



1. EL. XXX'-X" DENOTES ELEVATION ABOVE SEA LEVEL
2. EL. XXX.XX DENOTES TOWER CONSTRUCTION ELEVATION.

1. PROJECT LOCATION:
 - TEXZON RESEARCH AND DEVELOPMENT FACILITY; ITALY, TX
2. DESIGN SPECIFICATIONS AND CODES
 - INTERNATIONAL BUILDING CODE
 - ASCE 7-10 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
 - ASCE PRE-STANDARD FOR LRF DESIGN OF PULTRUDED FRP STRUCTURES; NOVEMBER 9, 2010
 - DESIGN MANUAL; 2007 STRONGWELL CORPORATION
3. LOADS
 - 3.1 ENVIRONMENTAL LOADS
 - 3.1.1 WIND LOAD AS DETERMINED PER CHAPTER 27 DIRECTIONAL PROCEDURE FOR MWFRS
 - BASIC WIND SPEED - 115 mph
 - WIND DIRECTIONALITY FACTOR - 0.85
 - EXPOSURE CATEGORY - C
 - ENCLOSURE CLASSIFICATION LOWER TOWER - ENCLOSED
 - ENCLOSURE CLASSIFICATION UPPER TOWER - OPEN
 - GUST EFFECT FACTOR - 0.85
 - 3.1.2 SEISMIC LOADS
 - MAPPED SPECTRAL ACCELERATION, S1 - 0.048
 - MAPPED SPECTRAL ACCELERATION, SS - 0.084
 - SITE CLASS - C
 - IMPORTANCE FACTOR, IE - 1.0
 - 3.2 LIVE LOADS
 - LANDING LIVE LOAD - 50 psf
 - WINCH LOAD - 10,000 lbs
4. MATERIALS
 - 4.1 COLUMN SECTIONS
 - GEOMETRY AND MATERIAL PROPERTIES AS PER STRONGWELL DRAWINGS NO. TM3311-00102, TM3314-00101, TM3318-00101
 - PLANAR SHEAR STRENGTH 7,250 psi
 - 4.2 STANDARD W SECTIONS - REQUIRED MINIMUM MATERIAL PROPERTIES:
 - MATERIAL PROPERTIES SAME AS ITEM 4.1.
 - 4.3 STANDARD I SECTIONS
 - MATERIAL PROPERTIES SAME AS EXTREN 625
 - 4.4 CONNECTION GUSSET PLATES AND ANGLES
 - MATERIAL PROPERTIES SAME AS ITEM 4.1 EXCEPT
 - 1/2" THICK PLATES LW PIN BEARING STRENGTH 30,000 psi
 - 3/4" AND THICKER PLATES LW AND CW PIN BEARING STRENGTH 20,000 psi
 - 4.5 FIBERGLASS STUDS AND NUTS (THREADED ROD) AS PER SECTION 11 OF STRONGWELL DESIGN MANUAL.
 - ALL HOLES IN COLUMNS AND W10 ARE 1 1/16" DIAMETER U.N.O.
 - ALL HOLES IN W8, I18 AND I12 ARE 1 1/8" DIAMETER U.N.O.
 - ALL HOLES IN PLATES AND ANGLES ARE 1 1/8" DIAMETER U.N.O.
 - 4.6 EPOXY VINYL ESTER RESIN HETRON D 1222 WITH A HEAT DISTORTION TEMPERATURE OF 286°F.
 - 4.7 STEEL
 - BASE ANCHORAGE: STAINLESS STEEL GRADE 316 ANNEALED

- TOP CONNECTION ASSEMBLY: CARBON STEEL A36
- 4.8 ADHESIVE - URETHANE ADHESIVE SYSTEM PLIOGRIP 7770
- INSTALLATION
- 5.1 JOINT PREPARATION, APPLICATION AND CURE OF ADHESIVE, BOLT TORQUE - SEE INSTALLATION WINGS SET
- 5.2 ASSEMBLY AND CONSTRUCTION - SEE INSTALLATION DRAWINGS SET
- FABRICATION AND TOLERANCES
- | | |
|-----------------|-----------|
| • LENGTH CUT | +/- 1/8" |
| • END CUT | +/- 1° |
| • HOLE LOCATION | +/- 1/16" |
| • HOLE DIAMETER | +/- 1/32" |
- BOLT HOLE DIAMETER
- ALL HOLES IN CORNER COLUMN, INTERMEDIATE COLUMNS, W10s, CORNER ANGLES AND 15/16" FLANGE PLATES TO BE 1 1/16" DIAMETER U.N.O.
 - ALL HOLES IN REMAINING PARTS TO BE 1 1/8" DIAMETER U.N.O.

N.T.S.

REV	DESCRIPTION	DES	DWN	CHK	APPD	DATE
X	REVISED TAGS	WP	RN	WP	WP	2018.04.16
W	REVISED AS NOTED & REVISED TAGS	WP	RN	WP	WP	2018.02.09
V	REVISED AS NOTED & REVISED TAGS	WP	RN	WP	WP	2018.01.03
U	REVISED AS NOTED	WP	RN	WP	WP	2017.11.22
T	REVISED AS NOTED	WP	RN	WP	WP	2017.10.13
S	REVISED AS NOTED	WP	RN	WP	WP	2017.09.18

ISSUE FOR
REVIEW
NOT FOR
CONSTRUCTION

Seq



TRACTOR:



LANDMARK
ENERGY SERVICES



VIZIV GDP - TRANSMISSION TOWER

**SUPERSTRUCTURE
FRP TOWER GENERAL NOTES
AND FULL ELEVATION**

CONFIDENTIAL

SP-102

X

SHEET FORMAT: ANSI D (34x22in)

SHEET SCALE: 0" 1" 1"