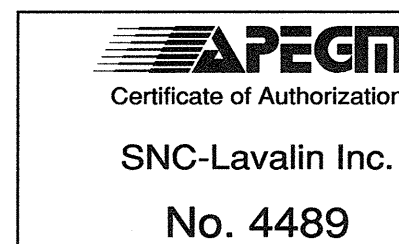


**GROUND FLOOR PLAN**  
SCALE: 1 : 100



DESIGN INTENT NOTES	
1	FAS-R-B04-D02 (SMOKE DETECTOR BELOW IN GALLERY 8A) AND FAS-R-103-D09 ARE INTENDED TO CLOSE HORIZONTAL FIRE SHUTTER DOOR U-R522 IN THE EVENT OF A FIRE.
2	WIRE AND CONNECT CONTROL RELAY FAS-R-103-C01 (N.C. CONTACT) TO DOOR ACTUATOR OF HORIZONTAL FIRE SHUTTER U-R522, TO PROVIDE AUTOMATIC CLOSURE IN THE EVENT OF FIRE. RELAY CONTACT TO BE PROGRAMMED TO OPERATE ONLY WITH THE ACTIVATION OF EITHER SMOKE DETECTORS FAS-R-B04-D02 OR FAS-R-103-D09 ADJACENT TO THE U-R522.
3	AIR DUCT SMOKE DETECTOR FAS-R-104-D06 IS INTENDED TO SHUT OFF AIR HANDLING UNIT AHU-R620 IN THE EVENT SMOKE IS DETECTED IN THE AIR HANDLING UNIT AIR DUCT. CONTROL RELAY FAS-R-104-C01 WILL GENERATE A SIGNAL TO SHUT OFF THE AIR HANDLING UNIT.
4	AIR DUCT SMOKE DETECTOR FAS-R-104-D07 IS INTENDED TO SHUT OFF AIR HANDLING UNIT AHU-R640 IN THE EVENT SMOKE IS DETECTED IN THE AIR HANDLING UNIT AIR DUCT. CONTROL RELAY FAS-R-104-C02 WILL GENERATE A SIGNAL TO SHUT OFF THE AIR HANDLING UNIT.

**GENERAL NOTES:**

- REFER TO DRAWING 1-0102-EFAS-R001 FOR FIRE ALARM GENERAL NOTES.

**SPECIFIC NOTES:**

- DO NOT MOUNT STROBES DIRECTLY ABOVE CABLE TRAY OR MCC IN ELECTRICAL ROOM.
- PROVIDE 2C, 16AWG, FAS90 CABLE RUN IN 27mm RIGID ALUMINUM CONDUIT TO PRIMARY CLARIFIER ELECTRICAL ROOM B P113A FOR CONNECTION OF PSP-R711 TO FIRE ALARM PANEL, FACP-P1. RUN CABLING/CONDUIT THRU GALLERY 8A, 8, 5B (IN BIOREACTORS/BLOWER BUILDING), THRU GALLERY 5, 3 (IN PRIMARY CLARIFIER), AND UP TO THE ELECTRICAL ROOM B P113A.
- PROVIDE REFLECTIVE BEAM SMOKE DETECTOR FAS-R105-D01 AND FAS-R105-D02 IN ELECTRICAL ROOM. MOUNT DETECTORS APPROX. 500mm BELOW THE BOTTOM OF STRUCTURAL BEAM. MOUNT REFLECTIVE MIRROR ON OPPOSING WALL. ADJUST EXACT LOCATION AS REQUIRED TO AVOID OBSTRUCTIONS.
- PROVIDE HEAT DETECTORS IN THE BLOWER ROOM WITH A FIXED ALARM TEMPERATURE OF 90°C. MOUNT HEAT DETECTOR TO THE BOTTOM OF THE NEAREST BEAM AT LOCATION INDICATED ON THE DRAWING.

REFERENCE DRAWINGS	DESCRIPTION
1-0102-EHLC-R002	HAZARDOUS LOCATION, BIOREACTOR/BLOWER BUILDING, UPPER LEVEL/GROUND FLOOR PLAN
1-0102-EFAS-R004	RISER DIAGRAM NOTIFICATION CIRCUITS
1-0102-EFAS-R003	RISER DIAGRAM DETECTION CIRCUITS
1-0102-EFAS-A001	UPGRADE LEGEND & DETAILS

NO.	REVISIONS	DATE	DESIGN	CHECK
01	ISSUED FOR ADDENDUM 5 - 976-2016	2017/07/14	DEB	DEB
00	ISSUED FOR CONSTRUCTION - 976-2016	2017/04/05	WE	DEB

**CH2MHILL.**  
SNC-LAVALIN

DESIGNED BY: V. ELIMBAN  
DRAWN BY: MJ. PERSSON  
SCALE: 1:100  
DATE: 2015/08/28

CHECKED BY: E. RYCZKOWSKI  
APPROVED BY: D. BECKER  
ISSUED FOR CONSTRUCTION BY: J. SHUMKA  
DATE: 2017/04/05

CONSULTANT NO.: 474248

ENGINEER'S SEAL

**D.E. BECKER**  
REGISTERED PROFESSIONAL ENGINEER  
23646

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE  
SEWPPC UPGRADING/EXPANSION PROJECT  
ELECTRICAL - FIRE ALARM LAYOUT  
BIOREACTORS/BLOWER BUILDING  
GROUND FLOOR PLAN

CITY DRAWING NUMBER: 1-0102-EFAS-R002  
SHEET: 001  
REV: 01  
SIZE: A1