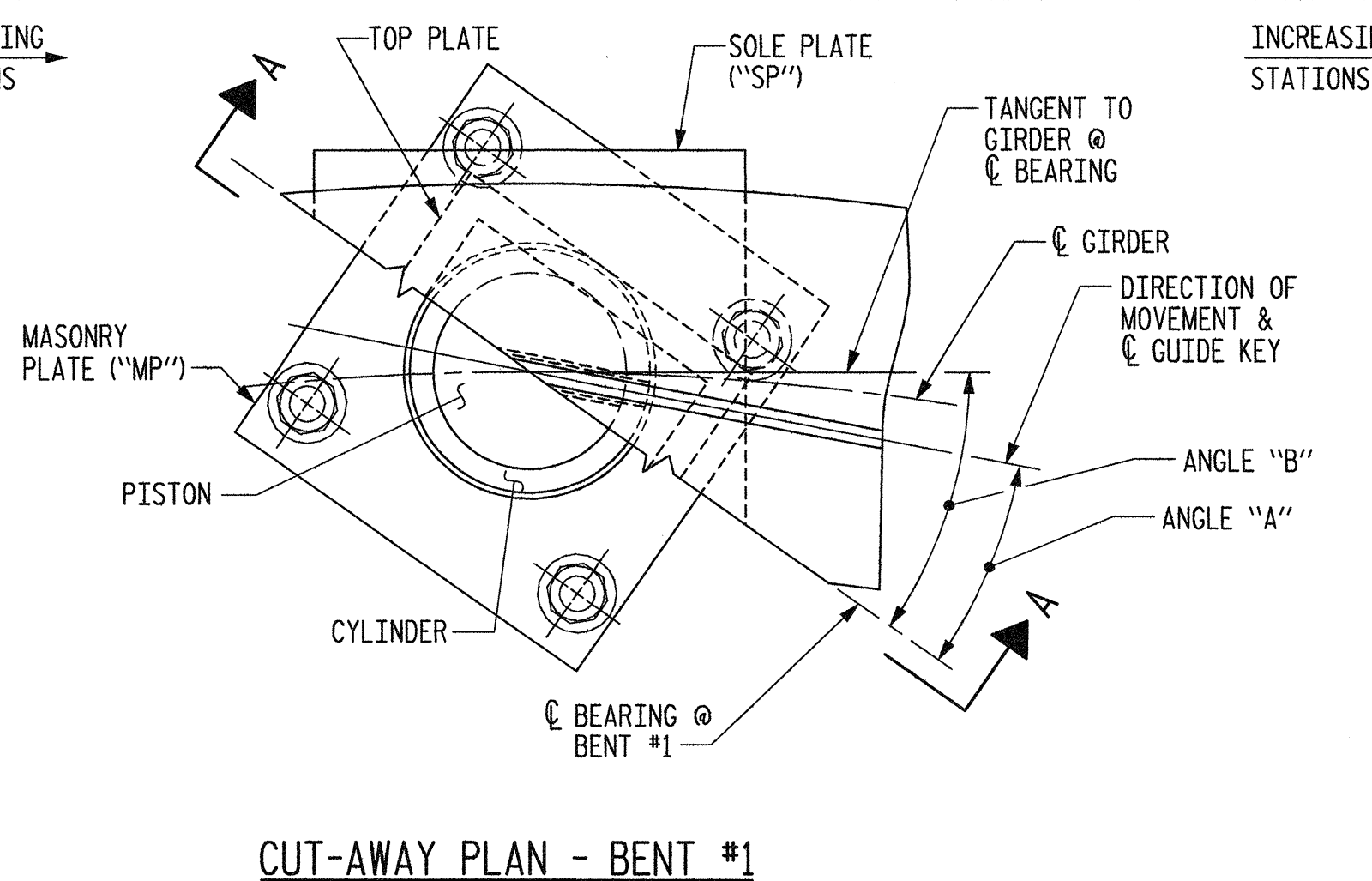
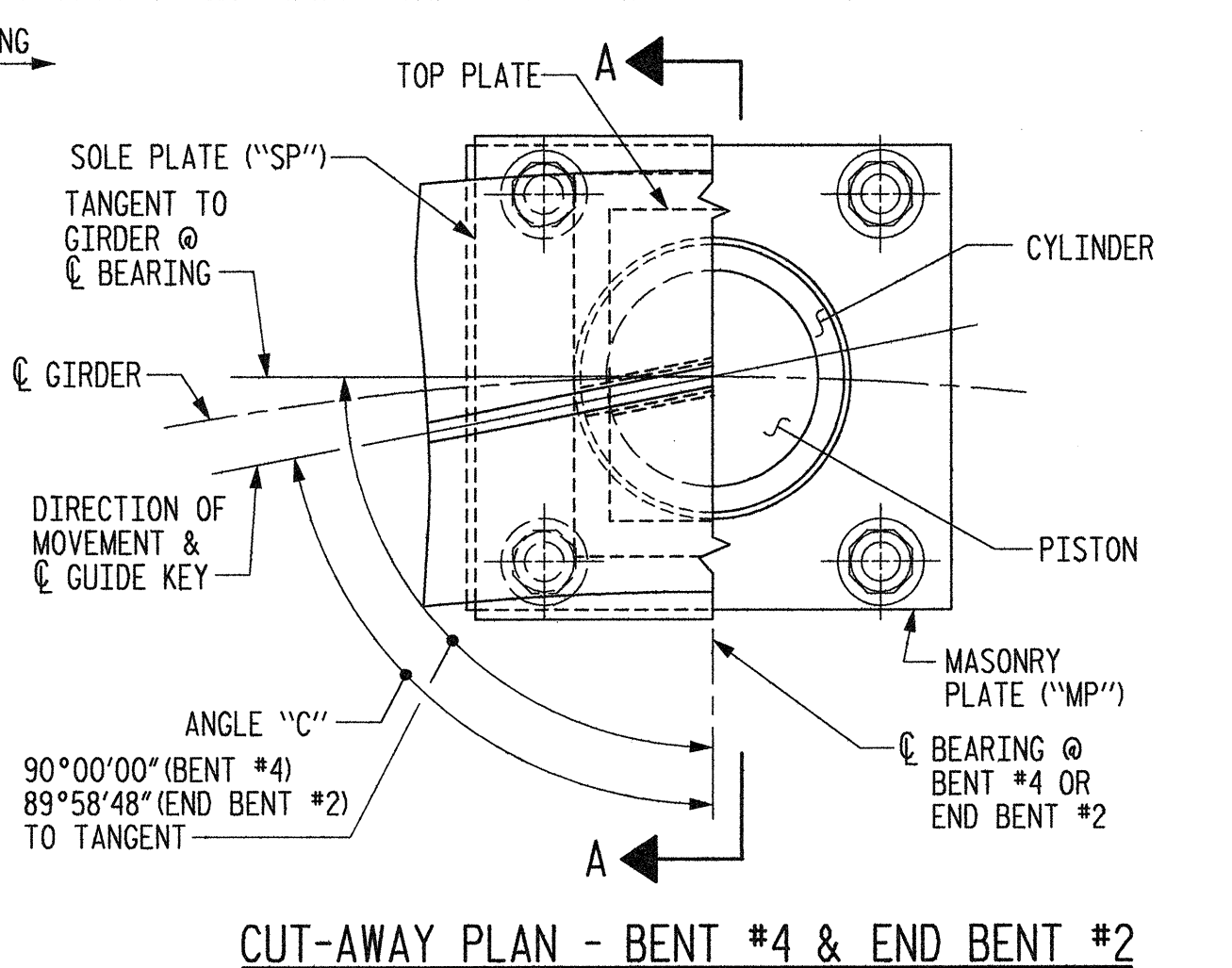


CUT-AWAY PLAN - END BENT #1



CUT-AWAY PLAN - BENT #1



CUT-AWAY PLAN - BENT #4 & END BENT #2

MASONRY PLATE ('MP')		
LOCATION	BEARING	MARK
END BENT #1	EB-1	MP-1
BENT #1	EB-2	MP-2
BENT #4	EB-3	MP-3
END BENT #2	EB-4	MP-4

SOLE PLATE ('SP')		
LOCATION	BEARING	MARK
END BENT #1	EB-1	SP-1
BENT #1	EB-2	SP-2
BENT #4	EB-3	SP-5
END BENT #2	EB-4	SP-6

NOTES

FOR POT BEARINGS, SEE SPECIAL PROVISIONS.

AT ALL POINTS OF SUPPORT IN SPANS A, B, C AND D, NUTS FOR ANCHOR BOLTS SHALL BE TIGHTENED FINGER TIGHT AND GIVEN AN ADDITIONAL 1/4 TURN. THE THREAD OF THE NUT AND BOLT SHALL THEN BE BURRED WITH A SHARP POINTED TOOL.

WHEN WELDING THE SOLE PLATE TO THE GIRDER, USE TEMPERATURE INDICATING WAX PENS, OR OTHER SUITABLE MEANS, TO ENSURE THAT THE TEMPERATURE OF THE BEARING DOES NOT EXCEED 121°C. TEMPERATURES ABOVE THIS MAY DAMAGE THE TFE OR ELASTOMER.

AFTER BEARING ASSEMBLY IS IN PLACE AND ANCHOR BOLTS HAVE BEEN FINALLY POSITIONED, THEY SHALL BE GROUTED IN PLACE AS SHOWN.

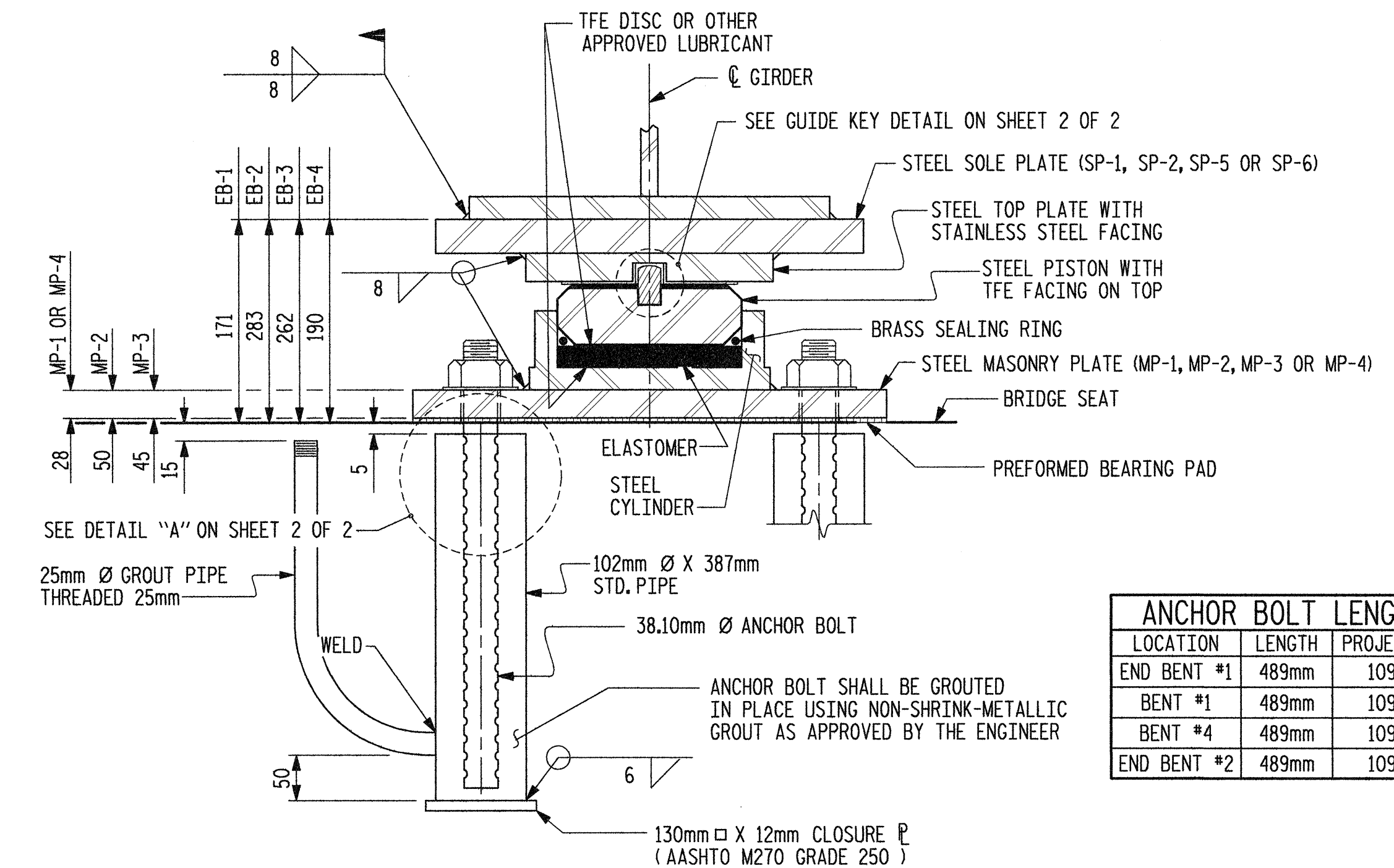
THE CLOSURE PLATE, GROUT PIPE AND STANDARD PIPE FOR THIS ASSEMBLY NEED NOT BE GALVANIZED.

SOLE PLATES SHOULD BE WELDED TO GIRDER FLANGES AND ANCHOR BOLTS SHOULD BE GROUTED BEFORE FALSEWORK IS PLACED.

ALL SURFACES OF BEARING PLATES SHALL BE SMOOTH AND STRAIGHT.

FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.

THE CONTRACTOR MAY SUBSTITUTE DISC BEARINGS FOR THE POT BEARINGS SHOWN. FOR OPTIONAL DISC BEARINGS, SEE SPECIAL PROVISIONS.



SECTION A-A  
EXPANSION POT BEARING DETAILS

ANCHOR BOLT LENGTH		
LOCATION	LENGTH	PROJECTION
END BENT #1	489mm	109mm
BENT #1	489mm	109mm
BENT #4	489mm	109mm
END BENT #2	489mm	109mm

TABLE FOR LOADS AND MOVEMENTS FOR EB-1 AT END BENT #1					
GIRDER	VERTICAL LOAD (kN)			LATERAL LOAD (kN)	TOTAL MOVEMENT (mm)
	DEAD	LIVE	TOTAL		
1	635	360	995	127	113
2	690	430	1120	138	113
3	725	405	1130	145	113
4	735	380	1115	147	113

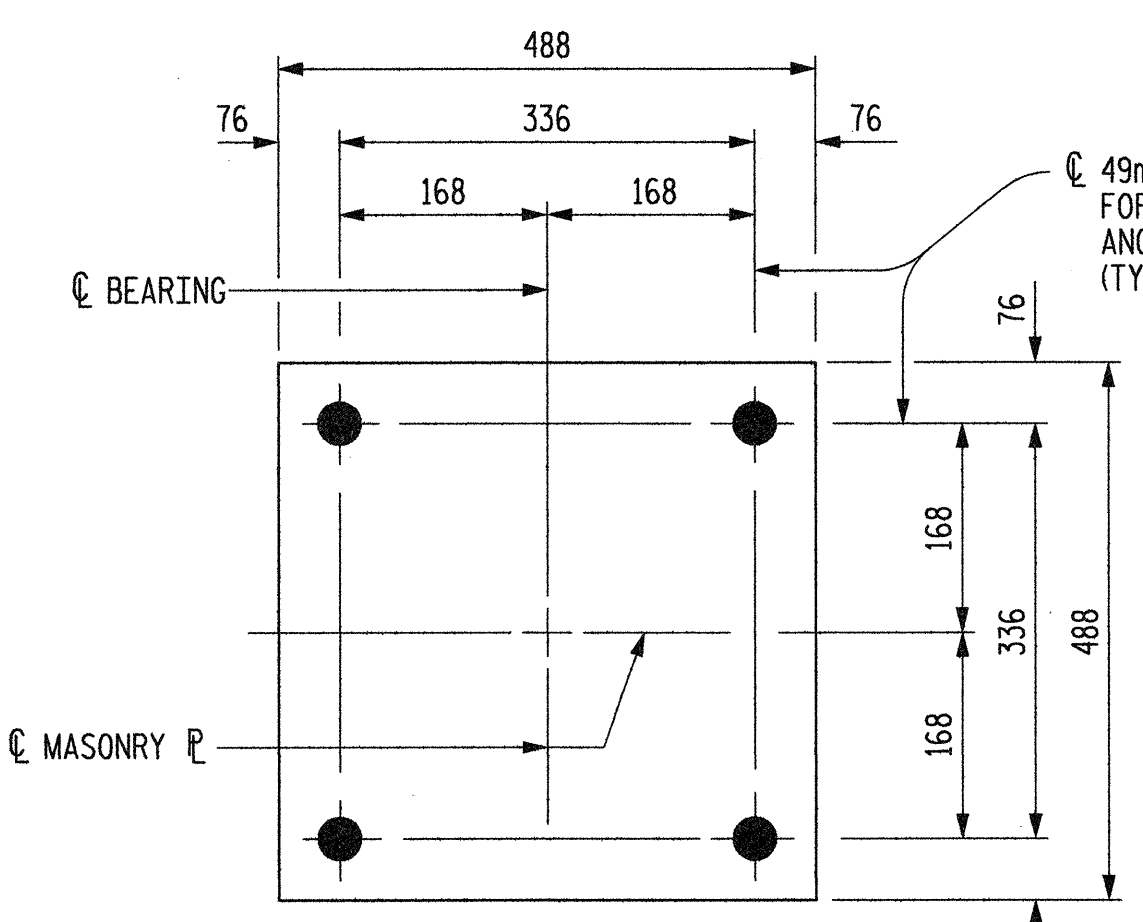
TABLE FOR LOADS AND MOVEMENTS FOR EB-3 AT BENT #4					
GIRDER	VERTICAL LOAD (kN)			LATERAL LOAD (kN)	TOTAL MOVEMENT (mm)
	DEAD	LIVE	TOTAL		
1	2465	895	3360	493	69
2	2600	1005	3605	520	69
3	2525	895	3420	505	69
4	2480	895	3375	496	69

TABLE FOR LOADS AND MOVEMENTS FOR EB-2 AT BENT #1					
GIRDER	VERTICAL LOAD (kN)			LATERAL LOAD (kN)	TOTAL MOVEMENT (mm)
	DEAD	LIVE	TOTAL		
1	1055	755	1810	211	73
2	3170	1565	4735	634	69
3	3070	1230	4300	614	65
4	1130	795	1925	226	62

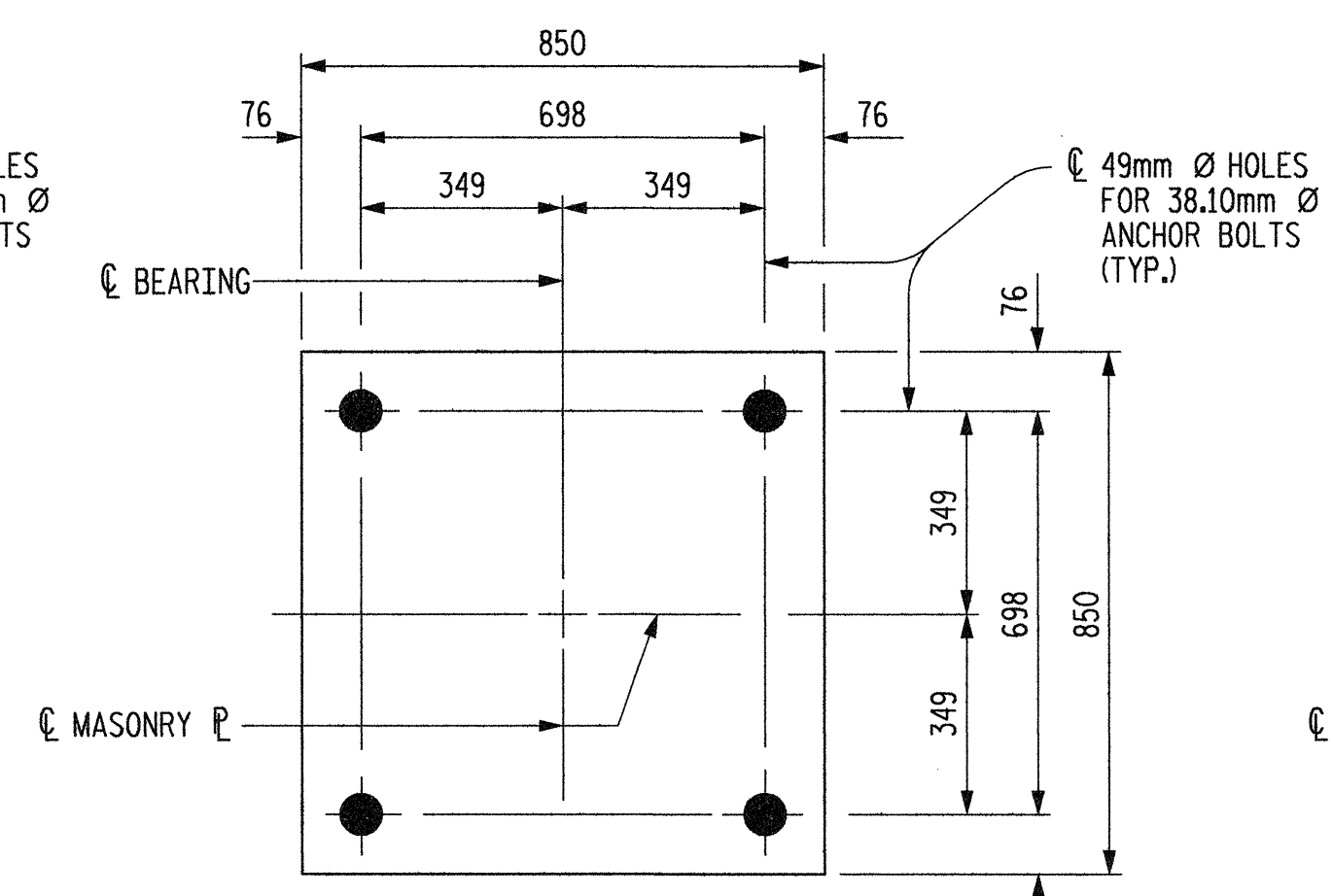
TABLE FOR LOADS AND MOVEMENTS FOR EB-4 AT END BENT #2					
GIRDER	VERTICAL LOAD (kN)			LATERAL LOAD (kN)	TOTAL MOVEMENT (mm)
	DEAD	LIVE	TOTAL		
1	980	460	1440	196	124
2	980	480	1460	196	124
3	960	440	1400	192	124
4	920	435	1355	184	124

NOTE: TOTAL MOVEMENT VALUES ARE BASED UPON ΔT=72°C.

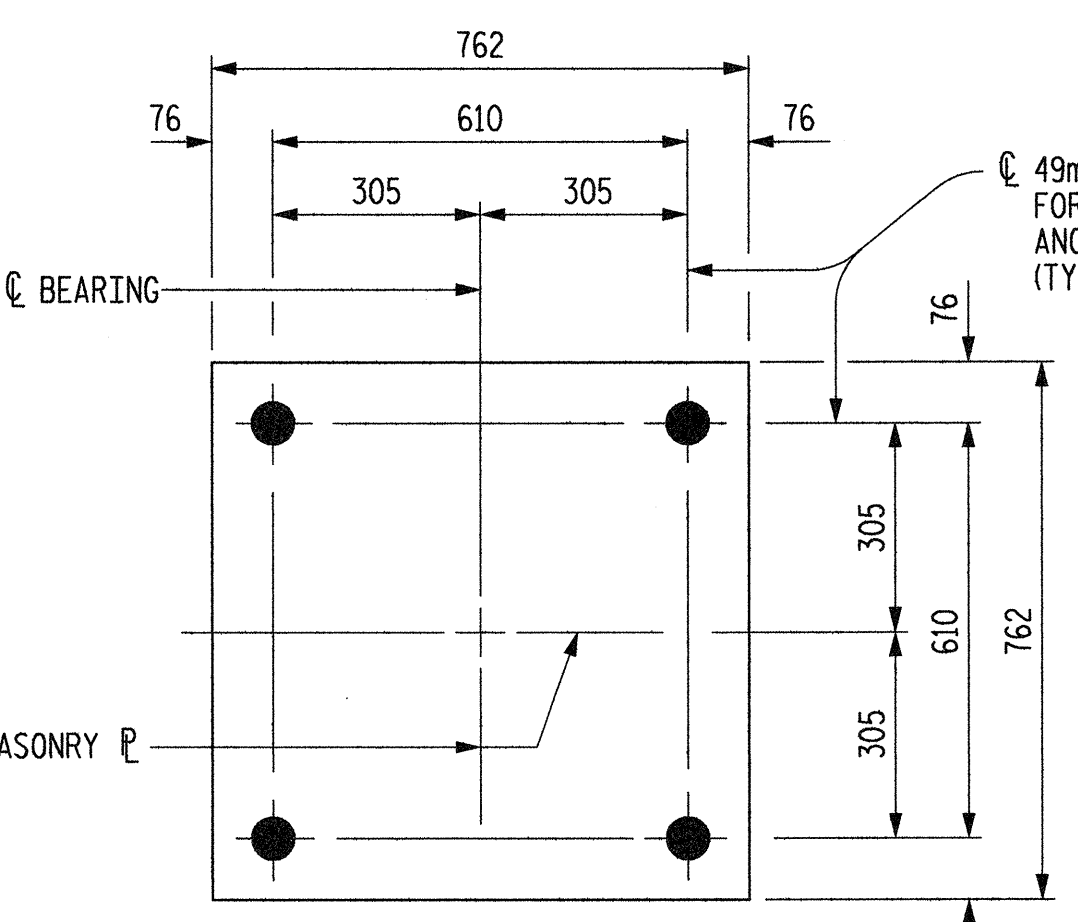
TABLE OF ANGLES					
GIRDER	ANGLE 'A'		ANGLE 'B'	ANGLE 'C'	
	END BENT #1	BENT #1	BENT #1	BENT #4	END BENT #2
1	88°19'48"	39°43'22"	40°38'07"	89°09'50"	88°07'10"
2	88°19'48"	39°39'29"	40°30'19"	89°09'50"	88°07'10"
3	88°19'48"	39°35'33"	40°22'28"	89°09'50"	88°07'10"
4	88°19'48"	39°31'36"	40°14'35"	89°09'50"	88°07'10"



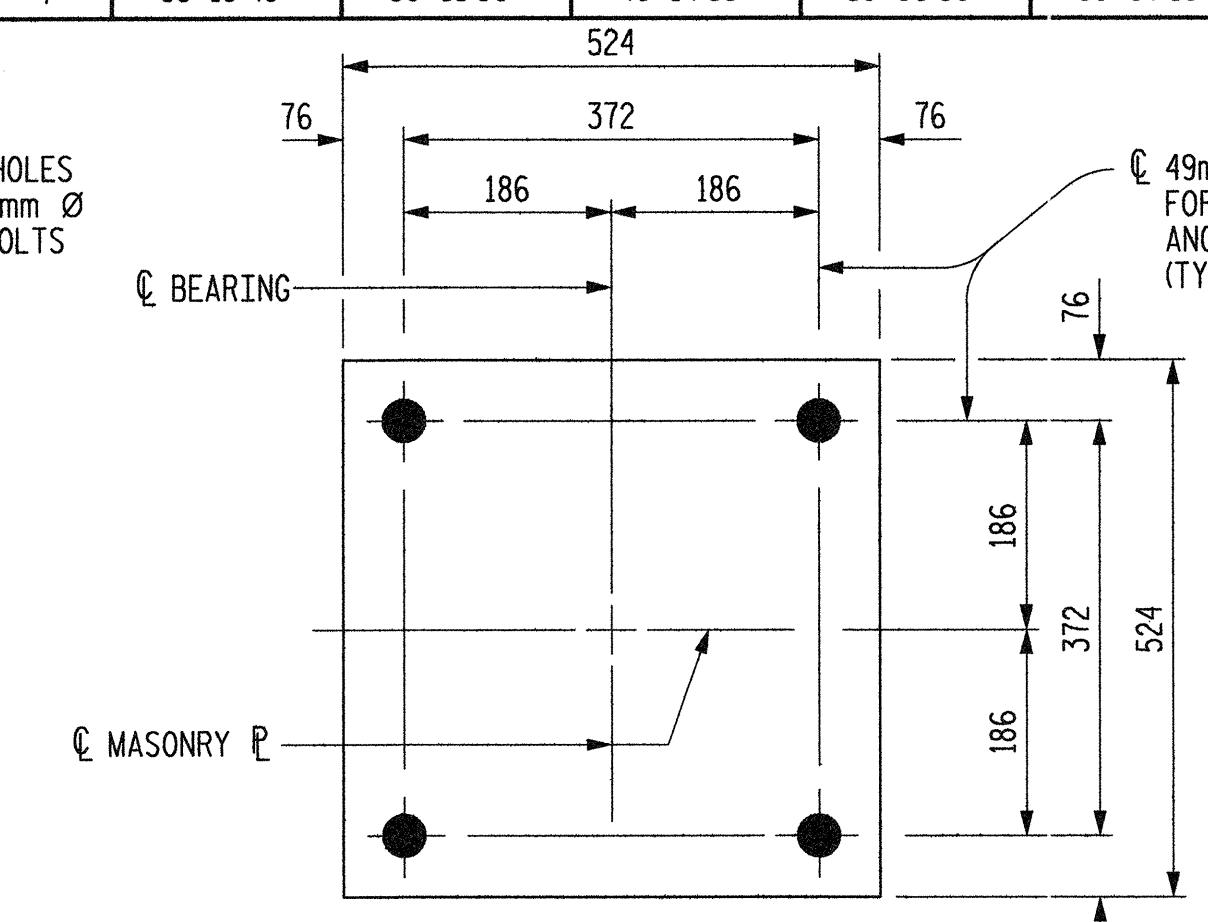
MASONRY PLATE MP-1  
(4 REQ'D. @ END BENT #1)



MASONRY PLATE MP-2  
(4 REQ'D. @ BENT #1)



MASONRY PLATE MP-3  
(4 REQ'D. @ BENT #4)



MASONRY PLATE MP-4  
(4 REQ'D. @ END BENT #2)

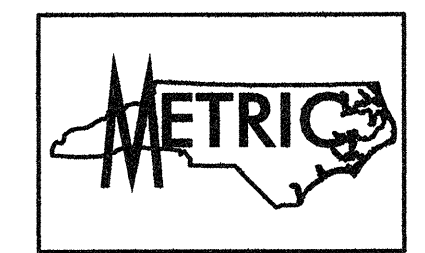
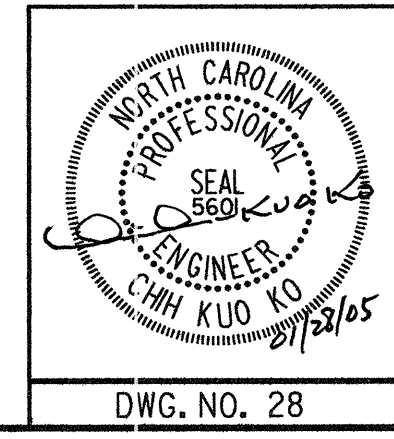
MASONRY PLATE DETAILS

PROJECT NO. R-2552AA  
WAKE-JOHNSTON COUNTY  
STATION: 28+31.359 -I1Y1-

SHEET 1 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SUPERSTRUCTURE  
POT BEARING DETAILS



Plans prepared by:  
**KO & ASSOCIATES, P.C.**  
Consulting Engineers  
1011 SCHAUER DR. SUITE #202  
RALEIGH, N.C. 27606  
For Division of Highways

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-111 TOTAL SHEETS 429
2			4			

DWG. NO. 28

PLOT: 01/27/2005 09:23:08 PM Ko & Associates, P.C.  
 FILE NAME: r:\2552aa.mxd\_bgl\_03.dgn

DRAWN BY: B.E. LANNING DATE: JAN. 2005  
 CHECKED BY: J.C. KO / A.K. ORR DATE: JAN. 2005