

TECHNICAL MEMORANDUM

TO: Lonne Moore, Projects Manager REF: 6698

Charlotte County Community Services

1120 Centennial Blvd. Port Charlotte, FL 33953

FROM: Dennis J. Croyle, P.E.

DATE: October 23rd, 2025

RE: Englewood Beach Boardwalk and Walkovers – Preliminary Design Study

Executive Summary

This technical memorandum presents schematic-level design alternatives for the replacement and improvement of the Englewood Beach boardwalk and walkovers at Chadwick Park in Englewood, Florida. The previous boardwalk and walkover system, constructed in 2001, was heavily damaged by Hurricane Milton in late 2024 and has since been mostly removed. This preliminary study evaluates a range of alternative design concepts, including:

- 1. Replace at the Original Elevation
- 2. Replace at a Higher Elevation
- 3. Walkovers with Limited Boardwalk Connectivity (Elevated)
- 4. Walkovers Only (Elevated)
- 5. Natural Access Paths Only

Each alternative is assessed for resiliency, accessibility, environmental impacts, permitting considerations, and cost. Based on the analysis, it is recommended that Charlotte County selects elevated dune walkovers with limited boardwalk connectivity (Alternative 3). The central walkovers will be connected to the main pavilion by boardwalk to maintain continuity at the central beach zone, while the northern and southern walkovers will remain as standalone dune crossings. The central pavilion will be retained without stairs, relying on adjacent ramps for beach access. Shower areas will be rebuilt in their same footprints, with the addition of a new shower station at the southernmost walkover to enhance visitors' convenience. It is recommended that a new ADA ramp is installed to access the primary overlook pavilion and restroom facility directly from the parking lot. The entire proposed structure will be elevated to improve resiliency and incorporate breakaway features to meet regulatory requirements. This approach preserves the park's amenities, provides ADA compliant access, protects the dunes, reduces costs, minimizes maintenance, and improves storm durability to provide a safe, accessible, and resilient public resource.

1. Background & Existing Conditions

The Englewood Beach boardwalk and walkovers replacement project is located at Chadwick Park, 2100 North Beach Road, Englewood, FL 34223. The property (Parcel ID: 411912251001) is owned and maintained by Charlotte County. The project is a Federal Emergency Management Agency (FEMA) funded disaster recovery project (DR-4834-FL) and is administered by Charlotte County.

Based on a review of available aerial imagery and information provided by the Charlotte County GIS and Property Appraiser, it is understood that the boardwalk and walkovers were originally constructed in 2001, along with other improvements including the restroom facility, overlook pavilions, picnic pavilions, pay stations, and shelters.

Hurricane Milton damaged the boardwalks and walkovers in late 2024. The structures were approximately 23 years old and were built at varying elevations with the lower elevated segments being the most vulnerable to wave and storm surge



2025 Aerial (Post Hurricane)

forces. During beach cleanup efforts, the damaged boardwalks and walkovers were removed; however, the central overlook pavilion / restroom facility and the adjacent overlook pavilions structure (excluding the decking and framing) remained intact and were not removed.

2. Design Objectives

This memorandum further evaluates alternative options in addition to simply replacing the boardwalk and walkover structure to make the best recommendation for the County and its residents. These options were weighed with the following considerations:

- Storm Resiliency: Improve survivability against hurricanes, wave action, and storm surge.
- **FEMA Compliance**: Align with FEMA Public Assistance guidance and cost-reasonable design.
- Environmental Protection: Minimize impacts to beach dunes, comply with FDEP Coastal Construction Control Line (CCCL) regulations, and support sea turtle nesting protections. Dune restoration is not an element of the current project scope; however, it is anticipated that the dunes will be replenished by Charlotte County after the 2026 nesting season and must be accounted for in design.
- Public Use & Safety: Provide safe, functional, and user-friendly access for residents and visitors.
- Americans with Disabilities Act of 1990 (ADA) Compliance: Ensure beach access meets current ADA standards and improve ADA accessibility where possible.
- **Cost-Effectiveness**: Balance capital investment with long-term maintenance needs.

3. Design Considerations

FEMA Compliance

FEMA public assistance for disaster recovery projects helps to cover the costs to restore public infrastructure and can help implement additional hazard mitigation measures to further protect public infrastructure from future storm related damage.

FEMA offers some general guidance on common mitigation measures for coastal facilities, like the Englewood Beach boardwalks. These suggested solutions include optimizing regular facility maintenance programs to identify and repair damage, retrofitting or reinforcing vulnerable structures, elevating new facilities to protect them from flood damage, and upgrading or relocating facilities if necessary. It is the intent of this project to replace the boardwalk and walkovers in a manner that will be more resilient and less vulnerable to storm damage while providing the same level of service to residents and in a cost-effective approach.

Elevating the Structure

The proposed walkovers and boardwalks will be sufficiently elevated to comply with CCCL dune clearance requirements, improve resiliency of the structure, and accommodate ADA accessibility. The project primarily lies within FEMA Zone 10VE. Elevating the structure is necessary to reduce risk from coastal flooding, wave action, and storm surge, and to support long-term durability compared to the previous boardwalk, which was lower and more susceptible to storm related damage.

For preliminary design purposes, a proposed minimum elevation of 10 ft NAVD (with some alternatives proposing boardwalk segments as high as 12.6 ft) has been selected for both the walkovers and boardwalk. This elevation balances the need to provide adequate vertical clearance over the dunes, meet anticipated FEMA requirements, and maintain practical ADA-compliant ramp lengths. The ADA ramps connect to ADA parking locations in the existing lot, limiting flexibility in ramp placement; therefore, the proposed elevation was selected to optimize accessibility while minimizing excessive ramp length and slope and impacts to the existing Chadwick Park facilities.

It should be noted that the restored dune elevation (future) is currently unknown, and final design will incorporate site-specific dune profiles and FEMA/CCCL guidance. Once a preferred alternative is approved, the project team will investigate opportunities to increase the structure elevation further, providing freeboard to improve storm resiliency. Even at the proposed preliminary elevation, the reconstructed walkovers and boardwalks will be more resilient than the previous structures, reducing the risk of damage during future storm events and facilitating quicker recovery.

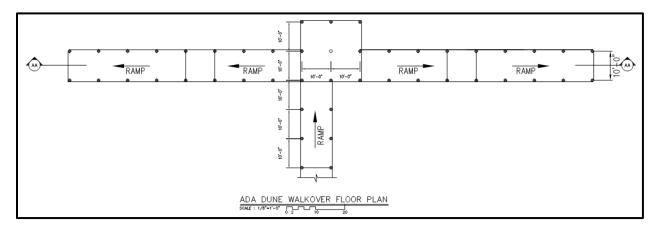
Frangibility & Breakaway Sections

In accordance with FEMA guidance and CCCL permitting requirements, the rebuilt structure will be designed with frangible connections and breakaway deck sections. These features allow portions of the structure to detach under extreme storm forces, reducing damage to the primary support system and minimizing debris loads on the beach and dune system. By incorporating breakaway design elements, the walkovers will enhance storm resiliency, facilitate emergency vehicle access (by reducing heavy debris) after storm events, and streamline future recovery and replacement efforts (only decking and rails will need to be replaced as the main pilings will remain in place).

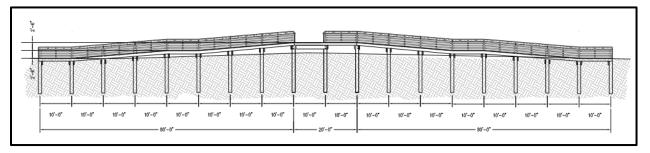
ADA Accessibility

Boardwalks should meet ADA access including maximum slopes, widths, and landing areas. Additionally, two of the previous existing dune walkovers adjacent to the primary overlook pavilion previously provided ADA compliant beach access with ramps instead of stairs. Each alternative considered in this memorandum also offers ADA beach access at these two locations which are closest to the existing ADA parking spots.

Conceptually, the geometry of the ADA accessible dune walkovers is shown below.



Conceptual ADA Dune Walkover Floor Plan



Conceptual ADA Dune Walkover Cross Section AA

Construction Materials

Several material alternatives were evaluated for the replacement of the boardwalk and walkovers, including synthetic wood, concrete, steel, and alternate hardwoods for example. Each material type offers unique benefits but also presents limitations for this coastal application. Synthetic wood components are durable and require less maintenance but tend to be less cost effective. Concrete and steel alternatives offer superior strength and longevity but are heavier, more expensive, and significantly more intrusive to the dune environment. They also present higher maintenance challenges in a saltwater environment due to corrosion or cracking. Alternate wood varieties (i.e., Alaskan yellow cedar, ipe, or cumaru) for certain components can provide durability but are cost-prohibitive and are not recommended for this project.

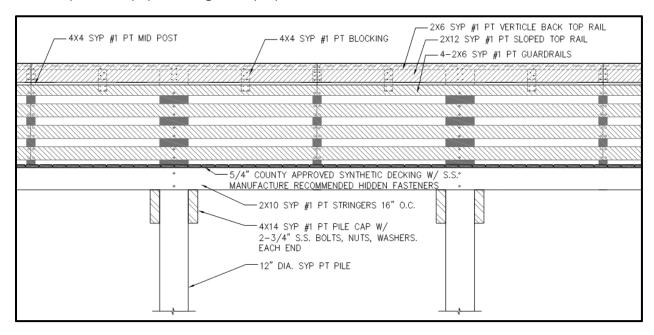
This study recommends the use of County-approved synthetic decking for improved durability with anticipated heavy foot traffic, reduced maintenance, and uniformity with other County parks, combined with pressure-treated southern yellow pine (SYP) for all structural framing elements.

The combined use of SYP and synthetic decking is supported for the following reasons:

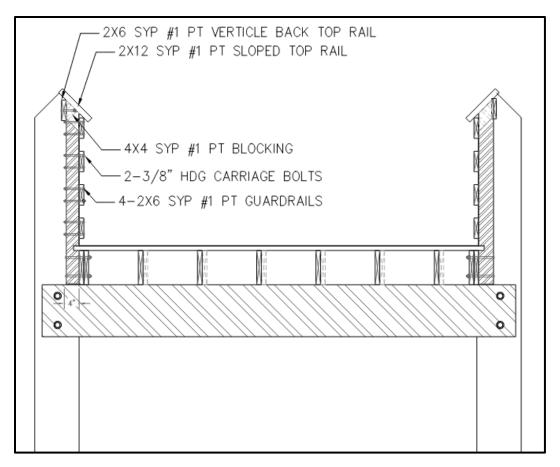
- SYP remains the most economical material, allowing FEMA recovery funding and County resources to be used efficiently.
- Structures can be designed with breakaway decking and frangible connections consistent with FEMA and CCCL guidance, reducing storm debris loads.
- SYP piles can be driven with relatively low disturbance to dune vegetation and root systems compared to heavier construction methods, supporting dune recovery and stability.
- Maintains the natural, rustic character of Englewood Beach, ensuring compatibility with the existing park setting and preserving the traditional look valued by the community.
- Decking can be constructed to meet all ADA requirements, ensuring equitable access.
- It can be constructed with narrow decking widths and non-reflective finishes that limit shading impacts and avoid disorienting sea turtle hatchlings, consistent with lighting and environmental protection guidelines.
- Boardwalk and walkovers are straightforward to repair using readily available materials, which supports long-term resilience and maintenance efficiency.

In summary, the combination of SYP and County approved synthetic decking provides a practical, cost-effective solution that meets resiliency and permitting requirements, ADA accessibility, and supports environmental protection considerations, while preserving the natural aesthetic of Englewood Beach and maintaining a uniform look with other County parks.

An example concept plan using these proposed materials is included below.



Conceptual Boardwalk Inside Elevation



Conceptual Boardwalk Section

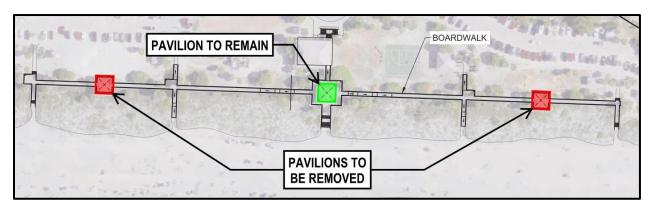
Existing Overlook Pavilions (North & South)

Two smaller overlook pavilions were previously located along the boardwalk corridor to the north and south of the existing large central pavilion. These structures did not provide direct beach access but served as passive viewing areas for park visitors. The pavilion roofs and support piles remained largely intact following the 2024 hurricane events, although both have sustained varying levels of structural damage, including damaged roof elements, piles, and beams. The extent of the damage to the framing and decking is unknown as it was all removed during cleanup efforts.

During preliminary evaluations, several options were considered for these structures depending on the selected boardwalk alternative. If a new boardwalk alignment were proposed beneath the existing pavilion footprints, repair or replacement of the pavilions could be feasible. Conversely, if no new boardwalk were constructed in these areas, the pavilions could either remain in place in their current condition or be removed entirely.

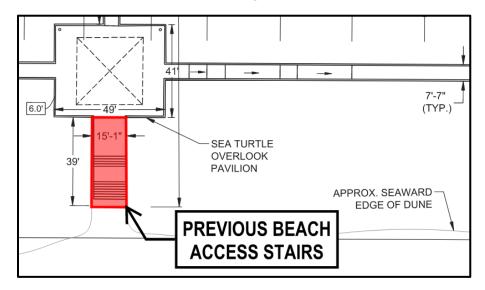
The County has indicated a preference to remove both overlook pavilions and not replace them as part of this project. This approach is consistent with the project's goals of improving storm resiliency, reducing long-term maintenance, and minimizing dune and habitat disturbance. The existing pavilion structures are partially compromised and would require significant reconstruction to meet current FEMA and FDEP standards for coastal structures. Removing these aging structures avoids potential permitting challenges (pavilion type structures near dunes are not preferred) and eliminates a potential source of debris during future storm events.

The primary overlook pavilion located near the restroom facility will remain, continuing to provide public gathering and viewing opportunities. Removing the two smaller pavilions simplifies the site layout, reduces environmental impacts, and supports a more natural, sustainable, and resilient shoreline design consistent with the County's long-term coastal management objectives.



Central Overlook Pavilion Beach Access Stairs

The previous boardwalk configuration included a wide central stairway at the central overlook pavilion that provided direct beach access. The stairs were heavily damaged and subsequently removed. Following discussions with Charlotte County, it was determined that these stairs will not be reconstructed. This decision aligns with the County's ongoing dune restoration plan, which prioritizes restoring and stabilizing the natural dune system in this area. The former wide stairway created a substantial opening in the dune, interfered with sand migration and vegetation growth, and required frequent maintenance due to storm damage.



From a permitting and resiliency standpoint, the removal of this feature is consistent with FDEP CCCL and FEMA guidance, which favor narrow, elevated, and frangible walkovers that minimize dune disturbance and debris potential. The elimination of the wide stairs will also simplify permitting and reduce long-term maintenance costs. Public access, including ADA-compliant walkovers, will continue to be provided at other access points adjacent to the central area, ensuring a similar level of service while supporting dune protection and improved storm resiliency.

4. Alternatives Analysis

The following design alternatives were evaluated for the proposed boardwalk and walkover system replacement.

Alternative 1: Replace at Original Elevation

Description:

- Rebuild the dune walkovers and full connecting boardwalk system in the same general footprint and at the same elevation as the previous structure.
- Replace the three showers that were removed. The two existing showers at the central pavilion will remain. An additional shower is proposed at the southernmost walkover.
- The north and south overlook pavilions will be removed. The central pavilion will remain.
- Install a new ADA ramp to access the restroom facility directly from the parking lot.
- No improvements to the central overlook pavilion or restroom facility are proposed.

Pros:

- Restores original layout / connectivity and amenities.
- Provides ADA compliant access.

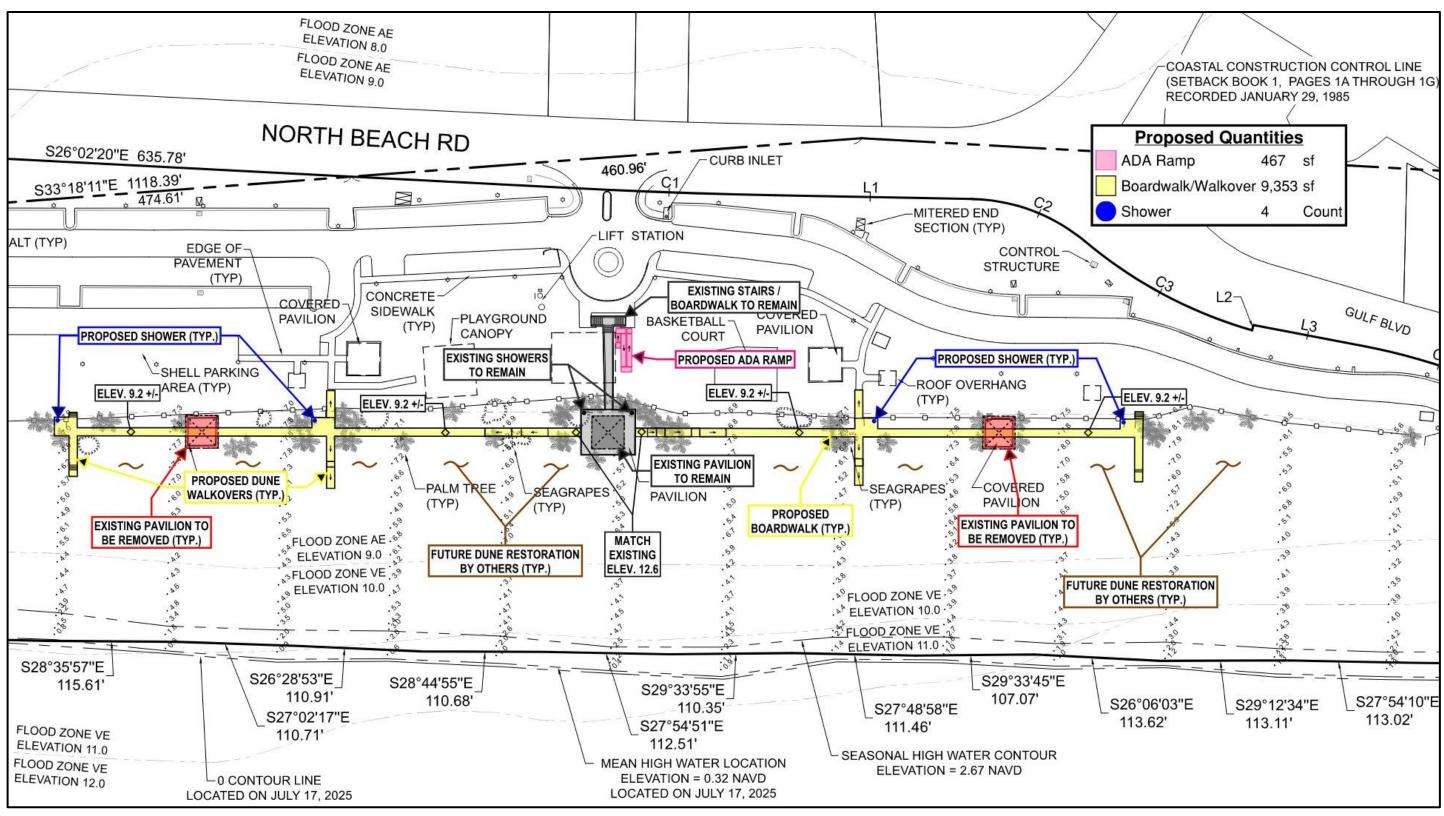
Cons:

- High vulnerability to storm damage.
- Does not improve resiliency.
- High maintenance.
- High capital cost.
- Moderate CCCL permitting risk: Replacement of structure, but boardwalks not preferred.
- Bathroom access from beach is not direct

Order-of-Magnitude Cost:

Itam Description	Unit	Unit Price		Alternative 1		
Item Description		U	nit Price	Qty		Total
Boardwalk/Walkover	SF	\$	170.00	9,353	\$ 1	,590,010.00
ADA Ramp	SF	\$	170.00	467	\$	79,390.00
Shower Station	EA	\$	5,000.00	4	\$	20,000.00
Demolish Overlook Pavilion	EA	\$ 2	25,000.00	2	\$	50,000.00
Sub-Total					\$ 1	,739,400.00
Class 3 AACE Contingency (15%)					\$	260,910.00
Total Estimate					\$ 2	2,000,000.00

Schematic Design 1: Replace at Original Elevation



Alternative 2: Replace at a Higher Elevation

Description:

- Reconstruct full boardwalk system and dune walkovers in generally the same footprint as the previous structure, but elevated.
- The new elevation will require longer ADA ramps at two of the walkovers.
- Minimum proposed boardwalk elevation is 10, which is approximately 1 to 4 feet higher (depending on the location) than the old boardwalk. Boardwalk elevation is limited by the ADA accessibility at two of the walkovers.
- Replace the three showers that were removed. The two existing showers at the central pavilion will remain. An additional shower is proposed at the southernmost walkover.
- The north and south overlook pavilions will be removed. The central pavilion will remain.
- Install a new ADA ramp to access the restroom facility directly from the parking lot.
- No improvements to the central overlook pavilion or restroom facility are proposed.

Pros:

- Restores original layout / connectivity and amenities.
- Provides ADA-compliant access.
- More resilient than the original boardwalk system.

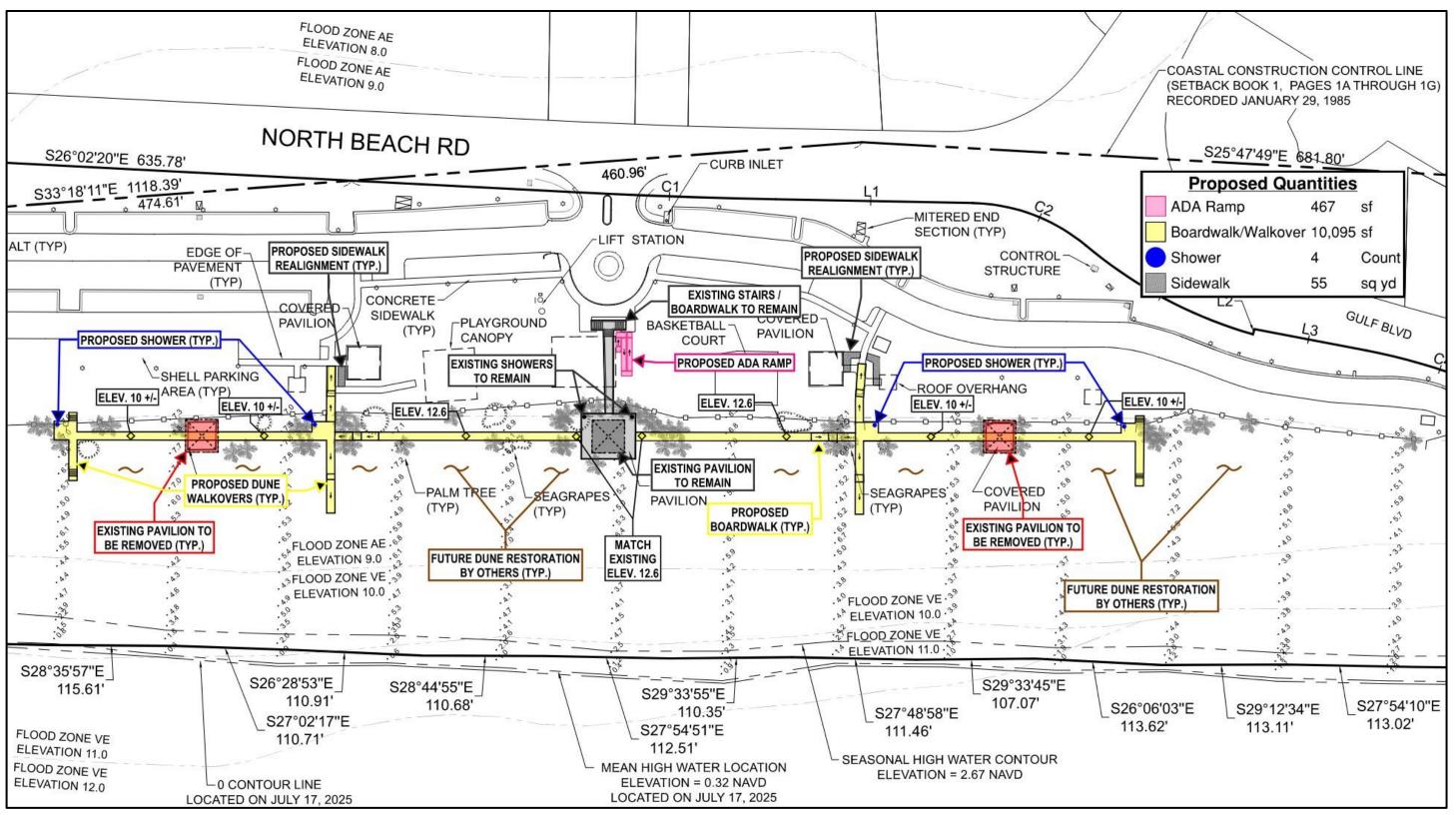
Cons:

- Highest capital cost.
- High maintenance.
- Still vulnerable to extreme storms (boardwalk at risk).
- Moderate CCCL permitting risk: Replacement of structure, but boardwalks not preferred.
- Bathroom access from beach is not direct

Order-of-Magnitude Cost:

Itana Dagavintian	Unit	Unit Price		Alternative 2			
Item Description				Qty		Total	
Boardwalk/Walkover	SF	\$	170.00	10,095	\$ 1	1,716,150.00	
ADA Ramp	SF	\$	170.00	467	\$	79,390.00	
Shower Station	EA	\$	5,000.00	4	\$	20,000.00	
Sidewalk	SY	\$	90.00	55	\$	4,950.00	
Demolish Overlook Pavilion	EA	\$:	25,000.00	2	\$	50,000.00	
Sub-Total					\$ 1	1,870,490.00	
Class 3 AACE Contingency (15%)					\$	280,573.50	
Total Estimate					\$ 2	2,151,000.00	

Schematic Design 2: Replace at Higher Elevation



Alternative 3: Walkovers with Limited Boardwalk Connectivity

Description:

- Construct elevated walkovers at central beach access points with connecting segments of elevated boardwalk.
- The new elevation will require longer ADA ramps at two of the walkovers.
- Minimum proposed boardwalk elevation is 10, which is approximately 1 to 4 feet higher (depending on the location) than the old boardwalk. Boardwalk elevation is limited by the ADA accessibility at two of the walkovers.
- Replace the three showers that were removed. The two existing showers at the central pavilion will remain. An additional shower is proposed at the southernmost walkover.
- The north and south overlook pavilions will be removed. The central pavilion will remain.
- Install a new ADA ramp to access the restroom facility directly from the parking lot.
- No improvements to the central overlook pavilion or restroom facility are proposed.

Pros:

- Provides ADA-compliant access.
- More resilient than a full boardwalk system.
- Reduces exposure and cost.
- Maintains key user amenities.

Cons:

- Some loss of continuous connectivity.
- Moderate maintenance (compared to full boardwalk).
- Still vulnerable to extreme storms (boardwalk at risk).
- Low-Moderate CCCL permitting risk: Replacement of structure, but boardwalks not preferred.
- Bathroom access from beach is not direct

Order-of-Magnitude Cost:

Itam Description	Unit	Unit Price		Alternative 3			
Item Description				Qty		Total	
Boardwalk/Walkover	SF	\$	170.00	6,927	\$1	,177,590.00	
ADA Ramp	SF	\$	170.00	467	\$	79,390.00	
Shower Station	EA	\$	5,000.00	4	\$	20,000.00	
Sidewalk	SY	\$	90.00	55	\$	4,950.00	
Demolish Overlook Pavilion	EA	\$ 25,000.00		2	\$	50,000.00	
Sub-Total					\$1	,331,930.00	
Class 3 AACE Contingency (15%)					\$	199,789.50	
Total Estimate					\$1	,532,000.00	

Schematic Design 3: Walkovers with Limited Boardwalk Connectivity FLOOD ZONE AE **ELEVATION 8.0** FLOOD ZONE AE COASTAL CONSTRUCTION CONTROL LINE **ELEVATION 9.0** (SETBACK BOOK 1, PAGES 1A THROUGH 1G) RECORDED JANUARY 29, 1985 **Proposed Quantities** NORTH BEACH RD 467 sf ADA Ramp S26°02'20"E 635.78' CURB INLET 460.96 Boardwalk/Walkover 6,927 sf S33°18'11"E 1118.39' C1 474.61 Shower Count MITERED END Sidewalk 55 sq yd SECTION (TYP) -LIFT STATION ALT (TYP) PROPOSED SIDEWALK EDGE OF-PROPOSED SIDEWALK CONTROL REALIGNMENT (TYP.) PAVEMENT REALIGNMENT (TYP.) STRUCTURE (TYP) **EXISTING STAIRS** / CONCRETE-BOARDWALK TO REMAIN COVERED GULF BLVD SIDEWALK PAVILIO -PLAYGROUND BASKETBALL -(TYP) **PAVILION** CANOPY PROPOSED SHOWER (TYP.) COURT PROPOSED SHOWER (TYP.) **EXISTING SHOWERS** PROPOSED ADA RAMP TO REMAIN SHELL PARKING ROOF OVERHANG AREA (TYP) ELEV. 12.6 (TYP) ELEV. 12.6 ELEV. 10 +/-ELEV. 10 +/-ELEV. 10 +/-ELEV. 10 +/-**EXISTING PAVILION** PROPOSED DUNE TO REMAIN SEAGRAPES & COVERED. PALM TREE **SEAGRAPES** WALKOVERS (TYP.) PAVILION PAVILION (TYP) PROPOSED BOARDWALK (TYP.) **EXISTING PAVILION TO EXISTING PAVILION TO** BE REMOVED (TYP.) FLOOD ZONE AE . 68 BE REMOVED (TYP.) MATCH **FUTURE DUNE RESTORATION EXISTING** ELEVATION 9.0 BY OTHERS (TYP.) **ELEV. 12.6** FLOOD ZONE VE **FUTURE DUNE RESTORATION** ELEVATION 10.0 A FLOOD ZONE VE BY OTHERS (TYP.) . № ELEVATION 10.0 . ° FLOOD ZONE VE ELEVATION 11.0 S28°35'57"E S26°28'53"E S28°44'55"E S29°33'45"E 115.61 S29°33'55"E 110.91 107.07 110.68 S27°54'10"E S26°06'03"E S29°12'34"E 110.35 S27°48'58"E S27°02'17"E 113.02 113.62' 113.11' S27°54'51"E 111.46' FLOOD ZONE VE 110.71 112.51 **ELEVATION 11.0** SEASONAL HIGH WATER CONTOUR FLOOD ZONE VE MEAN HIGH WATER LOCATION ELEVATION = 2.67 NAVD ELEVATION = 0.32 NAVD **ELEVATION 12.0** -0 CONTOUR LINE LOCATED ON JULY 17, 2025 LOCATED ON JULY 17, 2025

Alternative 4: Walkovers Only

Description:

- Construct elevated dune walkovers at each beach access point; eliminate parallel boardwalks.
- The new elevation will require longer ADA ramps at two of the walkovers.
- Minimum proposed elevation is 10, which is approximately 1 to 2 feet higher than the old walkovers. Walkover elevation at two of the walkovers is limited by the ADA accessibility ramps.
- Replace the three showers that were removed. The two existing showers at the central pavilion will remain. An additional shower is proposed at the southernmost walkover.
- The north and south overlook pavilions will be removed. The central pavilion will remain.
- Install a new ADA ramp to access the restroom facility directly from the parking lot.
- No improvements to the central overlook pavilion or restroom facility are proposed.

Pros:

- Reduced footprint; minimizes dune disturbance.
- Provides ADA compliant access.
- Low CCCL permitting risk: Dune walkovers are allowed.
- Elevated structures are more resilient.
- Less vulnerable to extreme storms (no boardwalk which is highest risk).
- Lower maintenance (no boardwalk).
- Easier and faster to rebuild in future; accelerates beach cleanup and reopening efforts.

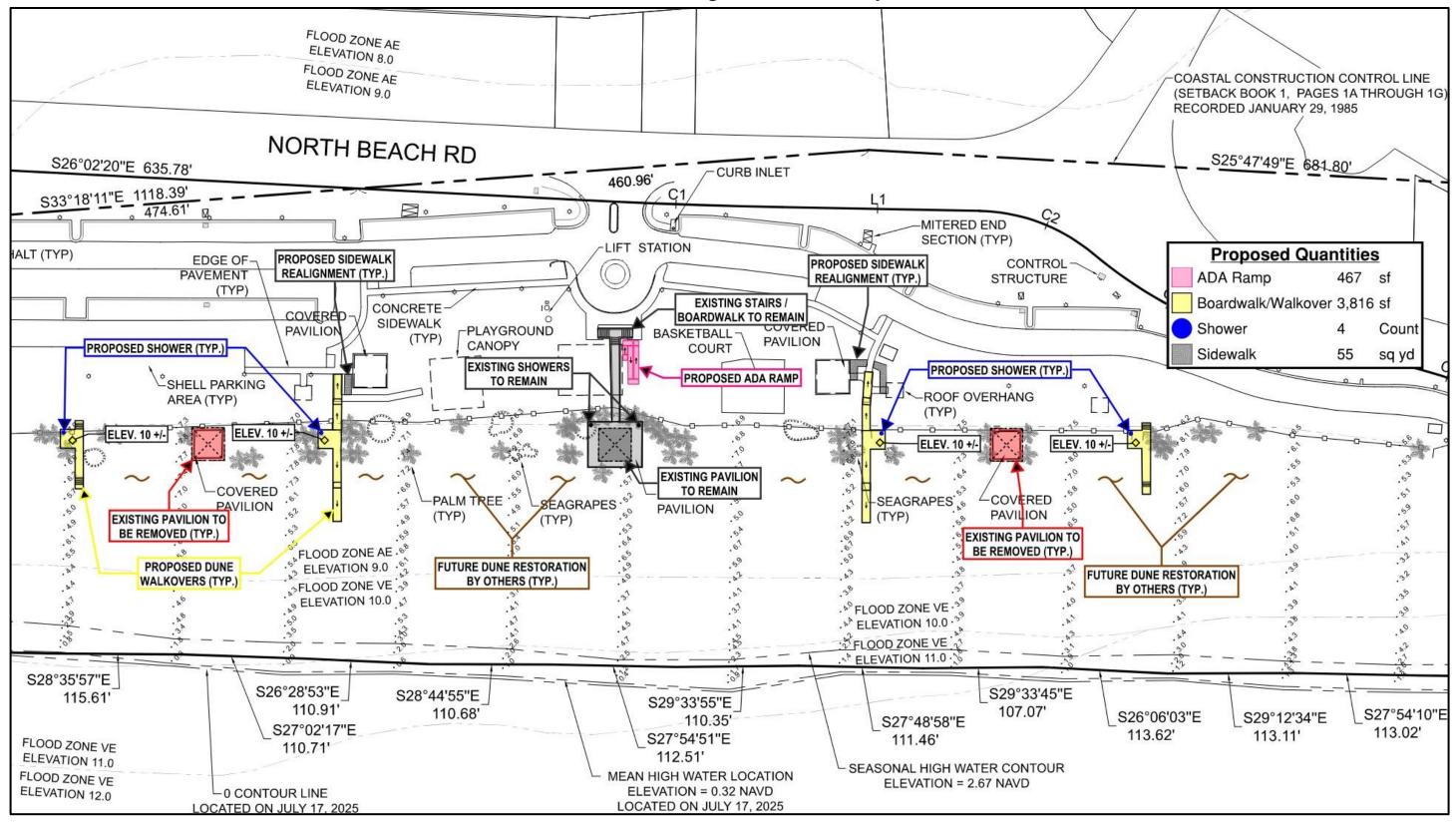
Cons:

- Less connectivity between access points.
- Loss of boardwalk user experience.
- Bathroom access from beach is not direct

Order-of-Magnitude Cost:

Itam Description	Unit	Unit Price		Alternative 4		
Item Description				Qty		Total
Boardwalk/Walkover	SF	\$	170.00	3,816	\$	648,720.00
ADA Ramp	SF	\$	170.00	467	\$	79,390.00
Shower Station	EA	\$	5,000.00	4	\$	20,000.00
Sidewalk	SY	\$	90.00	55	\$	4,950.00
Demolish Overlook Pavilion	EA	\$ 2	25,000.00	2	\$	50,000.00
Sub-Total					\$	803,060.00
Class 3 AACE Contingency (15%)				\$	120,459.00	
Total Estimate					\$	924,000.00

Schematic Design 4: Walkovers Only



Alternative 5: Natural Access Paths Only

Description:

- Do not reconstruct boardwalks or walkovers; allow pedestrian access over the existing natural sand paths.
- Replace the three showers that were removed. The two existing showers at the central pavilion will remain. An additional shower is proposed at the southernmost walkover.
- The north and south overlook pavilions will be removed. The central pavilion will remain.
- Install a new ADA ramp to access the restroom facility directly from the parking lot.
- No improvements to the central overlook pavilion or restroom facility are proposed.

Pros:

- Lowest cost.
- No structural exposure to storms.

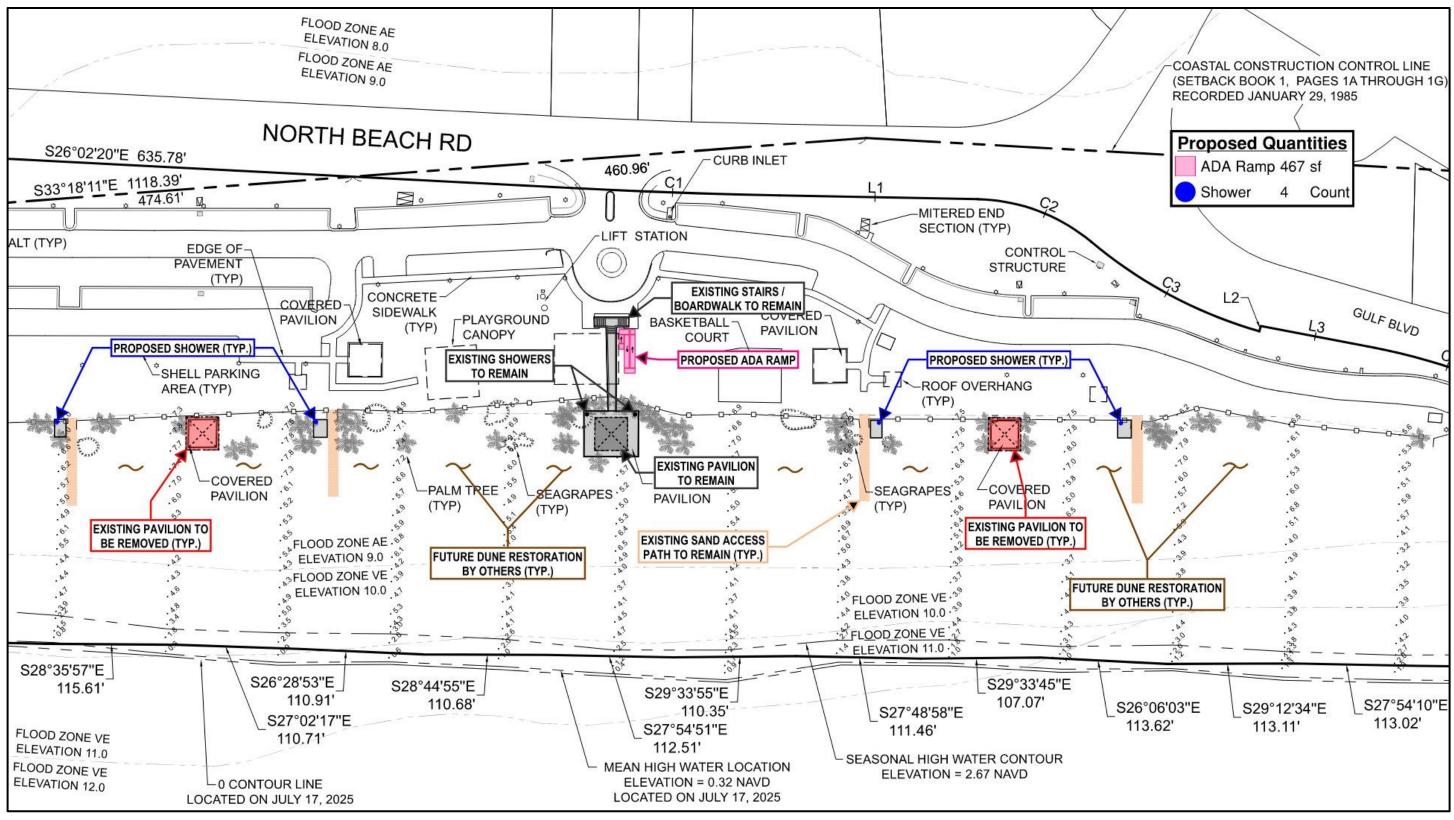
Cons:

- Very high CCCL permitting risk: Likely not allowed.
- Non-ADA compliant.
- Higher risk of dune damage and erosion.
- Poor user safety and experience.
- Loss of amenities.
- Bathroom access from beach is not direct

Order-of-Magnitude Cost:

Itama Daganintian	Unit	Unit Drice	Alternative 5		
Item Description		Unit Price	Qty		Total
ADA Ramp	SF	\$ 170.00	467	\$	79,390.00
Shower Station	EA	\$ 5,000.00	4	\$	20,000.00
Demolish Overlook Pavilion	EA	\$ 25,000.00	2	\$	50,000.00
		\$	149,390.00		
Class 3 A		\$	22,408.50		
		\$	172,000.00		

Schematic Design 5: Natural Access Paths Only



Alternatives Comparison Table

Alternative	ADA Compliance	Storm Resiliency	Env. Impact & Permitting Risk	User Experience	Order of Magnitude Cost (\$M)	
1 – Replace at	Yes	Low	High Impact /	Excellent	\$2.0M	
Original Elevation			Moderate Risk			
2 – Replace at	Yes	Moderate	High Impact /	Excellent	\$2.2M	
Higher Elevation	103	rioderate	Moderate Risk	LXCCROTT	ΨΖ.ΖΙ Ι	
3 – Walkovers &			Moderate			
Limited Boardwalk	Yes	Moderate	Impact / Low-	Good	\$1.5M	
(Elevated)			Moderate Risk			
4 – Walkovers Only	Yes	l liada	Low Impact /	Fair	ቀ 00014	
(Elevated)	res	High	Low Risk	rair	\$900k	
5 – Natural Access	No	High (no	Low Impact /	Poor	\$200k	
Paths Only	INU	assets at risk)	High Risk	F 001	φ∠υυκ	

5. Permitting Agencies

Multiple permitting organizations will need to be coordinated with for this project, regardless of what alternative is selected.

FEMA/NFIP Review & Environmental and Historic Preservation (EHP)

FEMA will review the proposed project to ensure that the proposed disaster recovery project meets funding eligibility and review for EHP applicability.

Coastal Construction Control Line (CCCL) Permitting

The Englewood Beach Boardwalk and Walkovers project is located seaward of the Florida Department of Environmental Protection's (FDEP) Coastal Construction Control Line (CCCL) and

will require a CCCL permit prior to construction.

Some of the project specific CCCL guidelines include:

- Locating structures to protect dune features, minimize disturbance of vegetation, not obstruct beach access, and to minimize the amount of material that may become storm debris.
- Designing structures to be minor and expendable with minimal interference with coastal processes.
- Elevating structures to provide clearance above existing or proposed dune vegetation to allow sand buildup and prevent disturbance to vegetation.
- Minimizing the quantity of material used in construction (i.e., minimizing the size of structures on the beach).



FDEP Environmental Resource Permit (ERP)

An ERP may be required for this project. Currently, it is anticipated that it will qualify for an ERP Exemption.

U.S. Army Corps of Engineers (USACE) Section 404/10 Permit

Since structures are proposed near dunes, it is likely that this project will require USACE review. Section 404/10 permits may be required.

Florida Fish and Wildlife Conservation Commission (FWC)

FWC will be involved in the project review due to the presence of sea turtles and shore birds.

Charlotte County Site Plan Review (SPR) & Overlay District

Since the project is proposing a rebuilding in the same general footprint as the previous structure, it is not anticipated that Site Plan Review (SPR) will be needed. This will be confirmed during design. It is also noted that this project is located in the Manasota Key Overlay District.

6. Summary & Recommendations

After careful consideration of design options, order of magnitude cost estimates, regulatory requirements, resiliency goals, and public benefit, it is recommended that Charlotte County proceed with Alternative 3 and reconstruct the elevated dune walkovers with limited boardwalk connectivity at a higher elevation. This would include a system of four dune walkovers with the two innermost walkovers connected by boardwalk to the primary central overlook pavilion. The outermost two walkovers will remain as standalone dune crossings.

This recommendation is supported by the following considerations:

Dune Protection

By reducing structures and continuous boardwalks parallel to the shoreline, the project lessens dune impacts, allowing the restored dune system (to be implemented by Charlotte County) to stabilize naturally and provide its critical role in coastal storm protection and wildlife habitat.

Cost Savings & Maintenance Efficiency

Constructing walkovers with a limited boardwalk system reduces initial construction costs, minimizes long-term maintenance needs, and lowers lifecycle costs.

Permitting Feasibility

A reduced footprint lowers permitting risks under FDEP's CCCL program, increasing the likelihood of timely approvals. Boardwalks parallel to the shoreline are generally not preferred, but limiting the amount of structure to be reconstructed will be favorable with permitting agencies.

• Storm Resiliency & FEMA Compliance

Elevated, pile-supported walkovers/boardwalk with breakaway decking can be engineered for frangibility, reducing debris during storm events and aligning with FEMA-compliant coastal construction practices.

Public Amenity Preservation & Level of Service

The limited boardwalk maintains the boardwalk experience and visual continuity of beach access, while the central pavilion remains as the primary overlook. The proposed ramp and walkovers are designed to provide accessible routes to the beach and restroom facilities, ensuring equitable access for all users. Shower areas will be reconstructed in their original footprints, with one additional station added at the southernmost walkover to enhance visitor convenience.

In summary, this approach balances public access, environmental protection, cost-effectiveness, and resilience, providing a practical and sustainable solution that preserves the primary function and amenity of the boardwalk system while reducing long-term risk and maintenance requirements. Implementing a system of dune walkovers with limited boardwalk connectivity is a balanced solution that meets FEMA disaster recovery objectives, reduces short and long-term County costs, protects sensitive coastal resources, and preserves the quality of beach access for residents and visitors alike. This approach is practical, resilient, and is a responsible use of recovery funding while ensuring Englewood Beach remains an accessible and enjoyable community asset.