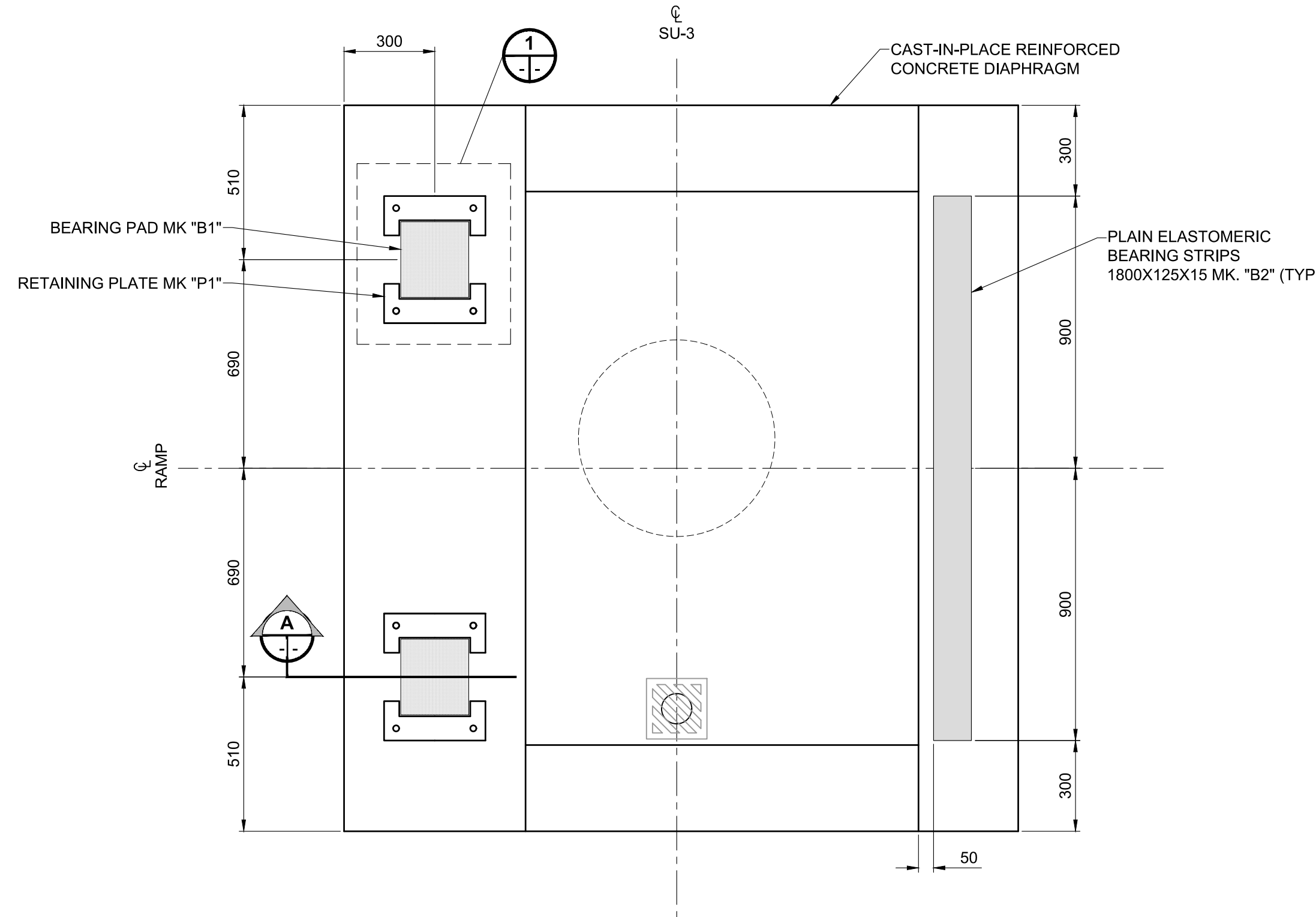
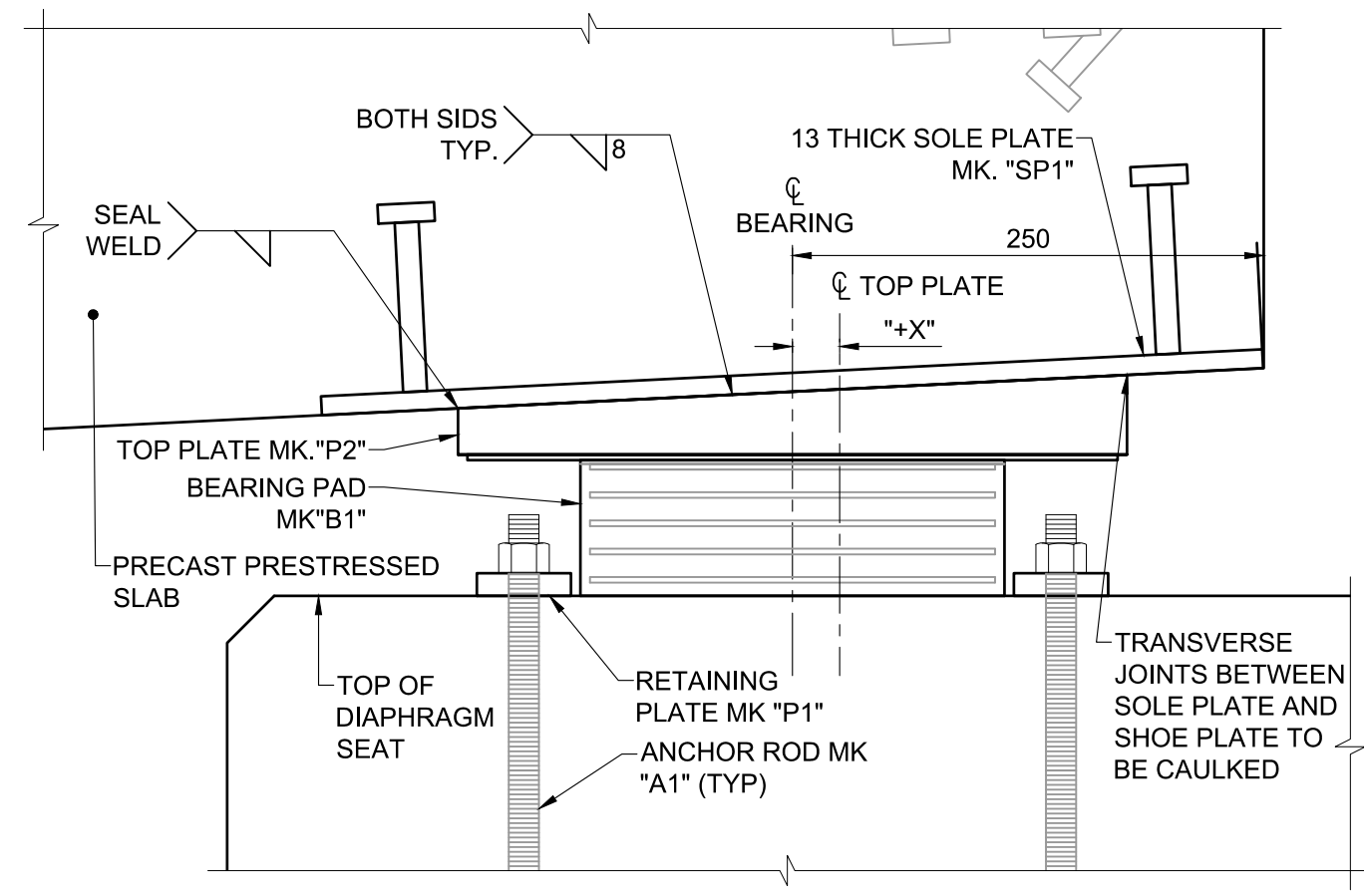


ISO A1 - 594mm x 841mm

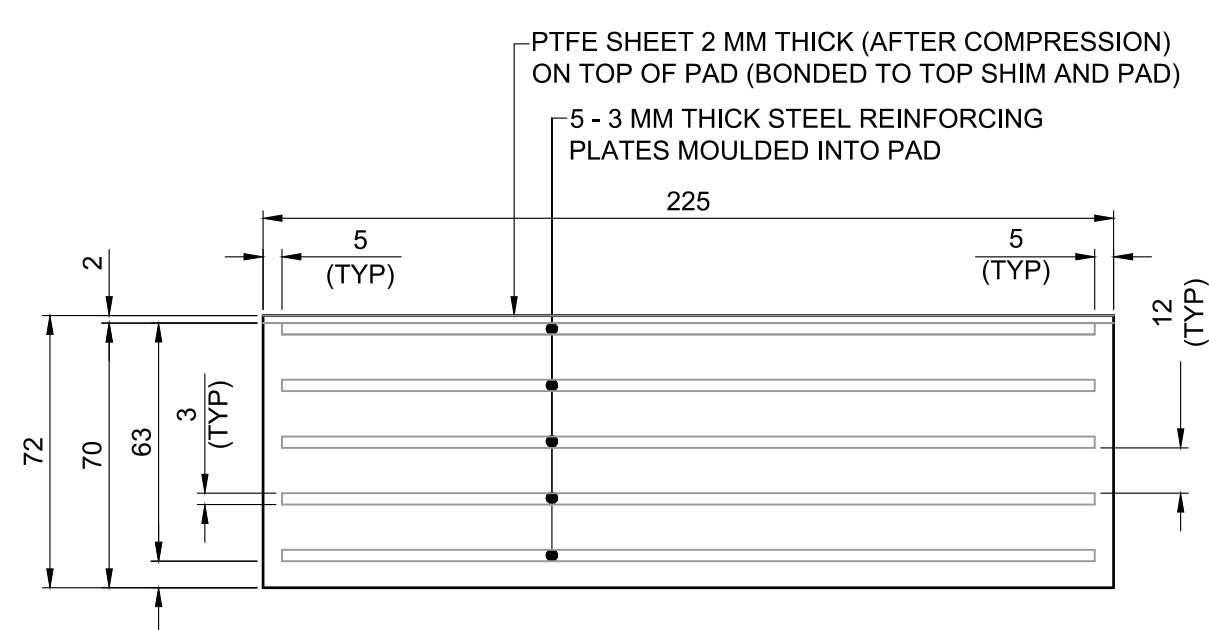
O:\Winipeg\Proj\W1600344\_Design\11\_Drawing\06\_Sheets\Detailed Design\Structural\Pedestrian Ramps\W160034 - DD\_NR BRG & SLAB ON GRADE.dwg Last Saved: 9/22/2018 6:21 PM by Y.Mehra - Plotted: 9/22/2018 9:39 PM by Alex Hoggner



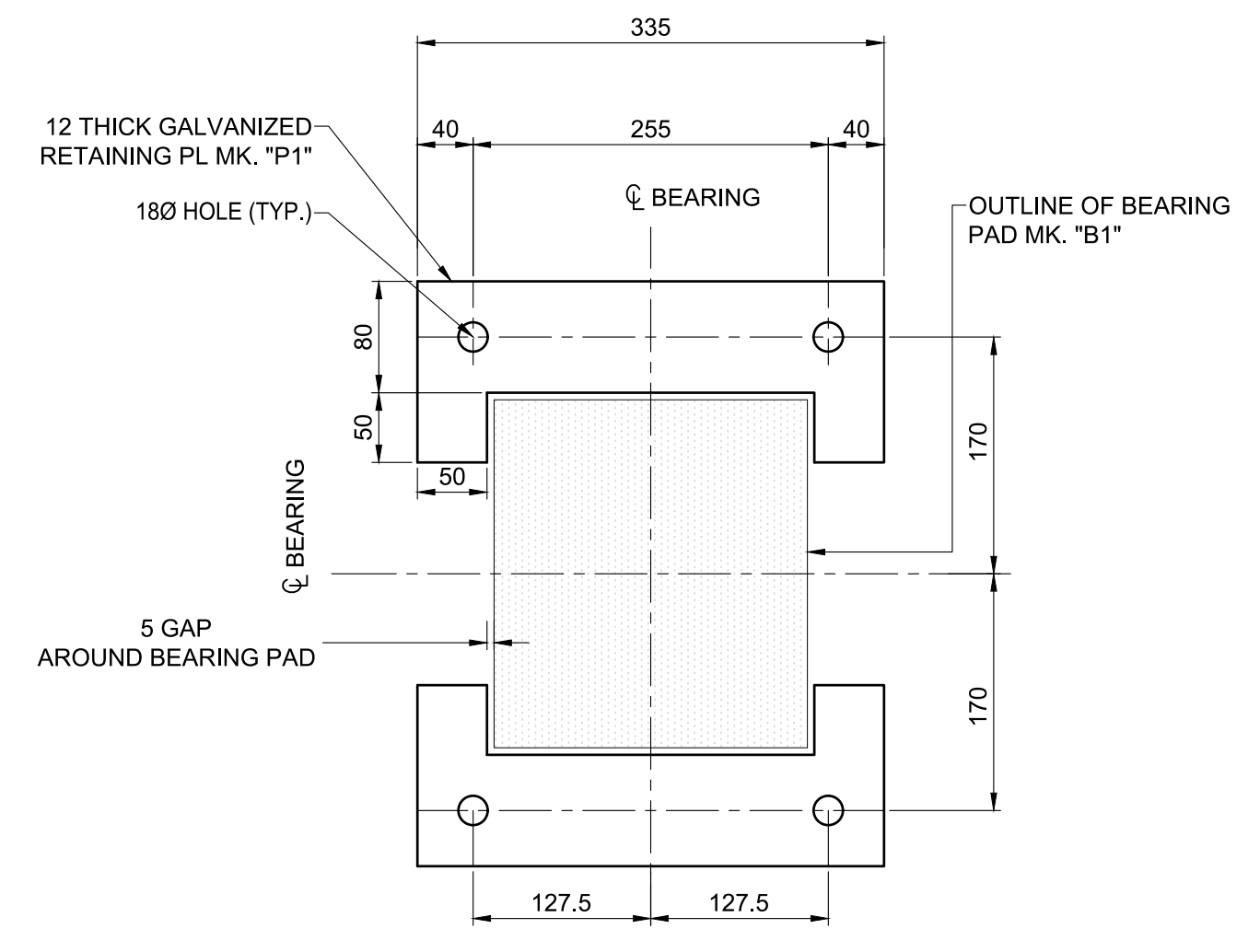
**PLAN - BEARING LAYOUT**  
SCALE: 1:15



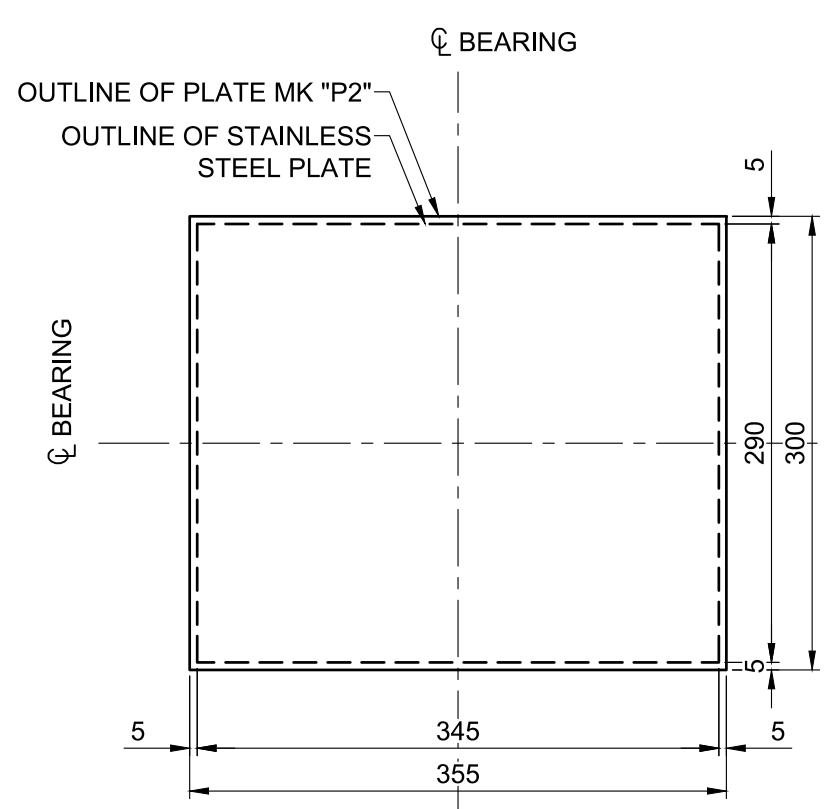
**SECTION - BEARING SET SCHEMATIC**  
SCALE: 1:4



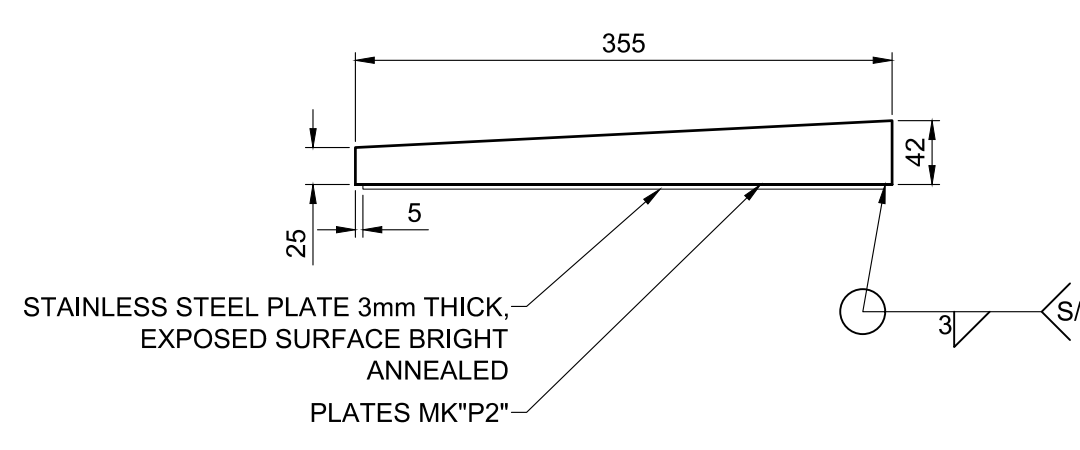
**DETAIL - BEARING PAD MK "B1" ELEVATION**  
SCALE: 1:2



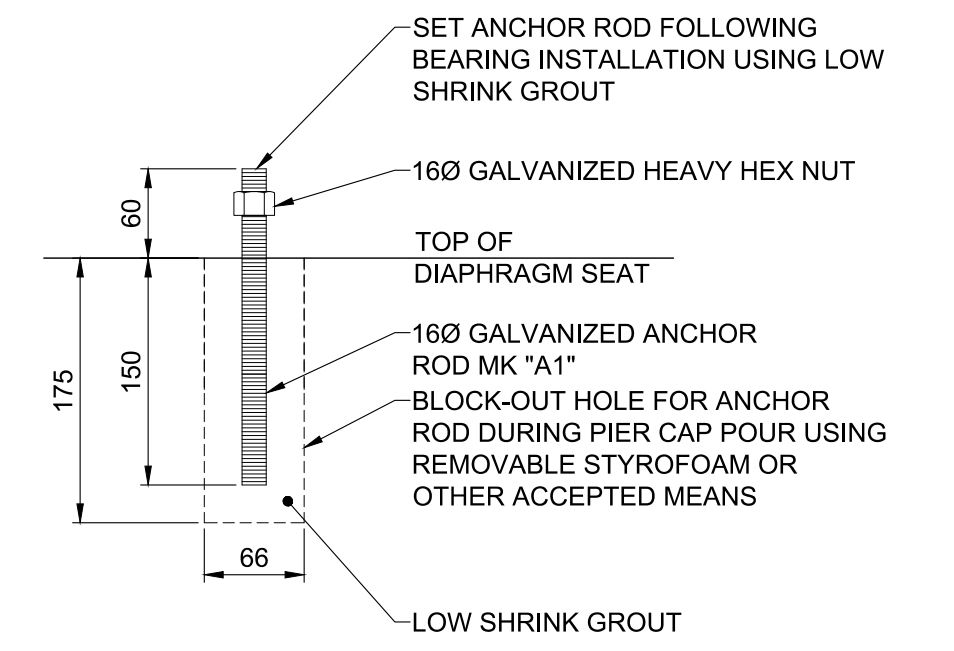
**DETAIL - RETAINING PLATE MK "P1"**  
SCALE: 1:5



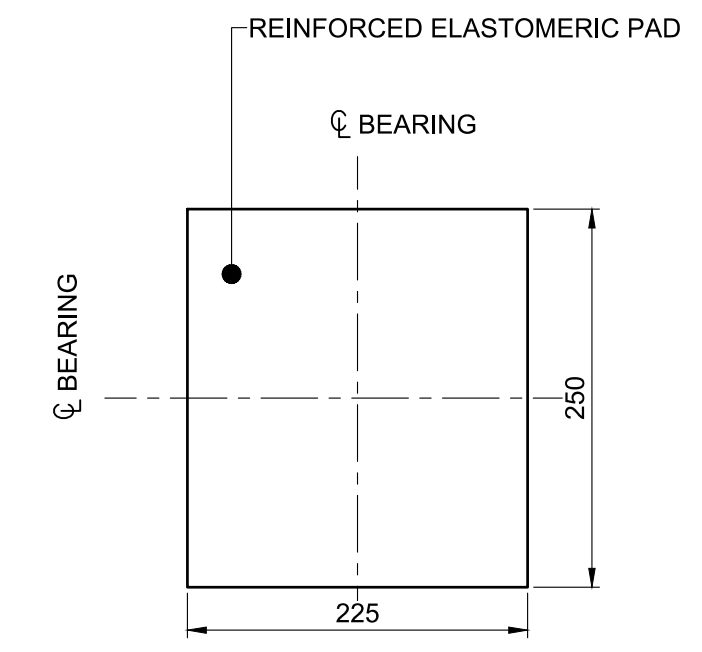
**PLAN - TOP PLATE MK "P2"**  
SCALE: 1:5



**ELEVATION - TOP PLATE MK "P2"**  
SCALE: 1:5



**DETAIL - ANCHOR ROD MK "A1"**  
SCALE: 1:5



**PLAN - BEARING PAD MK "B1"**  
SCALE: 1:5



**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

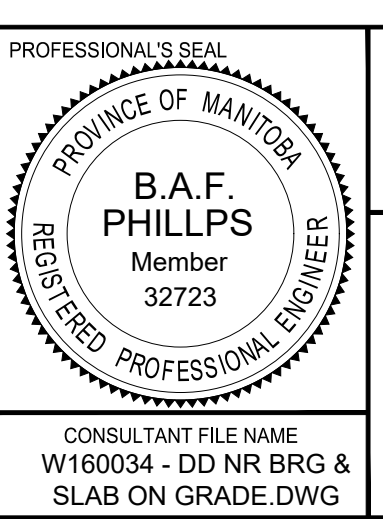
**LOCATION APPROVED**  
UNDERGROUND STRUCTURES

DATE: \_\_\_\_\_

**NOTE:**  
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY
B	ISSUED FOR TENDER	18/08/31	BAP
A	ISSUED FOR 95% DESIGN REVIEW	18/08/07	BAP

<b>MORRISON HERSHFIELD</b>	
DESIGNED BY: YM	CHECKED BY: BAP
DRAWN BY: ALP	APPROVED BY: BAP
HOR SCALE: AS SHOWN	RELEASED FOR CONSTRUCTION: N/A
VERT SCALE: AS SHOWN	DATE: _____



BID OPPORTUNITY No. 602-2018

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**EMPRESS STREET PROJECT**  
PEDESTRIAN ACCESSIBILITY RAMPS  
NORTH RAMP  
BEARING DETAILS

CITY DRAWING NUMBER: P-3494-150  
SHEET 150 OF 168  
DRAWING No. 150 REV B

CONSULTANT FILE NAME: W160034 - DD NR BRG & SLAB ON GRADE.DWG

**BEARING AND GIRDER ERECTION PROCEDURES:**

- ADJUSTMENTS FOR TEMPERATURE SHALL BE IN ACCORDANCE WITH THE BEARING SETTING CHARTS. "X" IS THE OFFSET DISTANCE BETWEEN CENTRE OF BEARING PAD AND CENTRE OF TOP BEARING PLATE:
  - POSITIVE "X" MEANS MOVING TOP PLATES TOWARDS THE DIAPHRAGM.
  - APPLY GALVALLOY TO ALL FIELD WELDS AND AREAS WHERE GALVANIZING HAS BEEN DAMAGED.

**LAMINATED ELASTOMERIC BEARING LOADS AND MOVEMENT TABLE**

LOCATION	LIMIT STATE	VERTICAL DEAD (kN)	VERTICAL LIVE (kN)	HORIZONTAL LONGITUDINAL (kN)	HORIZONTAL TRANSVERSE (kN)	MOVEMENT	
						LONGITUDINAL (MM)	LIVE LOAD ROTATION (RAD)
SU.3 (EXP)	SLS	50	22	25	2	40	0.005
	ULS	60	40	15	2	40	0.005

**BEARING SETTING TABLE**

TEMPERATURE (°C)	-15	-10	-5	0	5	10	15	20	25
'X' DISPLACEMENT (mm)	12	14	16	18	20	22	24	26	28

**BILL OF MATERIALS - RAMP LAMINATED BEARINGS ASSEMBLY**

ITEM	NO.
RETAINING PLATE MK. P1	4
ANCHOR ROD MK. A1	8
LAMINATED ELASTOMERIC BEARING MK. B1	2
TAPERED TOP PLATE MK "P2"	2

**BILL OF MATERIALS - RAMP PLAIN BEARINGS ASSEMBLY**

ITEM	NO.
PLAIN ELASTOMERIC BEARING STRIPS 1800X125X15 MK "B2"	9