

MATERIAL SPECIFICATION

VOCAB NUMBER	ITEM DESCRIPTION
132087	STAYROD AND BOW 3200 X M24, GALVANISED HEAVY DUTY

SPECIFICATION DETAILS

1. MATERIALS:

Steel of Property class 4.6 to AS 1111; and grade S1020 – 1040 to AS 1442.

2. DESCRIPTION:

Dimension as shown on drawing. Minimum failing load of assembly 128KN. Threads shall be ISO coarse pitch to tolerance 8g as in AS1275.

3. NUTS AND BOLTS:

Nuts shall be ISO metric double chamfered class 5 to AS 1112. Bolt heads shall comply with AS 1111.

4. FINISH:

All components shall hot dip galvanised to the requirements of AS 1214 and AS 1650.

- Unit of Measure: Set

- Rejection: PNG Power Ltd reserves all rights to reject whole or part of the order not complying with this specification and is not liable for any cost or loss with the return of rejects to the Supplier. Facilitation of Invoice Credit must commence between the supplier and PNG Power Ltd through the process of PNG Power Ltd Discrepancy Report provisions.

Drawing References: BWI 64501626

Manufacturer's Product Code:



STANDARDS COMMITTEE APPROVAL

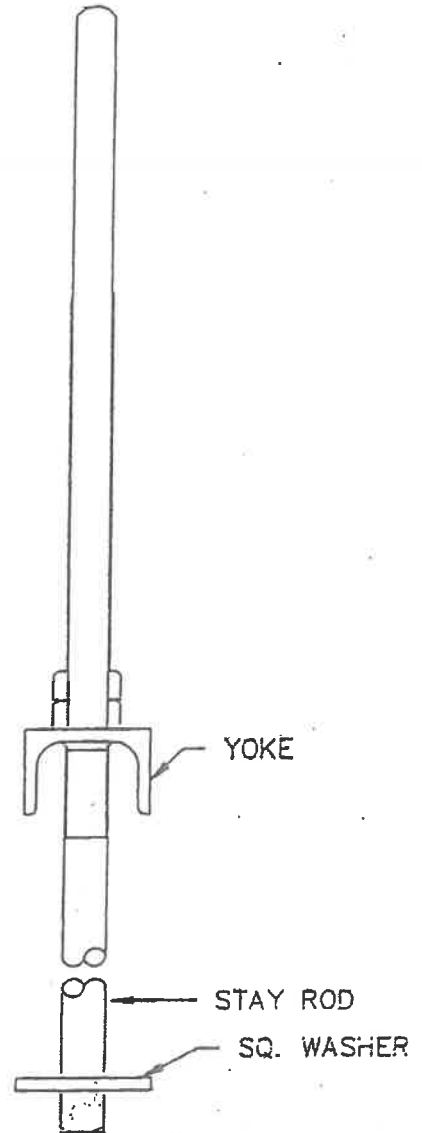
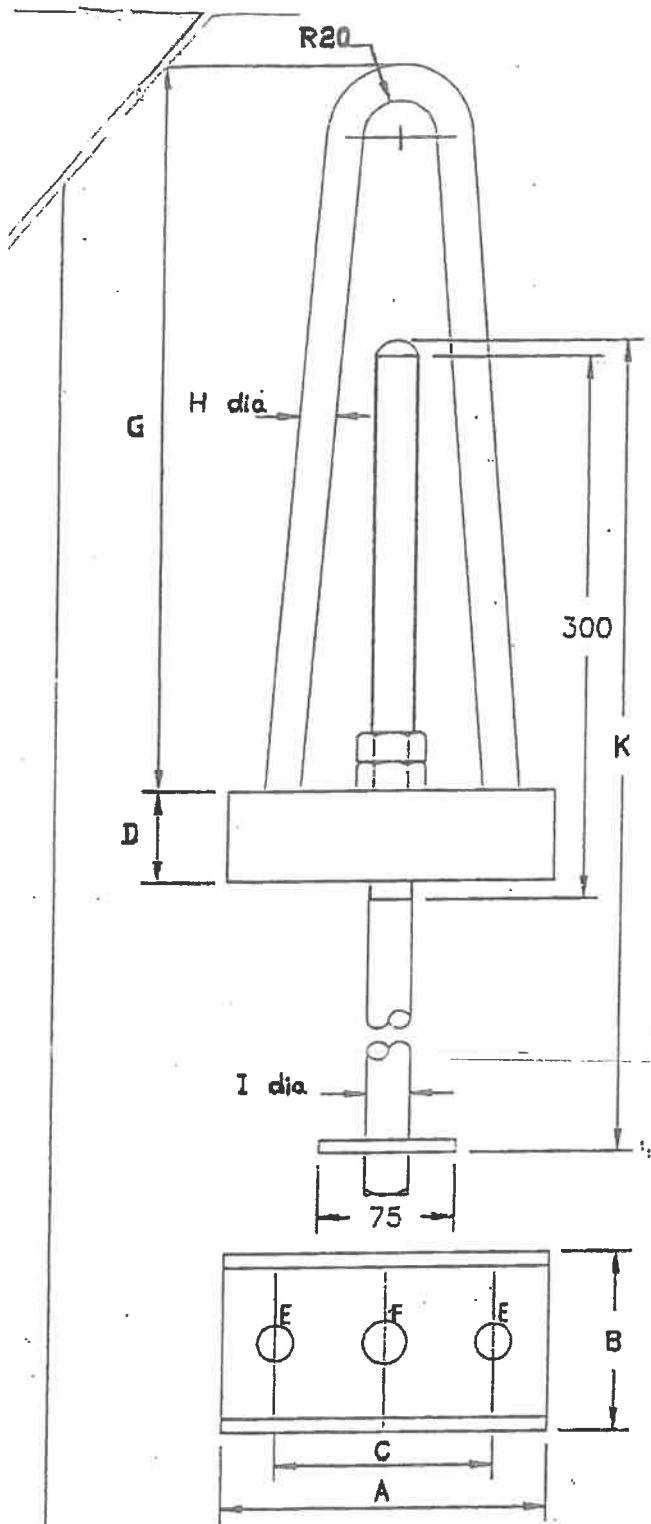
Approval by Alex Oa
Chairman

Signature: 

Date: 3 / 6 / 2015

DATA REVIEW ENDORSEMENT

NAME	TITLE	SIGNATURE	DATE
G. Peni	Team Leader Standards and Materials		2/6/15
G. PENI	✓		20/1/19



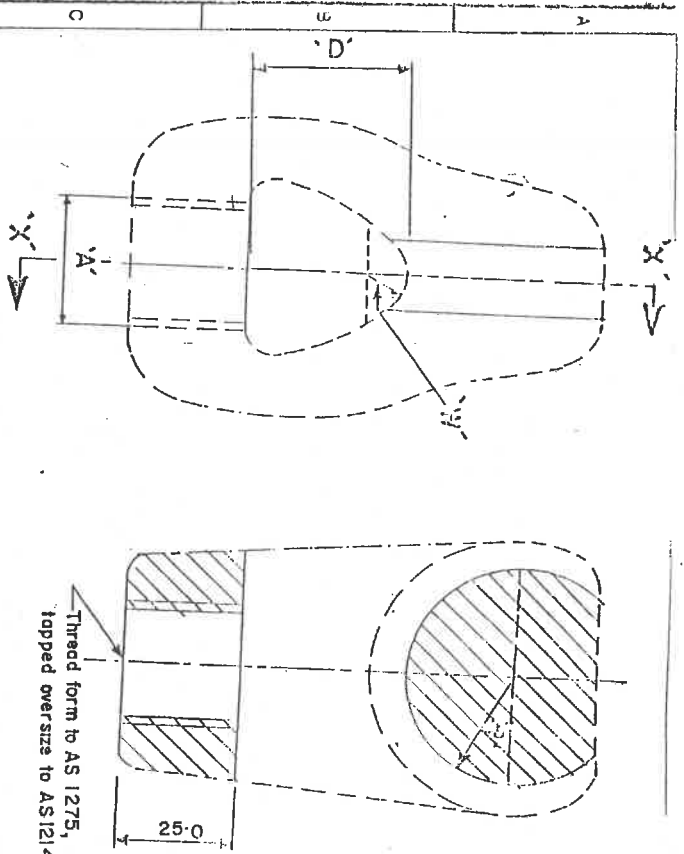
NOTES

1. MATERIAL MILD STEEL
2. HOT DIP GALVANISE ACCORDING TO AS 1214 AND 1650
3. SCREW THREAD IN ACCORDANCE WITH AS 1275-1985

VOCAB No	YOKE						BOW		ROD	
	A	B	C	D	E	F	G	H	I	K
132085	130	75	100	40	20	20	335	15	20	2745
132087	180	100	120	50	20	25	380	20	24	3200

ALL DIMENSIONS IN mm

PNG RURAL ELECTRIFICATION NOT TO SCALE	TITLE	JOB No
	STAY ROD AND BOW	43-645-01
		DRAWING No
		64501626



A	D Min	W Min	R Min	Min Tapping load	Working load	Proof load
20	32	6	19	84 kN	33 kN	50 kN
24	32	8	22	144 kN	57 kN	86 kN

MATERIAL: Forged steel (Selected from AS1124, Part 2 Clause 4.2.2)

FINISH: Hot dip galvanised to AS-1650

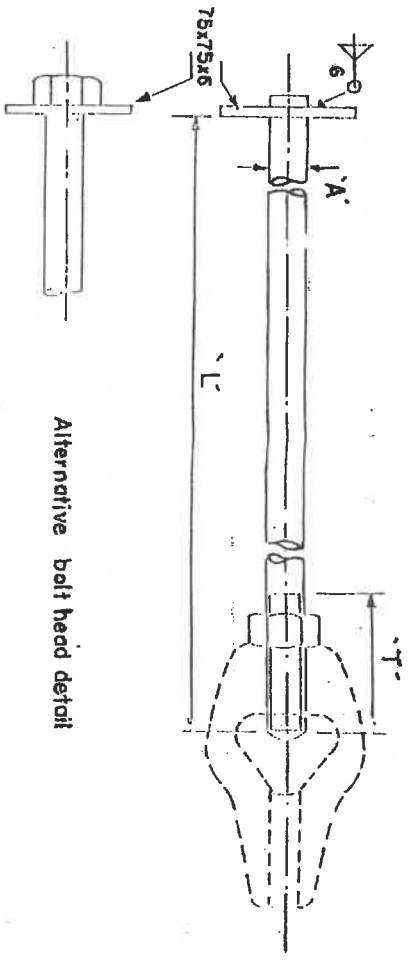
NOTE

1. Broken outlines are not critical and may be varied at the option of the supplier.
2. Thimble groove surface to be free from sharp projections.
3. All dimensions in mm.

THIMBLE EYENUT

REVISION	Rec. for Iss. Design Eng.	App. for Iss. Princ. Eng.	Date

SECTION 'X-X'



A	L	T Min	Min Tapping load	Working load	Proof load
20	274.5	80	98 kN	35 kN	53 kN
24	320.0	80	141 kN	57 kN	86 kN

MATERIAL: Grade 4.6 steel to AS1111.

THREADS: 150 metric to AS1275 and AS1214.

NUT: Galvanised double chamfered class 5 to AS1112.

FINISH: Hot dip galvanise to AS1650.

NOTE: 1. Washer may be welded in position or retained by standard bolt head at option of supplier.

2. All dimensions in mm.

STAYROD



Drawn	ANDY GEMVAL	Design Eng.
Checked	<i>[Signature]</i>	Princ. Eng.
Checked	<i>[Signature]</i>	Chief Design
App. for Iss.	<i>[Signature]</i>	Princ. Eng.
Date	9th of AUGUST, 1988.	

STAYROD AND THIMBLE EYENUT	Revision	A3	Drawing Number	SC - 4/8
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- NOTES:
- STAY DESIGNATION: D
 - TRAVERSE DRAWING
 - SINGLE STAYING OR DOUBLE STAYING WITH 400 RIGID AND BOX
 - RIGID STAY TYPE DETERMINED BY APPLIED LOAD
 - MAXIMUM HORIZONTAL TENSILE LOAD (MT)

TYPE: 55 71 11

LIGHT 15 21 22 25

MEDIUM 36

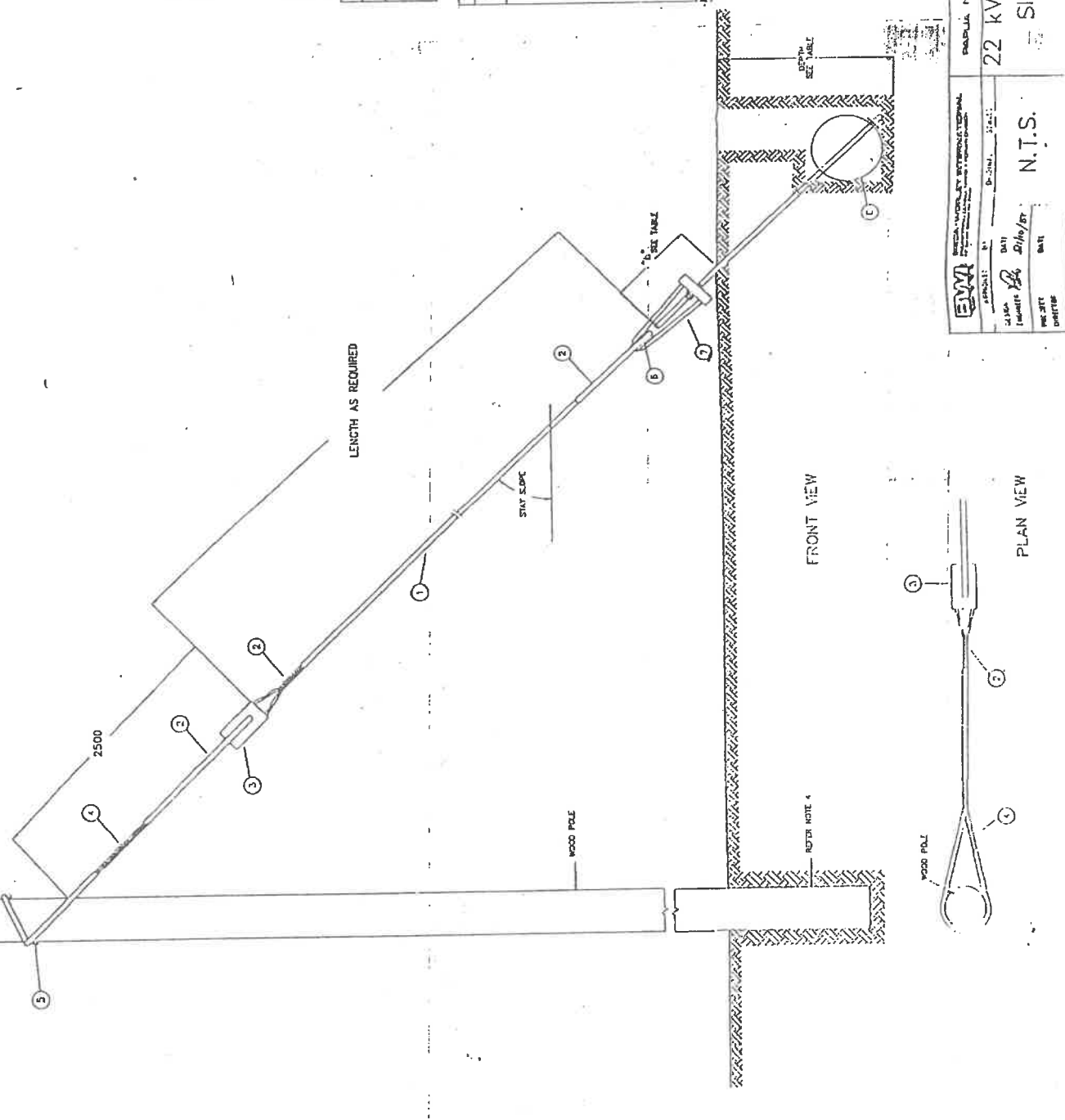
HEAVY 38 44 45 56

EXTRA HEAVY 55

- BASE POLE TOWARD STAY SO THAT WHEN CONDUCTORS ERRECTED POLE IS VERTICAL
- FOR POLE FOUNDATIONS SEE DISTRIBUTION CONSTRUCTION MANUAL
- STAY MUST INSURE LINE ANGLE
- FOR TRAY LINE USE CYL INSULATOR (MUST BE USED ON EXTRA-HEAVY STAY)
- FOR DOUBLE GROUND STAY SEE DRAWING ADDITIONAL

TYPE	STAY SCOPE		DEPTH	HT
	45°	60°		
LIGHT (M2)	1850	400	1850	450
MEDIUM (M2)	2000	400	2000	650
HEAVY (M2)	2300	400	2300	850
EXTRA HEAVY (M2)	2600	400	2600	1050

STAY DESIGNATION	STAY TYPE	LIGHT		MEDIUM		HEAVY		EXTRA HEAVY	
		RIG	MCB	RIG	MCB	RIG	MCB	RIG	MCB
6	SINGLE TOWER	13305	1	13305	1	13305	1	13305	1
7	RIGID AND BOX	13305	1	13305	1	13305	1	13305	1
8	TOWER	13305	1	13305	1	13305	1	13305	1
9	TRUSS	13305	1	13305	1	13305	1	13305	1
10	OUTRIGGER	13305	1	13305	1	13305	1	13305	1
11	STAY INSULATOR	13305	1	13305	1	13305	1	13305	1
12	CITY CRP	13305	1	13305	1	13305	1	13305	1
13	STAY WIRE	13305	1	13305	1	13305	1	13305	1



EMVA ENGINEERING MATERIALS VENTURES ASSOCIATES

DATE: BY: DRAWN BY: CHECKED BY:

SCALE: PROJECT NO: SHEET NO: TOTAL SHEETS: DATE:

APPROVAL: BY: DATE:

N.T.S.

22 kV DISTRIBUTION LINE

SINGLE GROUND STAY

SW - 4/7

64501016

PROJECT NO: SHEET NO: TOTAL SHEETS: DATE: