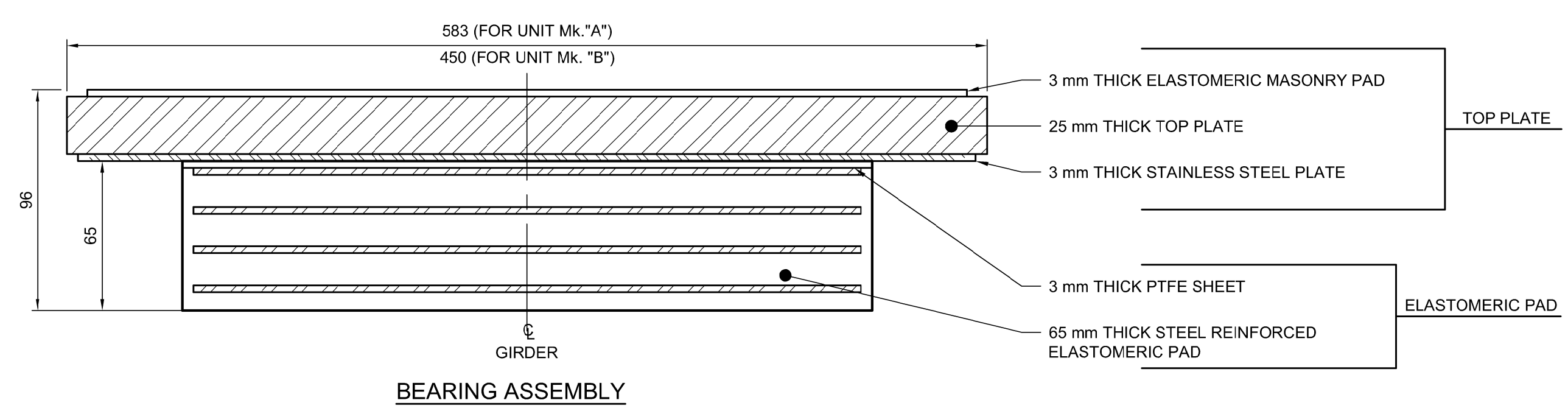
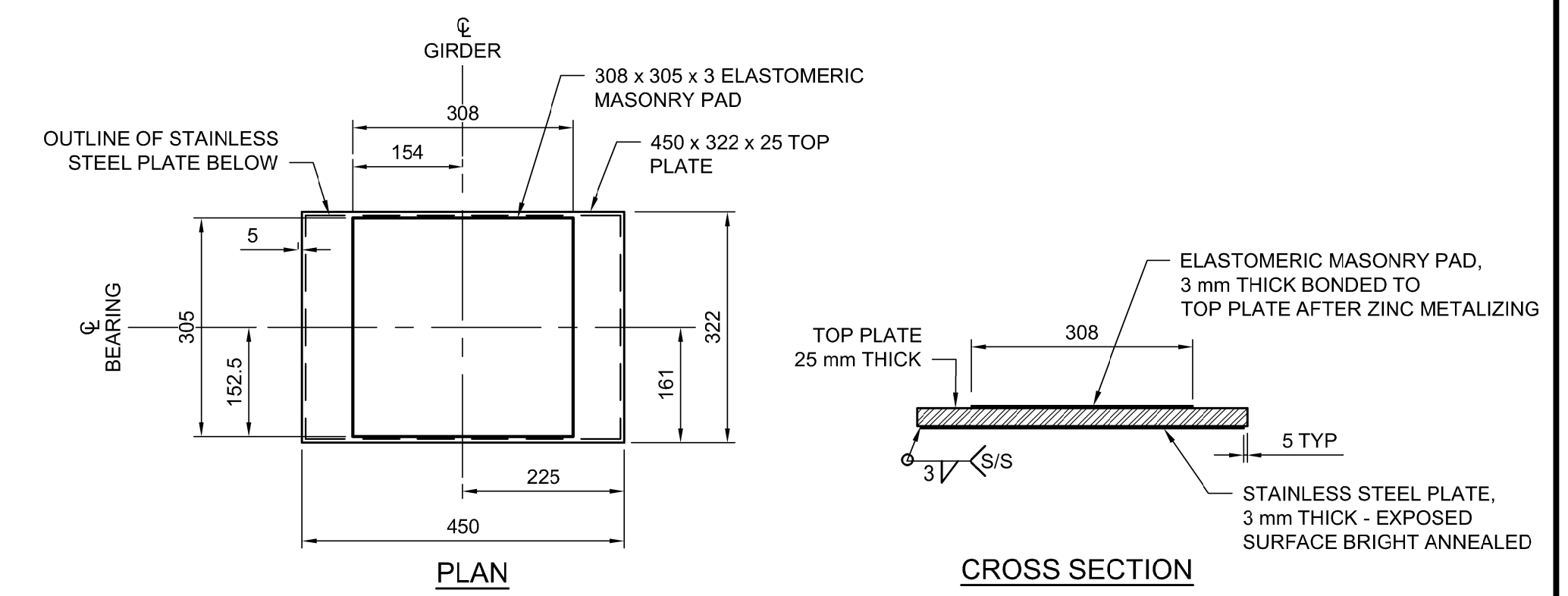
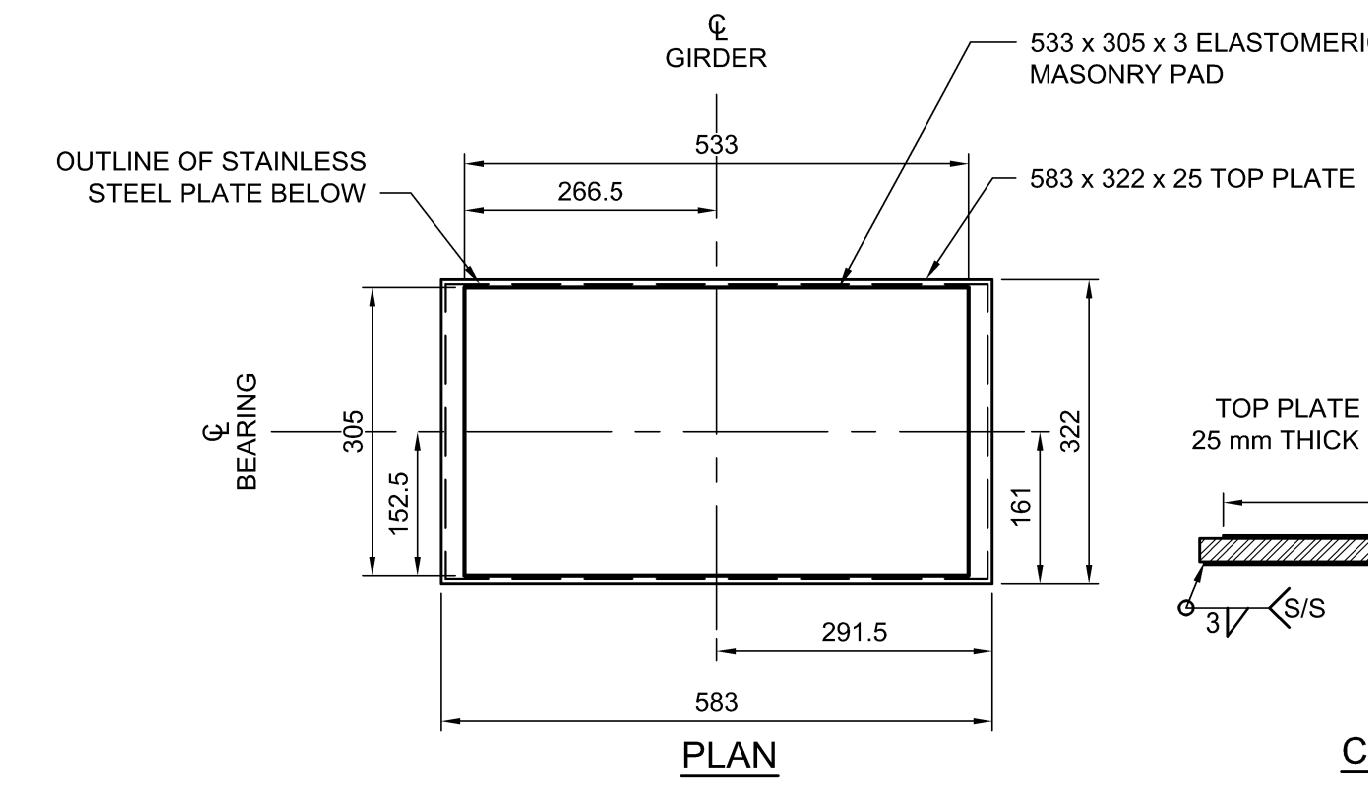
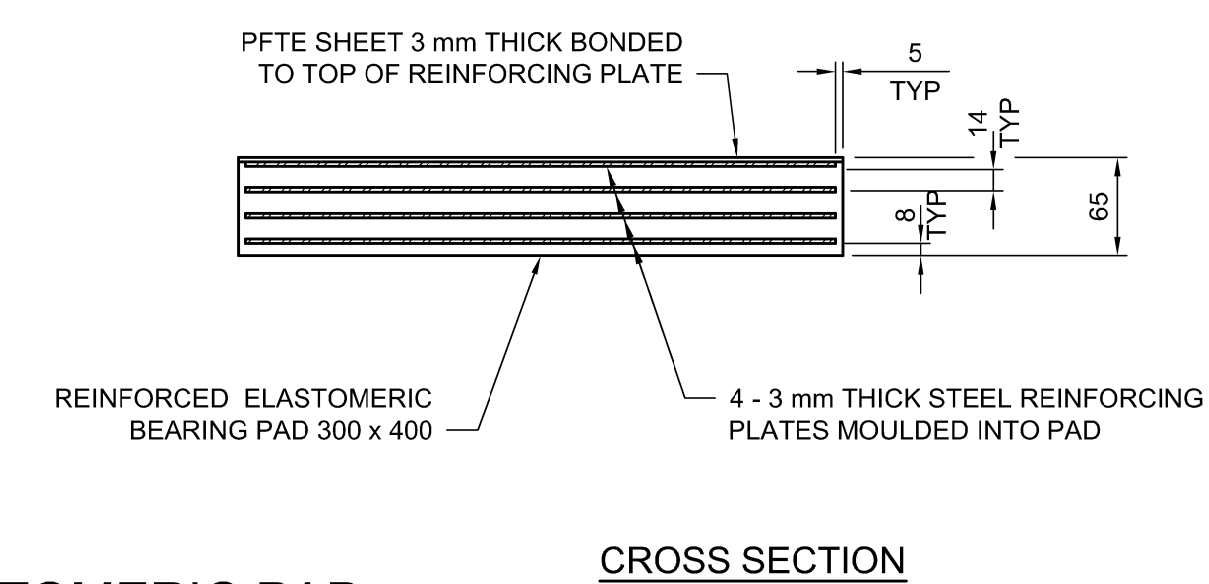
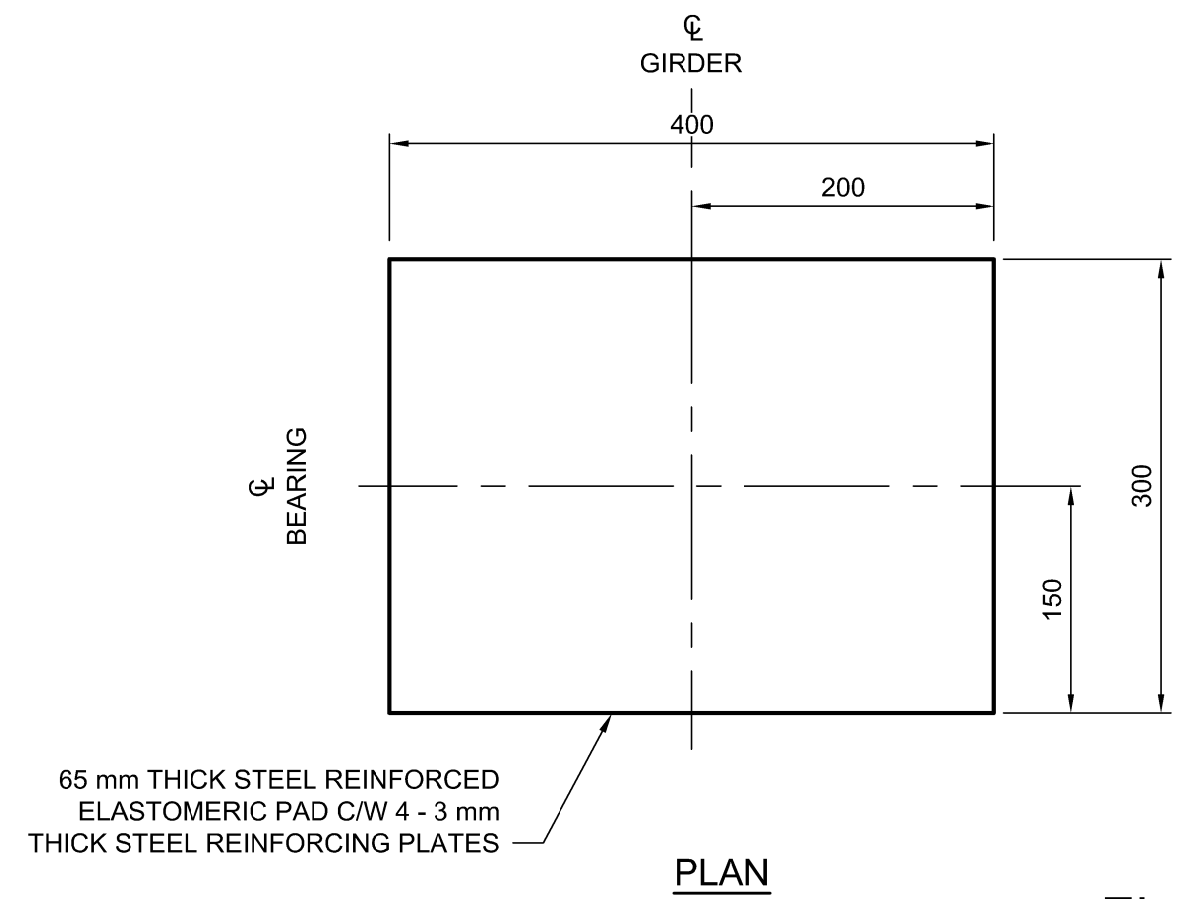


BILL OF BEARING PADS FOR SU. 1 AND SU. 4

| MARK | LOCATION | No. | DESCRIPTION | REMARKS |
|-------|--------------|-----|--------------------|-------------|
| A | SU. 1, SU. 4 | 12 | EXPANSION BEARINGS | AS DETAILED |
| B | SU. 1, SU. 4 | 14 | EXPANSION BEARINGS | AS DETAILED |
| TOTAL | | 26 | | |



GIRDER BEARING UNIT Mk. "A" (FOR EXISTING PRECAST GIRDERS)
GIRDER BEARING UNIT Mk. "B" (FOR EXISTING STEEL GIRDERS)

BILL OF MISCELLANEOUS METAL FOR BEARING UNITS

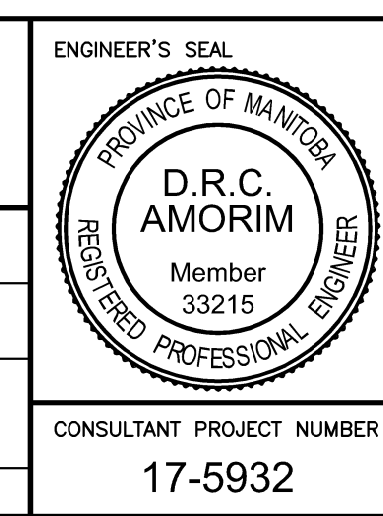
| MARK | No. | DESCRIPTION | COMPONENT MASS (kg) | MASS PER UNIT (kg) | TOTAL MASS (kg) |
|-----------------|-----|--|---------------------|--------------------|-----------------|
| A | 12 | BEARING UNIT, TO BE FABRICATED FROM: | | 51.60 | 619.20 |
| | | 533 x 305 x 3 ELASTOMERIC MASONRY PAD | | | |
| | | 583 x 322 x 25 STEEL PLATE | 36.84 | 36.84 | |
| | | 573 x 312 x 3 STAINLESS STEEL PLATE | 4.21 | 4.21 | |
| | | 300 x 400 x 65 BEARING PAD WITH 3 mm PTFE SHEET | | | |
| | | 2 - 410 x 250 x 12 RETAINING PLATE - AS DETAILED | 5.275 | 10.55 | |
| B | 14 | BEARING UNIT, TO BE FABRICATED FROM: | | 42.22 | 591.08 |
| | | 308 x 305 x 3 ELASTOMERIC MASONRY PAD | | | |
| | | 450 x 322 x 25 STEEL PLATE | 28.44 | 28.44 | |
| | | 440 x 312 x 3 STAINLESS STEEL PLATE | 3.23 | 3.23 | |
| | | 300 x 400 x 65 BEARING PAD WITH 3 mm PTFE SHEET | | | |
| | | 2 - 410 x 250 x 12 RETAINING PLATE - AS DETAILED | 5.275 | 10.55 | |
| TOTAL MASS (kg) | | | | | 1 210.28 |

BEARING DESIGN DATA

| LOCATION | Mk. | QTY | LIMIT STATE | VERTICAL | | LONGITUDINAL | TRANSVERSE | ROTATION | |
|-----------|-----|-----|-------------|----------------|------------|--------------|------------|---------------------|-----------------|
| | | | | PERMANENT [kN] | TOTAL [kN] | | | PERMANENT [RADIANS] | TOTAL [RADIANS] |
| ABUTMENTS | A | 12 | ULS | 420 | 900 | 75 | - | - | - |
| | | | SLS | 345 | 610 | 60 | - | 0.008 | 0.010 |
| | B | 14 | ULS | 325 | 820 | 60 | - | - | - |
| | | | SLS | 265 | 530 | 50 | - | 0.002 | 0.005 |



| | | | |
|-------------------|----------|---------------------------|------------|
| DESIGNED BY | DRA | CHECKED BY | SSR |
| DRAWN BY | NBG / DB | APPROVED BY | MBL |
| HOR. SCALE | AS SHOWN | RELEASED FOR CONSTRUCTION | |
| VERTICAL | AS SHOWN | | |
| ISSUED FOR TENDER | 18/02/09 | DRA | |
| NO. REVISIONS | DATE | BY | DATE |
| | | | 2018/02/09 |



THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

FERMOR AVENUE BRIDGE OVER SEINE RIVER
BRIDGE RE-HABILITATION, PEDESTRIAN-CYCLIST UNDERPASS STRUCTURE AND ROADWORKS FROM ST. ANNE'S ROAD TO ARCHIBALD STREET

CITY DRAWING NUMBER: B-118-2017-CS-022
SHEET OF 022 OF 100
CONSULTANT DRAWING NUMBER: CS-022

ABUTMENT BEARING REPLACEMENT DETAILS 1 OF 2

CONSULTANT PROJECT NUMBER: 17-5932