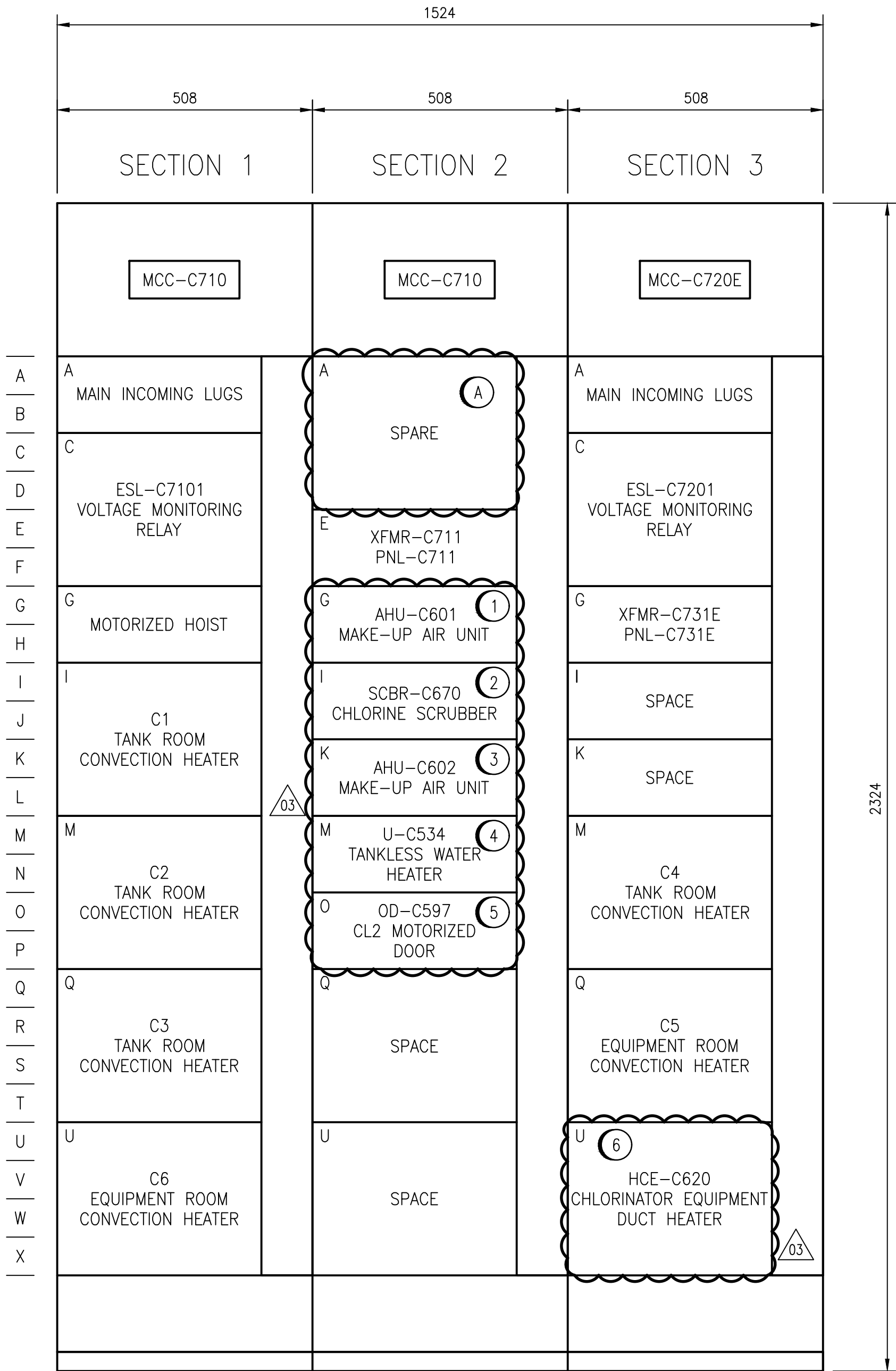




MCC-C710 AND MCC-C720E LAYOUT  
SCALE: 1:8

DEMOLITION NOTES:

- (A) DEMOLISH EXISTING FAN FN4 AND ALL CONDUIT AND CABLING ASSOCIATED WITH POWER AND CONTROLS. SEAL ALL HOLES LEFT BY DEMOLITION. RENAME MCC BUCKET AS SPARE. PROVIDE NEW LAMACOID INDICATING SPARE.

SPECIFIC NOTES:

- (1) PROVIDE NEW MCC BUCKET C/W WITH 100A CIRCUIT BREAKER TO FEED NEW AIR HANDLING UNIT, AHU-C601. REFER TO SCHEMATIC DRAWING 1-0640C-E0018 FOR MORE DETAILS. PROVIDE NEW LAMACOID.
- (2) PROVIDE NEW MCC BUCKET C/W WITH 90A CIRCUIT BREAKER TO FEED NEW CHLORINE SCRUBBER, SCBR-C670. REFER TO INTERCONNECTION DRAWING 1-0640C-E0025 FOR MORE DETAILS. PROVIDE NEW LAMACOID.
- (3) PROVIDE NEW MCC BUCKET C/W WITH 45A CIRCUIT BREAKER TO FEED NEW AIR HANDLING UNIT, AHU-C602. REFER TO SCHEMATIC DRAWING 1-0640C-E0019 FOR MORE DETAILS. PROVIDE NEW LAMACOID.
- (4) PROVIDE NEW MCC BUCKET C/W WITH 125A CIRCUIT BREAKER TO FEED NEW CHLORINE TANKLESS WATER HEATER, U-C534.PROVIDE NEW LAMACOID
- (5) PROVIDE NEW MCC BUCKET C/W WITH 15A CIRCUIT BREAKER TO FEED NEW OVERHEAD MOTORIZED DOOR, OD-C597. PROVIDE NEW LAMACOID.
- (6) PROVIDE NEW MCC BUCKET C/W WITH 15A CIRCUIT BREAKER TO FEED NEW ELECTRIC DUCT HEATER, HCE-C620. MODIFY MCC ACCORDINGLEY IF MCC BUCKET PROVIDED BY VENDOR IS DIFFERENT SIZE.

|               |                                                             |
|---------------|-------------------------------------------------------------|
| 1-0640C-E0012 | ELECTRICAL - HAZARDOUS LOCATION, CHLORINE BLDG GROUND LEVEL |
| 1-0640C-E0006 | PANELBOARD SCHEDULES                                        |
| 1-0640C-E0003 | SINGLE LINE, MCC-C710 & MCC-C720E                           |
| 1-0640C-A0002 | LOOP DIAGRAM, MCC-C710 VOLTAGE PRESENT                      |
| 1-0640C-A0001 | LOOP DIAGRAM, MCC-C720E VOLTAGE PRESENT                     |

|                |                    |
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| DRAWING NUMBER | REFERENCE DRAWINGS |
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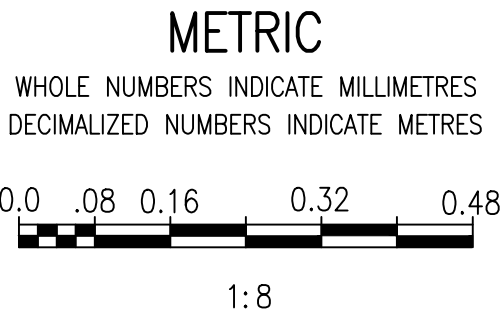


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|-----------------------------------|--------------------|-------------------------------------|--------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------|--------------|---------------|--------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------|-------|
| EQUIPMENT ID:<br>MCC-C710         |                    |                                     | VOLTS:<br>600V                                   | RATING:<br>600A              | PHASE:<br>3P                                                                            | WIRE:<br>3 W | MAIN BREAKER: | MAIN BREAKER TYPE:<br>-- | MAIN BREAKER SETTINGS:<br>LTPU: 600A INST: --<br>LTD: -- GFPU: --<br>STPU: -- GFD: --<br>STD: -- |                                                          |        |       |
| DESCRIPTION:<br>NON-ESSENTIAL MCC |                    |                                     | LOCATION:<br>ELECTRICAL ROOM – CHLORINE BUILDING |                              |                                                                                         |              |               |                          |                                                                                                  |                                                          |        |       |
| UNIT<br>LOC'N                     | LOAD               |                                     | MOTOR LOAD                                       |                              | NON-MOTOR LOAD                                                                          |              | STARTER       |                          |                                                                                                  | CIRCUIT PROTECTION                                       |        | NOTES |
|                                   | ID                 | DESCRIPTION                         | HP                                               | KW<br>FLA                    | KW<br>KVA                                                                               | NEMA SIZE    | TYPE          | OVERLOAD                 | RATING                                                                                           | TYPE                                                     |        |       |
| 1A                                | MAIN INCOMING LUGS | FROM MCC-M720                       |                                                  | 5.6                          |                                                                                         |              |               |                          |                                                                                                  |                                                          |        |       |
| 1C                                | ESL-C7101          | VOLTAGE MONITORING RELAY            |                                                  |                              |                                                                                         |              |               |                          |                                                                                                  |                                                          |        |       |
| 1G                                | HOIST              | MOTORIZED HOIST                     | 7.5                                              | --                           |                                                                                         |              |               |                          |                                                                                                  | 30A                                                      | TM, 3P |       |
| 1I                                | C1                 | TANK ROOM CONVECTION HEATER         |                                                  |                              | 5                                                                                       |              | 1             |                          |                                                                                                  | 15A                                                      | TM, 3P |       |
| 1M                                | C2                 | TANK ROOM CONVECTION HEATER         |                                                  |                              | 5                                                                                       |              | 1             |                          |                                                                                                  | 15A                                                      | TM, 3P |       |
| 1Q                                | C3                 | TANK ROOM CONVECTION HEATER         |                                                  |                              | 5                                                                                       |              | 1             |                          |                                                                                                  | 15A                                                      | TM, 3P |       |
| 1U                                | C6                 | EQUIPMENT ROOM CONVECTION HEATER    |                                                  |                              | 5                                                                                       |              | 1             |                          |                                                                                                  | 15A                                                      | TM, 3P |       |
| 2A                                | SPARE              | SPARE                               |                                                  |                              |                                                                                         |              |               |                          |                                                                                                  | 15A                                                      | TM, 3P |       |
| 2E                                | XFMR-C711          | PNL-C711 TRANSFORMER                |                                                  |                              |                                                                                         |              |               |                          |                                                                                                  | 40A                                                      | TM, 3P |       |
| 2G                                | AHU-C601           | MAKE-UP AIR UNIT 1                  | 119                                              | 114.5                        |                                                                                         |              |               |                          |                                                                                                  | 150A                                                     | TM, 3P |       |
| 2I                                | XFMR-C670          | XFMR-C670 (SCBR-C670)               | 40                                               | 52                           |                                                                                         |              |               |                          |                                                                                                  | 90A                                                      | TM, 3P |       |
| 2K                                | AHU-C602           | MAKE-UP AIR UNIT 2                  | 35                                               | 33.7                         |                                                                                         |              |               |                          |                                                                                                  | 45A                                                      | TM, 3P |       |
| 2M                                | U-C534             | TANKLESS WATER HEATER               |                                                  |                              | 102                                                                                     |              |               |                          |                                                                                                  | 125A                                                     | TM, 3P |       |
| 2O                                | OD-C597            | CL2 ROOM MOTORIZED DOOR             | 3                                                |                              |                                                                                         |              |               |                          |                                                                                                  | 15A                                                      | TM, 3P |       |
| 2S                                | SPACE              |                                     |                                                  |                              |                                                                                         |              |               |                          |                                                                                                  |                                                          |        |       |
| 2U                                | SPACE              |                                     |                                                  |                              |                                                                                         |              |               |                          |                                                                                                  |                                                          |        |       |
| TOTAL CONNECTED LOAD:<br>-- KVA   |                    | TOTAL DEMAND LOAD – SUMMER:<br>--VA | TOTAL DEMAND LOAD – WINTER:<br>-- KVA            | LEGEND:<br>FVNR<br>TM<br>MMC | FULL VOLTAGE NON-REVERSING<br>THERMAL MAGNETIC<br>MOTOR MANAGEMENT CONTROLLER (TESYS T) |              |               |                          | MCP<br>3P<br>MCS                                                                                 | MOTOR CIRCUIT PROTECTOR<br>3 POLE<br>MOULDED CASE SWITCH |        |       |

MCC-C710 SCHEDULE  
SCALE: NTS

|                               |                    |                                        |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
|-------------------------------|--------------------|----------------------------------------|--------------------------------------------------|-----------------|--------------|----------------|---------------|--------------------------|------------------------------------------------------------------------------------------------------------|----------|--------------------|--------|-------|
| EQUIPMENT ID:<br>MCC--C720E   |                    |                                        | VOLTS:<br>600V                                   | RATING:<br>600A | PHASE:<br>3P | WIRE:<br>3 W   | MAIN BREAKER: | MAIN BREAKER TYPE:<br>-- | MAIN BREAKER SETTINGS:<br>LTPU: 600A    INST: -<br>LTD: -        GFPU: -<br>STPU: -       GFD: -<br>STD: - |          |                    |        |       |
| DESCRIPTION:<br>ESSENTIAL MCC |                    |                                        | LOCATION:<br>ELECTRICAL ROOM - CHLORINE BUILDING |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
| LOAD                          |                    |                                        |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
| UNIT<br>LOC'N                 | ID                 | DESCRIPTION                            | MOTOR LOAD                                       |                 |              | NON-MOTOR LOAD |               | STARTER                  |                                                                                                            |          | CIRCUIT PROTECTION |        | NOTES |
|                               |                    |                                        | HP                                               | KW              | FLA          | KW             | KVA           | NEMA SIZE                | TYPE                                                                                                       | OVERLOAD | RATING             | TYPE   |       |
| 3A                            | MAIN INCOMING LUGS | FROM MCC-M730E                         |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
| 3C                            | ESL-C7201          | VOLTAGE MONITORING RELAY               |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
| 3G                            | XFMR-C731E         | PNL-C731E TRANSFORMER                  |                                                  |                 |              |                | 15            |                          |                                                                                                            |          | 15A                | TM, 3P |       |
| 3I                            | SPACE              |                                        |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
| 3K                            | SPACE              |                                        |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
| 3M                            | C4                 | TANK ROOM CONVECTION HEATER            |                                                  |                 |              | 5              |               | 1                        |                                                                                                            |          | 15A                | TM, 3P |       |
| 3Q                            | C5                 | EQUIPMENT ROOM CONVECTION HEATER       |                                                  |                 |              | 5              |               | 1                        |                                                                                                            |          | 15A                | TM, 3P |       |
| 3U                            | HCE-C620           | CHLORINATOR EQUIPMENT ROOM VENT HEATER |                                                  |                 |              | 9              |               |                          |                                                                                                            |          | 15A                | TM, 3P |       |
|                               |                    |                                        |                                                  |                 |              |                |               |                          |                                                                                                            |          |                    |        |       |
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MCC-C720E SCHEDULE  
SCALE: NTS



|                                       |  |  |  |  |  |                                                                                                                                                                 |  |                                         |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
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|                                       |  |  |  |  |  | <br>148 Nature Park Way, Winnipeg, Manitoba<br>Canada R3P 0X7 204-786-8080 |  | ENGINEER'S SEAL                         |  |  <b>THE CITY OF WINNIPEG</b><br>WATER AND WASTE DEPARTMENT                                                                                                                                                                                          |  |  |  |
|                                       |  |  |  |  |  |                                                                                                                                                                 |  |                                         |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
|                                       |  |  |  |  |  | DESIGNED BY:<br>S. BOGHOSIAN                                                                                                                                    |  | CHECKED BY:<br>K. SAPIAK                |  | <div>MCPHILLIPS PUMPING STATION</div> <div>ELECTRICAL AND HVAC UPGRADES, MCC REPLACEMENT</div> <div>ELECTRICAL PANEL LAYOUT</div> <div>CHLORINE BUILDING</div> <div>MCC-C710/MCC-C720E LAYOUT AND SCHEDULE</div> <div>CITY DRAWING NUMBER<br/>1-0640C-E0004</div> <div>SHEET<br/>001</div> <div>REV.<br/>03</div> <div>SIZE<br/>A1</div> |  |  |  |
|                                       |  |  |  |  |  | DRAWN BY:<br>S. BOGHOSIAN                                                                                                                                       |  | APPROVED BY:<br>D. BECKER               |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
|                                       |  |  |  |  |  | SCALE:<br>AS SHOWN                                                                                                                                              |  | ISSUED FOR CONSTRUCTION<br>BY: A. WEISS |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| 03 ISSUED FOR TENDER AND CONSTRUCTION |  |  |  |  |  | 2025/04/30                                                                                                                                                      |  | VE' VE'                                 |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| 02 AS-BUILT - 1070-2019 TENDER        |  |  |  |  |  | 2023/03/17                                                                                                                                                      |  | - VE'                                   |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| 01 MCC LAYOUT MODIFICATION            |  |  |  |  |  | 2020/06/08                                                                                                                                                      |  | CD VE'                                  |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| 00 ISSUED FOR TENDER AND CONSTRUCTION |  |  |  |  |  | 2019/10/18                                                                                                                                                      |  | SB KS'                                  |  |                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| NO. REVISIONS                         |  |  |  |  |  | DATE                                                                                                                                                            |  | DESIGN                                  |  | CHECK                                                                                                                                                                                                                                                                                                                                    |  |  |  |