

BOLT SCHEDULE				
***	STRENGTH GRADE	4.6		***
MARK	TYPE	NO OFF	LENGTH	
.a.	M20	.90	40.	
.b.	M20	.224	45.	
.c.	M20	.68	50.	
---	---	---	---	

80-BEVEL WASHERS REQ'D


NOTES ON BOLTS:



- 1) BOLTS TO BE SUPPLIED WITH NUT AND WASHER.
- 2) BOLTS ERECTED WITH HEAD TO INSIDE PREFERRED.
- 3) WASHER TO BE PLACED UNDER NUT.
- 4) ALL BOLTS TO BE GALVANIZED.
- 5) BOLT POSITIONS INDICATED THUS:
NO OFF/MARK eg. 6/4
- 6) BOLT TIGHTENING: "SNUG TIGHT"
USING STANDARD POGGER SPANNER
OR IMPACT WRENCH.

MASS OF STEELWORK (BOLTS EXCLUDED)	--3178 kg
MASS OF GRADE 4.6 BOLTS	.80. kg
NO. OFF GRADE 8.8 U-BOLTS	.10.

NOTES

UNLESS OTHERWISE NOTED :

- 1) QUANTITIES SHOWN ARE FOR ONE BEAM ONLY.
- 2) ALL STRUCTURAL STEEL TO BE GRADE 300N.
- 3) ALL STEELWORK TO BE HOT DIP GALVANIZED TO S.A.B.S. 763.
- 4) ALL HOLES TO BE 22 DIAMETER LOGAN.
- 5) OPEN HOLES AND SITE BOLTS INDICATED THUS: .
- 6) THE CONTRACTOR SHALL SUPPLY ALL NUTS, BOLTS, WASERS, ETC, REQUIRED FOR ERECTION.
- 7) ALL PORTIONS OF WELDED JOINTS NOT SEALED BY CONTRACTOR, WELD SHALL BE SEAL WELDED.
- 8) ALL MARKS TO BE STAMPED ON STEEL AND SHALL BE CLEARLY LEGIBLE AFTER GALVANIZING.
- 9) ALL MARKS TO BE PREFIXED : 4E/.....
- 10) LIMITATIONS OF GENERAL USAGE-
THESE STRUCTURES HAVE BEEN DESIGNED TO SAFELY WITHSTAND THE FOLLOWING LOADING CONDITIONS:
A) MAX. CONDUCTOR LOAD OF 28 KN PER PHASE AT -10 DEGREES CENTIGRADE.
NOTE: NOMINAL STRINGING TENSION TO BE 18 KN PER PHASE AT 20 DEGREES CENTIGRADE .
B) WIND LOADS RESULTING FROM A FREE STREAM VELOCITY PRESSURE $q(z)$ OF 1000 Pa AS DEFINED IN CLAUSE 4.5.3 OF SABS 0160-1980. THIS DESIGN PRESSURE IS APPLICABLE FOR TERRAIN CATEGORY 2 LOCATIONS THROUGHOUT SOUTH AFRICA, WITH THE EXCEPTION OF THE AREA BOUNDED BY THE TOWNS OF UPHUTUNG, KIMBERLEY, COLESBURG AND LANSBURG INCLUSIVE, WHERE THE STRUCTURES ARE TO BE LOCATED WITHIN THIS AREA, OR ANYWHERE WITHIN SOUTH AFRICA AT A TERRAIN CATEGORY 1 LOCATION (i.e. IN A SEVERELY EXPOSED LOCATION). APPROVAL TO USE THESE STRUCTURES MUST BE OBTAINED FROM ESCOM'S CIVIL ENGINEERING DIVISION.
- C) SHORT-CIRCUIT LOADS DUE TO PHASE-TO-PHASE AND PHASE-TO-EARTH FAULTS.

2	D.D.	10	10	LABEL FILING AREA	8.0	D.D.	
3	D.D.	10	10	FILE OFFICE FILES REVIEW	8.0	D.D.	
7	D.D.	10	10	FILE OFFICE	8.0	D.D.	
0				FIRST ISSUE / EERSTE UITREIKING			
				REUSING/ONTLEENING			
REV	AUTH	DATE	TIME	INDEXED REUSE/REUSE	BT	ESOM	0-54
PROJ				ST AND ST			DEFINING REFERENCES
							DEFINING REFERENCES
SOUTH AFRICA				ESOM / EVKOM			
				400 KV YARD STEELWORK			
				ASSEMBLY AND DETAILS OF			
				STINGER STAIN BEAM WITH OFFSETS			
				-TYPE AND			
APPROVED				DESIGNED BY			
N. BARNARD				0-54 / 3533			
AS SHOWN							
SA OR SA							

THIS DRAWING HAS BEEN CREATED ON A C.A.D.SYSTEM.
ANY AMENDMENT MUST BE EFFECTED ON THE SAME SYSTEM.
C.A.D. REFERENCE No [03, 164] Q3533A000 - B03 ; 1.