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PART 1 - GENERAL

1.1 DESCRIPTION

- .1 This section specifies requirements for supply and installation of new timber piles.

1.2 RELATED WORK

- .1 Section 31 61 13 - Pile Foundations, General.
- .2 Section 06 05 73 - Wood Treatment.

1.3 PROTECTION

- .1 Avoid dropping, bruising or breaking of wood fibres.
- .2 Avoid breaking surfaces of treated piles.
- .3 Do not damage surfaces of treated piles below cut-off elevation by boring holes or driving nails or spikes into them to support temporary material or staging. Staging may be supported in rope slings carried over tops of piles or attached to pile clamps of approved design.
- .4 Treat cuts, breaks or abrasions on surfaces of treated piles, bolt holes, cut-offs and field cuts in accordance with CSA 080.

1.4 MEASUREMENT FOR PAYMENT

- .1 Timber Bearing Piles: Timber bearing piles acceptably driven and secured in the work will be measured by the unit. Include cut-offs, protection of pile tops, pile shoes, hardware, preservative treatment and all equipment, material and labour.

.2 Timber Batter Piles: Timber batter piles acceptably driven and secured in the work will be measured by the unit. Include cut-offs, protection of pile tops, pile shoes, hardware, preservative treatment and all equipment, material and labour.

## PART 2 - PRODUCTS

### 2.1 TIMBER PILES

- .1 Round timber piles: to CAN3-056, latest edition, clean peeled piles with the following dimensions:
- .1 Butt Diameter (mm): 350
  - .2 Tip Diameter (mm): 225
  - .3 Length (m): 18

Note that the minimum diameter of the pile at the underside of the new pile cap support elevation is to be 300mm. Any piles not meeting this minimum requirement will be rejected. Do not arbitrarily order a typical 300mm diameter (imperial size 12) pile in this regard.

- .2 Species: Red Pine, or approved equal.
- .3 Preservative Treatment: to CSA O80 and commodity standard O80.18.

### 2.2 MISCELLANEOUS MATERIALS

- .1 Wire nails, spikes, staples to CSA B111.
- .2 Bolts, nuts and washers to ASTM A307.
- .3 Items manufactured or fabricated from scrap steel of unknown chemical composition or physical properties are not acceptable.
- .4 Hot dip galvanized bolts, nuts and washers

to CSA G164 and unless otherwise specified, spikes and nails and miscellaneous hardware to ASTM A123.

### PART 3 - EXECUTION

#### 3.1 PREPARATION

- .1 Protect pile heads during driving and hold in position by using a combination cushion - driving head and pilot. Closely fit driving heads to top of pile and extend down sides of pile for at least 75 mm. Where necessary protect pile head by means of heavy steel straps or wrought iron rings. Protect adjacent piles from damage.

#### 3.2 PILE INSTALLATION

- .1 Do pile installation work in accordance with Section 31 61 13.
- .2 Provide sufficient length above cut-off elevation so that part damaged during driving is cut-off. Cut-off piles neatly and squarely at elevations indicated.
- .3 Treat exposed ends of cut-off piles with two (2) liberally brushed coats of preservative, allowing sufficient interval between applications to permit total absorption.
- .4 Remove cut-off lengths from site on completion of work.