

FLAT VINYL WITH CAST-IN-PLACE CONC. SEAWALL GENERAL NOTES

1. THESE SPECIFICATIONS SHOW TYPICAL DETAILS FOR FLAT VINYL FORMS WITH CAST-IN-PLACE CONCRETE SEAWALLS WHICH ARE TO BE CONSTRUCTED IN THE CITY OF CAPE CORAL. INDIVIDUAL SEAWALL DESIGN IS THE RESPONSIBILITY OF THE PERMITEE AND MUST BE PERFORMED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER WHO SHALL BE THE ENGINEER OF RECORD FOR THE PROJECT. THESE SPECIFICATIONS ARE TYPICAL DETAILS ONLY AND ARE NOT INTENDED TO BE A FINAL SEAWALL DESIGN RELATING TO A SPECIFIC SITE.

2. THE ENGINEER OF RECORD (EOR) SHALL BE RESPONSIBLE FOR CERTIFYING THE FOLLOWING AS PART OF THE FINAL SEAWALL DESIGN:
 - a. EOR OR THEIR REPRESENTATIVE VISITED THE PROJECT SITE, AND INCORPORATED ALL SITE-SPECIFIC CONDITIONS, METHOD OF CONSTRUCTION, AND LOADS INTO FINAL DESIGN.
 - b. FINAL SEAWALL DESIGN CALCULATIONS AND CONSTRUCTION DOCUMENTS MUST BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER WITH STRUCTURAL EXPERIENCE.
 - c. IN ADDITION TO FINAL SEAWALL DESIGN, THE EOR SHALL CERTIFY THAT THE FOLLOWING SEAWALL ELEMENTS WERE CONSTRUCTED IN ACCORDANCE WITH THEIR PLANS AND SPECIFICATIONS:
 - c.1. ALIGNMENT OF SEAWALL
 - c.2. PENETRATION OF SEAWALL INTO SEABED
 - c.3. SEAWALL CAP REINFORCING AND PLACEMENT
 - c.4. DEADMAN ANCHORS, REINFORCING, AND TIE-BACK PLACEMENT

3. SEAWALL DESIGN CRITERIA:
 - a. THE FOLLOWING DESIGN CRITERIA IS APPLICABLE FOR A FLAT VINYL FORM WITH CAST-IN-PLACE CONCRETE SEAWALL PLACED IN FRONT OF AN EXISTING PRECAST CONCRETE SEAWALL (TO REMAIN IN PLACE) WITH A 7' EXPOSED HEIGHT ABOVE THE MUDLINE.
 - b. DESIGN SPECIFICATIONS: DESIGN SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF FLORIDA BUILDING CODE RESIDENTIAL, ASCE/SEI 24 FLOOD RESISTANT DESIGN AND CONSTRUCTION, ASCE 7 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, AND U.S. ARMY CORPS OF ENGINEERS ENGINEERING AND DESIGN MANUAL EM 1110-2-2504 DESIGN OF SHEET PILE WALLS.
 - c. EXISTING PRECAST CONCRETE SEAWALL MAY REMAIN IN PLACE SUBJECT TO THE FOLLOWING CRITERIA:
 - c.1. EXISTING SEAWALL CAP MUST BE SOUND, WITHIN ORIGINAL VERTICAL ALIGNMENT ($\pm\frac{1}{2}$ "), AND WITHIN ORIGINAL HORIZONTAL ALIGNMENT (WITH NO OUTWARD MOVEMENT IN TOWARDS THE CANAL).
 - c.2. EXISTING PRECAST SEAWALL PANEL MUST HAVE LESS THAN 2" HORIZONTAL MOVEMENT (LANDWARD) FROM ITS ORIGINAL PLUMB INSTALLATION. NO HORIZONTAL MOVEMENT (WATERWARD) IS ALLOWED.
 - c.3. IF THE EXISTING PRECAST SEAWALL (TO REMAIN IN PLACE) DOES NOT MEET THE ABOVE CRITERIA, THE EXISTING PRECAST WALL MAY BE DEMOLISHED ENTIRELY AND A NEW FLAT VINYL FORM WITH CAST-IN-PLACE CONCRETE SEAWALL MAY BE INSTALLED IN THE ORIGINAL LOCATION MEETING THE BELOW SPECIFICATIONS.
 - d. DESIGN LOAD COMBINATIONS: (OR AS APPROVED BY THE EOR)
 - d.1. LOW TIDE CANAL WATER (WATERWARD OF WALL) AT 5.5' BELOW NEW SEAWALL CAP, PLUS WATER LEVEL LANDWARD OF WALL AT 3' BELOW NEW SEAWALL CAP, PLUS EARTH PRESSURE, PLUS 200 psf SURCHARGE LOAD.
 - d.2. CANAL WATER (WATERWARD OF WALL) AT MUDLINE (7' MAXIMUM BELOW NEW SEAWALL CAP), PLUS WATER LEVEL LANDWARD OF WALL AT 3' BELOW NEW SEAWALL CAP, PLUS EARTH PRESSURE, AND NO SURCHARGE LOAD.

ADOPTED BY CITY COUNCIL	 CITY OF CAPE CORAL PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN STANDARD	TITLE	SHEET NO.
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		REVISIONS:	