



**NOTES :**

- 1-MATERIALS:  
 - HELIX PLATE PER CSA G40.21 50W, MIN.FY=60 KSI, ULTIMATE STRENGTH 70 KSI  
 -TUBES PER ASTM A500 GR C, FY=60KSI, FU=70KSI
- 2-ANY CHANGE OF MATERIAL IS SUBJECT TO GOLIATHTECH APPROVAL
- 3-WELD PERFORMED IN ACCORDANCE WITH CSA STANDARD W47.1 AND GOLIATHTECH WELDING PROCEDURES. WELDERS ARE ALSO CERTIFIED TO THE AWS STANDARD.
- 4-HOT-DIP GALVANIZED, PARTS PER ASTM A123.

|     |                 |            |
|-----|-----------------|------------|
| 3   |                 |            |
| 2   |                 |            |
| 1   | INITIAL RELEASE | 2023-09-07 |
| REV | MODIFICATION    | DATE       |

| NO. | Dimension (inches) | Description | MECHANICAL ASD LOAD CAPACITY   |                    |           |           |                |                |                          |                                    |
|-----|--------------------|-------------|--|--------------------|-----------|-----------|----------------|----------------|--------------------------|------------------------------------|
|     |                    |             | Unbraced Shaft Length, $L_u$ (ft)  | Compression (kips) |           |           | Tension (kips) | Lateral (kips) | Bending Moment (kips.ft) | Max Soil Capacity Comp/Ten* (kips) |
|     |                    |             |  | 0 Coupler          | 1 Coupler | 2 Coupler |                |                |                          |                                    |
| A   | 84                 |             | 0  | 70.6               | 70.6      | 70.6      | 28.78          | 21.30          | 7.12                     | 43.75                              |
| B   | 11                 |             | 5  | 40.2               | 26.2      | 16.3      |                |                |                          |                                    |
| C   | 4 1/4              |             | 10   | 22.8               | 17.5      | 12.5      |                |                |                          |                                    |
| D   | 3 PITCH            |             | 15   | 13.0               | 11.1      | 8.8       |                |                |                          |                                    |
| E   | 3/8                |             | 20   | 8.2                | 7.4       | 6.3       |                |                |                          |                                    |
| F   | 1                  |             | <b>Note:</b>   |                    |           |           |                |                |                          |                                    |
| G   | 1 1/2              |             | 1. Soil capacity (P4) must be determined per Section 4.1.5 of this report.   |                    |           |           |                |                |                          |                                    |
| H   | 3 1/2              |             | 2. Maximum ultimate soil capacity is determined from $P_{ult} = K_t \times T$ based on the corresponding maximum installation torque rating for the specific pile model. Allowable soil capacity is determined from $P_a = P_{ult} / 2.0$ based on the corresponding maximum installation torque rating for the specific pile model. See Section 4.1.5 for additional information. |                    |           |           |                |                |                          |                                    |
| I   | 9/16               |             | 3. Mechanical torsion rating is the maximum torsional resistance of the steel shaft.   |                    |           |           |                |                |                          |                                    |
| J   | 1/4                | Weld        | 4. Maximum Torque Per Soil Tests is the maximum torque achieved during field axial verification testing that was conducted to verify the pile axial capacity related to pile-soil interaction.   |                    |           |           |                |                |                          |                                    |
| K   | 33                 |             | 5. Maximum Installation Torque rating is the lower of the "mechanical torsion rating" and the "maximum torque per soil tests".   |                    |           |           |                |                |                          |                                    |
| L   | 13                 |             | 6. The allowable soil capacity under the IRC must be determined in accordance with Equation 3 of Section 4.1.5 of this report, when applicable.  |                    |           |           |                |                |                          |                                    |
| M   | 3 PITCH            |             | *7. Min required installation depth for tension is 12D where D is the diameter of the uppermost helix.   |                    |           |           |                |                |                          |                                    |
| N   | 3/8                |             | 8. Max Soil Capacities based on the the tube torsional capacity.   |                    |           |           |                |                |                          |                                    |
| O   | 3 1/2              |             |  |                    |           |           |                |                |                          |                                    |
| P   | 1/4                | Weld        |  |                    |           |           |                |                |                          |                                    |



**GOLIATHTECH PRESTIGE LINE**

TITLE: Double Helix Screw Pile of 3 1/2 (0.250 wall) with a 11" and 13" Helix

|                 |                                 |
|-----------------|---------------------------------|
| SEAL:           | DWG. NO :<br><b>GTP13121113</b> |
|                 | DRAWN BY:<br>ARG                |
|                 | DESIGN BY:<br>GOLIATHTECH       |
|                 | CHECK BY:<br>CPOC               |
|                 | APP BY:<br>CPOC                 |
| OTHER NO :<br>- |                                 |

|             |         |                   |               |
|-------------|---------|-------------------|---------------|
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| SCALE : NTS |         |                   |               |

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