

Planning \$ <u>10.00</u>	Drainage \$
TCP \$	School Impact \$

BLDG PERMIT NO.
FILE #

PLANNING CLEARANCE

(site plan review, multi-family development, non-residential development)
Grand Junction Community Development Department

THIS SECTION TO BE COMPLETED BY APPLICANT

BUILDING ADDRESS 688 29 1/2 ROAD
 SUBDIVISION METES & BOUNDS
 FILING BLK LOT

TAX SCHEDULE NO. 2943-051-00-155
 SQ. FT. OF EXISTING BLDG(S) N/A
 SQ. FT. OF PROPOSED BLDG(S)/ADDITONS N/A

OWNER GARY & SHARON MEIER
 ADDRESS 688 29 1/2 ROAD
 CITY/STATE/ZIP GRAND JUNCTION, CO 81504

MULTI-FAMILY:
 NO. OF DWELLING UNITS: BEFORE AFTER
 CONSTRUCTION
 NO. OF BLDGS ON PARCEL: BEFORE AFTER
 CONSTRUCTION

APPLICANT VERIZON WIRELESS

USE OF ALL EXISTING BLDG(S) AG/RES/TELECOM

ADDRESS 3131 S. VAUGHN WAY, SUITE 550
 CITY/STATE/ZIP AURORA, CO 80014
 TELEPHONE 303-229-4681 BRAD JOHNSON
Submittal requirements are outlined in the SSID (Submittal Standards for Improvements and Development) document.

DESCRIPTION OF WORK & INTENDED USE:
REPLACE EXISTING ANTENNAS

THIS SECTION TO BE COMPLETED BY COMMUNITY DEVELOPMENT DEPARTMENT STAFF

ZONE <u>RMF-5</u>	LANDSCAPING/SCREENING REQUIRED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
SETBACKS: FRONT: <u> </u> from Property Line (PL) or from center of ROW, whichever is greater SIDE: <u> </u> from PL REAR: <u> </u> from PL	PARKING REQUIREMENT: <u>N/A</u>
MAX. HEIGHT <u> </u>	SPECIAL CONDITIONS: <u>only replacing an existing antenna</u>
MAX. COVERAGE OF LOT BY STRUCTURES <u> </u>	

Modifications to this Planning Clearance must be approved, in writing, by the Community Development Department Director. The structure authorized by this application cannot be occupied until a final inspection has been completed and a Certificate of Occupancy has been issued by the Building Department (Section 307, Uniform Building Code). Required improvements in the public right-of-way must be guaranteed prior to issuance of a Planning Clearance. All other required site improvements must be completed or guaranteed prior to issuance of a Certificate of Occupancy. 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 is required by the Grand Junction Zoning and Development Code.

Four (4) sets of final construction drawings must be submitted and stamped by City Engineering prior to issuing the Planning Clearance. One stamped set must be available on the job site at all times.

I hereby acknowledge that I have read this application and the information is correct; I agree to comply with any and all codes, ordinances, laws, regulations, or restrictions which apply to the project. I understand that failure to comply shall result in legal action, which may include but not necessarily be limited to non-use of the building(s).

Applicant's Signature [Signature] Date 8/28/06
 Department Approval [Signature] Date 8/28/06

Additional water and/or sewer tap fee(s) are required:	YES	NO <input checked="" type="checkbox"/>	W/O No. <u>No SWR or WTR charges</u>
Utility Accounting <u>[Signature]</u>	Date <u>8/28/06</u>		

VALID FOR SIX MONTHS FROM DATE OF ISSUANCE (Section 2.2.C.1 Grand Junction Zoning and Development Code)

(White: Planning) (Yellow: Customer) (Pink: Building Department) (Goldenrod: Utility Accounting)

Verizon Wireless
 3131 S Vaughn Way, Suite 550
 Aurora, CO 80014

August 26, 2006

Attn: Senta Costello
 City of Grand Junction
 Community Development – Planning & Zoning
 250 North 5th Street
 Grand Junction, CO 80306

**Subject: Verizon Wireless Antenna Modification: DEN-Broken Spoke
 Site Address: 688 29 1/2 Road, Grand Junction, CO 81504**

Dear Ms. Costello,

As discussed several weeks ago, Verizon Wireless is in need of replacing existing panel antennas at the above referenced site in order to ensure that adequate and uninterrupted service is maintained at all times per our License Agreement with the Federal Communications Commission (FCC) along with the ability to offer the residents and visitors of Grand Junction with new wireless services.

I have enclosed a map showing the location of the existing wireless telecommunications facility as well as a set of plans depicting the existing conditions and proposed modifications to the facility. I have also provided "cut-sheets" from the antenna manufacturer (Andrew & Amphenol Antel, Inc.) detailing the specifications for the proposed new antennas. The modification shall only include the following:

- 1) The removal of six (6) of the twelve (12) existing Verizon Wireless panel antennas currently on the tower at a height of 112 feet.
- 2) The addition of six (6) new panel antennas maintaining the 112 foot height. The proposed antennas shall not be mounted any higher than the current antennas and this modification shall not result in a height or bulk increase to the tower. The proposed new antennas are actually smaller in width and slightly less tall than the existing antennas to be replaced.

Antenna Replacement Schedule

Existing Antenna	Existing Antenna Size (H x W x D)	Proposed Replacement Antenna	Proposed Replacement Antenna Size (H x W x D)
Andrew/Decibel 844G65VTZASN	48" x 12.5" x 8.5"	Antel LPA-185063/8CF	47.2" x 6.6" x 5.8"

- 3) All associated electronic equipment for the new antennas shall be located within the existing equipment shelter and no part of this equipment will be visible from outside the shelter.

Verizon Wireless
3131 S Vaughn Way, Suite 550
Aurora, CO 80014

- 4) No other visible or other changes are proposed at this time.

In summary, the site currently has a total of twelve (12) panel antennas of which six (6) will be removed and replaced with slightly smaller panel antennas. All new antennas shall be mounted at the same heights as the existing antennas. The proposed total number of antennas shall not exceed twelve (12). Therefore, there will no net increase in the number of antennas currently at this site and there should be little to no visual differences between the existing and proposed designs.

Please let me know if you have any questions or concerns, or if you are in need of additional information. Please forward any correspondence/permit applications if necessary to my attention at the address provided below. Thank you for your assistance in this matter.

Sincerely,

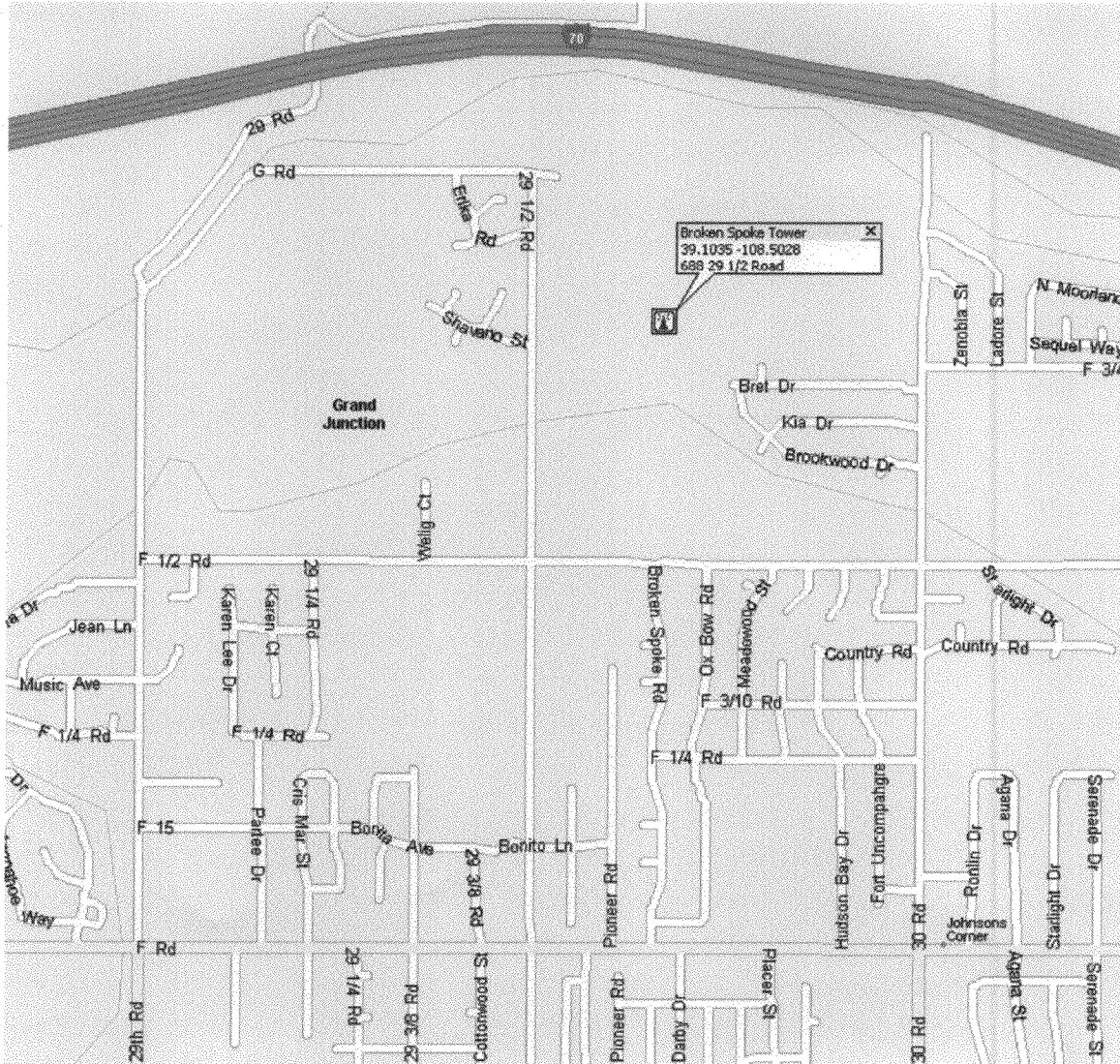


Brad Johnson
Zoning Manager / Site Acquisition Consultant for Verizon Wireless

REI Wireless Consultants
10518 W. Cooper Drive, Littleton, CO 80127
303.229.4681 phone
brad_w_johnson@hotmail.com

Verizon Wireless
3131 S Vaughn Way, Suite 550
Aurora, CO 80014

VICINITY MAP



NTCH - Colorado Collocation Application

(Application fee of \$1,500 required with submittal)

NTCH - Colorado, Inc. 1600 Ute Avenue, Suite 10 Grand Junction, CO Attention: Garry Curry	Main: (970) 234-1357 Fax: (970) 241-0437 e-mail: garry@cleartalk.net
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Site Information

Date: May 26,2006	NTCH Site ID: 36336	NTCH Site Name:Meier
Latitude: 39.103481	Longitude:108.502758	Source of Coordinates: A-1
AGL:	City: Grand Junction	State: Colorado

Tenant Information

Site ID: NA	Site Name: CO3 Broken Spoke
Company Name: Verizon Wireless	Company Representing: Retherford Enterprises, Inc. <i>(if consultant)</i>
Contact Name: Joy Retherford	Contact Address: 10763 Adams Street Northglenn, Colorado 80233
Contact Phone: 720-261-2064	
Contact Fax: 720-929-2405	Contact e-mail: Joyretherford@comcast.net

Leasing Information

Contact Name: <i>(if different)</i>	Phone:	
Name of Company to Appear on Lease: Colorado RSA NO.3 Limited Partnership, a Delaware limited partnership, d/b/a Verizon Wireless	State Incorporated: Delaware	Tax ID #:
Signatory Name: Keith A. Surratt	Signatory Title: West Area Vice President- Network	
Corporate Address: 180 Washington Valley Road Bedminster, New Jersey 07921 Attention: Network Real Estate	Notice Address: 180 Washington Valley Road Bedminster, New Jersey 07921 Attention: Network Real Estate With Copies to:	
Name / Phone & Address to Send Leases For Execution: <i>(if different)</i> Joy Retherford 720-261-2064 10763 Adams Street Northglenn, CO 80233	# of Original Leases Required: Two	Special Instructions:

Construction Information

Contact Name: Jerry Bell	Phone: 303-594-0007
Fax: 303-873-2684	e-mail: Jerald.bell@verizonwireless.com
Mobile: 303-594-0007	Projected Installation Date: ASAP

Tenant Emergency Contact

Equipment Specifications

TECHNOLOGY TYPE: Existing cellular/ add EVDO The Decibel antennas we currently have at this site operate at the 880 MHz- 890MHz and 891.5MHZ-894MHz frequency to provide cellular service. We will be retaining some of the Decibel antennas to continue to provide this service and replacing some Decibel antennas with Antel antennas to accommodate EVDO at the 1965MHz-1969.95MHz and 1965 MHz – 1969.95MHz frequency.			GROUND SPACE REQUIREMENTS: NA- modification to antennas ONLY
ANTENNA: REPLACE SIX 844G65VTZASX antennas with SIX LPA-185063/8CF antennas LEAVE SIX 844G65VTZASX			Tenant Provided Shelter / Pad:
Quantity: SIX 844G65VTZASX antennas and SIX LPA-185063/8CF			Dimensions:
Type (panel, omni, receive, transmit, etc.): panel			Type Shelter / Pad:
Manufacturer	Decibel	Antel	
Model:	(-6) 844G65VTZASN	(+6) LPA-185063/8CF	Existing Shelter Space:
Length:	48 x 12.5 x 8.5 in	47.2" x 6.4" x 5.8"	Dimensions Needed:
Weight:	(-6) 16 lbs	(+6) 9 lbs	
Mounting Height: (list for each antenna) 110' At base of the antenna: 108' At centerline of the antenna: 110' At tip of the antenna: 112'			IF EXISTING SPACE IN OWNER'S SHELTER IS BEING USED, PLEASE PROVIDE EQUIPMENT SPECIFICATIONS: Transmitter: Quantity:
Orientation:	349	109	229
Manufacturer:			
Model:			
Power Output (Watts):			
CABLE: USE EXISTING COAX			
Number of Lines:			
Type:			Transmitter Cabinet:
Size:			Quantity:
DISH:			Manufacturer:
Quantity:			Model:
Manufacturer:			Dimensions:
Model:			Weight:
Dimensions:			
Weight:			FREQUENCIES:
Mounting Height:			Transmit: 1965 - 1969.95 MHz
Orientation:			Receive: 1885 - 1889.95 MHz
Cable / Type Mount:			



844G65VTZASX

Directed Dipole, No Screen Antenna

DECIBEL
Base Station Antennas

- Field adjustable electrical downtilt, featuring linear phase shifter, no wheels or gears
- Excellent azimuth pattern shaping, 15-20% reduction in cell-to-cell overlap
- Outstanding first upper side lobe suppression
- Air dielectric feed system, no screws, rivets, welds or solder in RF element feed path

ELECTRICAL

Frequency (MHz) :	806 - 896	897 - 940
Polarization :	Vertical	Vertical
Gain (dBd/dBi) :	13/15.1	13/15.1
Azimuth BW (Deg.):	65	65
Elevation BW (Deg.):	16	16
Beam Tilt (Deg.):	0-16	0-16
USLS* (dB) :	>15	>15
Front-To-Back Ratio* (dB) :	40	40
VSWR :	<1.4:1	<1.5:1
PIM3 @ 2 x 20w (dBc) :	-150	-150
Max. Input Power (Watts) :	500	500
Impedance (Ohms) :	50	50
Lightning Protection :	DC Ground	DC Ground

MECHANICAL

Weight :	7.2 kg (16 lb)
Dimensions (LxWxD) :	1,232 x 318 x 216 mm (48.5 x 12.5 x 8.5 in)
Max. Wind Area :	0.13 m ² (1.4 ft ²)
Max. Wind Load (@ 100 mph) :	631.6 N (142 lbf)
Max. Wind Speed :	241 km/h (150 mph)
Hardware Material :	Galvanized Steel
Connector Type :	7-16 DIN - Female (1, Back)
Color :	Light Gray
Standard Mounting Hardware :	DB380
Standard Downtilt	
Mounting Hardware :	DB5083

EXISTING
ANTENNAS

BROKEN
SPOKE

Vertically Polarized, Log Periodic 63° / 18 dBi

LPA-185063/8CF

When ordering, replace "___" with connector type.

Mechanical specifications

Length	1200 mm	47.2 in
Width	167 mm	6.6 in
Depth	148 mm	5.8 in
4) Weight	4.1 kg	9.0 lbs

Wind Area

Front	0.200 m ²	2.15 ft ²
Side	0.178 m ²	1.91 ft ²

Rated Wind Velocity (Safety factor 2.0)

>548 km/hr >341 mph

Wind load @ 100 mph (161 km/hr)

Front	299 N	67.2 lbs
Side	267 N	60.0 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting & Downtilting:

Wall mounted or pole tower mount with mounting brackets.

Mounting bracket kit #26799997

Downtilt bracket kit #26799999

The downtilt bracket kit includes the mounting bracket kit.

Electrical specifications

Frequency Range	1850-1990 MHz
Impedance	50Ω
3) Connector	NE, E-DIN
1) VSWR	≤1.4:1
Polarization	Vertical
1) Gain	18 dBi
2) Power Rating	250 W
1) Half Power Angle	
H-Plane	63°
E-Plane	8°
1) Electrical Downtilt	0°
1) Null Fill	10-20%
Lightning Protection	Direct Ground

¹⁾Typical Values

²⁾Power Rating limited by connector only.

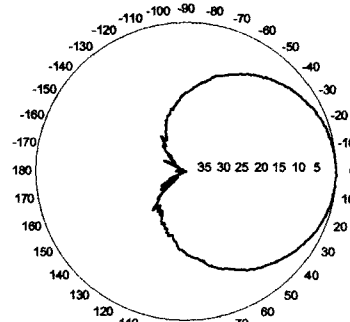
³⁾NE indicates an elongated N Connector.

E-DIN indicates an elongated DIN Connector.

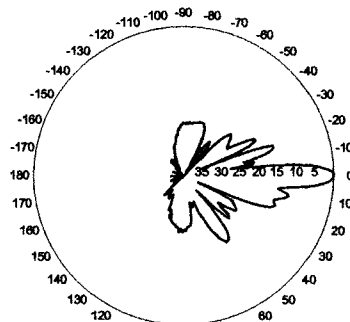
⁴⁾The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation-pattern¹⁾



Horizontal



Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back Ratio.

*PROPOSED ANTENNAS
BROKEN SPOKE*

CF Denotes a Center-Fed Connector.

1850-1990 MHz



1850-1990 MHz



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

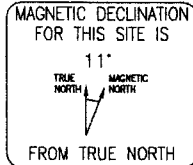
Every Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with center-fed connector only.

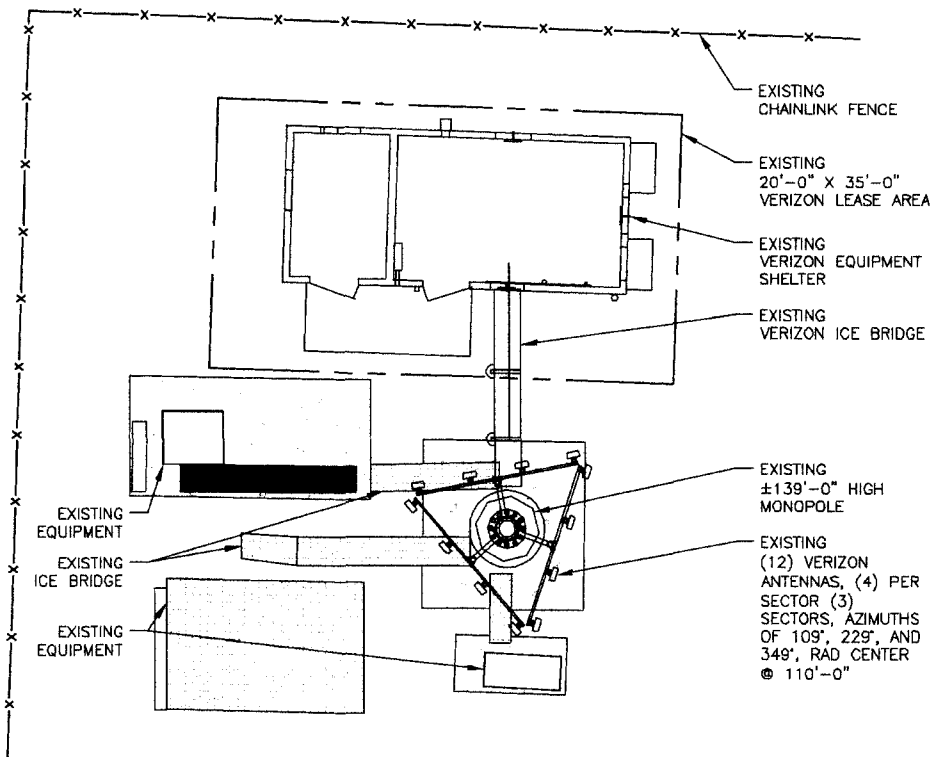
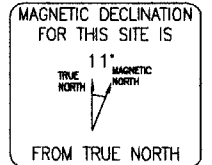


Revision Date: 8/23/04

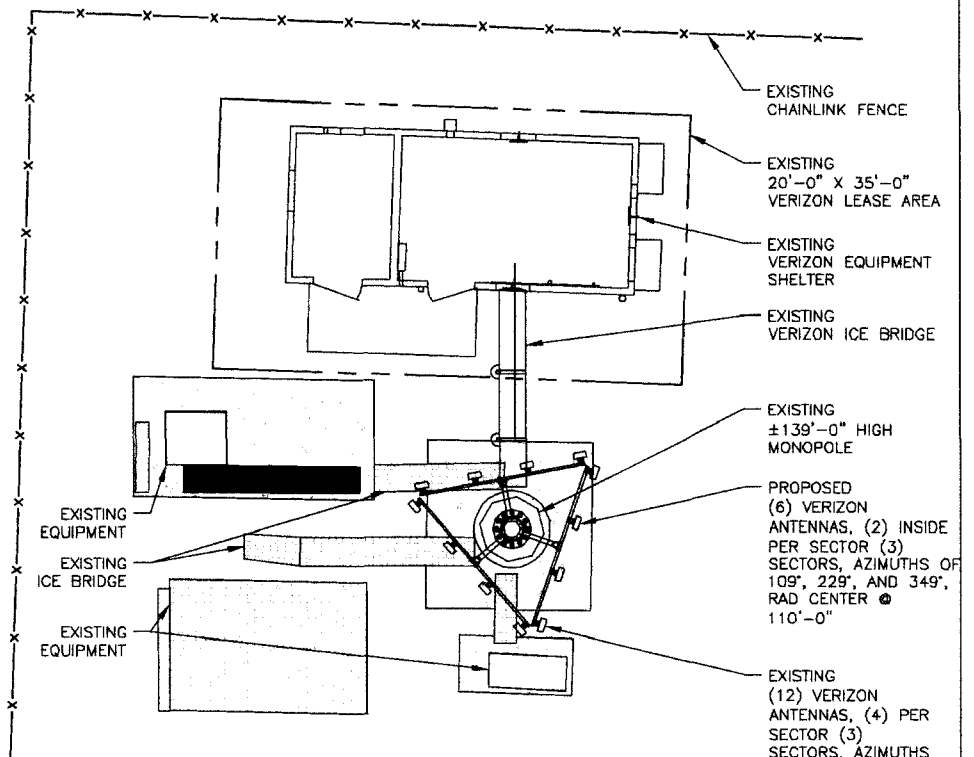
NOTES:
1. FIELD VERIFY HEIGHT OF MONOPOLE AND ALL ANTENNAS & RETURN TO CAD DEPARTMENT.



NOTES:
1. ADDITION OF (6) (2 INSIDE PER SECTOR) PCS ANTENNAS "ANTEL" LPA-185063/BCF. KEEP EXISTING AZIMUTHS (109°,229°,349°) AND RAD CENTER (110'-0" A.G.L FIELD VERIFY).
2. ADDITION OF (6) (2 PER SECTOR) DUPLEXERS.
3. REMOVE (6) (2 INSIDE PER SECTOR) PCS ANTENNAS AT AZIMUTHS (109°,229°,349°) AND RAD CENTER (110'-0" A.G.L FIELD VERIFY).
4. CONTRACTOR SHALL MAINTAIN POWER AND TELEPHONE SERVICE TO EXISTING EQUIPMENT DURING CONSTRUCTION. COORDINATE INSTALLATION WITH VERIZON CONSTRUCTION REPRESENTATIVE.
5. IF NEW ANTENNA MOUNT IS REQUIRED PROPOSED LPD TRIPLE BRACKET KIT (LPD DOWN TILT BRACKET) BSA STANDARD BRACKET KIT (BSA DOWN TILT BRACKET) (OR APPROVED EQUAL).



EXISTING ROOF PLAN



PROPOSED ANTENNA PLAN

ENGINEER: DOK



TITLE: CONSTRUCTION DRAWINGS

BY: SMT DATE: 09.09.03

VERIZON FILE:

SITE: C003 BROCKEN SPOKE

SHT: 1 of 2

SCALE: 1"=10'-0" REVISION: 4

--- KDC Architects - Engineers, P.C.
--- 7442 South Tuscon Way Suite 180
--- Englewood, Colorado 80112
--- MAIN: 303.750.6999
--- FAX: 303.750.0236

DRAWN BY: SCP

JOB NAME: BROCKEN SPOKE

SCALE: 1" = 10'-0"

DATE: 08/25/06

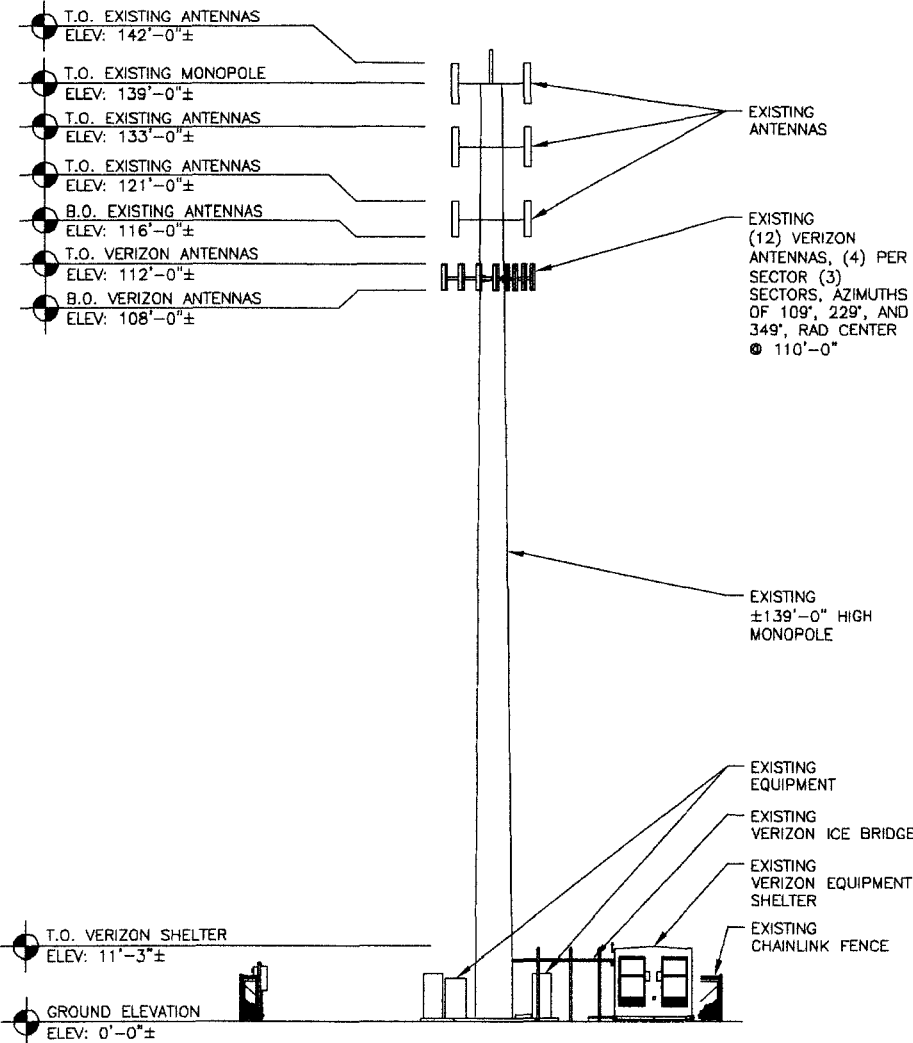
JOB NUMBER: 128065.069

CHECKED BY: SCP

PROPOSED ANTENNA PLAN

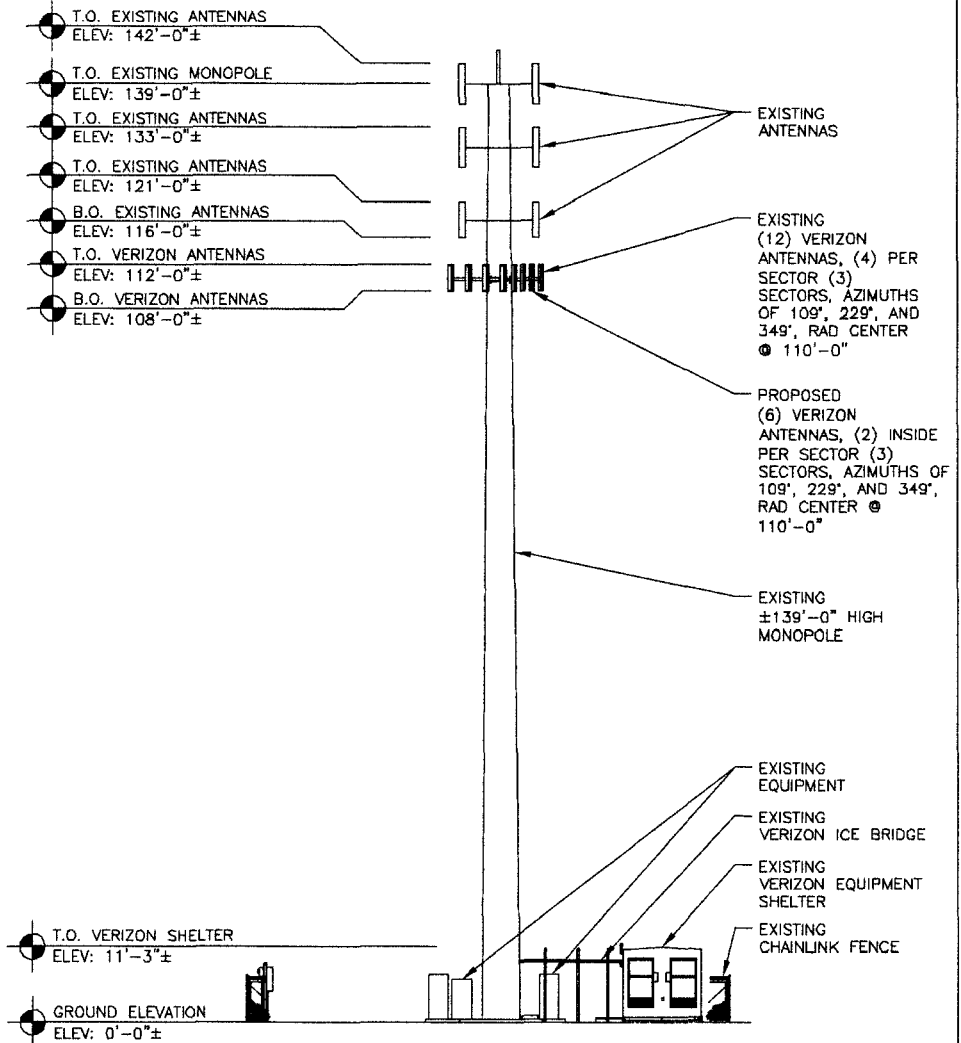
SHEET: PLAN 1 OF 2

verizonwireless



EXISTING ANTENNAS EAST ELEVATION

verizonwireless



PROPOSED ANTENNAS EAST ELEVATION

ENGINEER: DOK



TITLE: CONSTRUCTION DRAWINGS BY: SMT DATE: 09.09.03

VERIZON FILE: SITE: CO03 BROCKEN SPOKE SHT: 1 of 2 SCALE: 1" = 20'-0" REVISION: 4

--- KDC Architects - Engineers, P.C.
 --- 7442 South Tuscon Way Suite 180
 --- Englewood, Colorado 80112
 --- MAIN: 303.750.6999
 --- FAX: 303.750.0236

DRAWN BY: SCP	CHECKED BY: SCP
JOB NAME: BROKEN SPOKE	PROPOSED ANTENNA ELEVATION
SCALE: 1" = 20'-0"	
DATE: 08/25/06	
JOB NUMBER: 128065.069	SHEET: ELEVATION 2 OF 2