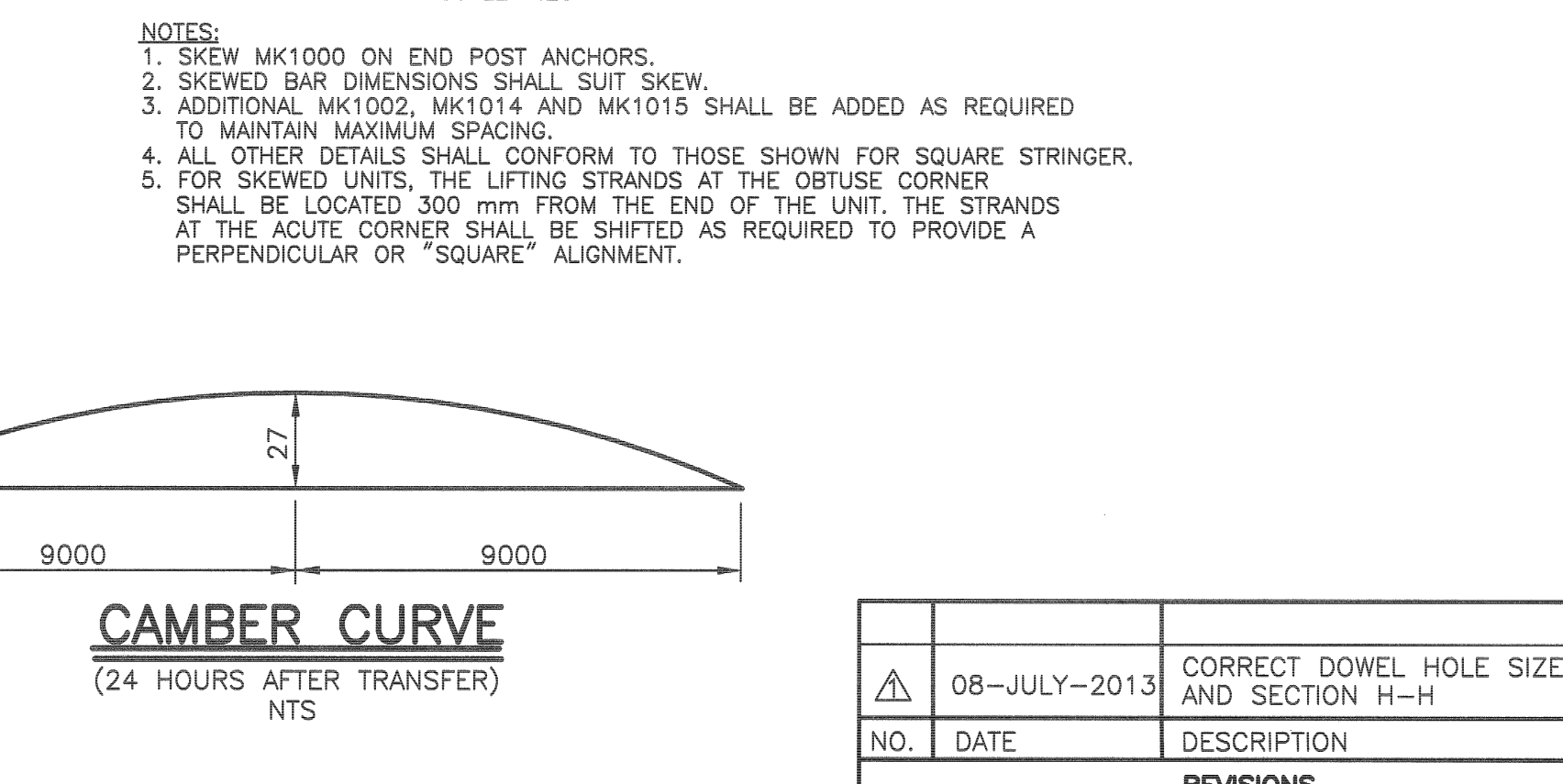
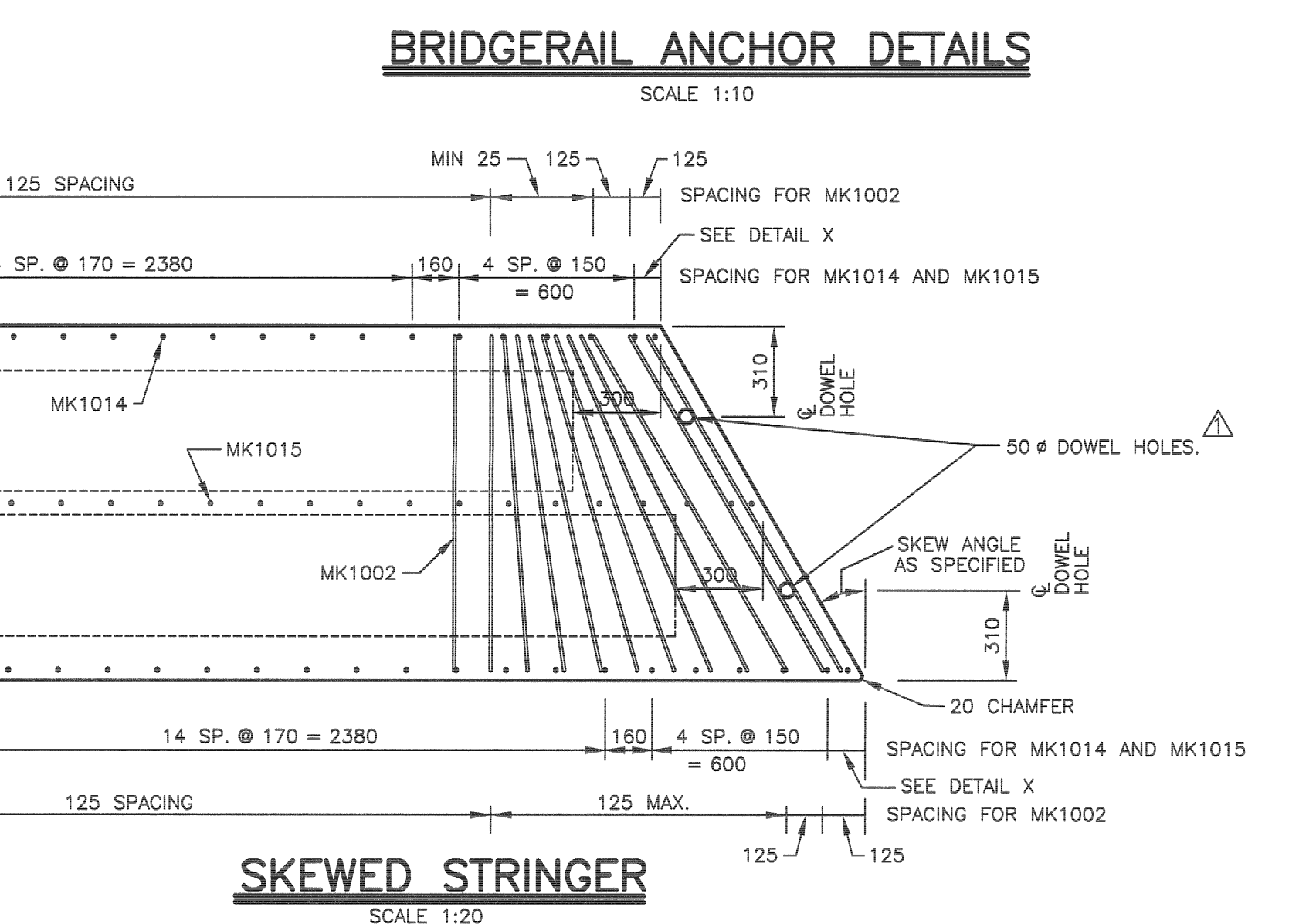
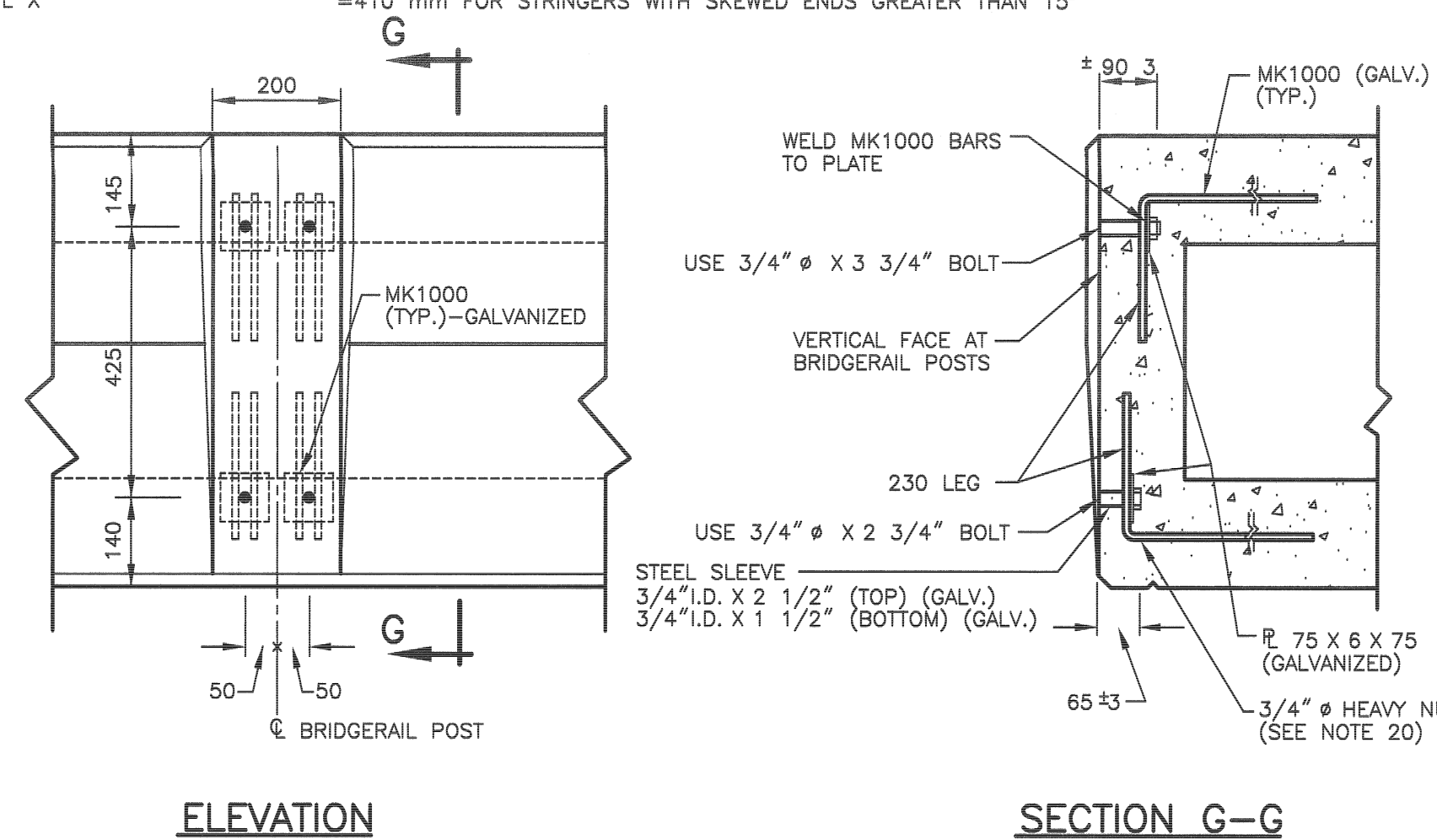
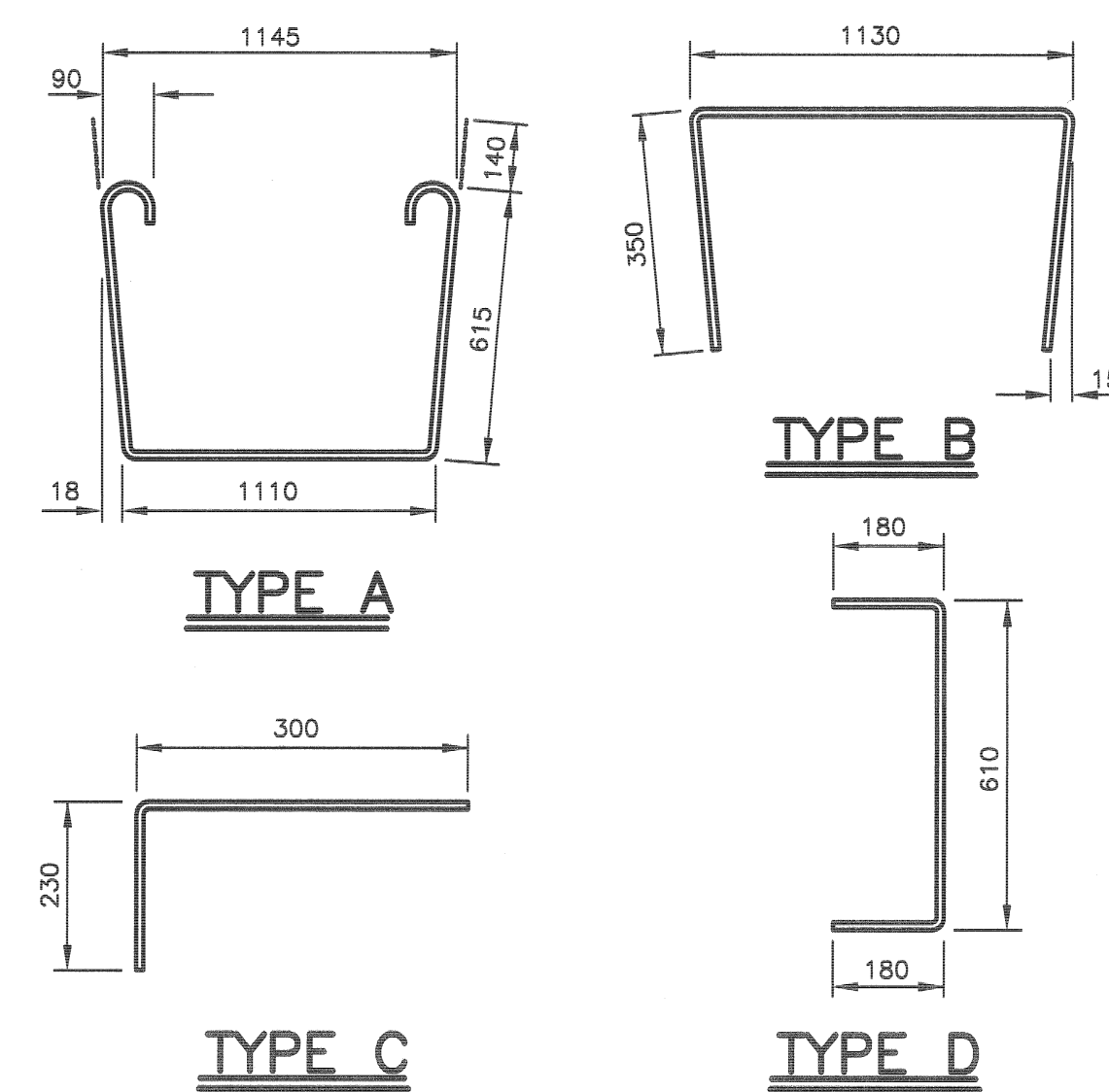
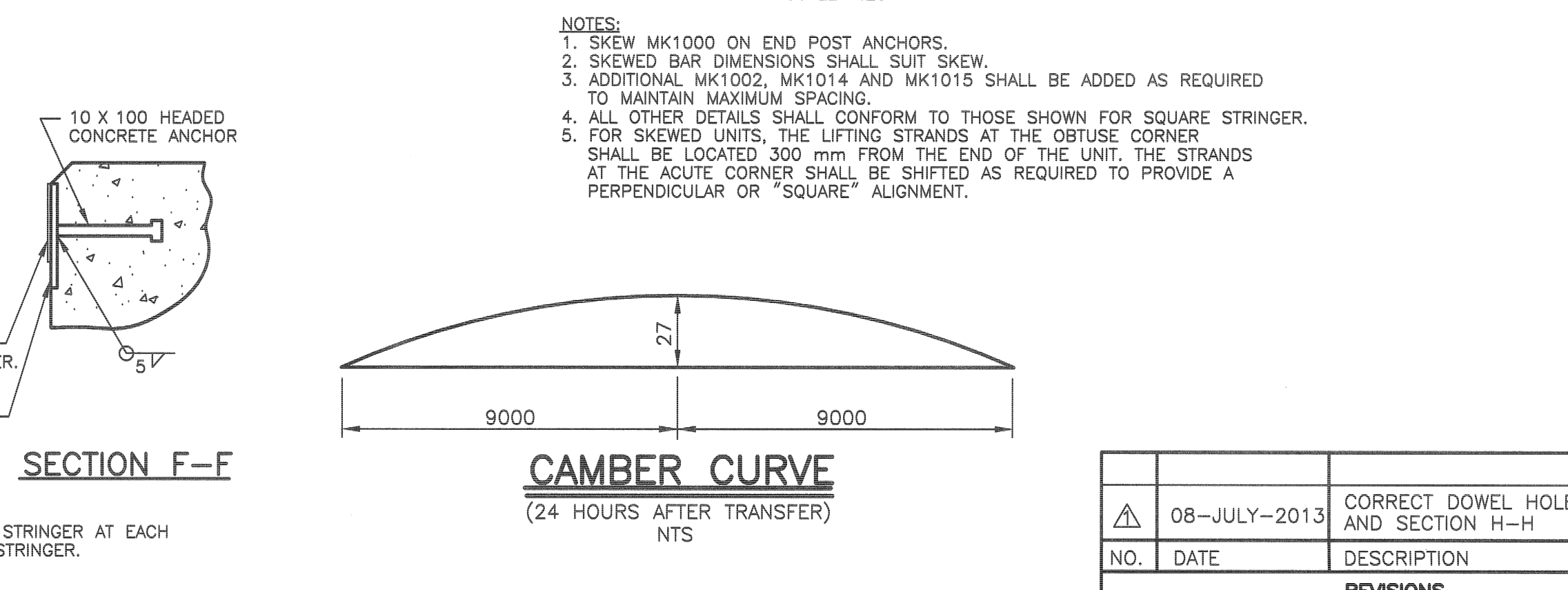
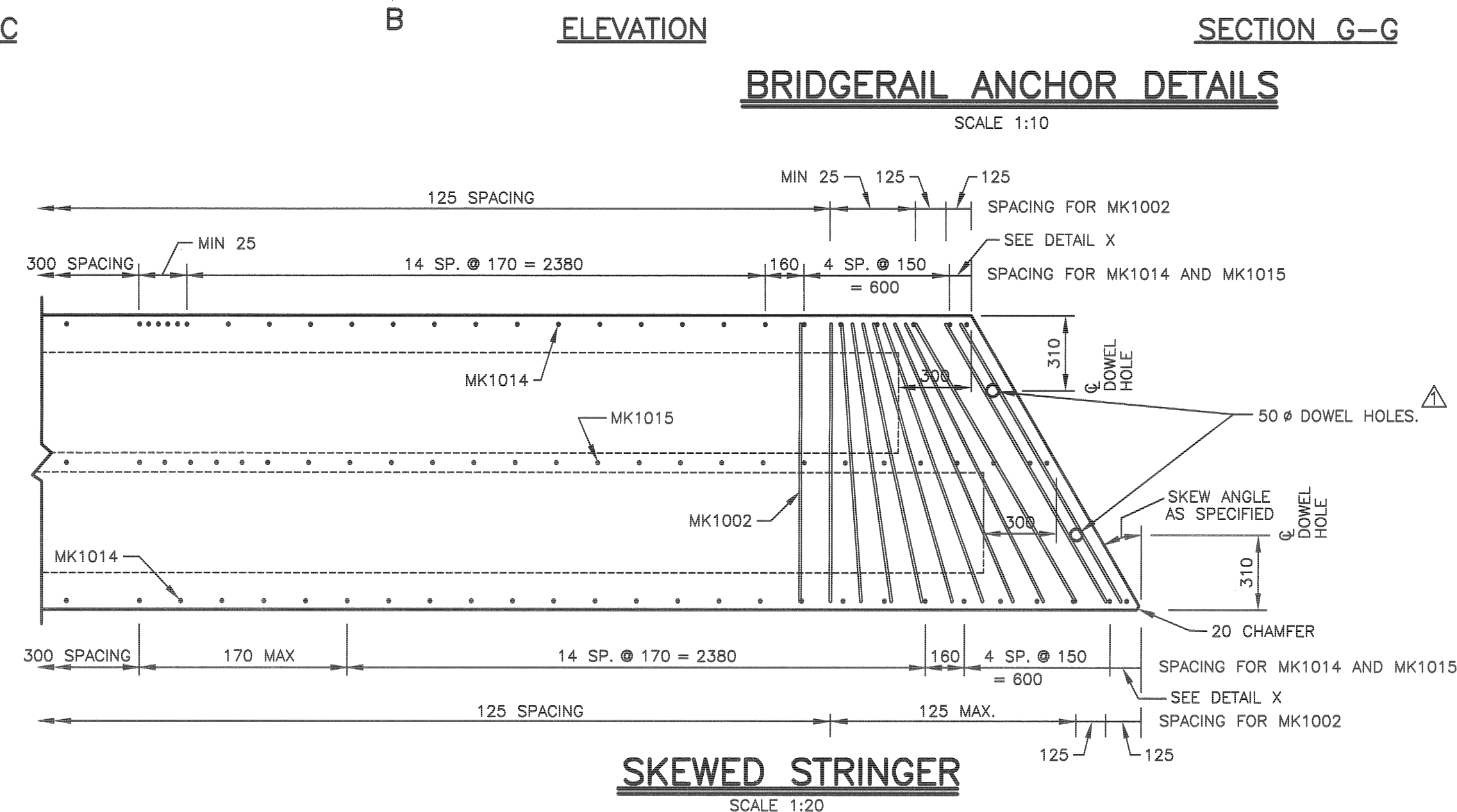
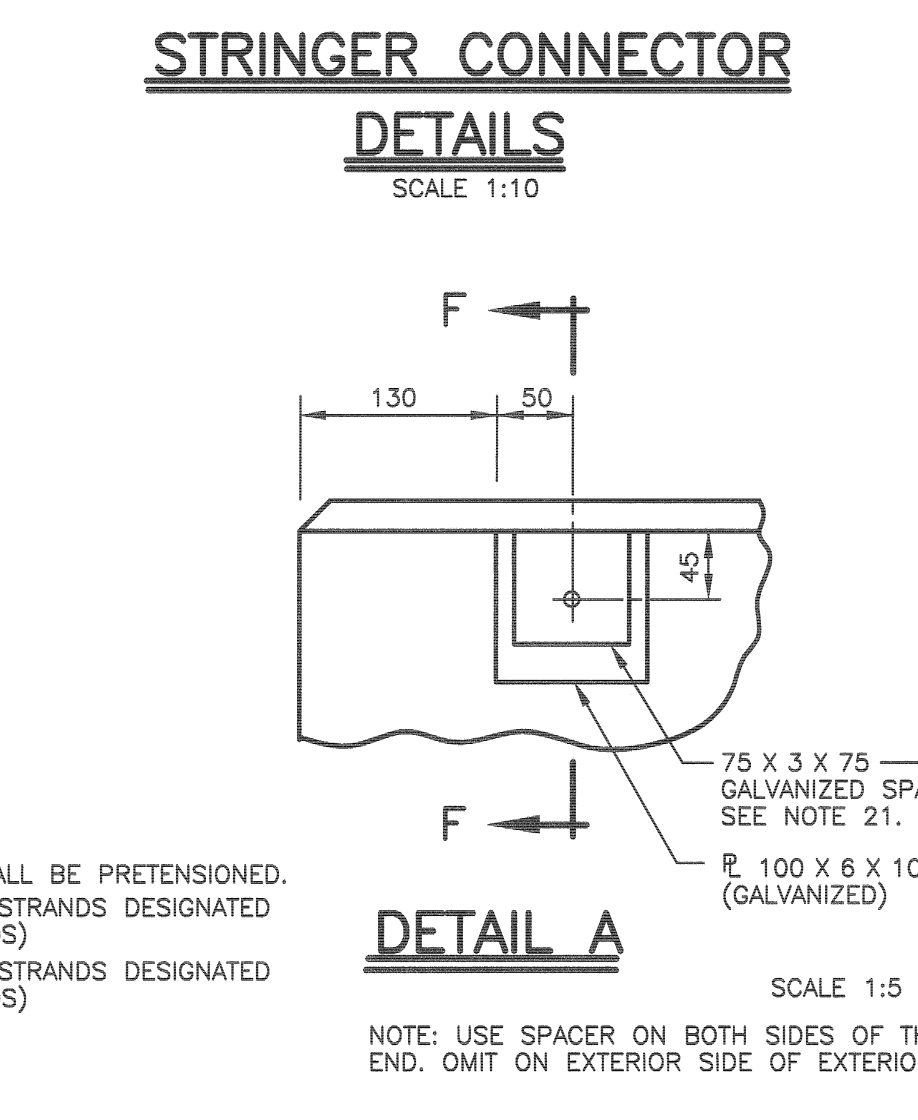
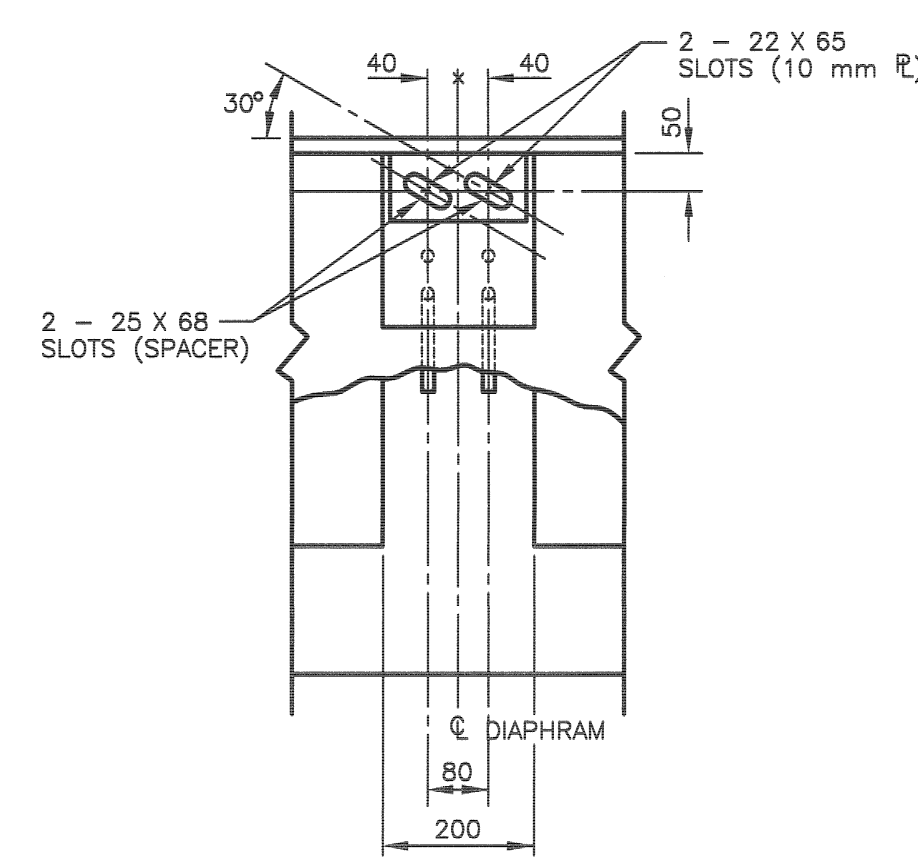
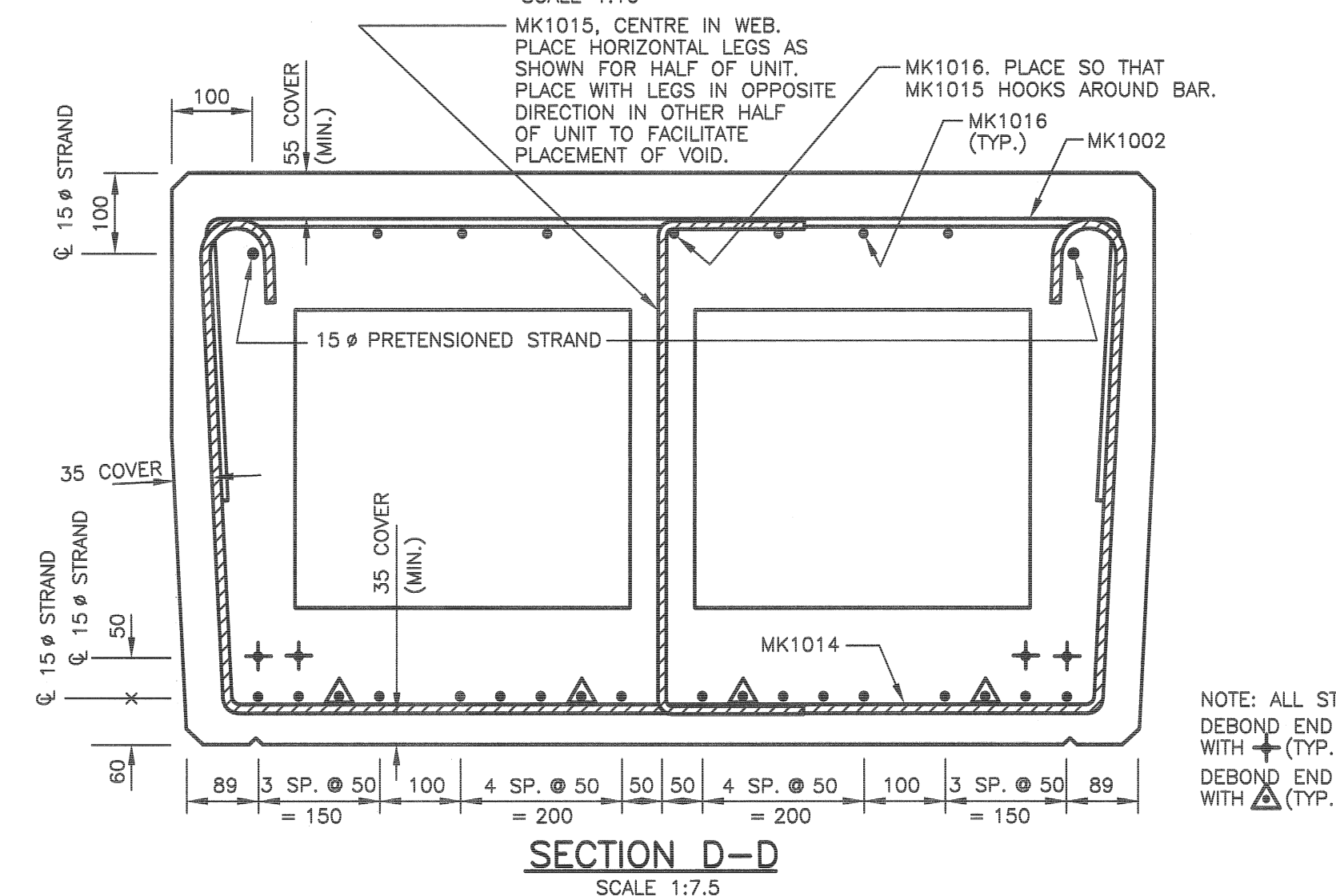
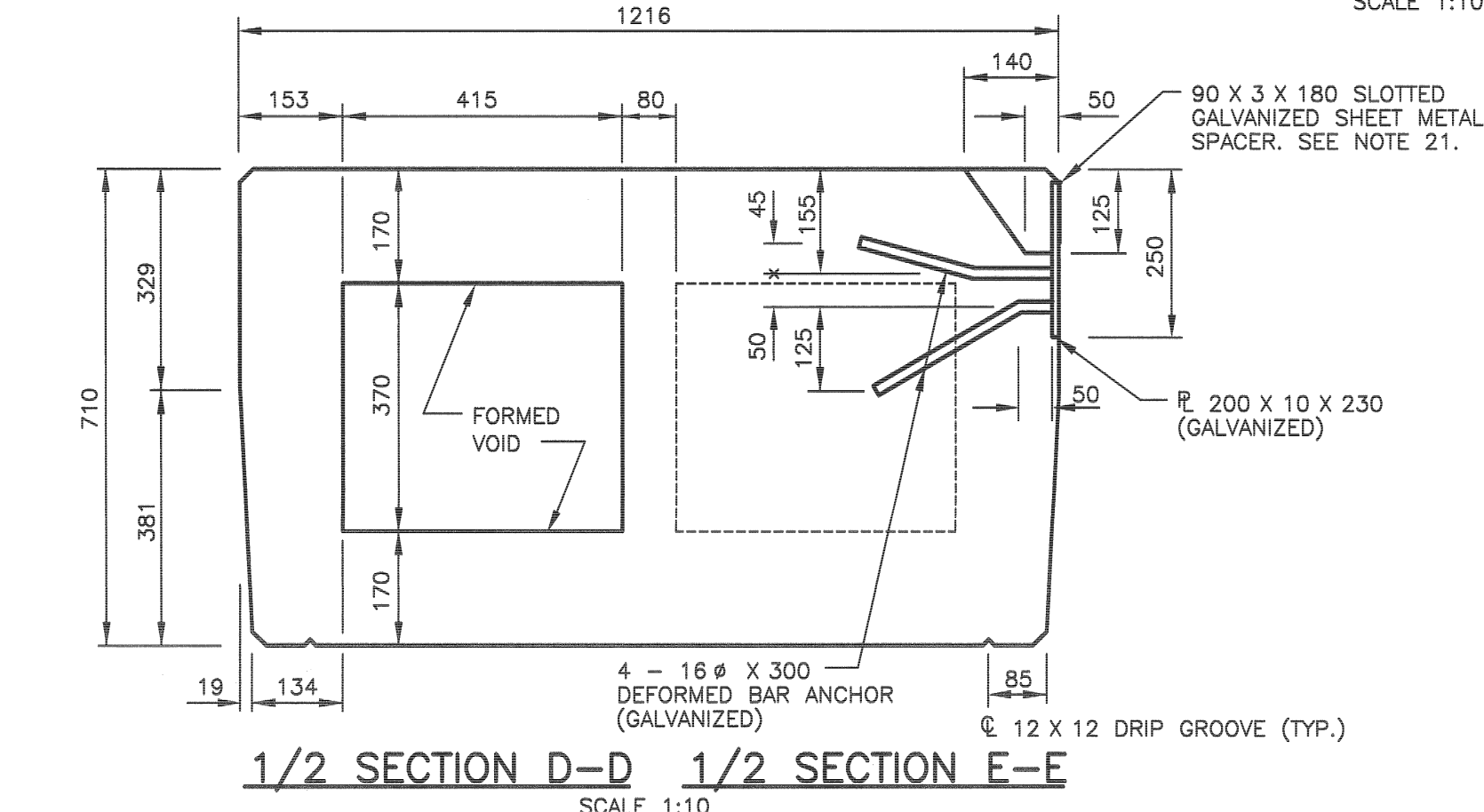
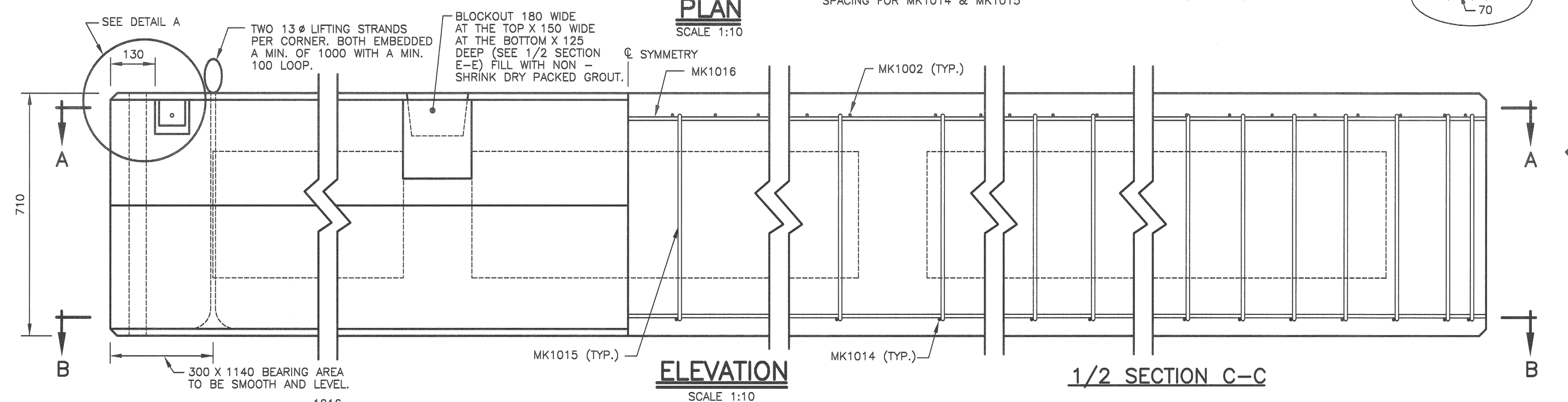
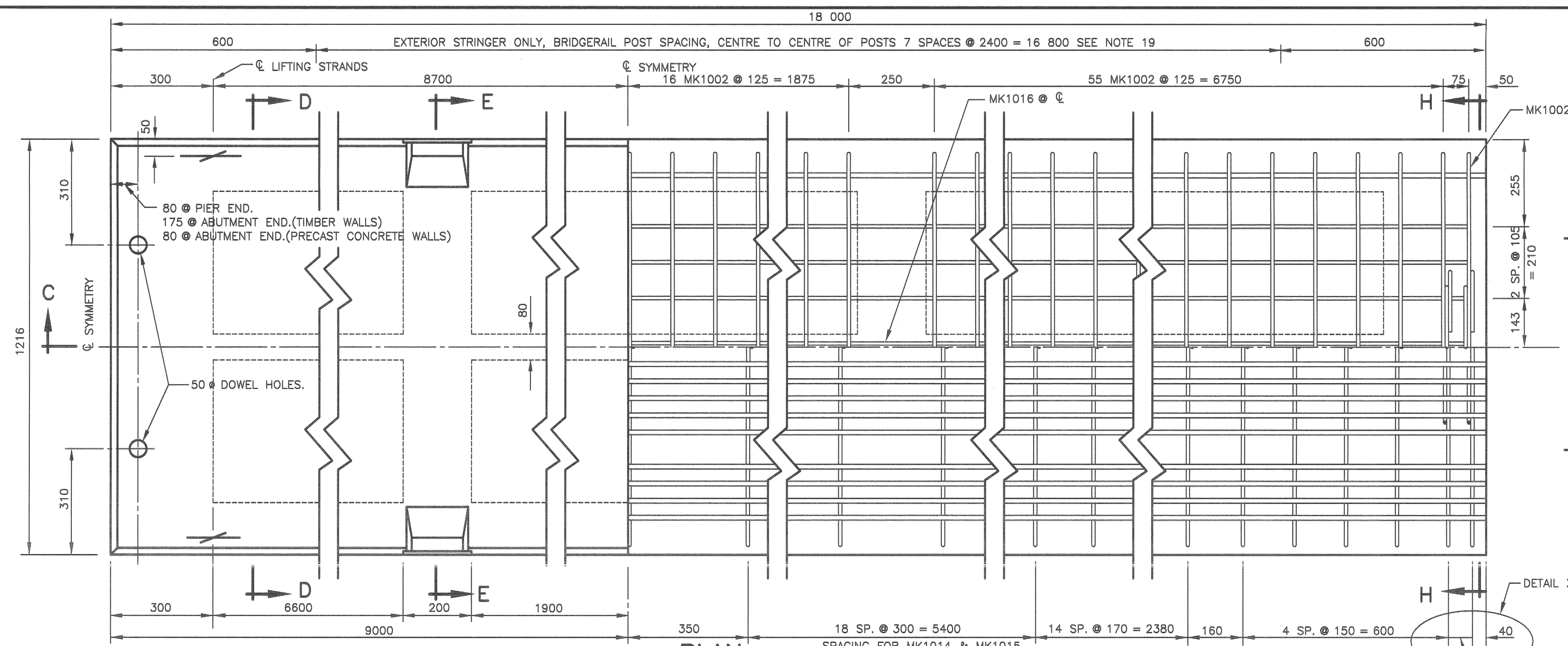
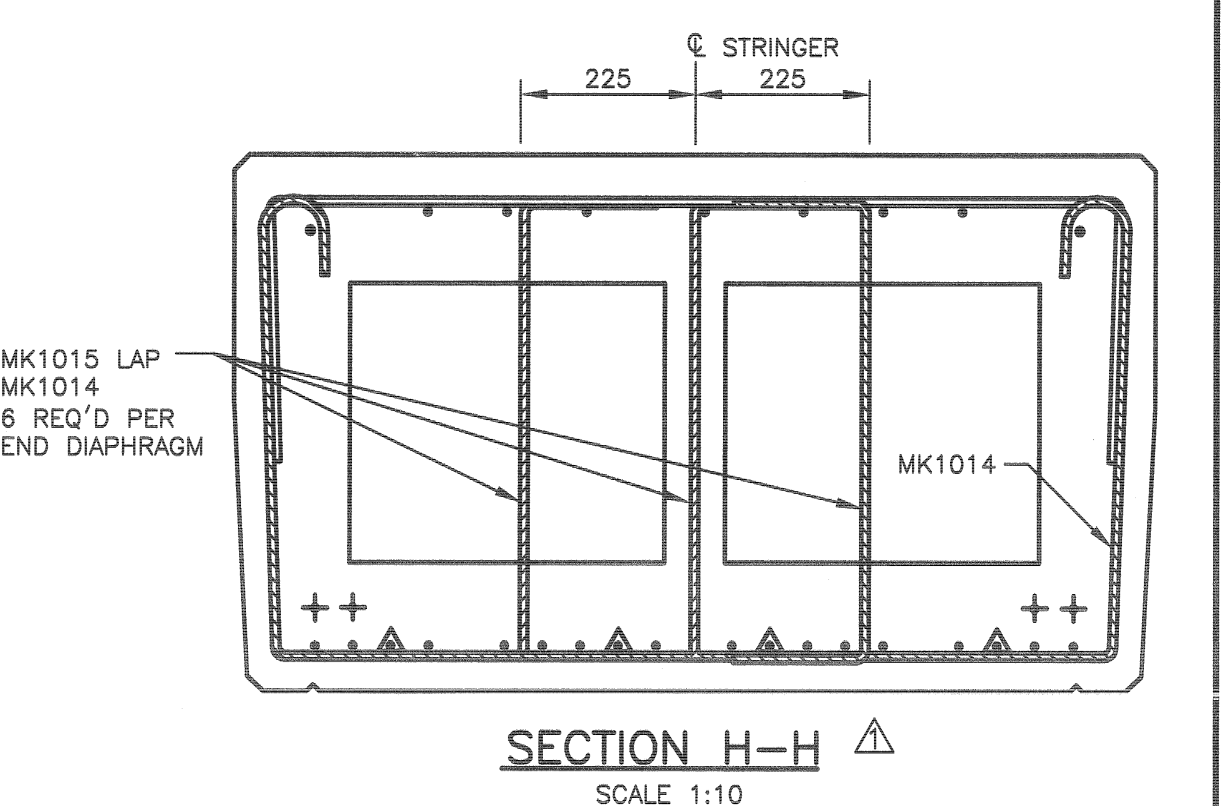




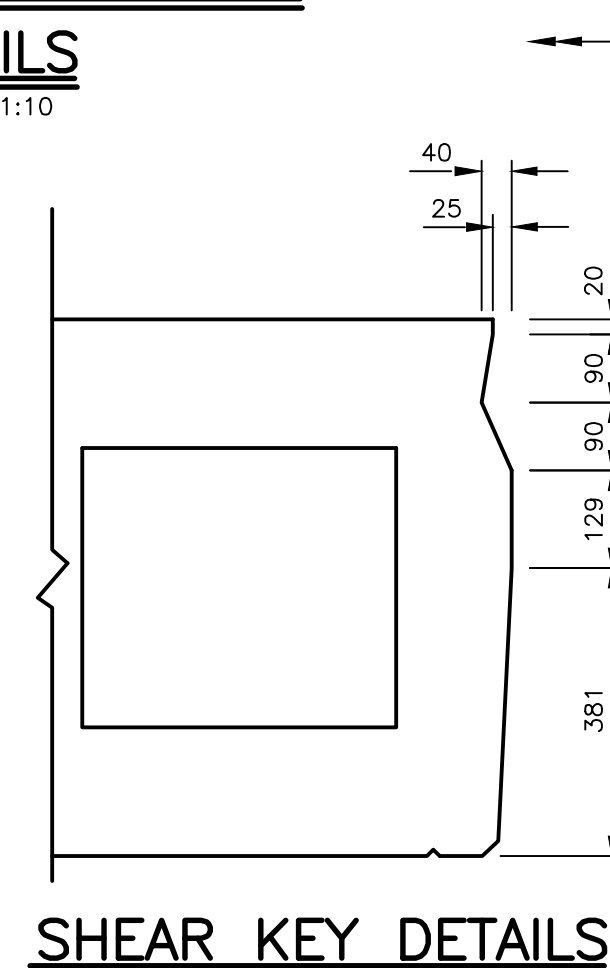
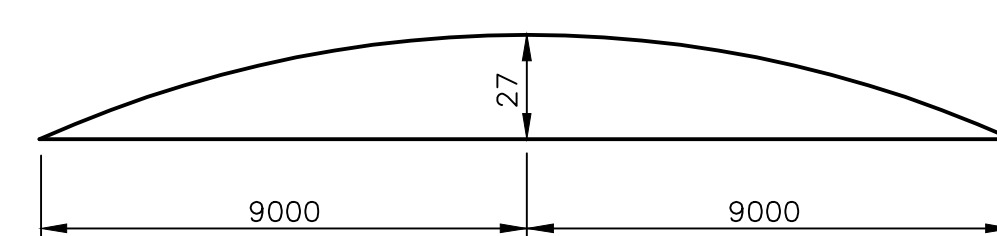
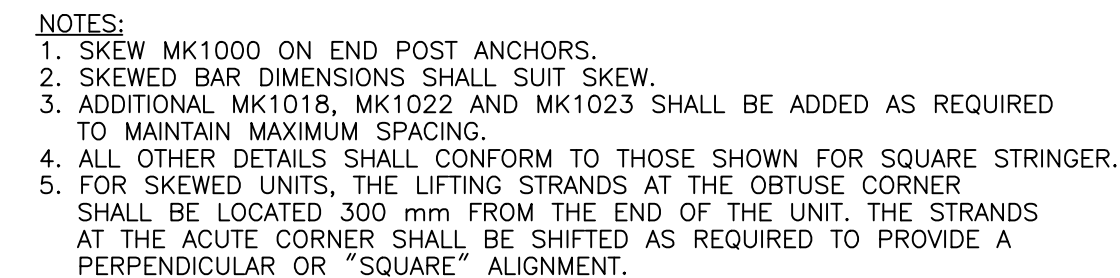
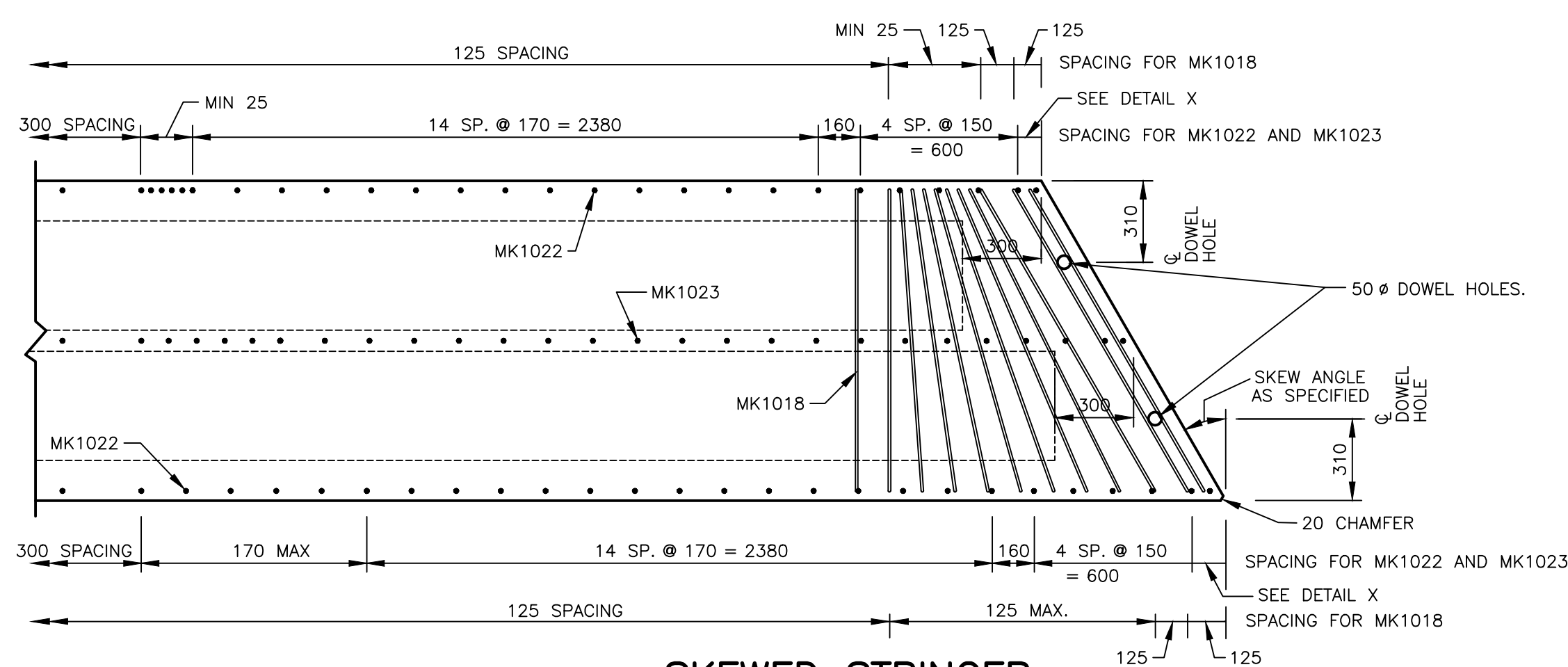
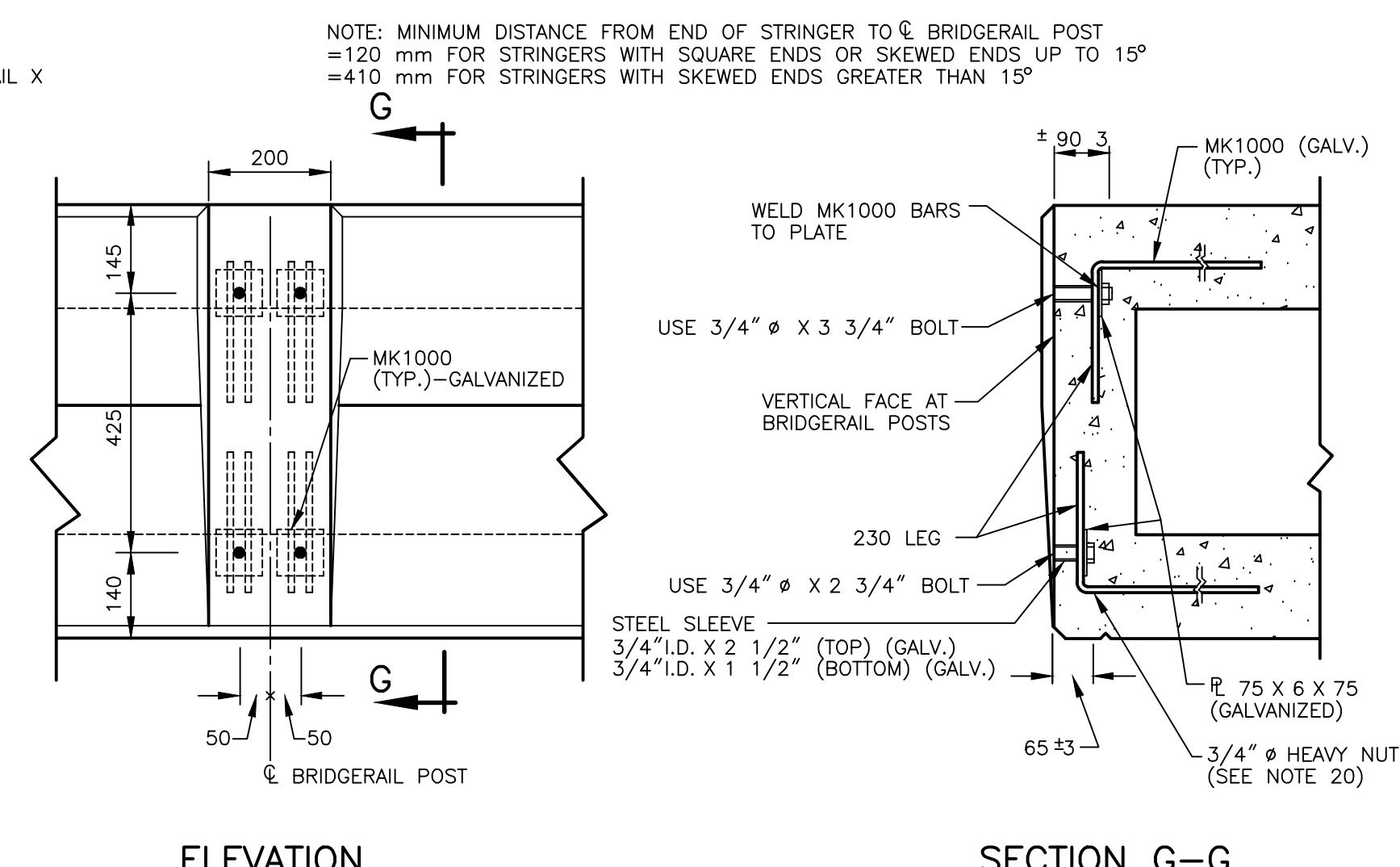
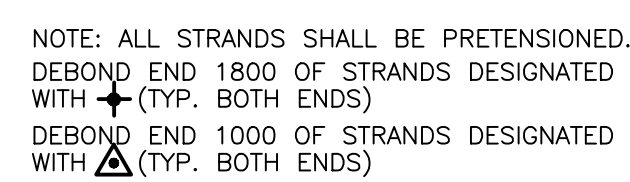
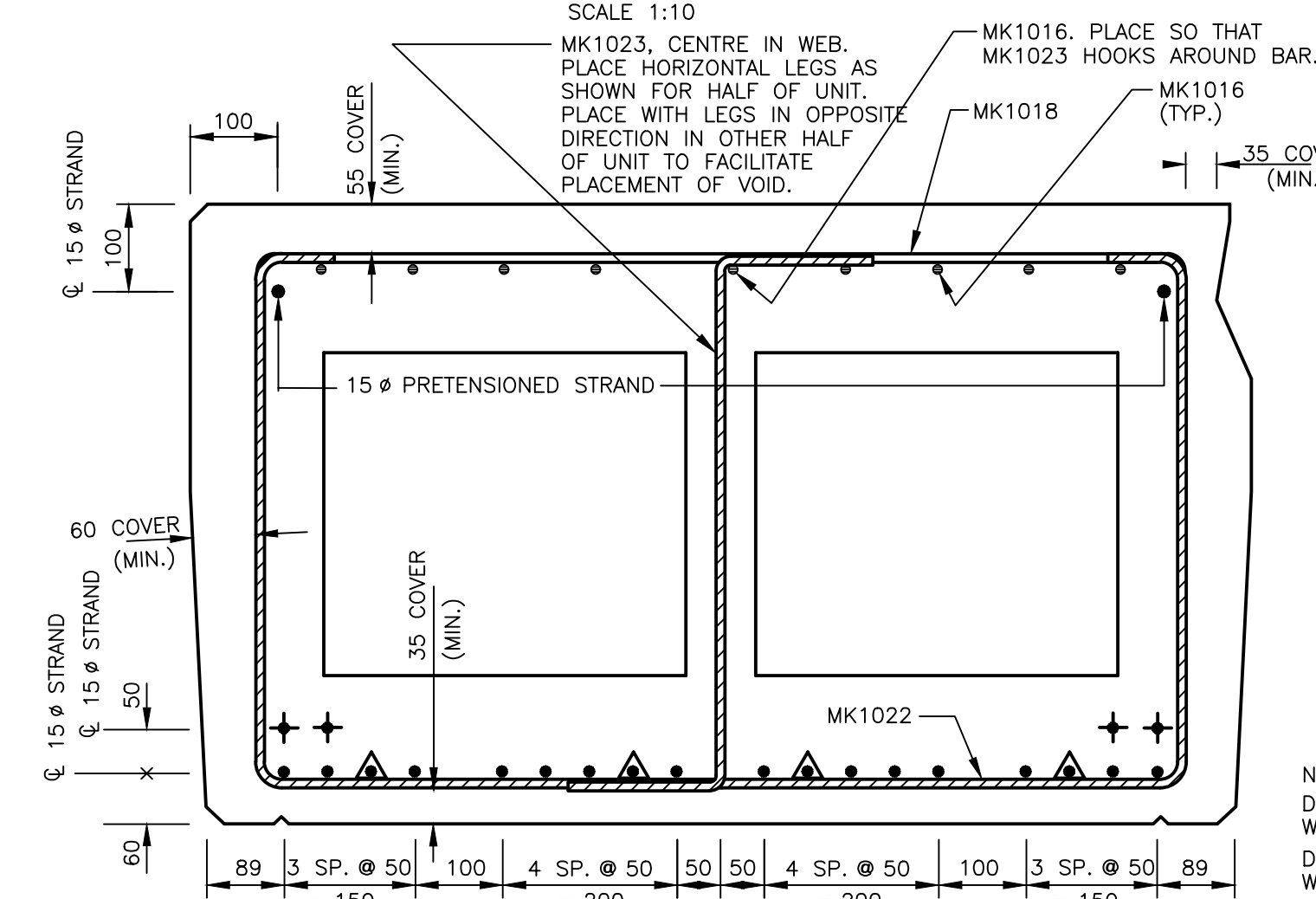
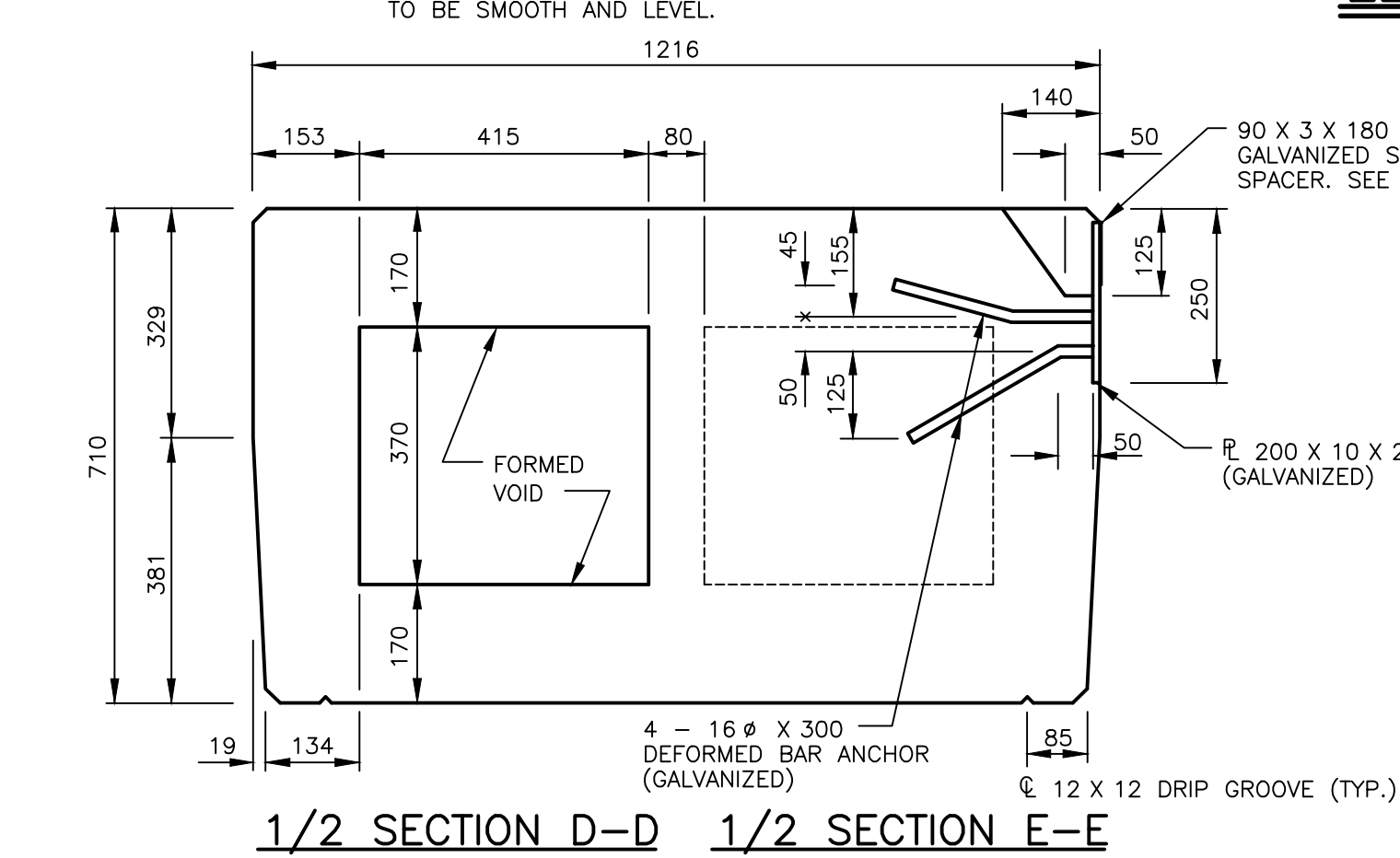
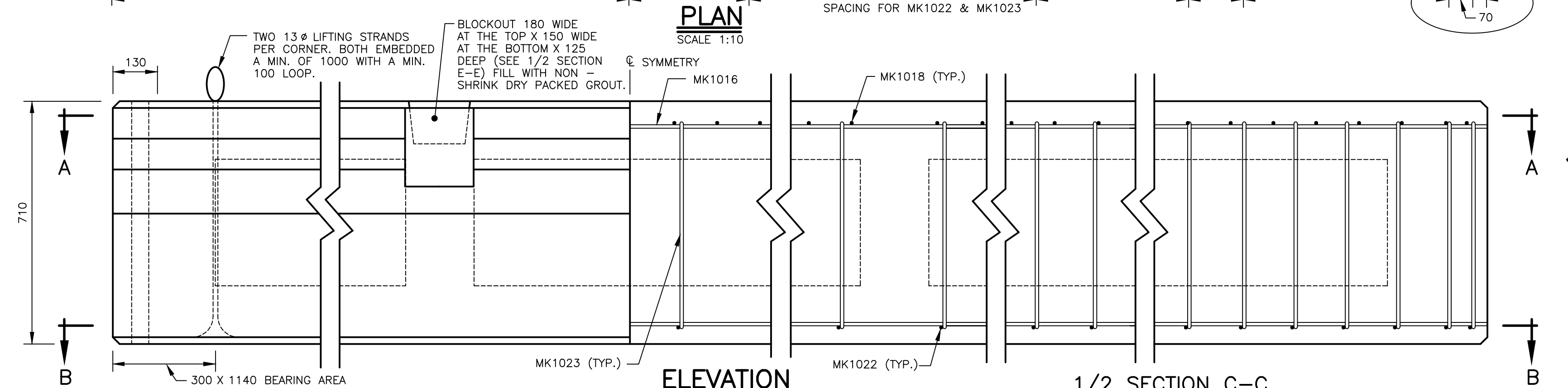
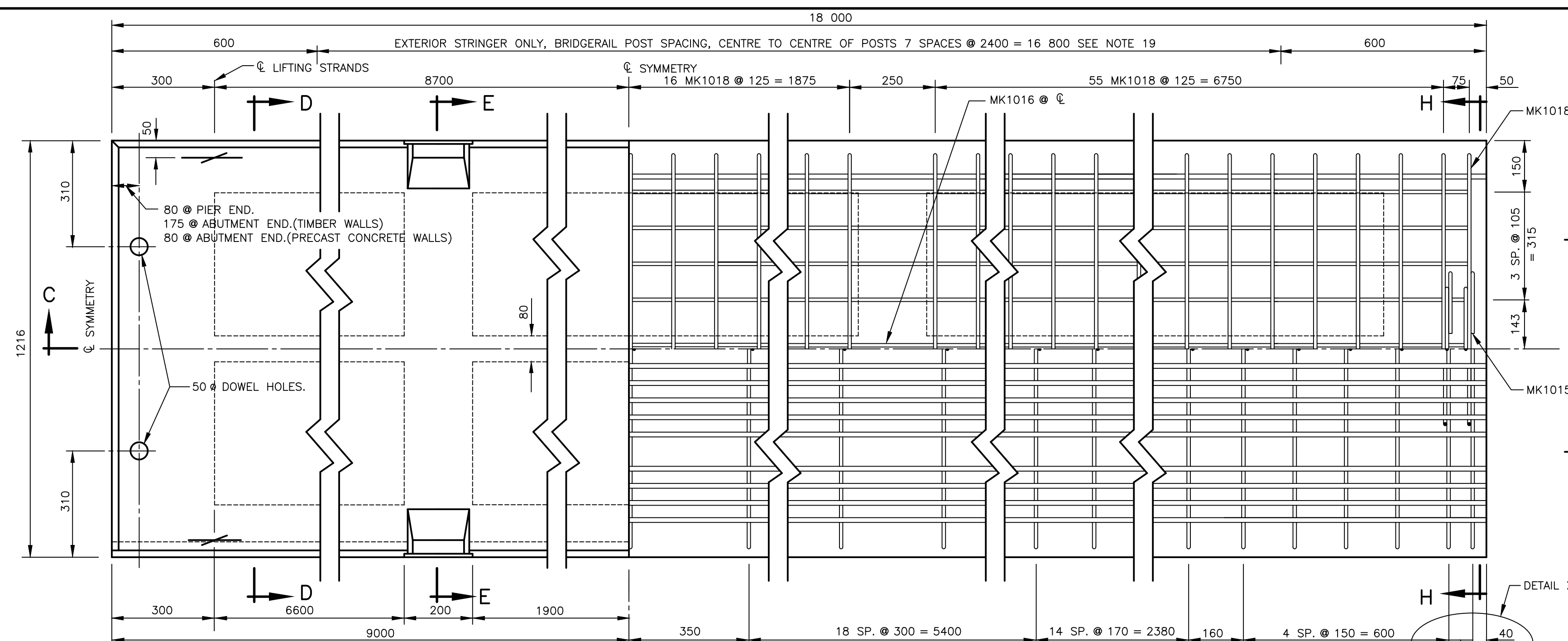
REINFORCING SCHEDULE							
MARK NO.	SIZE	NO.	TYPE	LENGTH	TOTAL LENGTH	GRADE	MASS kg
1000	10 M	64	C	530	33 920	400	27
1002	10 M	143	B	1830	261 690	400	205
1014	10 M	79	A	2620	206 980	400	162
1015	10 M	87	D	970	84 390	400	66
1016	10 M	14	STR.	9 200	128 800	400	101
STRANDS	15 Ø	24	STR.	18 000	432 000	1860	479

NOTE:
ALL REINFORCING DIMENSIONS ARE OUT TO OUT



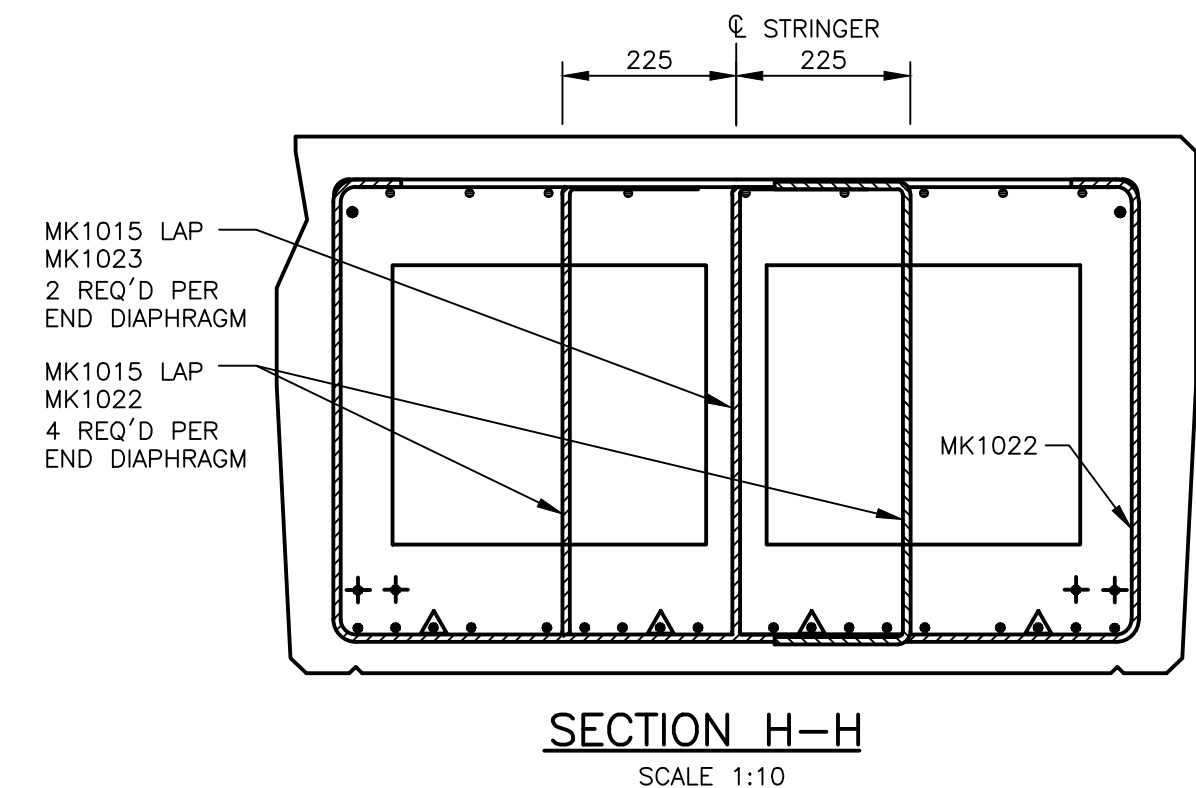
- NOTES:**
1. Design Specifications – CAN/CSA-S6-06
 2. Design Loading
 - Live Load CL-750
 - Load Factors 1.2D + 1.5D(surfacing) + 1.7L
 - Dead Load includes 80 mm of asphalt
 3. Concrete for stringers shall be standard weight containing Type GU General Use Portland cement with silica fume and 6% ± 1% entrained air. Maximum aggregate size shall be 20 mm.
 4. Concrete shall attain a minimum 28 day compressive strength of 35 Mpa.
 5. The compressive strength of job cured standard cylinders shall be 27 MPa before the prestressing force is transferred.
 6. Prestressing strands shall conform to the requirements of CSA Standard G279-M, Grade 1860 with a low relaxation property.
 7. Initial tensioning force shall be 185 kN per 15 Ø strand.
 8. Stringer length shown is the dimension to be achieved after transfer of the prestressing force.
 9. Reinforcing steel shall be fabricated from deformed bars conforming to the requirements of CAN/CSA-G30.18-M, Grade 400.
 10. Diameters of all hooks and bends unless otherwise noted, shall conform to the recommended sizes in CAN/CSA-S6-06.
 11. Structural steel shall conform to the requirements of CAN/CSA-G40.21, Grade 300W.
 12. Welding of reinforcing steel will not be permitted without the written approval of the Engineer.
 13. All welding shall conform to the requirements of CSA Standard W59.
 14. Galvanizing shall conform to the requirements of CSA Standard G164.
 15. Construction procedures shall conform to Specification 7800 For The Fabrication Of Precast Concrete Units And Barriers.
 16. All exposed corners shall have a 20 mm chamfer.
 17. Exterior face of exterior stringers shall be finished to a smooth uniform colour and texture. Other surfaces shall have all pockets filled and all fins removed.
 18. Bridgerail and connector bolts are not a part of this contract. All other hardware shown shall be supplied by the fabricator.
 19. The bridgerail gap spacing shown is for a single span bridge with a Type 2 steel Bridgerail. For multiple span bridges using a Type 4 steel bridgerail, a revised spacing will be provided with the order. The anchor details shown will not be used with a concrete curb or concrete traffic barrier
 20. The 3/4" Ø heavy nuts for the bridgerail anchor shall be heavy hex nuts conforming to the requirements of ASTM specification A563, Grade DH. Nuts shall be galvanized and taped oversized in accordance with ASTM Specification A563.
 21. Galvanized spacers shall be attached by welding or other approved procedure.
 22. All dimensions are in millimetres unless noted otherwise.

QUANTITIES	
ITEM	TOTAL QUANTITY
CONCRETE (STANDARD WEIGHT)	10.1 m ³
PRESTRESSING STRANDS (Grade 1860 MPa)	479 kg
REINFORCING STEEL (Grade 400 MPa)	561 kg



REINFORCING SCHEDULE							
MARK NO.	SIZE	NO.	TYPE	LENGTH	TOTAL LENGTH	GRADE	MASS kg
1000	10 M	64	C	530	33 920	400	27
1015	10 M	8	D	970	7 760	400	7
1016	10 M	18	STR.	9 200	165 600	400	134
1018	10 M	143	B	1765	252 395	400	204
1022	10 M	79	A	2675	211 325	400	166
1023	10 M	79	E	970	76 630	400	62
STRANDS	15 Ø	24	STR.	18 000	432 000	1860	479

NOTE:
ALL REINFORCING DIMENSIONS ARE OUT TO OUT



- NOTES:**
1. Design Specifications – CAN/CSA-S6-14
 2. Design Loading – Live Load CL-750
 - Load Factors 1.2D + 1.5D(surfacing) + 1.7L
 - Dead Load includes 80 mm of asphalt
 3. Concrete for stringers shall be standard weight containing Type GU General Use Portland cement with silica fume and $6\% \pm 1\%$ entrained air. Maximum aggregate size shall be 20 mm.
 4. Concrete shall attain a minimum 28 day compressive strength of 35 Mpa.
 5. The compressive strength of job cured standard cylinders shall be 27 MPa before the prestressing force is transferred.
 6. Prestressing strands shall conform to the requirements of CSA Standard G279-M, Grade 1860 with a low relaxation property.
 7. Initial tensioning force shall be 185 kN per 15 Ø strand.
 8. Stringer length shown is the dimension to be achieved after transfer of the prestressing force.
 9. Reinforcing steel shall be fabricated from deformed bars conforming to the requirements of CAN/CSA-G30.18-M, Grade 400.
 10. Diameters of all hooks and bends unless otherwise noted, shall conform to the recommended sizes in CAN/CSA-S6-14.
 11. Structural steel shall conform to the requirements of CAN/CSA-G40.21, Grade 300W.
 12. Welding of reinforcing steel will not be permitted without the written approval of the Engineer.
 13. All welding shall conform to the requirements of CSA Standard W59.
 14. Galvanizing shall conform to the requirements of CSA Standard G164.
 15. Construction procedures shall conform to Specification 7800 For the Fabrication Of Precast Concrete Components.
 16. All exposed corners shall have a 20 mm chamfer.
 17. Exterior face of exterior stringers shall be finished to a smooth uniform colour and texture. Other surfaces shall have all pockets filled and all fins removed.
 18. Bridgerail and connector bolts are not a part of this contract. All other hardware shown shall be supplied by the fabricator.
 19. The bridergal post spacing shown is for a single span bridge with a 4 steel bridergal. For multiple span bridges using a type 4 steel bridergal, a revised spacing will be provided with the order. The anchor details shown will not be used with a concrete curb or concrete traffic barrier
 20. The 3/4" Ø heavy nuts for the bridergal anchor shall be heavy hex nuts conforming to the requirements of ASTM specification A563, Grade DH. Nuts shall be galvanized and taped oversized in accordance with ASTM Specification A563.
 21. Galvanized spacers shall be attached by welding or other approved procedure.
 22. All dimensions are in millimetres unless noted otherwise.

QUANTITIES	
ITEM	TOTAL QUANTITY
CONCRETE (STANDARD WEIGHT)	10.1 m ³
PRESTRESSING STRANDS (Grade 1860 MPa)	479 kg
REINFORCING STEEL (Grade 400 MPa)	600 ka

