#### STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF HOMELAND TOWERS, LLC AND NEW CINGULAR WIRELESS PCS, LLC d/b/a AT&T FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A TELECOMMUNICATIONS FACILITY AT 1837 PONUS RIDGE ROAD IN THE TOWN OF NEW CANAAN, CONNECTICUT

DOCKET NO. 509

October 5, 2023

#### RESPONSES OF HOMELAND TOWERS, LLC AND NEW CINGULAR WIRELESS PCS, LLC d/b/a AT&T TO CONNECTICUT SITING COUNCIL DEVELOPMENT & MANAGEMENT (D&M) PLAN INTERROGATORIES

- Q1. The geotechnical report and slope stability analysis indicate the presence of shallow bedrock at the site and that blasting could be performed to remove rock. Does Homeland anticipate blasting at this site? If yes, submit a blasting plan that includes work procedures and municipal notifications.
- A1. Homeland does not anticipate blasting at the site. If ledge/shallow bedrock is encountered during construction, chipping with a hydraulic hammer is preferred to blasting. If blasting were required, the appropriate protocol would be followed in accordance with state and municipal regulations. Homeland has already reached out and spoken with the local Fire Marshal on this matter.
- Q2. The recommendations in the February 28, 2023 geotechnical report (p. 6) indicate a geotechnical engineer should be on-site to confirm subgrades can support the proposed foundation. Does Homeland intend to implement this recommendation?
- A2. Yes, Homeland will retain an engineering/inspection agency to oversee the tower installation including subgrade inspections, concrete testing and backfilling.
- Q3. Site Plan N-1, Environmental Notes Resource Protection Measures 2. c. states the Contractor will notify the environmental monitor within 24-hours if sediment releases impact the Laurel Reservoir or occur within 100 feet of wetlands. After notification, what specific remediation actions will be taken and by whom?
- A3. The permittee is required to follow all notification requirements under the CTDEEP SWPCP Permit associated with any release of sediment off the site. The Aquarion Water Company would also be notified. The first action would be to investigate how the release occurred and bolster the site's erosion control measures immediately to limit additional releases and avoid further impact to sensitive resource areas. The permittee is responsible for development of necessary remedial actions, the specifics of which would be dependent on the

type, extent, location, and scale of the release. In general, areas of accumulated sediment from a release would be removed and the affected areas would be restored.

- Q4. Site Plan C-2 has a detail for a grass lined swale. In what areas will a grass lined swale be installed?
- A4. The detail for a Grass Lined Swale on Drawing C-2 (Detail 1) was shown in error. The proposed swale shown on the drawings is for a Riprap Lined Swale which is shown on Detail 2 on Drawing C-2.
- Q5. Referencing the Council's Decision and Order Condition No. 2(c), the D&M Plan shall include, "c) Details of the monopine structure, including, but not limited to, manufacturer, branch pattern, and photographs of other monopine installations that used the selected design." The structural design report for the tower and foundation that includes a branch layout dated August 25, 2023 and prepared by Cell Trees, Inc. referenced on page 1 of the September 18, 2023 cover letter is not behind Exhibit B of the D&M Plan. Provide a copy.
- A5. Included in Attachment 1 is the signed and sealed structural design report prepared by Cell Trees, Inc. dated August 25, 2023. This report contains tower and foundation designs along with a branch layout.
- Q6. The D&M Plan states 1,500 cubic yards of fill will be required to construct the site. Does Homeland intend to import this material from off-site locations given that excavated rock will be removed and not used as fill material, as stated on D&M Plan p. 4?
- A6. Yes, if the design documents require fill, this will be imported.
- Q7. Site Plan EC-1- Temporary Stockpile Detail states only material not re-used will be removed from the site. What material will be re-used?
- *A7.* It may be possible to re-use some of the organics removed from the surface if they consist of sufficient topsoil for re-seeding.

#### **CERTIFICATE OF SERVICE**

I hereby certify that on this day one original and 16 hard copies, and one electronic version of the foregoing were sent to the Connecticut Siting Council and one electronic copy was sent to:

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Dated: October 5, 2023

Lucie Chrocchio

Lucia Chiocchio, Esq. Cuddy & Feder LLP 445 Hamilton Ave, 14th Floor White Plains, NY 10601 (914)-761-1300

cc: Manny Vicente, Homeland Towers Ray Vergati, Homeland Towers Harry Carey, AT&T Rachelle Biden Lewis, AT&T APT C Squared

# **ATTACHMENT 1**



**DRAWING INDEX** MP-1 TITLE SHEET MP-2 NOTES & SPECIFICATIONS MP-3 ELEVATION VIEWS MP-4 DETAILS MP-5 NOT USED MP-6 FOUNDATION MP-7 BRANCH LAYOUT

**NEW CANAAN NW** SITE #: CT050 **115'-0" MONOPINE** 

> CELL TREES, INC. Job: 23-093

> > LOCATION:

1837 PONUS RIDGE RD. NEW CANAAN, CT 06840 FAIRFIELD COUNTY

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## 5401 S. CANADA PLACE **TUCSON, AZ 85706** PH: (520) 663-1330



	SUMMARY OF SPECIAL INSPECTION	
NO.		INSPECTION TYPE
1.	REQUIRED INSPECTIONS FOR SOIL/FOUNDATION:	
Α.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND THAT THE MATERIALS BELOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	PERIODIC
Β.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	PERIODIC
C.	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS
D.	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT IT HAS BEEN PREPARED PROPERLY	PERIODIC
2.	REQUIRED INSPECTIONS FOR CAST-IN-PLACE DEEP FOUNDATION ELEMENTS	
Α.	INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT	CONTINUOUS
Β.	VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	CONTINUOUS
3.	REQUIRED INSPECTIONS FOR CONCRETE CONSTRUCTION	
_	INSPECT REINFORCEMENT AND VERIFY PLACEMENT	PERIODIC
Β.	INSPECT ANCHORS CAST IN CONCRETE - PLUMBNESS, ORIENTATION, TOP AND BOTTOM TEMPLATES ARE INSTALLED, AND THAT THE MINIMUM EMBEDMENT SPECIFIED BY THE FOUNDATION DESIGNER IS MET.	PERIODIC
C.	VERIFY USE OF REQUIRED DESIGN MIX AND COMPLIANCE WITH ACI 318-19	PERIODIC
D.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS
Ε.	INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS
F.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	PERIODIC
G.	INSPECT FORMWORK FOR PROPER SHAPE, LOCATION AND DIMENSIONS.	PERIODIC
4.	BOLTING:	
Α.	ANCHOR BOLTS SHALL BE INSTALLED WITH A LOCKING MECHANISM AND BE TIGHTENED TO A "SNUG TIGHT" CONDITION PER AISC	PERIODIC
Β.	ALL HIGH STRENGTH BOLTS, A325, SHALL BE TIGHTENED TO THE TURN OF NUT METHOD AS DEFINED BY AISC	PERIODIC
5.	FIELD WELDING:	
Α.	<u>NO FIELD WELDING SHALL BE PERMITTED</u> EXCEPT WHERE SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS	<pre><!--= 5/16, PERIODIC --> 5/16, CONTINUOUS</pre>
6.	SHOP WELDING:	
Α.	ALL SHOP WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED BY AN APPROVED FABRICATOR'S SHOP PER 2022 CSBC SECTION 1704.2.5	PROVIDE CERTS.
Β.	ALL WELDED CONNECTIONS SHALL CONFORM WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) D1.1	N/A
C.	WELD ELECTRODES SHALL BE LOW HYDROGEN E70XX U.N.O.	N/A
D.	VISUAL INSPECTION OF ALL WELDS SHALL BE PERFORMED BEFORE GALVANIZING.	INSPECT AND REPORT
E.	IF A WELD IS IN QUESTION PER THE VISUAL INSPECTION THEN IT SHALL BE TESTED USING AN APPROPRIATE TEST, I.E. DIE PENETRATION, MAGNETIC PARTICLE, U.T., ETC.	INSPECT AND REPORT

#### SPECIAL INSPECTION:

- SPECIAL INSPECTION SHALL BE PERFORMED ACCORDING TO 2022 CSBC. 1.
- THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE LOCAL JURISDICTION TO PERFORM THE 2. TYPES OF INSPECTION REQUIRED.
- ANY SUPPORT SERVICE PERFORMED BY THE ENGINEER OF RECORD DURING CONSTRUCTION 3. SHALL BE DISTINGUISHED FROM INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER OF RECORD ARE ONLY FOR THE PURPOSE OF ASSISTING IN THE QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH THE CONTRACT DOCUMENTS. THIS SUPPORT DOES NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

#### GENERAL DESIGN NOTES:

STRUCTURAL DESIGN IS BASED ON THE CONNECTICUT STATE BUILDING CODE, 2022 EDITION (2021 IBC) AND THE TIA-222-H STANDARD

#### DESIGN LOADS:

- WIND: WIND SPEED = 120 MPH (3-SEC GUST) PER THE ASCE 7-16 STANDARD RISK CATEGORY: II EXPOSURE: C TOPOGRAPHIC PROCEDURE (METHOD 2): HILL SLOPE DISTANCE: 348 FT CREST HEIGHT: 75 FT ELEVATION: 403 FT ABOVE SEA LEVEL
- ICE: 1" RADIAL ICE THICKNESS @ 50 MPH (3-SEC GUST) PER THE TIA-222-H STANDARD

#### SEISMIC:

IMPORTANCE FACTOR: 1.00 RISK CATEGORY: II MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss = 0.259q, S1 = 0.058gSITE CLASS: C SPECTRAL RESPONSE COEFFICIENTS: SDS = 0.224q, SD1 = 0.058qSEISMIC DESIGN CATEGORY: B BASIC SEISMIC-FORCE-RESISTING-SYSTEM: TELECOMMUNICATION TOWER: STEEL POLE SEISMIC BASE SHEAR, V: 1.7 K SEISMIC RESPONSE COEFFICIENT, Cs: 0.025 RESPONSE MODIFICATION FACTOR, R: 1.5 ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

#### BASE DESIGN REACTIONS:

MOMENT. M = 8.633 K - FT (1.0 WIND)SHEAR, V = 110.6 K (1.0 WIND)AXIAL, P = 107.4 K (1.2 DEAD + 1.0 ICE)

THE MONOPOLE, BASE PLATE, AND FOUNDATION ARE DESIGNED FOR THE DESIGN LOADING. THE ANTENNA MOUNTS ARE ONLY DESIGNED FOR THE INITIAL LOADING. SEE DTL 2/MP-3.

#### STRUCTURAL STEEL:

- 1. POLYGONAL MONOPOLE SHAFT STEEL SHALL CONFORM w/ ASTM A572 GR. 65, U.N.O.
- 2. BASEPLATE STEEL SHALL CONFORM w/ ASTM A572 GR. 50. U.N.O.
- 3. ALL STEEL PIPE SHALL CONFORM w/ ASTM A53 GR. B (35 KSI), U.N.O.
- 4. ALL STEEL RECTANGULAR TUBES (HSS) SHALL CONFORM w/ ASTM A500 GR. B (46 KSI), U.N.O.
- 5. REINFORCED PORT STEEL SHALL CONFORM w/ ASTM A572 GR. 65. U.N.O.
- 6. ALL OTHER STEEL SHAPES & PLATES SHALL CONFORM w/ ASTM A36, U.N.O.

#### STRUCTURAL STEEL (CONT.):

- BY AISC.
- U.N.O.
- WELDED JOINT.
- w/ ASTM A123 AND ASTM F2329 STANDARDS. ANY

#### DISCLAIMERS:

- THE CONTRACTOR.
- EQUIPMENT DOES NOT EXCEED LISTED EPA.
- WIND-INDUCED STRUCTURAL OSCILLATIONS. VECTOR STRUCTURAL ENGINEERING RECOMMENDS FREQUENT
- REQUIRED AT THE OWNER'S EXPENSE.

7. ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM w/ ASTM F3125 GR. A325, U.N.O. AND SHALL BE TIGHTENED PER THE "TURN-OF-NUT" METHOD AS DEFINED

8. ALL ANCHOR BOLTS SHALL CONFORM w/ ASTM A615 GR. 75,

9. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OF THE AMERICAN WELDING SOCIETY (AWS) BY CERTIFIED WELDERS PER AWS D1.1. ALL WELDING SHALL BE PERFORMED IN A SHOP APPROVED BY THE BUILDING OFFICIAL. STEEL WELDS SHALL BE PERFORMED WITH MINIMUM E70XX LOW-HYDROGEN ELECTRODE EXCEPT WHERE HIGHER STRENGTH ELECTRODE IS REQUIRED BY AWS D1.1. VERIFY FILLER MATERIAL IS COMPATIBLE WITH BASE METAL FOR EACH

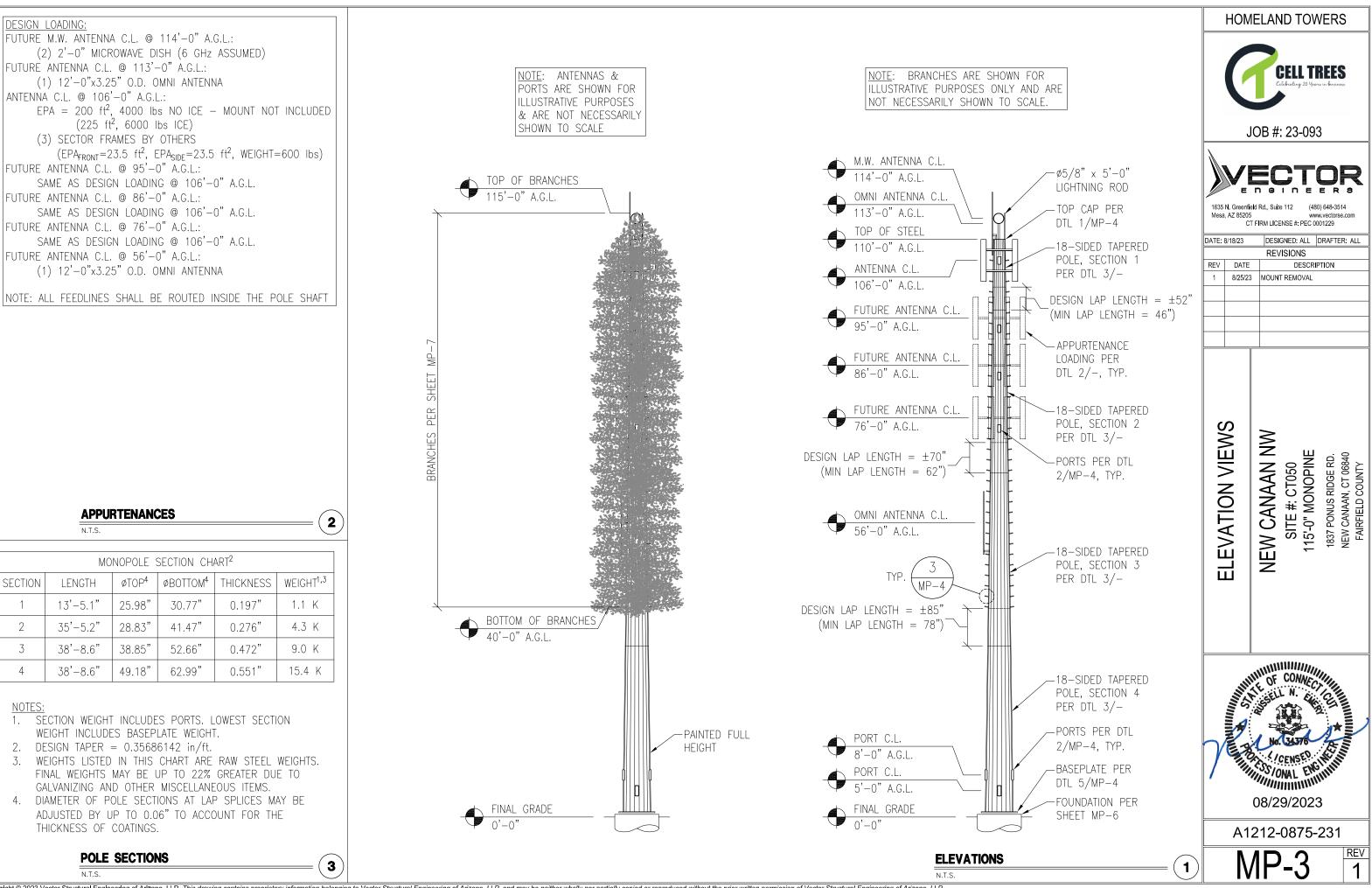
10. ALL STEEL SURFACES SHALL BE GALVANIZED IN ACCORDANCE GALVANIZED SURFACES THAT BECOME DAMAGED DURING SHIPPING, WELDING, OR ERECTION MUST BE COATED WITH A MINIMUM OF TWO COATS OF COLD GALVANIZING COMPOUND THAT COMPLIES WITH THE REQUIREMENTS OF ASTM A780

1. ALL STRUCTURAL COMPONENTS TO BE CONNECTED TOGETHER SHALL BE COMPLETELY FIT UP ON THE GROUND OR OTHERWISE VERIFIED FOR COMPATIBILITY PRIOR TO LIFTING ANY COMPONENT INTO PLACE. REPAIRS REQUIRED DUE TO FIT-UP OR CONNECTION COMPATIBILITY PROBLEMS AFTER PARTIAL ERECTION ARE THE FINANCIAL RESPONSIBILITY OF

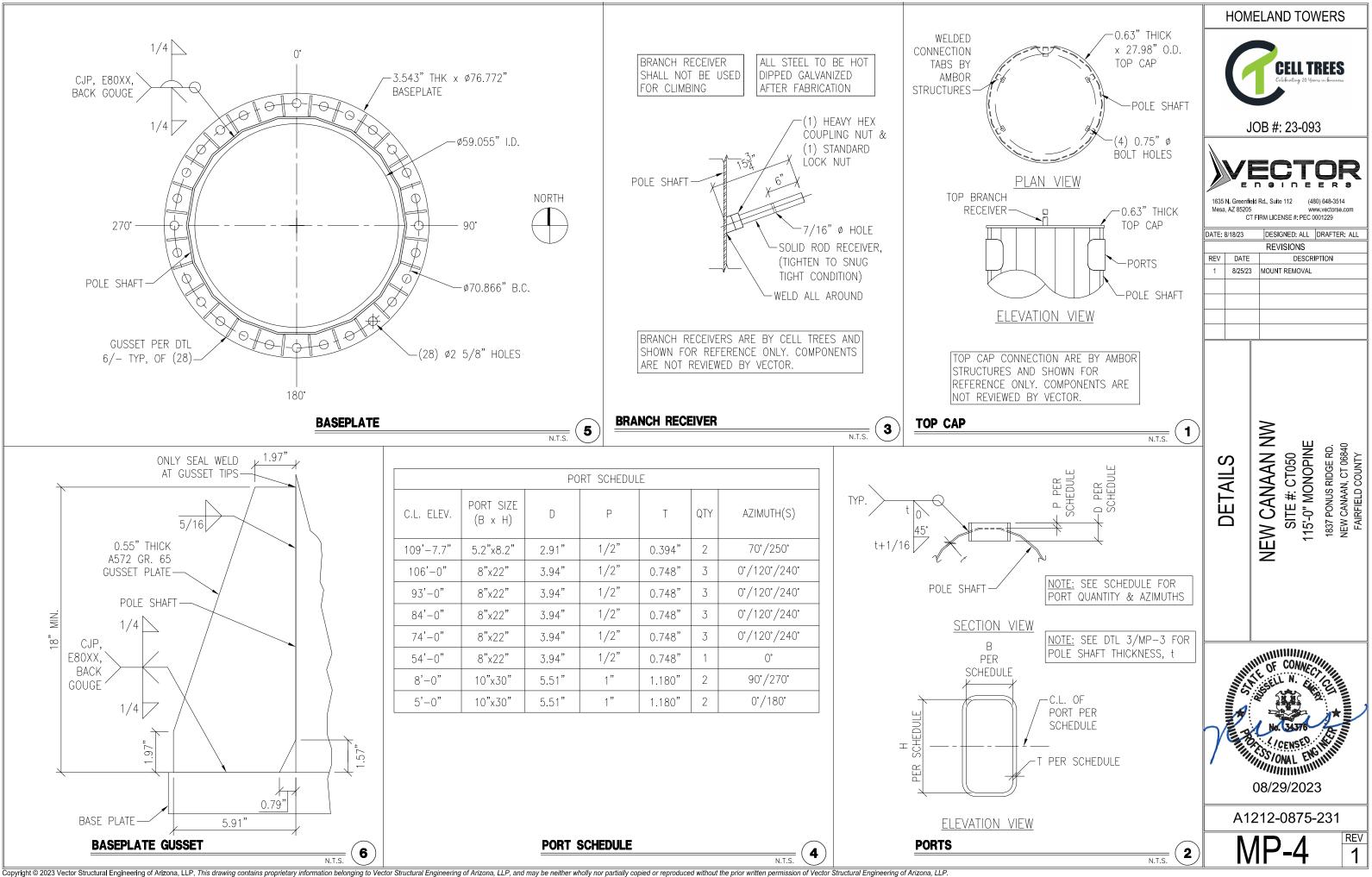
2. WHERE EFFECTIVE PROJECTED AREAS (EPA) ARE USED, IT IS THE RESPONSIBILITY OF OTHERS TO VERIFY INSTALLED 3. SOME TELECOMMUNICATIONS STRUCTURES ARE SUSCEPTIBLE TO WIND-INDUCED OSCILLATIONS. OSCILLATIONS MAY OCCUR AT LOW OR MODERATE WIND SPEEDS. TIA PROVIDES NO PRACTICAL ANALYTICS METHOD TO PREDICT AND PREVENT MONITORING TO IDENTIFY WIND-INDUCED OSCILLATION AND REGULAR CONDITION ASSESSMENTS TO IDENTIFY FATIGUE CRACKING, LOOSE OR MISSING BOLTS, AND ANY OTHER STRUCTURAL DEFECTS. ANY OSCILLATION OR DEFECTS OBSERVED SHALL BE IMMEDIATELY REPORTED TO VECTOR STRUCTURAL ENGINEERING FOR FURTHER EVALUATION AND POSSIBLE REPAIRS OR MODIFICATIONS WHICH MAY BE

4. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THIS REQUIREMENT APPLIES CONTINUOUSLY, IS NOT LIMITED TO NORMAL WORKING HOURS, AND INCLUDES FIRE PREVENTION AND/OR DAMAGE FROM HEAT DUE TO FIELD WELDING.





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#### FOUNDATION NOTES:

POLE SHAFT-

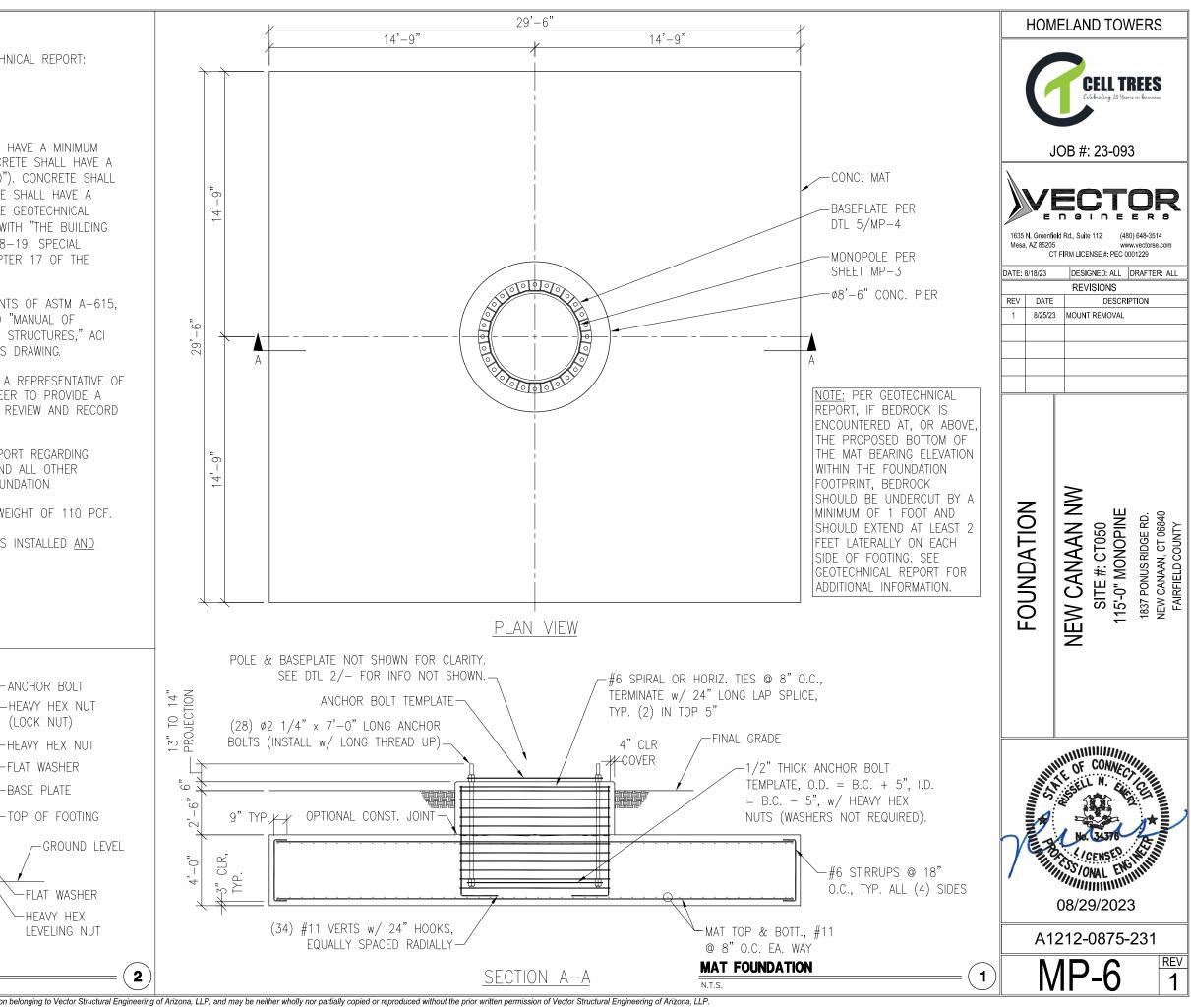
'n,

1. FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT:

TECTONIC REPORT: 11869.01 DATE: FEBRUARY 28, 2023

- 2. ALL CONCRETE SHALL USE TYPE V PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MINIMUM OF 6% ENTRAINED AIR (WHERE FROST DEPTH > 0"). CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45. CONCRETE SHALL HAVE A SLUMP OF 5" (± 1") UNLESS OTHERWISE SPECIFIED IN THE GEOTECHNICAL REPORT. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318-19. SPECIAL INSPECTION SHALL BE PERFORMED AS REQUIRED PER CHAPTER 17 OF THE BUILDING CODE.
- 3. REINFORCING STEEL SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A-615, GRADE 60. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315, LATEST EDITION, UNLESS DETAILED OTHERWISE ON THIS DRAWING.
- 4. INSTALLATION OF THE FOUNDATION MUST BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER FIRM. GEOTECHNICAL ENGINEER TO PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORD PURPOSES.
- 5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT REGARDING INSTALLATION METHOD, REQUIRED EQUIPMENT, WARNINGS, AND ALL OTHER RECOMMENDATIONS OR REQUIREMENTS RELATED TO THE FOUNDATION
- COMPACTED FILL OVER MAT SHALL HAVE A MINIMUM UNIT WEIGHT OF 110 PCF. 6.
- 7. MONOPOLE MAY BE ERECTED 3-DAYS AFTER FOUNDATION IS INSTALLED AND ONCE CONCRETE STRENGTH IS AT LEAST 4500 PSI.

NTS



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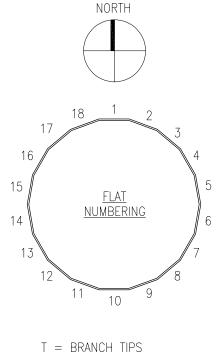
ANCHOR BOLT

(LOCK NUT)

-FLAT WASHER

-BASE PLATE

HEAVY HEX



BB = BOOM BRANCHX = VACANT RECEIVER2 = 2' - 0'' BRANCH 3 = 3' - 0'' BRANCH 4 = 4' - 0'' BRANCH 5 = 5' - 0'' BRANCH 6 = 6' - 0'' BRANCH7 = 7' - 0'' BRANCH 8 = 8' - 0'' BRANCH 9 = 9' - 0'' BRANCH 10 = 10' - 0" BRANCH TOTAL BRANCH COUNT = 214AVERAGE = 3.06 BRANCHES PER FOOT

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### BRANCH LAYOUT

