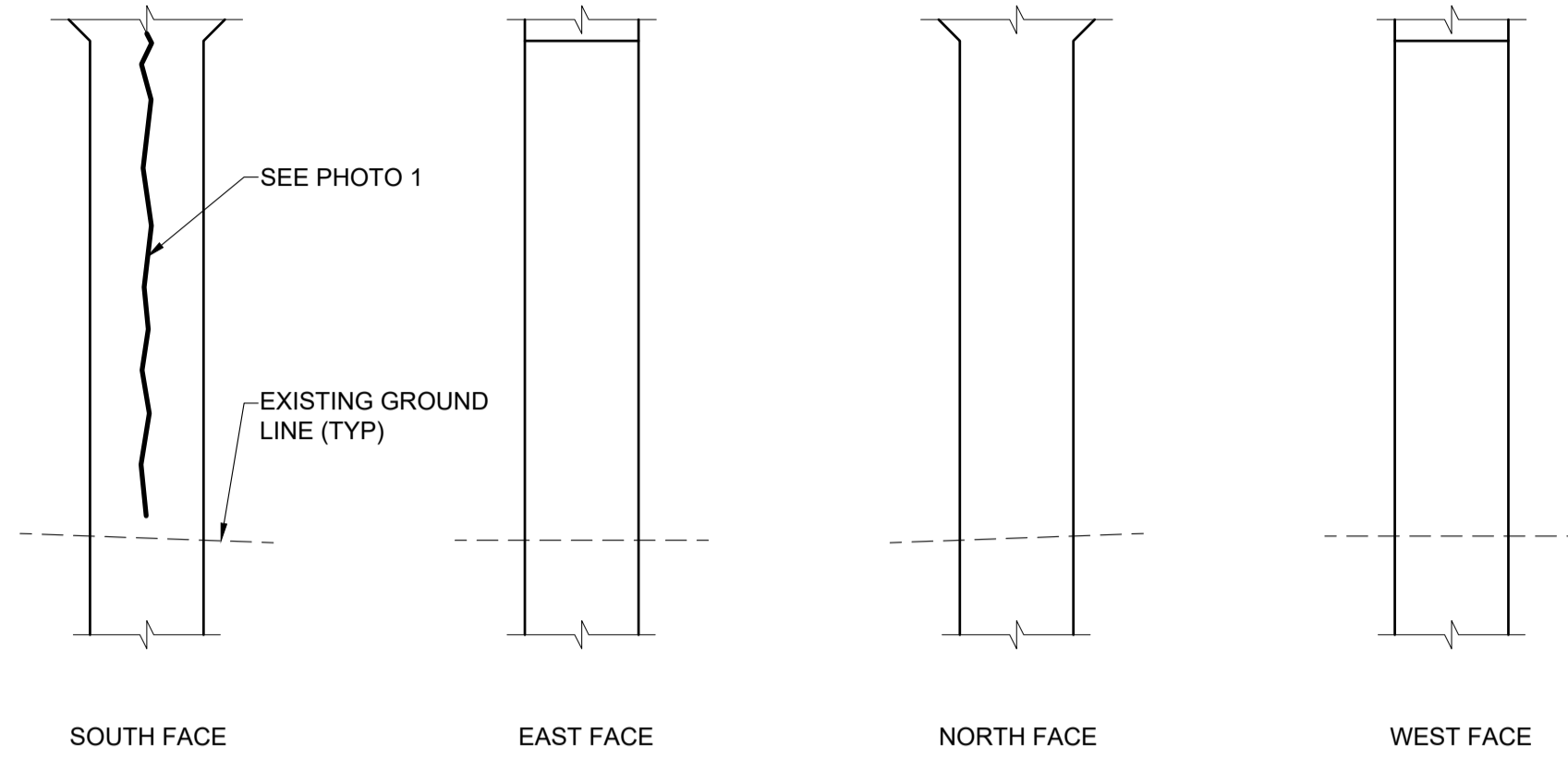
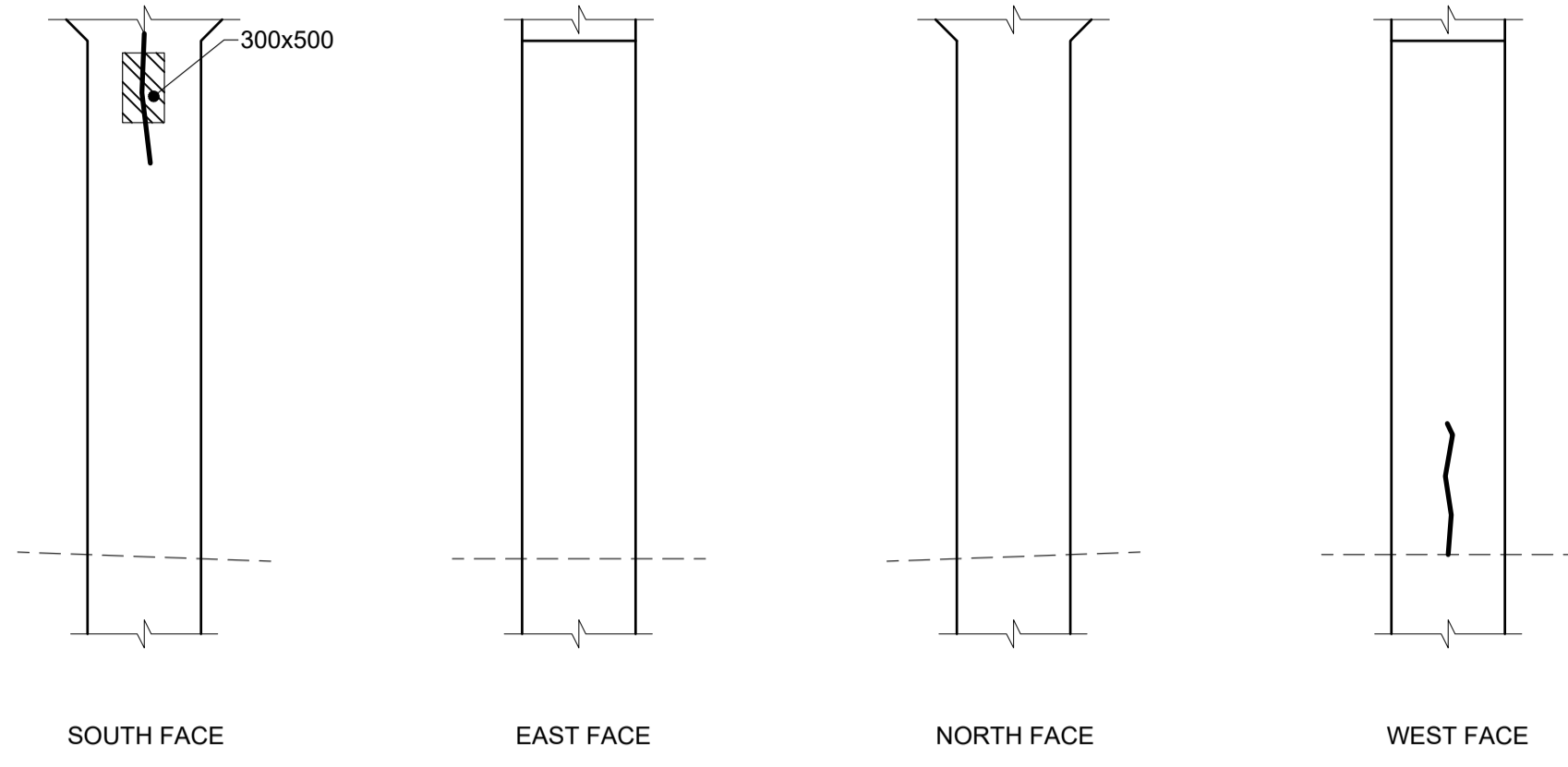


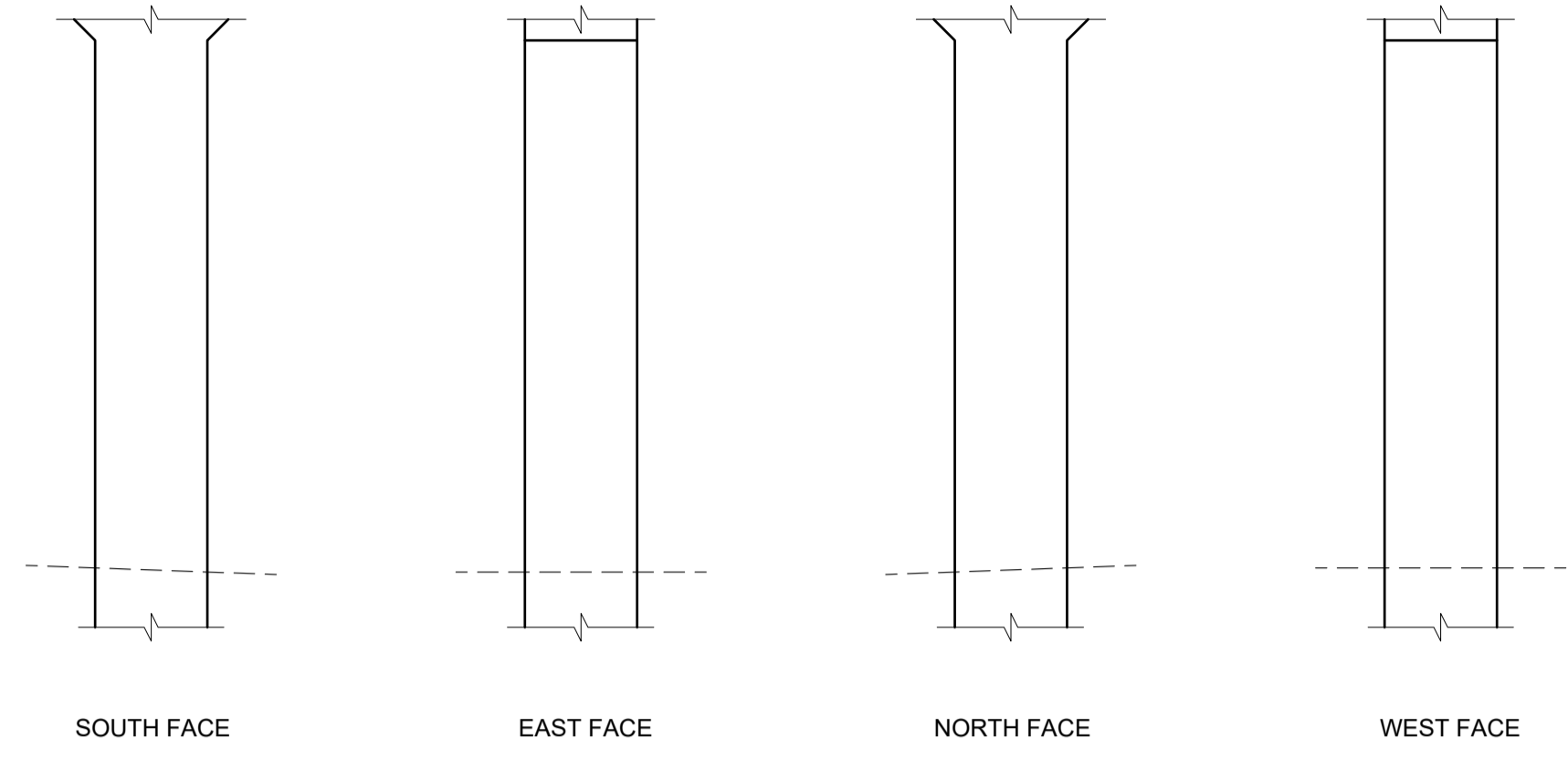
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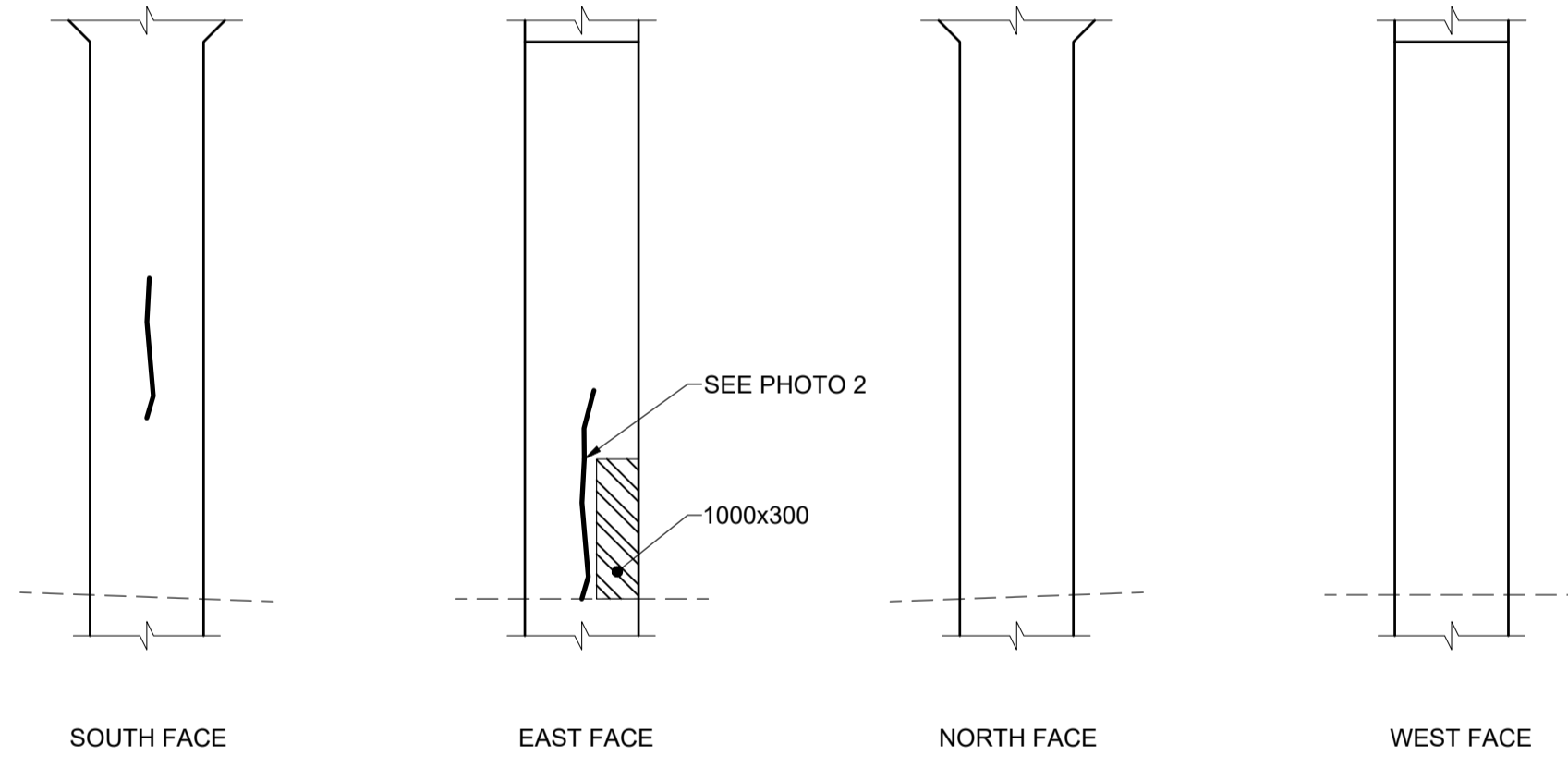
COLUMN 11
SCALE: 1:50



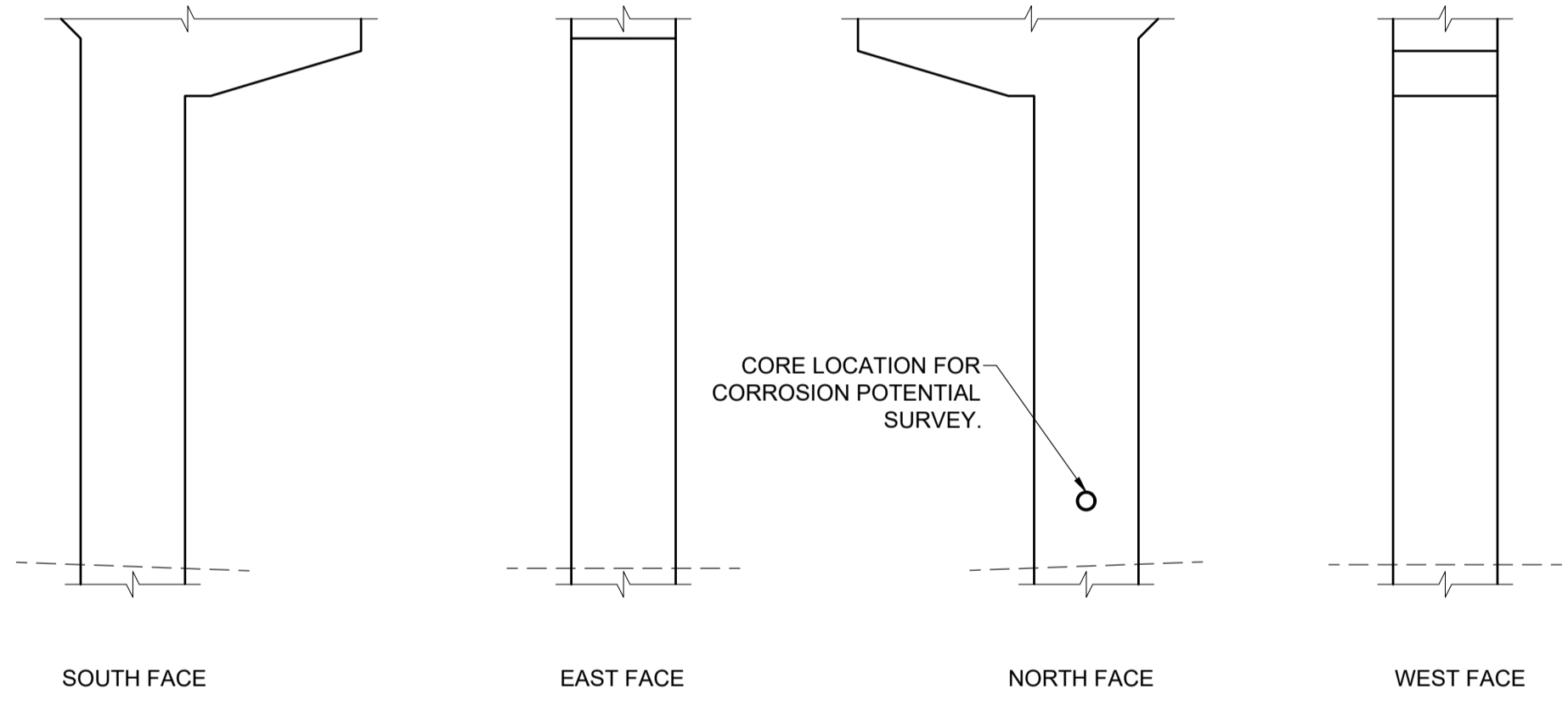
COLUMN 12
SCALE: 1:50



COLUMN 13
SCALE: 1:50



COLUMN 14
SCALE: 1:50



COLUMN 15
SCALE: 1:50



1. SOUTH FACE COLUMN 11
(LINE ADDED TO ILLUSTRATE CRACK LOCATION)



2. EAST AND NORTH FACE COLUMN 14
(LINE ADDED TO ILLUSTRATE CRACK LOCATION)

LEGEND:

- LOSS OF MORTAR SURFACE REPAIR
- DELAMINATION
- SPALL
- CRACK

GENERAL NOTES:

1. DEFECTS MAPPED OCTOBER 5, 2017.
2. CONTRACTOR TO UNDERTAKE DELAMINATION SURVEY WITH RESIDENT ENGINEER TO CONFIRM EXTENTS OF DEFECTS.
3. REPAIRS TO BE COMPLETED TO DELAMINATED, SPALLED, AND CRACKED CONCRETE PRIOR TO INSTALLING AND APPLYING ECE TREATMENT. REFER TO SHEET 99 FOR REPAIR DETAILS.



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED UNDERGROUND STRUCTURES			
NO.	REVISIONS	DATE	BY
D	ISSUED FOR TENDER	18/09/04	BAP
C	ISSUED FOR 95% DESIGN REVIEW	18/08/07	BAP
B	ISSUED FOR 50% DESIGN REVIEW REV 1	18/06/28	AG
A	ISSUED FOR 50% DESIGN REVIEW	18/04/03	AF

DESIGNED BY		CHECKED BY	
AG		BAP	
DRAWN BY		APPROVED BY	
AH		BE	
HOR SCALE		VERT SCALE	
AS SHOWN		AS SHOWN	
DATE		DATE	

MORRISON HERSHFIELD

DESIGNED BY: AG
CHECKED BY: BAP
DRAWN BY: AH
APPROVED BY: BE
HOR SCALE: AS SHOWN
VERT SCALE: AS SHOWN
DATE: _____

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
B.A.F. PHILLIPS
Member
32723
REGISTERED PROFESSIONAL ENGINEER
CONSULTANT FILE NAME
W160034 - DD SU, DWG

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

EMPRESS STREET PROJECT OVERPASS REHABILITATION WORKS SUBSTRUCTURE NORTH PIER COLUMNS DEFECT MAP AND SURFACE REPAIRS

CITY DRAWING NUMBER: P-3494-92
SHEET 92 OF 168
DRAWING No. 92 REV D

BID OPPORTUNITY No. 602-2018