

LEGEND

SYMBOL DESCRIPTION

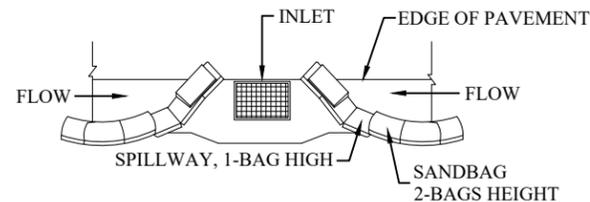
PROPOSED	
	2' X 3' VAULT
	NEW STREETLIGHT
	PCC SIDEWALK
	TRENCH AND FIBER CONDUIT (PVT)
EXISTING	
	EXISTING STREETLIGHT
	STATION POINTS (100' INCREMENTS)
	EXISTING CURB RAMP
	EXISTING CURB & GUTTER
	EXISTING RIGHT OF WAY
	EXISTING CENTER LINE
	EXISTING CENTER LINE

EROSION AND SEDIMENT CONTROL NOTES:

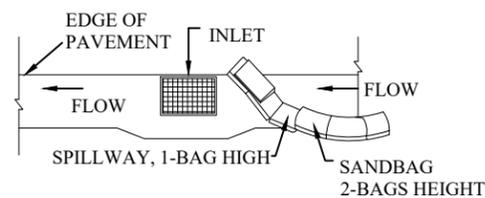
TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

- 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:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS DO NOT APPLY IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.

FCC NOTE:

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.

ASG69

PHASE II

CROWN CASTLE PROJECT NO.

242727

CLIENT:



300 SPECTRUM CENTER DR STE. 1200
IRVINE, CA 92618
www.crowncastle.com

PREPARED BY:



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

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY AND CONFIDENTIAL TO AT&T. ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO AT&T IS STRICTLY PROHIBITED.

DIGALERT



1-800-227-2600
CALL AT
LEAST TWO
DAYS BEFORE
YOU DIG

UNDERGROUND SERVICE ALERT
TICKET # _____

REVISIONS	DATE
LUMINAIRE CHANGE	7/17/15
REVISIONS	8/19/15
ANTENNA CHANGED	10/9/15
ADD PED 009	07/7/16
REMOVED PED 009. ADD CISH-51	11/11/16
REVISION / ISSUE	DATE

SITE NAME & ADDRESS:

ASG69
ACROSS 3486 SEAGLEN DR
RANCHO PALOS VERDES, CA

DETAILS & NOTES

DRAWN BY: RG DRAFT DATE: 11/11/16 APPROVED BY: TO

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

Electrical	
Power Supply	
Mains Power, Vac.	85 to 264
	115 or 230
Power consumption, watts	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, dB	0.5***
Input ICP3, dBm	
ICP3 optimized	-12
Noise figure optimized	-18

Noise figure, dB	
ICP3 optimized	7
	11 max.
Noise figure optimized	4.5
	6 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, dB	0.5***

Input ICP3, dBm	
ICP3 optimized	-12
Noise figure optimized	-18

Noise figure, dB	
ICP3 optimized	7
	11 max.
Noise figure optimized	4.5
	6 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)
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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)

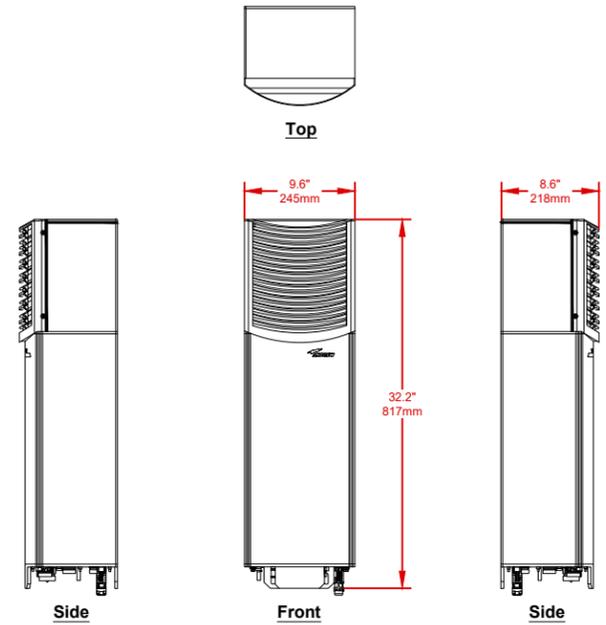
Environmental

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

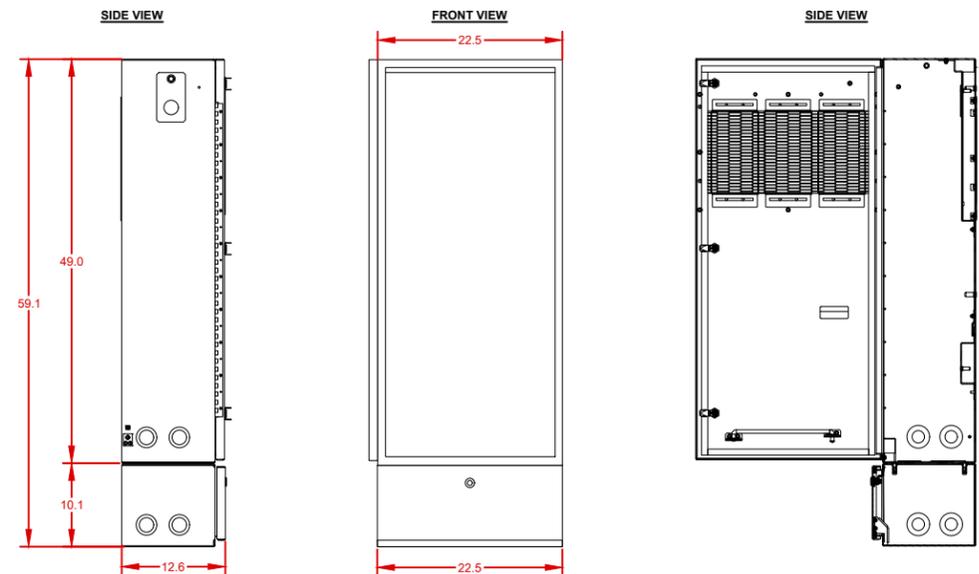
All figures are typical values.

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



1 SCALE N.T.S.

CISH-51 PEDESTAL

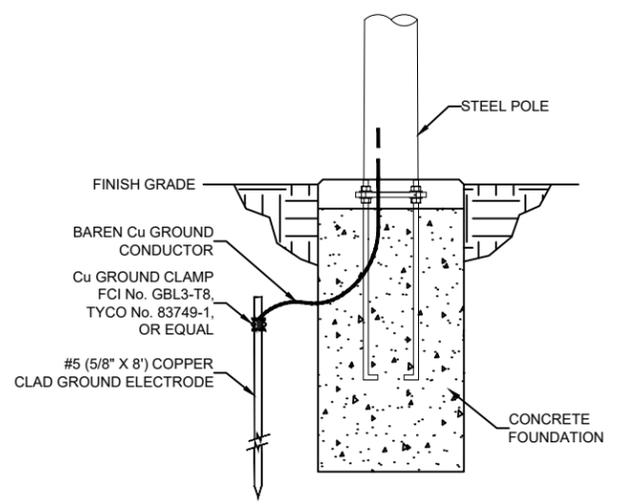


NOTES:
CUBE APPROX. WEIGHT W/PEDESTAL = 105 LBS

* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.

2 SCALE N.T.S.

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



3 SCALE SCALE

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RANCHO PALOS VERDES, CA

DETAILS & NOTES

DRAWN BY: RG	DRAFT DATE: 11/11/16	APPROVED BY: TO
SHEET NO. D-2		

CUUX045X06F0000

Connector Description

The antenna has 6 connectors located at the bottom, each marked with a colored ring:

Low Band (R1)	696-960 MHz	Red Rings	●	(2x) 7/16-DIN Female
High Band #1 (Y1)	1695-2700 MHz	Yellow Rings	●	(2x) 7/16-DIN Female
High Band #2 (Y2)	1695-2700 MHz	Yellow Rings	●	(2x) 7/16-DIN Female

Electrical Characteristics

Frequency Bands (MHz)	Low Band		High Bands #1 and #2			
	696-960 MHz	806-960 MHz	1695-1880 MHz	1850-1990 MHz	1920-2200 MHz	2300-2700 MHz
Polarization	±45°					
Horizontal Beamwidth	47°	37°	49°	45°	42°	38°
Vertical Beamwidth	40.6°	30.8°	24.8°	24°	23.0°	21.7°
Gain	12.2 dBi	13.9 dBi	12.9 dBi	13.8 dBi	14.1 dBi	14.4 dBi
Electrical Downtilt	0°					
Impedance	50Ω					
VSWR	≤ 1.5:1					
Front-to-Back Ratio	> 24 dB		> 25 dB			
Isolation Between Bands	> 30 dB		> 30 dB			
Isolation Between Ports	≥ 25 dB		≥ 25 dB			
IM3 (2x20W carrier)	< -150 dBc		< -150 dBc			
Input Power	(2x) 500 W		(4x) 300 W			
Diplexed	No					
Lightning Protection	Direct Ground					
Operating Temperature	-40° to +60° C (-40° to +140° F)					

Mechanical Characteristics

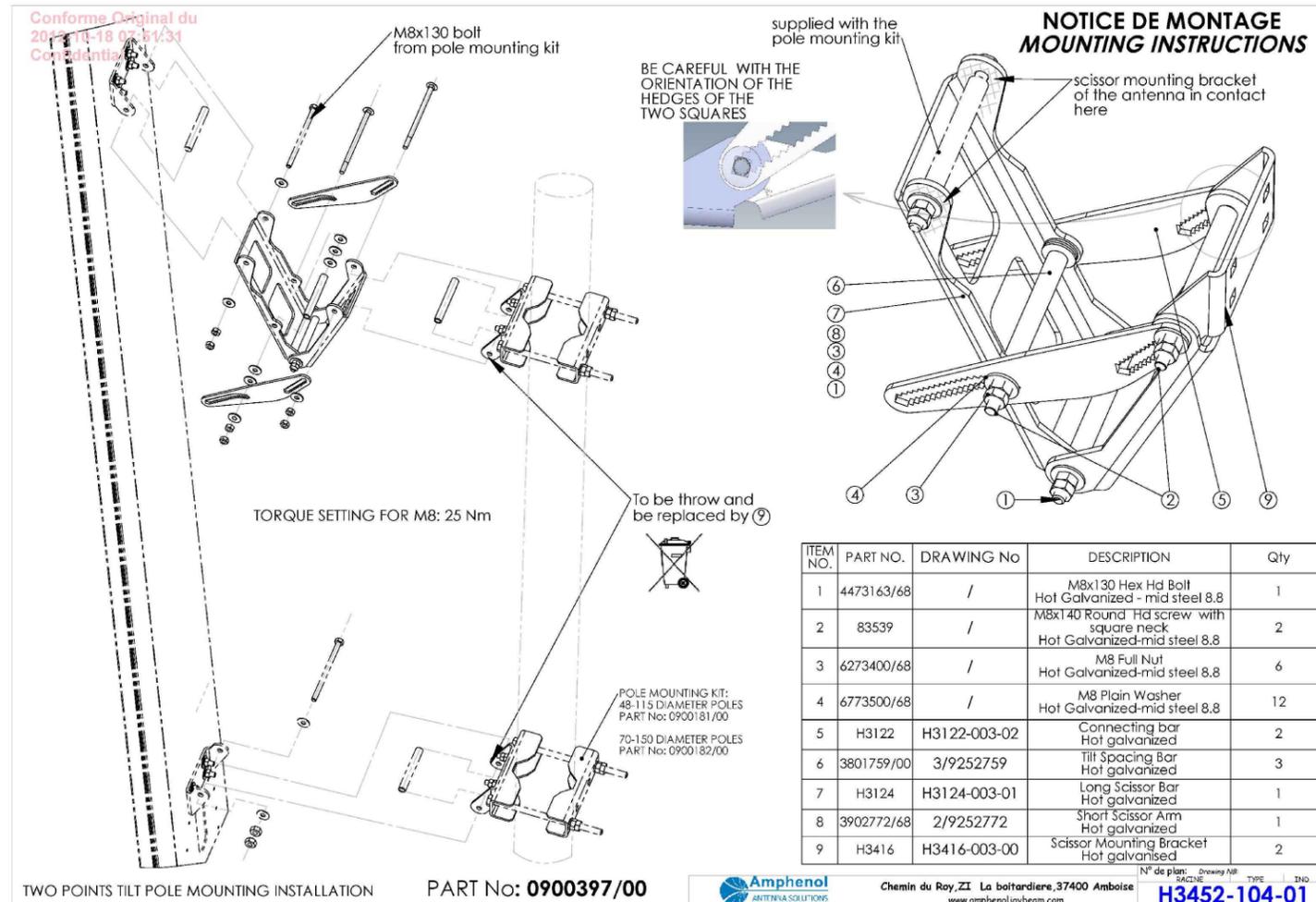
Dimensions (Height x Width x Depth)	611 x 412 x 185 mm	24.1 x 16.2 x 7.3 in
Weight without Mounting Brackets	7.1 kg	15.7 lbs
Survival Wind Speed	241 km/hr	150 mph
Wind Area	Front	0.25 m²
	Side	0.11 m²
Wind Loads (160 km/hr or 100 mph)	Front	305 N
	Side	135 N



8

SCALE
N.T.S.

MOUNTING BRACKET #0900397/00



TWO POINTS TILT POLE MOUNTING INSTALLATION

PART No: 0900397/00



Chemin du Roy, ZI La boitardiere, 37400 Amboise
www.amphenoljoybeam.com

N° de plan: 3452-104-01
SÉRIE: TYPE: ÉD: 11/11/16

9

SCALE
N.T.S.

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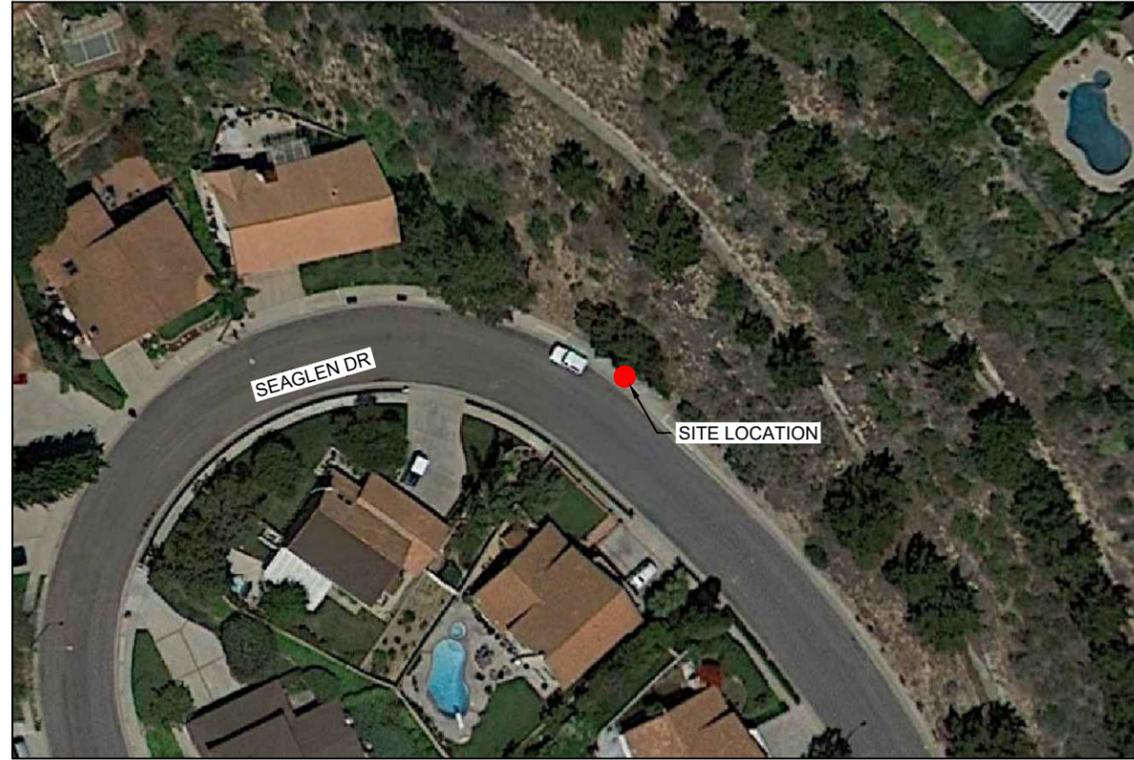
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DETAILS & NOTES

DRAWN BY: RG
DRAFT DATE: 11/11/16
APPROVED BY: TO
SHEET NO. D-4



A KEY MAP



B 12 O'CLOCK VIEW- FROM THE SOUTHWEST



C 3 O'CLOCK VIEW- FROM THE NORTHEAST



D 9 O'CLOCK VIEW- FROM THE SOUTHEAST

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SITE PHOTOS

DRAWN BY: RG DRAFT DATE: 11/11/16 APPROVED BY: TO
SHEET NO. S-1

