

MEMORANDUM

TO: BOB ARNETTE

FROM: CHARLES SMITH, P.E., PTOE

ORGANIZATION:

DATE: JUNE 15, 2022

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

RE: MANNING ROAD PROPERTY TRAFFIC MEMO

YOUR REFERENCE NUMBER:

URGENT     FOR YOUR USE     PLEASE COMMENT     PLEASE REPLY     PLEASE RECYCLE

**BACKGROUND AND PURPOSE**

The Manning Road development is a proposed residential development on Manning Road south of Route 58 / Holland Road. The conceptual plan provided by Coastal Virginia Developers (Coastal) is attached. The site plan identifies a development with 262 single family units covering 114.4 acres. However, this memorandum assumes 300 single family units for the worst-case scenario. Access will be provided via two access locations on Manning Road. The northern access will be a full access with exclusive right and left turn lanes. The southern access will be a right-in / right-out access.

Trips to and from the proposed site will traverse through the Holland Road and Manning Road intersection. Holland Road is currently being improved to include a third through lane in each direction. In addition, the Manning Road intersection will also include additional turn lane improvements and traffic signalization. As there are no operational issues currently at the Manning Road intersection, the additional improvements will increase capacity and safety.

The purpose of this memorandum is to provide a summary of the additional trips related to the proposed site compared to the current roadway volumes.

**CURRENT VOLUME AND TRIP GENERATION**

The VDOT traffic count database indicates the Holland Road volume near Manning Road is 35,000 vpd (vehicles per day). Note that this is a year 2019 volume as the year 2020 volume was impacted by Covid-19 responses and the year 2021 volumes are not yet available.

The trip generation potential of the proposed development was determined using data published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* (10<sup>th</sup> Edition).

**TABLE 1**  
**Site Generated Traffic**  
**(Vehicles Per Day and Vehicles Per Hour)**

USE	ITE Code	ADT	AM PEAK		PM PEAK	
			IN	OUT	IN	OUT
300 Single Family Detached	210	2857	55	167	184	108

Source: ITE Trip Generation Manual 10<sup>th</sup> Edition

**SUMMARY**

*Trips*

The trip generation of the proposed development is less than 10% of the current Holland Road volume. The Holland Road corridor project is increasing capacity and safety along the corridor in general and specifically at the Manning Road intersection. As the Manning Road intersection currently does not have capacity issues, the increased capacity should adequately handle the increased volume related to the proposed site.

*Access*

Access will be provided via two access locations on Manning Road. The northern access will be a full access with exclusive right and left turn lanes. The southern access will be a right-in / right-out access.

**END OF MEMORANDUM**

Enclosed – Concept Plan

**CONCEPTUAL MASTER PLAN  
CLUSTER LAYOUT**

**SITE DATA:**  
SINGLE FAMILY LOTS (60'x120' LOTS)  
TOTAL LOTS: 262

TOTAL SITE AC: 114.4 AC  
TOAL CRITICAL AC: 16.6 AC  
TOAL DEVELOPABLE AC: 97.8 AC

RLM DUA: 2.9  
PROPOSED DUA: 2.4

REQUIRED OPEN SPACE: 51.48 AC (45%)  
PROPOSED OPEN SPACE: 36.83 AC  
20% CRITICAL AREA: 3.32 AC  
TOTAL PROPOSED OPEN SPACE: 40.15 AC (35%)

OPEN SPACE NEEDED: 11.33 AC

SWM: 2.63 AC  
IMPACTED WETLANDS: 0.23 AC

-  OPEN SPACE
-  WETLANDS
-  IMPACTED WETLANDS



\*Masterplan is for conceptual use only. Base map is approximate and not based off of survey data.