

**NOTES:**

- DIRTY FILTER ALARM IS BETWEEN 0.55-1" W.C. CONTRACTOR TO VERIFY THE FILTER PRESSURE DROP AND PROGRAM / CALIBRATE TRANSMITTER ACCORDINGLY.
- THE TUNNEL HVAC SYSTEM IS INTENDED FOR CONTINUOUS OPERATION 24 HRS / DAY, 7 DAYS A WEEK. THE SUPPLY FANS ARE CONSTANT SPEED, TO BE OPERATED AT ALL TIMES. THE EXHAUST FANS ARE VARIABLE AND ARE TO BE CONTROLLED BY THE PLC SYSTEM IN ORDER TO MAINTAIN THE DESIRED TUNNEL PRESSURE. THE PLC SHALL MAINTAIN A TUNNEL PRESSURE OF -0.5" WC.
- ALL XX-PDT-XX INSTRUMENTS SHALL BE CALIBRATED FOR A RANGE OF -2" WC TO 2" WC.
- THE DRAWING INCLUDES INSTRUMENTATION INFORMATION FOR PACKAGE 1-TBU43 AND PACKAGE 2-TBU44



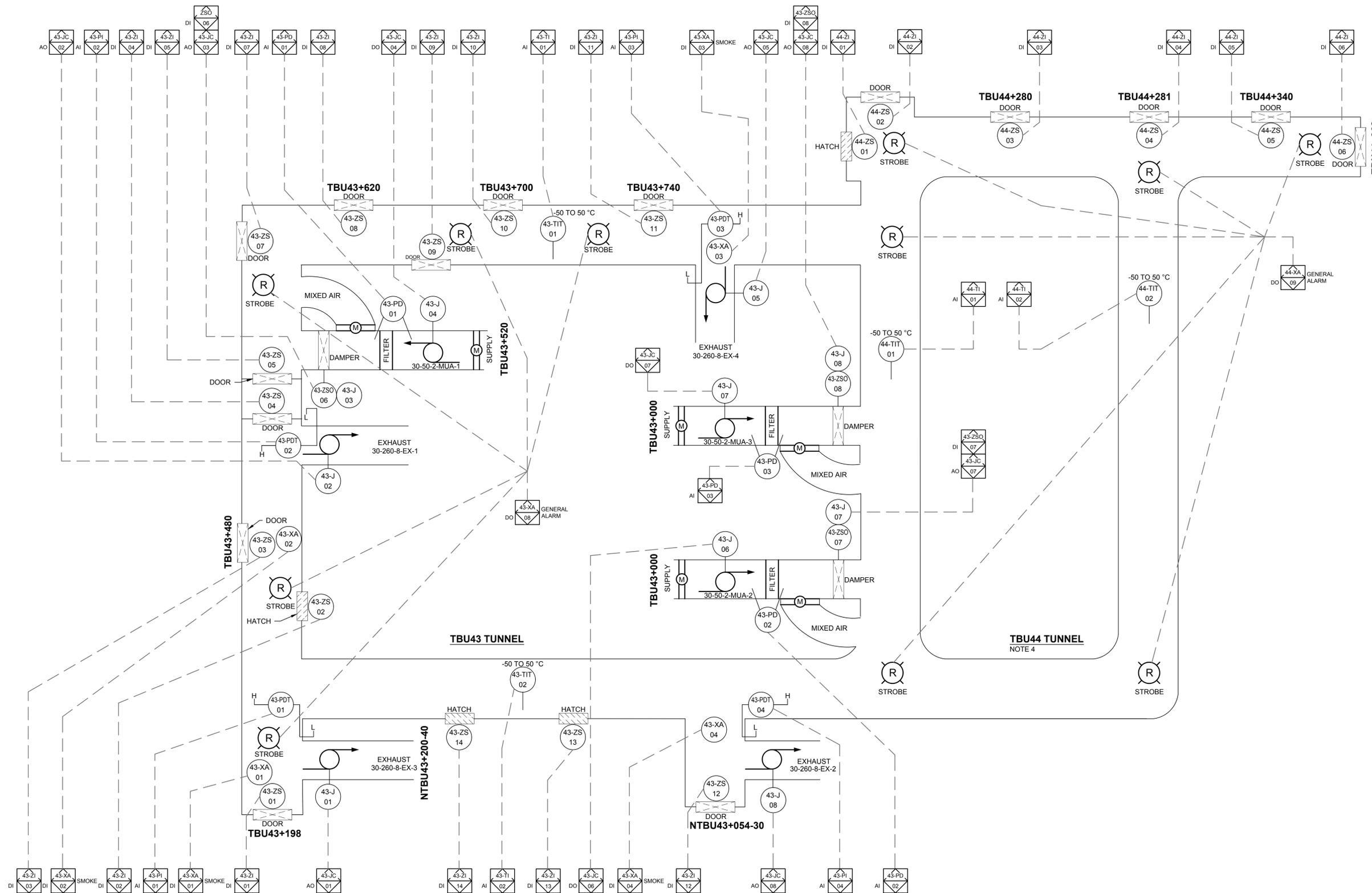
DEVICE MONITORED	ALARMS
DOORS	IF DOOR IS OPEN LONGER THAN 60 SECONDS PROVIDE ALARM STATUS TO SITE, AND OPERATE STROBE BEACONS
TUNNEL PRESSURE > 0" WC < -1" WC	PROVIDE ALARM STATUS TO SITE, AND OPERATE STROBE BEACONS
SMOKE ALARM	SHUTDOWN ALL SUPPLY AND EXHAUST FANS, PROVIDE ALARM STATUS TO SITE, AND OPERATE STROBE BEACONS.
FILTER DIRTY	PROVIDE ALARM STATUS TO SITE, AND OPERATE STROBE BEACONS.
TUNNEL TEMPERATURE < -10° C > 30° C	PROVIDE ALARM STATUS TO SITE, AND OPERATE STROBE BEACONS

**TENDER  
NOT FOR CONSTRUCTION**



ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF SASKATCHEWAN  
**CERTIFICATE OF AUTHORIZATION**  
AECOM Canada Ltd.  
NUMBER C1667  
PERMISSION TO CONSULT HELD BY:  
DISCIPLINE: ELECTRICAL SASK. REG. NO. 36101 SIGNATURE: [Signature]

Key Plan



**1 | TBU43 AND TBU44 INSTRUMENTATION LAYOUT**

N.T.S.

Revision	Description	Date
E	Issued For Tender	19/09/30
D	Issued For 99% Review	19/06/21
C	Not Issued	-
B	Not Issued	-
A	Not Issued	-

Client

**Public Works and Government Services Canada**

Project title

**Tunnel Revitalization**

Designed by  
**B. Stewart**  
Drawn by  
**T. Shrufi**  
Approved by  
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PWGSC Project Manager  
**J. Dayman**  
Drawing title

Package 1 - TBU43 - Tunnel  
Electrical  
Instrumentation Layout

Project no.	Drawing no.	Revision no.
1004259	E1.05	E