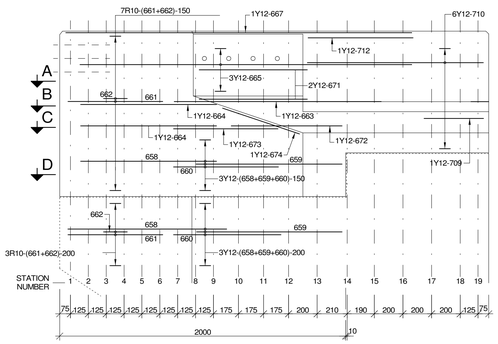
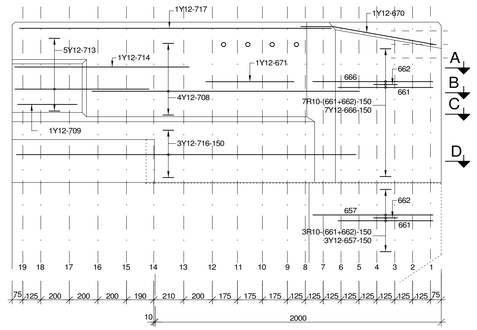
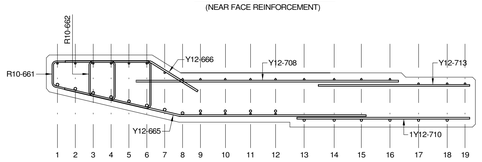


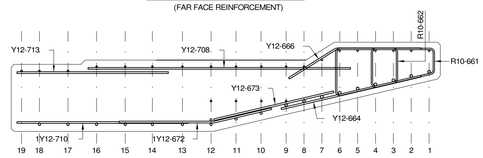
INSIDE ELEVATION
(NEAR FACE REINFORCEMENT)



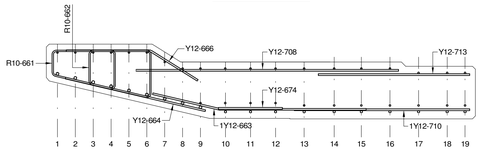
OUTSIDE ELEVATION
(FAR FACE REINFORCEMENT)



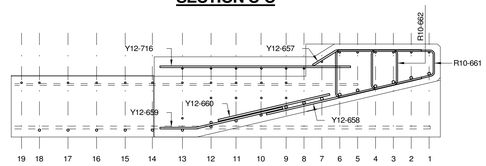
SECTION A-A



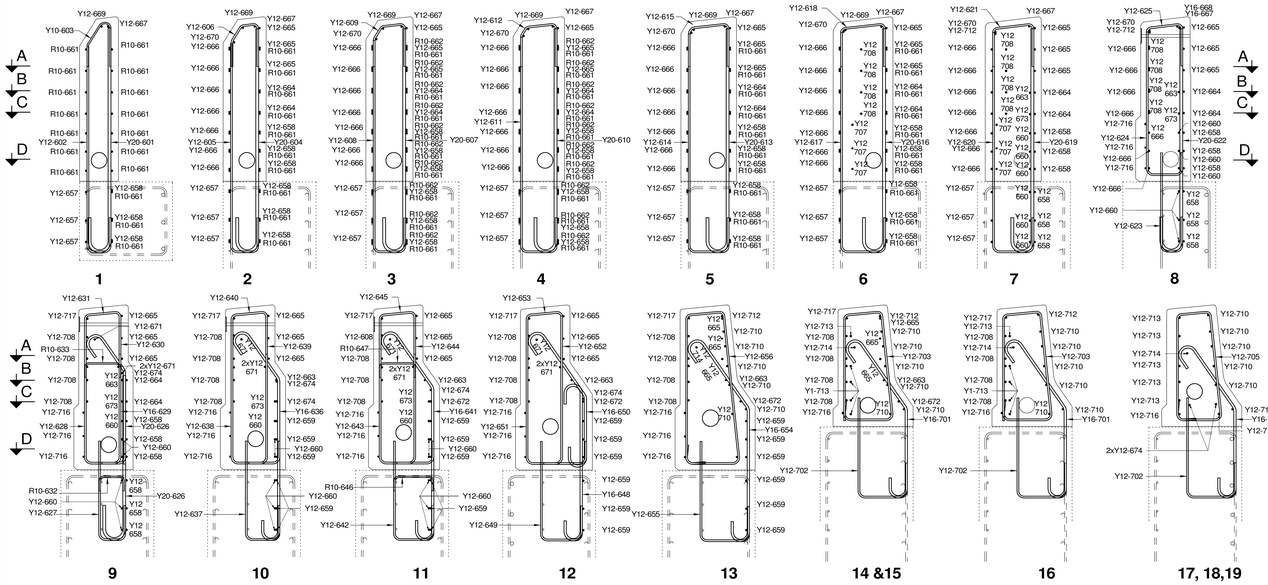
SECTION C-C

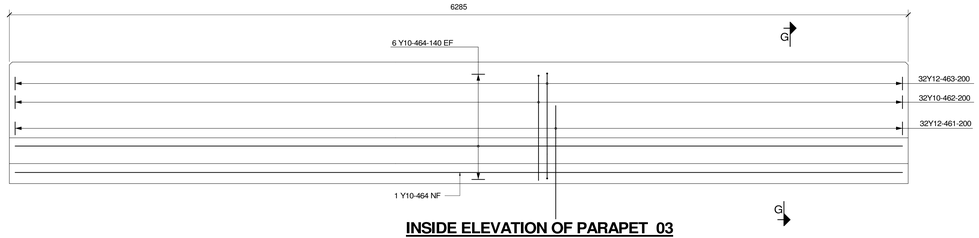


SECTION B-B

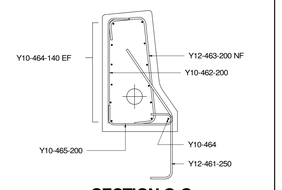


SECTION D-D

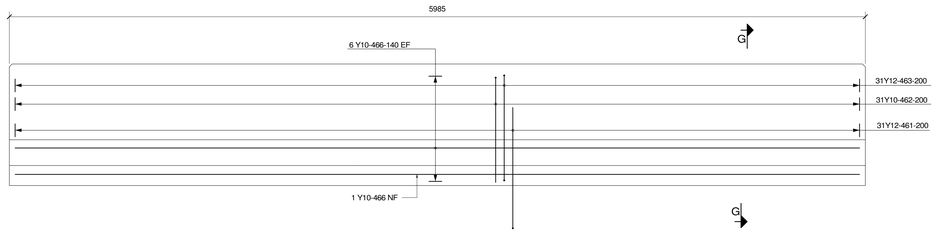




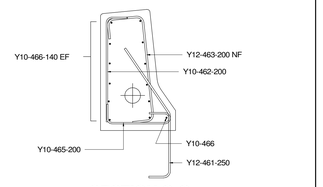
INSIDE ELEVATION OF PARAPET 03
2 Nos



SECTION G-G



INSIDE ELEVATION OF PARAPET 04
28 Nos



SECTION G-G

MEMBER	ORIENATION	STATION NO	No OF	BARS PER MEMB	DIA.	LENGTH	TOTAL NUMBER	MARK	S C	BENDING A	B	C	D	E	F/r
PARAPET ENDBLOCK		1	2	1	Y20	1850	2	601	32	1570					
			2	1	Y12	1800	2	602	38	1440	165				
			2	1	Y10	750	2	603	99A	200	150	5	95	70	
		2	2	1	Y20	1850	2	604	32	1570					
			2	1	Y12	1850	2	605	38	1460	195				
			2	1	Y12	800	2	606	99A	200	145	5	95	100	
		3	2	1	Y20	1850	2	607	32	1570					
			2	1	Y12	1900	2	608	38	1500	255				
			2	1	Y12	850	2	609	99A	200	150	10	95	130	
		4	2	1	Y20	1900	2	610	32	1620					
			2	1	Y12	1950	2	611	38	1500	255				
			2	1	Y12	850	2	612	99A	200	150	10	95	160	
		5	2	1	Y20	1950	2	613	32	1670					
			2	1	Y12	2000	2	614	38	1650	285				
			2	1	Y12	900	2	615	99A	200	150	15	95	185	
		6	2	1	Y20	1950	2	616	32	1670					
			2	1	Y12	2050	2	617	38	1550	310				
			2	1	Y12	950	2	618	99A	200	150	15	95	215	
		7	2	1	Y20	1950	2	619	32	1670					
			2	1	Y12	2100	2	620	38	1650	285				
			2	1	Y12	750	2	621	99A	200	150	20	40	245	
		8	2	1	Y20	1950	2	622	32	1670					
			2	1	Y12	1050	2	623	38	700	155				
			2	1	Y12	1650	2	624	38	1180	255				
			2	1	Y12	700	2	625	99B	200	25	240	10	110	
		9	2	1	Y20	1400	2	626	32	1120					
			2	1	Y12	1100	2	627	38	700	185				
			2	1	Y12	1650	2	628	38	1200	285				
			2	1	Y16	1450	2	629	99H	340	275	250			
			2	1	Y12	1250	2	630	34	1120					
			2	1	Y12	750	2	631	99B	200	25	240	15	130	
			2	1	R10	400	2	632	35	175					
			2	1	R10	450	2	633	35	250					
		10	2	1	Y16	2050	2	636	99C	1130	330	325	430		
			2	1	Y12	1150	2	637	38	700	240				
			2	1	Y12	1750	2	638	38	1230	340				
			2	1	Y12	1250	2	639	34	1120					
			2	1	Y12	750	2	640	99B	200	25	235	20	160	
		11	2	1	Y16	2050	2	641	99C	1130	330	325	430		

CUTTING AND BENDING TOLERANCES ACCORDING TO SABS 82:1997

PROJECT	STRUCTURE	DRAWING No.	SHEET
P 52-3	3030	3030-15	16

MEMBER	ORIENATION	STATION NO	No OF	BARS PER MEMB	DIA.	LENGTH	TOTAL NUMBER	MARK	S C	BENDING A	B	C	D	E	F/r
VERTICAL REINFORCEMENT		11	2	1	Y12	1150	2	642	38	700	280				
			2	1	Y12	1800	2	643	38	1250	380				
			2	1	Y12	1250	2	644	34	1120					
			2	1	Y12	800	2	645	99B	200	25	230	20	190	
			2	1	R10	500	2	646	35	275					
			2	1	R10	450	2	647	35	250					
		12	2	1	Y16	1550	2	648	33	1090					
			2	1	Y12	1200	2	649	38	700	290				
			2	1	Y16	1550	2	650	99C	475	445	400	575		
			2	1	Y12	1900	2	651	38	1300	420				
			2	1	Y12	1250	2	652	34	1120					
			2	1	Y12	700	2	653	99J	200	25	255			
		13	2	1	Y16	2000	2	654	99C	930	475	430	610		
			2	1	Y12	1250	2	655	38	700	345				
		14	2	1	Y12	3450	2	656	99F	1370	20	230	140	1400	
		14	2	3	Y16	1700	6	701	99C	625	475	430	610		
		15	2	3	Y12	1250	16	702	38	700	345				
		16	2	3	Y12	3100	6	703	99F	1380	20	230	115	1130	
		17	2	3	Y12	1900	6	605	99F	625	35	245	65	665	
		18	2	3	Y16	1650	6	607	99C	625	435	400	560		
		19													
HORIZONTAL REINFORCEMENT ALL STATIONS			2	3	Y12	800	6	657	62	190	100				
			2	6	Y12	1150	12	658	20						
			2	6	Y12	850	12	659	62	250	55				
			2	6	Y12	800	12	660	20						
			2	10	R10	2050	20	661	99D	690	175	155			
			2	10	R10	1000	20	662	99D	185	235	35			
			2	1	Y12	1500	2	663	62	480	110				
			2	2	Y12	1000	4	664	20						
			2	3	Y12	2150	6	665	62	825	190				
			2	7	Y12	1000	14	666	62	390	210				
			2	1	Y16	1100	2	667	62	250	60				
			2	1	Y12	950	2	670	62	250	50				
			2	3	Y12	800	6	671	20						

CUTTING AND BENDING TOLERANCES ACCORDING TO SABS 82:1997

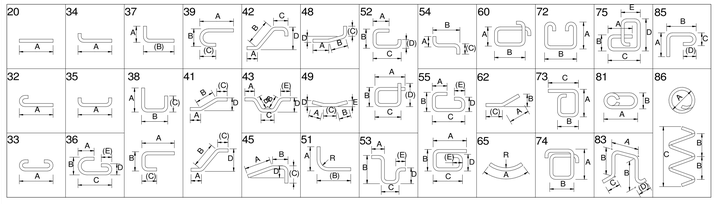
PROJECT	STRUCTURE	DRAWING No.	SHEET
P 52-3	3030	3030-15	17

MEMBER	ORIENATION	STATION NO	No OF	BARS PER MEMB	DIA.	LENGTH	TOTAL NUMBER	MARK	S C	BENDING A	B	C	D	E	F/r
PARAPET ENDBLOCK	HORIZONTAL REINFORCEMENT ALL STATIONS		2	1	Y12	1100	2	672	62	400	95				
			2	1	Y12	850	2	673	20						
			2	1	Y12	750	2	674	20						
			2	4	Y12	1900	8	708	20						
			2	2	Y12	450	4	709	20						
			2	6	Y12	1250	12	710	20						
			2	1	Y12	750	2	712	20						
			2	5	Y12	1100	10	713	20						
			2	1	Y12	1300	2	714	20						
			2	6	Y16	950	12	715	20						
			2	3	Y12	2400	6	716	20						
			2	1	Y12	1750	2	717	20						
PARAPET PANEL 03			2	32	Y12	1325	64	461	45	550	450			325	
				32	Y10	1050	64	462	37	300	770				
				32	Y12	1725	64	463	52	300	445	770			
				13	Y10	6200	26	464	20						
				32	Y10	1150	64	465	85	400	445	60			
PARAPET PANEL 04			28	31	Y12	1325	868	461	45	550	450			325	
				31	Y10	1050	868	462	37	300	770				
				31	Y12	1725	868	463	52	300	445	770			
				13	Y10	5900	364	466	20						
				31	Y10	1150	868	465	85	400	445	60			

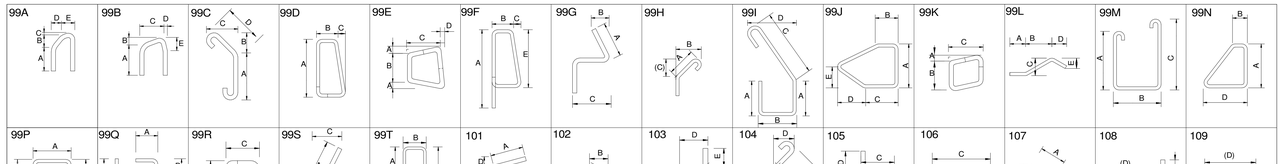
CUTTING AND BENDING TOLERANCES ACCORDING TO SABS 82:1997

PROJECT	STRUCTURE	DRAWING No.	SHEET
P 52-3	3030	3030-15	18

STANDARD SHAPE CODES



SPECIAL SHAPE CODES



NOTES

1. BEFORE ORDERING AND BEFORE CUTTING AND BENDING OF REINFORCEMENT COMMENCES, THE CONTRACTOR MUST CHECK ALL SCHEDULES TO ENSURE CORRECTNESS, WHERE CHANGES ARE NECESSARY, THEY SHALL BE REFERRED TO THE ENGINEER.
2. ALL BENDING SHALL BE DONE IN ACCORDANCE WITH SABS 82 (WITH THE LATEST AMENDMENTS).
3. THREE TYPE OF REINFORCEMENT CAN BE SPECIFIED ON REINFORCEMENT DRAWINGS AND BENDING SCHEDULE viz.
   a. R HOT-ROLLED MILD STEEL BARS OF PLAIN ROUND CROSS-SECTION HAVING A CHARACTERISTIC STRENGTH OF 250 MPa.
      Y HOT-ROLLED HIGH YIELD STRESS STEEL HAVING A CHARACTERISTIC STRENGTH OF 450 MPa.
   b. WELDED STEEL FABRIC IN ACCORDANCE WITH SABS 1024:1991.

   FOR EXAMPLE:

   R20 DENOTES A 20mm DIAMETER PLAIN ROUND HOT-ROLLED MILD STEEL

   Y25 DENOTES A 25mm DIAMETER HOT-ROLLED HIGH YIELD STRESS STEEL

   REF: 665 DENOTES FABRIC REFERENCE 655 MESH

Rev	Date	Description	Checked	Signed
A	28-09-2023	ISSUED FOR APPROVAL	BM	

AMMENDMENTS

AS BUILT

Supervising Engineer Date

Supervising Authority

Continued from :
Continued on :
Cross Section No :
Longitudinal Section No :
Survey Plan No :

Designed by : T. Mkhize
Checked by : B. Manyela
Drawn by : S. Maphumulo
Checked by : T. Mkhize
Date of approval :

transport
Department:
Transport
Province of KwaZulu-Natal

Designed by :
IBHONGO CONSULTING
Director Date

71 Fifth Avenue
Morningside
Durban 4001
Tel: (031) 324 2200
Fax: (031) 324 2222
email:info@ibhongo.co.za

Structural Design: Chief Engineer

Head: Transport

PROVINCIAL ROAD P52/3 - NONGOMA TO PONGOLA
S 27 39 47.18 E 31 43 12.14

PROPOSED MKHUZE RIVER BRIDGE

PARAPETS REINFORCEMENT DETAILS -SHEET 2 OF 3

Staked km distance 27.400

Scale : As indicated

Sheet : 46 of : 51

Ibhongo Dwg No: 2203-SRD-214

DOT Dwg No: 3801-46

3801-46