

TECHNICAL SPECIFICATIONS
DUNE WALKOVER CONSTRUCTION
OCEAN DRIVE AND DONALD ROSS RD. (JB-0)
PALM BEACH COUNTY, FLORIDA


Client:
TOWN OF JUNO BEACH

AUGUST 2025

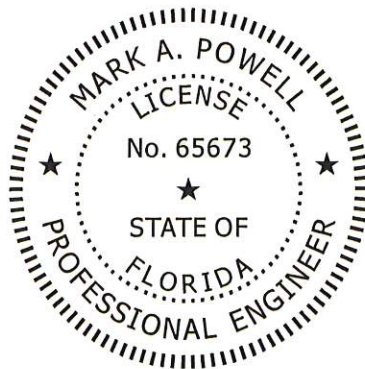
Prepared by

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Index to Specifications:

1A....General Requirements
2A....Demolition and
Walkover Construction

SECTION 1A GENERAL REQUIREMENTS

1.01 SCOPE OF WORK: The Contractor shall furnish all labor, materials, tools, supplies, plant, equipment, and machinery necessary to complete the work in accordance with the contract documents. Materials or work described in words which have a well-known technical trade meaning shall be held to refer to such recognized standards. All materials and supplies shall be new unless otherwise specified. The specific work which is included is shown on the drawings and specified herein.

1.02 EXISTING UTILITIES AND STRUCTURES: The Contractor shall assure himself of any utilities, structures or facilities prior to performing any work. At least two business days prior to start of digging work, the Contractor shall call 811 to provide notification and request each utility agency to advise him of the location of their facilities in the vicinity. The Town of Juno Beach and the Engineer will assume no liability for damages sustained or costs incurred because of Contractor's operations in the vicinity of existing utilities or structures.

A. Buried Materials - Buried concrete, steel and debris may exist at any location.

B. Overhead Power Lines - Overhead power lines may exist on or near the site. Contractor is responsible for taking any necessary precautions if working in the vicinity.

C. Underground Facilities – Power lines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water, may exist at the site. The Contractor shall take all necessary steps to locate and protect these facilities. In the event there are facilities that cannot be protected the Contractor shall flag these areas and bring them to the attention of the Engineer prior to the disturbance of these areas.

1.03 LAYOUT OF WORK-SURVEY LINES AND GRADES:

A. Layout: At the Contractor's expense, R.L. Vaught & Associates, Inc., a Florida Registered Land Surveyor, shall layout the structure with markers prior to construction. The number and extent of such markers or marks will be coordinated between the Contractor and the Surveyor.

B. Alignment Markers: The markers for alignment and location information may consist of railroad spikes, iron pins, concrete monuments and other types in customary use in the area, or will be established upon request. The Contractor shall lay out his work from these markers and shall be responsible for all measurements in connection therewith. The Contractor shall preserve all alignment and right-of-way markers and shall reset or replace at his own expense any and all which are removed, destroyed, or covered up by his work. In the event that additional markers, stakes or monuments are required, or in the event that previously established markers must be replaced, the Contractor shall employ

R.L. Vaught & Associates, Inc., to reset or replace them.

C. Bench Marks: The Contractor shall lay out his work from bench marks or reference elevations, which shall be supplied by the Surveyor at the expense of the Contractor. They will be shown and explained to the Contractor; thereafter, these bench marks and elevations become the sole responsibility of the Contractor and, if replacement is required, either at the request of the Contractor or in the judgment of the Engineer, the Contractor shall pay for the cost of replacement.

1.04 TESTS: The Engineer will have the right to require certain materials, as noted, to be submitted for testing prior to incorporation in the work. If the Engineer is not satisfied with test results, he may have additional tests made at cost to others, and the Engineer shall be the sole judge as to which tests shall be accepted as proof of contract performance. The Contractor shall not obligate the Town for tests without the Engineer's approval.

1.05 OBSERVATION: The work will be conducted under the general observation of the Engineer for the Town and is subject to observation by his appointed representative to assess compliance with the plans and specifications. The representative is not authorized to change any provision of the specifications without written authorization of the Engineer nor shall the presence or absence of a representative relieve the Contractor from any requirements.

1.06 SHOP DRAWINGS AND SAMPLES: As soon as practicable and within ten (10) days after being selected for the project, the Contractor shall submit to the Engineer for approval, an electronic copy (mpowell@coastal-engineers.com) of the shop drawings and/or documents listed below (Product Data Sheet and Manufacturer's Verification) and physical samples (if requested):

Product Data Sheets

- A. Evergrain Composite Lumber specification.
- B. WeardeckTM Composite Lumber specification.
- C. Fibergrate Micromesh
- D. Tenino Copper Naphthenate (or approved equal).

Shop Drawings:

- A. Aluminum Handrailing – including connection details, extensions, and hardware specifications. This document(s) may be submitted immediately prior to railing fabrication. This document can be submitted no less than 14 days prior to commencement of the handrail installation.

Samples:

- A. Decking sample for selected decking (EverGrain Composite Lumber) and cap rail member (WeardeckTM). These may be provided for approval prior to delivery of decking.

1.07 WORK SITE TIME AND AREA RESTRICTIONS: In coordination with the Town, Contractor may completely restrict access only to the immediate construction area. The Contractor is responsible for compliance with all applicable Town of Juno Beach work site restrictions.

1.08 PERMITS AND FEES: The Contractor shall procure the required Town of Juno Beach permits and arrange for inspections. If applicable, the Town will pay such government fees as are thereby incurred at cost (i.e., no contractor markup)..

The Engineer or Town has procured the required authorization from the Florida Department of Environmental Protection. The Contractor is fully responsible for compliance with this authorization. A copy of this authorization will be available from the Engineer.

The Contractor is responsible for obtaining a Maintenance of Traffic permit from Palm Beach County. If applicable, the Town will pay such government fees as are thereby incurred at cost (i.e., no contractor markup).

1.09 SUBCONTRACTORS: All subcontractors are subject to approval by the Engineer and the Town.

1.10 COORDINATION: Contractor will be required to participate in any coordination meetings as may be required. Contractor is required to coordinate scheduling, access, staging, storage, and safety with any other contractors working at the project site.

1.11 PROJECT CONDITIONS:

- A. The work consists of construction of a dune walkover and related construction.
- B. The work is to construct a facility for exposure to salt-laden atmosphere. At all times the Contractor shall exercise caution to utilize construction procedures and materials to minimize the effects of long-term corrosion.
- C. The project is located adjacent to multi-family residential properties. The Contractor may not block access to any onsite systems, buildings, roads, or adjacent properties.
- D. The Contractor shall utilize the area seaward of the sidewalk for equipment, material, and personnel access. All reasonable precautions shall be taken to prevent damage to any existing structures on the property. The Contractor shall take precautions to minimize damage to existing vegetation other than in these designated areas. In the event of any damage, the Contractor is responsible for restoring the area to the pre-project condition.

1.12 PROSECUTION OF THE WORK:

- A. The Contractor shall submit his construction schedule prior to beginning the work.
- B. The Contractor shall give the Engineer 24 hours notice prior to beginning any new phase of construction.

SECTION 2A
DEMOLITION AND WALKOVER CONSTRUCTION

PART 1 - GENERAL

1.01 SCOPE: Work covered by this section of the specifications consists of furnishing all plant, labor, equipment, appliances, and materials in performing all operations in connection with the construction of the walkover, including miscellaneous metal and hardware.

1.02 APPLICABLE CODES, STANDARDS AND SPECIFICATIONS: The construction of the walkover under this contract shall be in strict accordance with the applicable provisions of the following codes, standards and specifications:

- A. American Forest and Paper Association (AF&PA) NDS for Wood Construction, 2015.
- B. American Wood Preservers Association (AWPA), various standards.
- C. American Society for Testing and Materials (ASTM).
- D. Florida Building Code – Accessibility, 2023

PART 2 - PRODUCTS

2.01 WOOD POSTS AND STRUCTURAL WOOD:

- A. MATERIAL:
 - a. SUPPORT POSTS: All wood posts be pressure treated (“Saltwater Exposure – South of Georgia”, AWPAC Category UC5C minimum equivalent) no. 1 Southern Pine or better.
 - b. BENTS AND STRINGERS: All structural wood bents, stringers, and stair stringers, shall be pressure treated (“Saltwater Exposure – South of Georgia”, AWPAC Category UC5C minimum equivalent) no. 1 Southern Pine or better.
 - c. RAIL POSTS AND OTHER STRUCTURAL LUMBER: All remaining structural wood including bench support members, and stringer splices shall be pressure treated (“ground contact”, AWPAC Category UC4B minimum equivalent) no. 1 Southern Pine or better.

2.02 WOOD PRESERVATIVE FIELD TREATMENT: Cut ends/segments (including stair stringers) of wood shall be treated with Tenino Copper Naphthenate (or approved equal).

2.03 ADHESIVE FLASHING: The tops of all stringers, stair stringers, posts, and horizontal bench members shall be sealed with Grade Vycor Deck Protector self-adhesive flashing (or approved equal).

2.04 DECKING AND STAIR TREADS:

- A. Material: All decking and bench surface members shall be EverGrain 2x6 composite decking (Color: Cape Cod Grey) which conforms to ASTM D7032. For

inspection purposes, the boards must include the following labeling: "ASTM D7032 compliant."

2.05 SHOWER PLATFORM: Grated decking adjacent to the shower pedestal (specified by others) shall consist of Fibergrate Micromesh (1-1/2" Thickness, Color: Gray).

2.06 RAIL MEMBERS:

A. CAP RAIL: Material: The cap rail shall consist of 5/4x8 Weardeck™ Composite lumber (color: Barefoot Gray).

B. TOP AND INTERMEDIATE RAIL MEMBERS: Material - The top rail (under the cap rail) and intermediate rail members shall be 2x6 pressure treated "Sun Deck Plus" or "Tropical Decking" ("ground contact", AWP Category UC4A minimum equivalent) no. 1 (or better) Southern Pine.

C. GRAB RAIL/GRIP ROD: The handrail/grab rod for the stairs shall consist of 1-1/2" O.D. (1/8" wall thickness) aluminum tubing (Alloy 6061 – mill finish). Contractor to provide shop drawings with connection and extension details to Engineer for approval.

2.07 STRUCTURAL METALS:

A. Unless otherwise specified, all structural metals shall be salt corrosion resistant 316 stainless steel.

B. Materials shall be handled, shipped and stored in a manner that will prevent distortion or other damage. Material shall be stored in a clean, properly drained location out of contact with the ground. All damaged material shall be replaced or repaired in an approved manner by and at the expense of the Contractor.

2.08 HARDWARE: All bolts, washers, nuts, screws, nails, straps, ties, and other hardware items shall be 316 stainless steel. All bolts shall have a polished finish.

PART 3 - EXECUTION

3.01 DEMOLITION AND OFFSITE DISPOSAL: The existing concrete shower pad and existing wood dune step structure (posts, bents, stringers, decking, and railing) shall be demolished as specified in the plans. Care shall be taken not to damage the existing plumbing (and other adjacent utilities) under and around the shower platform. Care shall be taken to limit the spreading of debris onto the sandy beach fronting the subject property and adjacent properties. All debris shall be removed from the upland property, neighboring properties, and the beach area immediately fronting the properties. Debris shall be transported offsite and disposed of in an appropriate inland disposal area in accordance with all applicable federal, state, and local laws. Care shall be taken to not damage any existing structures to remain on the subject and adjacent properties. The Marine Contractor shall be repair and/or replace damaged structures at no additional cost to the Town.

3.02 WOOD SUPPORT POSTS:

A. Posts shall be carefully located as shown on the drawings and installed in a plumb position. The bottom of posts holes should be tamped level with bottom of post prior to installation. Tops

of posts shall be positioned laterally within 1/2 inch of position. However, for each lengthwise side of the walkover, the inside edge of every new post installed along the same segment shall be no further than 1/4 inch from a straight string line (measured at the top of post). The tops of posts shall be within 1/2" (sawing permitted) of each other. All posts shall be installed with a variation of not more than 1/16 inch per foot of post length from the vertical. The Contractor shall provide suitable templates or guide structures to ensure that the post are installed in correct alignment and location.

B. Post holes should be dug to depth necessary to achieve full penetration of the 6 ft. post. A motorized or conventional post hole digger may be used. The sand at the bottom of hole shall be moistened and tamped with the flat end of a steel post hole digging bar. Once post is set in place, hole should be carefully backfilled without displacing or shifting the post. Backfill shall consist of native beach sand and shall be placed, moistened, and tamped in 8" lifts. Care shall be taken not to damage the posts during the installation. Any post damaged during installation shall be removed and replaced at the expense of the Contractor.

3.03 POST AND POST TOPS: The cut tops of the posts (including existing posts) and rail posts shall be field coated with a preservative treatment such as Tenino Copper Naphthenate (or approved equal).

3.04 WALKOVER CONSTRUCTION:

A. STRINGERS AND BENTS: Stringers and bents shall be installed with the "crown" side up and bolt holes shall pre-drilled at the spacing specified on the plans. Stringers shall be spaced as shown on the plans within 1/2" of position.

B. DECKING: Unless noted otherwise, all deck boards shall be screwed using two #10 x 3 1/2" screws per deck board at each stringer crossing. Decking shall be spaced with a 1/8" gap side to side and between the boards and any horizontally abutting surface. All screws into composite or ipe decking shall be pre-drilled and countersunk. All other manufacturers' installation instructions must be followed.

3.05 SYP RAIL, STRINGER, AND BENT SAW CUTS: The end grains of saw cut SYP rail members, stringers, and bents shall be field treated with Tenino Copper Naphthenate (or approved equal) in accordance with the manufacturer's specifications.

3.06 BENCH CONSTRUCTION: Exposed edges on bottom of bench seat members shall be relieved to match top relieved edge. Top, bottom, and exposed side edges of end cut rail and bench seat members shall also be relieved to match relieved edge of decking.

3.07 RAILING CONSTRUCTION: Hand/Grab railing shall include extensions in accordance with 2023 Florida Building Code – Accessibility, Sections 505.10.2 and 505.10.3 at no additional cost to Town. Bolts/threaded rod shall be installed as level and square as possible to the members they are secured to.