



March 29, 2021

Mr. A. Scott Porter, Municipal Administrator
Borough of Longport
2305 Atlantic Avenue
Longport, NJ 08403

RE: Traffic Engineering Review
City of Margate Promenade and
Amherst Avenue One-Way Conversion
Borough of Longport, Atlantic County, NJ
McMahon Project No. E20A28.11P

Dear Scott,

As requested, McMahon Associates, Inc. (McMahon) has completed a traffic engineering review associated with the conversion of Amherst Avenue from two-way traffic flow to one-way southbound traffic flow only between Washington Avenue and Coolidge Avenue in the City of Margate. To-date, the work associated with the reconstruction of the bulkheads has already been completed along the waterfront in this area.

The following documents were reviewed in preparation of this traffic review letter:

- Amherst Avenue Promenade Construction Plan Set (16 Sheets), prepared by Arthur W. Ponzio Co. & Associates, Inc., dated September 3, 2020.
- Traffic Engineering Evaluation Amherst Avenue Development Plan, prepared by Shropshire Associates LLC, dated August 31, 2020

Based on the review of the above listed documents, McMahon offers the following comments for consideration by the Borough that would then need to be discussed with the City of Margate as the work associated with the restriping to convert Amherst Avenue from one-way to two-way traffic flow will be occurring this year.

1. According to the traffic evaluation, counts were conducted in the Summer of 2018 that indicate Amherst Avenue carries approximately 143 (southbound) and 88 (northbound) vehicles per hour during a Friday morning peak hour, 351(southbound) and 144 (northbound) vehicles per hour during the Friday afternoon peak hour, and 230 (southbound) and 124 (northbound) vehicles per hour during the Saturday peak hour. As a result, with the one-way conversion, the direction of travel was recommended to be in the southbound direction since it had the higher volume and the northbound volume of traffic, which is lower, would be transferred to Monmouth Avenue. A supplemental review of area traffic volumes from Streetlight Data was completed and is summarized in **Table A** along with the August 2018 traffic data.

Table A – Vehicular Volumes along Amherst Avenue by Direction

Time-Period	Weekday Morning (7 AM to 9 AM)			Weekday Afternoon (4 PM to 6 PM)			Saturday Midday (11 AM to 2 PM)			Saturday Evening (4 PM to 7 PM)		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
Summer 2018	83	143	231	88	143	231	144	351	495	124	230	354
Summer 2019	31	70	101	70	136	206	79	185	264	83	180	263
Fall 2019	28	123	151	45	114	159	56	205	261	119	239	358

Based upon the volumes along Amherst Avenue, the modification from two-way to one-way would not have an adverse impact on the Borough of Longport. The only impacts associated with the conversion is that vehicles that would like to park along Amherst Avenue that cannot find an available space between Washington Avenue and Coolidge Avenue will need to turn left onto Coolidge Avenue, turn left onto Monmouth Avenue and circle the area once more.

Traffic that was previously traveling north along Amherst Avenue from the 33rd Avenue/Sunset Avenue and 32nd Avenue/Monmouth Avenue areas would be redirected to utilize Monmouth Avenue, Winchester Avenue, or Ventnor Avenue depending on their original destination in Longport Borough to access the City of Margate sections of Amherst Avenue. Based on a review of the area traffic volumes, transferring traffic would not adversely impact area traffic operations.

2. At the intersection of Amherst Avenue and Coolidge Avenue, it is recommended that the intersection be converted to provide all-way stop-control to address the potential safety issues associated with the northbound and southbound travel lanes being directly aligned with one another. If a vehicle traveling north inadvertently misses the signage to turn right, then they would enter the southbound travel lanes and as vehicles continue to travel south along Amherst Avenue, they need to shift to the west to avoid the northbound travel lane, which is directly in their travel path. An extension of the proposed cross-hatched pavement markings is also recommended to further delineate the permitted movements at this intersection. A red-line schematic is attached that illustrates the potential modifications to the pavement markings to improve the alignment of the movements along with recommended signage modifications.
3. The Borough should consider continuing the one-way southbound flow along Amherst Avenue from Coolidge Avenue to North 33rd Avenue, as this would allow for a continuous cross-section to be provided that would continue to provide a dedicated bicycle lane on the west side of the road and potentially allow for on-street parking on the east side. However, as no parking is permitted in this section under current conditions a dedicated bicycle lane could be provided in both directions of travel an alternative to on-street parking in this section. North 33rd Street would also be restriped to one-way eastbound only traffic flow and the existing parking on both sides of the street could then be maintained.
4. As part of the bulkhead replacement project, a section of right-of-way was vacated by the City of Margate and dedicated to the owner of the Lamberti's Sunset Marina & Restaurant in return for partial financing of the project. However, to-date no expansion plans for the restaurant have been provided and the current plans maintain the existing building footprint. It is our understanding based upon discussions with the Borough, as well as a field view of the area, that the restaurant is currently under construction and is

expanding from one-story to two stories. A trip generation assessment is provided in **Table B** based upon the approximate building footprint and data compiled by the Institute of Transportation Engineers publication ITE), entitled *Trip Generation Manual, Tenth Edition*. The trip generation is based on ITE Land Use Code 932: High-Turnover (Sit-Down) Restaurants.

Table B - Trip Generation Comparison⁽¹⁾

Land Use	Size (s.f.)	Daily	Weekday Afternoon Peak Hour (4:00 PM to 6:00 PM)			Weekday Afternoon Peak Hour of Generator			Saturday Peak Hour of Generator		
			In	Out	Total	In	Out	Total	In	Out	Total
Proposed (Two-Stories)	8,472	951	52	31	83	90	89	179	48	47	95
- Less Existing (One-Story)	<u>-4,236</u>	<u>-475</u>	<u>-25</u>	<u>-16</u>	<u>-41</u>	<u>-45</u>	<u>-45</u>	<u>-90</u>	<u>-24</u>	<u>-23</u>	<u>-47</u>
Additional Trips	4,236	476	27	15	42	45	44	89	24	24	48

(1) Based on ITE's *Trip Generation Manual, Tenth Edition* for Land Use Code 932: High Turnover (Sit-Down) Restaurant.

In addition to the potential for additional vehicular trips in the area, there is also an increased parking demand associated with the expansion to the restaurant. According to ITE's *Parking Generation Manual, Fifth Edition*, the peak parking demand for the restaurant is provided in Table C based upon the building size. When the peak parking demand numbers below are converted to number of seats, the renovated and expanded restaurant could then have between 205 to 306 seats based upon the corresponding rates from the *Parking Generation Manual*.

Table C – Peak Parking Generation Comparison^(1, 2)

Land Use	Size (s.f.)	Weekday (Monday to Thursday)	Friday	Saturday
Proposed (Two-Stories)	8,472	80	96	104
- Less Existing (One-Story)	<u>-4,236</u>	<u>-40</u>	<u>-48</u>	<u>-52</u>
Additional Trips	4,236	40	48	52

(1) Based on ITE's *Parking Generation Manual, Fifth Edition* for Land Use Code 932: High Turnover (Sit-Down) Restaurant.

The City of Margate Zoning Code requires 1 space for every 5 seats according to *Section 175-36.B. of the Zoning Ordinance*. Based on the peak Saturday parking demand for ITE for 104 spaces, which equates to 306 seats, the renovated and expanded restaurant would be required to provide up to 62 spaces. A review of the plans indicates that there are approximately 77 pull-in parking spaces provided on the west side of Amherst Avenue between Washington Avenue and Coolidge Avenue and the potential for up to 22 parallel parking spaces on the east side for a total of 99 spaces in this area. However, these spaces could also be utilized by other uses, such as the residents on the east side or people with boats docked at the marina, which has a parking requirement of 0.5 spaces per boat docking space according to the City of Margate Zoning Ordinance.

- Another item that could impact area traffic operations is the completion of the Island Aqua Park, which is located on the east side of Amherst Avenue across from Jefferson Avenue. Based on information available online, the Island Aqua Park is a 6,800 square-foot aqua park located entirely in the water and is operations

from 9:00 AM to 5:00 PM or 6:00 PM daily from Memorial Day to Labor Day. Patrons pay for one to two hours of entertainment at a time and there are approximately 16 part-time employees working in two shifts. While the use would normally require 17 parking spaces, it was waived by the City of Margate, since there is no on-site parking available. The facility anticipates 65 to 100 patrons at any one time. Because of the one-to two-hour turnover of patrons, this is a use that could result in additional traffic in the area as parents drop-off/pick-up children from the park. However, due to the social distancing restrictions caused by COVID-19, the full traffic generation associated with this use are unknown. It is anticipated that any patrons from the south, would need to utilize roadways such as Monmouth Avenue or Ventnor Avenue to access the site for drop-off and when exiting from Amherst Avenue to areas to the north would most likely utilize Madison Avenue.

We trust that this review letter responds to your request, and satisfactorily addresses the traffic issues at this time as related to conversion of Amherst Avenue from two-way to one-way southbound traffic flow between Washington Avenue and Coolidge Avenue in the City of Margate. If the Borough has any questions, or requires further clarification, please feel free to contact us.

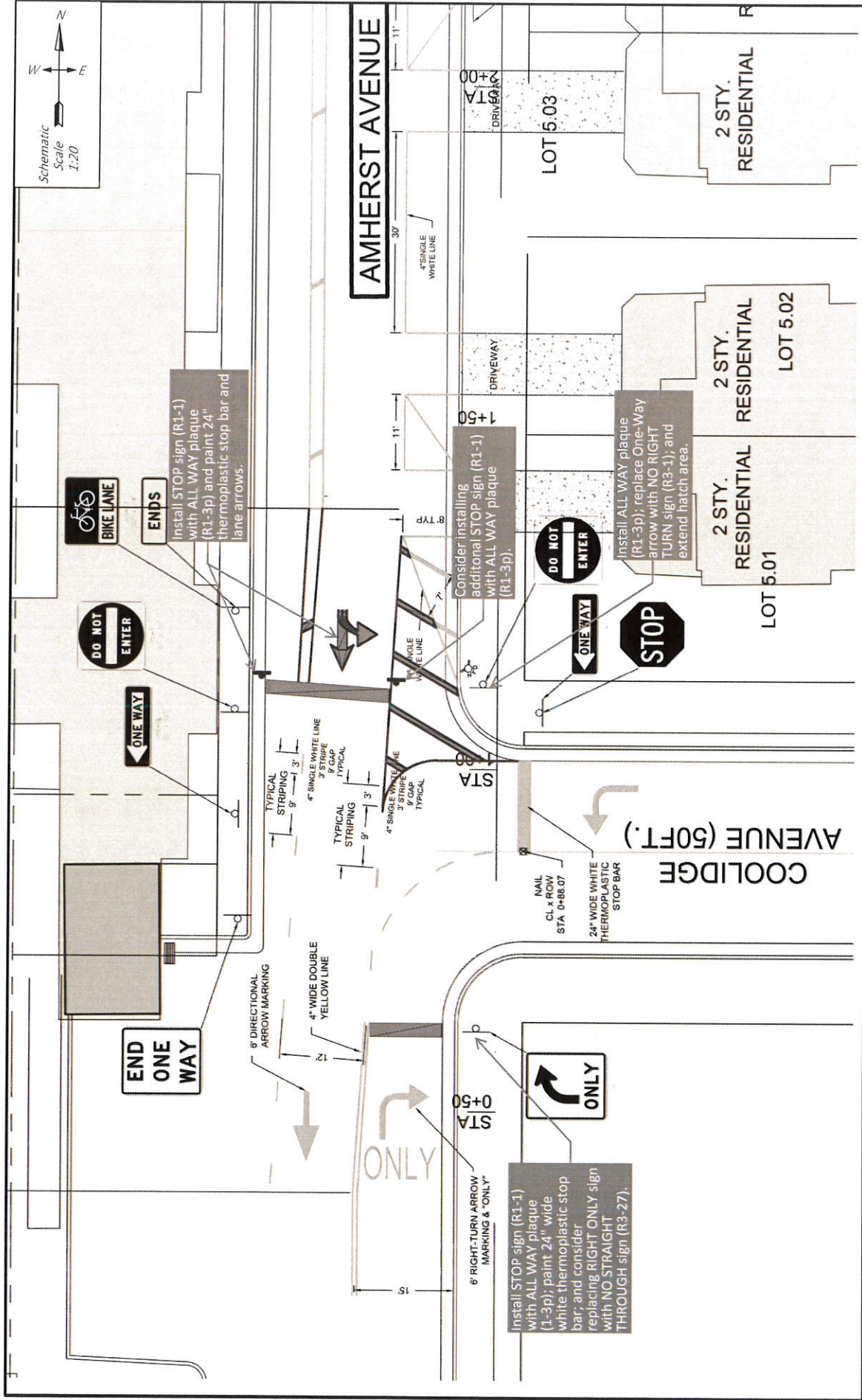
Sincerely,



Sandy A. Koza, P.E., PTOE
Project Manager

SAK/DM

Attachment



Schematic
Scale
1:20

Schematic 1

Pavement Marking and Signage Recommendations

AMHERST AVENUE PROMENADE PROJECT
CITY OF MARGATE, ATLANTIC COUNTY COUNTY, NJ

