LOCAL CONCEPT DEVELOPMENT STUDY FOR CAPE MAY COUNTY ROUTE 619 (OCEAN DRIVE) BRIDGE (STRUCTURE NO. 3100-002) LOCATED OVER CORSONS INLET

UPPER TOWNSHIP

NAVIGATION IMPACT REPORT

MARCH 2026

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I. Introduction

1. Purpose of This Report

The purpose of the Navigation Impact Report (NIR) is to aid in the determination of the reasonable needs of navigation on Corsons Inlet as they relate to the Cape May County Route 619 (Ocean Drive) Bridge (Structure No. 3100-002) Located over Corsons Inlet (Corsons Inlet Bridge). The NIR is being prepared in accordance with the Memorandum of Agreement (MOA) between the United State Coast Guard (USCG) and the Federal Highway Association (FHWA). Per this MOA, the USCG has federal jurisdiction over the Corsons Inlet navigable channel, and therefore any crossing must accommodate the reasonable needs of navigation in order to be eligible for a bridge permit.

The first two sections of this report describe the existing conditions of navigation on Corsons Inlet, including physical features of the inlet, condition of navigable channels, current and future navigation needs, marine traffic, bridge opening frequencies, vessel clearance restrictions, vessel dimensions, surrounding land uses, and local opinions and boating behaviors collected through public outreach. The third section of this report outlines the purpose and need of the Corsons Inlet Bridge project. The fourth section (under development pending input from the USCG) details the Alternatives Analysis, which includes the development of bridge alternatives, and the development of the Comparison of Alternatives Matrix. This section includes the results of a vessel height sensitivity analysis, which delineates how various bridge heights could affect maritime movement on Corsons Inlet.

2. Corsons Inlet Bridge Local Concept Development Study

A Local Concept Development (LCD) Study is being performed for the Cape May County Route 619 (Ocean Drive) Bridge (Structure No. 3100-002) Located over Corsons Inlet (Corsons Inlet Bridge). The Corsons Inlet Bridge spans Corsons Inlet in a southwest/northeast direction connecting Ocean City to Strathmere in Upper Township, Cape May County. The bridge spans over Strathmere Bay but does not cross the Intercoastal Waterway and borders the Cape May Coastal Wetlands, which are sensitive ecological resources. The Corsons Inlet Bridge is located at milepost 15.49 (northbound and southbound). The project limits include the immediate roadway sections on both approaches to the bridge, making the project limits approximately 0.51 miles in length.

The Corsons Inlet Bridge, a bascule span bridge, was constructed in 1949. This bridge is structurally deficient and functionally obsolete and will eventually need to be replaced. The bascule span has not operated since December 2013 due to deterioration of the bascule trunnion support column. The bridge superstructure was strengthened and repainted in 2007 with bridge railings replaced in 2012. Substructure repairs and scour countermeasures at the north abutment were completed in 2015-16. In 2021 underdeck concrete patching was completed in several north approach spans and above deck patching in the toll span area.

A Corson's Inlet bridge does not cross the Intercoastal Waterway. The bascule span has not been operational for the past 13 years and during that time there has been no documented detriment or continuing requests for bridge openings. As a result of the infrequency of bridge openings when the bridge was operational more than 13 years ago, the hazardous navigational conditions contributing thereto, and since there has been no public outcry for bascule openings over the past 13 years, the Bridge Commission, with the endorsement of the County Commissioners, seeks to close the bascule span permanently.

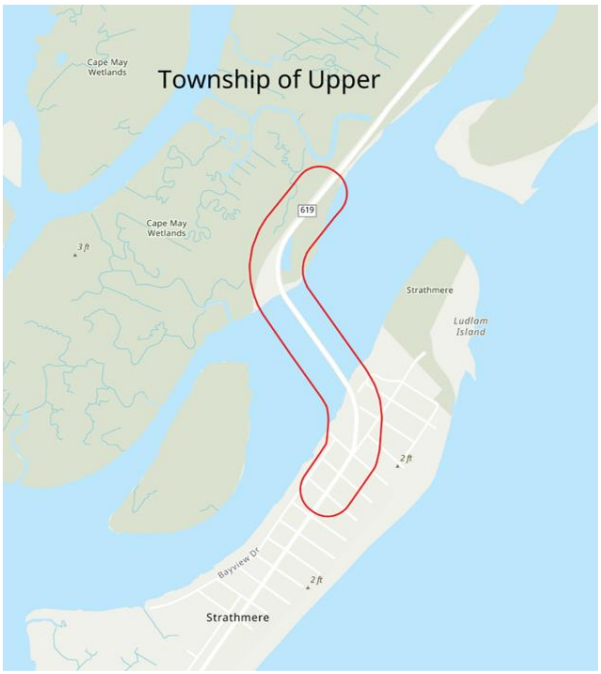

Figure 1. Geographic location of Corsons Inlet Bridge (Structure No. 3100-002) and Study Area

The overall condition of the structure is 3 (serious) due to the condition of the substructure. Per the Bridge Scour Evaluation Program data provided by NJDOT, dated August 2007, the structure is scour critical. General scour has occurred over the life of the bridge, lowering the channel bed from pier 5 to 34 from the north. There is also local scour at the pier piles, causing depressions around the piers. Undermining was detected during this cycle inspection below the east caisson of pier P29 exposing 9 H-piles.

The Corsons Inlet Bridge has two 12-foot travel lanes in the east/west direction and 1'-6" safety walks on both sides of the bridge, except at the toll booth on Span 29, where the total roadway width shrinks to 20.5' from the typical 24' cross section. The project area is located within the Coastal Area Facilities Review Act (CAFRA) boundary and within the Atlantic City Railroad Cape May Division Historic District. The Corsons Inlet Bridge was identified as a historic property but is not on the National Historic Register. There are 13 Section 4(f) parkland resources located within the study area. Corsons Inlet Bridge spans over Strathmere Bay and borders the Cape May Coastal Wetlands, both sensitive ecological resources. A Coastal Wetlands permit may be required, and approval will be required from the U.S. Army Corps of Engineers for repair, replacement, or rehabilitation alternatives that require in-water work or disturbance to regulated areas. The study area is designated as an Essential Fish Habitat (EFH) and is located within the tidal 1% chance of floodplain at an elevation of 13 feet.

The major objectives of the LCD Study are to develop a Purpose and Need Statement focused on the needed transportation improvement, identify a reasonable number of prudent and feasible alternatives to address the Purpose and Need, including no-build, rehabilitation, and replacement alternatives, perform an evaluation of those alternatives, and select a Preliminary Preferred Alternative (PPA). As the Corsons Inlet Bridge spans a navigable channel within United States Coast

Guard (USCG) jurisdiction, a determination of the reasonable needs of navigation will inform the selection of the PPA.

3. CORSONS INLET BRIDGE

The Corsons Inlet bridge carries the CR 619 Ocean Drive over the Corsons Inlet. It is a 1,485' long bridge consisting of Thirty Nine (39) spans of which Thirty Six (36) are 35' approach spans, two are 79' spans, one on each side of the 65' bascule span. The bascule span is exhibiting severe corrosion to the trunnion columns and the bascule span has not been operational since 2013 due to electrical, mechanical and structural issues associated with bascule as well as deficiencies with the supporting superstructure below. It has two 12' wide lanes with no shoulders and 1'-6" safety walks on both sides. The approach span superstructure is composed of three steel stinger with reinforced concrete deck, the remaining spans are girder, floor beam and stringer system. The substructure consists of reinforced concrete pile bents for all approach spans and stub abutments on timber piles. The vertical under clearance at the bascule span is approximately 15' to the mean high-water (MHW) line with a 50' horizontal clearance for navigational purposes.

Figure 2. Corsons Inlet Bridge with closed bascule (8/20/2025)

Summary:

- Structure Type: Main Span: Steel bascule. Appr. Spans: 2 steel girder-floor-beam spans and 36 steel stringer (partially continuous) spans with a reinforced concrete deck slab.
- Structure Length: 1485.0'
- Width Out to Out: 29.8'
- Width Curb to Curb: 20.5'
- Sidewalk: 1.5' width safetywalk on both sides of the bridge
- Fence: Four-bar bridge railing on both sides of the bridge
- Lighting: Lighting is present at both bridge approaches, at the toll booth, and the traffic signal. All lights are standard cobra head style lights. Lighting on the bridge is located on standard metal poles and lighting on each approach roadway co-located on existing utility poles.
- Vertical Clearance: Waterway navigational 15' minimum below closed bascule at mean high tide. Unlimited vertical clearance with open bascule (not currently operational).

- Horizontal Clearance: 50 feet below the bascule span.

4. Bridge Condition

The current Bridge Reevaluation Survey Report (18th Cycle, October 1, 2023) identifies County Road 619 (Ocean Drive) over Corsons Inlet (Structure No. 3100-002) as a steel bascule bridge with 2 steel girder-floor-beam-spans and 36 steel stringer (partially continuous) spans with a reinforced concrete deck slab. The bridge inspection report notes that the overall condition of the structure is 3 (Serious) due to the condition of the substructure.

The deck has a condition of 4 (Poor Condition) due to the large, spalled areas with exposed corroded reinforcing steel on the underside of all spans.

The approaches have a condition of 6 (Satisfactory Condition) due to the wide transverse and longitudinal cracks in the reinforced concrete (RC) slab of the South approach, and dense map cracking and spall along the joint in the RC slab of the northbound lane of the north approach. Both approach railings and the north approach safety-walk and curbs are in Fair condition.

The superstructure has a condition of 4 (Poor Condition) due to arrested metal section loss, pitting, and holes in the steel girders, steel stringers, and bearing elements, and severe pack-rust between many steel sliding plate bearings and the vertical bearing stiffeners on the girders, and the possible frozen pin and hanger assemblies due to corrosion pack rust. This directly impacts the bascule's inability to function.

The substructure has a condition of 3 (Serious) due to the severe section loss of the web and flanges on the steel built-up section outside bearing column supporting the west girder at the trunnion (4.5' exposed above the pier cap with remainder being embedded).

The channel/channel protection has a condition of 7 (Good Condition) with no significant defects.

The waterway adequacy has a condition of 6 (Satisfactory Condition) due to the chance of overtopping at the approaches. The north approach was over-topped in October 2012 during Hurricane Sandy and in January 2016 during winter storm Jonas.

Safety features are required at all corners to protect the bridge railing. Acceptable 4-Bar painted steel bridge railing is in place. There is no guide rail present at the southwest and northeast corners. A nested Thrie-beam at the southeast and northwest corners meets standards but is not connected to the 4-Bar bridge railing. An approach guide rail properly stiffened and attached is required at all corners of the 4-Bar bridge railing.

Per the Bridge Scour Evaluation Program data provided by NJDOT, dated August 2007, the structure is scour critical. General scour has occurred over the life of the bridge, lowering the channel bed (via loss of channel substrate) from pier 5 to pier 34 from the north. There is also local scour at the pier piles, causing depressions around the piers. Undermining was detected during this cycle inspection below the east caisson of pier P29 exposing 9 H-piles.

Immediate repairs have been a necessity in order to keep the bridge open to light vehicle traffic until its eventual replacement. Further reductions in postings are inevitable. The Corsons Bridge is also posted due to its inability to carry loads greater than 15 tons.

5. Existing Land Use

Residential and commercial establishments populate the area surrounding the south approach to the Corsons Inlet Bridge in the Strathmere Community in Upper Township. The area is more specifically characterized as high-density single-family residential, with commercial businesses sporadically along Commonwealth Avenue and Bayview Drive. The most prominent and frequented commercial establishment in the vicinity of the bridge is the Deauville Inn, situated adjacent to and southwest of the Corsons Inlet bridge.

Figure 3 shows surrounding land uses.

Figure 3. Existing Land Use

6. Corsons Inlet

Corsons inlet provides access to Strathmere Bay and several estuarine waters that run north and south along the barrier islands. North of Strathmere Bay, Corsons Inlet Ramp Channel extends to Ocean City. Under Bay Avenue (CR 619). South of the Bay, Strathmere Channel is the main throughfare between Corsons Inlet and Intracoastal Waterway. Other primary estuaries between Strathmere and the Intracoastal Waterway (at Ludlam Bay) include Flat Creek and Whale Creek.

a. Tidal Datums

Waterway stage information was obtained from the National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS) Tides and Currents website, developed and supported by the Center for Operational Oceanographic Products and Services (CO-OPS). Tidal Datum information for Station 8535163, Strathmere, Strathmere Bay, NJ is provided relative to the station datum (Table 1). Tidal Datum information for additional stations located within proximity of Station 8535163, Strathmere, Strathmere Bay, NJ is provided in Appendix C.

Table 1. Tidal Datums at Station 8535163, Strathmere, Strathmere Bay, NJ (NOAA, 2004).

Station: 8535163, Strathmere, Strathmere Bay, NJ		
Datum	**Value (ft.)**	**Description**
MHHW	4.36	Mean Higher-High Water
MHW	3.97	Mean High Water
MTL	2.06	Mean Tide Level
MSL	2.12	Mean Sea Level
MLW	0.16	Mean Low Water
MLLW	0.00	Mean Lower-Low Water
NAVD88	2.41	North American Vertical Datum of 1988

b. Tide Predictions

Station: 8535163, Strathmere, Strathmere Bay, NJ is referenced to Station: 8534720, Atlantic City, NJ. The time offset is 31 minutes for high tide and 38 minutes for low tide. The offset is 0.95 feet for high tide and 1.00 feet for low tide (NOAA, 2020).

c. Navigation Channels and Conditions

Providing safe and navigable waterways is a multiple Federal and State agency effort. The National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS) Office of Coast Survey performs bathymetric surveys and maintains the nation's nautical charts, and the U.S. Coast Guard (USCG) is responsible for maintaining the U.S. Aids to Navigation System. The U.S. Army Corps of Engineers (USACE) is responsible for surveying, reporting, and maintaining the authorized conditions of federal navigation channels. The New Jersey Department of Transportation (NJDOT) Office of Maritime Resources (OMR) is responsible for maintaining safe and navigable waterways within the state that are not maintained by the USACE. The New Jersey Department of Environmental Protection (NJDEP) Bureau of Coastal Engineering (BCE) Aids to Navigation Team is responsible for the installation and maintenance of buoys, channel markers, and navigational beacons throughout the state.

Figure 4a below provides a visual representation of the channels, bays, and harbors served by Corsons Inlet. Immediately south of Corsons Inlet, Strathmere Channel (Strathmere Bay) varies in width from approximately 300' to 1000'. Although numerous shoals, tidal flats and salt marshes are present along the channel, this channel is the primary means of access from the south to Corsons Inlet.

Further south, Flat Creek varies in width from approximately 300' to 600'. Navigation through this channel is extremely limited due to shoals, tidal flats and salt marshes at low tide; however, it is identified as the primary means of access from the Intracoastal waterway to Strathmere Bay.

Whale Creek serves the primary marina in the project area, as well as numerous docks and slips. This channel varies in width from approximately 180' to 450'. As with Flat Creek Navigation through this channel south of Second Street is extremely limited due to shoals, tidal flats and salt marshes.

South of Flat Creek and Whale Creek are Ludlam Bay and Ludlam Thorofare. Navigation though this area is well marked with no major issues during low tide.

It should be noted that the Intracoastal Waterway (ICW) is situated west of Strathmere Bay, traversing from Ludlam Bay, through Main Channel, and to Middle Thorofare to the north.

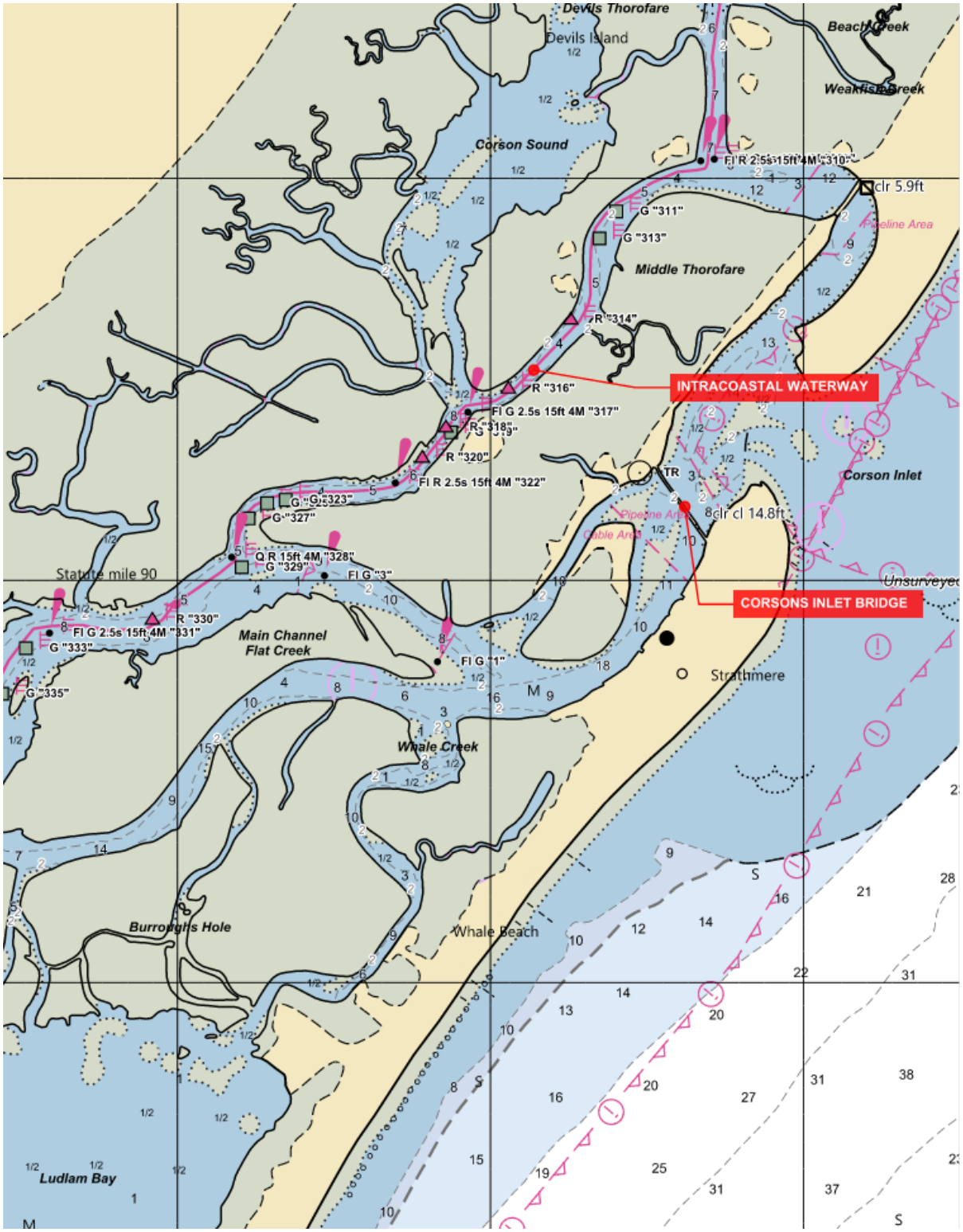

Figure 4a. Adjacent Navigation Channels and Crossings

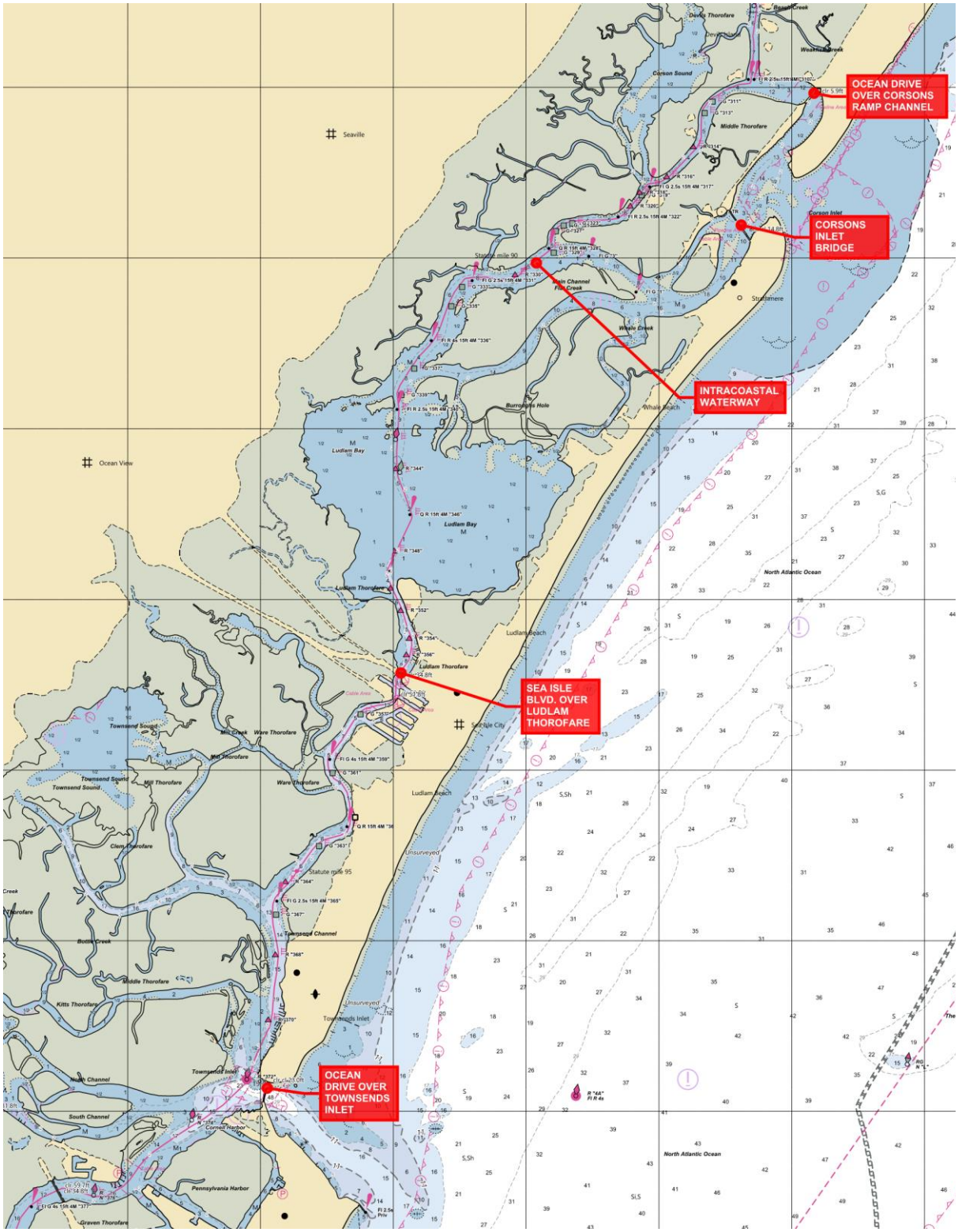

Figure 4b. Adjacent Navigation Channels and Crossings

d. Clearance

The Corsons Inlet Bridge is a single-leaf bascule span bridge with unrestricted vertical clearance when the spans is in the open position, and a vertical clearance of 15' feet (MHW) when the span is in the closed position. Currently, the bascule is inoperable and permanently in the closed position.

There is a 50-foot horizontal clearance between the piers of the bascule span. Although not on the Intracoastal Waterway, navigation from Corsons Inlet to the Intracoastal Waterway can occur via the Corsons Inlet Bridge (at Strathmere) or via the Ocean Drive (AKA James Kilpatrick Causeway) crossing at Corsons Ramp to the north. Once on the Intracoastal, navigation to the next southerly access to the Atlantic Ocean (Townsends Inlet), requires passage under Sea Isle Boulevard (5.1 miles to the south) and Townsends Inlet Bridge (8.5 miles to the south). Table 2 shows area locations and clearances. Figures 4a and 4b above show the location of surrounding bridges relative to the Corsons Inlet Bridge.

Obstruction	Relation	Distance	Vertical Clearance MHW	Vertical Clearance MLW	Horizontal Clearance
		(mi)	(ft.)		
Ocean Drive (CR 619 - Townsends Inlet Bridge) over Townsends Inlet	Upstream	8.5	23' (closed)	27' (closed)	50'
Sea Isle Boulevard (CR 625) over Ludlam Thorofare	Upstream	5.1	35'	39'	80'
Corsons Inlet Bridge over Strathmere Channel	-	-	15' (closed)	19' (closed)	50'
Ocean Drive (CR 619) over Corsons Ramp Channel	Alternate route to Intracoastal	1.0	Less than 15'	Less than 19'	25'

Table 2. Upstream and adjacent structures.

e. Existing Marinas and Boat Ramps

There are 10 marinas and boat clubs located along waterways in Upper Township, Sea Isle City, and Avalon. The marinas and clubs are listed below (Table 3). The table features the number of dock slips, number of moorings, and if a pump out station is available onsite. Whale Creek Marina in Upper Township is the only marina in the table that was further evaluated during the Marina Interviews due to the proximity of Corsons Inlet Bridge. The remaining nine marinas were evaluated as part of the Townsends Inlet Bridge Local Concept Development Study due to proximity to the Townsends Inlet Bridge. However, the ten marinas are included in Table 3 because vessels that use these facilities can navigate waterways under both bridges.

Table 3: Existing Marinas within the Project Area

Municipality	Name	Facility	Number of Slips	Number of Moorings	Pump Out Station
Upper Township (Strathmere)	Whale Creek Marina	Marina	65	0	Yes
Sea Isle City	Sea Isle City Marina	Marina	41	1	No
	Larsen's Marina	Marina	17	0	Yes
	Minmar Marine*	Marina	56	Unknown	Unknown
	Townsend Inlet Yacht Club*	Marina	41	Unknown	Unknown
	Pier 88 Marina	Marina	68	0	No
Avalon	Commodore Bay Marina	Marina	100	0	No
	Avalon Yacht Club	Club	32	0	No
	Jet Drive Exchange Boat & Jet Ski Club/Avalon Marine Center*	Marina	51	Unknown	Unknown
	Nob's Boat Ramp	Marina	7	0	No

** Marinas/clubs with an asterisk were unable to be reached via phone. The number of slips is estimated via Google Maps aerial view.*

In addition to the marinas there are three boat ramps that provide access to the adjacent waterways, which are listed below (Table 4).

Table 4. Boat ramps in the vicinity of Corsons Inlet Bridge

Municipality	Name	Type
Ocean City	Corsons Inlet Boat Ramp	Concrete Ramp
Strathmere	Bayview Drive Boat Ramp	Concrete Block Ramp
Strathmere	Whale Creek Marina	Gravel Ramp

A location map of the existing marinas and boat ramps is included in Appendix E.

f. Private Docks

Based on field observations and Google Maps aerial views, there are an estimated 66 private docks in the study area. Private docks are generally located on residential properties along Ludlam Bay, Whale Creek, and Strathmere Bay in Sea Isle City and Upper Township.

g. Vessel Population

Through a field observation conducted on a weekday in August 2025, there is an estimated 186 resident vessels in the study area. This estimate is based on a count of vessels parked at marinas and private residential dock slips throughout the study area.

II. Corsons Inlet and Its Users: Means of Data Collection

1. Corsons Inlet Bridge Operator Log

Although the Corsons Inlet Bridge is fitted with a bascule section, it has been inoperable for more than a decade and no operator logs are available.

2. Vessel Field Survey

A field vessel survey was conducted on Wednesday, August 20th, 2025 to estimate the vertical clearance requirements of the vessel population located within the study area. Staff rented a small, motorized boat from a marina and navigated the waters to survey the vessel population from the Sea Isle Boulevard bridge to north of Corsons Inlet Bridge. A rangefinder was used to estimate the air draft of vessels docked at marinas and private residential docks. Height was measured by taking a distance measurement with the rangefinder between the tallest part of the vessel (excluding the antennae) and the waterline. Each vessel was then assigned to an estimated vessel height category to estimate vertical clearance requirements. With the waterline measurement and the maximum extent measurement, the Pythagorean Theorem was used to determine the estimated air draft of the vessel (i.e., the third side of a triangle). The results of the vessel survey are summarized in Table 5.

Table 5: Summary of Vessel Heights from Visual Survey

Vessel Height	Total	Percent
< 15'	180	96.8%
15' - 20'	6	3.2%
20' - 25'	0	0.0%
25' - 30'	0	0.0%
30' - 35'	0	0.0%
35' - 40'	0	0.0%
40' - 45'	0	0.0%
45' - 50'	0	0.0%
50' - 55'	0	0.0%
Total	186	100.0%

The results indicate that the majority (180 vessels or 96.8%) of the vessel population consists of vessels that have vertical clearance requirements that do not require an opening in order to transit past the Corsons Inlet Bridge. These vessels primarily consist of small to mid-size motor boats as well as a few smaller sailboats. The next category consisted of vessels that had a height that may require an alternate route, but would not exceed 20 feet of vertical clearance. It should be noted that the spans immediately west of the bascule and fixed steel sections are slightly higher (approximately 5’ higher), and in all likelihood, 100% of the vessels inspected should be able to

traverse this crossing. The survey results were collected on a typical summer weekday and may not provide a representation of vessel statistics year-round.

3. Maritime Navigation Survey

In October 2025, the project team solicited feedback from property owners that border waterways in the vicinity of the Corsons Inlet Bridge. Postcards were mailed to 66 property owners prompting them to take the Maritime Navigation Survey (MNS) via website URL or by scanning a QR code with their mobile device that would direct them to the survey. The purpose of the survey is to gather information about vessels that transit the adjacent waterways near the Corsons Inlet Bridge. Postcards arrived to property owners on approximately October 22 to 24, 2025 and responses were encouraged by November 14, 2025. A total of 40 (60%) responses were received.

Key findings include the following:

- Type of Vessel Use
    - A large majority (90%) indicated their maritime activity on Corsons Inlet Bridge is personal/ recreational in nature, only 4 responses (10%) reported other (e.g., rental fleet, charter, business).
    - The three most common boat types reported using the Corsons Inlet Bridge waterway were “Motorboat/Powerboat” (89.2%), followed by “Personal Watercraft” (40.5%), and “Canoe/Kayak/Rowboat” (32.4%) (respondents could choose more than one answer). Some respondents have up to 40–50 boats; most have 1–3 boats.
- Vessel Dimensions
    - The average maximum length of 26.5 feet was reported, the average maximum beam was 9.47 feet, average maximum draft was 3.0 feet, and the average maximum air draft was 11.3 feet.
    - *The longest vessel length reported was 65 feet, the highest beam reported was 25 feet, the deepest vessel draft reported was 6 feet, and the highest vessel air draft reported was 26 feet.
    - On average, respondents reported that their boats require a minimum channel depth of 6.3 feet, horizontal/width clearance of 21.7 feet, and vertical/overhead clearance of 19.6 feet.
    - The deepest channel depth reported was 25 feet, the largest horizontal/width clearance reported was 50 feet, and the highest vertical/overhead clearance reported was 60 feet.
    - 9.1% of respondents reported having masts on their vessels, 36.1% of respondents reported having outriggers, and 66.7% reported having antennae.

**The highest vessel air draft originally reported was 55 feet. The respondent was contacted by the project team to confirm which waterways the respondent normally navigates with this vessel. The respondent confirmed that he owns a vessel of this height, but does not have it docked at his private property or a nearby marina, and therefore is not navigating nearby waterways with this vessel.*

- Transiting Waterways
    - 91.4% of respondents reported that their mooring or berthing location requires a transiting of Corsons Inlet Bridge to reach the ocean.
    - On average, respondents reported transiting the Corsons Inlet Bridge 82.5 times per month during the peak season, and 17.8 times per month during the off-peak season. Most report the bridge does not open or has not opened for years.
    - On average, respondents reported requiring a bridge opening 2.2 times per month during the peak season, and 4.1 times per month during the off-peak season; however, with the bridge being inoperable for more than a decade, it is assumed that these requests were associated with Townsends Inlet to the south.
    - 67% (22 responses) of respondents reported operation of vessels during hours of darkness.
    - 54.3% (19 responses) reported existing waterway obstructions/hazards such as sandbars, shoaling, submerged pilings, old bridge foundations, power cables.

The following tables provide further detail of input on vessel height and desired vertical clearance.

Table 6 – Vessel Air Drafts - Maritime Navigation Survey

Vessel Height	Total Vessels	Percent
< 15'	23	65.7%
15' - 20'	6	17.1%
20' - 25'	2	5.7%
25' - 30'	1	2.9%
30' - 35'	0	0.0%
35' - 40'	0	0.0%
40' - 45'	0	0.0%
45' - 50'	0	0.0%
50' - 55'	0*	0.0%
Not Answered	2	5.7%
Total	34	100.0%

**The highest vessel air draft originally reported was 55 feet. The respondent was contacted by the project team to confirm which waterways the respondent normally navigates with this vessel. The respondent confirmed that he owns a vessel of this height, but does not have it docked at his private property or a nearby marina, and therefore is not navigating nearby waterways with this vessel.*

Table 7 – Desired Minimum Vertical Clearance Per Input from Vessel Owners - Maritime Navigation Survey

Desired Minimum Vertical Clearance	Total	Percent
< 15'	9	33.3%
15' - 20'	5	18.5%
20' - 25'	5	18.5%
25' - 30'	3	11.1%
30' - 35'	1	3.7%
35' - 40'	2	7.4%
40' - 45'	0	0.0%
45' - 50'	0	0.0%
50' - 55'	0	0.0%
55' – 60'	1	3.7%
Not Answered	1	3.7%
Total	27	100.0%

Appendix H includes extensive summary of survey responses, along with pictures of boats owned by respondents.

4. Marina Interviews

In September 2025, a phone interview was conducted with Whale Creek Marina located in Upper Township. The purpose of the interview was to collect technical and anecdotal information about their facility, resident vessels, transient vessels, and the nature of boat usage (commercial or recreational). While 10 marinas including Whale Creek Marina are listed in section 6c – Existing Marinas and Boat Ramps, the remaining nine marinas were evaluated as part of the Townsends Inlet Bridge Local Concept Development Study due to proximity to the Townsends Inlet Bridge. Table 8 shows a summary of the marina interviews conducted.

Table 8 – Summary of Marinas Interviewed

Marina	Address	Date of Interview	Method of Interview
Whale Creek Marina	2608 S Bayview Dr, Strathmere, NJ 08248	16-Sep-25	Phone

Whale Creek Marina has 65 dock slips, does not provide mooring locations, and does not provide storage locations. The marina provides repair service, fuel service, pump out service, water supply service, and boat rentals. The dock slips, per the owner of the marina, are normally 100% occupied during the summer months. The marina does not have a height limit for air draft, a maximum of 28' for length, a maximum of 12' for width, and a maximum of 8' for draft. Per the owner, a specialized vessel (Oyster Boat) and a commercial vessel (commercial farmer) dock at this marina.

A table summarizing the marina facility is included in Appendix I. The table includes the number of dock slips, number of mooring locations, number of storage locations, maximum draft, maximum air draft, maximum length, maximum width, ownership information, services provided at the marina, and specialized vessels that use the marinas.

5. Projected Waterway Improvements

[To be determined]

6. Summary of Vessel Height Data

The two sources of vessel height data were used in this study to estimate the impact of bridge clearance for maritime traffic in Strathmere Bay.

Vertical clearance height impacts on Strathmere Bay vessel movements were estimated using vessel height data gathered from two sources during the data collection effort of this study. As there is likely overlap between data sources, each is presented separately. The two data sources are as follows:

- Vessel Field Survey: Heights of 186 boats docked at marinas and private residential properties were manually measured. Please note that survey results were collected on a random summer weekday and may not provide a representation of vessel statistics year-round.
- Maritime Navigation Survey: 34 vessel heights provided via a maritime survey meant to collect information specifically about maritime navigation on Strathmere Bay.

Table 9 shows the summary of vessel heights as reported by the two data sources.

Table 9 – Summary of Vessel Height Data

Vessel Height	Vessel Field Survey	Maritime Navigation Survey	Total	Total (%) (rounded)
< 15'	180	23	203	93%
15' - 20'	6	6	12	5%
20' - 25'	0	2	2	<1%
25' - 30'	0	1	1	<1%
30' - 35'	0	0	0	0%
35' - 40'	0	0	0	0%
40' - 45'	0	0	0	0%
45' - 50'	0	0	0	0%
50' - 55'	0	0	0	0%
55' – 60'	0	0	0	0%
Not Answered	N/A	2	2	2%
Total	**186**	**34**	**220**	

III. Project Purpose and Need

1. Project Purpose

The overall purpose of this project is to address the deficiencies of the structure carrying County Road 619 (Ocean Drive) Bridge over Corsons Inlet (Corsons Inlet Bridge) to provide a safer, and more efficient and reliable crossing for all users and modes of transportation.

2. Project Need

Bridge and Roadway Deficiencies

Structure #3100-002, located in Upper Township, Cape May County, at Milepost (MP) 15.49, carries County Route 619 (Ocean Drive) over Corsons Inlet. Built in 1948, Corsons Inlet Bridge is a steel bascule bridge with 38 fixed spans and one bascule span. The bascule span has not operated since December 2013 due to deterioration of the bascule trunnion support column. It is not anticipated to be operational in the future due to its condition. Due to its age, the bridge has deteriorated over time and routine maintenance can no longer address the deficiencies.

According to the most recent bridge inspection report (Bridge Re-Evaluation Survey Report, 18th Cycle, dated October 1, 2023):

- The **overall** condition of the Corsons Inlet Bridge is "serious" due to the condition of the substructure.
- The **substructure** is in "serious" condition, experiencing severe section loss of the web and flanges on the steel built-up section outside bearing column supporting the west girder at the trunnion.
- The **deck** is in "poor" condition due to the large area of spalls with exposed severely corroded reinforcing steel bars on the underside of all spans. The top of the deck also has cracks and small spalls with asphalt patching in numerous spans.
- The **superstructure** is in "poor" condition due to the arrested metal section loss, pitting, and holes in the steel girders, steel stringers, and bearing elements, and severe pack-rust between the steel sliding plate bearings and vertical bearing stiffeners on the girders. Several steel stringers in the 3 stringers spans have severe arrested metal losses to the bottom flanges and require supplemental steel angles due to section loss on the bottom flanges.
- The **approach roadways** are in satisfactory condition. Uneven asphalt patches, large spalls with exposed and wide map cracking were observed over the vault slab along the deck joint in the North Approach. Erosion was observed along the northeast approach embankment.
- The **channel/channel protection** is in good condition with no significant defects.
- The bridge is also classified as both **Scour Critical** and **Fracture Critical**.
- The bridge's **mechanical machinery** and **electrical system** are in poor to inoperable condition.

Substandard roadway controlling design elements were not identified due to Corsons Inlet Bridge and approach roadways Design Speed of 40 MPH or less. However, evaluation reveals that the following deficiencies exist:

- Lack of current standard MASH compliant roadside protections
- Lack of dedicated bicycle and pedestrian facilities
- Worn out pavement markings

System Linkage

Corsons Inlet Bridge provides an important multimodal link within the regional transportation network. Heavily utilized by cars, maritime vessels, and cyclists, its connectivity is vital to the local economies. The Corsons Inlet Bridge connects Strathmere with the southern end of Ocean City, serving as a north-south arterial roadway for both local and regional travel. Corsons Inlet Bridge is heavily traveled during the peak summer tourist season, providing an important connection for the tourism industry.

The connection provided by Corsons Inlet Bridge is economically important, linking customers with local businesses. Local residents and business owners rely on Corsons Inlet Bridge for their daily needs, travelling between Strathmere/Sea Isle City and Ocean City. Due to its local and regional importance, especially during the peak summer tourist season, bridge closures due to aging infrastructure would become highly burdensome to the community particularly because of the lack of convenient detour routes. Corsons Inlet Bridge requires a detour in excess of 18 miles when closed. Due to the age of the bridge, emergency repairs requiring a full closure of the bridge will become more frequent, leading to the use of this lengthy detour.

The rehabilitation or reconstruction of Corsons Inlet Bridge to provide more reliable conditions that can serve the community as a vital economic connection is paramount to this Local Concept Development Study.

3. Goals and Objectives

- Upgrade bridge and approach roadway conditions to meet AASHTO and NJDOT safety standards including new parapets and guide rail
- Reduce the frequency of major bridge maintenance activities that result in detours and/or disruption of traffic flow
- Correct the highway deficiencies
- Avoid or minimize long-term roadway closures during construction
- Provide ADA-compliant pedestrian and bicycle accommodations
- Avoid or minimize impacts to social, economic and environmental resources
- Provide accommodation for current and future users of Corsons Inlet in accordance with the completed Navigation Impact Report

IV. Alternatives Analysis

1. List of Alternatives

2. Comparison of Alternatives Matrix

V. Appendices