

TECHNICAL MEMORANDUM

To: Kirk Johnson
From: Kayla Ord, PE, PTOE
Gee Sreekanth Gopi, EIT
Mike King
Date: July 17, 2025
Subject: **14600 Washington Street – Shared Parking Analysis Memo**

Introduction

This memorandum presents the findings of a shared parking analysis for the proposed '14600 Washington Street' development located in the Town of Haymarket, in Prince William County, Virginia. This memorandum includes the following elements:

- A review of the applicable parking requirements.
- A review of the proposed on-site shared parking.
- A discussion on the anticipated average parking demand and how the proposed supply exceeds the demand.

The site is currently occupied with approximately 32 kSF of commercial and office space. The planned development program for the site includes mix uses with approximately 26 kSF of commercial/office land uses and up to 61 single family attached (townhome) units. Please note, a portion of the site is currently occupied by existing commercial uses. A portion of the commercial uses, approximately 5.9 kSF of office space, are planned to be removed with this application while the remaining 26 kSF is anticipated remain. The location of the site is shown in Figure 1.

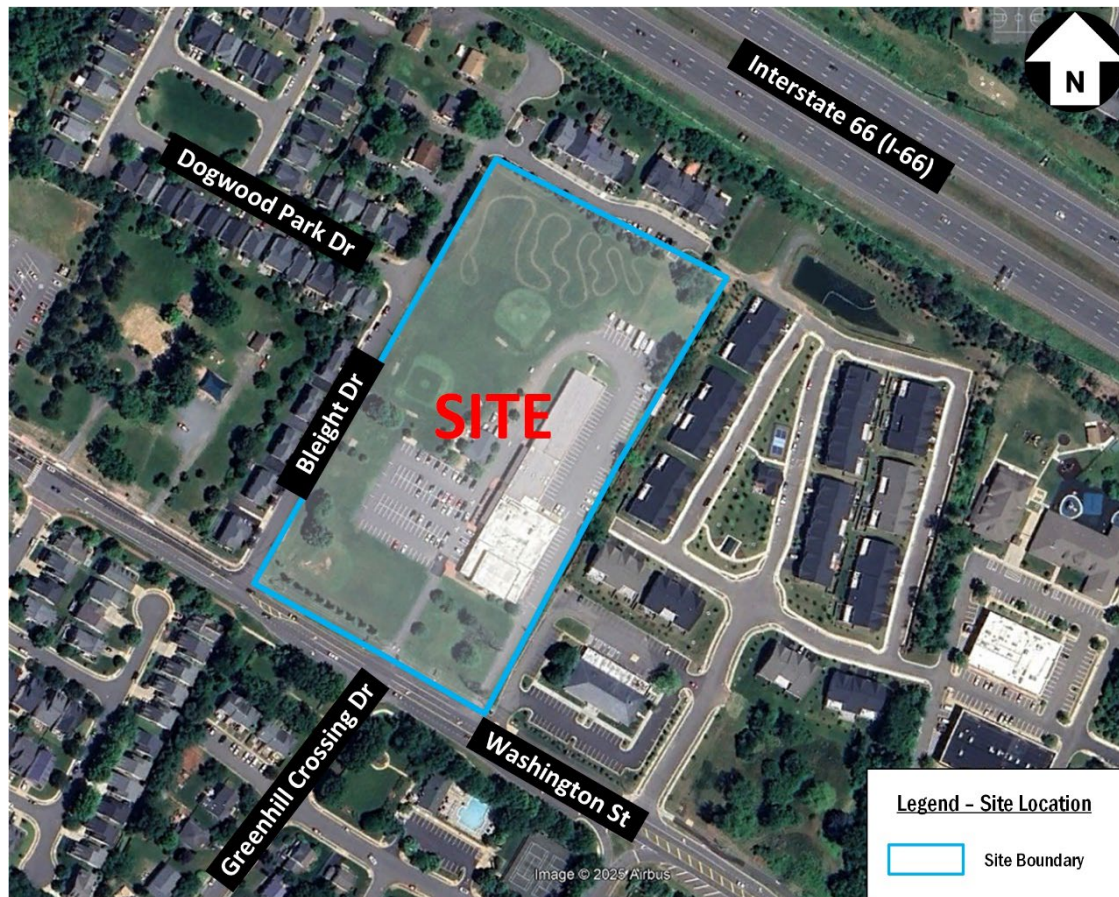


Figure 1: Site Location

Background

The proposed development is to be situated on one (1) parcel of land with the land area of approximately 8.8 acres. The parcel is located within the Town of Haymarket and can be identified on Prince William County Mapper with the GPIN: 7397-19-1734. As previously mentioned, the planned development program for the site includes mix uses with approximately 26 kSF of commercial/office land uses and up to 61 single family attached (townhome) units. Total site build-out is planned for the year 2030.

Minimum Off-Street Parking and Loading

The Town of Haymarket Code of Zoning Ordinance stipulates parking ratios (i.e., the number of parking spaces per unit) in Section 58-6.1. The municipality's minimum parking requirements for the proposed (Mixed-Use) land uses and the number of spaces provided are summarized in Table 1.

Table 1: Off-Street Parking Requirements & Tabulations (Mixed-Use)

Proposed Use	Density (SF)	*Parking Rate (Required)	# Spaces Required	Provided Spaces
General Office	6,925	1 space/300 sf	23	
Restaurant	6,165	1 space/100 sf	62	
Recreation Facility	6,920	1 space/300 sf	23	
Wholesale Business	2,028	1 space/1,000 sf	2	
Ice Cream Shop	1,600	1 space/100 sf	16	
Total	23,638		126	147

*Town of Haymarket Zoning Ordinance

Per the Town's parking requirements, the mixed-use portion of the 14600 Washington St development would require 126 parking spaces. A total of 147 parking spaces are planned to be provided, for mixed-use purposes, on the surface level parking lot. Please note this exceeds the Town of Haymarket requirements for the proportion of proposed land uses shown in Table 1 above.

Similarly, the Town of Haymarket's minimum parking requirements for the proposed residential use are shown in Table 2 below.

Table 2: Off-Street Parking Requirements & Tabulations (Residential)

Proposed Use	Density (units)	*Parking Rate (Required)	# Required	Proposed Parking
Single Family Attached	61	2.25/du	137	122

*Town of Haymarket Zoning Ordinance

Per the Town's parking requirements, the residential portion of the 14600 Washington St development would require 137 parking spaces (122 reserved for residential & 15 reserved for visitor parking). A total of 122 parking spaces are planned to be provided within the residential units and reserved for residents with the remaining 15 spaces to be provided in the surface lot.

On-Site Parking Supply

The Applicant is planning to construct a total of 269 parking spaces on-site. The final breakdown of parking provided for each use is subject to change as the project develops and final mix and density are approved. The summarized parking breakdown is shown on Table 3 below.

Table 3: Summarized Parking Tabulations

Proposed Use	# Spaces Required	Provided Spaces
Mixed-Use	126	147
Residential	137	122
TOTAL	263	269

Shared Parking Analysis

Section 58-6.1.B states "The minimum required parking spaces may be reduced if a land owner can provide parking that will be shared by complementary adjacent land uses. Such a proposal must be prepared using the methods set forth in the latest edition of the Shared Parking Manual of the Urban Land Institute (ULI). The necessary calculations and other data that show the suitability of a shared parking proposal must be submitted to the Town in conjunction with a site plan or other applicable development application..."

Shared parking is planned on-site to accommodate the proposed parking reduction. Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions:

- Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and
- Relationships among the land uses that result in visiting multiple land uses on the same trip.

The key goal of shared parking analysis is to find the balance between providing adequate parking to support a development from a commercial viewpoint and minimizing the negative aspects of excessive land area or resources devoted to parking.

The process below outlines the shared parking methodology:

1. *Determine* the applicable parking ratios – The base parking ratios were split between residents/employees and visitors using the parking ratios provided in the Urban Land Institute's (ULI) *Shared Parking*, 3rd Edition (2020). The base parking ratios per the Town of Haymarket Zoning Ordinance is shown in Table 4.

Table 4: Base Parking Ratios (Haymarket ZO)

Land Use	Development	*Base Parking Ratio	Base Parking Supply	Proposed
Recreation Facility	6,920 SF	1.0 /300 SF	23 spaces	
General Office	6,925 SF	1.0 /300 SF	23 spaces	
Wholesale Retail	2,028 SF	1.0 /1,000 SF	2 spaces	
Dine-In Restaurant	6,165 SF	1.0 /100 SF	62 spaces	
Residential (Reserved)	61 DU	2.00 /DU	122 spaces	
Residential (Visitor)	61 DU	0.25 /DU	15 Spaces	
Fast Casual Restaurant	1,600 SF	1.0 /100 SF	16 spaces	
			263 spaces	269 spaces

**Town of Haymarket Off-Street Parking Requirements per Zoning Ordinance*

2. *Determine* the number of reserved parking spaces – For the purposes of this analysis, reserved spaces were assumed for only the residential portion of the development.
3. *Determine* the peak parking scenario – This is shown in the following tables. The hourly factors are based on the Urban Land Institute (ULI) *Shared Parking*, 3rd Edition (2020) time-of-day factors. The hourly factors are applied to the base parking ratios shown in Table 4 to determine the peak parking scenario.
4. *Determine* the peak parking demand – This is shown in the following tables.

The shared parking analysis includes all the proposed uses. This analysis looks at the shared characteristics of these uses in the surface parking lot which is planned to contain 147 parking spaces.

Weekday

The weekday parking accumulation calculations are shown in Table 5 and Figure 2. The peak weekday parking demand is anticipated to occur at 7:00 PM. Based on the ULI time-of-day factors, the peak weekday demand is 239 parking spaces, which is less than the 269 spaces provided.

Table 5: Weekday Shared Parking Hourly Characteristics

ULI - 3rd Edition		Proposed															
		Residential - Reserved		Residential - Visitor		Wholesale Retail - ⁶		Dine-In Restaurant - ⁸		Fast Casual Restaurant - ¹⁰		Recreation Facilities - ²		General Office - Employees ⁴		Total	Surplus
		Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Demand	
Time of Day	6:00 AM	100%	122	0%	0	1%	1	0%	0	5%	1	70%	17	3%	1	142	142
	7:00 AM	100%	122	10%	2	5%	1	0%	0	10%	2	40%	10	15%	4	141	128
	8:00 AM	100%	122	20%	3	15%	1	0%	0	20%	4	40%	10	50%	12	152	117
	9:00 AM	100%	122	20%	3	35%	1	0%	0	30%	5	70%	17	90%	21	169	100
	10:00 AM	100%	122	20%	3	60%	2	15%	10	55%	9	70%	17	100%	24	187	82
	11:00 AM	100%	122	20%	3	75%	2	40%	25	85%	14	80%	19	100%	24	209	60
	12:00 PM	100%	122	20%	3	100%	3	75%	47	100%	16	60%	14	85%	20	225	44
	1:00 PM	100%	122	20%	3	100%	3	75%	47	100%	16	70%	17	85%	20	228	41
	2:00 PM	100%	122	20%	3	95%	2	65%	41	90%	15	70%	17	95%	22	222	47
	3:00 PM	100%	122	20%	3	85%	2	40%	25	60%	10	70%	17	95%	22	201	68
	4:00 PM	100%	122	20%	3	85%	2	50%	31	55%	9	80%	19	85%	20	206	63
	5:00 PM	100%	122	40%	6	85%	2	75%	47	60%	10	90%	21	60%	14	222	47
	6:00 PM	100%	122	60%	9	90%	2	95%	59	85%	14	100%	24	25%	6	236	33
	7:00 PM	100%	122	100%	15	80%	2	100%	62	80%	13	90%	21	15%	4	239	30
	8:00 PM	100%	122	100%	15	65%	2	100%	62	50%	8	80%	19	5%	2	230	39
	9:00 PM	100%	122	100%	15	45%	1	100%	62	30%	5	70%	17	3%	1	223	46
	10:00 PM	100%	122	100%	15	15%	1	95%	59	20%	4	35%	9	1%	1	211	58
	11:00 PM	100%	122	80%	12	5%	1	75%	47	10%	2	10%	3	0%	0	187	82
	12:00 AM	100%	122	50%	8	0%	0	25%	16	5%	1	0%	0	0%	0	147	122

Time of Day Sources:

2. Health Club Visitors - ULI Shared Parking, 3rd Edition,

4. Office Employees - ULI Shared Parking, 3rd Edition

6. Retail Employees - ULI Shared Parking, 3rd Edition

8. Dine-In Restaurant Visitors - ULI Shared Parking, 3rd Edition

10. Fast Casual Restaurant Visitors - ULI Shared Parking, 3rd Edition

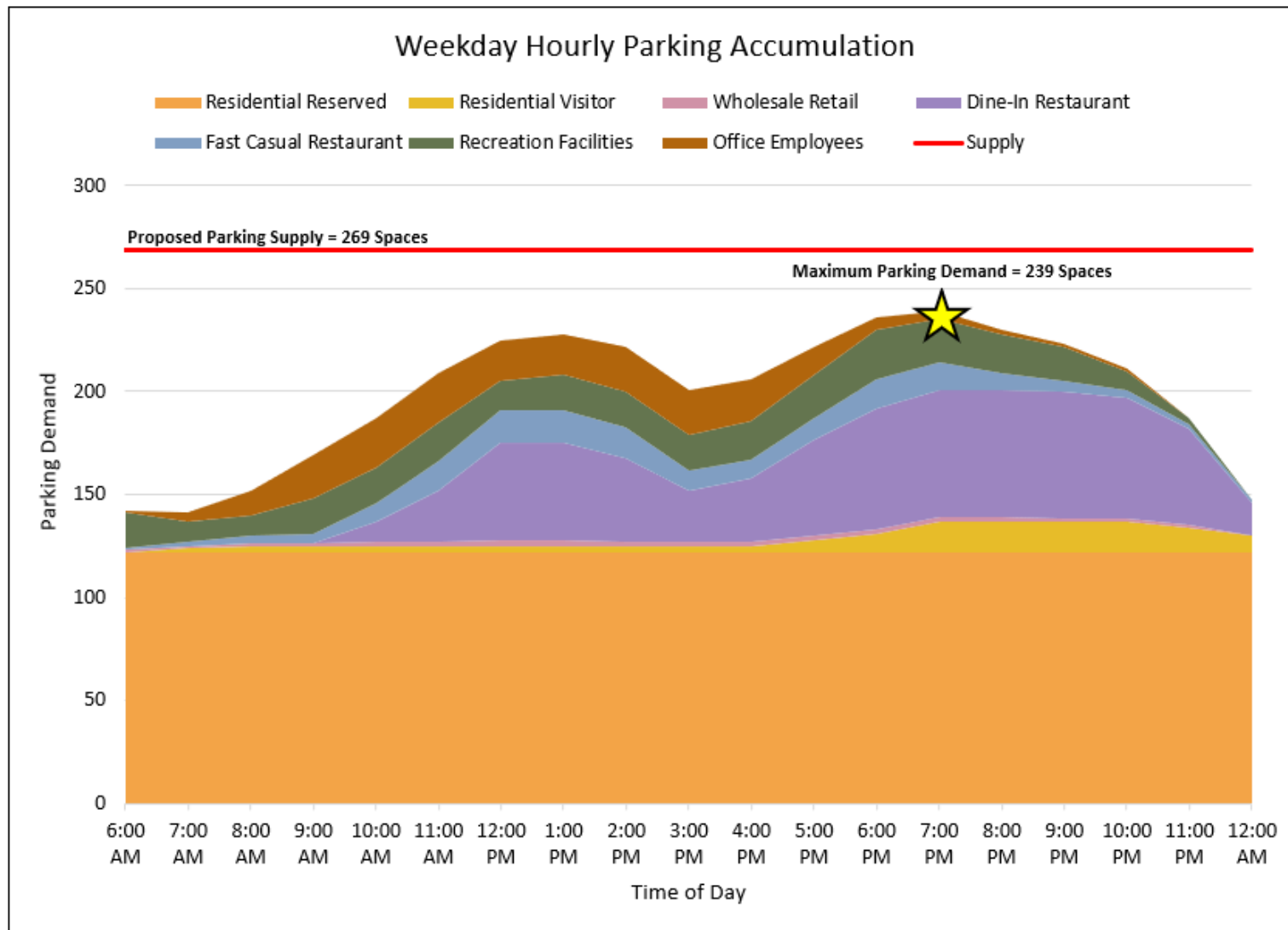


Figure 2: Weekday Shared Parking Hourly Characteristics

The parking supply is anticipated to exceed of the demand during the week by (30) spaces.

Weekend

The weekend parking accumulation calculations are shown in Table 6 and Figure 3. The peak weekend parking demand is anticipated to occur at 6:00 PM. Based on the ULI time-of-day factors, the peak weekend demand is 227 parking spaces, which is less than the 269 spaces provided.

Table 6: Weekend Shared Parking Hourly Characteristics

ULI - 3rd Edition		Proposed															
		Residential - Reserved		Residential Visitor		Wholesale Retail - ⁶		Dine-In Restaurant - ⁸		Fast Casual Restaurant - ¹⁰		Recreation Facilities - ²		General Office - Employees ⁴		Total	Surplus
		Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Time of Day Adjust	Demand	Demand	
Time of Day	6:00 AM	100%	122	0%	0	1%	1	0%	0	5%	1	80%	19	0%	0	143	126
	7:00 AM	100%	122	20%	3	5%	1	0%	0	10%	2	45%	11	20%	5	144	125
	8:00 AM	100%	122	20%	3	30%	1	0%	0	20%	4	35%	9	60%	14	153	116
	9:00 AM	100%	122	20%	3	50%	2	0%	0	30%	5	50%	12	80%	19	163	106
	10:00 AM	100%	122	20%	3	70%	2	0%	0	55%	9	35%	9	90%	21	166	103
	11:00 AM	100%	122	20%	3	90%	2	15%	10	85%	14	50%	12	100%	24	187	82
	12:00 PM	100%	122	20%	3	95%	2	50%	31	100%	16	50%	12	90%	21	207	62
	1:00 PM	100%	122	20%	3	100%	3	55%	34	100%	16	30%	7	80%	19	204	65
	2:00 PM	100%	122	20%	3	100%	3	45%	28	90%	15	25%	6	60%	14	191	78
	3:00 PM	100%	122	20%	3	95%	2	45%	28	60%	10	30%	7	40%	10	182	87
	4:00 PM	100%	122	20%	3	90%	2	45%	28	55%	9	55%	13	20%	5	182	87
	5:00 PM	100%	122	70%	11	80%	2	60%	37	60%	10	100%	24	10%	3	209	60
	6:00 PM	100%	122	60%	9	75%	2	90%	56	85%	14	95%	22	5%	2	227	42
	7:00 PM	100%	122	100%	15	70%	2	95%	59	80%	13	60%	14	0%	0	225	44
	8:00 PM	100%	122	100%	15	65%	2	100%	62	50%	8	30%	7	0%	0	216	53
	9:00 PM	100%	122	100%	15	50%	2	90%	56	30%	5	10%	3	0%	0	203	66
	10:00 PM	100%	122	100%	15	30%	1	90%	56	20%	4	1%	1	0%	0	199	70
	11:00 PM	100%	122	80%	12	10%	1	90%	56	10%	2	1%	1	0%	0	194	75
	12:00 AM	100%	122	50%	8	0%	0	50%	31	5%	1	0%	0	0%	0	162	107

Time of Day Sources:

2. Health Club Visitors - ULI Shared Parking, 3rd Edition,

4. Office Employees - ULI Shared Parking, 3rd Edition

6. Retail Employees - ULI Shared Parking, 3rd Edition

8. Dine-In Restaurant Visitors - ULI Shared Parking, 3rd Edition

10. Fast Casual Restaurant Visitors - ULI Shared Parking, 3rd Edition

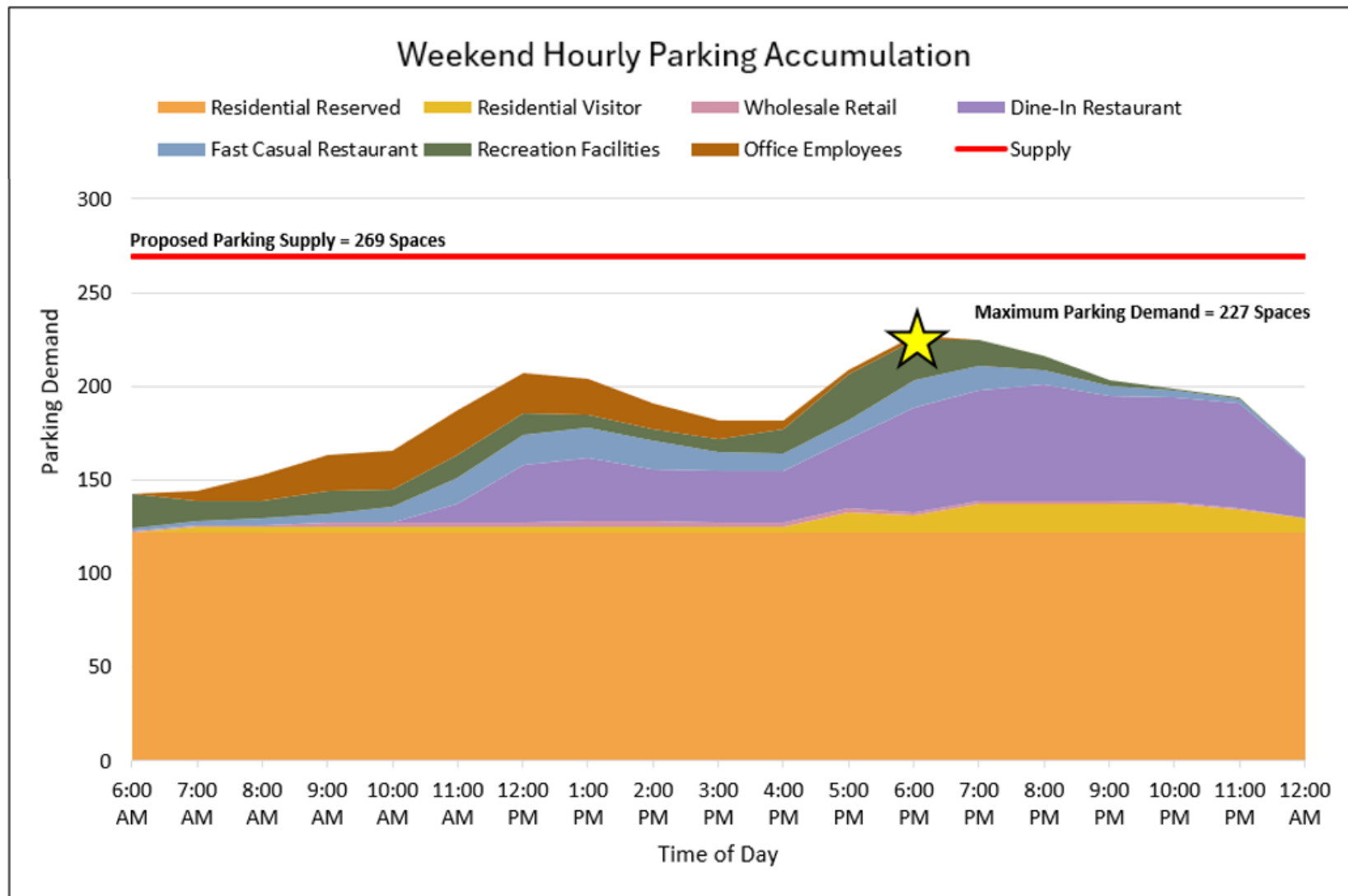


Figure 3: Weekend Shared Parking Hourly Characteristics

The parking supply is anticipated to exceed the demand on the weekend with a surplus of (42) spaces.

Conclusion

This memorandum presented the findings of a shared parking analysis conducted in conjunction with the redevelopment of the 14600 Washington Street site in the Town of Haymarket Virginia. This memorandum supports the following conclusions:

- Per the Town of Haymarket *Code of Ordinances*, a total of 263 parking spaces would be required for the application.
- The Applicant is proposing to construct a total of 269 parking spaces on-site, with 122 of those spaces reserved within the residential units.
 - The proposed parking supply would provide a surplus of six (6) parking spaces to what is required per the Town's zoning ordinance.
 - The final breakdown of parking provided for each use is subject to change as the project develops and final mix and density are approved.
- Shared parking could be provided on-site in the surface parking lot to further accommodate the minimum parking requirements.
 - The shared parking tables and figures show that the uses peak at different times of day and that the on-site surface lot can accommodate the uses at all times of the day.
 - The peak parking demand was found to be on weekdays at 7:00 PM with a peak demand of 239 spaces which is 30 spaces less than the provided 269 spaces.