4343 Cox Road Glen Allen, VA 23060

July 13, 2021

Mr. John Cejka, P.E. Henrico County Public Works 4301 East Parham Road Henrico, Virginia 23228 Phone: (804) 501-4238

Reference: The Ridings – Trip Generation Comparison

Henrico County, Virginia

Dear Mr. Cejka,

D.R. Horton is proposing to construct a neighborhood in the north quadrant of the Route 5 (New Market Road) at Longbridge Road intersection. The development plan includes:

- 473 single-family lots and 230 townhomes with one access point on Longbridge Road and two access points on Yahley Mill Road
- 67 single-family lots with two access points on Turner Road

Ramey Kemp & Associates, Inc. (RKA) performed the Traffic Impact Analysis (TIA) for the previous land use plan in April 2005 – under the name Camp Hill Development. In that study, the development plan included 679 single-family lots and 250,000 square feet (s.f.) of general retail space. Table 1 shows the trip potential of that plan based on the 7th edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, which was current at the time.

Table 1: Camp Hill Development – ITE Trip Generation – Weekday – 7th Edition

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Land Use (ITE Land Use Code)	Size	Weekday Daily Traffic (vpd)		AM Peak Hour (vph)		PM Peak Hour (vph)				
		Enter	Exit	Enter	Exit	Enter	Exit			
Single-Family Detached Housing (210)	679 lots	3,019	3,019	121	364	386	217			
General Retail Space (820)	250,000 s.f.	6,160	6,160	165	85	550	596			
Total Trips		9,179	9,179	286	449	936	813			
Pass-By Trips (15%)		924	924	19	19	86	86			
Primary Trips		8,255	8,255	267	430	850	727			



Transportation Consulting that moves us forward. In 2012, the following off-site roadway improvements were proffered based on the Camp Hill Development TIA performed in 2005:

New Market Road at Longbridge Road:

- Realign Longbridge Road approximately 450 feet to the west along New Market Road
- Construct a two-lane road along the relocated segment of Longbridge Road
- Construct one eastbound left-turn lane on New Market Road with 200 feet of storage and an appropriate taper
- Construct one westbound right-turn lane on New Market Road with 200 feet of storage and an appropriate taper

Longbridge Road at Fountain Grove Drive:

- Construct one eastbound left-turn lane on Longbridge Road with 200 feet of storage and an appropriate taper
- Construct one westbound right-turn lane on Longbridge Road with 200 feet of storage and an appropriate taper

Yahley Mill Road at Caspian Court / Union Grove Road:

• Construct a southbound right-turn lane on Yahley Mill Road with 200 feet of storage and an appropriate taper length

Turner Road at Town Hall Drive:

Construct a northbound right-turn lane on Turner Road with 150 feet of storage and a 100 foot taper

Turner Road at Fort Southard Road:

Construct a northbound right-turn lane on Turner Road with 150 feet of storage and a 100 foot taper

The Camp Hill Development TIA also included five proposed driveways (Driveways 4 through 8) to serve the commercial area, but those have been eliminated with the current plan, so the proffered improvements for those driveways are not listed.



The current site plan now includes 540 single-family lots and 230 townhomes. Table 2 shows the trip potential of the current site plan based on the 10^{th} edition of the ITE *Trip Generation Manual*.

Table 2: The Ridings – ITE Trip Generation – Weekday – 10th Edition

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Land Use (ITE Land Use Code)	Size	Weekday Daily Traffic (vpd)		AM Peak Hour (vph)		PM Peak Hour (vph)			
		Enter	Exit	Enter	Exit	Enter	Exit		
Single-Family Detached Housing (210)	540 lots	2,549	2,549	100	300	337	198		
Multifamily Housing (Low-Rise) (220)	230 townhomes	849	849	24	82	81	48		
Total	770 units	3,398	3,398	124	382	418	246		
April 2005 TIA	679 units / 250,000 s.f. of retail	9,179	9,179	286	449	936	813		
% Reduction in Trips		-63%		-31%		-62%			

Note that the current land use plan generates significantly fewer trips than the previous plan:

- 63% fewer daily trips
- 31% fewer AM peak hour trips
- 62% fewer PM peak hour trips

Therefore, the off-site roadway improvements that were proffered in 2012 are still valid, and no additional off-site roadway improvements are warranted or recommended.



RAMEY KEMP ASSOCIATES

We appreciate your attention to this matter. Please contact me at (804) 217-8560 if you have any questions about this report.

Sincerely yours, Ramey Kemp & Associates, Inc.

Carl Hultgren, P.E., PTOE State Traffic Engineering Lead

Copy to:

Mr. Robert Butler, P.E., VDOT Mr. Louis Condelee, D.R. Horton Mr. Jeffrey Geiger, Hirschler

Mr. Ivan Wu, P.E., Timmons Group Mr. Jon Murray, P.E., Timmons Group



