

PARKING MANAGEMENT PLAN



4TH & VALLEY
REDEVELOPMENT
SOUTH ORANGE, NY

OCTOBER 6, 2017

INTRODUCTION

Level G Associates prepared and submitted a Parking Study of the proposed Fourth & Valley Redevelopment for review by the Village of South Orange dated July 18, 2017. That document concluded that the provision of a 123-space podium parking deck, 11 new on-street spaces, plus a partial use of typically vacant on-street metered parking spaces within one block of the project will be sufficient to accommodate typical peak parking demand generated by the project.

The purpose of this Parking Management Plan (PMP) is to update the program and provide specific detail regarding the use and occupancy of the various parking spaces on a categorical basis.

PARKING SPACE SUPPLY

Figure 1, next page, is a map showing existing and proposed parking spaces within one block of the project that may be included in the PMP. They are:

Podium Parking Deck (124 Spaces)* – This is a surface parking facility located below and within the footprint of the project. It will be a gated parking facility only accessible to project residents or employees of the project commercial space. It may also be used by valet attendants to store cars related to the project to the extent it may be necessary.

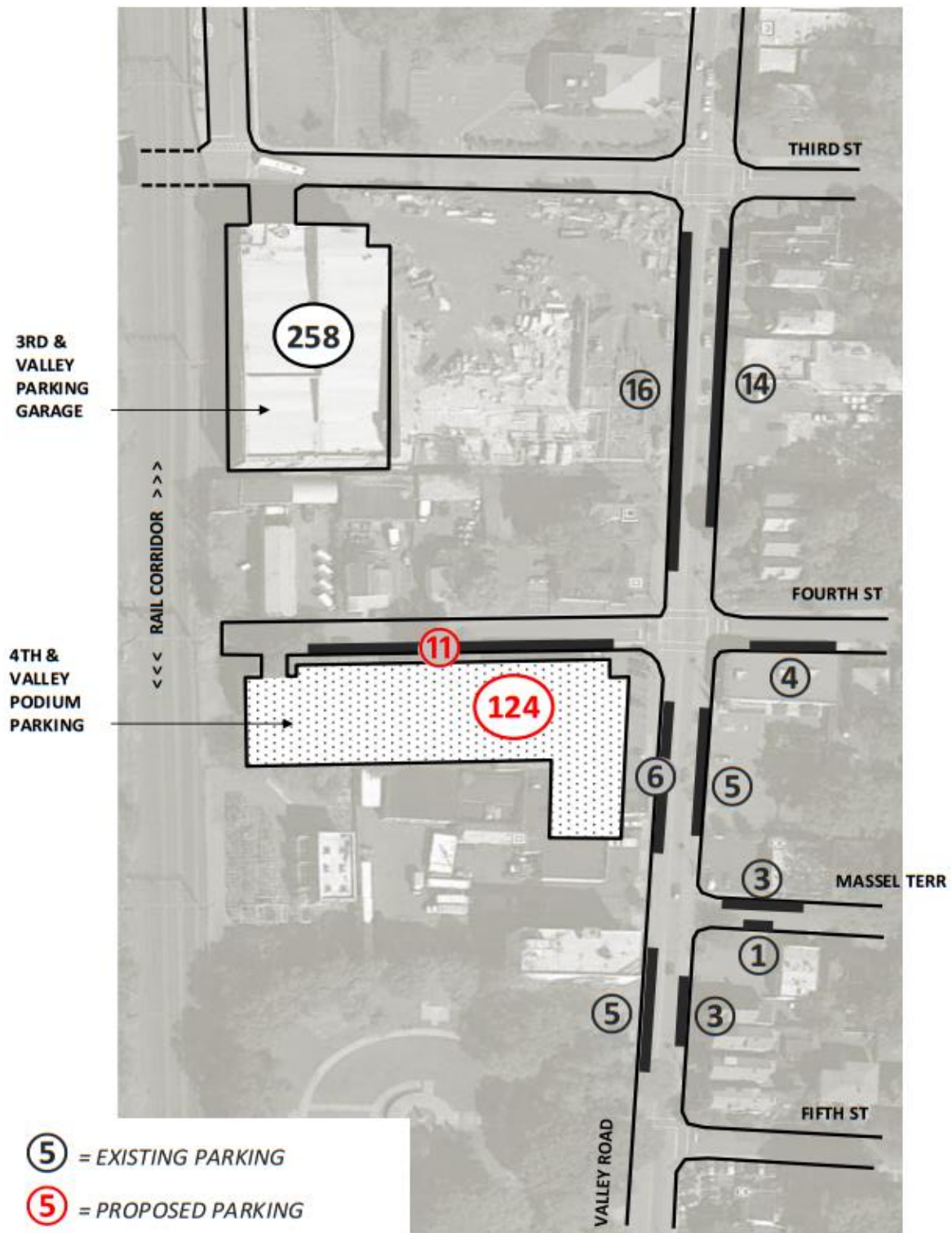
New Fourth Street On-Street Parking (11 spaces) – These spaces will be reserved for use by project residents or employees and customers of the project commercial space. They may also be used by valet attendants to store cars related to the project to the extent it may be necessary.

Metered On-Street Parking Within One Block of the Project (57 Spaces) – These spaces are open to the public on a first-come, first-served basis. It is expected they will be utilized by some customers of the project commercial space.

3rd & Valley Parking Garage (258 Spaces) – This is a public parking deck owned and operated by the Village of South Orange. These spaces are open to the public on a first-come, first-served basis. It may be used by cars related to the project to the extent it may be necessary.

** Updated total. The July 18, 2017 Parking Study indicated a capacity of 123.*

FIGURE 1



PEAK PARKING DEMAND

The previously submitted July 18, 2017 Parking Study (appended to this PMP for reference purposes) was based on a commercial building program consisting of 10,000 SF (divided 5,000 SF restaurant and 5,000 SF retail). Subsequent to the preparation of that document the proposed commercial space was reduced from 10,000 SF to 8,824 SF. This PMP is based on the new building program consisting of:

- 106 Dwelling Units
- 8,824 SF Commercial Space; divided as follows:
 - 4,412 SF Retail Space; 4,412 SF Restaurant Space

Similar to the 7/18/2017 analysis peak parking conditions for the adjusted program are expected to occur on Saturdays between 7PM and 8PM. The parking demand profile for the adjusted building program at the 8PM peak along with the expected parking location of each car is summarized in the following chart:

PEAK PARKING DEMAND BY CATEGORY / SATURDAY 8PM		WHERE WILL THEY PARK?		
		Podium Parking Deck (124 Spaces)	Fourth Street (11 Spaces)	On-Street Meters (57 Spaces / 44 Available)
Project Residents	106	106	0	0
Restaurant Customers	22	0	8	14
Restaurant Employees	7	7	0	0
Resident Visitors	6	6	0	0
Retail Customers	5	0	2	3
Retail Employees	3	3	0	0
TOTAL	149	122	10	17

As indicated, 132 of the 149 project cars will be accommodated on-site or within newly created parking spaces while 17 are expected to use typically available on-street metered spaces. This will leave 27 vacant on-street metered spaces within 1 block of the project.

STRESS TEST

The village's planning consultant asked us to review a scenario where the ratio of project restaurant space to retail space were 100:0 rather than the 50:50 ratio that is contemplated in the parking study.

This 100% restaurant scenario would increase the peak parking demand estimate by 21 cars and may trigger the need for a valet parking operation (utilizing the podium parking area) and the parking of restaurant employees in the village's Third & Valley garage.

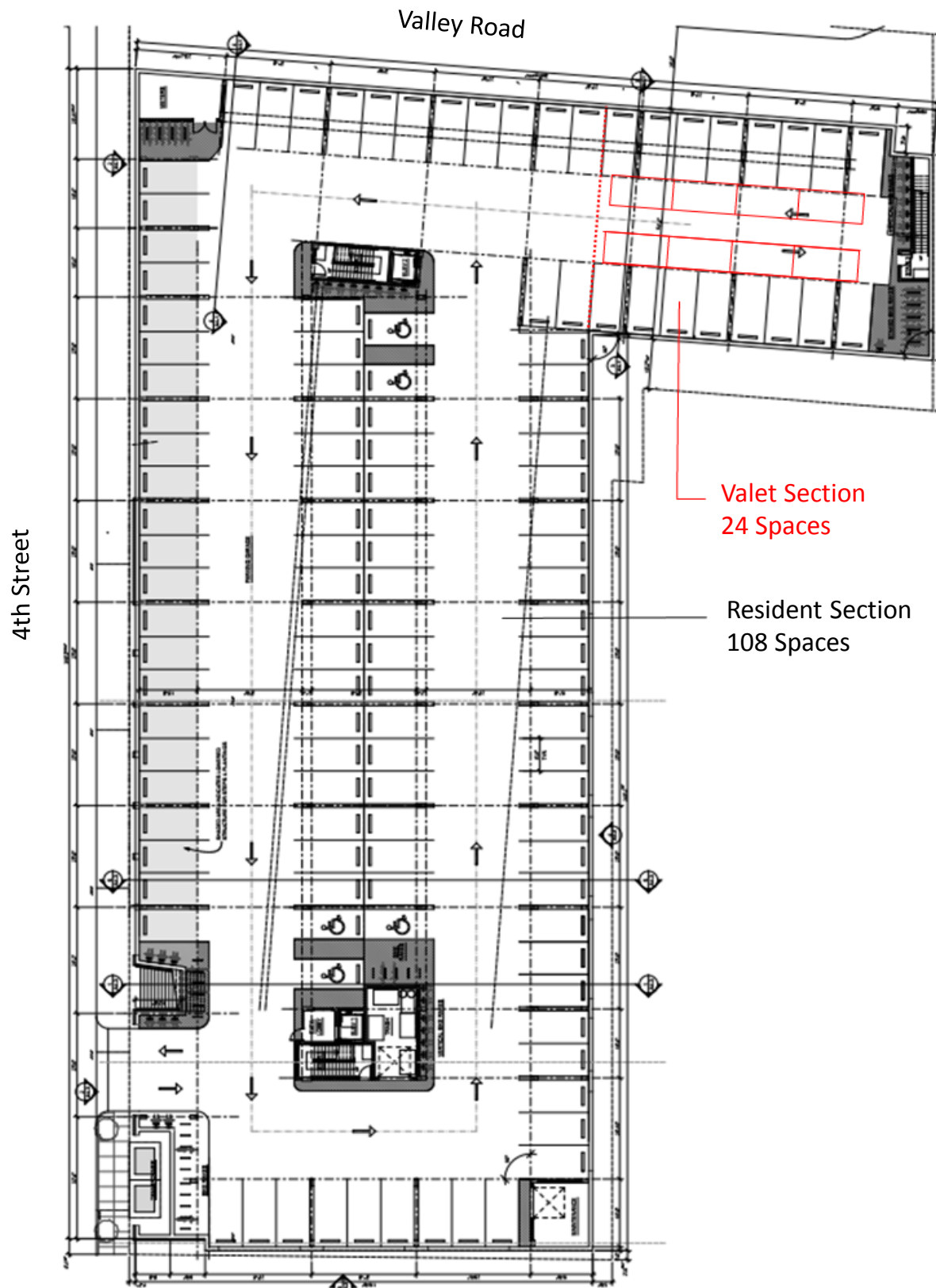
We have determined that a small portion of the podium parking area with 24 "stacked" parking spaces can be set aside for valet parking while maintaining 108 spaces for resident parking (see diagram, next page). Using this configuration plus securing 14 spaces in the 3rd & Valley parking garage for restaurant employees yields the following summary:

PEAK PARKING DEMAND BY CATEGORY / SATURDAY 8PM		WHERE WILL THEY PARK?				
		Podium Parking Deck (108 Spaces)	Podium Parking Deck Valet (24 Spaces)	Fourth Street (11 Spaces)	3rd & Valley Garage (258 Spaces / Over 100 Available)	On-Street Meters (57 Spaces / 42 Available*)
Project Residents	106	106	0	0	0	0
Restaurant Customers	44	0	24	5	0	15
Restaurant Employees	14	0	0	0	14	0
Resident Visitors	6	0	0	6	0	0
Retail Customers	0	0	0	0	0	0
Retail Employees	0	0	0	0	0	0
TOTAL	170	106	24	11	14	15

** Reduced from 44 to 42 in order to reserve 2 spaces for valet pick-up / drop-off on Valley Road*

As indicated, 141 of the 170 project cars will be accommodated on-site or within newly created parking spaces, 14 will use the 3rd & Valley garage and 15 will use typically available on-street spaces. This will leave 27 vacant on-street metered spaces within 1 block of the project.

Valet Configuration



TECHNICAL MEMORANDUM

To: South Orange Planning Board
From: Gerard Giosa, Level G Associates
Re: Fourth & Valley Redevelopment Proposal in South Orange, NJ
Date: July 18, 2017

Level G Associates has completed an assessment of the projected parking impacts of the above captioned project that consists of 106 dwelling units, 10,000 square feet of retail / restaurant space and 134 new parking spaces -- 123 in a one level on-site podium parking deck plus 11 adjacent to the project on the south side of Fourth Street.

Project Parking Demand

106 Dwelling Units

The most significant parking generator for this project will be the residential piece. In order to estimate the number of cars that will be generated by this use we conducted evaluations of very similar Transit Oriented Development (TOD) projects in the New Jersey communities of Bound Brook¹ and Morristown². Level G conducted parking space occupancy counts at both properties on a midweek day at 3AM (the peak parking hour for residential uses) to ascertain the peak number of cars generated by each residential project. The results were as follows:

	Number of Cars Parked – 3AM	Number of Dwelling Units	Peak Parking Per Unit
Bound Brook	219	172	1.27
Morristown	272	217	1.25

For the purposes of this report we will assume that the Fourth & Valley project will exhibit the measured parking patterns of the Bound Brook project because they are both Capodagli TOD projects that will likely attract residents with similar demographic and automobile usage tendencies.

10,000 SF Retail / Restaurant Use

For the purposes of this report we will assume that this 10,000 SF project element will consist of 5,000 SF of retail space and 5,000 SF of restaurant space. In order to estimate the parking volumes and patterns associated with these land uses we utilized two widely referenced publications used for estimating parking demand on a peak point and hour-by-hour basis. They are:

¹ A Capodagli / Meridia multi-family redevelopment project with 172 dwelling units

² A Rosewood multi-family redevelopment project with 217 dwelling units

- Parking Generation. 4th Edition. Institute of Transportation Engineers
- Shared Parking. Second Edition. Urban Land Institute

Attachment No. 1 is a shared parking model indicating the estimated ebb and flow of parked cars associated with each of the project land uses. The models were developed for both a weekday and Saturday condition.

As indicated in Attachment No. 1 peak parking conditions are expected to occur on a Saturday between 7PM and 8PM when the project is expected to draw approximately 154 parked cars. Approximately 112 of these cars will be resident vehicles and 27 will be the vehicles of restaurant customers. The remaining cars will those of restaurant employees, retail customers, and retail employees.

The weekday peak is projected to occur at approximately 7PM when the project is expected to draw approximately 147 parked cars. Approximately 108 of these cars will be resident vehicles and 22 will be the vehicles of restaurant customers. The remaining cars will those of restaurant employees, retail customers, and retail employees.

Parking Supply

As described earlier the total number of new parking spaces to be provided by the project is 134. This means that approximately 20 and 13 project generated vehicles will be required to park off-site or on the local streets during Saturday and weekday peak conditions, respectively.

	Saturday Peak (7PM-8PM)	Weekday Peak (7PM)
Project Parking Demand	154	147
Project Parking Supply	134	134
Off-Site Parking Required	20	13

Local On-Street Parking

As indicated in Attachment No. 2 there are 57 on-street parking spaces located within a short walking distance (one block) of the project and many of these parking spaces remain vacant for long periods of time.

The number of cars parked in these spaces were counted by Level G personnel on Wednesday November 9 and Saturday November 12, 2016. The results of these counts indicate that there is abundant on-street parking typically available within one block of the project that can accommodate the anticipated off-site parking demand generated by the project.

	Saturday Peak (7PM-8PM)	Weekday Peak (7PM)
Vacant On-Street Spaces Within One Block	44	42
Off-Site Parking Required By Project	20	13
Vacant Spaces To Remain	24	29

As indicated above, it is estimated that there will still be ample vacant parking spaces available on the local streets after accommodating the off-site parking requirements of the project. These vacancies are projected to be 24 spaces at the Saturday peak and 29 spaces at the weekday peak.

Safety Factors

There are two safety factors available to mitigate potential parking shortages if local on-street parking space vacancies begin to wane over time. The first is the use of the Third & Valley parking garage by employees or customers of the project. As indicated on Attachment No. 2, the walking distance from the southeast corner of the parking garage to the southwest corner of Fourth and Valley is just 350' via the walkway connecting the parking garage to the Valley Road sidewalk. A walking distance of 350' is considered very convenient from a parking planning perspective. Special counts conducted concurrently with the 57-space on-street parking vacancy counts indicate that there are over 100 vacant spaces in this public parking garage during the (7PM) project peak periods. This is likely due to the fact that the garage parks many train commuters during the day who have vacated the garage before the 7PM project peak periods.

The second safety factor is the potential use of a valet parking service to either increase the on-site parking capacity via stacking of cars or to shuttle project vehicles to an off-site location such as the Third & Valley parking garage or some other parking facility. A valet parking service can work very well with both restaurant and residential uses.

ATTACHMENT NO. 1

PARKING DEMAND MODEL

4TH & VALLEY REDEVELOPMENT PROGRAM

Run Date: June 21, 2017

SATURDAY CONDITION

Land Use	Peak Factor	Unit	Source	6am	7am	8am	9am	10am	11am	12n	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm	12m
Add: 5,000 SF Retail Customers	2.30	/ 1000 SF	Note 1	0	1	3	7	9	10	12	12	11	10	9	8	8	6	6	5	3	2	0
Add: 5,000 SF Restaurant Customers	5.44	/ 1000 SF	Note 2	0	0	0	1	1	2	5	11	14	13	10	17	22	27	25	19	9	2	1
Add: 5,000 SF Retail Employees	0.57	/ 1000 SF	ULI	0	0	1	2	2	3	3	3	3	3	3	3	3	3	3	2	1	0	0
Add: 5,000 SF Restaurant Employees	1.36	/ 1000 SF	ULI	0	1	3	5	6	6	6	6	6	5	5	7	7	7	7	7	7	6	2
Add: 106 Dwelling Units (Non-Reserved)	1.27	per Unit	Comp Study	132	127	120	79	96	90	89	86	86	93	98	105	108	112	113	117	120	128	132
Parking Demand Estimate				132	130	127	94	114	111	115	118	121	124	125	139	147	154	154	150	140	139	136

↑ PEAK
↑ PEAK

WEEKDAY CONDITION

Land Use	Peak Factor	Unit	Source	6am	7am	8am	9am	10am	11am	12n	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm	12m
Add: 5,000 SF Retail Customers	2.04	/ 1000 SF	Note 1	0	1	4	6	8	9	10	10	10	10	9	9	9	9	9	7	4	2	0
Add: 5,000 SF Restaurant Customers	4.44	/ 1000 SF	Note 2	0	0	0	1	1	4	8	10	9	8	12	15	22	22	22	11	6	3	1
Add: 5,000 SF Retail Employees	0.51	/ 1000 SF	ULI	0	0	1	2	2	2	3	3	3	3	3	2	2	2	2	2	1	0	0
Add: 5,000 SF Restaurant Employees	1.11	/ 1000 SF	ULI	0	1	3	4	5	5	5	5	5	4	4	6	6	6	6	6	6	5	2
Add: 106 Dwelling Units (Non-Reserved)	1.27	per Unit	Comp Study	125	106	79	63	51	50	47	44	46	44	43	82	93	97	108	120	124	127	132
Parking Demand Estimate				126	109	87	75	67	70	73	72	72	68	71	114	132	136	147	146	140	136	135

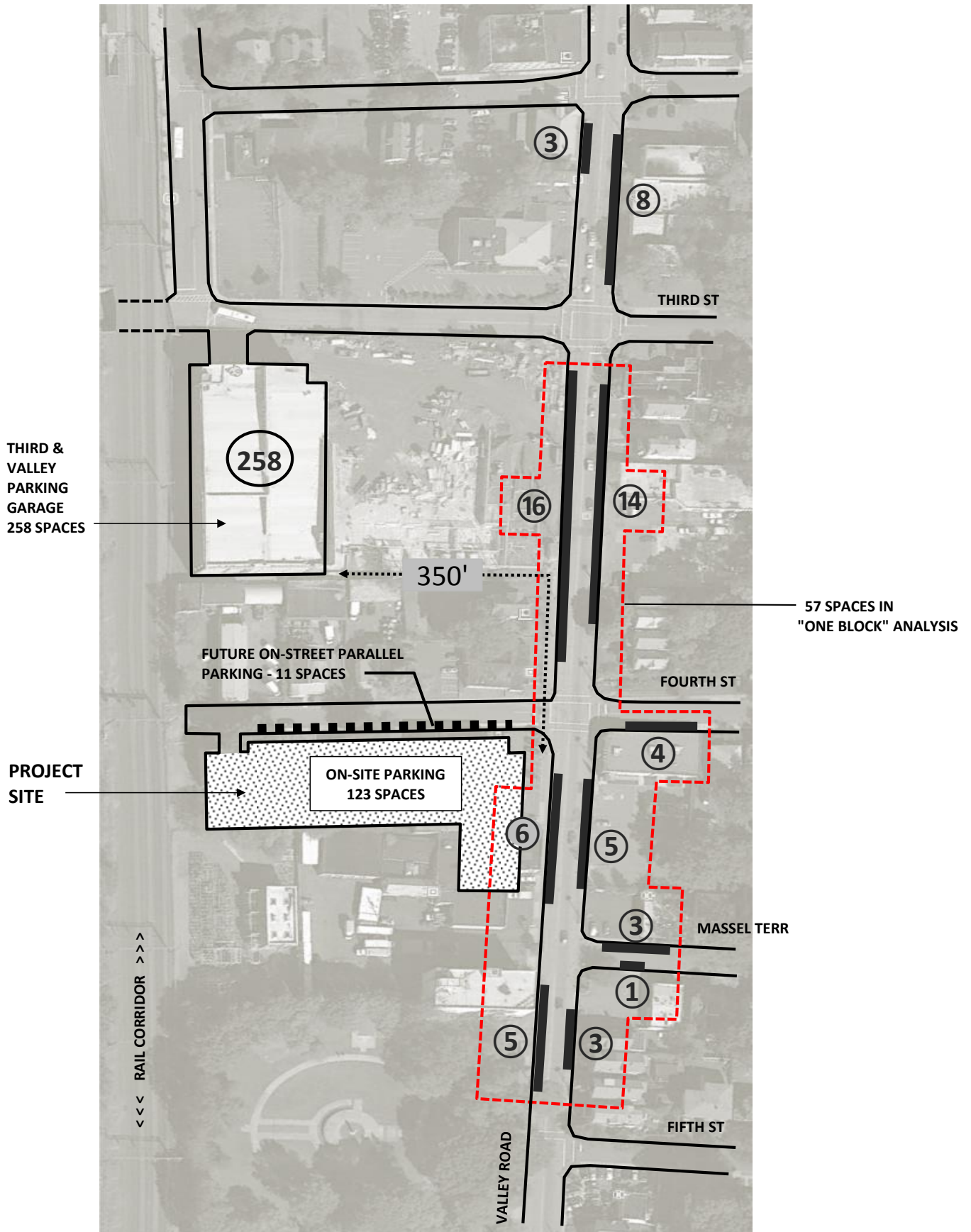
↑ PEAK

Note 1 - ITE Land Use 820 less 20% employees.

Note 2 - Weekday factor plus 22.5% to account for Saturday condition (typical Saturday increase based on published ITE factors for Land Use 932) less 20% employees.

Note 3 - ITE Land Use 932 less 20% employees.

Note 4 - Figures may appear incorrect by a factor of 1.0 due to rounding.



ATTACHMENT NO. 2

PARKING INVENTORY / ONE BLOCK ANALYSIS
FOURTH & VALLEY REDEVELOPMENT
SOUTH ORANGE, NJ