

RESOLUTION 18-63

A RESOLUTION TO ADOPT AN ACCESS MANAGEMENT PLAN FOR PORT ROYAL ROAD FROM SATURN PARKWAY TO KEDRON ROAD

WHEREAS, the City of Spring Hill, TN recognizes that continued growth in south Spring Hill is leading to increasing travel demand along the Port Royal Road corridor, which if unmanaged, can negatively affect the Level of Service (LOS) safety experienced by users of the roadway; and

WHEREAS, the Planning Commission and Board of Mayor and Aldermen for the City of Spring Hill, Tennessee have identified this growing travel demand and development pressure as a concern with potential negative consequences for the safety and operation of the corridor, with potential to degrade the performance of the corridor, and the resulting implications for the economy and quality of life; and,

WHEREAS, the City of Spring Hill have identified a list of corridor management goals for the Port Royal corridor; and,

WHEREAS, to achieve these goals, corridor management strategies and traffic control measures that include land use planning, roadway design and capacity, access management and traffic management and operations are proposed; and,

WHEREAS, due to projected development and related traffic volumes, the City of Spring Hill desires the need for an Access Management Plan for Port Royal Road between Saturn Parkway and Kedron Road; and,

WHEREAS, the primary responsibility of an arterial street is to provide for mobility, capacity, reasonable speeds, and safety while also providing some limited access from adjacent land uses; and

WHEREAS, Tennessee Annotated Code §54-18-101 through 104 permit cities and towns with the cooperation of their respective planning commissions, to enter into planning agreements that provide for a continuing and comprehensive transportation planning process; and

WHEREAS, the following findings constitute the need for an access management plan for Port Royal Road corridor.

FINDINGS

1. Port Royal Road (Saturn Parkway to Kedron Road) and Jim Warren (Port Royal to U.S Highway 431) has an arterial street functional classification of arterial streets

2. The average daily background traffic volume on Port Royal Road north of Kedron Road is approximately 3300 vehicles per day. The average daily traffic volume north of Jim Warren Road is approximately 12,300 vehicles per day. Background traffic volume is increasing nearly five per cent each year. Building permits for single family homes over the last three years have steadily increased from 602 for 2014, 580 for 2015, 694 for 2016 and 804 for 2017. (See Spring Hill Planning Department statistical information).
3. Municipal zoning along Port Royal Road consist of B-2, B-3, B-4, M-1, R-1, R-2 PUD, and R-5 of which M-1, B-4, B-3 and R-5 are considered capable of producing high trip traffic volumes. (See Zoning Ordinance for the City of Spring Hill, Tennessee – Updated April 2016 and Trip Generation, Ninth Edition).
4. Table 4-4 of the City’s Major Thoroughfare Plan lists the typical traffic volumes that can be accommodated for each LOS based on roadway functional classifications and number of travel lanes. A four-lane arterial urban section can handle 19,000 vehicles per day with a LOS C. A five-lane arterial urban section handles 21,900 vehicles per day with a LOS C. (See Highway Capacity Manual 2010 (HCM2010)).
5. Current Spring Hill zoning records indicate the following zoned acreage adjacent Port Royal Road between Saturn Parkway and Kedron Road.
 - a. 1019 acres of R-2 or R-2 PUD zoned properties,
 - b. 319 acres of B-3 and B-4 zoned properties,
 - c. 341 acres of undeveloped M-1 zoned properties, and
 - d. 114 acres of undeveloped R-5 zoned properties
 - e. 339 acres of AG - Agricultural zoned properties

These parcels total nearly 2132 acres of residential, commercial, and industrial zoning that contributes to increasing daily traffic volumes along this part of the corridor. (See City of Spring Hill Zoning Map and Exhibit A.)

The 2015 Comprehensive Land Use Plan designate agricultural parcels as Mixed-Use Neighborhood Areas. As agriculturally zoned property develops, the land will align with the adopted 2015 Spring Hill Rising Plan (city’s comprehensive plan). Consequently, additional traffic is anticipated from these parcels. (See City of Spring Hill 2015 Comprehensive Land Use Plan Exhibit B.)

6. Accident records from the Spring Hill Police Department indicate that there were 5 accidents on Port Royal in 2015, 2 accidents in 2016, and year to date for 2017 there was 1 accident. Accident data reflects vehicular damage greater than \$400. (Data from Spring Hill Titan Crash Data software).
7. The current posted speed limit for Port Royal Road traveling southbound is 35 mph to the intersection of John Lunn Road, then it increases to 45 mph to Port Royal Park where it reduces to 40 mph to Kedron. The site distance drivers need to stop at 35 miles

per hour in order to avoid striking an unexpected vehicle on the roadway is 275 feet for level ground. This distance changes when street grades increase or decrease in slope and with the type of vehicle. Intuitively truck traffic requires a longer site distance to safely stop. The City may, as traffic volumes increase, establish a uniform posted speed limit between Saturn Parkway and Kedron Roadway. (See 2011 6th Edition for Geometric Design of Highways and Streets).

8. The City of Spring Hill utilizes standards, guidelines and policies for access management planning from the Institute of Traffic Engineer publications, Highway Capacity Manual 2010, and the Tennessee Department of Transportation.

NOW, THEREFORE BE IT RESOLVED, that the City of Spring Hill Planning Commission and Board of Mayor and Aldermen adopt an Access Management Plan for Port Royal Road between Saturn Parkway and Kedron Road as follows:

**ACCESS MANAGEMENT PLAN FOR PORT ROYAL ROAD
FROM SATURN PARKWAY TO KEDRON ROAD**

1. All new development along Port Royal Road between Saturn Parkway and Kedron Road shall be required to dedicate 95 feet of right of way for the corridor.
2. The minimum Level of Service on Port Royal shall be C. All future development between Interstate 65 and Port Royal and approximately one-half mile (1/2) west along either side of the corridor, shall not degrade the Level of Service on Port Royal below LOS C. If traffic studies for the particular development indicates that the Level of Service for Port Royal Road falls below a LOS C, the Planning Commission may request lower density development. A traffic study shall be commissioned for any development that generates one hundred (100) or more peak hour trips per site. Traffic Study information shall be as outlined by the City of Spring Hill. All recommendations from the Traffic Impact Study for mitigation measures shall be the financial responsibility of the development.
3. The following intersections shall be upgraded for signalization or roundabouts: Port Royal and Jim Warren, Port Royal and Derryberry Lane, and Port Royal and Rice Road. Other intersections along this corridor may emerge in the future to warrant additional controls. These controls will respond to traffic volumes, points of conflicts and warrants to determine their measure and extent.
4. Port Royal Road from Saturn Parkway to Kedron Road shall be upgraded to a five-lane arterial section composed of the following: Five-lane travel section comprised of five-foot sidewalks (both sides), six-foot grass strip (both sides), two-foot curb and gutter (both sides), five-foot bike lane (both sides), four eleven-foot travel lanes and one twelve-foot wide center turn lane for a total section width of ninety-two (92) feet. The City may elect to install medians in lieu of constructing a two way left turn lane along various

portions of the corridor as a means for access management as well as corridor beautification. (See City of Spring Hill Street Subdivision Standards).

- All new developments in this corridor shall be required to construct dedicated auxiliary turn lanes into their property in accordance with the following table.

A deceleration lane and left-turn lane will be required as follows:

Developers of subdivisions containing more than 50 dwelling units and other type developments exiting onto collector or arterial roadway shall be required to construct deceleration and left turn lanes generally in accordance with the following guidance developed using the latest edition of Trip Generation, An Informational Report by the Institute of Transportation Engineers:

Use	Weekday Trip Generation	Deceleration/Left Turn Lanes Required
Res. Single Family	9.55/Unit	> 50 Units
Apartments	6.47/Unit	> 75 Units
Condo/Townhome	5.86/Unit	> 80 Units
Offices	11.01/1000 SF gross floor area	> 43,300 SF
Retail	40.67/1000 SF gross floor area	> 11,800 SF
Grocery Store	177.59/1000 SF gross floor area	> 2,700 SF
Restaurant	2.86/Seat	> 165 Seats

Example: 50 Unit Single Family x (9.55 Trips per day for Weekdays)/Unit = approx. 480 Trips/Day

- Three lane cross section shall be considered when driveway volumes exiting onto Port Royal exceed 30 vehicles per hour. Lane widths are 14 feet for the inbound lane, and 11 for each of the two outbound lanes (thru and left turn).
- All Parcels adjoining Port Royal Road shall consider and plan for shared internal access points to minimize the number of driveways existing onto the street. Vehicular access shall be provided between all parcels of nonresidential uses and between multi-family uses. The City shall promote intersection hierarchy thereby avoiding connecting a roadway of low classification directly to a roadway of much higher classifications. Local streets and parking area access shall connect onto frontage roads while collector and arterial streets may connect directly onto Port Royal Road.
- The recommended minimum spacing distances for commercial and industrial access onto Port Royal Road shall be 660 feet. If a two way left turn lane is present on Port Royal Road, the developer may request to reduce the distance to 330 feet otherwise the driveway entrances shall be 660 feet. If the spacing distances are lessened, driveway

access shall be limited to right in and right out movements. Minor driveways with low volumes of peak hourly traffic (less than 30 vhp) may be spaced at 225 feet. No driveway access shall be closer than 275 feet from an intersection with upgraded traffic control

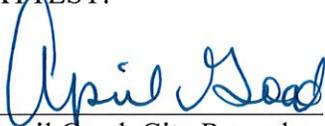
9. Access points from any development shall be accomplished on side streets whenever possible. All exceptions shall be approved of by the Planning Commission.
10. Access points shall be aligned directly across from each other when on opposite sides of Port Royal.
11. No access shall be within the limits of an auxiliary lane including the taper.
12. The Planning Commission shall have the authority to approve waivers of the requirement set forth within this resolution based on engineering judgement, existing conditions, and supplemental engineering data.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 21st day of May, 2018.



Mayor Rick Graham

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Patrick Carter, City Attorney

May 7, 2018

MEMO TO: Victor Lay, City Administrator

FROM: Philip Stuckert, P.E. Infrastructure Director

SUBJECT: Access Management Policy for South Port Royal Road (Saturn Parkway to Kedron Road).

Recommendation: That the Board of Mayor and Aldermen adopt a resolution creating an access management policy (AMP) for South Port Royal Road between Saturn Parkway to Kedron Road.

Summary:

The Transportation Advisory Committee (TAC) presents this access management policy for consideration by the Board of Mayor and Aldermen. The AMP project covers work in house over the last 7 months.

The Planning Commission recognizes the future growth in the surrounding areas of South Port Royal Road and encourages the development of an access management plan. Last year, the Planning Commission changed the functional status of Port Royal Road from a collector roadway. to an arterial roadway. The uncertainty of future growth and potential growth promotes the concepts of Access Management Plans. The access management plan is similar to the plan developed for the north segment of Port Royal Road between Saturn Parkway and Duplex Road.

Elements and purpose of the access management policy include corridor management strategies and traffic control measures that include land use planning, roadway design and capacity, access management and traffic management for the corridor.

The Transportation Advisory Board held a number of meetings to refine the AMP during its development. In March the TAC asked staff to move the AMP resolution to the Board of Mayor and Aldermen for their consideration and adoption.

Staff recommends that the Board of Mayor and Aldermen adopt the access management policy for South Port Royal Road between Saturn Parkway and Kedron Road.

A resolution is prepared for the Board's consideration.

SOUTH PORT ROYAL ACCESS MANAGEMENT PLAN (Saturn Parkway to Kedron)

Exhibit B

LEGEND

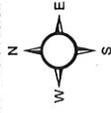
-  SH_Roads
-  Maury_Parcel

zoning

-  ZType AG
-  B-1
-  B-2
-  B-3
-  B-4
-  F-1
-  M-1
-  M-2
-  PUD-Commer
-  R-1
-  R-2
-  R-2 PUD
-  R-4
-  R-5
-  R-6

-  South Port Royal Study Corridor
-  Corridor Boundary Traffic Impact Zone

Corridor Boundary Traffic Impact Zone



1 inch = 1,500 feet

