2232 SUBMISSION

WASHINGTON DC MARKET

APPROVAL

OWNER'S AGENT APPROVAL	SIGNATURE	PHONE NUMBER	DATE
SPRINT CONSTRUCTION COORDINATOR	SIGNATURE	PHONE NUMBER	DATE
SPRINT APPROVAL	SIGNATURE	PHONE NUMBER	DATE
ALU CONSTRUCTION	SIGNATURE	PHONE NUMBER	DATE

PROJECT INFORMATION

SITE NAME:

SITE NUMBER:

SITE ADDRESS:

APPLICANT INFO:

ADA COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

PROJECT DATA:

MAP #:	
TAX DISTRICT:	80000
JURISDICTION:	FAIRFAX COUNTY
SUPERVISOR DISTRICT:	
ZONING:	RC
USE GROUP:	U-UTILITY
CONSTRUCTION TYPE:	29
STRUCTURE TYPE:	MONOPOLE
LAND AREA (ACREAGE):	38.1568 AC
STRUCTURE HEIGHT:	186'-0" A.G.L.

GEOGRAPHIC COORDINATES

LATITUDE:	38.7224, (38°, 43', 20.64)
LONGITUDE:	-77.29, (77°, 17', 24")
2C GROUND ELEVATION:	251'± AMSL

APPLICANT INFO:

SCOPE OF WORK:
AN UNMANNED RADIO TELECOMMUNICATIONS FACILITY, CONSISTING OF RETROFITTING EQUIPMENT CABINET INSIDE A SHELTER AND ANTENNAS ON AN EXISTING MONOPOLE
6 PANEL ANTENNAS TO BE REMOVED
6 PANEL ANTENNAS TO BE INSTALLED
1 MICROWAVE DISH TO BE INSTALLED
1 EQUIPMENT CABINET TO BE RETROFITTED

PROJECT DIRECTORY

OWNER & UTILITY INFO

DIG WITH C.A.R.E. — CALL MISS UTILITY — KEEP VIRGINIA SAFE

FOR MORE INFORMATION CONTACT THE STATE CORPORATION COMMISSION DIVISION OF UTILITY AND RAILROAD SAFETY

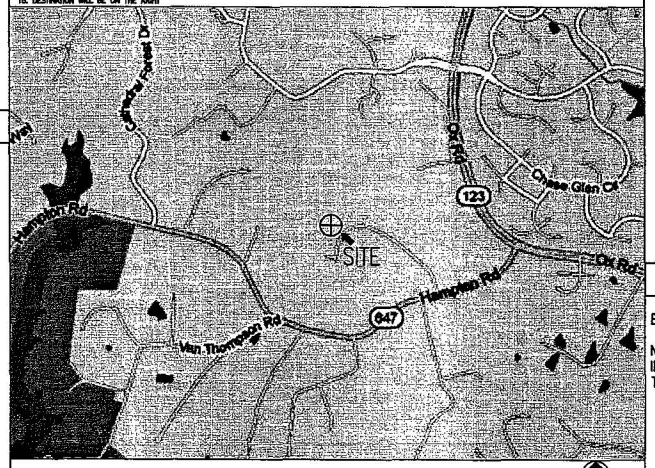
VIRGINIA UTILITY PROTECTION SERVICE, INC.
CALL BEFORE YOU DIG:
811 OR 1-800-552-7001

CODE ANALYSIS:
CODE: IBC 2009 NEC 2008

CODE

VICINITY MAP

DIRECTIONS:
1. HEAD SOUTHEAST 95 FT
2. TURN RIGHT TOWARD GUILFORD RD 102 FT
3. TURN LEFT ONTO GUILFORD RD 2.4 MI
4. TURN RIGHT ONTO US-1 S/WASHINGTON BLVD 0.4 MI
5. MERGE ONTO MD-32 E VIA THE RAMP TO FORT MEADE 2.5 MI
6. TAKE EXIT 10C FOR BALTIMORE-WASHINGTON PARKWAY S TOWARD WASHINGTON 0.8 MI
7. MERGE ONTO MD-295 S
ENTERING DISTRICT OF COLUMBIA16.3 MI
8. CONTINUE ONTO DISTRICT OF COLUMBIA HWY 295 4.7 MI
9. CONTINUE ONTO I-395 S
ENTERING MARYLAND5.2 MI
10. TAKE EXIT 1C FOR I-95/I-495 S TOWARD RICHMOND 0.6 MI
11. MERGE ONTO I-495/I-95 S
PASSING THROUGH DISTRICT OF COLUMBIA
ENTERING VIRGINIA 7.3 MI
12. SLIGHT LEFT ONTO I-95 S (SIGNS FOR RICHMOND) 7.6 MI
13. TAKE EXIT 163 FOR VA-642 TOWARD LORTON 0.3 MI
14. TURN RIGHT ONTO LORTON RD/VA-600/VA-642
CONTINUE TO FOLLOW LORTON RD/VA-64 21.3 MI
15. CONTINUE ONTO FURNACE RD 0.9 MI
16. TURN RIGHT ONTO VA-123 N/OX RD 2.1 MI
17. MAKE A U-TURN AT GAUGE DR
18. DESTINATION WILL BE ON THE RIGHT



SCALE: 1"=2000'

NORTH

SHEET INDEX

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SEE DRAWING A-0 FOR 2232 SUBMISSION PARCEL AND ORDINANCE DATA

NOTES

EMERGENCY: CALL 911

NO WORK IS TO BE PERFORMED ON THIS SITE WITHOUT REVIEW OF THE APPROVED STRUCTURAL ANALYSIS, IF ANY DISCREPANCIES ARE FOUND THE GENERAL CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING. AT NO TIME WILL ANY ADDITIONAL ANTENNAS BE INSTALLED WITHOUT WRITTEN CONSENT FROM TOWER ENGINEER

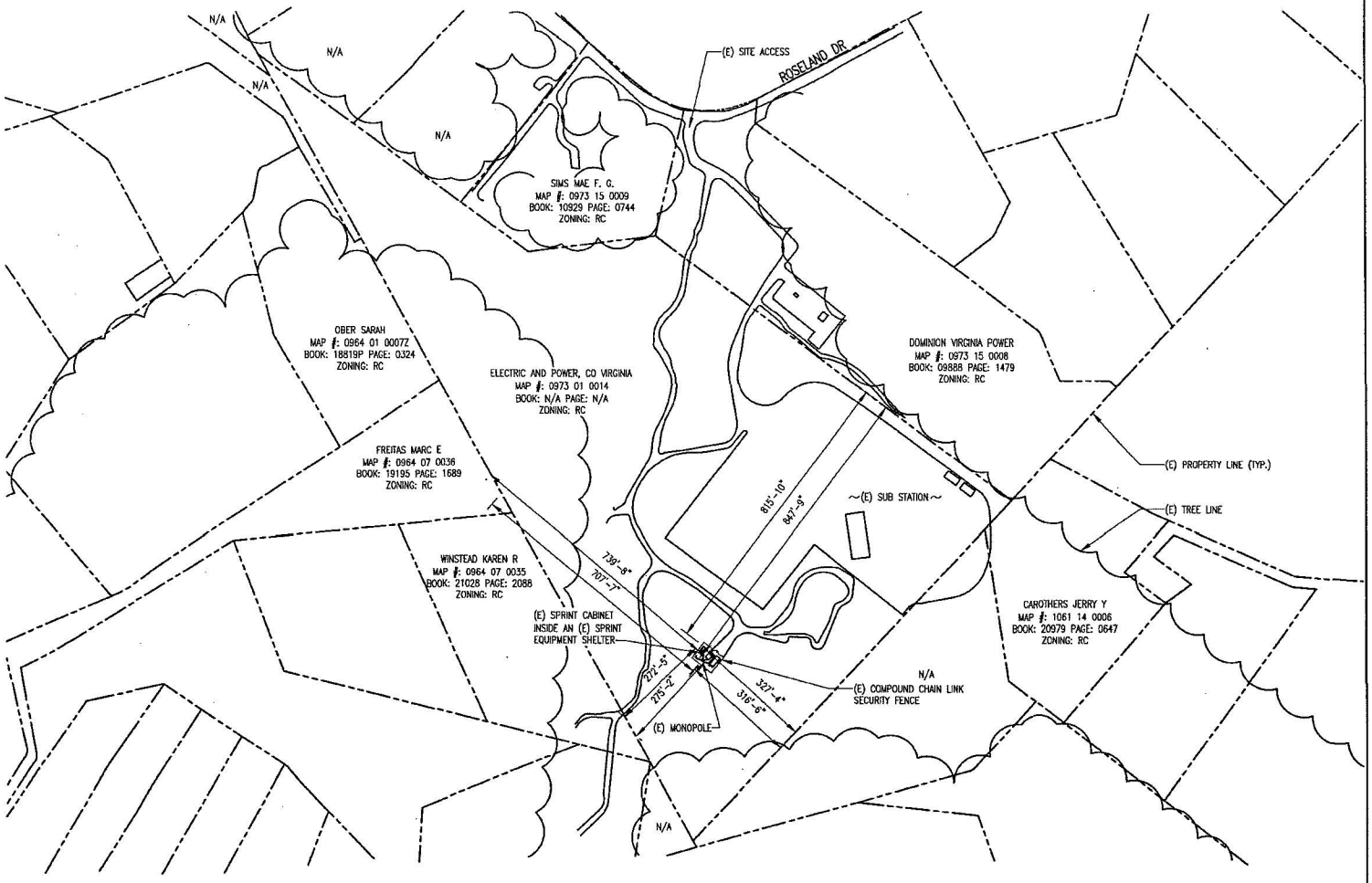
NO.	DATE	REVISIONS	BY	CHK	APP'D
4					
3					
2					
1	01-18-	REVISED 2232 SUBMISSION	SB	CDM	
0	01-17-	2232 SUBMISSION	AV	CDM	

SCALE: AS SHOWN | DESIGNED | DRAWN AV

PROFESSIONAL ENGINEER

TITLE SHEET

DRAWING NUMBER	REV
T-1	1



2232

SITE PLAN NOTES

1. THERE ARE NO IMPROVEMENTS TO THE PUBLIC RIGHTS OF WAY.
2. THE PROPERTY IS NOT SERVED BY PUBLIC WATER, GAS & SEWER.
3. THERE ARE NO FLOODPLAINS ON THE PROPERTY.
4. THERE IS NO RPA ON THE PROPERTY.
5. THERE ARE NO GRAVES, OBJECTS OR STRUCTURES MARKING A PLACE OF BURIAL ON THE PROPERTY PER THE FAIRFAX COUNTY CEMETERY MAP.
6. THERE ARE NO KNOWN TRAILS ON TO THE SUBJECT PROPERTY.
7. THERE IS AN EXISTING STORM WATER MANAGEMENT FACILITY. THERE ARE NO PROPOSED STORM WATER MANAGEMENT FACILITIES FOR THIS PROJECT.
8. NO EXISTING TREES WILL BE REMOVED FOR CONSTRUCTION PURPOSES.
9. THERE ARE NO PROPOSED SIGNS FOR THIS PROJECT.
10. THERE ARE NO KNOWN UTILITY EASEMENTS ON THE SUBJECT PROPERTY.

ORDINANCE DATA

PARCEL DATA

MAP #:	
PROPERTY OWNER:	
ZONING DISTRICT:	RC
AREA OF PARENT PARCEL	
AREA OF DISTURBANCE	0 SF
AREA OF EXISTING STRUCTURES ON SUBJECT PARCEL	7,471 SF
AREA OF PROPOSED STRUCTURES	0 SF

BUILDING DATA

MAXIMUM BUILDING HEIGHT:	60'
YEAR BUILT:	1966
TOTAL EXISTING GROSS BUILDING FLOOR AREA:	N/A SF
TOTAL PROPOSED SPRINT AREA:	0 SF
TOTAL EXISTING & PROPOSED FLOOR AREA:	N/A SF
MAXIMUM F.A.R. PER 3-C07	0.10
ACTUAL F.A.R.	N/A

SETBACKS
FRONT: CONTROLLED BY A 50' ANGLE OF BULK PLANE, BUT NOT LESS THAN 40 FEET
SIDE: CONTROLLED BY A 45' ANGLE OF BULK PLANE, BUT NOT LESS THAN 20 FEET
REAR: CONTROLLED BY A 45' ANGLE OF BULK PLANE, BUT NOT LESS THAN 25 FEET

NORTH PROPERTY LINE TO TELECOMMUNICATIONS ANTENNAS =	847'-9"
EAST PROPERTY LINE TO TELECOMMUNICATIONS ANTENNAS =	316'-6"
SOUTH PROPERTY LINE TO TELECOMMUNICATIONS ANTENNAS =	275'-2"
WEST PROPERTY LINE TO TELECOMMUNICATIONS ANTENNAS =	707'-7"
NORTH PROPERTY LINE TO TELECOMMUNICATIONS EQUIPMENT =	815'-10"
EAST PROPERTY LINE TO TELECOMMUNICATIONS EQUIPMENT =	327'-4"
SOUTH PROPERTY LINE TO TELECOMMUNICATIONS EQUIPMENT =	272'-5"
WEST PROPERTY LINE TO TELECOMMUNICATIONS EQUIPMENT =	739'-8"

PARKING TABULATION:

EXISTING PARKING LOTS:	N/A
EXISTING PARKING SPACES:	N/A
PROPOSED PARKING SPACES:	N/A
TOTAL PARKING SPACES:	N/A

NOTE: THE TELECOMMUNICATIONS FACILITY GENERATES APPROXIMATELY (1) TRIP PER MONTH PER CARRIER; NO DEDICATED PARKING IS REQUIRED.

FLOOD ZONE

MAP # 51059C0360E – SEPTEMBER 17, 2010
THIS PROJECT IS NOT LOCATED IN A FLOOD PLAIN (ZONE X)

STRUCTURAL COMPONENTS ANALYSIS

REFER TO THE STRUCTURAL ANALYSIS REPORT
THE EQUIPMENT, ANTENNAS, MOUNTING SYSTEMS AND ALL ASSOCIATED COMPONENTS HAVE BEEN ANALYZED IN ACCORDANCE WITH THE TIA-222-G STANDARD AS ADOPTED BY VIRGINIA USBC (2009 IBC) BASED UPON A WIND SPEED OF 90 MPH, 3 SECOND GUST.

COMMONWEALTH OF
PROFESSIONAL ENGINEER

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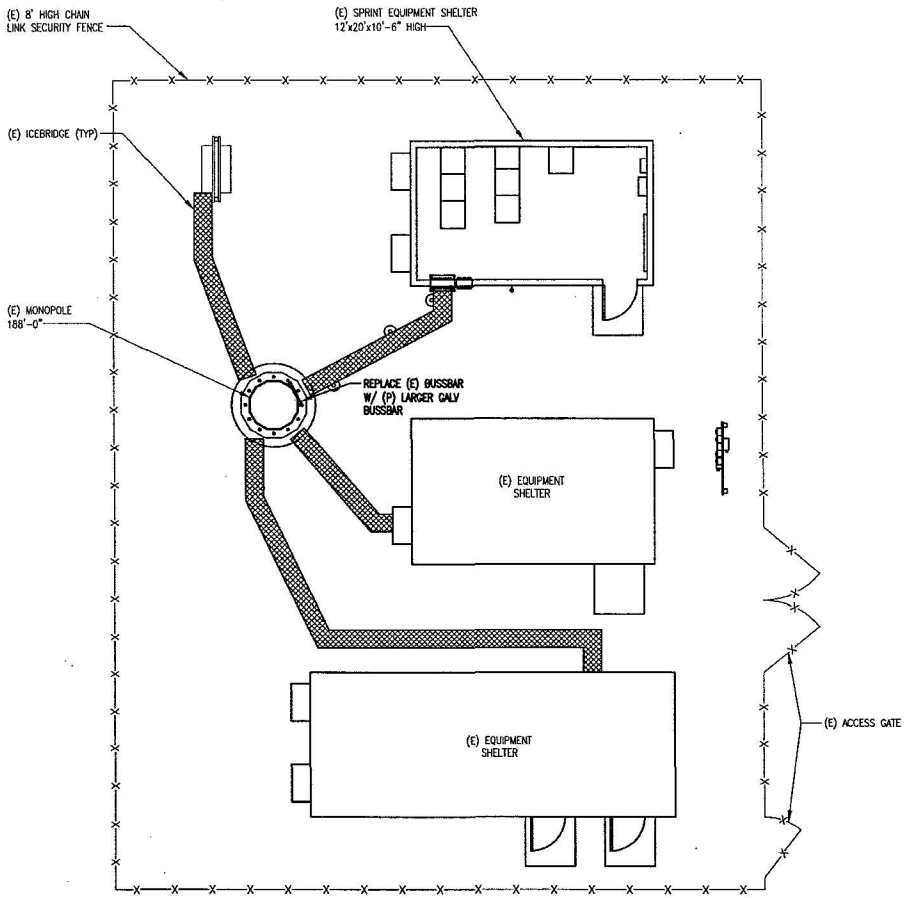
SCALE: AS SHOWN | DESIGNED | DRAWN AV

2232, PARCEL DATA, SITE PLAN

DRAWING NUMBER	REV
A-0	1



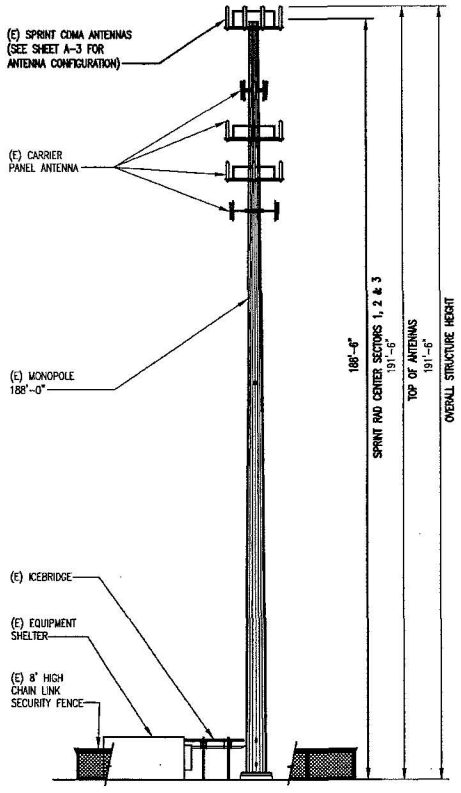
SCALE IN FEET

0 5 10 20 30

EXISTING COMPOUND PLAN (1 / A-1)

SCALE: 1"=10'

TRUE NORTH



EXISTING TOWER ELEVATION (2 / A-1)

SCALE: N.T.S.

SCALE IN FEET

0 15 30 60 90

COMMONWEALTH OF VIRGINIA
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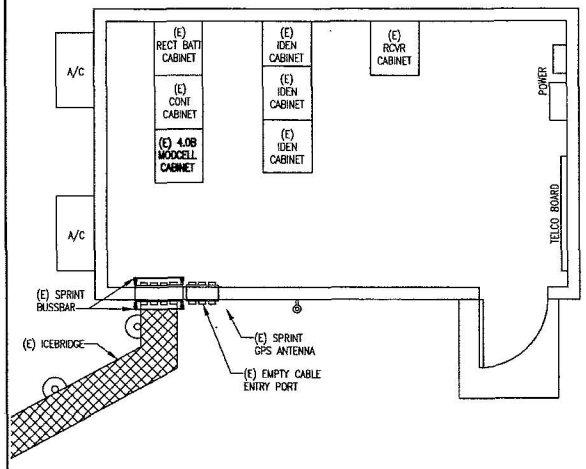
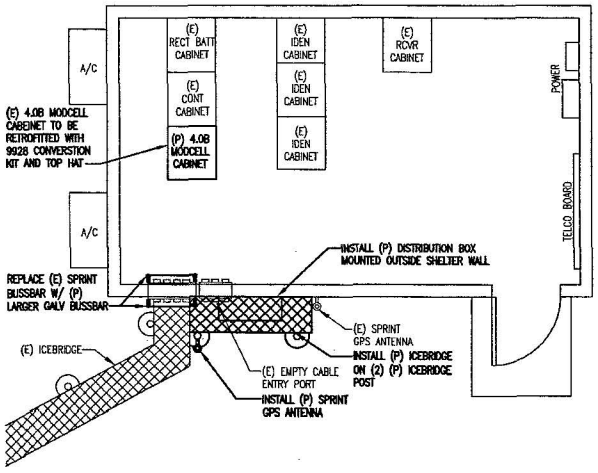
SCALE: AS SHOWN | DESIGNED C. MORIN | DRAWN AV

EXISTING EQUIPMENT LOCATION PLAN

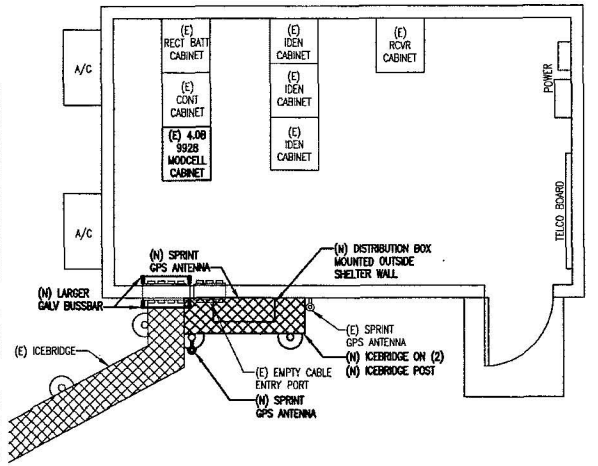
DRAWING NUMBER	REV
A-1	1



EQUIPMENT PLAN (BEFORE) 1/A-2
SCALE: 1"=5'-0"



EQUIPMENT PLAN (DURING) 2/A-2
SCALE: 1"=5'-0"



EQUIPMENT PLAN (AFTER) 3/A-2
SCALE: 1"=5'-0"

SCALE IN FEET
0 2.5 5 10 15

TRUE NORTH

SCALE IN FEET
0 2.5 5 10 15

TRUE NORTH

SCALE IN FEET
0 2.5 5

TRUE NORTH

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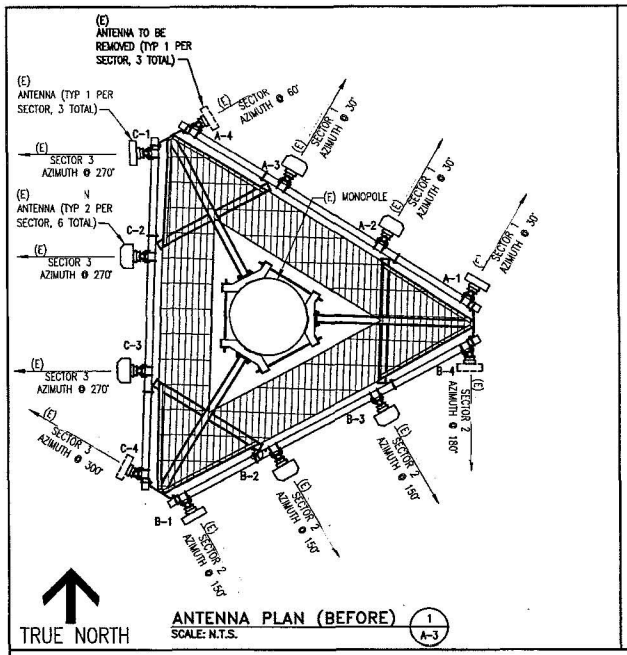
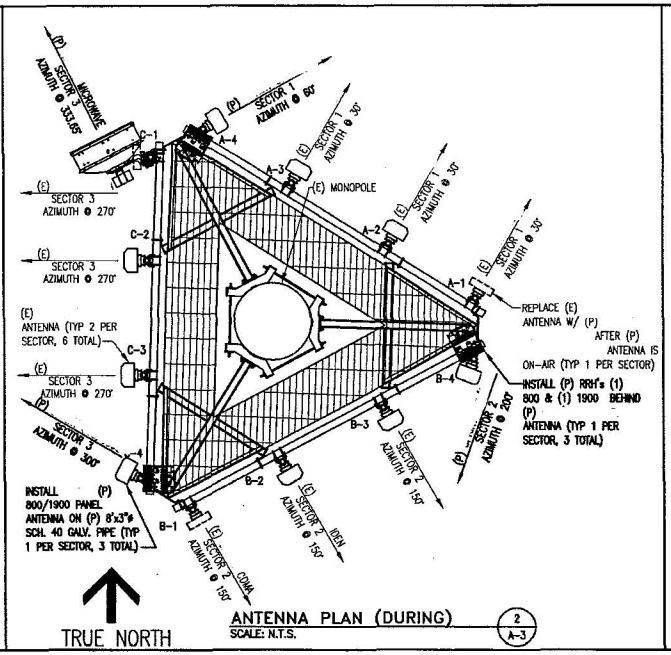
EQUIPMENT PLAN PHASES

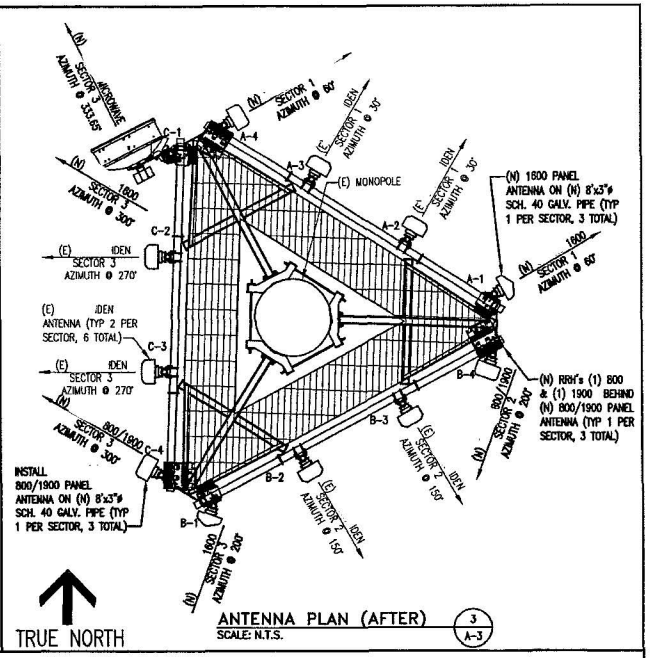
DRAWING NUMBER	REV
A-2	1



ANTENNA PLAN (BEFORE) 1 A-3
SCALE: N.T.S.



ANTENNA PLAN (DURING) 2 A-3
SCALE: N.T.S.



ANTENNA PLAN (AFTER) 3 A-3
SCALE: N.T.S.

ANTENNA AND COAX CABLE SCHEDULE

	ANTENNA LOCATION	AZIMUTH	RAD CENTER	STATUS	TECHNOLOGY	ANTENNA MODEL #	RRH'S / RADIO'S	COMBINER MODEL #	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	CABLE SIZE	CABLE LENGTH	JUMPER LENGTH	GPS CABLE LENGTH =12'
ALPHA	A-1	30°	188.5'	TO BE REPLACED	CDMA	–	–	–	–	–	–	–	–	
	A-1	60°	188.5'	PROPOSED	1600	APXV9N18-C-A20	(1) 1600 ALU/PANASONIC	–	0°	-4°	SHARED W/ 800/1900	230'	12'	
	A-2	30°	188.5'	TO REMAIN	IDEN	–	–	–	–	–	–	–	–	
	A-3	30°	188.5'	TO REMAIN	IDEN	–	–	–	–	–	–	–	–	
	A-4	60°	188.5'	TO BE REPLACED	CDMA	–	–	–	–	–	–	–	–	
	A-4	60°	188.5'	PROPOSED	800/1900	APXV9ERR18-C-A20	(1) 1900 ALU/PANASONIC & (1) 1900 ALU/PANASONIC	–	0°	-8°(800)/-4°(1900)	1-1/4"	230'	12'	
BETA	B-1	150°	188.5'	TO BE REPLACED	CDMA	–	–	–	–	–	–	–	–	
	B-1	200°	188.5'	PROPOSED	1600	APXV9N18-C-A20	(1) 1600 ALU/PANASONIC	–	0°	-4°	SHARED W/ 800/1900	230'	12'	
	B-2	150°	188.5'	TO REMAIN	IDEN	–	–	–	–	–	–	–	–	
	B-3	150°	188.5'	TO REMAIN	IDEN	–	–	–	–	–	–	–	–	
	B-4	180°	188.5'	TO BE REPLACED	CDMA	–	–	–	–	–	–	–	–	
	B-4	150°	188.5'	PROPOSED	800/1900	APXV9ERR18-C-A20	(1) 1900 ALU/PANASONIC & (1) 1900 ALU/PANASONIC	–	0°	-8°(800)/-4°(1900)	1-1/4"	230'	12'	
GAMMA	C-1	270°	188.5'	TO BE REPLACED	CDMA	–	–	–	–	–	–	–	–	
	C-1	300°	188.5'	PROPOSED	1600	APXV9N18-C-A20	(1) 1600 ALU/PANASONIC	–	0°	-4°	SHARED W/ 800/1900	230'	12'	
	C-2	270°	188.5'	TO REMAIN	IDEN	–	–	–	–	–	–	–	–	
	C-3	270°	188.5'	TO REMAIN	IDEN	–	–	–	–	–	–	–	–	
	C-4	300°	188.5'	TO BE REPLACED	CDMA	–	–	–	–	–	–	–	–	
	C-4	270°	188.5'	PROPOSED	800/1900	APXV9ERR18-C-A20	(1) 1900 ALU/PANASONIC & (1) 1900 ALU/PANASONIC	–	0°	-8°(800)/-4°(1900)	1-1/4"	230'	12'	
	C-4	333.65°	188.5'	PROPOSED	MICROWAVE	–	SB-3	–	–	–	–	230'	–	

NOTES:
1. SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO SEPARATE RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
2. THE STANDARD IS BASED ON EIGHT COLORED TAPES–RED, BLUE, GREEN, YELLOW, GREEN, GREEN, WHITE, AND SLATE(GREY). THESE TAPES SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
3. USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
4. COLOR CODE TAPE SHALL BE 3" WIDE AT TOP AND MIDDLE OF TOWER AND 2" WIDE AT THE BOTTOM. ALL JUMPERS SHALL BE INCLUDED.
5. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
6. ALL COLOR BANDS INSTALLED AT OR NEAR THE GROUND SHALL BE A MINIMUM OF 3/4" WIDE.
7. ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN HEAD TO TAIL WITH ONE ANOTHER FROM SIDE-TO-SIDE.
8. GPS CABLE TO BE RUNNER CABLES SHALL BE LCF12-50J

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER

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SCALE: AS SHOWN | DESIGNED | DRAWN AV

ANTENNA PLAN PHASES & SCHEDULE

DRAWING NUMBER	REV
A-3	1