



7/30/2024

RE:

STRELO Ultra Well TX 212070

5700 E Saunders St

Webb County

American Tower proposes a 122' Monopole Tower within a fenced compound at the above location that will be able to collocate up to 4 carriers. Tower Designs attached.

Thanks,

Lori Pritchett

07/30/2024

Lori Pritchett

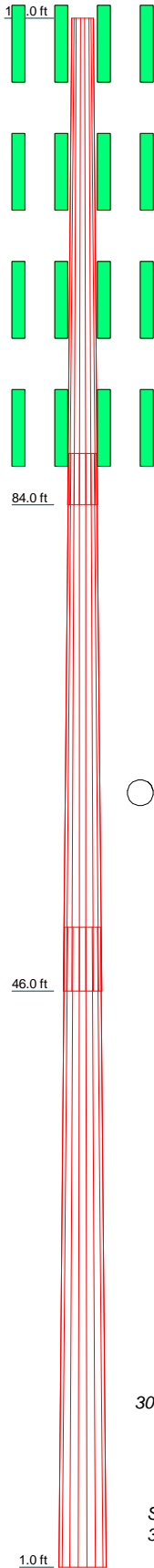
Project Manager Site Development, West Region

American Tower Corporation

281-622-0662

lori.pritchett@americantower.com

Section	1	2	3	
Length (ft)	38.00	42.00	50.00	
Number of Sides	18	18	18	
Thickness (in)	0.1875	0.3125	0.3750	
Socket Length (ft)	4.00	5.00	33.5227	
Top Dia (in)	20.0000	26.5795	43.7500	
Bot Dia (in)	27.7727	35.1705		
Grade	A572-65	A572-65		
Weight (K)	1.8	4.3	7.7	13.9



BASE PLATE:	2.25" x 56.75" ROUND (50 KSI)
ANCHOR BOLTS:	(14) ANCHORS ON 50.75" B.C 2.25 in. A615 GR. 75 X 7'-0"

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Antennas + Mount (EPA 175 ft2 / 5,200 lbs)	120	Antennas + Mount (EPA 150 ft2 / 4,700 lbs)	100
Antennas + Mount (EPA 175 ft2 / 5,200 lbs)	110	Antennas + Mount (EPA 125 ft2 / 4,500 lbs)	90

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

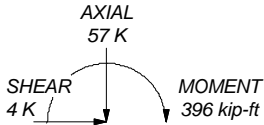
TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-H Standard.
2. Tower designed for a 108 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 30 mph basic wind with 0.50 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 100%

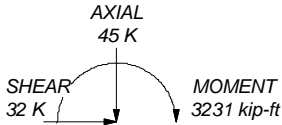
Additional Notes:

- Bulk EPA wind loading takes no reductions for shielding or directional factors.
- Foundation designed to a maximum of 90% capacity

ALL REACTIONS
ARE FACTORED



30 mph WIND - 0.5000 in ICE



REACTIONS - 108 mph WIND

Preliminary Design
Not For Fabrication

Estimated Total Structure Wt. = 14903 lbs



QUALITY STEEL POLES. DELIVERED.

Design may not be used without written permission from Michael F. Plahovinsak, PE

Michael Plahovinsak, P.E.

18301 State Route 161
Plain City, OH 43064
Phone: 614-398-6250
FAX: mike@mfpeng.com

Job: **122-ft Monopole - MFP #23524-318**

Project: **212070 STRELO Ultra Well**

Client: 24-0600

Drawn by: JC

App'd:

Code: TIA-222-H

Date: 05/31/24

Scale: NTS

Path:

C:\Users\jorge\Dropbox\MFP Engineering Files\Projects\235-TAPP\23524-318\23524-318.dwg

Dwg No. E-1

FOUNDATION NOTES:

1. FOUNDATION DESIGN IS BASED ON GEOTECHNICAL REPORT PROVIDED BY:

GEOTECH: TOWER ENGINEERING PROFESSIONALS

REPORT NO.: 339682.952583

REPORT DATE: 5/22/24

2. FOUNDATION CONCRETE STRENGTH SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI .

3. ESTIMATED CONCRETE VOLUME = 20 CUBIC YARDS.

4. ANCHOR RODS: 2 1/4"Ø x 7'-0" LONG, WITH MIN.6'-0" EMBEDMENT INTO CONCRETE.

5. THE FOUNDATION WAS DESIGNED FOR THE FOLLOWING LOADS:

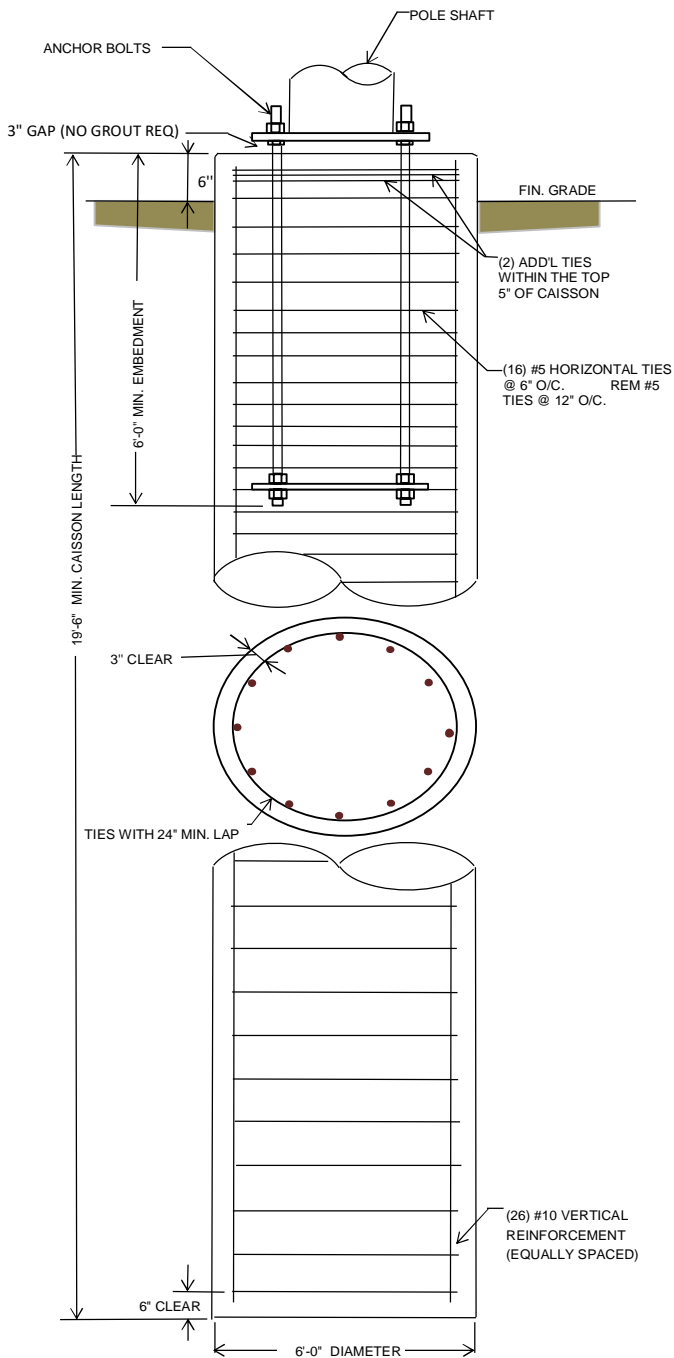
MOMENT: 3590 FT-KIPS

SHEAR: 36 KIPS

AXIAL: 45 KIPS

6. GEOTECHNICAL REPORT INDICATES GROUNDWATER MAY BE ENCOUNTERED AT 17 FT BELOW GRADE.

- PRELIMINARY FOUNDATION DESIGN -
NOT FOR CONSTRUCTION



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122-ft monopole - MFP #23524-318

212070 STRELO Ultra Well

TAPP

Mike

TIA-222-H

05/31/2024

PRELIMINARY FOUNDATION