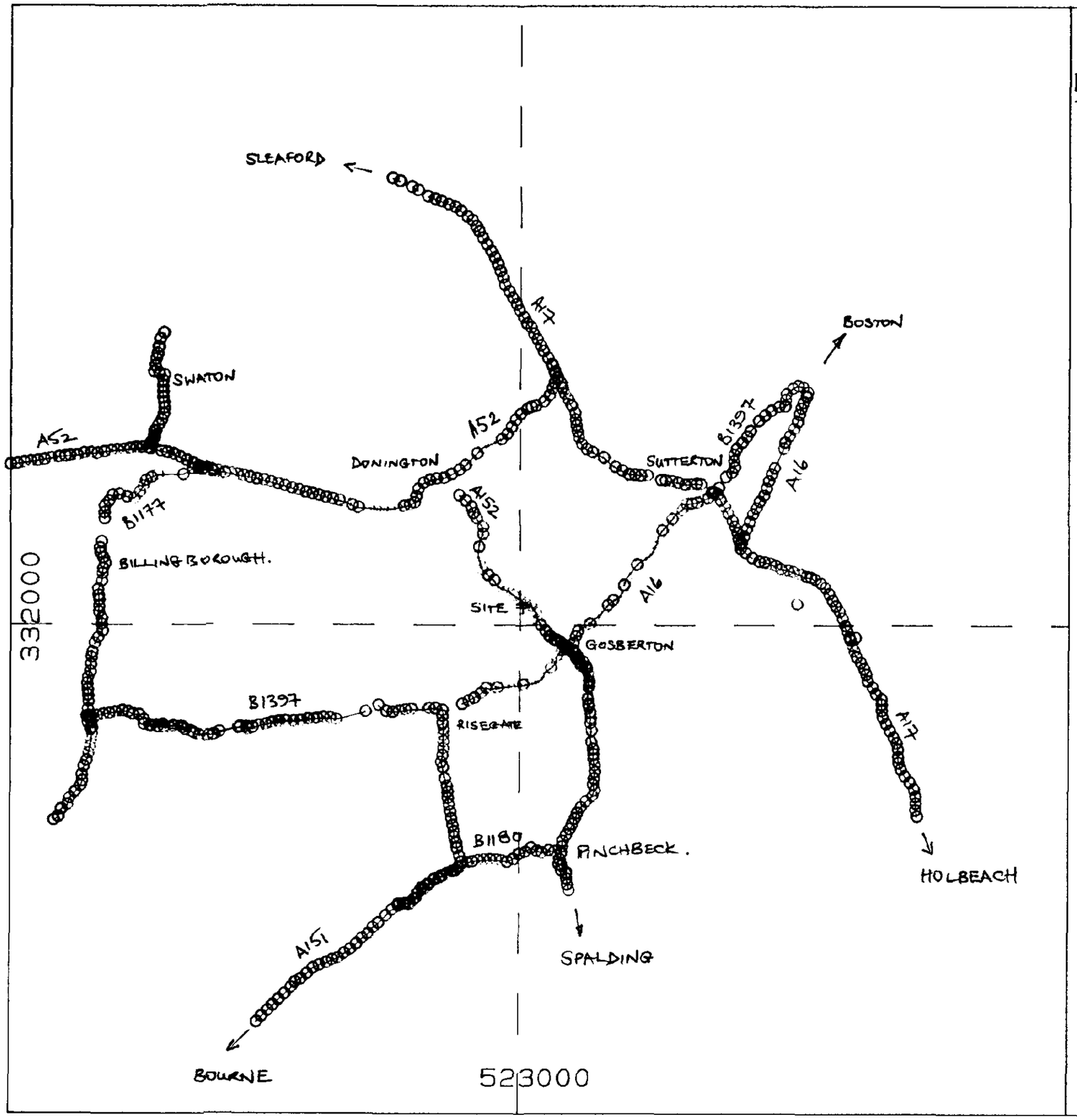


LIN018A GRANTHAM TRANS 30M
Tue Jan 24 09:38:27 1995

TRANSMISSION HEIGHT 30m AGL

DETERMINED PLAN

SOUTH HOLLAND D.C.
PLANNING DEPT
14 MAR 1995
REF...H15/0286/95

THRESHOLDS:

SIGNAL >=-87.0dBm
GOOD IN-BUILDING

SIGNAL >=-98.0dBm
MED IN-BUILDING

SIGNAL >=-103.2dBm
POOR IN-BUILDING

SIGNAL >=-109.0dBm
STREET MOBILE

SIGNAL >=-110.0dBm

SIGNAL >=-112.0dBm

SIGNAL >=-117.5dBm
CELL ACCESS THRESHOLD

SIGNAL >=LOWEST
NO COVERAGE.

0 2 4 km

KEY

EXISTING STRUCTURES

GREENFIELD SITES

Lincoln Trent View

Lincoln Centre

Wellington

North Rauceby

East Heckington

Boston Hospital

Brentham Transport

Long Sutton

500

510

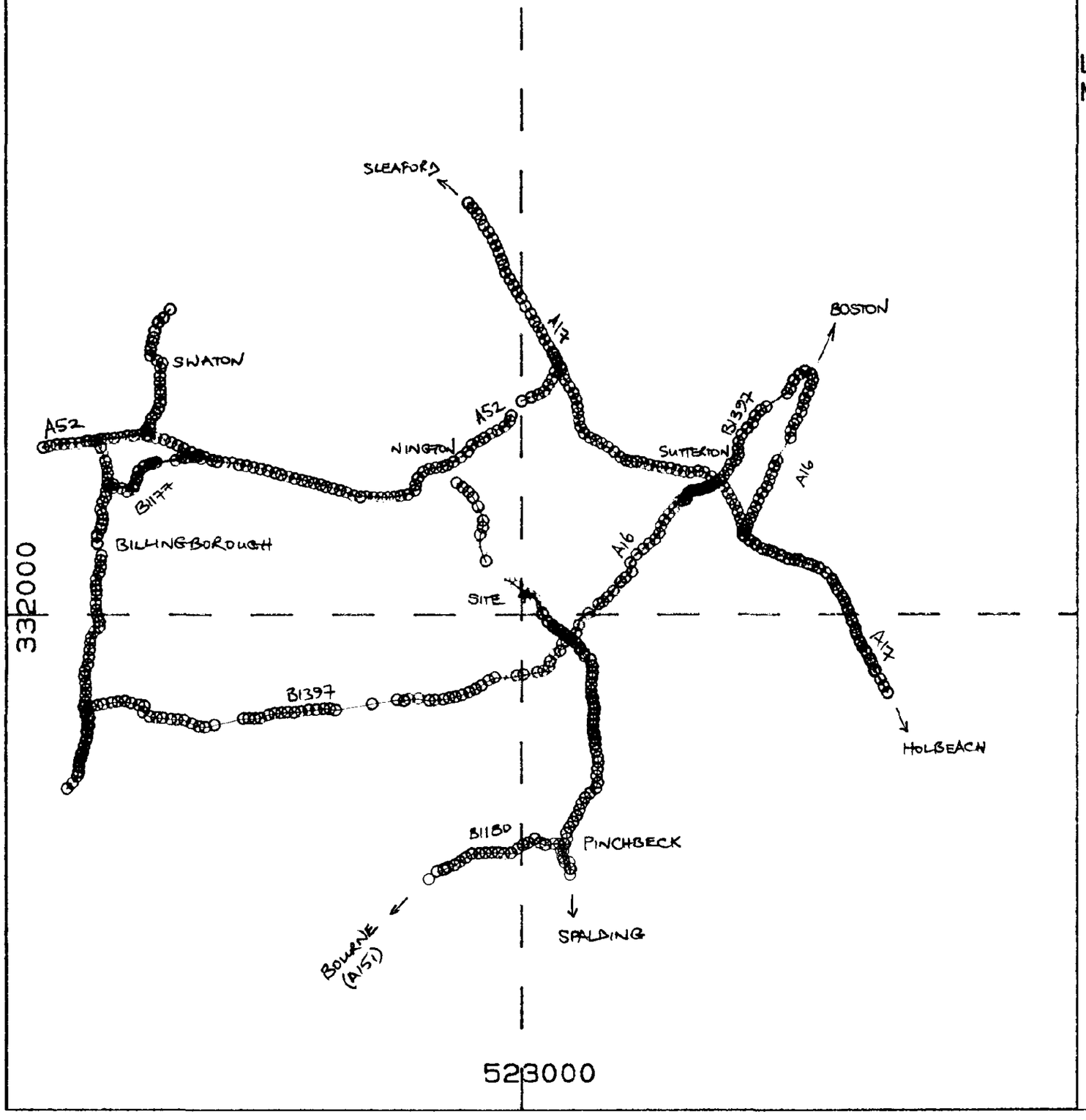
520

530

540

550

SOUTH ... DC
PLA... T
4 MAR 1995
REF... H15/0286/95



LIN018A GRANTHAM TRASPORT
Mon Jan 23 10:47:32 1995

TRANSMISSION HEIGHT 15m AGL.

THRESHOLDS:

SOU[illegible] D.C.
[illegible]T
14 MAR 1995
REF. H15/0986/95.

[illegible] GOOD IN-BUILDING

—— SIGNAL >=-98.0dBm
MED IN-BUILDING

—— SIGNAL >=-103.2dBm
POOR IN-BUILDING

—— SIGNAL >=-109.0dBm
STREET MOBILE

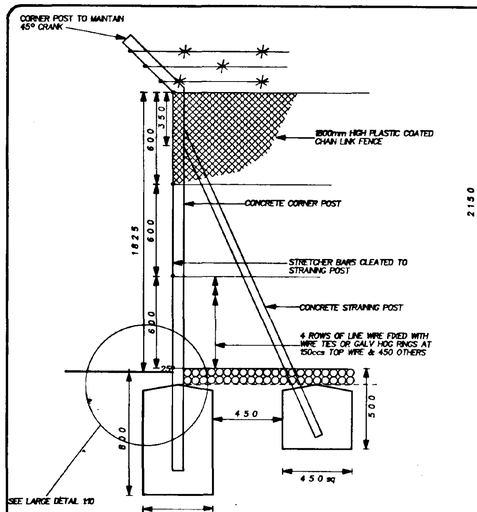
—— SIGNAL >=-110.0dBm

—— SIGNAL >=-112.0dBm

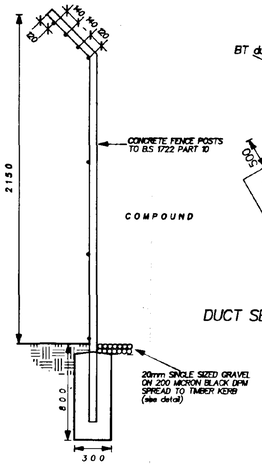
—— SIGNAL >=-117.5dBm
CELL ACCESS THRESHOLD

—— SIGNAL >=LOWEST
NO COVERAGE.

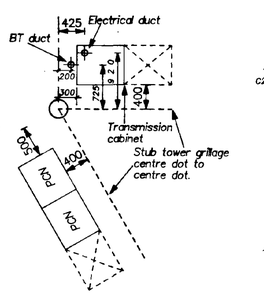
0 2 4 km



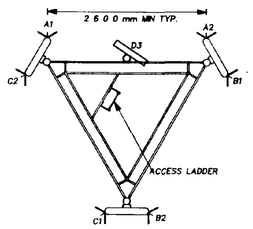
ELEVATION OF CORNER STRAINING POST 1:20



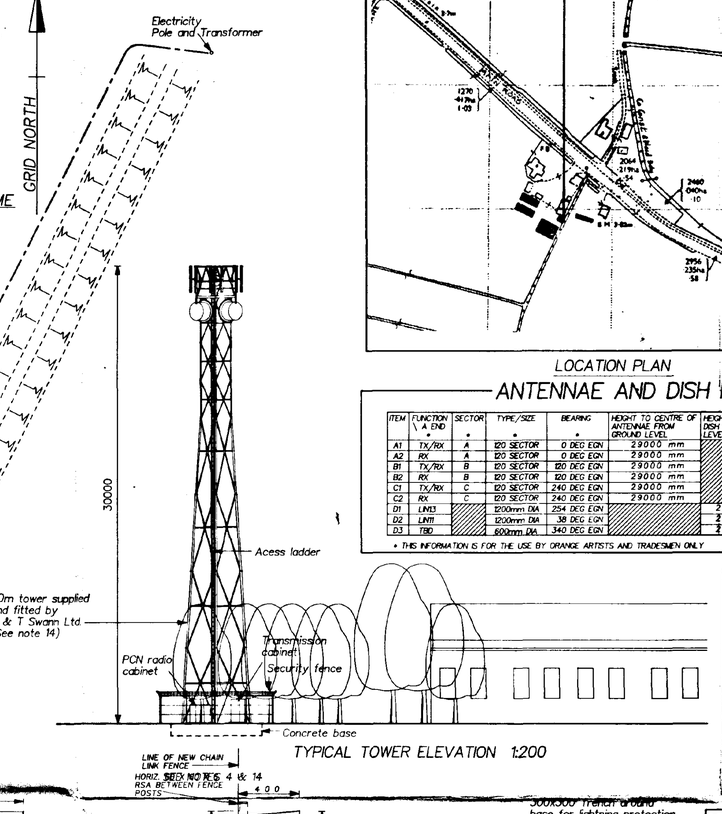
SECTION A–A 1:20



DUCT SETTING OUT ADJ. TOWER 1:50



PLAN OF TOWER HEADFRAME 1:50



TYPICAL TOWER ELEVATION 1:200

LOCATION PLAN

ANTENNAE AND DISH KEY

ITEM	FUNCTION A END *	SECTOR *	TYPE/SIZE *	BEARING *	HEIGHT TO CENTRE OF ANTENNAE FROM GROUND LEVEL	HEIGHT TO CENTRE OF DISH FROM GROUND LEVEL	REMOTE / RFU *	LNA *
A1	TX/RX	A	120 SECTOR	0 DEG EGN	29000 mm			NO
A2	RX	A	120 SECTOR	0 DEG EGN	29000 mm			NO
B1	TX/RX	B	120 SECTOR	120 DEG EGN	29000 mm			NO
B2	RX	B	120 SECTOR	120 DEG EGN	29000 mm			NO
C1	TX/RX	C	120 SECTOR	240 DEG EGN	29000 mm			NO
C2	RX	C	120 SECTOR	240 DEG EGN	29000 mm			NO
D1	LINK1		1200mm DIA	254 DEG EGN		27000 mm	YES	
D2	LINK		1200mm DIA	38 DEG EGN		27000 mm	YES	
D3	TBD		600mm DIA	340 DEG EGN		29000 mm	YES	

* THIS INFORMATION IS FOR THE USE BY ORANGE ARTISTS AND TRADESMEN ONLY

STATUS BOX

BUILD PACKAGE	
DRAWING STATUS	DATE
SURVEY DONE	17.2.95
SURVEY DRAWING	28.2.95
EQUIPMENT ADDED	2.3.95
FEA LETTER	.
DESIGN AND DETAIL DRAWINGS + REPORT	.
TENDER ISSUE	.
CONSTRUCTION ISSUE	.
AS BUILT ISSUE	.

Notes:–

1. This drawing is to be read in conjunction with all other Contract Drawings as listed in "Section 2 – Works specification" of the contract specification.

2. This Drawing is to be read in conjunction with the "Works Specification" which is Section 2 of the contract specification.

3. The Main Contractor is to supply and fit all those items of new work and alterations shown on this drawing and all other contract drawings as being in his supply and as listed in the Contract Specification.

4. All antennae, dishes and their associated radio feeder cables will be supplied and fitted by Orange P.C.S Ltd or their artists and tradesmen, after Practical completion of the contract.

5. Work to figured dimensions only. IF IN DOUBT ASK! All dimensions to be varified by the contractor prior to the commencement of works. The exact position and correct orientation of the base is to be confirmed with R&T Swan Ltd in advance of any concreting.

6.i. Blinding and mass concrete to be C25P OPC (to BS12) 20mm nominal aggeregate (to BS882) of medium workability i.e. 16 cement:total aggeregate in accordance with BS5328.
ii. Concrete to be C40 Design mix with OPC (to BS12) nominal maximum aggeregate size of 20mm to (BS882) minimum cement content of 325 kg\m cube and maximum free water cement ratio of 0.55 and 5% air entrainment at the point of placing. But as shown on John Allen Associates Drg if different to above for tower concrete base.

7. New pre–fitted meter cupboard (free–issue) from Orange P.C.S Ltd to be collected from regional transport point. Main Contractor will be required to provide electrical test notice for whole installation after fitting and connection.

8. All ducts are to be provided with "slow" bends at all changes in direction . The incoming ducts are to be at a depth shown on the drawings but at a min of 100mm from the top of the duct from below the slab concrete. The ducts connecting various points within the slab plan can be cast within the slab concrete The ducts are to be smooth wall UPVC 100mm dia. Complete with draw wire. All buried ends of ducts are to be marked at the ground surface with permanant clearly described markers.

9. The finish to the top surface of the slab is to be wood floated. Being careful to maintain the 25 mm fall shown to the top of the slab.The sides of the raft slab are to formed as type A of BS8110 cl 6.10.3. namely properly designed formwork. Particular care is to be taken with the top 200mm which will remain visible after completion.

10. Cover to reinforcement is to be min 60mm Bottom and sides 80mm top.

11. Formation level below the blinding is to be hand trimmed if necessary and to be capable of supporting an applied load of 100n\sq.m. The contract Administrator is to be notified in advance of when he may inspect the formation to ensure compliance with this requirment. No blinding is to be placed until the formation has been approved by the Contract Adminstrator.

12. The site is to be left in a clean and workmanlike manner upon completion of the works and is to be similary maintained during the progress of the works.

13. The contractor is to be responsablefor the design maintenance and removal of all temporary works.

14. The tower will be supplied and fitted by others onto a foundation stub grillage assembly that is to be cast into thr raft foundation by the main contractor . The foundation stub grillage assembly is to be supplied and deliveredboth free of charge, by R&T Swan ltd. Under the direction of the main contractor. The main contractor is responsible for the site handling and accurate positioning and concreting of the grillage in accordance with detailed recommendations attached to the "contract specification".

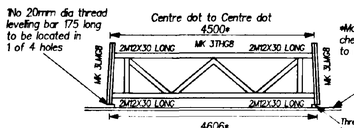
15. All surplus excavated material is to be removed from site and carted to a tip.

16. A trench is to be provided all round the foundation slab to provide a lightning protection earthing system. The complete lightning protection system to be by main contractor (see note 19)

17. After concreting the raft slab foundation and installing the grp meter cupboard the main contractor is to allow access for Orange P.C.S Ltd artists and tradesmen to erect the radio tower on the stub grillage, install the radio equipment. After these installations the main contractor is to erect the fencing and generally complete.

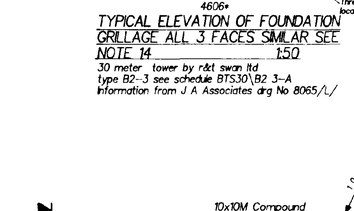
18. Fencing is to complywith BS1722 part 10. Cranked top tapered concrete posts 2 1 5 0 mm o/h tall.

19. For lightning protection and earthing details please refer to standard Orange P.C.S Ltd Drg. No 10/1785/BX & 10/1786/1X

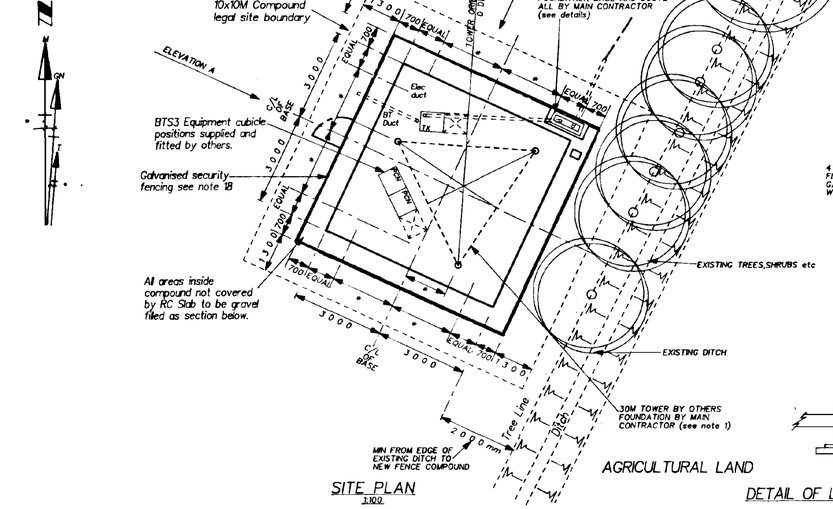


TYPICAL ELEVATION OF FOUNDATION GRILLAGE ALL 3 FACES SIMILAR SEE NOTE 14 1:50

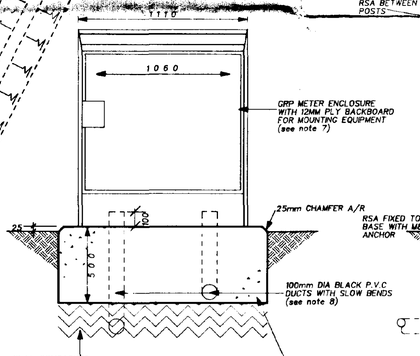
30 meter tower by r&t swan ltd type B2–3 see schedule BTS30\B2 3–A Information from J A Associates drg No 8065/L/



DETAIL OF KICK BOARD AND PEBBLES 1:10

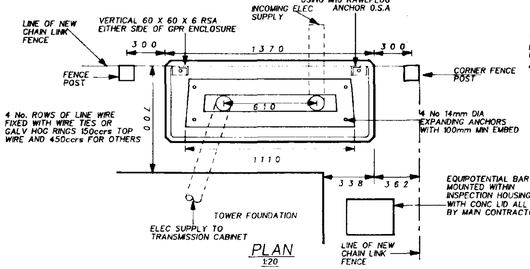


SITE PLAN 1:100



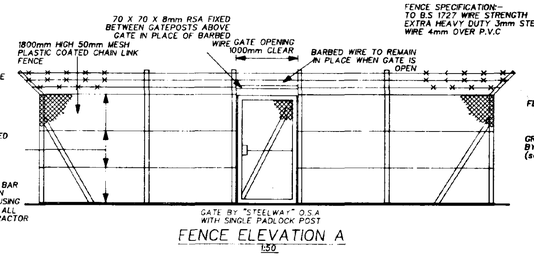
FRONT ELEVATION 1:20

SIDE ELEVATION 1:20



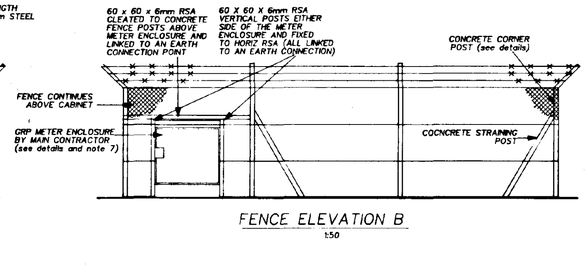
PLAN 1:20

GRP METER ENCLOSURE DETAILS



FENCE ELEVATION A 1:50

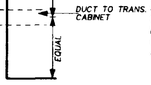
FENCE SPECIFICATION– TO BS 1727 WIRE STRENGTH EXTRA HEAVY DUTY 3mm STEEL WIRE 4mm OVER P.V.C



FENCE ELEVATION B 1:50



DETAIL OF LEVELLING BAR 1:5



SECTION THROUGH BTS 30m TOWER FOUNDATION 1:20

refer to note 1

Refer to JA Associates site specific details and drawing no. 8065\R\35 for all tower details.

300X300 Trench around base for lightning protection Main Contractor to leave sufficient spoil and backfill once lightning protection system installed.

SOUTH HOLLAND D.C. PLAN DEPT 14 MAR 1995 REF. H/S/0086/95

THIS DRAWING CONTAINS INFORMATION DERIVED FROM THE TOWER AND FOUNDATION DESIGN DATA PROVIDED BY R & T SWANN LIMITED AND JOHN ALLEN ASSOCIATES

Architects, Civil & Structural Consultants
Grantham Parsons and Nolan Ltd
2219 Coventry Road
Sheldon Birmingham B26 3EH
Telephone (0121) 742 7462 Fax (0121) 742 6865

EV	DATE	DESCRIPTION	BY

TITLE
BTS 3 Microvave Installation at Grantham Transport Quadring, Lincolnshire

General Arrangement

SCALE	DRAWN	CHECKED	APPROVED
AS SHOWN	SAM	MDG	
	DATE 2/3/95	DATE 7/3/95	DATE

DRAWING NUMBER
40/LIN–0018/01/1X

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