SECTION 02390 - SHEET PILES

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

- 1.1 WORK OF THIS SECTION
 - A. The WORK of this Section includes providing steel sheet piles as indicated. Temporary sheet piling installed by the CONTRACTOR to facilitate the installation or construction of other features of the WORK is not covered by this Section.
- 1.2 RELATED SECTIONS
 - A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
 - 1. Section 02200 Earthwork
- 1.3 STANDARD SPECIFICATIONS
 - A. Except as otherwise indicated in this Section of the Specifications, the CONTRACTOR shall comply with the Standard Specifications for Public Works Construction (SSPWC), as specified in Section 01090 REFERENCE STANDARDS.
- 1.4 SPECIFICATIONS AND STANDARDS
 - A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:

ASTM A 328	Specification for Steel Sheet Piling.
ASTMA 690	Specification for High-Strength Low-Alloy Steel H-Piles and Sheet Piling for Use in Marine Environments.

- 1.5 SHOP DRAWINGS AND SAMPLES
 - A. The following shall be submitted in compliance with Section 01300:
 - 1. Drawings indicating sheet pile configuration, material specifications and complete layout plan including the proposed method of installation.
- 1.6 SUBSURFACE CONDITIONS
 - A. A geotechnical engineering study has been performed for the site. The soil report is available at the CONSTRUCTION MANAGER's office. The CONTRACTOR shall understand and conform to all recommendations and criteria associated with sheet piling given in this report.
 - B. The CONTRACTOR shall visit the site and shall satisfy itself as to all existing surface and subsurface conditions affecting the work. The information provided in the geotechnical engineering report is available to the CONTRACTOR at its own risk, in the

[NOVEMBER 1999] [CONTRACT NO.]-[CONTRACT TITLE] SHEET PILES PAGE 02390-1 assessment of subsurface conditions at the site. Prior to bidding, bidding contractors may make their own subsurface investigations to satisfy themselves as to site and subsurface conditions, but such subsurface investigations shall be performed only under time schedules and arrangements approved in advance by OWNER.

- 1.7 NOTIFICATION OF SCHEDULE
 - A. The CONTRACTOR shall give written notification to the CONSTRUCTION MANAGER of the scheduled date for installation of sheet piling at the site at least one week in advance of that date.

PART 2 -- PRODUCTS

\$#

NTS: For steel sheet piles located in marine environment, specify material (steel) conforming to ASTM A 690.

For steel sheet piles not located in marine environment, specify either ASTM A 328 or A 690.

#\$

2.1 STEEL SHEET PILES

- A. Steel sheet piles shall be rolled steel sections of the weight, shape, and length indicated. The material in steel sheet piles to be used shall meet the requirements of ASTM [A 690] [A 328].
- B. Other requirements for sheet piles shall comply with SSPWC subsection 205-2.

PART 3 -- EXECUTION

- 3.1 DRIVING SHEET PILES
 - A. Sheet piles shall be driven with hammers adequate to drive the piles to the required depths.
 - B. To maintain satisfactory alignment, sheet piles shall be driven in increments of penetration necessary to prevent distortion, twisting out of position, or pulling apart at interlocks.
- 3.2 JETTING SHEET PILES
 - A. Sheet piles may be installed with water jets at locations where stability of embankments or other improvements will not be endangered.
 - B. The CONTRACTOR shall supply and operate one or more high pressure jetting systems to erode material adjacent to the pile when needed and permitted to facilitate driving sheet piling to the desired penetration.

[DECEMBER 1995] [CONTRACT NO.]-[CONTRACT TITLE] SHEET PILES PAGE 02390-2 C. Jetting may be done either ahead of or simultaneously with driving operations. If jets and hammer are used simultaneously, jets shall be withdrawn and final penetration of sheet piles obtained by driving with the hammer alone for at least the last foot of penetration.

3.3 CUTOFFS

- A. Tops of sheet piling shall be cut off or driven down to a straight line at the elevation shown, or as directed. If a cutting torch is used on steel sheet piling, the cut surface shall be made as smooth as practicable by grinding or other approved methods.
- B. If heads of sheet piles are appreciably distorted or otherwise damaged below cut-off level, damaged portions shall be removed and replaced, or repaired to the satisfaction of the CONSTRUCTION MANAGER.
- C. Sheet piles damaged during driving, or driven out of proper position, or below cut-off elevation, shall be withdrawn and replaced with new piles.

** END OF SECTION **