CITY OF SACRAMENTO
DEPARTMENT OF PLANNING & DEVELOPMENT
ZONING ADMINISTRATOR
1231 I Street, Sacramento, CA 95814

ACTION OF THE ZONING ADMINISTRATOR

On Tuesday June 15, 1993 the Zoning Administrator approved with conditions a Zoning Administrator's Special Permit for the project known as Z93-027. Findings of Fact and conditions of approval for the project are listed on pages 2 and 3.

Project Information

Request: Zoning Administrator's Special Permit to allow antennas to be attached to an existing 401,800 sq.ft. building on 2.37± developed acres in the Central Business District (C-3) Zone.

Location: 555 Capitol Mall

Assessor's Parcel Number: 006-0145-025

Applicant:	Smart Specialized Mobile Radio (SMR) of California, Inc.	Owner:	Downtown Plaza Towers Association
Address:	3355 Vincent Rd., Suite A Pleasant Hill, CA. 94523	Address:	555 Capitol Mall, Suite 240 Sacto., CA. 95814

General Plan Designation: Regional Commercial & Offices
Central City Community
Plan Designation: Urban Office
Existing Land Use of Site: Office Building
Existing Zoning of Site: Central Business District (C-3)

Surrounding Land Use and Zoning:

North: Commercial; C-3
South: Commercial; C-3
East: Commercial; C-3
West: Commercial; C-3

Property Area: 2.37± acres
Square Footage of Building: 401,800 sq.ft.
Height of Building: fourteen stories, 196 ft.
Exterior Building Materials: concrete
Roof Materials: tar

Additional Information: Applicant proposes to attach antennas to the parapet wall of the 555 Capitol Mall office building. The antennas are for a dual purpose mobile radio system which would provide an alternative to cellular telephone systems and provide digital dispatch services to large fleet users. The project would be accomplished in two phases. Phase One will consist of the installation of three to six omni antennas on the top of the building (Exhibit C). Phase Two consists of the installation of up to 12 directional panel type antennas (Exhibit D). In addition, a small test antenna and two small global positioning antennas will be installed on the rooftop below the parapet wall. All antennas will be made of non-reflective materials and will not exceed 12 feet above the parapet of the building nor will exceed the height of existing antennas on the rooftop. All radio transmitting/receiving equipment will be located inside the office building.

The Zoning Administrator noted, upon inspection of the site, that there are already several antennas on top of the subject building similar to the type of antenna the applicant is proposing to locate on the building.

The project has been reviewed by Ron Costa of the City's Communications Division.

The project is located in the Central City and is undergoing review by Design Review Board staff. The file number is DR 93-191.

Project Plans: See Exhibits A, B, C and D.

Environmental Determination:

This project will not have a significant effect on the environment and is exempt from environmental review pursuant to State EIR Guidelines (California Environmental Quality Act, Section 15311.

Conditions of Approval

1. The antenna installation may be done in phases as noted above. The proposed antennas will not exceed 12 feet above the parapet in height nor will they exceed the height of the existing antennas on the rooftop.

2. The necessary equipment for the operation of the antennas shall be located within the existing office building.

3. A satellite dish is not being permitted by this permit. If a satellite dish is need in the future, the necessary entitlement shall be obtained.

4. The applicant shall obtain Design Review staff approval and all necessary building permits prior to installation of the antennas.

Findings of Fact

1. The project, as conditioned, is based upon sound principle of land use in that the antennas are compatible with office development in the area.

2. The project, as conditioned, will not be detrimental to the public welfare in that the antennas will be located on top of an existing building where similar antennas are located.

3. The project is consistent with the General Plan which designates the site for Regional Commercial and Office use and the Central City Community Plan which designates the site for Urban Office use.

Joy D. Patterson

Joy D. Patterson
Zoning Administrator

A use for which a Special Permit is granted must be established within two years after such permit is approved. If such use is not so established the Special Permit shall be deemed to have expired and shall be null and void. A Special Permit use which requires a Building Permit shall be deemed established when such Building Permit is secured and construction thereunder physically commenced. If no building permit is required, the use shall be deemed established when the activity permitted has been commenced.

The decision of the Zoning Administrator may be appealed to the Planning Commission. An appeal must be filed within 10 days of the Zoning Administrator's hearing. If an appeal is not filed, the action of the Zoning Administrator is final.

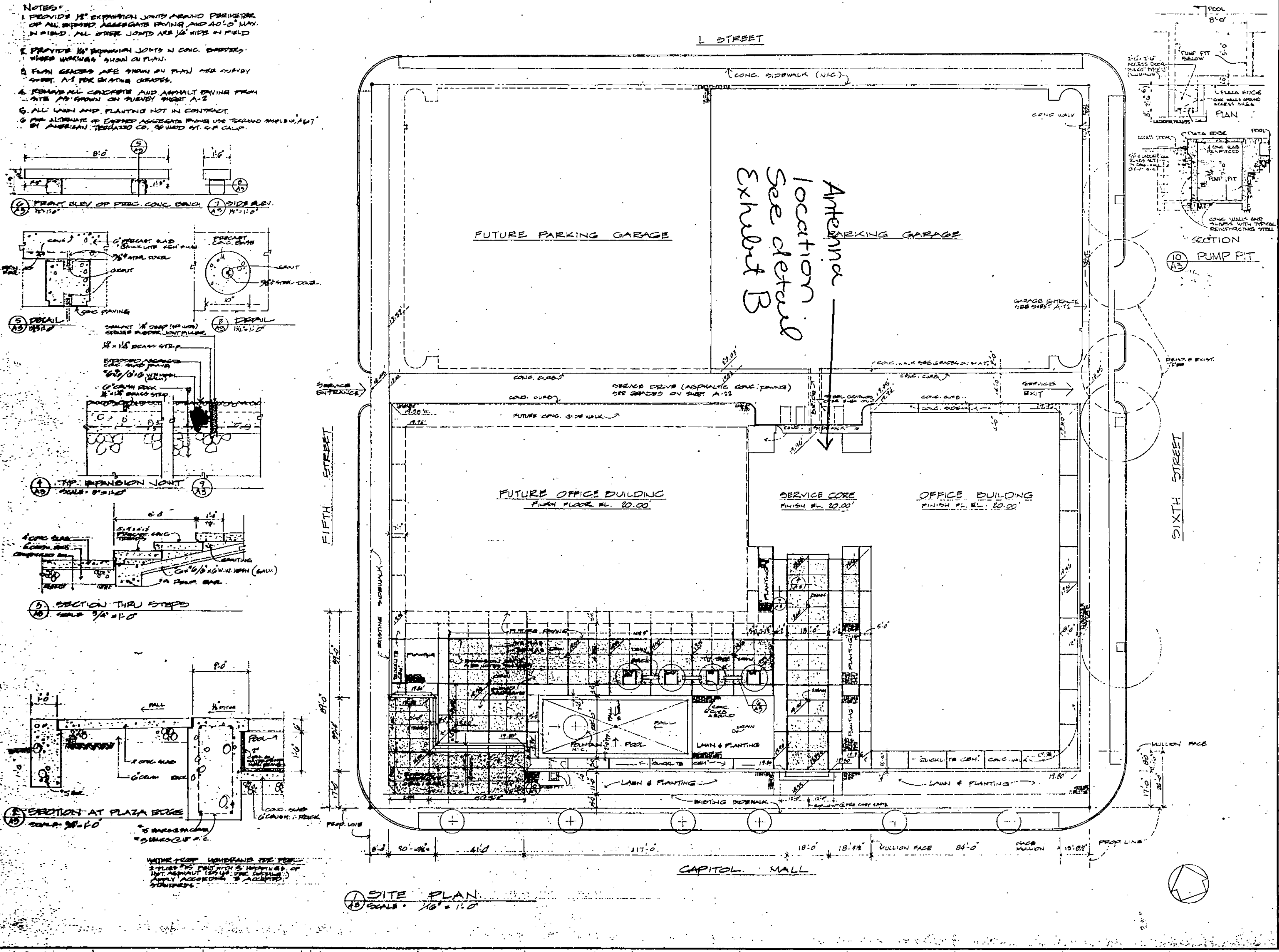
cc: File (original)
Applicant
ZA Log Book
Design Review (Randy Lum)
Building Division

293-027

6-15-93

#1

EXHIBIT A



NOTES:
1. PROVIDE 1/2" EXPANSION JOINTS AROUND PERIMETER OF ALL EXPOSED AGGREGATE PAVING AND 40'-0" MAX. IN FIELD. ALL OTHER JOINTS ARE 1/4" WIDE IN FIELD
2. PROVIDE 1/2" EXPANSION JOINTS IN CONC. BORDERS WHERE MARKINGS SHOWN ON PLAN.
3. FINISH GRADES ARE SHOWN ON PLAN. SEE SURVEY SHEET A-1 FOR EXISTING GRADES.
4. REMOVE ALL CONCRETE AND ASPHALT PAVING FROM SITE AS SHOWN ON SURVEY SHEET A-2
5. ALL LAWN AND PLANTING NOT IN CONTRACT.
6. FOR ALTERNATE OF EXPOSED AGGREGATE PAVING USE TERRAZZO SAMPLE NO. A687 BY AMERICAN TERRAZZO CO. 36 WOOD ST. S.F. CALIF.

Antenna location See detail Exhibit B

OFFICE TOW
PARKING STR
DOWNTOWN PLAZA PR
CAPITOL MALL AVE
SACRAMENTO, CALIFO

McSWEENEY · SCHUPPEL
ARCHITECTS A.I.A.
MICHAEL D. KELLY ASSOCIATE
SAN FRANCISCO CALIFORNIA

HARRY J. DEVINE INC.
A R C H I T E C T
SACRAMENTO CALIFORNIA

CONRAD ENGINEERS
Division of Construction Research and Development Corporation

Yoshpe Engineers mechanical · electrical
Sacramento California

3-26-69

NO.	REVISIONS	DATE

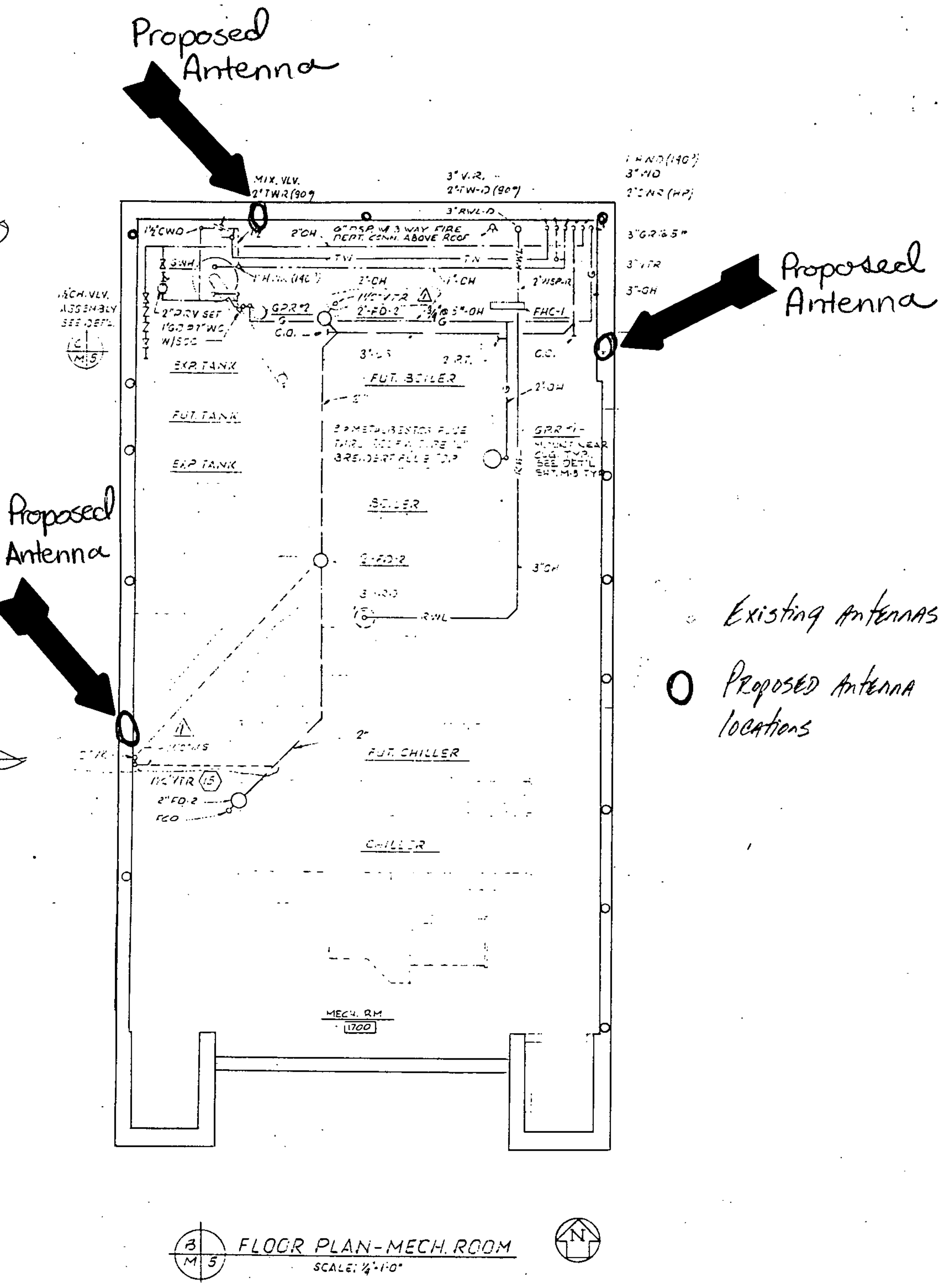
SITE PLAN
DETAILS

SCALE: AS SHOWN

JOB NO.: MB 114
DATE: AUG 30, 68
DRAWN:
CHECKED:

SHEET NO.
A-3
OF 26 SHEETS

EXHIBIT B



Proposed Antenna

Proposed Antenna

Proposed Antenna

Existing Antennas

O Proposed Antenna locations

B/M5 FLOOR PLAN - MECH. ROOM
SCALE: ¼"=1'-0"

OFFICE TOWER AND
PARKING STRUCTURE
DOWNTOWN PLAZA PROPERTIES
CAPITOL MALL AVENUE
SACRAMENTO, CALIFORNIA

McSWEENEY · SCHUPPEL
ARCHITECTS A.I.A.
MICHAEL D. KELLY ASSOCIATE
SAN FRANCISCO CALIFORNIA

HARRY J. DEVINE INC.
ARCHITECT
SACRAMENTO CALIFORNIA

CONRAD ENGINEERS
Division of Construction Research and Development Corporation
14656 OXNARD STREET / VAN NUYS, CALIFORNIA
TELEPHONE 786-0981

Yoshpe Engineers mechanical - electrical
1917 22nd Street Sacramento, California 95816

NO.	REVISIONS	DATE
1	ADD 2" VTR - TLT. RM. - REVISE VENTS - MECH. RM.	3-12-69

ROOF PLAN - OFFICE
& MECH. ROOM

SCALE: AS NOTED

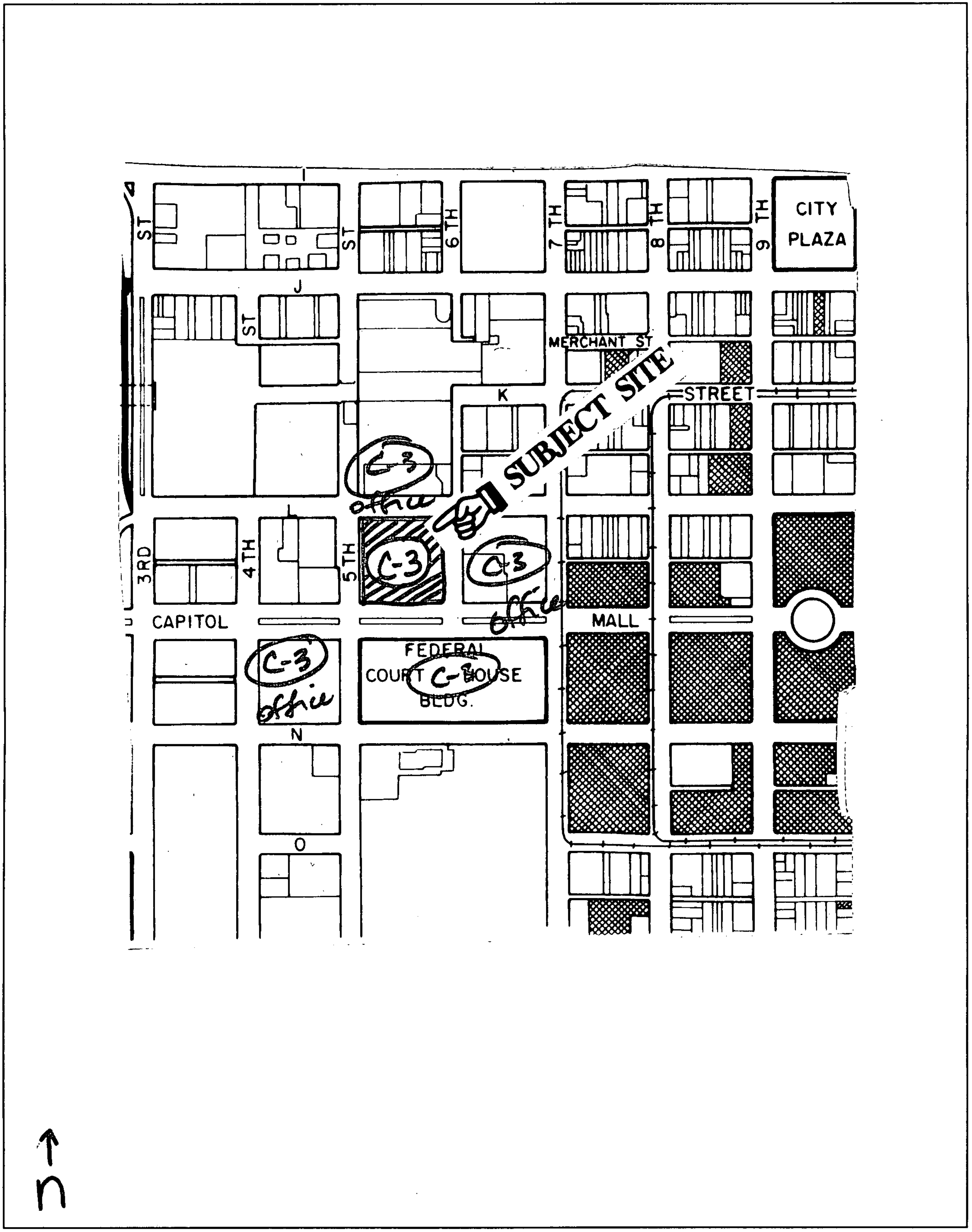
JOB NO.: 0368	SHEET NO.
DATE: 8-30-68	M5
DRAWN: AM/FG	
CHECKED: D.Y.	OF SHEETS

Z93-027

Z93-027

6-15-93

#1



LAND USE, ZONING, AND VICINITY MAP

Z93-027

6-15-93

Item No. 1

Exhibit C

DB810 DUAL SKIRT DIPOLE™ (DSD™) OMNI ANTENNAS
DB810M 10 dBd GAIN, 806-960 MHz

DECIBEL

These antennas are available with or without 3° or 6° of electrical uptilt or downtilt for 806-960 MHz conventional, trunked, paging and cellular operations.

They both offer 10 dBd gain and have similar VSWRs and frequency ranges. The DB810 handles 500 watts input, and the DB810M, which is slimmer and lighter, handles 450 watts.

The main difference between the two antennas lies in the radomes. The ruggedized DB810 is constructed with 3" (76.2 mm) OD Minimum-Tip-Deflection™ fiberglass; the DB810M has a 2" (50.8 mm) OD MTD™ radome made of one-eighth inch (3.18 mm) thick fiberglass. Both are Horizon Blue™ color.

DB810 has a 28" (711 mm) aluminum alloy extension pipe for mounting, the DB810M a 26" (660.4 mm) pipe. Both attach to platforms, towers and structures with round members to 3.5" (88.9 mm) OD or angle member to 3.75" (92.25 mm). Both use the new No-Torsion DB5087 Mount.

Design and Construction

With patented Center-Fed-Collinear™ and Dual Skirt Dipole™ design, these antennas provide broad bandwidths and no pattern tilt across the band.

All metal used in the radiator, feed and matching systems are made of copper or brass, which prevents signal cells.

Each antenna is tested for power rating compliance and the absence of intermodulation generators.

For lightning protection, a large brass tube extends from top to bottom, with provisions for grounding to the tower.

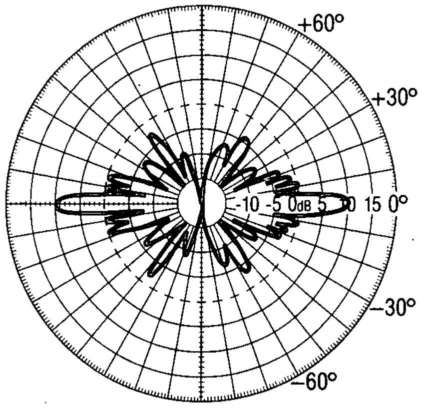
Top and bottom moisture drains are provided.

Ordering Information

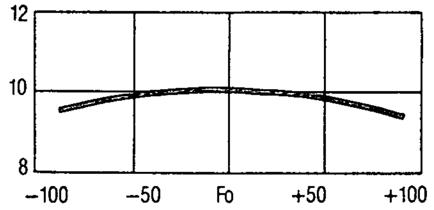
Specify model and frequency range. DB5087 Mount, VAPOR-WRAP® and HELIAX® are included.

VAPOR-WRAP is a registered trademark of Decibel Products.
HELIAX is a registered trademark of Andrew Corporation.

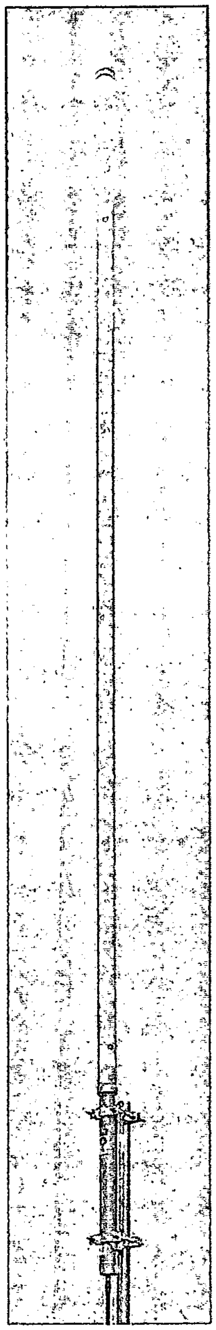
DB810 and DB810M Vertical Pattern



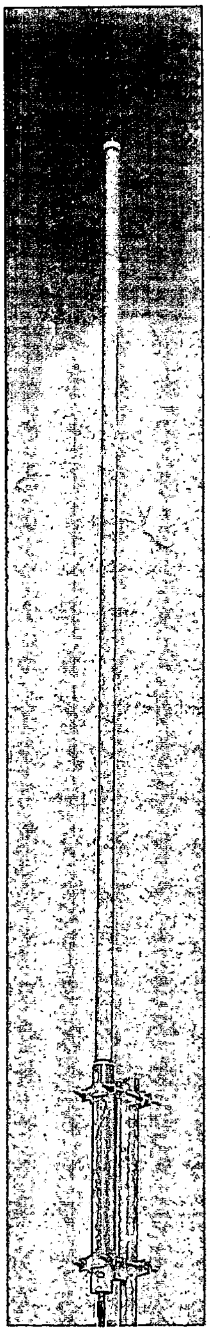
S810 and S810M Gain-dBd vs. Frequency-MHz



Frequency Ranges Available - MHz	
DB810-XT or DB810M-XT	806-869
DB810-XC or DB810M-XC	824-896
S810-X or S810M-X	806-901
DB810-Y or DB810M-Y	890-960
S810-Z or S810M-Z	851-960
For antenna with Flange add "F." Example: DB810MF-XC. Not available on S models. For Pressurized antenna add "P." Example: DB810MP-XC. Not available on S models.	
For downtilt add T3 for 3° or T6 for 6°. Example: DB810T6-XC. For uptilt add U3 for 3° or U6 for 6°. Example: DB810U6-XC. Not available on S models.	



DB810



DB810M

Mechanical Data	DB810	DB810M
Materials:		
Radome (fiberglass) — in. (mm)	3 (76.2) OD	2 (50.8) OD
Clamps (galvanized steel)	DB5087	DB5087
Maximum exposed area (flat plate equivalent) — ft^2 (m^2)	2 (.19)	1.34 (.125)
Lateral thrust at 100 mph (161 km/hr) — lbs. (kg)	99 (45)	68 (30.8)
Length — in. (mm)	158 (4,013)	155 (3,937)
Tip deflection at 100 mph (161 km/hr) with extension	2.5°	12°
Net weight — lbs. (kg)	35 (15.88)	30 (13.6)
Shipping weight — lbs. (kg)	71 (32.2)	45 (20.4)

Electrical Data	DB810	DB810M
Frequency Ranges — MHz	806-960	806-960
Gain (maximum) — dBd	10	10
Beamwidth "E" Plane (half power)	6°	6°
Beamwidth "H" Plane (half power)	Omni	Omni
Maximum power input — watts	500	450
Input impedance — ohms	50	50
VSWR	1.5 to 1 or better	1.5 to 1 or better
Lightning protection	Direct ground	Direct ground
Termination	Type N-Female (fixed)	Type N-Female (fixed)
HELIAX® jumper	N-Male/N-Male	N-Male/N-Male

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Exhibit D

DB870 SERIES OF DIRECTIONAL
DB880 PANEL ANTENNAS, 820-960 MHz

DECIBEL

Decibel's DB870 and DB880 series of directional panel antennas are designed to operate in the 820-960 MHz range. Horizontal radiation coverage is available for 120°, 105°, 83°, 60° or 45° at the 3 dB points. Some models are available with electrical downtilt.

An optional field adjustable antenna tilt bracket, DB5081, is available to mechanically tilt the major lobe of any model below the horizon.

For information regarding the use of several interconnected panel antennas to generate a near-omnidirectional pattern, contact Decibel System Engineers.

Design and Construction

Electrically and mechanically these antennas offer the best trade-off between small size vs. windloading and high front-to-back ratio.

Each antenna is tested for power rating compliance and the absence of intermodulation generators.

All antennas in the series are constructed using precision high-strength aluminum alloy, brass elements and a high impact, weather and UV resistant fiberglass radome.

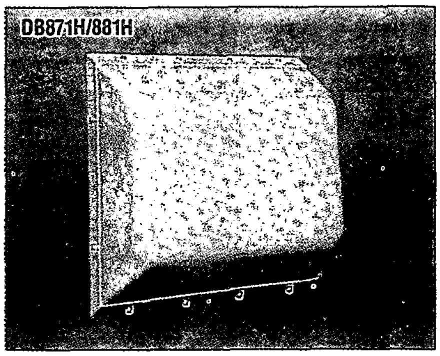
The size of the antennas depends on gain. Low gain DB871 and DB881 are 12"W×12"H×5"D. Medium gain DB872 and DB882 are 12"W×24"H×5"D. High gain DB874 and DB884 are 12"W×48"H×5"D.

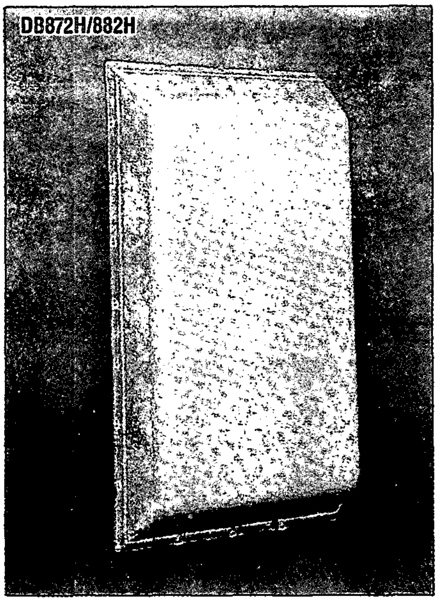
Ordering Information

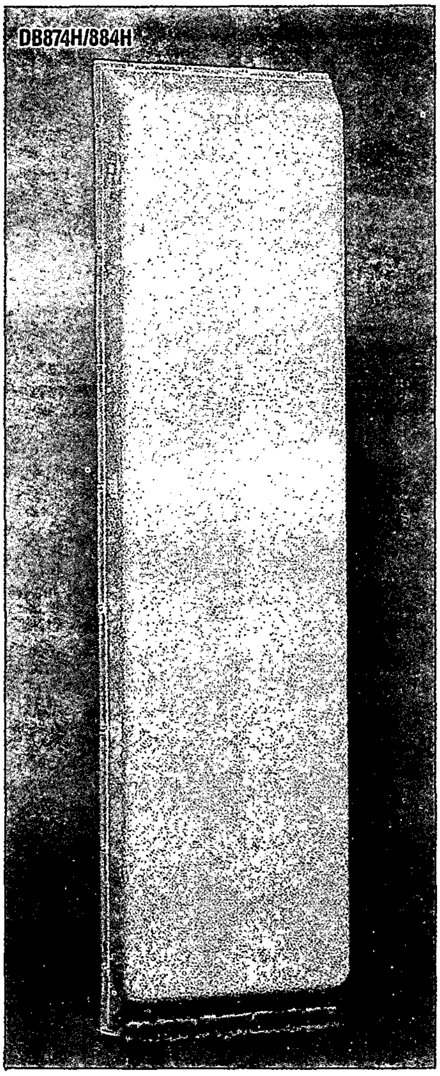
Determine your desired coverage and refer to the gain table based on horizontal radiation pattern aperture (half power points) and vertical aperture. The table shows the performance of each panel antenna model.

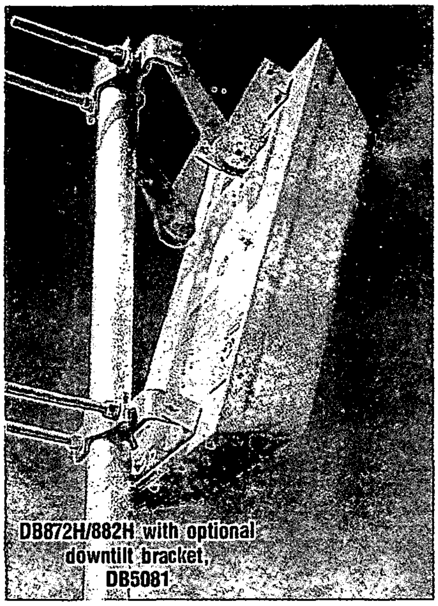
Each model is available by frequency range. Use –X suffix for 820-900 MHz or –Y for 890-960 MHz.

A mounting clamp set is included for direct attachment to 1.5" (38.1 mm) to 3.5" (89 mm) pipes. An AMPS platform pipe mounting kit, DB5080, is optional. VAPOR-WRAP® is included. If a non-pressurized EIA flange or 7/16 DIN connector is required, please specify when ordering.


DB871H/881H


DB872H/882H


DB874H/884H


DB872H/882H with optional downtilt bracket, DB5081

Gain Table

Horizontal Aperture	120°	105°	83°	60°	45°
Vertical aperature					
DB871 60° — dBd	5.0	5.5	6.2	8.0	9.2
DB872 29° — dBd	8.0	8.7	9.4	11.0	12.4
DB874 14° — dBd	11.3	11.8	12.5	14.3	15.6

VAPOR-WRAP is a registered trademark of Decibel Products.

Electrical Data

Frequency Ranges — MHz	–X = 820-900, –Y = 890-960
Gain — dBd	See back page
VSWR	1.5 to 1 or better
Beamwidth "E" Plane (half power)	See back page
Beamwidth "H" Plane (half power)	See back page
Front-to-back ratio — dB	See back page
Maximum power input — watts	
All models except DB871	500
DB871	250

Mechanical Data

Dimensions (W×H×D) — in. (mm)	See back page
Materials:	
Radome	Fiberglass
Radiating elements	Brass, silver plated
Antenna feed — in. (mm)	.250 (6.3) and .141 (3.6) Copper hardline
Mounting clamps	Galvanized steel
Fasteners	Stainless steel
Maximum exposed area (flate plate equivalent) — ft² (m²)	See back page
Lateral thrust at 100 mph (161 km/hr) — lbs. (kg)	See back page
Net weight — lbs. (kg)	See back page
Shipping weight — lbs. (kg)	See back page

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