

LEGEND

SYMBOL DESCRIPTION

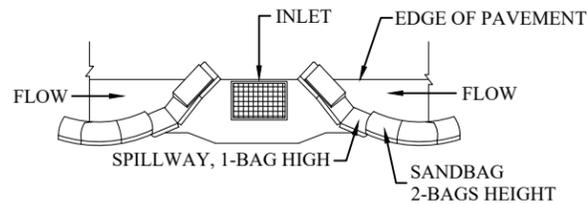
PROPOSED	
	2 X 3 VAULT
	NEW POLE
	TRENCH AND FIBER CONDUIT (PVT)
EXISTING	
	STATION POINTS (100' INCREMENTS)
	EXISTING CURB RAMP
	EXISTING CURB & GUTTER
	EXISTING RIGHT OF WAY
	EXISTING CENTER LINE
	EXISTING CENTER LINE

EROSION AND SEDIMENT CONTROL NOTES:

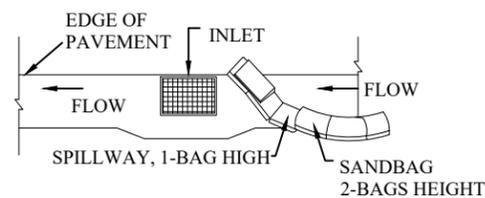
TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

- ALL REQUIREMENTS OF THE CITY OF RANCHO PALOS VERDES "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED PUBLIC IMPROVEMENTS CONSISTENT WITH THE EROSION CONTROL PLAN AND/OR WATER POLLUTION CONTROL PLAN (WPCP), IF APPLICABLE.
- FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
- THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
- EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON.
- THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
- THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION/SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
- ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED IMPROVEMENT PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
- ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
- THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER/DEVELOPER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

STORMDRAIN INLET PROTECTION



TYPICAL PROTECTION FOR INLET WITH OPPOSING FLOW DIRECTIONS



TYPICAL PROTECTION FOR INLET WITH SINGLE FLOW DIRECTION

NOTES:

- INTENDED FOR SHORT - TERM USE.
- USE TO INHIBIT NON - STORM WATER FLOW.
- ALLOW FOR PROPER MAINTENANCE AND CLEANUP.
- BAGS MUST BE REMOVED AFTER ADJACENT OPERATION IS COMPLETED.
- NOT APPLICABLE IN AREAS WITH HIGH SILTS AND CLAYS WITHOUT FILTER FABRIC.

NOTES:

- CONTRACTOR TO POTHOLE ALL UTILITY CROSSINGS.
- CONTRACTOR TO PLACE SANDBAGS AROUND ANY/ALL STORM DRAIN INLETS TO PREVENT CONTAMINATED WATER.
- SPOILS PILE WILL BE COVERED AND CONTAINED AND STREET WILL BE SWEEPED AND CLEANED AS NEEDED.
- CONTRACTOR TO REPAIR DAMAGED PUBLIC IMPROVEMENTS TO THE SATISFACTION OF THE CITY ENGINEER.
- CURB & GUTTER TO BE PROTECTED IN PLACE. SIDEWALK TO BE REPLACED TO THE SATISFACTION OF THE CITY ENGINEER.
- THE CONTRACTOR SHALL RESTORE THE ROADWAY BACK TO ITS ORIGINAL CONDITION SATISFACTORY TO THE CITY ENGINEER INCLUDING, BUT NOT LIMITED TO PAVING, STRIPING, BIKE LANES, PAVEMENT LEGENDS, SIGNS, AND TRAFFIC LOOP DETECTORS.
- SIDEWALK SHALL BE RESTORED/REPLACED PER CITY OF RANCHO PALOS VERDES STANDARD DRAWINGS G7, G9, G10, G11 & SDG100.
- PEDESTRIAN RAMP WILL NOT BE DISTURBED.

ROW GROUND CONSTRUCTION NOTES:

- GROUND CONSTRUCTION TO REMOVE/CLEAN ALL DEBRIS, NAILS, STAPLES, OR NON-USED VERTICALS OFF THE POLE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MUNICIPAL, COUNTY, STATE, FEDERAL, GO95 AND GO128 STANDARDS AND REGULATIONS.
- CALL USA 48 HOURS PRIOR TO EXCAVATING AT (800) 227-2600 OR 811.
- ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
- ALL EQUIPMENT TO BE BONDED.
- METERING CABINET REQUIRES 36" CLEARANCE AT DOOR OPENING.
- CAULK CABINET BASE AT PAD.

NORMAL LOCATION OF UNDERGROUND UTILITIES NOTES:

- LOCATION AND DEPTH OF EXISTING AND PROPOSED UTILITIES MUST BE PROVIDED BY THE SUBDIVIDER AND SHOWN ON ANY PLANS SUBMITTED TO THE DEPT. OF PUBLIC WORKS FOR APPROVAL.
- CHANGES MAY BE PERMITTED BY THE DEPT. OF PUBLIC WORKS IN CASES OF CONFLICTING FACILITIES.
- CONFLICTS BETWEEN UTILITY COMPANIES FACILITIES, EXISTING AND PROPOSED, MUST BE MUTUALLY RESOLVED BY THE UTILITY COMPANIES.
- FOR COMMERCIAL SIDEWALKS, THE FIRE HYDRANT SHALL BE PLACED WITHIN THE SIDEWALK 1'-6" BEHIND FACE OF CURB.
- MAXIMUM 2" DIAMETER GAS MAINS MAY BE PLACED IN JOINT UTILITIES TRENCH SUBJECT TO APPROVAL OF CITY ENGINEER (IN TRACTS).

CALIFORNIA STATE CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PREFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- CALIFORNIA ADMINISTRATIVE CODE (INCLUDING TITLES 24 & 25) 2010
- 2010 CALIFORNIA BUILDING CODES WHICH ADOPTS THE 2010 UBC, 2010 UMC, 2010 UPC AND THE 2010 NEC.
- BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
- 2010 CALIFORNIA MECHANICAL CODE
- ANSI/EIA-222-F LIFE SAFETY CODE NFPA-101
- 2010 CALIFORNIA PLUMBING CODE
- 2010 CALIFORNIA ELECTRICAL CODE
- 2010 LOCAL BUILDING CODE
- CITY/COUNTY ORDINANCES

ACCESSIBILITY REQUIREMENTS:

THIS WIRELESS COMMUNICATION FACILITY COMPLIES WITH FEDERAL STANDARDS FOR RADIO FREQUENCY IN ACCORDANCE WITH THE TELECOMMUNICATION ACT OF 1996 AND SUBSEQUENT AMENDMENTS AND ANY OTHER REQUIREMENTS IMPOSED BY STATE OR FEDERAL REGULATORY AGENCIES.

FCC NOTE:

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ASG15m1

PHASE II
CROWN CASTLE PROJECT NO.
242727

CLIENT:

CROWN CASTLE
NG WEST LLC
300 SPECTRUM CENTER DR STE. 1200
IRVINE, CA 92618
www.crowncastle.com

PREPARED BY:

Coastal Communications
Telecommunications Engineering
5841 EDISON PLACE, SUITE 200
CARLSBAD, CA 92008
PHONE: (760) 929-0910
FAX: (760) 929-0936

PROPRIETARY INFORMATION

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CALL AT
LEAST TWO
DAYS BEFORE
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UNDERGROUND SERVICE ALERT
TICKET # _____

REVISION / ISSUE	DATE
SITE RELOCATED	8/20/15

SITE NAME & ADDRESS:

ASG15m1
28151 HIGH RIDGE RD
RANCHO PALOS VERDES, CA

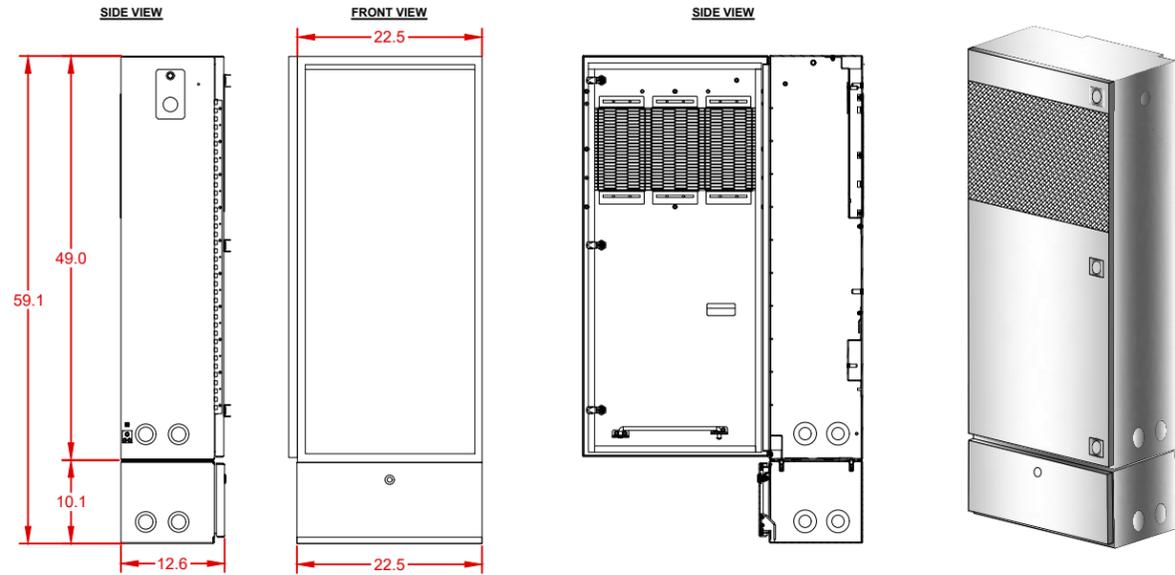
DETAILS & NOTES

DRAWN BY: RG	DRAFT DATE: 10/12/16	APPROVED BY: JT
SHEET NO. D-1		

ABBREVIATIONS

A/C	ASPHALT CURB
C&G	CURB & GUTTER
CL	CENTERLINE
EX	EXISTING
EOP	EDGE OF PAVEMENT
PL	PROPERTY LINE
R/W	RIGHT OF WAY
S/B	SUBDIVISION BOUNDARY

CISH-51 PEDESTAL

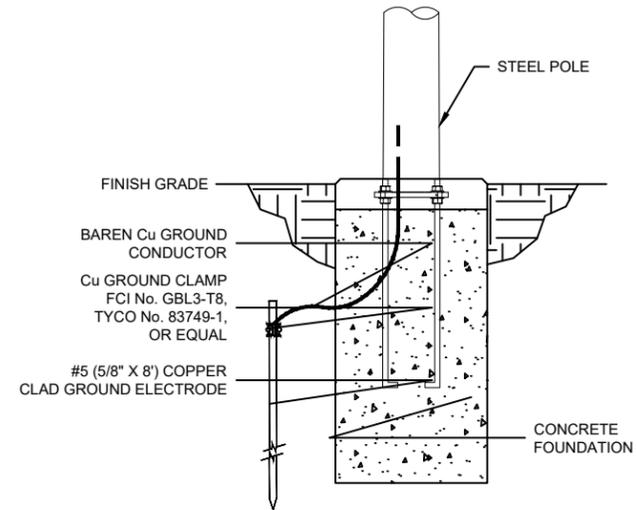


NOTES:
CUBE APPROX. WEIGHT W/PEDESTAL = 105 LBS

* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.

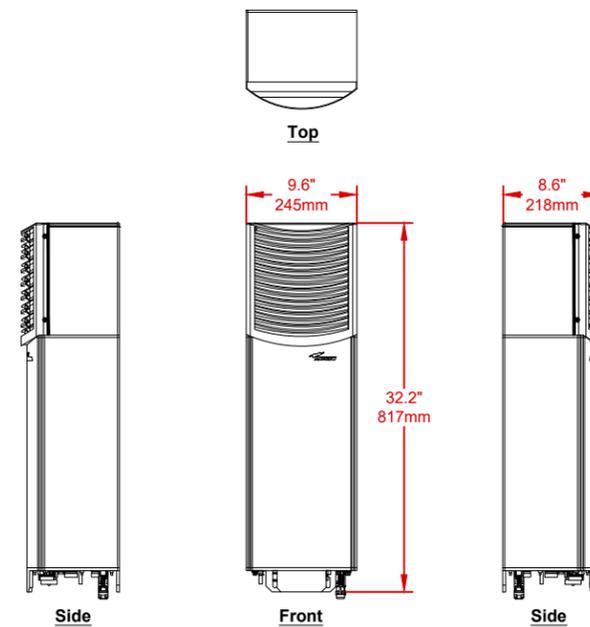
1 SCALE
N.T.S.

GROUND ROD INSTALLATION FOR STEEL POLE
TYPICAL SECTION: N.T.S.



2 SCALE
N.T.S.

ANDREW ION-M17HP/19HP
MULTI-BAND, MULTI-OPERATOR
REMOTE OPTICAL SYSTEM



3 SCALE
N.T.S.

Electrical

Power Supply	
Mains Power, Vac.	85 to 264
Power consumption, watts	115 or 230
	1150

Optical

Connectors	E2000/APC 8°
Optical return loss, dB	45 minimum
Fiber type, mm	Single mode E9/125
Optical link budget, dB	0 to 10
Composite input power @ OTRx master side, dBm	
1900 MHz	+5 composite
1700 / 2100 MHz	+5 composite

Interface

BTS Side	
Number of connectors	
1900 MHz	4
1700/2100 MHz	4
System optimized for BTS power, dBm	
	33
	43
Antenna Port	
Connector	7/16 Female
Output power	See band specification
Return loss, dB	15

1700/2100 MHz (AWS)

Frequency range, MHz	
Uplink	1710 to 1755
Downlink	2110 to 2155

Output power per carrier, dBm*

Number of Carriers	1	2	4	8
GSM	45	42	39	36
CDMA	45	42	39	36
UMTS	45	42	39	36
LTE	45	42**	39	36

Spurious emission < -13 dBm / 1 MHz

Adjacent channel power, dBc-48

DL output tolerance over frequency, dB±1

DL output tolerance over temperature, dB0.5***

Input ICP3, dBm

ICP3 optimized-12

Noise figure optimized-18

Noise figure, dB

ICP3 optimized7

Noise figure optimized11 max.

Noise figure optimized4.5

Noise figure optimized6 max.

1900 MHz (AWS)

Frequency range, MHz	
Uplink	1850 to 1915
Downlink	1930 to 1995

Output power per carrier, dBm*

Number of Carriers	1	2	4	8
GSM	45	42	39	36
CDMA	45	42	39	36
UMTS	45	42	39	36
LTE	45	42**	39	36

Spurious emission < -13 dBm / 1 MHz

DL output tolerance over frequency, dB±1

DL output tolerance over temperature, dB0.5***

Input ICP3, dBm

ICP3 optimized-12

Noise figure optimized-18

Noise figure, dB

ICP3 optimized7

Noise figure optimized11 max.

Noise figure optimized4.5

Noise figure optimized6 max.

System Supervision and Control

Commands	RF on/off
	External control parts
Alarms	Summary
	Power Supply
	Optical UL and DL failure
	Temperature
Supervision	Output power on a per-channel and per-band basis (optional)

Mechanical***

Height, width, depth mm (in)	817 x 245 x 218
	(32.2 x 9.61 x 8.6)
Weight, kg (lb)	40 (88.2)

Environmental

Operation temperature range	-33° C to +50° C
Ingress protection	RF part.....IP67
	Fan part.....IP55

- * Applicable to single modulation mode only
- ** 3db power reduction @ < 5MHz carrier bandwidth
- *** With active cooling
- **** Spacing required 40 mm (1.58 in) around unit
- ***** With passive cooling maximum temperature +40° C

All figures are typical values.

ASG15m1

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RANCHO PALOS VERDES, CA

DETAILS & NOTES

DRAWN BY:	DRAFT DATE:	APPROVED BY:
RG	10/12/16	JT

SHEET NO.
D-2



A KEY MAP



B 12 O'CLOCK VIEW- FROM THE NORTH EAST



C 3 O'CLOCK VIEW- FROM THE SOUTHEAST



D 9 O'CLOCK VIEW- FROM THE NORTHWEST

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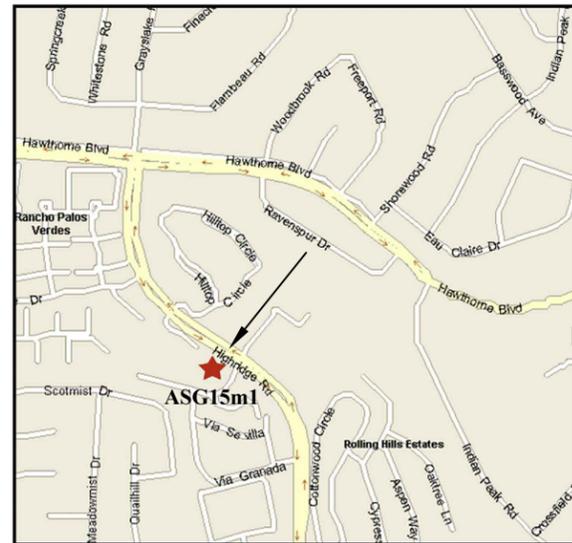
SITE PHOTOS

DRAWN BY: RG DRAFT DATE: 10/12/16 APPROVED BY: JT

SHEET NO. S-1



Existing Site



Vicinity Map
LOOKING SOUTHWEST



Proposed Site ASG15m1

ASG15m1

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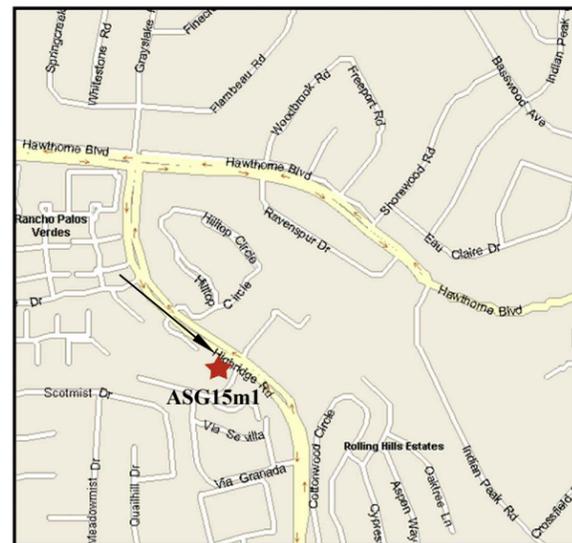
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RANCHO PALOS VERDES, CA

PHOTOSIM

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SHEET NO. S-3



Existing Site



Vicinity Map
LOOKING SOUTHEAST



Proposed Site ASG15m1

ASG15m1

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PHOTOSIM

DRAWN BY: RG DRAFT DATE: 10/12/16 APPROVED BY: JT
SHEET NO. S-4

A ANTENNA DETAILS

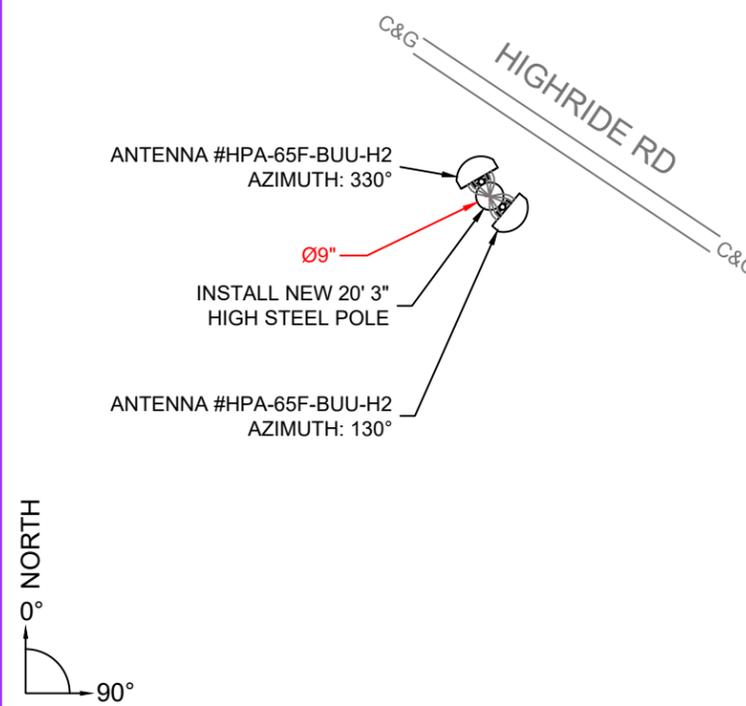
SCALE: 1:5

B 12 O'CLOCK VIEW

SCALE: 1:5

B 3 O'CLOCK VIEW

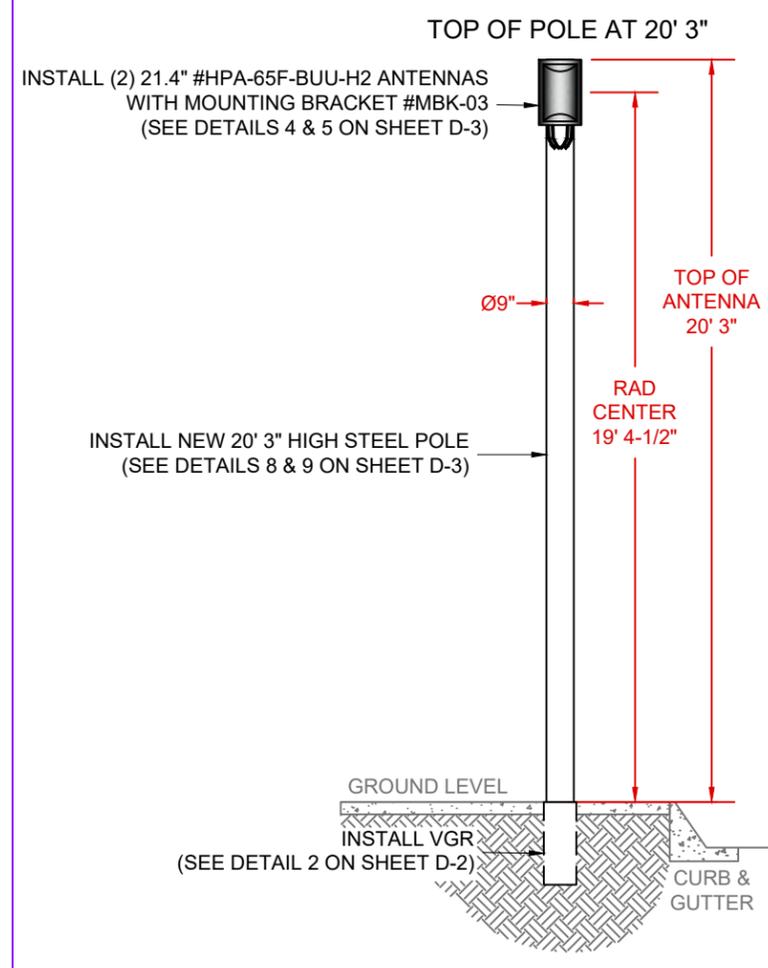
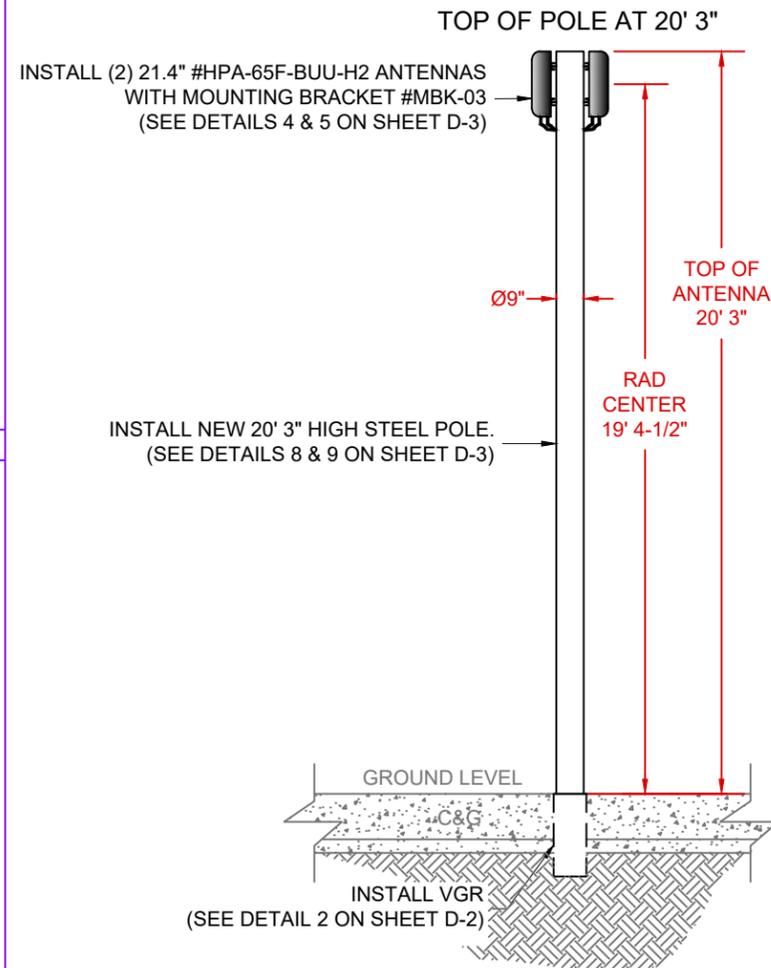
SCALE: 1:5



NOTES:

POLE #NT:
 TOP OF NEW POLE: 20' 3"
 TOP OF ANTENNA: 20' 0"
 RAD CENTER: 19' 4-1/2"
 AZIMUTH: 130° & 330°

ANTENNAS TO BE PAINTED TO MATCH POLE.



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POLE PROFILE

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