PLAN # 20598

☒ City ☐ County

APPLICATION FOR THE PLANNING CLEARANCE FOR A BUILDING PERMIT

SUBMITTALS REQUIRED: (2) Plot Plans showing Parking, Landscaping, Setbacks to all property lines, and all streets which abut the parcel:

BLDG ADDRESS: 345 Hillcrest Manor
SUBDIVISION: _____
FILING # _____ BLK # _____ LOT # _____
TAX SCHEDULE NUMBER: 2945-112-17-004
PROPERTY OWNER: XYZ Television Inc.
ADDRESS: P.O. Box 289
PHONE: 242-5000
DESCRIPTION OF WORK AND INTENDED USE: Installation of 2 Satellite Dishes - CBS Television Network

SQ FT OF BLDG: _____
SQ FT OF LOT: _____
NUMBER OF FAMILY UNITS: _____
NUMBER OF BUILDINGS ON PARCEL BEFORE THIS PLANNED CONSTRUCTION: one
USE OF ALL EXISTING BUILDINGS: Radio/TV Station

****

FOR OFFICE USE ONLY

****

ZONE: RSF-5
SETBACKS: F 45'E S 5' R 25'
RIGHT OF WAY: _____
MAXIMUM HEIGHT: 32'
PARKING SPACES REQUIRED: n/a
LANDSCAPING/SCREENING: n/a

FLOOD PLAIN: YES (NO)
GEOLOGIC HAZARD: YES (NO)
CENSUS TRACT NUMBER: 4
SPECIAL CONDITIONS: _____

****

ANY MODIFICATION TO THIS APPROVED PLANNING CLEARANCE MUST BE APPROVED IN WRITING BY THIS DEPARTMENT.
THE STRUCTURE APPROVED BY THIS APPLICATION CANNOT BE OCCUPIED UNTIL A CERTIFICATE OF OCCUPANCY (CO) IS ISSUED BY THE BUILDING DEPARTMENT (Section 307, Uniform Building Code).
ANY LANDSCAPING REQUIRED BY THIS PERMIT SHALL BE MAINTAINED IN AN ACCEPTABLE AND HEALTHY CONDITION. THE REPLACEMENT OF ANY VEGETATION MATERIALS THAT DIE OR ARE IN AN UNHEALTHY CONDITION SHALL BE REQUIRED.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND THE ABOVE IS CORRECT AND I AGREE TO COMPLY WITH THE REQUIREMENTS ABOVE. FAILURE TO COMPLY SHALL RESULT IN LEGAL ACTION.

A B Sackett
SIGNATURE

DATE APPROVED: 4-11-84
APPROVED BY: T. Shelton

XYZ Television, Inc.

"SERVING WEST OF THE CONTINENTAL DIVIDE – IN COLORADO, NEW MEXICO AND UTAH"

Grand Junction, Colorado 81502 — Hillcrest Manor — P.O. Box 789 — Dial 242-5000

April 11, 1984

It is necessary at this time for XYZ Television, Inc. to install two (2) satellite receiving antennas to receive CBS Television Network service to KREX-TV due to the scheduled discontinuance of present network service to the station via Mountain Microwave.

This installation involves placement of two (2) concrete pads located 40 feet apart as indicated on attached plot. Construction of pads will be done by McCrary Construction Company of Grand Junction. Approximate cost $3,000.

Power service to the 7 meter antenna will be by underground conduit, 80 amp 3 phase wye configuration to be done by B&B Electric of Grand Junction, permit #350. Approximate cost $2,000.

Assembly and installation of antenna onto the pads will be done by the manufacturer, Scientific Atlanta Incorporated of Atlanta Georgia.

In order to provide radio frequency interference protection to the antenna, if determined to be needed after installation of the antennas, Fanwall Roofmount Shielding will be installed by McCrary Construction Company, Grand Junction.

All construction to conform to applied local and state codes.

INSTALLATION INSTRUCTIONS

SERIES 8346 EARTH STATION ANTENNA
FOUNDATION
PUBLICATION NO. 33N043B

Scientific Atlanta

INTRODUCTION

The Series 8346 Earth Station Antennas (figure 1) do not require critical foundation alignment because the antenna can be rotated on its support ring through an azimuth of 360 degrees. This feature greatly simplifies construction of the foundation and consequently results in reduced cost.

Scientific-Atlanta does not represent or warrant that any particular design or size of foundation is appropriate for any particular locality or installation. However, this publication includes wind loading data, typical foundation designs and other information that may be used as a guide when considering professional design of the antenna foundation.

SITE SELECTION

The most important consideration in the selection of a site for your antenna is that a clear line-of-sight is maintained between the dish and the present and future satellites from which you desire reception. Using the satellite aiming coordinates (determined below) for a particular site, be sure that there are no trees, buildings, power lines, etc., between the dish and the satellite. It is important that this clearance includes the total dish surface area and that nothing is blocking even a small portion of its surface.

DETERMINING AIMING COORDINATES

The location (longitude) of each satellite, from which reception is desired, is used in determining the clear line-of-site. The following procedure, through use of an example, describes the method for determining the aiming coordinates of a given satellite with respect to a specific site. This procedure can also be used, after antenna installation is completed, to accurately orient the Series 8346 Elevation-Over-Azimuth Mount for aiming at a desired satellite. Figure 1 shows the dimensions and travel range of the 4.6 meter antenna.

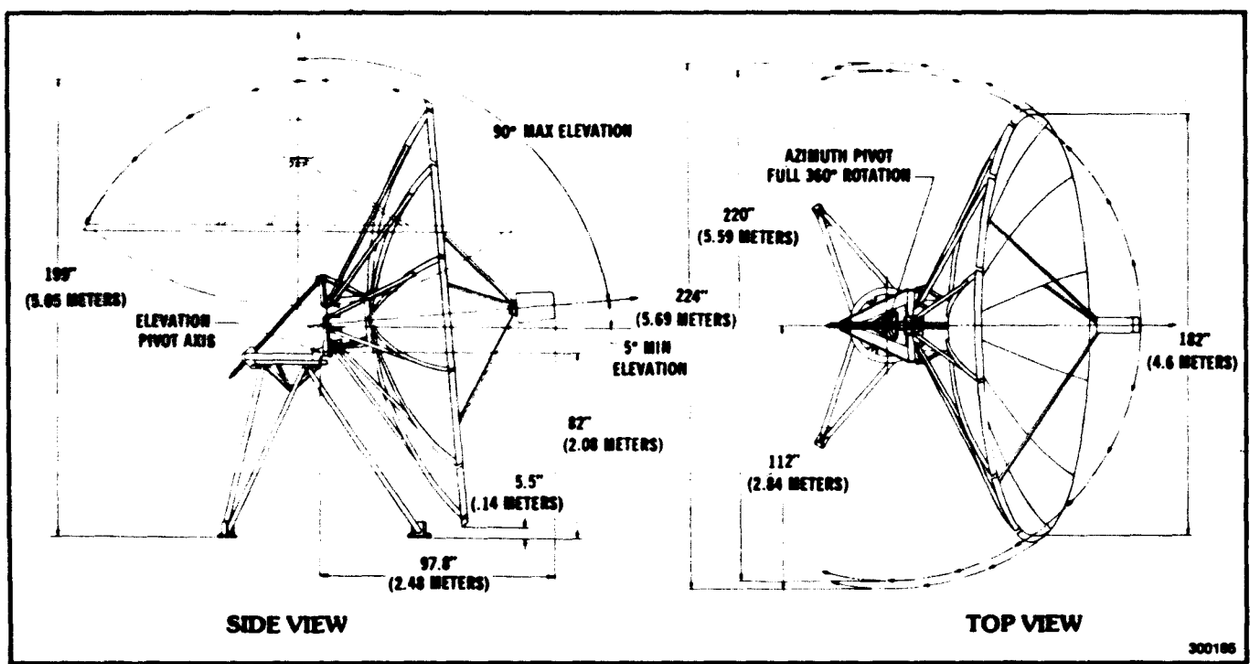


Figure 1. Outline Dimensions of 4.6 Meter Antenna

XYZ TELEVISION, INC.
KREX-AM-FM-TV
P. O. Box 789
Grand Junction, Colorado 81501

XYZ TELEVISION, INC.
KREX-AM-FM-TV
P. O. Box 789
Grand Junction, Colorado 81501

IMPORTANT NOTICE

SCIENTIFIC-ATLANTA DOES NOT REPRESENT OR WARRANT THAT ANY PARTICULAR DESIGN OR SIZE OF FOUNDATION IS APPROPRIATE FOR ANY PARTICULAR LOCALITY OR INSTALLATION.

FOUNDATION CONSTRUCTION NOTES:

1. The foundation heading is not critical to antenna performance. Refer to the foundation section of the manual for general considerations.
2. Proper electrical grounding shall be provided by the installing contractor to meet local applicable codes. This may take the form of a buried grid or a suitable copper stake, depending on local soil conditions. The mount shall be electrically connected to the ground.
3. Provisions must be made to provide suitable support for power, RF and control cables either by buried conduit or overhead raceway. If conduit is supplied, it shall be at least 3 inches diameter.
4. Lightning arrestors must be provided across all cables leaving antenna per applicable local codes and N.F.P.A. codes.
5. Refer to Dwg. 300185 for information on outline and basic dimensions.
6. Areas (6 x 12 inch) for mounting feet should be flat within 1/16 inch and level with respect to one another within 1/4 inch.
7. Use no nuts under foot (Item 1). Foot must rest flush on concrete pad. Use one washer and one nut per anchor bolt to secure feet to pad.

NOTES:

1. Reinforcing bars shall conform with ASTM-A0615-68. All bars shall be Grade 40 or better.
2. All concrete shall be building code standard weight 3000 P.S.I. compressive strength at 28 days.
3. Minimum safe soil-bearing capacity is 2000 PSF.
4. Structural steel shall be ASTM-A-36.
5. Footing is designed to safely support a Model 8346 4.6 Meter Antenna, attached directly to the pad, in a 100 MPH steady wind. (Ref. American National Standard Building Code Requirements, ANSI A58.1, with an effective velocity pressure of 25.6 PSF.)

300443

Figure 8. Pad Foundation, Surface Mount

Section I

GENERAL INFORMATION

1-1. **INTRODUCTION.** This manual describes the Model 8010CM Earth Station Antenna. The antenna is seven meters in diameter and provides an economical capability for reception of geosynchronous satellite transmissions in the 3.7 to 4.2 GHz frequency range. The antenna also has optional transmit capability in the 5.925 to 6.425 GHz range.

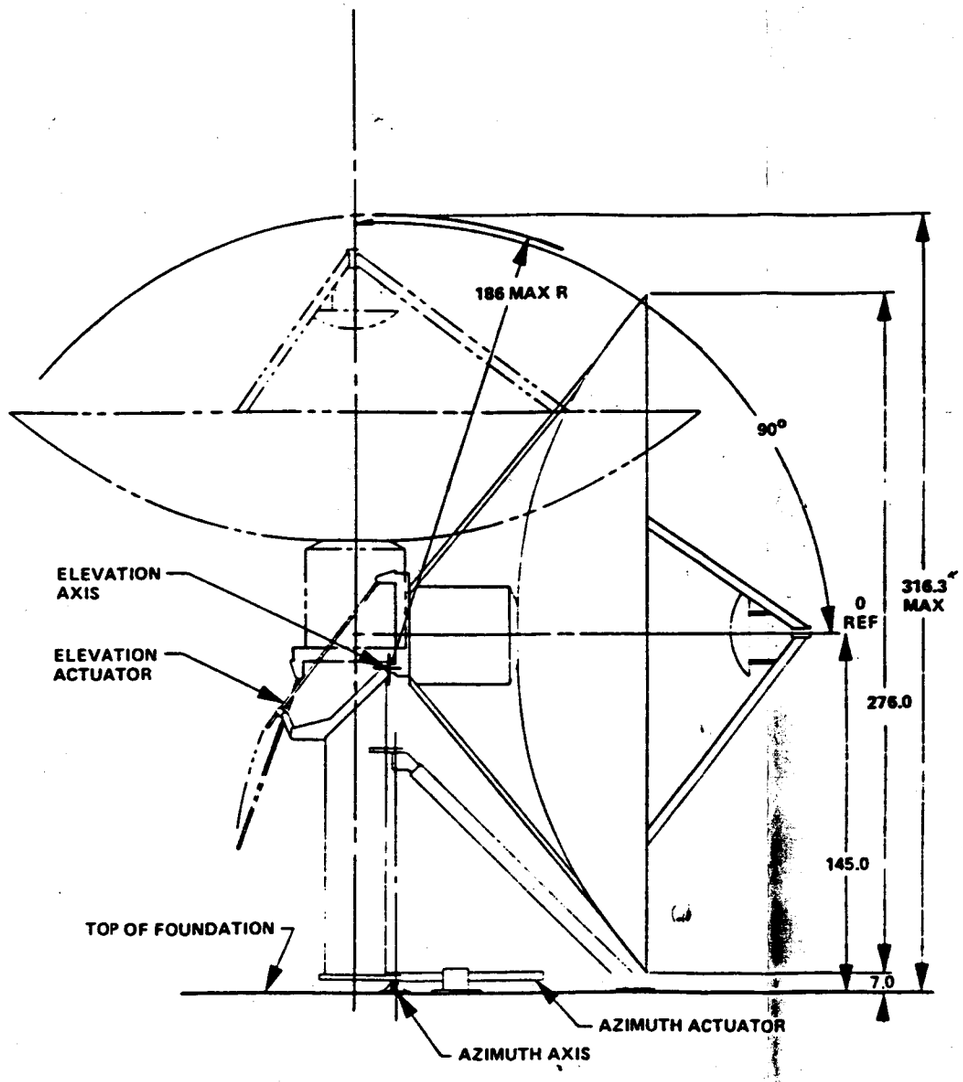
1-2. Instructions for installation, position adjustment, and maintenance are provided in this publication. They are supported by parts lists and in-text illustrations. A trained crew of at least three workmen who are familiar with and make use of safe mechanical assembly techniques will be required to assemble the antenna. Do not make substitutions or alterations without approval.

1-3. **GENERAL DESCRIPTION.** The standard Model 8010CM Antenna consists of a 7-meter shaped main reflector, a shaped subreflector, and a linearly polarized feed on an elevation-over-azimuth mount. Subassembly model designations are listed below.

- Model 8128B Reflector
- Model 8229DP Dual-Polarization, Receive-Only Feed and Subreflector
- Model 8028M Elevation-over-Azimuth Mount, motorized
- Model 8083-7 Anchor Bolt/Template Kit
- Model 8039A-7 Motorized Polarization Drive

Options are:

- Model 8229SP Single Polarization, Receive-Only Feed
- Model 8229RT Orthogonal Polarization, Receive/Transmit Feed
- Model 8229RTC Circular-Polarized, Receive/Transmit Feed
- Model 8229RTP Coplanar Receive/Transmit Feed
- Model 8229DPT Three-port feed (two orthogonal receive ports, one transmit port)
- Model 8240-2 Full Reflector, Feed, and Subreflector Deicing System
- Model 8240-3 Feed and Subreflector Deicing System



55-B-2038
Sheet 1 of 3

NOTES:

1. ALL LINEAR DIMENSIONS ARE SHOWN IN INCHES
2. SEE FOUNDATION DRAWING FOR MOUNTING LOCATION

Figure 1-4. Outline Drawing 7-Meter Antenna Model 8010CM, 55-B-2038 (Sheet 1 of 3)

XYZ TELEVISION, INC.
KREX AM-FM-TV
P. O. Box 789

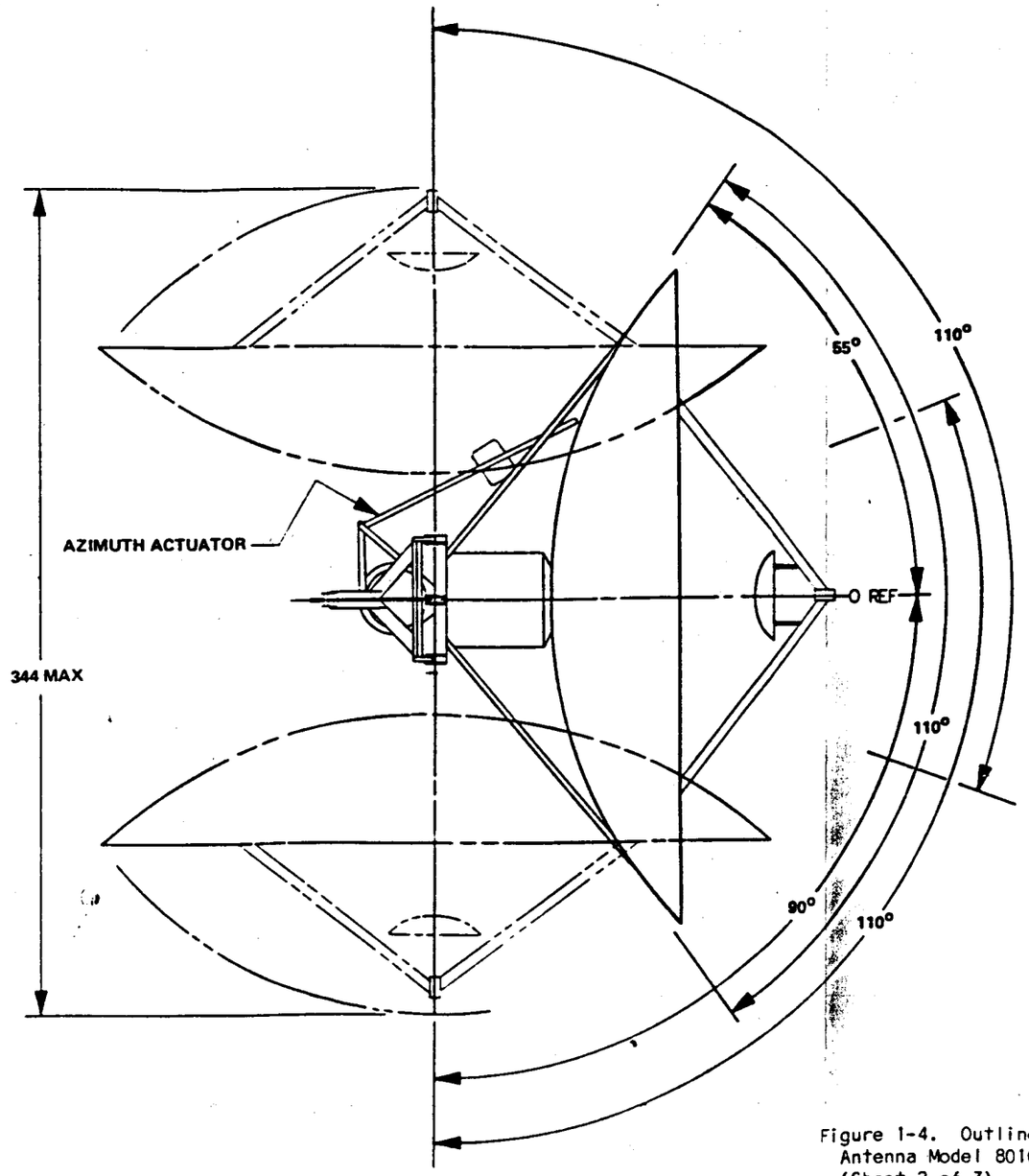
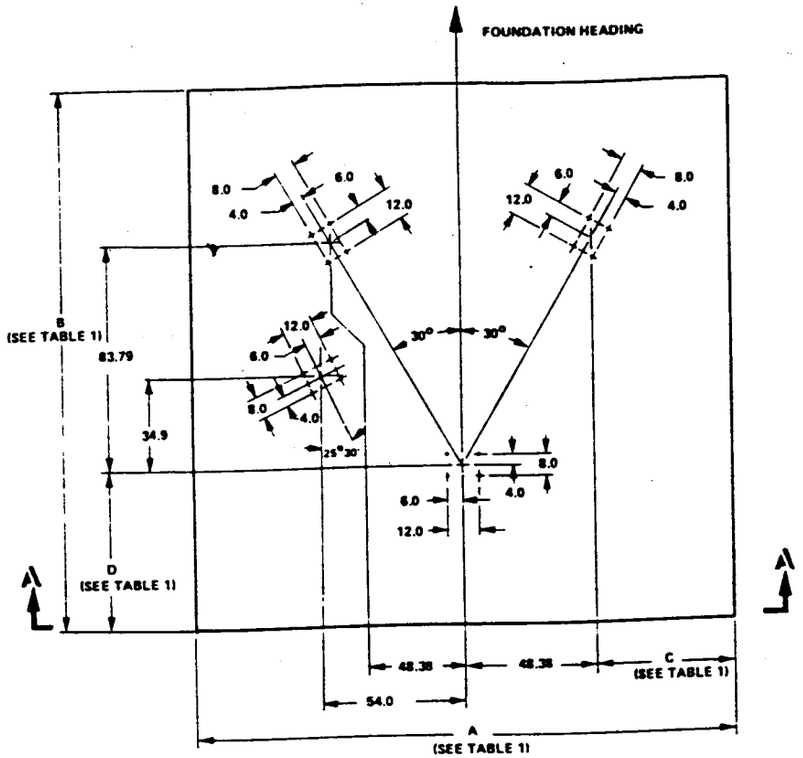
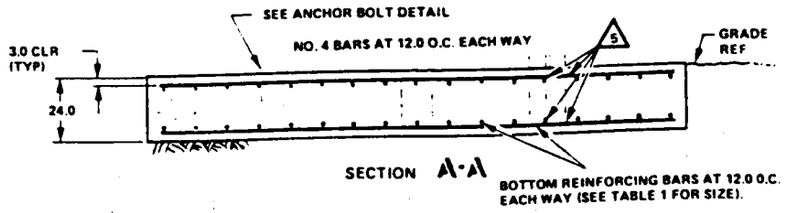
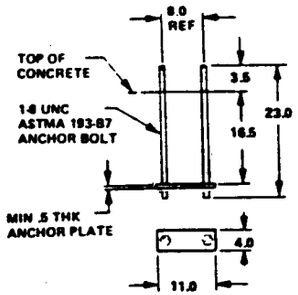


Figure 1-4. Outline Drawing 7-Meter Antenna Model 8010CM, 55-B-2038 (Sheet 2 of 3)







ANCHOR BOLT DETAIL

TYPICAL 8 PL

TABLE 1

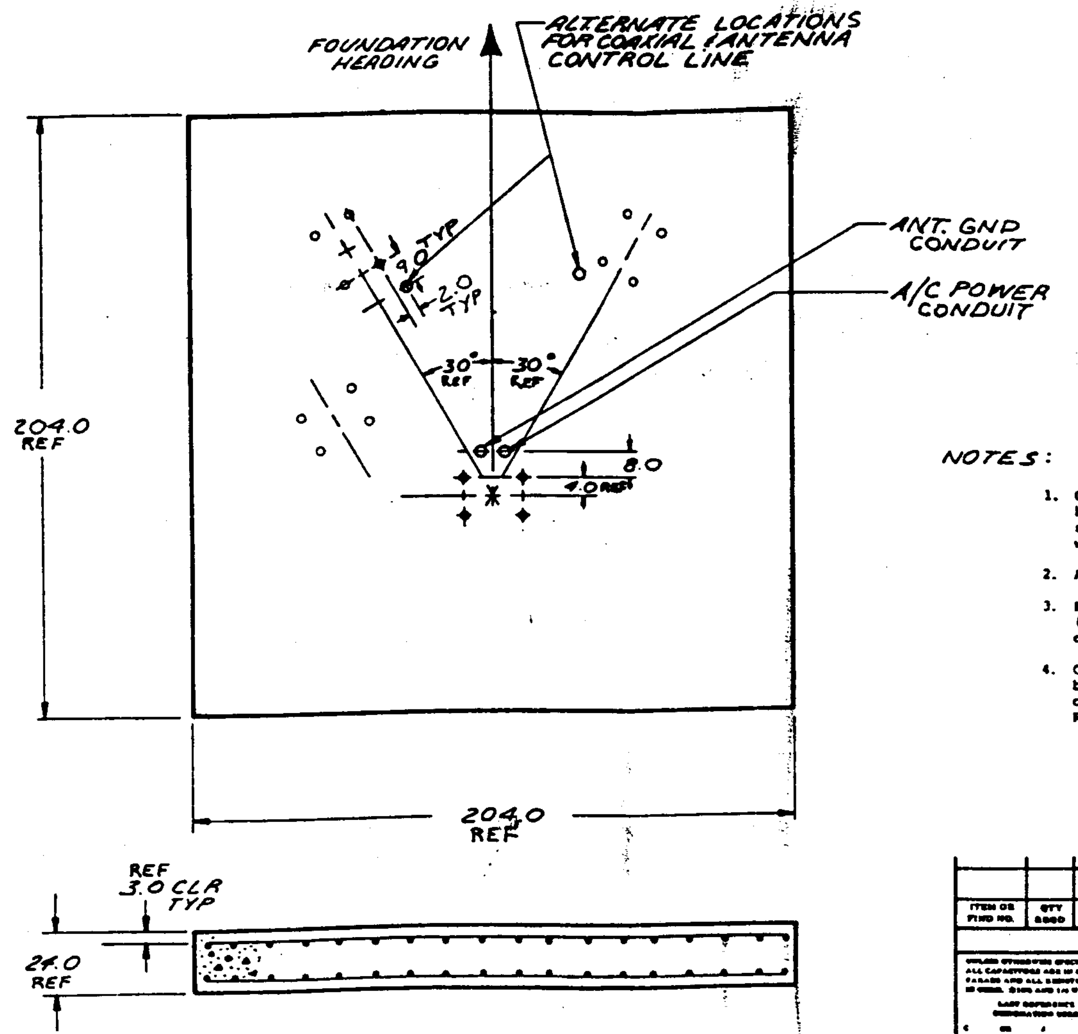
FOUNDATION DESIGN WIND SPEED (MPH)	DIMENSIONS A	B	C	D	BOTTOM REINFORCING BAR SIZE
125	204	204	53.62	60.10	#7(7/8" DIA)
90	150	150	28.62	33.10	#4(1/2" DIA)

NOTES:

1. FOOTINGS DESIGNED FOR 125 MPH AND 90 MPH WIND.
2. REINFORCING BARS SHALL CONFORM WITH ASTM A-615-68. ALL BARS SHALL BE GRADE 60
3. CONCRETE SHALL BE 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
4. SOIL BEARING CAPACITY TO BE A MINIMUM OF 2000 PSF (9765 KG/M^2).
5. DO NOT WELD ANCHOR BOLTS TO REINFORCING BARS
6. FROST LINE TO BE A MAXIMUM OF 24 IN. BELOW GRADE.
7. USE SCIENTIFIC-ATLANTA FOUNDATION TEMPLATE 263031 TO INSURE PROPER ANCHOR BOLT LOCATION. THE TEMPLATE SHOULD BE SECURELY SUPPORTED DURING CONSTRUCTION TO KEEP THE ANCHOR BOLTS PLUMB.
8. PROPER ELECTRICAL GROUNDING SHALL BE PROVIDED BY THE INSTALLING CONTRACTOR TO MEET LOCAL APPLICABLE CODES. THIS MAY TAKE THE FORM OF A BURIED GRID OR A SUITABLE COPPER STAKE, DEPENDING ON LOCAL SOIL CONDITIONS. THE MOUNT SHALL BE ELECTRICALLY CONNECTED TO THE GROUND.
9. PROVISIONS MUST BE MADE TO PROVIDE SUITABLE SUPPORT FOR POWER, RF AND CONTROL CABLES EITHER BY BURIED CONDUIT OR OVERHEAD RACEWAY. IF CONDUIT IS SUPPLIED IT SHALL BE AT LEAST 3 INCHES IN DIAMETER.
10. THIS DRAWING SUPERSEDES 263024.
11. ALL LINEAR DIMENSIONS ARE SHOWN IN INCHES.

55-B-2040-1B

Figure 3-1. Foundation Plan and Loads, 55-B-2040-1B (Sheet 1 of 3)



NOTES:

1. Conduit runs for coaxial & control cables should be planned so that conduit bends are minimized. Any bend RADIUS should not be less than 24" with 36" suggested. Under no circumstances should conduit be routed under bolts within the pad used for critical mounting.

2. A 4" PVC is recommended for coaxial and antenna control lines.

3. Power line conduits must be sized for individual installation requirements (de-icing), etc.) and in accordance with National, State and Local electrical codes.

4. Grounding systems should be designed for any unique site requirements but should be as a minimum: One 5/8" diameter X 8' copper clad ground rod at least 12" from concrete foundation and connected to antenna ground stud by #4 or larger wire. Run in PVC Conduit.

ITEM OR FIND NO.	QTY REQD	S-A STOCK NO.	NOMENCLATURE OR DESCRIPTION	MATL SPEC AND SIZE OR COMPONENT VALUE	IDENTIFYING OR PART NO.	FSCM NO

PARTS LIST

Scientific-Atlanta 3845 Pleasantdale Road Atlanta, Georgia 30340

CONDUIT LOCATION AZIEL 7METER FOUNDATION

SIZE	FSCM NO	DWG NO	REV
C	10110	265960	

SCALE — SHEET 1 OF 1

XYZ TELEVISION, INC.
X-AM-FM-TV
). Box 789