

## **Exhibit 10.1: Traffic Mitigation**

- (1) Both the Property Owner and the Town are concerned with the accessibility of Kiawah Island and mobility thereon. Both understand the practical economies of staging the development of transportation facilities. Both are interested in the continuation of the enforceable agreement of PDD1a that would permit the developer a certain degree of flexibility in staging the development of transportation facilities, but require those facilities to meet certain performance standards.

This exhibit provides a set of such performance standards or criteria for the Kiawah River Bridge (Bridge) and the Island Parkway (Parkway). The standards are meant to maintain the performance of these facilities in terms of the volume of traffic thereon and the ratio of that volume to the maximum capacity of the facility. Critical traffic volumes and frequencies of their occurrence are used in accordance with paragraph (2) of this exhibit to specify the point at which Traffic Mitigation Plans and Traffic Mitigation Measures will be required.

As traffic volume on any Link of the transportation facilities approaches full capacity, it will become necessary to expand the capacity of that Link. Two important factors should be considered in deciding when Traffic Mitigation Measures are needed.

First, traffic on the Bridge and Parkway should not be required to fully reach capacity volumes before Traffic Mitigation Measures are mandated. Near Capacity Traffic Volumes will result in congestion, delay, and driving discomfort, which can be avoided if sufficient lead time is provided between the decision to build and the actual construction of Traffic Mitigation Measures. Traffic volumes should exceed only a specified percentage of capacity in order to require Traffic Mitigation Measures.

Second, infrequent peaking of traffic volumes at or near capacity due to special events or circumstances does not, alone, justify the expansion of the transportation facilities. Traffic volumes should approach capacity with a specific regularity in order to require Traffic Mitigation Measures.

The Property Owner agreed in PDD1a to (1) initially provide (a) two-lane roadway to the Island (24' paved width); (b) two-lane bridge over the Kiawah Creek (26' roadway); (c) one of the two-lane roadways of the Kiawah Island Parkway (24' paved width); and (d) set aside right-of-way for expansion of those facilities to four lanes. By this Agreement, Property Owner has been relieved only of the obligation to provide an additional two lanes for the entire length of the Bridge and Parkway. In lieu thereof, Property Owner shall provide Traffic Mitigation Measures approved by the Town whenever a specified traffic volume is reached. A phased construction process whereby the Property Owner will plan and provide approved Traffic Mitigation Measures is described in paragraph (3)

of this exhibit.

- (2) Traffic counts will be conducted by the Town on the Bridge and Parkway three (3) times per year in accordance with paragraph (3) of this exhibit. The traffic counts will be used to evaluate the existing traffic conditions during the summer peak and during time periods on each side of the peak season. The exact time and date of the traffic counts are to be determined by the Town, but they shall not coincide with high publicity special events. Each traffic count will be conducted for a two-week period.

If for any three consecutive days during these count periods traffic volume for any peak hour exceeds 70 percent of peak hour capacity (defined herein as "Near Capacity Traffic Volume") of any Link of the Bridge or Parkway, the Property Owner will submit for Town approval (which approval shall not be unreasonably withheld) a Traffic Mitigation Plan for each affected Link. Traffic Mitigation Plans will propose Traffic Mitigation Measures which shall reduce traffic volume below Near Capacity Traffic Volume or increase roadway capacity for each affected Link.

Upon Town approval of a Traffic Mitigation Plan, the Property Owner shall immediately begin construction of improvements and implement approved Traffic Mitigation Measures within six months. The Property Owner may submit Traffic Mitigation Plans and implement approved Traffic Mitigation Measures at any time prior to the above traffic conditions being reached.

Traffic Mitigation Measures include improvements and/or traffic management strategies to restore or maintain acceptable levels of service for a roadway Link or Links including, but not limited to: turn lane additions, acceleration/deceleration lanes, other road widening alternatives, vanpools, and alternatives to decrease traffic volume or increase roadway capacity.

For the purpose of determining when 70 percent of capacity is reached, peak hour capacity for each lane shall be (a) 1,700 vehicles per hour (VPH) for the existing Bridge and (b) 1900 VPH for the existing Parkway. Near Capacity Traffic Volume shall be 1,190 VPH for the existing Bridge and 1,330 VPH for the existing Parkway, with both of these volumes measured under conditions of free traffic flow.

- (3) Traffic counts will be conducted annually during the first two weeks of June (June 1-14), the second and third week of July (July 8-22) and the last two weeks of August (August 17-31) at each of the intersections along the Parkway and peak hour travel time runs will be conducted from the Parkway's intersection with Bohicket to its intersection with Governor's Drive. The traffic counts and travel time runs will be used to evaluate Near Capacity Traffic Volume during the summer peak and during periods on each side of the peak season. The data will be used to calibrate the NETSIM traffic simulation model for the Town.

The NETSIM model will be used to evaluate the impact of proposed development and mitigation measures on the capacity of the Parkway and Bridge between Bohicket Road and the Vanderhorst security gate. The NETSIM model network will be formed using data collected from an inventory of field observations, including: intersection spacing, intersection layout, peak hour turning movement counts, traffic counts and travel time studies throughout the Parkway and Bridge corridor. The network will be segmented into the following individual Links.

The NETSIM Simulation Model, developed and distributed by the Federal Highway Administration (FHWA), is the most recently developed simulation model available for the analysis of road network operations. The programs in the model allow the user to simulate not only the road network itself, but also the actual operating characteristics of individual vehicles such as vehicle acceleration, speed, length, etc. This allows the user to input the road width and traffic control at each intersection. The user can then take into account the differences between a traffic signal or a stop sign as well as the effects of specific signal phasing. The program also allows the user to identify for different types of vehicles (i.e., truck, bus, auto, etc.) the operating characteristics such as speed and acceleration and then determine whether vehicles in the simulation are free-flowing or queued. For the purposes of this Agreement, it allowed the user to analyze the effects of the signals along the Kiawah Island Parkway from Bohicket Road to Governor's Drive and the interaction between them.

Link #	Link Description	Near Capacity Traffic Volume (VPH)
Link 1	Kiawah Island parkway/Bohicket Road to the Bridge.	1,330
Link 2	Kiawah Island Parkway/Beachwalker Drive Intersection including the potential commercial concentration between the Bridge and the General Store.	1,330
Link 3	Kiawah Island Parkway/Kiawah Beach Drive intersection	1,330
Link 4	Kiawah Island Parkway/Surf Watch Drive/Sea Marsh Drive intersection	1,330
Link 5	Kiawah Island Parkway/Green Winged Teal Road intersection.	1,330
Link 6	Kiawah Island Parkway/Sea Forest Drive West intersection	1,330
Link 7	Kiawah Island Parkway/Sea Forest Drive East intersection.	1,330
Link 8	Kiawah Island Parkway/Sanctuary Beach Drive intersection.	1,330
Link 9	Kiawah Island Parkway/Green Dolphin Way.	1,330
Link 10	Kiawah Island Parkway/Governor's Drive intersection	1,330
Link 11	Kiawah Island Parkway Bridge	1,190

The above Links include specific intersections along the Parkway and allow the investigation of traffic flow characteristics for each localized area. Traffic flow interruptions for the security gates will be incorporated into the model, with regular model calibration to reflect actual traffic observations.

- (4) The Property Owner shall be liable for implementing the approved Traffic Mitigation Plan and Traffic Mitigation Measures to ensure that the traffic on all Links of the network does not exceed the Near Capacity Traffic Volume; provided, however, that the Property Owner may include in the Traffic Mitigation Plan and Measures an identification of the land uses generating the increased traffic demand. To the extent that the Traffic Mitigation Plan identifies increased traffic generation from land uses and development other than that of the Property Owner, the Town will make all reasonable efforts to seek the participation of such third parties in the Traffic Mitigation Plan and Measures.