

PERMIT NO. CC13-01

District 4



Applica	nt Name	e and Job Nun	nber Crown Cast	le NG East LLC S	FL 60_1		
Job Add	dress ar	nd Location_1	001 SE 20th St.	_			N
Descrip	otion of V	Work <u>Installin</u>	g cabinet and ut	ility pole within ri	ght-of-way.		
Anticipa	ated star	rt and end date	es of work <u>6/2/1</u>	4 - 45 days			
x	below (Code) Crown	grade, in acco	ordance with Sec qualified expert(ction 25-100.1.B. s) is attached.	3 of the City of F	tall communications ort Lauderdale Co subsections and	de of Ordinances
□ (Siz	C.1 ze)	☐ C.2 (Height)	☐ C.3 (Front Yard)	☐ C.4 (Corner Yard)	☐ C.6 (Separation)	□C.7 (Exist. Facility)	C.12 (Collector)
	require Notice one hu with Se The pro dated _ A lands associa Crown	ments in Section the pending ndred fifty (15 ection 25-100.1 opposed site will 04/04/2013 ecaping mainted tion is attached Castle shall be	on 25-100.1 of the application has 0) feet of the process. E.5 of the Code I be maintained I which is on the application of the	ne Code been provided to oposed site and for one	all property owner to the relevant how accordance with ingineer adjacent propercial prop	rs abutting public rimeowner association the approved Graf rty owner and relepted to the approved of the approved of the rty owner and relepted to the object of the approved in the object of the approved of	ghts-of-way within on, in accordance fiti Mitigation Plan vant home owner
As an correct.		ed representa	ative of Crown C	Castle, I certify u	nder oath that th	e forgoing stateme	ents are true and
		ernandez of Authorized C	Crown Castle Age	ent Signat	ure of Authorized	Crown Castle Ager	nt .
Sworn t	No. Ai	ubscribed before the property Public State of the property Public State of the property of the	Nota State	ry Public, e of Florida		, 2008, 2014 Expires 8 · 23 (Do not wr	ite below this line)
Concep	tual app	proval date	by			, Subject to the fol	lowing conditions:
1) Ad	etailed	visual mitigat	ion plan is requ	uired			
Final P	ermit a	pproval date	by _		Final Inspectio	n dateby	/
		ering Permits I work at (954)	Division 24 hours 828-5649	3			



CLIENT:

CROWN CASTLE SFL60 1

ADDRESS:

CLIENT SITE ID#:

1001 SE 20TH STREET FORT LAUDERDALE, FL 33316

SITE TYPE:

(H)

Broward Health

Medical Cente

SE 16th St

SE 16th Ct

NEW METAL POLE

SE 15th St

SE 16th St

Causeway

Shoppes'

SE TATH CL.

Cliff Lake

SETENDO

Funderdome:

Indoor Playground and Cafe

SE 15th St

PROPERTY INFORMATION SITE COORDINATES: JURISDICTION.

PROPERTY OWNER:

26.096715* -80.132413 CITY OF FORT LAUDERDALE

CROWN CASTLE 8555 NW 64TH STREET

MIAMI, FL 33166

g SE 16th SL SE.16th St

The Art Institute

Grande I

PROJECT TEAM

PROJECT MANAGEMENT FIRM: CROWN CASTLE 8555 NW 64TH STREET MIAMI, FL 33166

ENGINEERING FIRM: ADDRESS:

CONTACT:

PHONE:

AW SOLUTIONS, INC. 300 CROWN OAK CENTRE DR. LONGWOOD, FL 32750 SHANE HAFNER 407.260.0231 EXT. 120 26983

DESIGN CRITERIA;

FLORIDA COA#:

- 1. FLORIDA BUILDING CODE 2010 AND ASCE 7-10. WIND LOAD PER ASCE 7-10.
- ULTIMATE WIND SPEED: 170 MPH. BUILDING RISK CATEGORY: II. WIND EXPOSURE: C.
- 2. DEAD LOAD:
- A. EQUIPMENT WEIGHT PER MANUFACTURER DATA. SEISMIC LOAD DOES NOT GOVERN THIS DESIGN.

Bistro (1) Mezzaluna (1)

SEA 8th Ct.

Hyatt Place Fort

Lauderdale 17th Street ()

INDEX

SHEET SHEET DESCRIPTION REV TITLE SHEET C1 SITE PLAN C1.1 LANDSCAPE MITIGATION PLAN C2 ELEVATION C3 DETAILS 3 C4 DETAILS 3 F1 TOWER FOUNDATION DETAILS 3 SP1 SPECIFICATIONS SP2 SPECIFICATIONS 3 SP3 **SPECIFICATIONS** 3 DATE:

APPROVALS

SS GMT Global

Marine Travel

Books & Charts

UTILITY:

2

INTERNATIONAL &

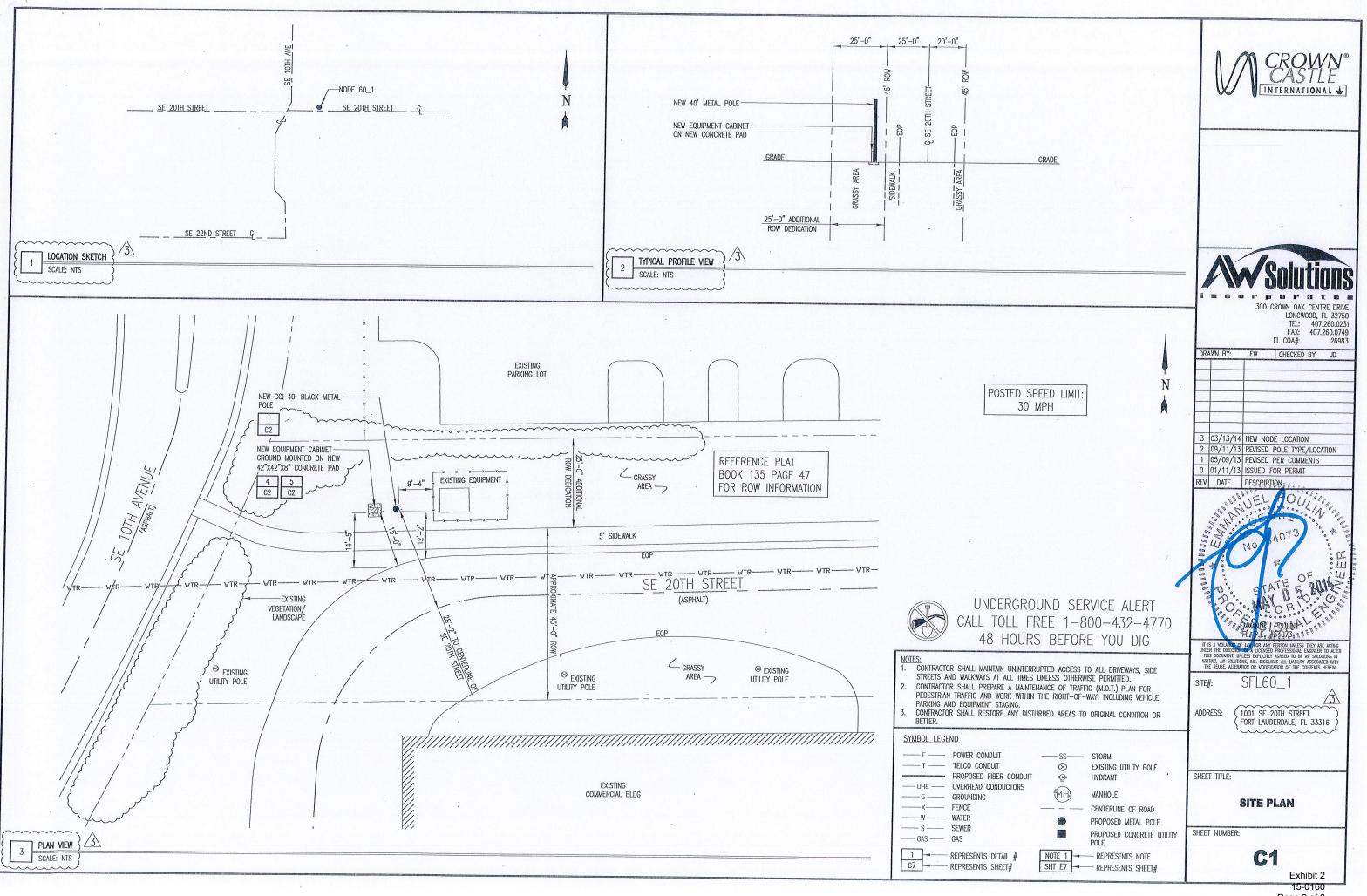
300 CROWN OAK CENTRE DRIVE LONGWOOD, FL 32750 TEL: 407.260.0231 FAX: 407.260.0749 FL COA#: 26983 EW CHECKED BY: JD

)T			
5	3	03/13/14	NEW NODE LOCATION
	2	09/11/13	REVISED POLE TYPE/LOCATION
1	1	05/09/13	REVISED PER COMMENTS
	0		ISSUED FOR PERMIT
	REV	DATE	DESCRIPTION
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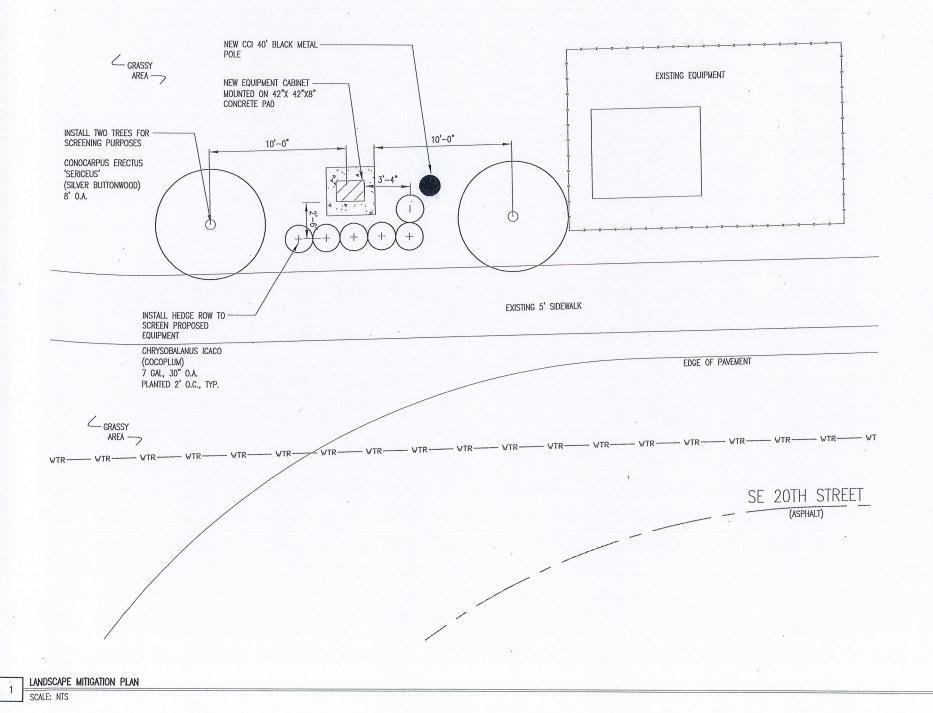
SE 17th St Convention Center (A1A) 17th St SE 17th St (A1A) SE 17th St 4401 South Harbor Plaza Fort Lauderdale SE 18th Ct Health: Moreti Matthew MD SET8th'St Elite Shuttle SETELL SI SEI 9th St SF 19th SI Broward SE 22nd St Convention (a) Comfort Books & Charts Center (Suites Airport Tropical SE 18th Ct. 5 & Cruise Port (FE) Hyatt Place Fort Lauderdale 17th Street Convention Center (A) Toth Awe SE 19th St outhern sulation 🖲 === SE 201h St SF 20th St SF 20th St SE 20th St SE:20th St poration Royalty East Atlantic **NODE 60 1** SE 216151 SE 21 st St Marine V 21st St SE 21st St Tiki Hut SE 20th St SE 20th St SE 22nd St-SE 22nd St SE 22nd St 1090 1185 Creative d St. Anthony's Coal eht Works Fired Pizza SEZ SE 23rd St SFL60 SITE#: Belcher Rd SE 24th St SE 24th St SE 24th St SE 24th St 84 (84) ADDRESS: 1001 SE 20TH STREET Thrifty
Car Rental FORT LAUDERDALE, FL 33316 SE 25th \$1 SET Mercedes-Benz of FL Lauderdale Port Everglades (A1A) 2 SE 2 Corporation SE 26th St SE 26th St SHEET TITLE: SF-21st St SE 21st St SE 21st St = SE 21st St = SPECIFIC LOCATION MAP **DRIVING** GENERAL VICINITY MAP TITLE SHEET **DIRECTIONS** UNDERGROUND FROM CROWN CASTLE OFFICE IN MIAMI, HEAD WEST ON NORTHWEST 64TH STREET. TURN RIGHT ONTO NORTHWEST 87TH AVENUE. TURN RIGHT ONTO NORTH WEST 74TH STREET, TURN LEFT SHEET NUMBER: SERVICE ALERT TO MERGE ONTO FLORIDA-826 NORTH, TAKE THE EXIT TOWARD FL-826 EAST/BEACHES. MERGE ONTO FL-826 EAST. TURN LEFT ONTO NW 2ND AVE (SIGNS FOR INTERSTATE 95 NORTH) TAKE CALL TOLL FREE THE RAMP ONTO I-95 NORTH. TAKE EXIT 23 FOR FL-818/GRIFFIN ROAD. TURN RIGHT ONTO FL-818 E/GRIFFIN ROAD. SLIGHT LEFT ONTO U.S. 1 N/S FEDERAL HIGHWAY. TURN RIGHT ONTO 1-800-432-4770 11 SE 17TH STREET. TURN RIGHT ONTO EISENHOWER BOULEVARD. TAKE THE 2ND RIGHT ONTO SE 20TH STREET. (RESTRICTED USAGE ROAD) DESTINATION WILL BE ON THE RIGHT. 48 HOURS BEFORE Exhibit 2 15-0160

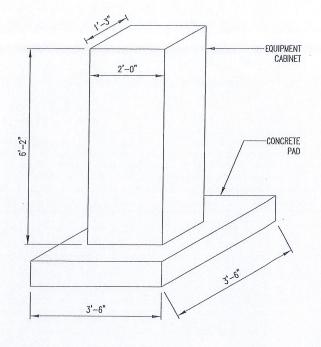


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- LANDSCAPE NOTES:
 1. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1 OR BETTER, AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS" PART I, 1963, AND PART 11, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, FLORIDA.
- 2. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK.
- 3. ALL PLANT BEDS TO RECEIVE 10" OF 50/50 MIX. 50% SAND, 50% MUCK.

 4. IT SHALL BE THE RESPONSIBILITY OF THE LANDSACPE CONTRACTOR TO PROVIDE A SMOOTH UNIFORM GRADE PRIOR TO INSTALLING SOD.
- ALL MULCH TO BE 'FLORAMULCH' MELALEUCA MULCH.
- 6. ALL TREES TO BE STAKED IN THE FIELD WITH APPROVED NURSERY STANDARD METHODS.
- 7. TREES/PALMS SHALL BE INSTALLED A MIN. OF 3' FROM UNDERGROUND UTILITIES.





UNDERGROUND SERVICE ALERT

CALL TOLL FREE 1-800-432-4770

48 HOURS BEFORE YOU DIG

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0

- STORM

HYDRANT

MANHOLE

POLE

NOTE 1 REPRESENTS NOTE

EXISTING UTILITY POLE

CENTERLINE OF ROAD

PROPOSED METAL POLE

PROPOSED CONCRETE UTILITY

NOTES:

1. CONTRACTOR SHALL MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS, SIDE STREETS AND WALKWAYS AT ALL TIMES UNLESS OTHERWISE PERMITTED.

CONTRACTOR SHALL PREPARE A MAINTENANCE OF TRAFFIC (M.O.T.) PLAN FOR PEDESTRIAN TRAFFIC AND WORK WITHIN THE RIGHT—OF—WAY, INCLUDING VEHICLE

3. CONTRACTOR SHALL RESTORE ANY DISTURBED AREAS TO ORIGINAL CONDITION OR

PARKING AND EQUIPMENT STAGING.

- PROPOSED FIBER CONDUIT

----E ---- POWER CONDUIT

----- T ----- TELCO CONDUIT

----- G ----- GROUNDING

----X---- FENCE

----- W ----- WATER

----- S ----- SEWER

---- GAS --- GAS

---- DHE --- OVERHEAD CONDUCTORS

1 REPRESENTS DETAIL #

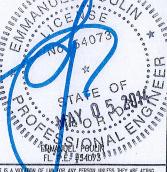
REPRESENTS SHEET#

SYMBOL LEGEND



N

FL COA#: EW CHECKED BY: JD DRAWN RY 3 03/13/14 NEW NODE LOCATION 2 09/11/13 REVISED POLE TYPE/LOCATION 1 05/09/13 REVISED PER COMMENTS 0 01/11/13 ISSUED FOR PERMIT REV DATE DESCRIPTION BEER



SFL60 1 SITE#:

1001 SE 20TH STREET FORT LAUDERDALE, FL 33316 ADDRESS:

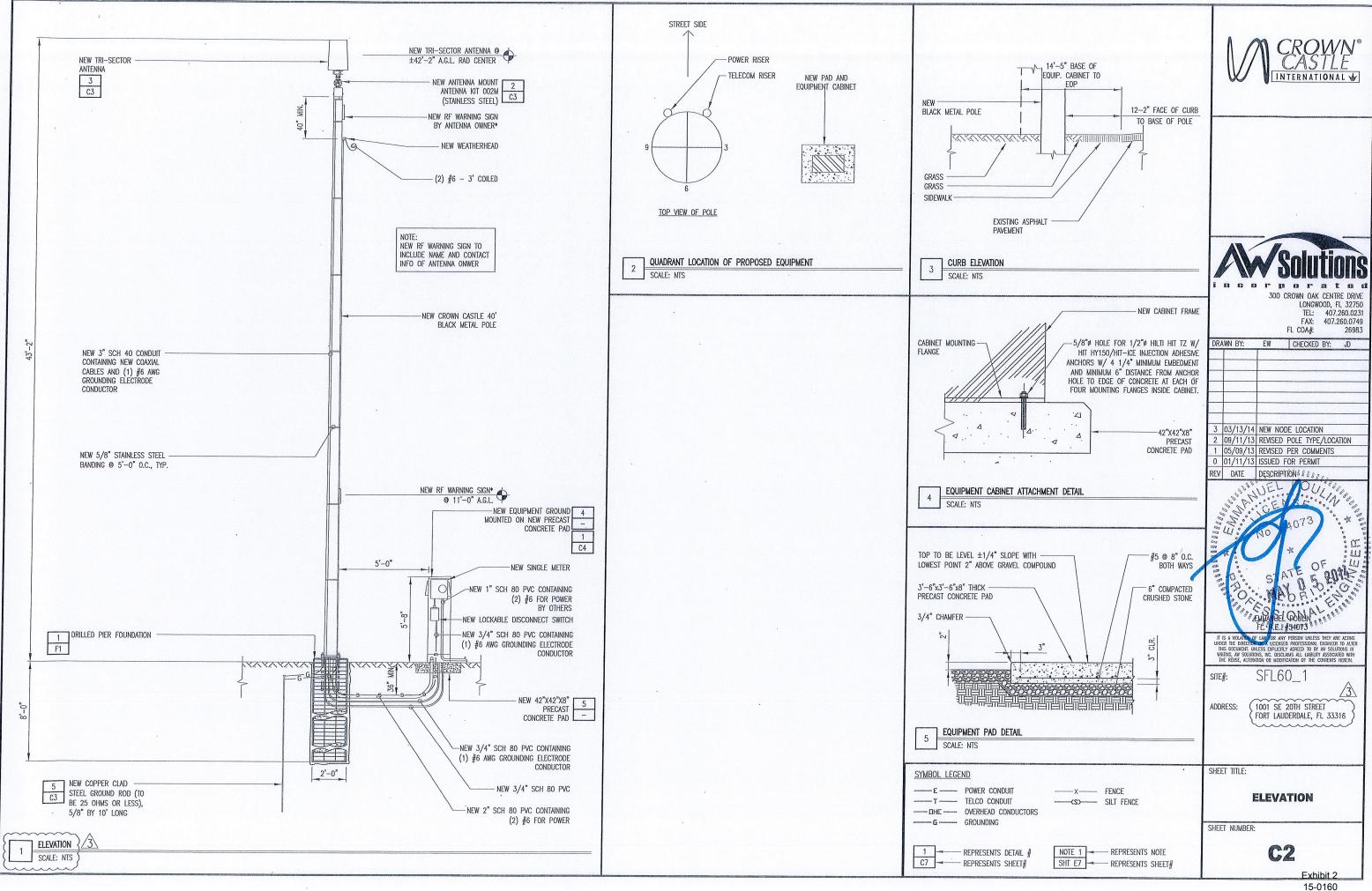
SHEET TITLE:

LANDSCAPE **MITIGATION PLAN**

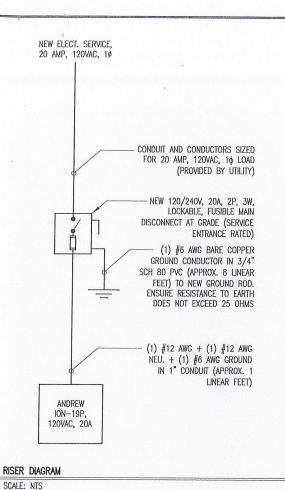
SHEET NUMBER:

C1.1

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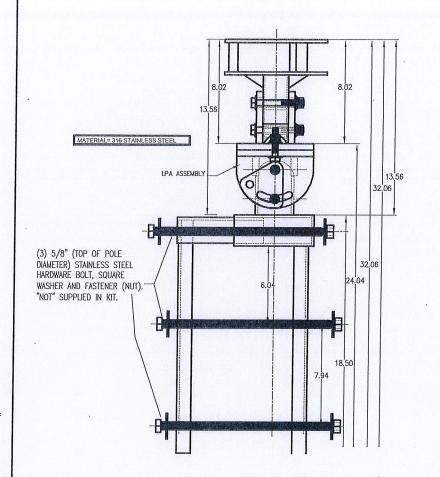
SHORT CIRCUIT CURRENT RATING OF FUSIBLE MAIN DISCONNECT: 100kA. PER FLORIDA BUILDING CODE 2010: FEEDER CONDUCTORS ARE SIZED FOR A

MAXIMUM VOLTAGE DROP OF 2% AT DESIGN LOAD OF 20A.

PER FLORIDA BUILDING CODE 2010: BRANCH CIRCUIT CONDUCTORS ARE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD. HOWEVER, THIS DESIGN CONTAINS NO BRANCH CIRCUITS.

ALL CONDUCTORS ARE TO BE COPPER WIRE WITH INSULATION TYPE XHHW.

ALL ABOVE GRADE CONDUIT IS TO BE UV RESISTANT SCHEDULE 80 PVC. ALL BELOW GRADE CONDUIT IS TO BE SCHEDULE 40 PVC.



SCALA DIVISION

Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS.

- Wide band operation.
- · Exceptional intermodulation characteristics.
- · High strength fiberglass radome.
- . Internal diplexers allow the +45° polarization (opper and lower bands) to be combined on one connector and the -45° polarization (upper and lower bands) to be combined on a second connector for each antenna.

Frequency range	806–960 MHz 1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodušation (2x20w)	BM3: k-150 dBc
Polarization	445° upper and lower band -45° upper and lower band
Connector	6 x 7-16 DIN female
Isolation intrasystem intersystem	>30 dB >40 dB (806–960 // 1710–2170 MHz)
Radome color	Brown, gray or dark gray (custom colors available at additional cost)
Weight	50 lb (22.7 kg)
Height	24 inches (609 mm)
Radome diameter	16 inches (407 mm)
Equivalent flat plate area	1.6 ft² (0.148 m²)
Wind survival rating"	100 mph (160 kph)
Shipping dimensions	32 x 20 x 19 inches (B13 x 508 x 483 mm)
Shipping weight	52 lb (23.6 kg)
Mounting	Designed to be mounted on top of a utility pole using a custom mounting bracket supplied by the customer.

806-866 MHz

+45° and -45° polarization 67° (half-power) 66° (half-power) horizontal bearnwidth

94° (heli-power)

824-894 MHz

>23 dB (co-polar) >23 dB (co-polar) >25 dB (co-polar) >20 dB (total power) >20 dB (total power) >22 dB (total power)

250 weits (at 50°C) 250 walfs (at 50°C) 250 weits (at 50°C)

35° (half-power)

25 dB (typical)

11.4 dBi

880-960 MHz

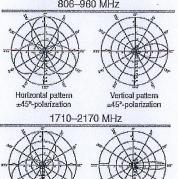
64" (helf-power)

30° (helf-power)

25 d3 (typical)

11.8 dBi





1/10-	-2170
Horizontal pattern =45°-polenization	i a

1710-1880 MHz 1850-1990 MHz

200 watts (et 50°C) 200 watts (et 50°

>25 dB (co-polar) >22 dB (total power)

66° (half-power)

20° (half-power)

16 dB (typical) >10 dB

13.3 dBi

>25 dB (co-polar) >22 dB (tetal cov

60° (half-power)

18° (half-power)

(BdB (typical) >10 dB

300 CROWN OAK CENTRE DRIVE FL COA#: DRAWN BY: EW CHECKED BY: JD

	1920-2170 MHz
	13,6 dBi
er)	>25 dB (co-polar) >22 dB (total power)
C)	200 watta (et 50°C)
Tig	60° (half-power)
	17.5° (hali-power)

20 dB (typical) s40 dB

2 09/11/13 REVISED POLE TYPE/LOCATION 1 05/09/13 REVISED PER COMMENTS 0 01/11/13 ISSUED FOR PERMIT DATE DESCRIPTION

3 03/13/14 NEW NODE LOCATION

: 111

INTERNATIONAL &

LONGWOOD, FL 32750

TFL: 407.260.0231 FAX: 407.260.0749

IT IS A VIOLATION OF LA FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT, UNLESS EXPLICITLY AGREET OF AW SOLUTIONS IN WARRING, AW SOLUTIONS, INC. DISCLAIS ALL LUBLITY ASSOCIATED WITH THE RELIES, ALLERATION ON MODIFICATION OF THE CONTENTS FERRING.

SFL60 SITE#:

ADDRESS:

1001 SE 20TH STREET FORT LAUDERDALE, FL 33316 ~~~~~~~

SHEET TITLE:

DETAILS

SHEET NUMBER:

GRADE EXOTHERMIC WELD (2) #6 AWG GROUNDING ELECTRODE CONDUCTOR GROUND ROD (COPPERCIAD STEEL), 5/8"\$ X 10'-0"

Specifications:

Front-to-back rati

Cross polar ratio Main direction

SCALE: NTS

Maximum input power

+45° and -45° polerization vertical beamwidth

ANTENNA SPECIFICATIONS

 $(180^{\circ} \pm 30^{\circ})$

GROUND ROD DETAIL

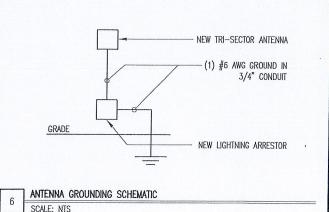
1. GROUND ROD TO BE DRIVEN 10' VERTICALLY.

FINISHED GRADE, STONE, ASPHALT,-RESTORE SURFACE TO MATCH CONCRETE PAVING OR SOD. MATCH SLOPE ORIGINAL CONDITION AND THICKNESS OF EXISTING SURFACE UNDISTURBED COMPACTED BACKFILL (SUITABLE ON SITE MATERIAL) - 6" WARNING TAPE TELCO CONDUIT WHERE APPLICABLE (REFER TO NOTE 4) 6" MIN. TYP.

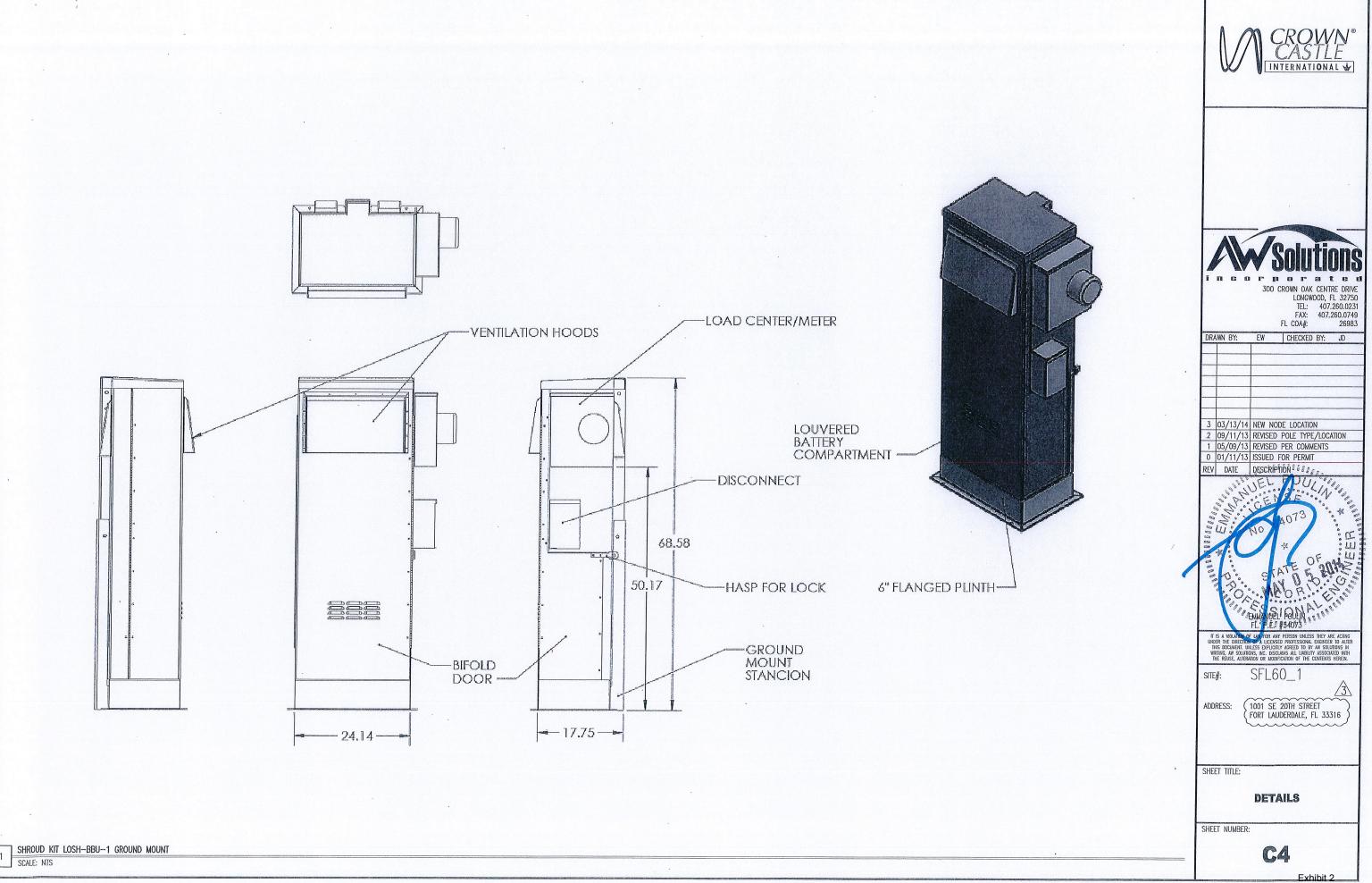
ANTENNA MOUNTING KIT (002M)

SCALE: NTS

- NEW UNDERGROUND CONDUIT(S) TRENCHING DETAIL (IF APPLICABLE, REFER TO SITE PLAN) SCALE: NTS
- PROVIDE SCHEDULE 40 PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
- PROVIDE SCHEDULE 80 PVC CONDUIT AND ELBOWS AT STUB UP LOCATIONS (i.e. SERVICE POLE, BTS EQUIPMENT, ETC.).
- INSTALL UTILITY PULLBOXES PER NEC.
- SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY CO. REQUIREMENTS.
- CONDUIT/TUBING CONTAINING FIBER OPTIC CABLING TO BE FILLED WITH GEL TO PREVENT WATER PENETRATION, COMMONLY REFERRED TO AS "ICKY PICK."



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