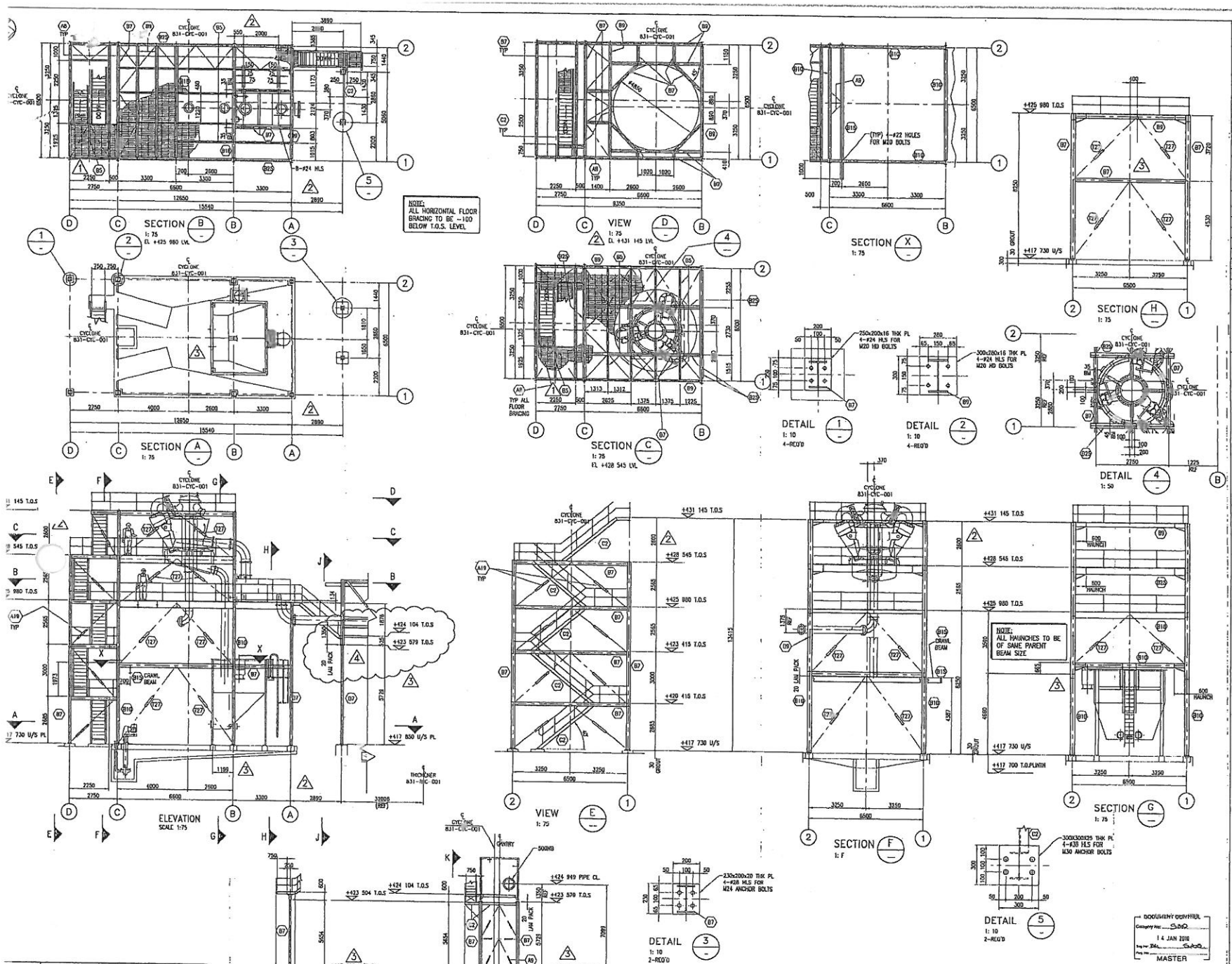

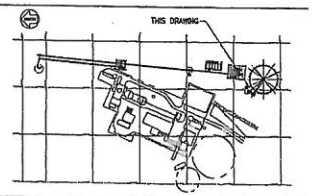

KEY PLAN

STEEL LEGEND

MARK	LONG ANNOTATION	MARK	LONG ANNOTATION
B5	180x18,8 PE	T27	114x4,0 CHS
B7	203x133x25 UB	C2	180x70x22 PFC
B9	254x146x31 UB	A8	70x70x6 RSA
B10	254x146x37 UB	A19	100x100x6 RSA
B15	305x165x41 UB	A9	70x70x8 RSA
B18	356x171x45 UB		
B25	406x178x60 UB		

STRUCTURAL GENERAL NOTES

(U.O.N.)

1) SPECIFICATION : ALL FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATION (M8083-S610-001). ALL CONNECTIONS TO BE FULL STRENGTH TO SABSCH AND AWS D1.1 STANDARD. NO ECCENTRIC CONNECTIONS ARE ALLOWED.

2) HANDRAILING: HANDRAIL TO BE TUBULAR TYPE. 32mm OD. AND 1.6mm WALL THICKNESS, 1000mm ABOVE FINISHED FLOOR LEVEL WITH KNEE RAIL. ALL STANCHIONS TO BE AT 1500mm MAXIMUM CRS.

3)

MATERIAL	SANS 1431 GRADE 350WA
GUSSETS	GUSSET PLATES TO BE 8mm THICK MINIMUM.
HOLES	ALL HOLES #22 FOR M20 CLASS 8.8 BOLTS U.O.N.
WELDING	ALL WELDS SHALL BE MINIMUM 6mm CFW U.O.N. TO BS 5135 AND SANS 10162, SANS1044 & AWS D1.1.

4) CONNECTIONS:
a. ALL BEAMS AND BRACING CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS.
b. BEAM END PLATES MINIMUM THICKNESS TO BE 10mm.
c. ALL STRUCTURES SHALL BE OF SHOP WELDED AND SITE BOLTED CONSTRUCTION U.O.S.
d. ALL HANDRAILS, STAIRTREADS, PURLINS, GIRTS AND SAG ANGLES TO HAVE #18 HOLES FOR M16 CLASS 4.6 BOLTS.

5) FLOORING: ALL OPEN GRID FLOORING TO BE RS40 (OR SIMILAR APPROVED) WITH 30x4.5 BEARER BARS. KICK FLATS TO 130x8mm TO BE FULLY WELDED AND ARE TO BE AN INTEGRAL PART OF THE GRATING. ALL EXPOSED LANDING EDGES ARE TO BE FITTED WITH NON-SLIP NOSING BARS.

6) STAIR TREADS: ALL STAIR TREADS TO BE STANDARD 245 WIDE 30x4.5 THICK BEARER BARS C/W NON SLIP NOSING AND BOTH SIDES BANDED.

7) MARKINGS: ALL STEELWORK TO BE HARD STAMPED WITH MARK No. AND DRAWING No. ON THE TOP SURFACE AND MUST BE ABLE TO WITHSTAND SANDBLASTING.

8) COLUMN SPLICES: ALL SPLICES SHALL BE FULL STRENGTH END BEARING TYPE SPLICES.

9) PAINTING: TO PROJECT SPECIFICATION

10) STAINLESS STEEL: a. ALL STAINLESS STEEL ITEMS SHALL BE PICKLED AND PASSIVATED BEFORE INSTALLATION.
b. 3mm POLYPROPYLENE SPACER STRIP GLUED IN POSITION BETWEEN ALL MILD AND STAINLESS STEEL SURFACES.

11) CLADDING: (SPECIFICATION TO BE PROJECT SPECIFIC)

NOT REQUIRED

12) SUPPLY OF BOLTS: FABRICATOR TO SUPPLY ALL BOLTS, NUTS AND WASHERS NECESSARY FOR ASSEMBLY AND ERECTION. ALL LOOSE BOLTS, ETC. TO BE BAGGED AND TAG MARKED WITH DRAWING NUMBER.

13) EXISTING STEELWORK: WHERE MODIFICATIONS, MATCHING AND TO EXISTING STEELWORK ARE NECESSARY, ALL MISSING SITE DIMENSIONS AND MAIN SET-OUT DIMENSIONS FROM EXISTING DETAIL DRAWINGS WILL REMAIN THE RESPONSIBILITY OF, AND MUST BE CHECKED ON SITE BY THE FABRICATOR PRIOR TO DETAILING.

14) VIBRATION: STRUCTURES SUBJECT TO VIBRATION OR IMPACT AND DIRECT REVERSAL OF STRESSES MUST HAVE LOCKING NUTS TO ALL MAIN BOLTED CONNECTIONS. ALL VERTICAL AND HORIZONTAL BRACING OF SUCH STRUCTURES MUST BE DETAILED 2mm SHORT TO ENSURE THAT THESE MEMBERS ARE PRETENSIONED. BOLTS ARE TO BE CLASS 8.8S TORQUED TO SASC STD.

15) SITE SPLICES: ALL LONG COLUMNS, ROOF TRUSSES AND GIRDERS THAT ARE TO BE SPLICED ON SITE MUST BE TRIAL ASSEMBLED PRIOR TO SITE DELIVERY.

16) DRAWINGS: ALL SHOP DETAIL DRAWINGS TO BE SUBMITTED TO ENGINEER FOR REVIEW PRIOR TO FABRICATION.

FOR CONSTRUCTION

FOSKOR H8310

NUMBER	TITLE
0001001	[illegible]H AND TUNNEL GENERAL ARRANGEMENT
0002001	[illegible]R BRAKE MECHANISM
0003001	[illegible] BEAM G.A. & DETAILS
0002001	TUNNEL ACCESS STAIRWAY G.A. & DETAILS
0002001	THICKENER FLOOR AND DRAINS CONC. LAYOUT & DETAILS
0003001	THICKENER CENTRE CORE CONC. LAYOUT & DETAILS
0002001	TUNNEL & STAIR ACCESS CHAMBER LAYOUT & DETAILS
0001001	THICKENER WALLS CONC. LAYOUT & DETAILS

REVISIONS No.	DATE	DESCRIPTION	BY	CHKD	SCALE	ENG	REG. No.
4	11.01.10	BRIDGE ACCESS STAIR REVISED	RVN	CJE	RVN	V.8	869326
3	01.12.09	BEAM LIFTED UP TO SUIT NEW TANK/PUMP HEIGHT & T27 BEAMS REPLACED WITH B7	RVN	CJE	RVN	V.8	869326
2	07.10.09	ROW "A" MOVED 300mm TOP FILTER UP 300mm	RVN	CJE	RVN	VB	860226
1	05.10.09	BEAM ADDED FOR GRATING SUPPORT	LG	JF	RVN	VB	860226
D	23.09.09	ISSUED FOR CONSTRUCTION	LG	JF	RVN	VB	860226
C	22.09.09	UPDATED TO CHECK & SQUAD CHECK COMMENTS	LG	–	–	–	–
B	17.09.09	ISSUED FOR CHECKING	GM	–	–	–	–
A	08/09/09	ISSUED FOR COMMENT	LG	–	–	–	–

APPROVED BY	NAME	SIGN	DATE
PROCESS	N.SMITH	NS	17/07/09
CIVIL/STRUCT.	V.MORTHOK	VM	17/07/09
INSTRUMTN.	–		
MECHN.	N.NUTES	NN	17/07/09
PIPING	–		
ELECT.	A.COOMBES	AC	–
CONT/INSTR.	–		–
PROJ. ENG.	L.VAN HO	LV	6/07/09
PROJ. MANAGER	R.M	RM	6/07/09

REGISTERED NUMBER	PR. ENG.	PR.TECH.ENG	PR.CONT.ENG
	–	–	–
860228	–	–	–
	–	–	–
	–	–	–
	–	–	–
	–	–	–
	–	–	–
	–	–	–

	NAME	DATE
DRAWN BY	L.O	08/08/2009
CHECKED BY	J.F	04.09.09
RECEIVED BY	RVN	23.09.09

BATEMAN
BATEMAN ENGINEERING PROJECTS (SA)-SAHARAN AFRIC
A DIVISION OF BATEMAN ENGINEERS LIMITED REG. No. 1951/000114

FOSKOR EXTENSION B
DE-BOTTLENECKING PROJECT
CYCLONES AND THICKENER
G.A AND DETAILS OF THICKENER CYCLONE SUPPORT STRUCTURE

SCALE: AS SHOWN
SHEET: 1 OF 1

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A0 PROJECT No. M8083 REV 4

DWG No. H83103S310001001

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