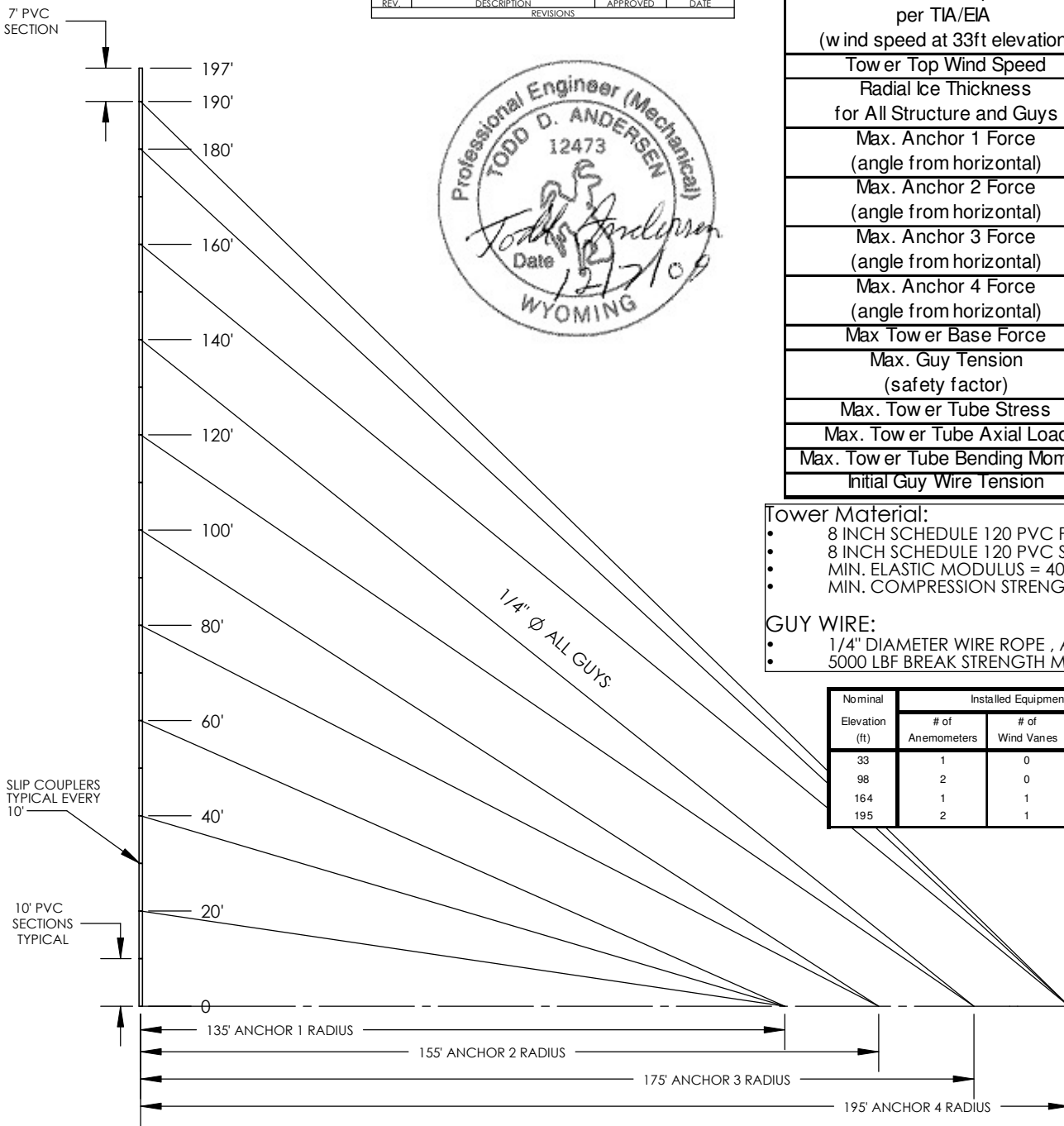


INITIAL RELEASE	TA	12/7/2009
REV.	DESCRIPTION	APPROVED
	REVISIONS	DATE



Basic Wind Speed per TIA/EIA (w wind speed at 33ft elevation)	95 mph
Tower Top Wind Speed	135 mph
Radial Ice Thickness for All Structure and Guys	1/4"
Max. Anchor 1 Force (angle from horizontal)	1,418 lbf (16 deg)
Max. Anchor 2 Force (angle from horizontal)	1,375 lbf (30 deg)
Max. Anchor 3 Force (angle from horizontal)	2,064 lbf (37 deg)
Max. Anchor 4 Force (angle from horizontal)	4,226 lbf (42 deg)
Max Tower Base Force	13,510 lbf
Max. Guy Tension (safety factor)	1,500 lbf (3.28)
Max. Tower Tube Stress	1,106 psi
Max. Tower Tube Axial Load	13,510 lbf
Max. Tower Tube Bending Moment	11.78 in-kLB
Initial Guy Wire Tension	200 lbf

- Tower Material:**
- 8 INCH SCHEDULE 120 PVC PIPE, ALL SECTIONS
 - 8 INCH SCHEDULE 120 PVC SLIP COUPLING
 - MIN. ELASTIC MODULUS = 400,000 psi
 - MIN. COMPRESSION STRENGTH = 9,600 psi
- GUY WIRE:**
- 1/4" DIAMETER WIRE ROPE, ALL GUYS
 - 5000 LBF BREAK STRENGTH MINIMUM



Nominal Elevation (ft)	Installed Equipment			Boom Arm Length (in)
	# of Anemometers	# of Wind Vanes	# of Boom Arms	
33	1	0	1	133
98	2	0	2	109
164	1	1	2	92
195	2	1	3	92

- NOTES:**
- Wind forces and member loads are calculated per TIA/EIA-222-F. Loads based on the fastest mile (basic) wind speed per TIA/EIA.
 - Guy joint efficiency = 0.90 and all guy safety factors are greater than 2.0.
 - Member forces and reactions were calculated using a non-linear model in the Algor FEA software to account for large non-linear deflections.
 - Prior to tower erection each of the 12 guy anchors must be pull tested to a minimum of 5,000 lbf using a dynamometer. The pull tests should be done at the angle listed in the table above.
 - This specification may not be valid for sites where significant icing is known to occur. For sites known to lie inside special ice regions additional analysis may be required.
 - This specification is not valid for use in counties with a basic wind speed requirement greater than 95mph per TIA/EIA-222-F.
 - Tower sections are connected with the provided slip couplers. PVC adhesive to be used on the top side of the coupled connection.
 - All dimensions shown are nominal. Actual installed dimensions may vary slightly.

DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	SG	12/7/09
	CHECKED		
MATERIAL	ENG APPR.	TA	12/7/09
	MFG APPR.		
FINISH	Q.A.		
	COMMENTS:		
DO NOT SCALE DRAWING			

PROPRIETARY AND CONFIDENTIAL

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60 METER MET TOWER PLAN

95mph Rated Configuration



SIZE	DWG. NO.	REV.
A	WR-60m-95	-
SCALE: 1:512	WEIGHT:	SHEET 1 OF 1