







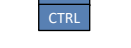











**Attachment B:
Energy Drawings
(see following page)**

Basement Comm/Sensor Layout

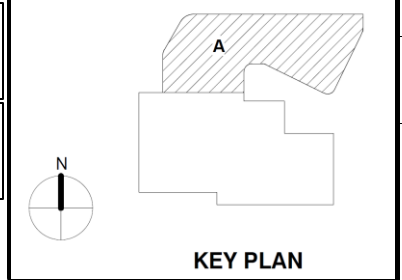
Floor Plan Legend

-  Ethernet Cable
-  Interlock / Low Voltage Wire
-  MS/TP Cable
-  Thermostat Cable
-  Act Net Cable
-  ES2 Provided Controller
-  BACnet MS/TP Equipment
-  Other Controlled Equipment
-  Control Panel
-  Temp Sensor
-  Wall Plate Temp Sensor
-  Suggested Temp Sensor*
-  Outside Air Temp Sensor
-  Carbon Monoxide Sensor
-  Communication Network End-Of-Line
-  IP Drop Requested
-  HW Valve IP Drop Requested
-  CHW Valve IP Drop Requested

*Suggested location as none was provided. Verify location is viable and is acceptable to owner before install.

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel

* Cable trays, pathways, and j hooks to be provided by the electrical contractor.



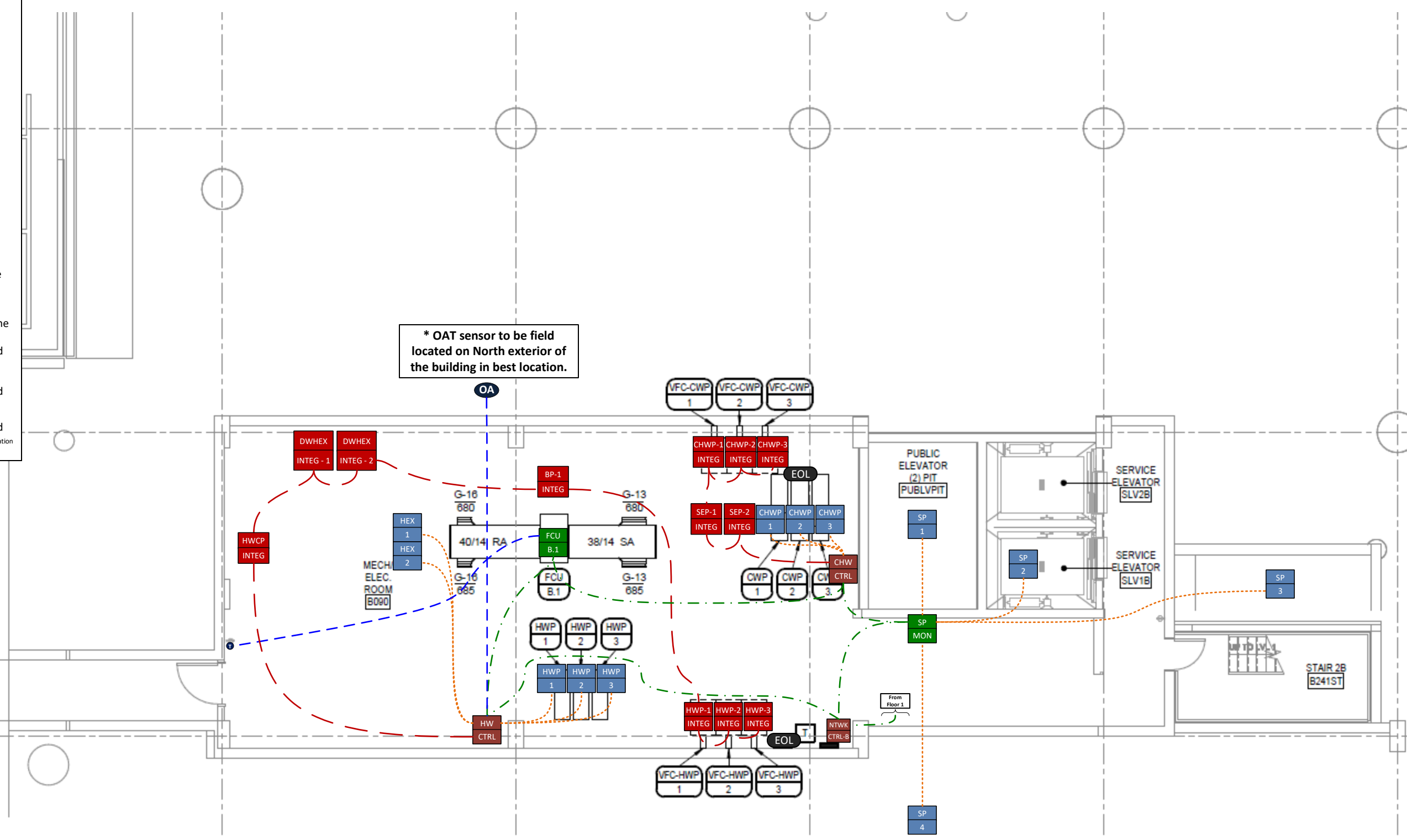
REV	DESCRIPTION	DATE	BY
0			
0			
0			
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW

PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104

FILENAME: 00 - Project Details

Contractor: **es2**
 Engineered Systems & Energy Solutions, Inc.
 13401 N Santa Fe Ave
 Oklahoma City, OK 73114

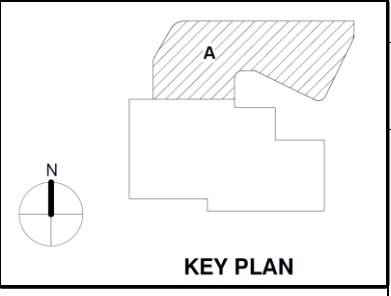
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SE:	TM
DE:	BW
PR:	
DRAWING NAME:	Basement Comm/Sensor Layout
DRAWING NO.:	0.13



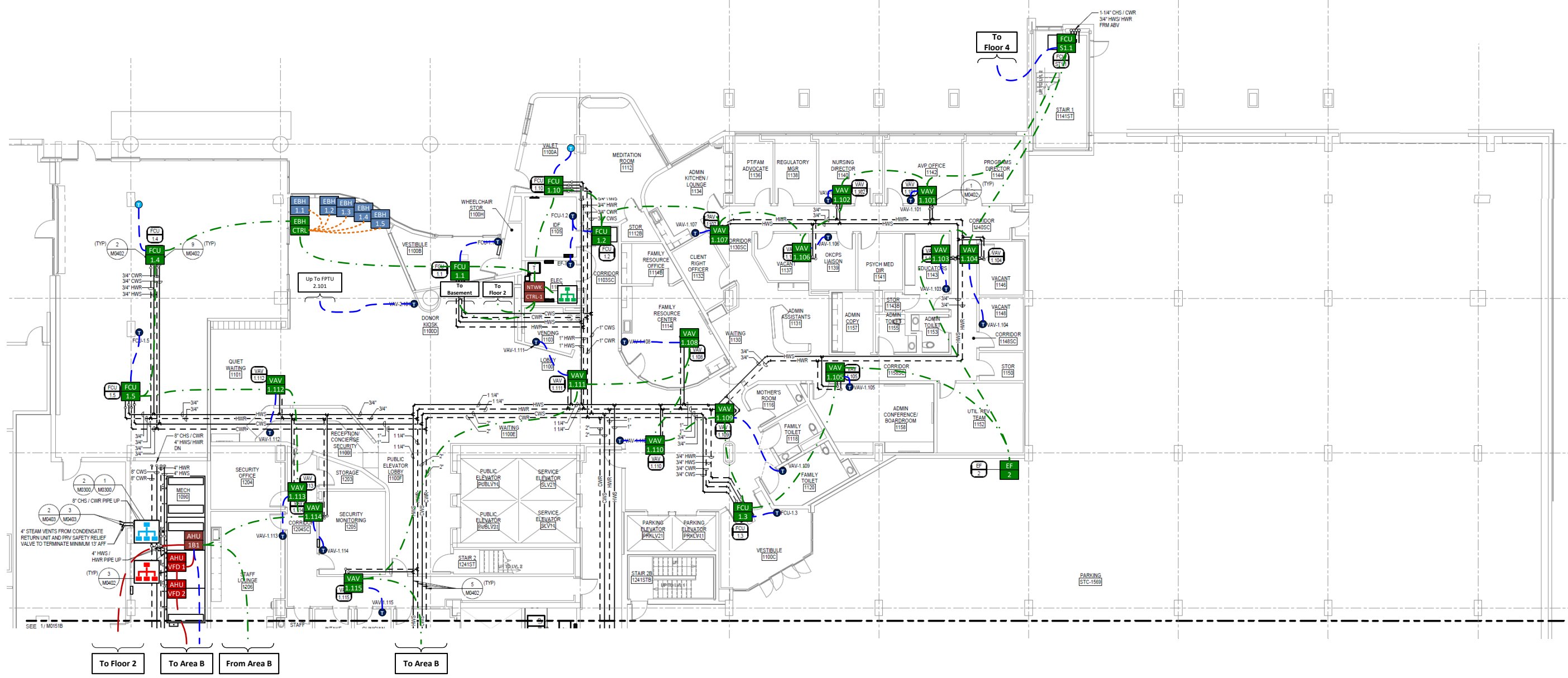
* OAT sensor to be field located on North exterior of the building in best location.

1st Floor Area A Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel

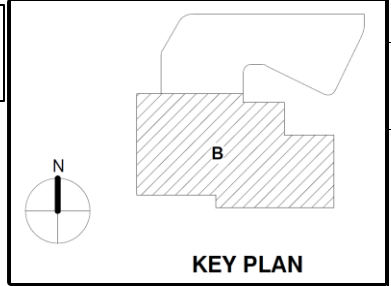


REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
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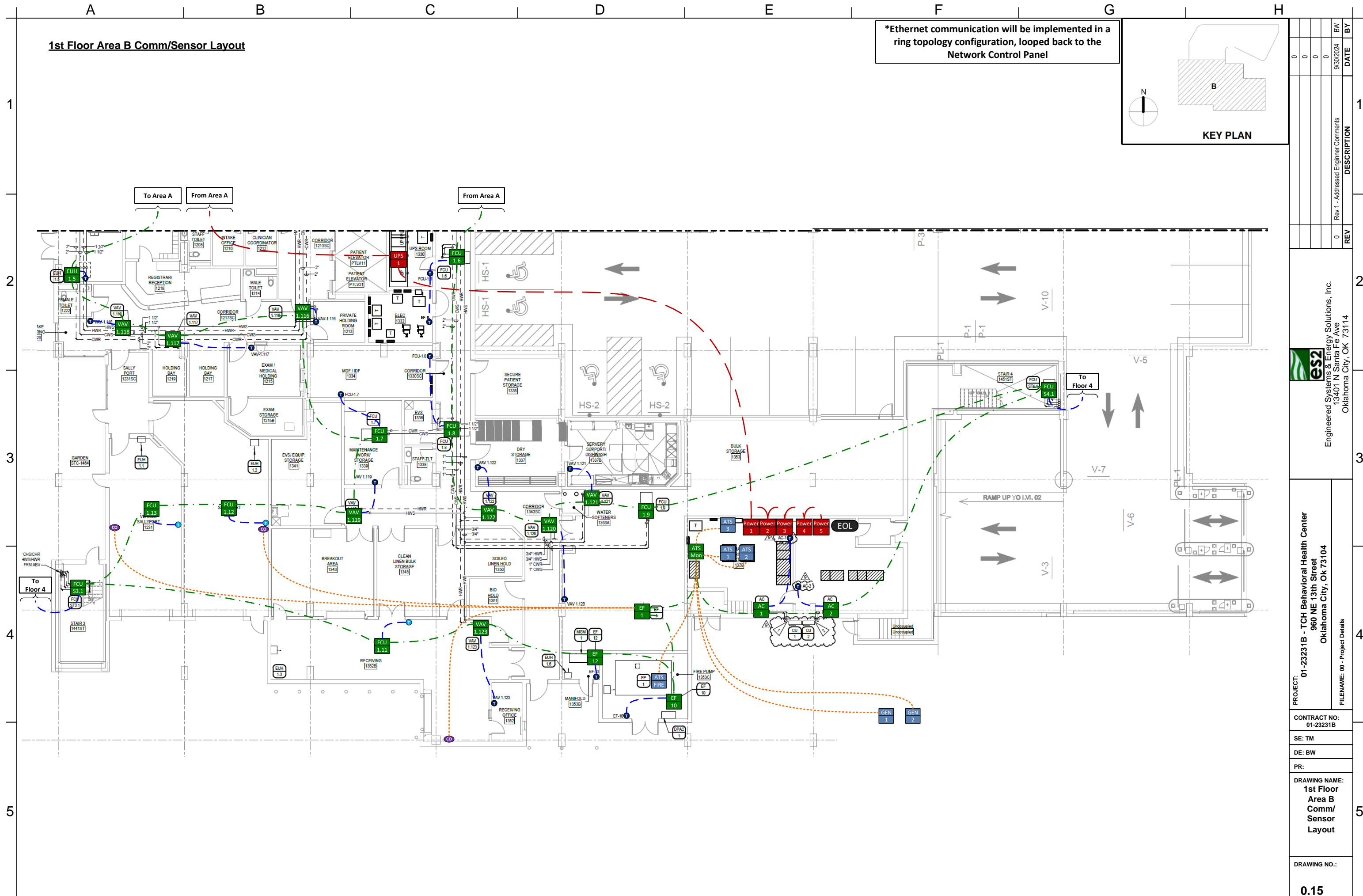


1st Floor Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW



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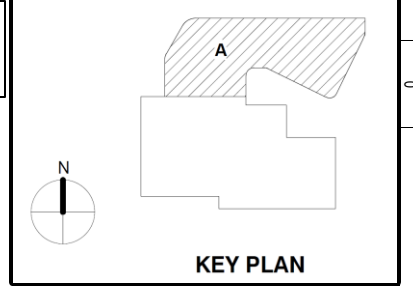
PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104
 FILENAME: 00 - Project Details

CONTRACT NO: 01-23231B
 SE: TM
 DE: BW
 PR:
 DRAWING NAME:
1st Floor Area B Comm/Sensor Layout

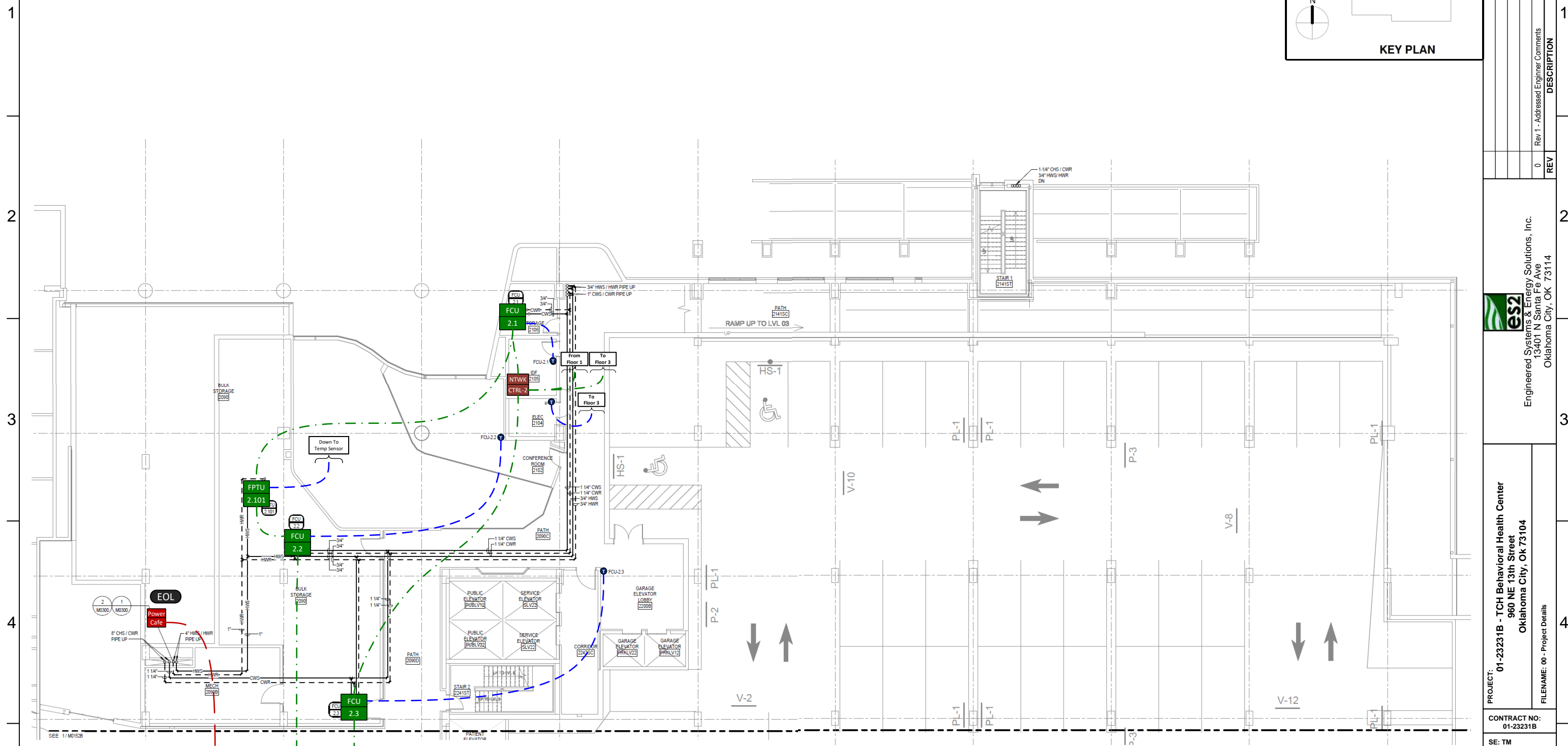
DRAWING NO.:
0.15

2nd Floor Area A Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DESCRIPTION	DATE	BY
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0			
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0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW



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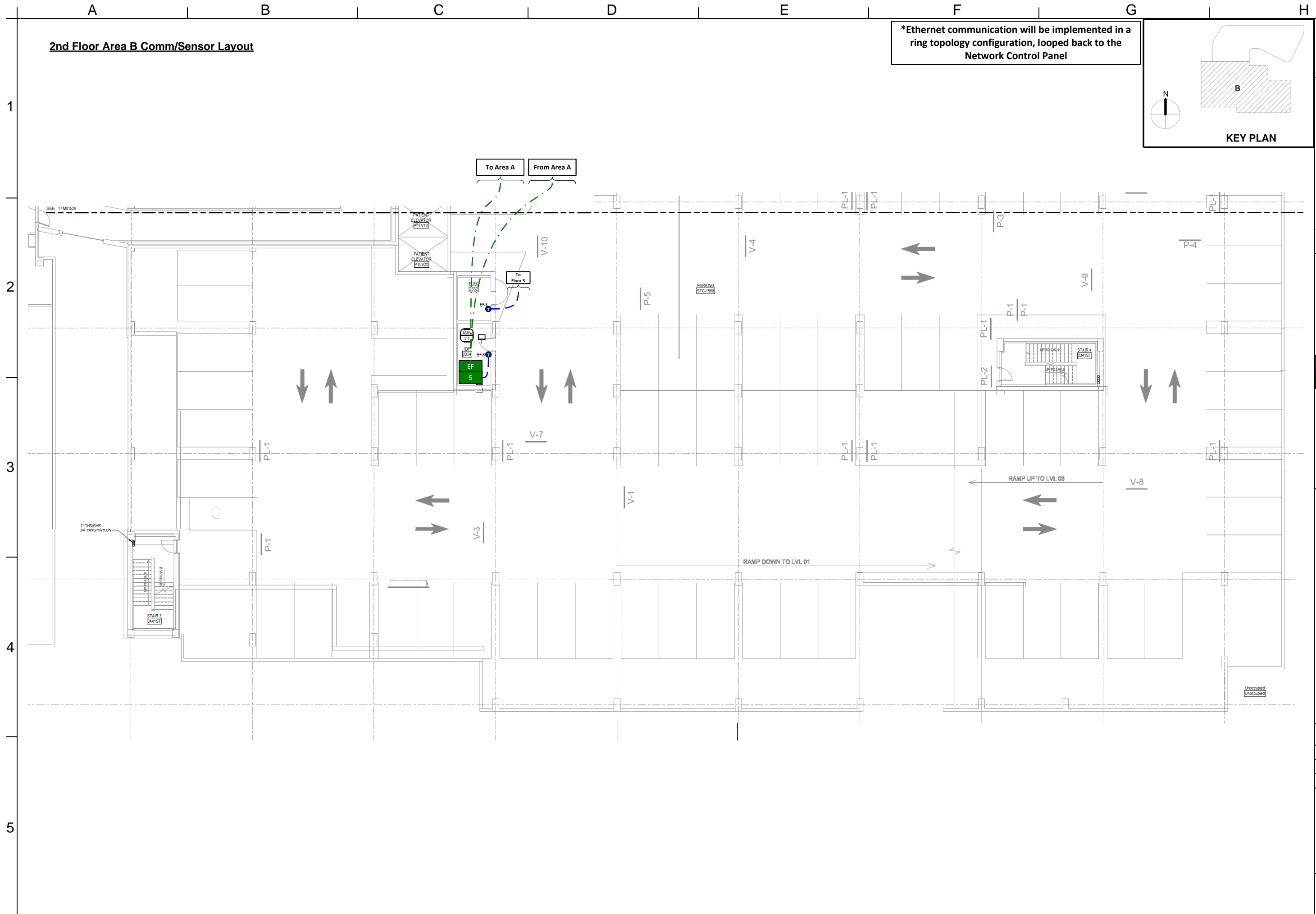
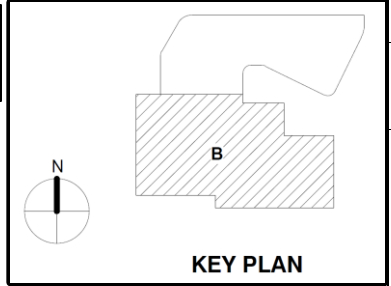
PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104
 FILENAME: 00 - Project Details

CONTRACT NO.: 01-23231B
 SE: TM
 DE: BW
 PR:
 DRAWING NAME:
2nd Floor Area A Comm/Sensor Layout

DRAWING NO.:
0.16

2nd Floor Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
0			
0			

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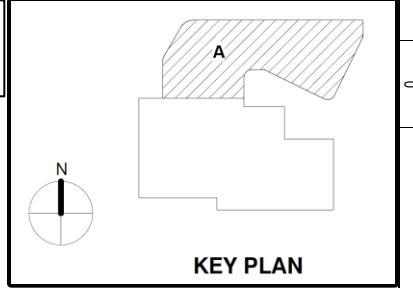
PROJECT: **01-23231B - TCH Behavioral Health Center**
 960 NE 13th Street
 Oklahoma City, OK 73104
 FILENAME: 00 - Project Details

CONTRACT NO.: 01-23231B
 SE: TM
 DE: BW
 PR:
 DRAWING NAME:
2nd Floor Area B Comm/Sensor Layout

DRAWING NO.: **0.17**

3rd Floor Area A Comm/Sensor Layout

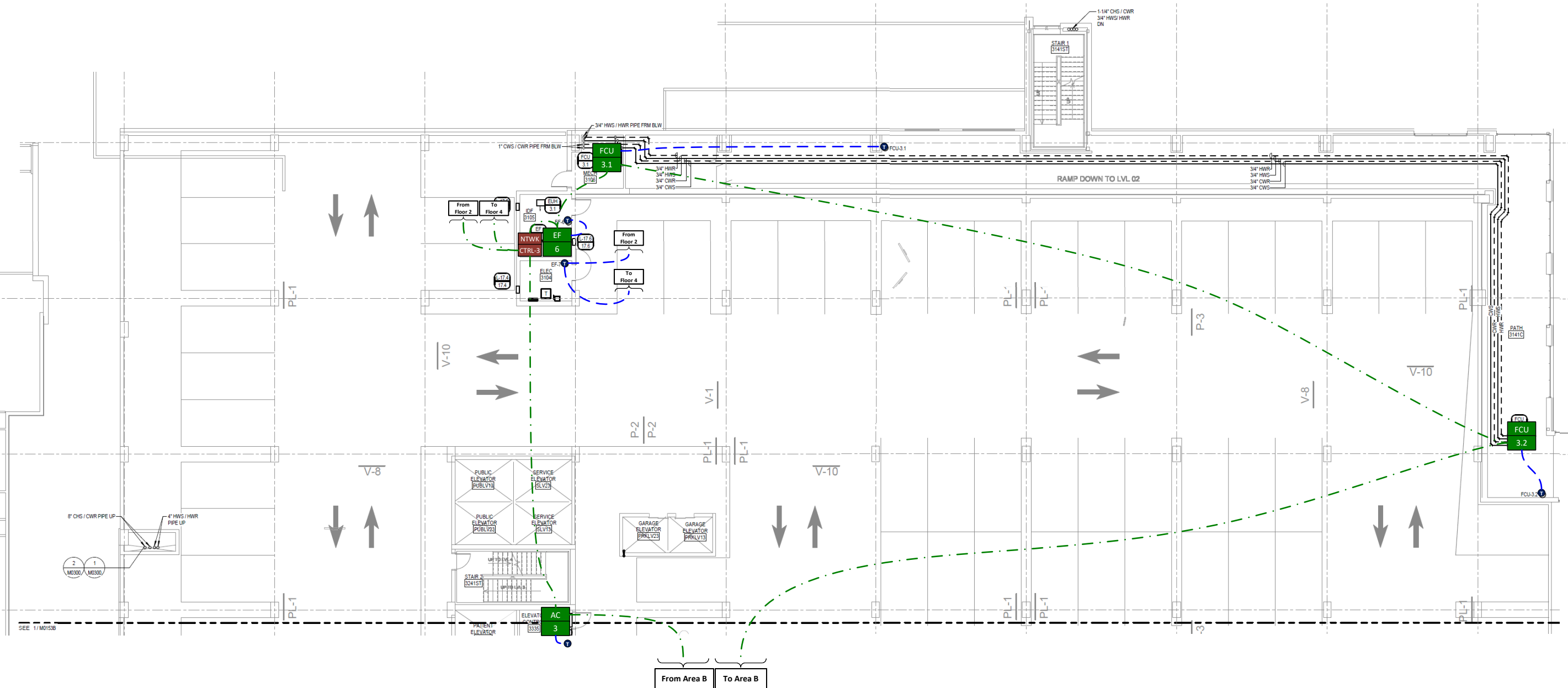
*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
0			
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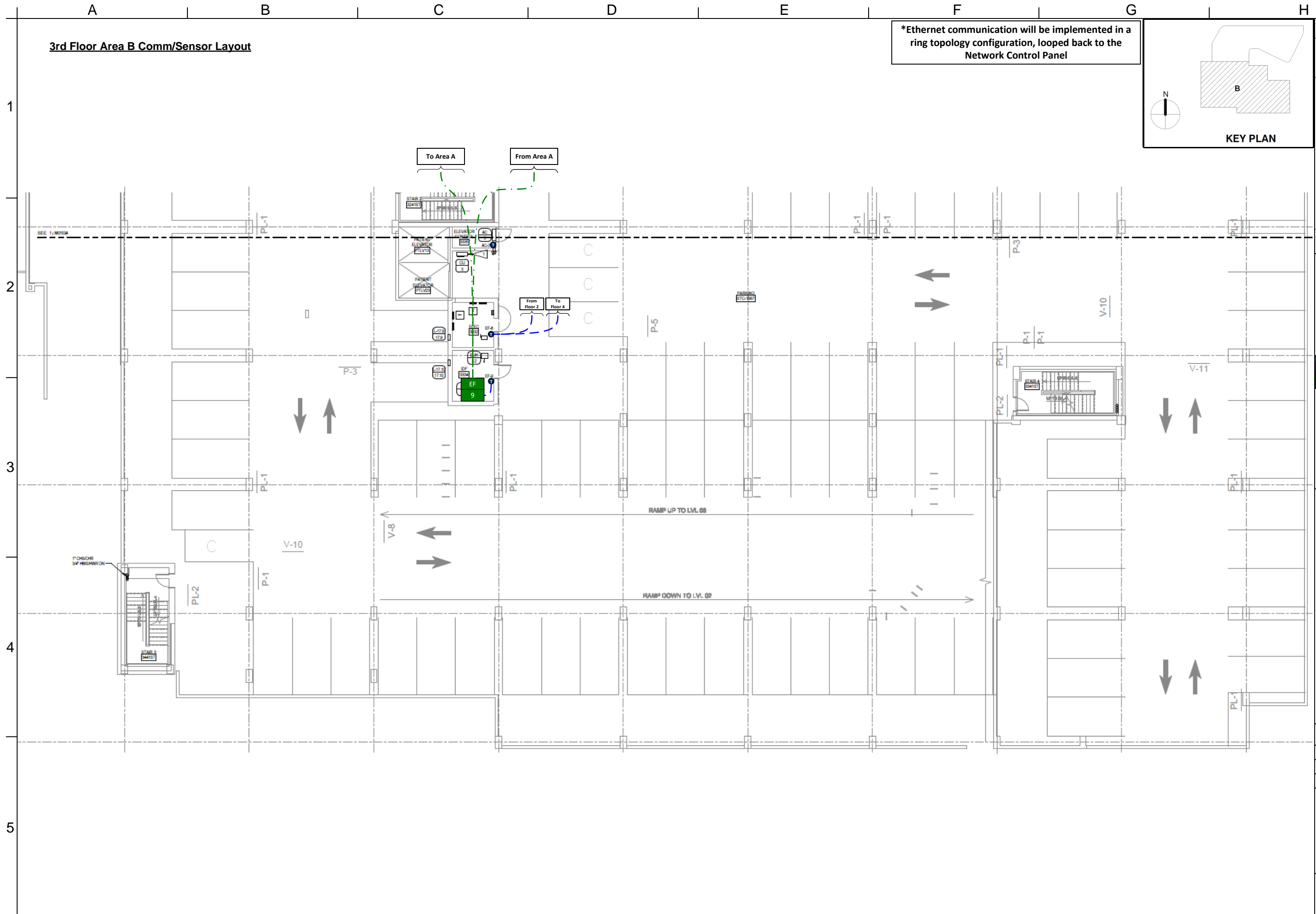
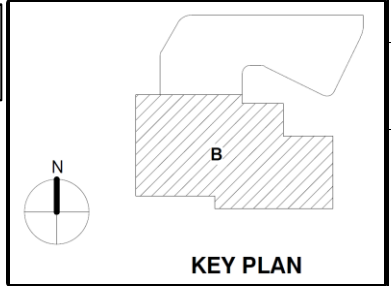
PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104
 FILENAME: 00 - Project Details

CONTRACT NO.: 01-23231B
 SE: TM
 DE: BW
 PR:
 DRAWING NAME:
 3rd Floor
 Area A
 Comm/
 Sensor
 Layout

DRAWING NO.:
0.18

3rd Floor Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



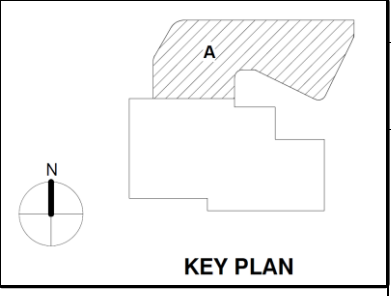
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PROJECT:	01-23231B - TCH Behavioral Health Center 960 NE 13th Street Oklahoma City, OK 73104
CONTRACT NO.:	01-23231B
SE:	TM
DE:	BW
PR:	
DRAWING NAME:	3rd Floor Area B Comm/ Sensor Layout
DRAWING NO.:	0.19

es2	Engineered Systems & Energy Solutions, Inc. 13401 N Santa Fe Ave Oklahoma City, OK 73114
FILENAME:	00 - Project Details

4th Floor Area A Comm/Sensor Layout

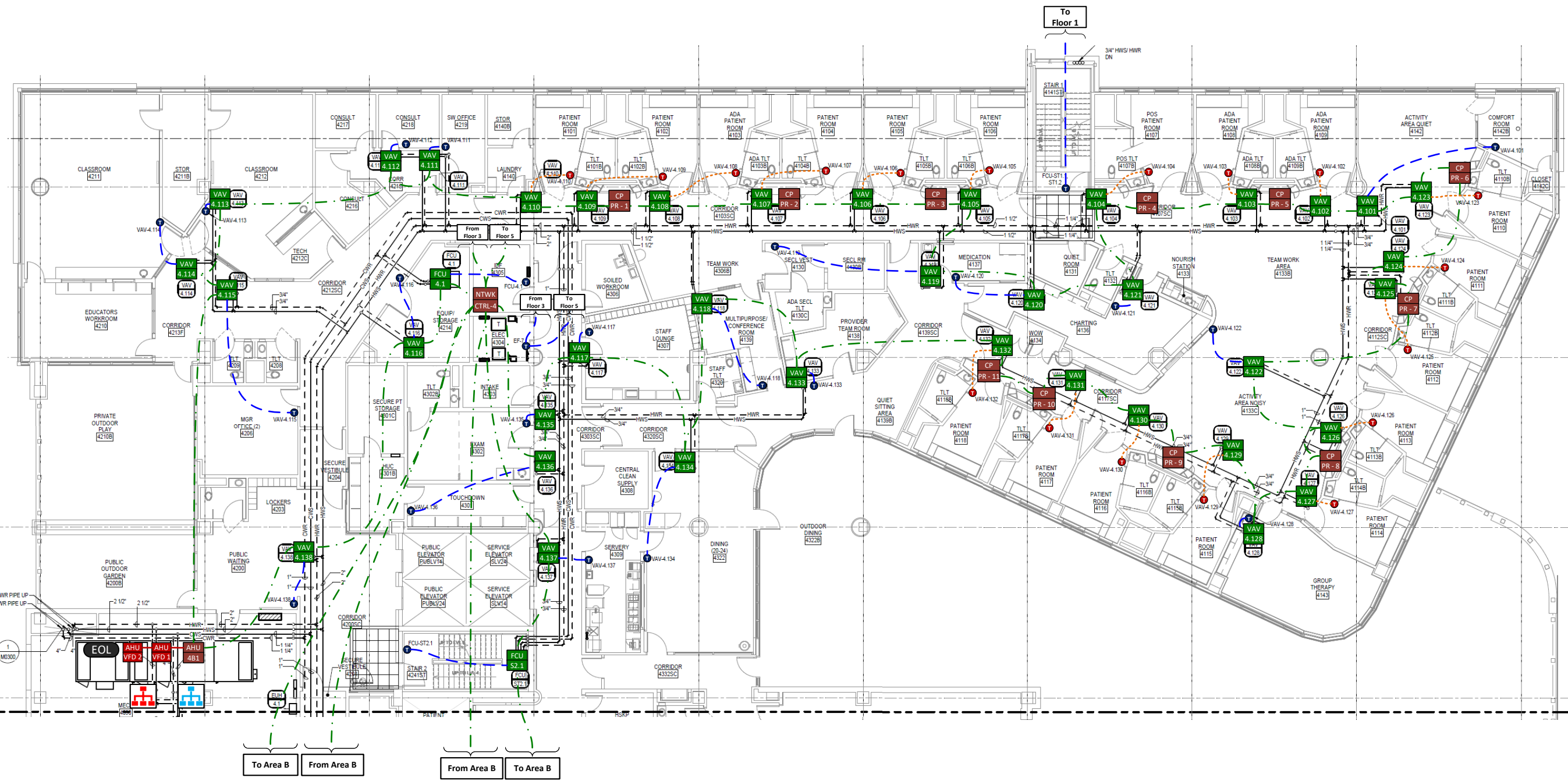
*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DATE	DESCRIPTION
0	9/30/2024	Rev 1 - Addressed Engineer Comments

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2
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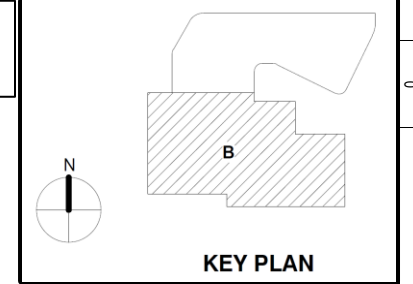
PROJECT: 01-23231B - TCH Behavioral Health Center
960 NE 13th Street
Oklahoma City, OK 73104
FILENAME: 00 - Project Details

CONTRACT NO: 01-23231B
SE: TM
DE: BW
PR:
DRAWING NAME:
4th Floor Area A Comm/Sensor Layout

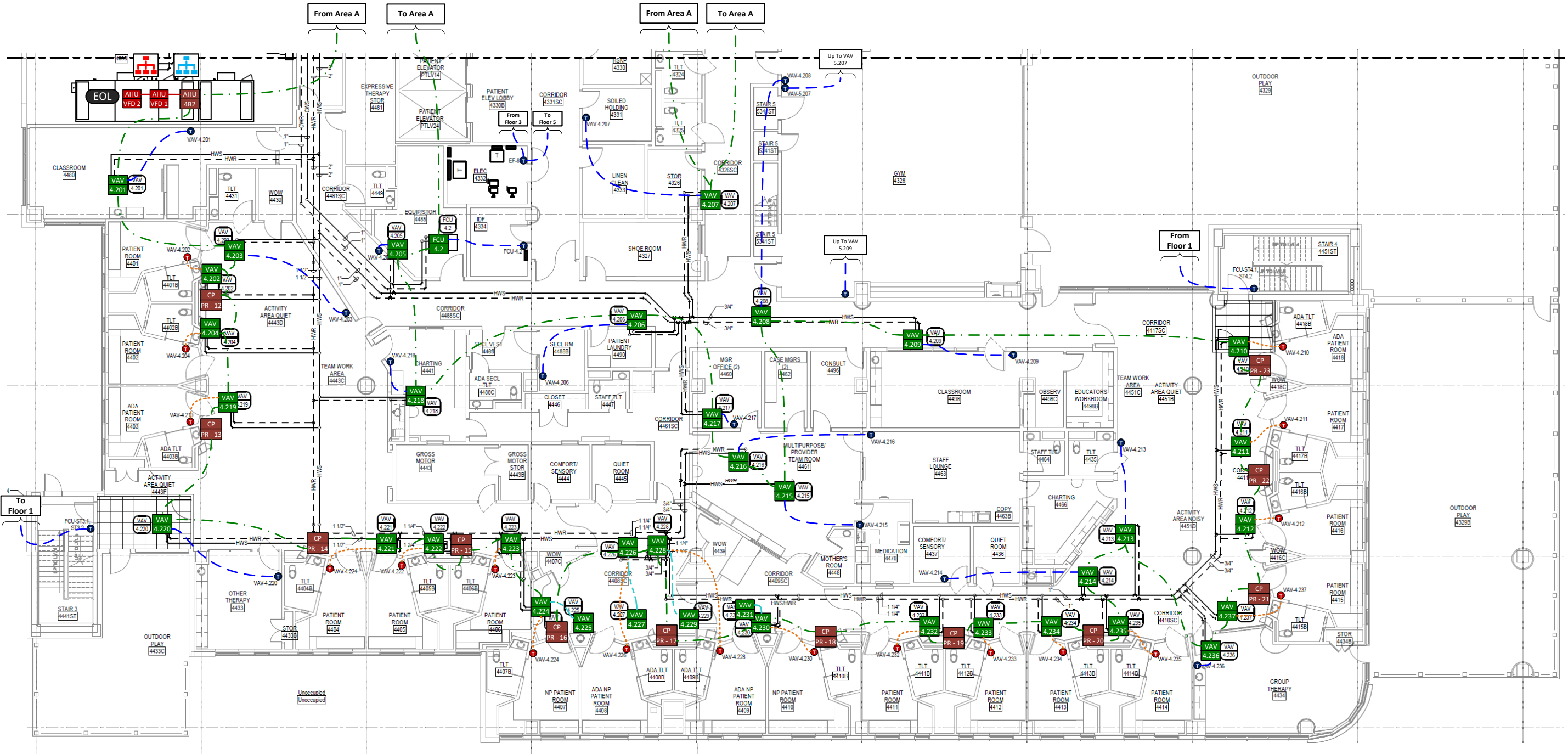
DRAWING NO.:
0.20

4th Floor Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



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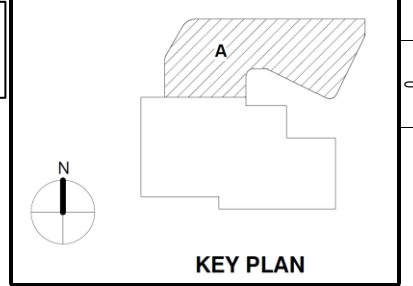
REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
0			
0			

PROJECT:	01-23231B - TCH Behavioral Health Center
CONTRACT NO.:	01-23231B
SE:	TM
DE:	BW
PR:	
DRAWING NAME:	4th Floor Area B Comm/Sensor Layout
DRAWING NO.:	0.21

ENGINEER:	es2
COMPANY:	Engineered Systems & Energy Solutions, Inc.
ADDRESS:	13401 N Santa Fe Ave Oklahoma City, OK 73114
FILENAME:	00 - Project Details

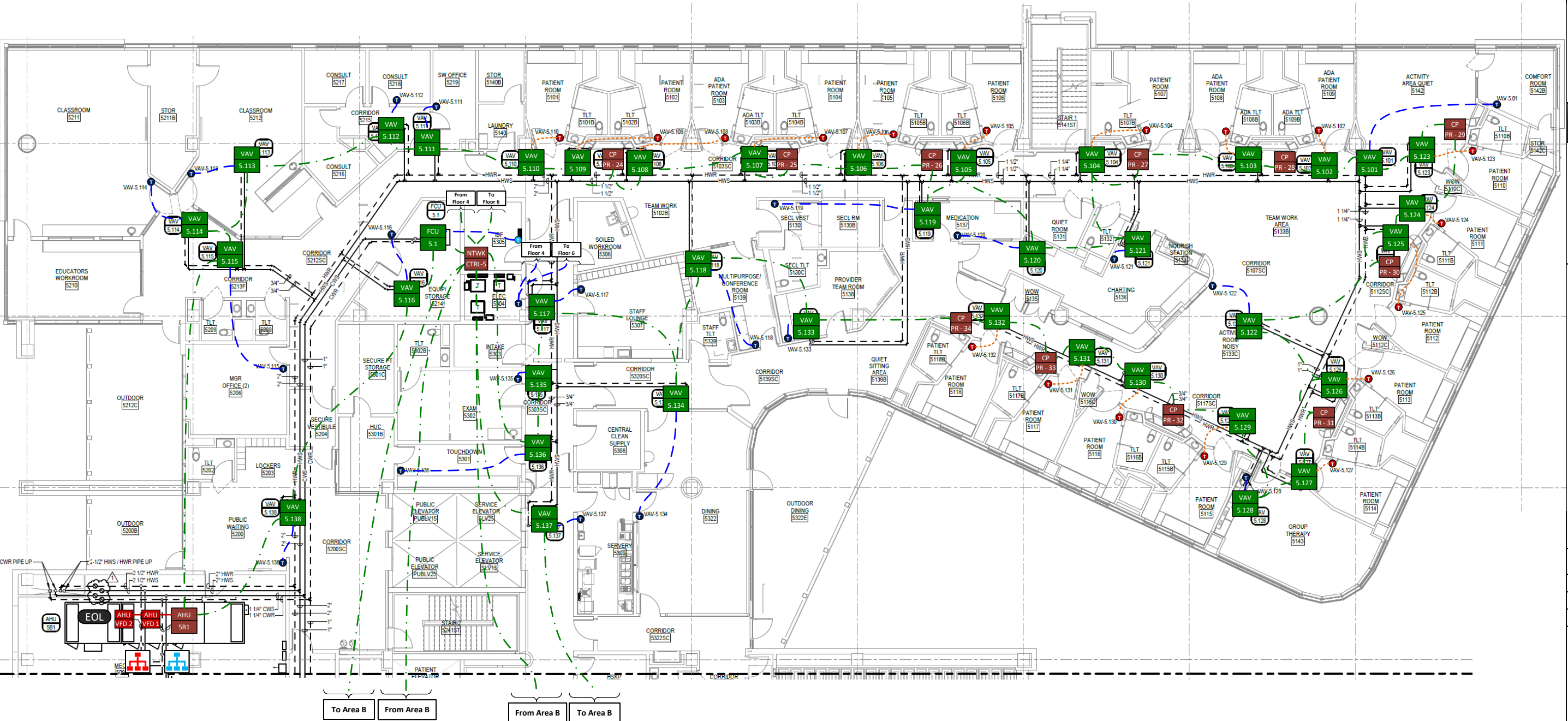
5th Floor Area A Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW

1
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PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104

CONTRACT NO: 01-23231B
 SE: TM
 DE: BW
 PR:
 DRAWING NAME:
 5th Floor
 Area A
 Comm/
 Sensor
 Layout

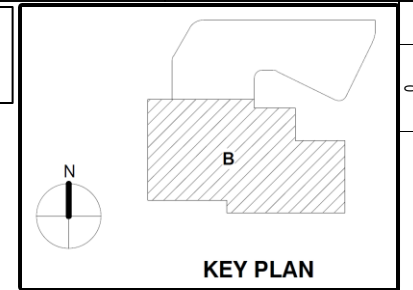
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DRAWING NO.: **0.22**

REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW

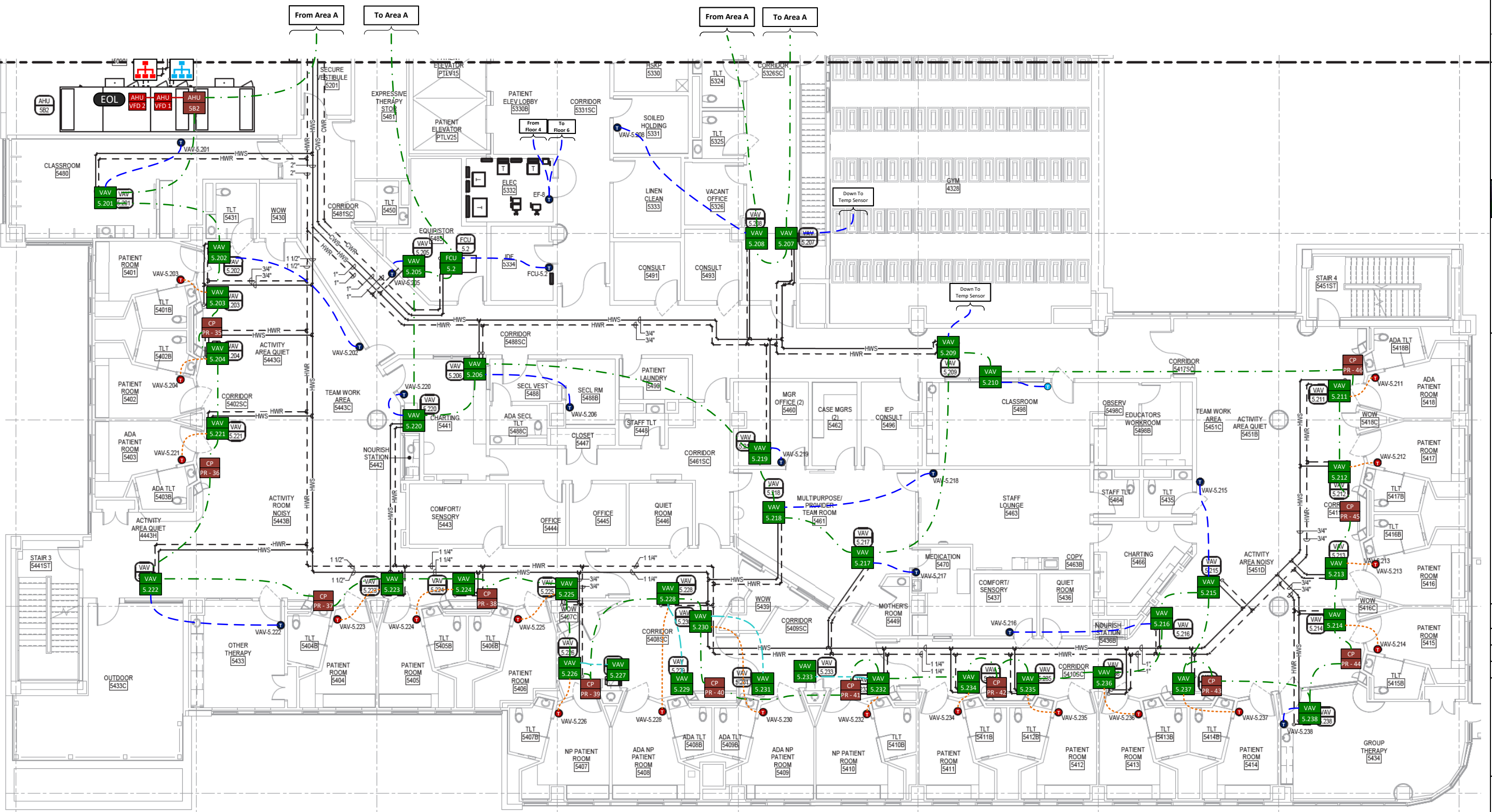
5th Floor Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel



REV	DATE	DESCRIPTION
0	9/30/2024	Rev 1 - Addressed Engineer Comments

1
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3
4
5



PROJECT: 01-23231B - TCH Behavioral Health Center
960 NE 13th Street
Oklahoma City, OK 73104

Contractor: **es2**
Engineered Systems & Energy Solutions, Inc.
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Oklahoma City, OK 73114

CONTRACT NO: 01-23231B
SE: TM
DE: BW
PR:
DRAWING NAME: 5th Floor Area B Comm/Sensor Layout

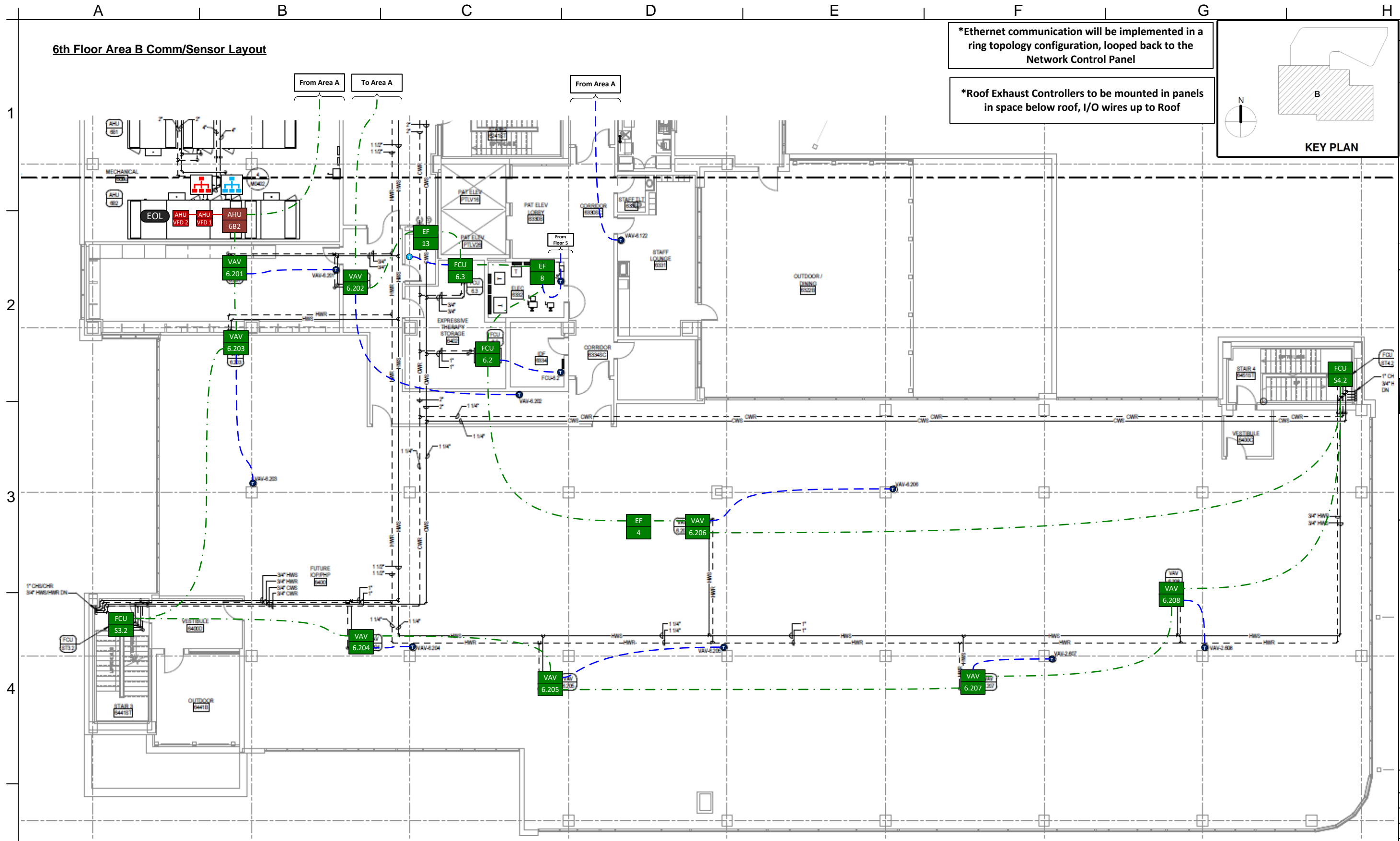
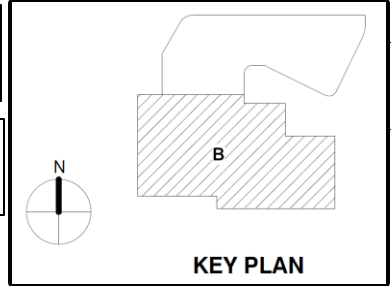
DRAWING NO.: 0.23

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6th Floor Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel

*Roof Exhaust Controllers to be mounted in panels in space below roof, I/O wires up to Roof



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
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PROJECT:	01-23231B - TCH Behavioral Health Center
CONTRACT NO.:	01-23231B
SE:	TM
DE:	BW
PR:	
DRAWING NAME:	6th Floor Area B Comm/Sensor Layout
DRAWING NO.:	0.25

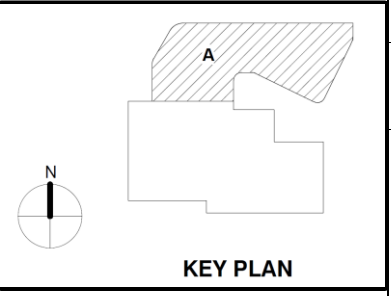
FILENAME:	00 - Project Details
PROJECT:	01-23231B - TCH Behavioral Health Center
CONTRACT NO.:	01-23231B
SE:	TM
DE:	BW
PR:	
DRAWING NAME:	6th Floor Area B Comm/Sensor Layout
DRAWING NO.:	0.25

ENGINEER:	es2
COMPANY:	Engineered Systems & Energy Solutions, Inc.
ADDRESS:	13401 N Santa Fe Ave
CITY:	Oklahoma City, OK 73114

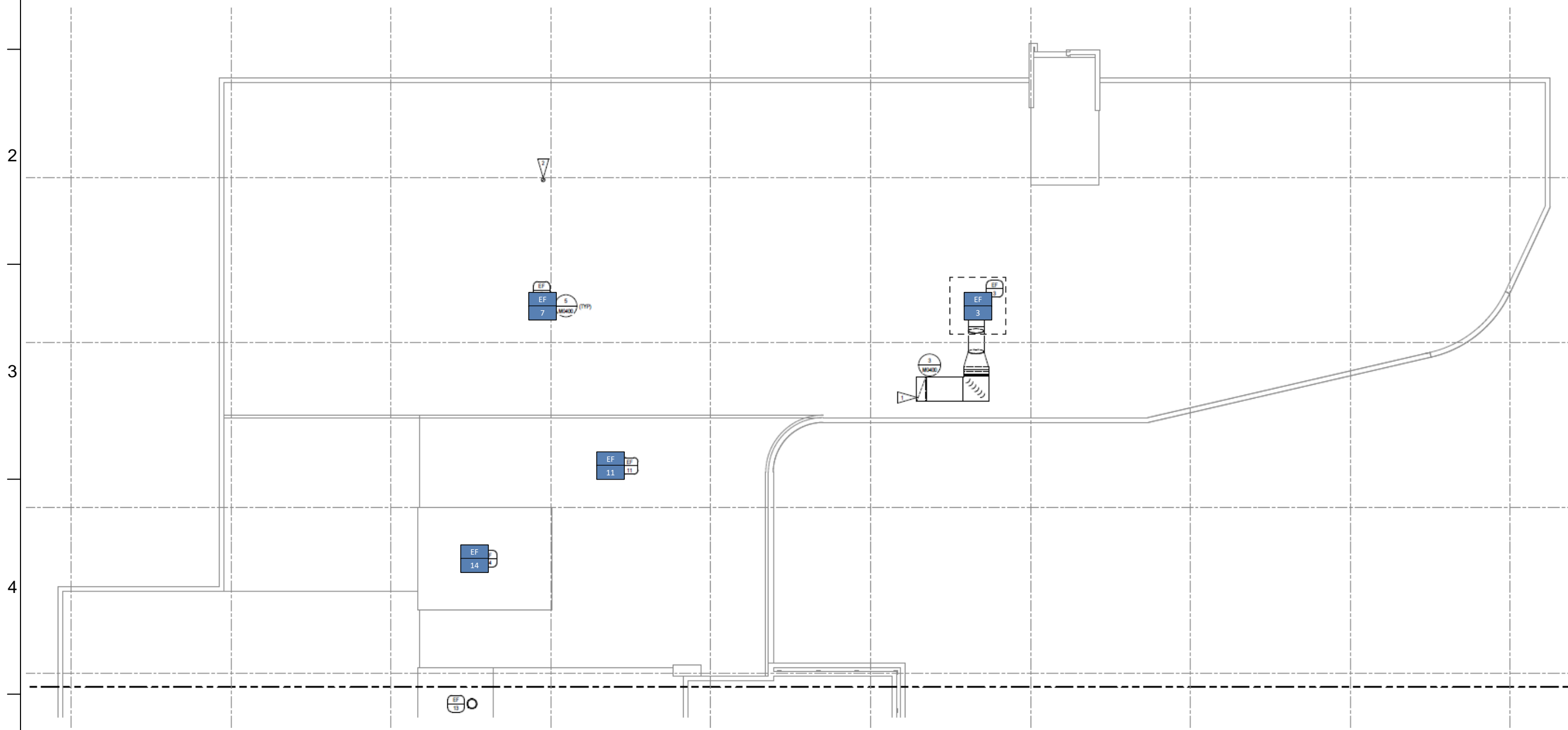
7th Floor/Roof Area A Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel

*Roof Exhaust Controllers to be mounted in panels in space below roof, I/O wires up to Roof



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
0			
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PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104

FILENAME: 00 - Project Details

CONTRACT NO.: 01-23231B

SE: TM

DE: BW

PR:

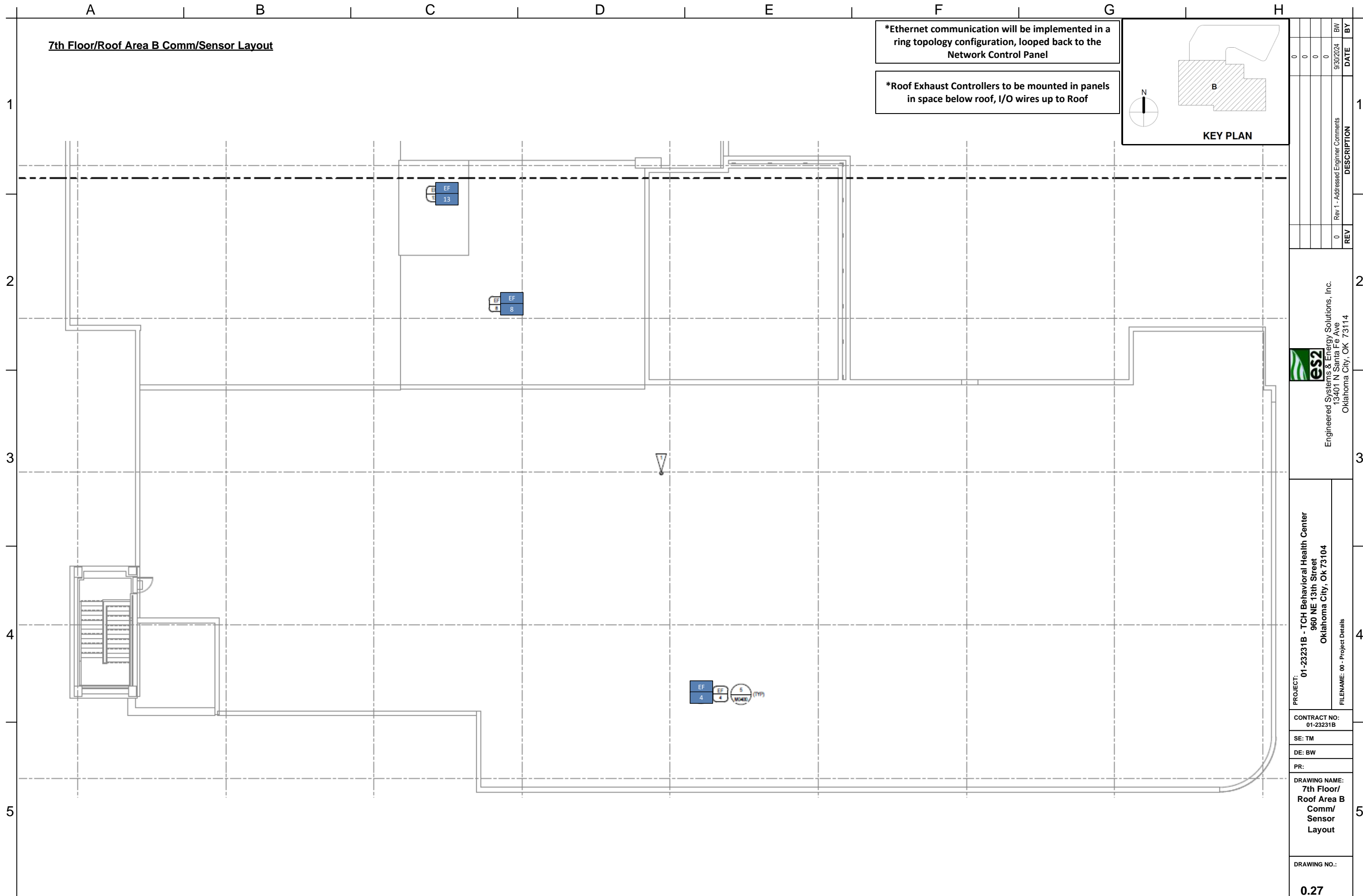
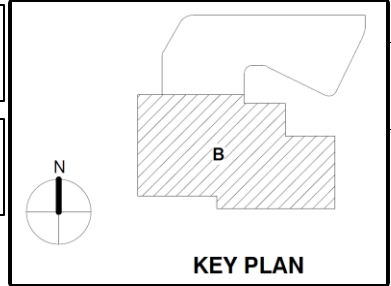
DRAWING NAME:
**7th Floor/
 Roof Area A
 Comm/
 Sensor
 Layout**

DRAWING NO.:
0.26

7th Floor/Roof Area B Comm/Sensor Layout

*Ethernet communication will be implemented in a ring topology configuration, looped back to the Network Control Panel

*Roof Exhaust Controllers to be mounted in panels in space below roof, I/O wires up to Roof



REV	DESCRIPTION	DATE	BY
0	Rev 1 - Addressed Engineer Comments	9/30/2024	BW
0			
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0			

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PROJECT: 01-23231B - TCH Behavioral Health Center
 960 NE 13th Street
 Oklahoma City, OK 73104
 FILENAME: 00 - Project Details

CONTRACT NO: 01-23231B
 SE: TM
 DE: BW
 PR:
 DRAWING NAME:
**7th Floor/
 Roof Area B
 Comm/
 Sensor
 Layout**

DRAWING NO.:
0.27