084 PLACE: MAKATI CITY	IAPOA NO.: DATE: 02 JAN. 2024 T.I.N. NO.: 157-691-905	

MODE OF OPERATION:  
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  - COMMUNICATIONS SERVER
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  - FIRE ALARM CONTROL PANEL
  - NETWORK ROUTER
  - NETWORK SWITCH
  - REMOTE TERMINAL UNIT
  - SIGNALING MODULE
  - VENTILATION CONTROL PANEL
  - ACCESS GATHERING PANEL
  - TEMPERATURE SENSOR  
n - DENOTE NUMBER OF SENSORS

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  - RTU REMOTE TERMINAL UNIT

- NOTE:
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1 AUXILIARIES NETWORK INTERFACING ARCHITECTURE  
 D-STA-IE-13004E NTS

**SMC - MRT7**

Approved

Approval with comments

Disapproved, for resubmission

Disapproved, for workshop

FEBRUARY 27, 2024

REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT
A	24FEB09	ISSUED FOR CONSTRUCTION	RVC MSM EW	
5	24JAN10	ISSUED FOR APPROVAL	RVC MSM EW	
4	23JUN20	ISSUED FOR APPROVAL	RVC MSM EW	
3	23APR27	ISSUED FOR APPROVAL	RVC MSM EW	
2	22DEC16	ISSUED FOR APPROVAL	RVC MSM EW	
1	22OCT10	ISSUED FOR APPROVAL	RVC MSM EW	
0	22MAY20	FOR COORDINATION	RVC MSM EW	

PROJECT TITLE: **THE MRT 7 PROJECT**  
 LOCATION: QUEZON CITY- SAN JOSE DEL MONTE BULACAN

SHEET CONTENTS: **AUXILIARIES NETWORK INTERFACING ARCHITECTURE PART E**  
 DWG. NO: **D-STA-IE-13004E**

SHEET NO: **05 OF 06**  
 DESIGN CONTRACTOR: **PHILKOEI INTERNATIONAL, INC.**  
 ERWIN V. JUNASA  
 PROFESSIONAL ELECTRONICS ENGINEER  
 PRC NO.: 862  
 PTR NO.: 10074084  
 PLACE: MAKATI CITY

CONCESSIONAIRE: **MRT7 SMC MASS RAIL TRANSIT 7 INC.**  
 HYUNG-WOOK KIM  
 PROJECT DIRECTOR

GRANTOR: **REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION**  
 RECOMMENDING APPROVAL: **JORJETTE B. AQUINO**  
 PROJECT MANAGER ASSISTANT SECRETARY FOR RAILWAYS  
 APPROVED: **CESAR B. CHAVEZ**  
 UNDER SECRETARY FOR RAILWAYS

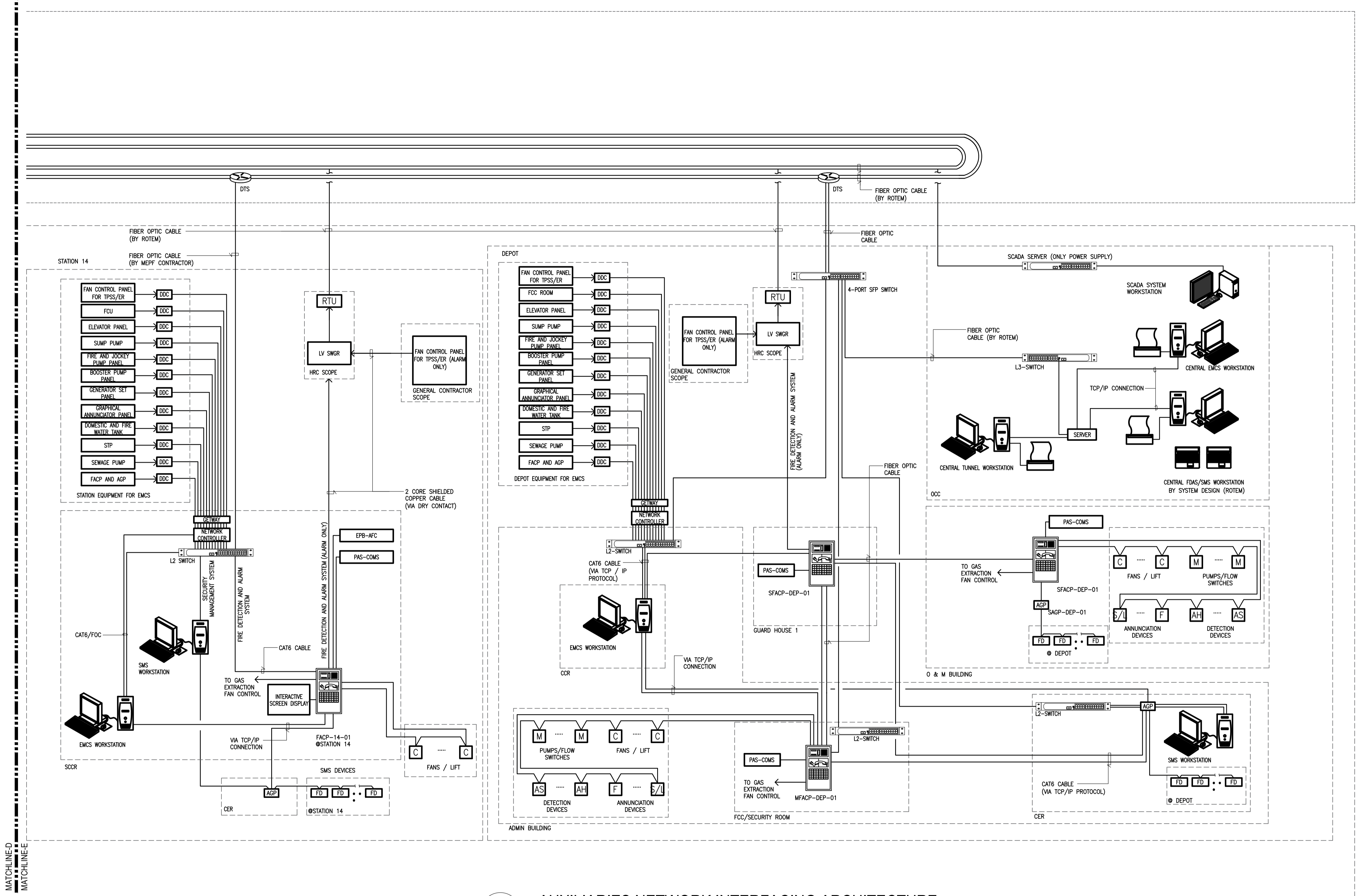
REVISION HISTORY

MODE OF OPERATION:  
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  - FIELD DEVICES
  - FIRE ALARM CONTROL PANEL
  - NETWORK ROUTER
  - NETWORK SWITCH
  - REMOTE TERMINAL UNIT
  - SIGNALING MODULE
  - VENTILATION CONTROL PANEL
  - ACCESS GATHERING PANEL
  - TEMPERATURE SENSOR  
n - DENOTE NUMBER OF SENSORS

- ABBREVIATION:
- DTS DATA TRANSFER SWITCH
  - RTU REMOTE TERMINAL UNIT

- NOTE:
1. THE NETWORK SWITCH SHALL BE INSTALLED IN THE COMMUNICATIONS EQUIPMENT RACK AND POWERED BY UPS.
  2. CABLE MATERIAL AND CABLE INSTALLATION SHALL BE PROVIDED BY MEFP CONTRACTOR.



1 - AUXILIARIES NETWORK INTERFACING ARCHITECTURE  
 D-STA-IE-13004F NTS

**SMC - MRT7**

Approved

Approved with comments

Disapproved, for resubmission

Disapproved, for workshop

FEBRUARY 27, 2024

PROJECT TITLE: <b>THE MRT 7 PROJECT</b>	SHEET CONTENTS: AUXILIARIES NETWORK INTERFACING ARCHITECTURE PART F	SHEET NO. 06 OF 06	DESIGN CONTRACTOR: PKII PHILKOEI INTERNATIONAL, INC. In association with MEIN+HARDT ERWIN V. JUNASA PROFESSIONAL ELECTRONICS ENGINEER	CONCESSIONAIRE: MRT7 SMC MASS RAIL TRANSIT 7 INC. HYUNG-WOOK KIM PROJECT DIRECTOR	GRANTOR: REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION RECOMMENDING APPROVAL: JORJETTE B. AQUINO PROJECT MANAGER ASSISTANT SECRETARY FOR RAILWAYS APPROVED: CESAR B. CHAVEZ UNDERSECRETARY FOR RAILWAYS	<table border="1"> <tr> <th>REV</th> <th>DATE</th> <th>MARK / DESCRIPTION</th> <th>ORIGINATOR</th> <th>CLIENT</th> </tr> <tr> <td>A</td> <td>24FEB09</td> <td>ISSUED FOR CONSTRUCTION</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>6</td> <td>24JAN10</td> <td>ISSUED FOR APPROVAL</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>5</td> <td>23NOV06</td> <td>ISSUED FOR APPROVAL</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>4</td> <td>23JUN20</td> <td>ISSUED FOR APPROVAL</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>3</td> <td>23APR27</td> <td>ISSUED FOR APPROVAL</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>2</td> <td>22DEC16</td> <td>ISSUED FOR APPROVAL</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>1</td> <td>22OCT10</td> <td>ISSUED FOR APPROVAL</td> <td>RVC MSM EW</td> <td></td> </tr> <tr> <td>0</td> <td>22MAY20</td> <td>FOR COORDINATION</td> <td>RVC MSM EW</td> <td></td> </tr> </table>	REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT	A	24FEB09	ISSUED FOR CONSTRUCTION	RVC MSM EW		6	24JAN10	ISSUED FOR APPROVAL	RVC MSM EW		5	23NOV06	ISSUED FOR APPROVAL	RVC MSM EW		4	23JUN20	ISSUED FOR APPROVAL	RVC MSM EW		3	23APR27	ISSUED FOR APPROVAL	RVC MSM EW		2	22DEC16	ISSUED FOR APPROVAL	RVC MSM EW		1	22OCT10	ISSUED FOR APPROVAL	RVC MSM EW		0	22MAY20	FOR COORDINATION	RVC MSM EW	
REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT																																															
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LOCATION: QUEZON CITY- SAN JOSE DEL MONTE BULACAN	DWG. NO. D-STA-IE-13004F	REV. NO. A	PRC NO.: 862 PTR NO.: 10074084 PLACE: MAKATI CITY	IAPOA NO.: DATE: 02 JAN. 2024 T.I.N. NO.: 157-691-905		<table border="1"> <tr> <th>REV</th> <th>DATE</th> <th>MARK / DESCRIPTION</th> <th>ORIGINATOR</th> <th>CLIENT</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	REV	DATE	MARK / DESCRIPTION	ORIGINATOR	CLIENT																																								
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