

TO:	Harold Reader GoVenture Capital Group, LLC Geoff Lewis The Michaels Organization	DATE:	October 21, 2024
FROM:	Keri Pyke, P.E., PTOE Christa Lucas, P.E.	HSH PROJECT NO .:	2024174.00
SUBJECT:	274 Frankin Street, Worcester Parking Memorandum		

This memorandum, prepared by *Howard Stein Hudson (HSH)*, summarizes the existing parking conditions and proposed parking impacts associated with the construction of 274 Franklin Street (the Project). The Project is located in the Commercial Corridors Overlay District (CCOD) and is within a five-minute walk (0.2 mile) from Union Station. The Project consists of demolishing vacant industrial buildings and constructing approximately 364 residential units in a single building and 361 parking spaces. The Project proposes to provide two spaces for loading/service, a reduction from the requirements of the Worcester Zoning Ordinance, which requires four loading spaces for buildings between 200,001 – 400,000 square feet (sf). The previously approved site plan and revised proposed building programs are summarized in **Table 1**.

Table 1.Project Program Summary

Project Characteristics	Approved Site Plan	Revised Program
Residential Units	364 units	364 units
Parking Spaces	396 spaces	361 spaces

Loading/Service

The Project proposes to provide two spaces for loading/service, a reduction from the Worcester Zoning Ordinance, which requires four loading spaces for buildings between 200,001 - 400,000 square feet (sf).

TRUCK TRIP GENERATION

Truck trip generation estimates for the Project were developed utilizing empirical data based on residential delivery data for Boston-area residences with 200 – 400 units. The Project is expected to generate approximately 12 truck trips per day (six entering and six exiting). Most (90%) of the truck trips are expected to be light trucks (FedEx, UPS, Amazon, etc.). Minimal truck activity is

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anticipated during the peak hours. The truck trip generation calculation sheets are included in **Appendix A**.

The majority of heavy truck use in the loading spaces will occur for move in/move-out activity. The timing and process of when tenants move in or move out will be managed by the property management company to ensure there are no conflicts with traffic flow and/or use of loading spaces.

Existing Parking Conditions

HSH conducted a parking occupancy study of public off- and on-street parking within approximately one-quarter mile of the site. Parking inventories were conducted during the early morning (before 7:00 a.m.), mid-morning (9:00 – 11:00 a.m.), mid-afternoon (3:00 - 5:00 p.m.), and late-night (after 9:00 p.m.) parking periods.

OFF-STREET PARKING OCCUPANCY

Off-street parking occupancy in the public lots and garages that offer hourly and monthly parking near the Project was observed throughout the day on Thursday, September 26, 2024. Off-street parking observations are summarized in **Table 2**. Detailed parking observations are provided in **Appendix B**.

Time/ Location	Union Station Garage ¹	19-39 Grafton (monthly)	39 Grafton ² (hourly)	Temple/ Winter Lot A	Temple/ Winter Lot C	Total Spaces Occupied	Total Spaces Available
Capacity	471	65	39	186	38	N/A	799
Early morning (before 7:00 a.m.)	59	47	20	22	31	179	620
Mid-morning (9 – 11 a.m.)	129	36	34	42	3	244	555
Mid-afternoon (3 – 5 p.m.)	126	39	35	20	10	230	569
Late night (after 9:00 p.m.)	59	44	33	26	1	163	636

Table 2. Off-street Public Parking Occupancy

¹ Public Parking Capacity of the Union Square Garage does not include spaces reserved for Worcester Police Dept. (11 spaces), Zipcar (1 space), Garage Management (2 spaces), or Cannabis Control Commission (15 spaces). ² Parking Capacity for the 39 Grafton Street Lot does not include spaces reserved for Kenmore Diner (28 spaces).

Observations indicate that 550 - 600 off-street public parking spaces are available in the near vicinity throughout the day at any time. In the time period that had the highest off-street parking usage (mid-morning), 70% of available off-street parking spaces were available. These spaces are all located within approximately one-quarter mile (five-minute) walk of the Project Site.

ON-STREET PARKING OCCUPANCY

On-street parking occupancy on the streets within proximate walking distance to the Project (fiveminute walk or ¹/₄-mile) was also observed throughout the day on Thursday, September 26, 2024. The limits of the on-street parking study included:

- Franklin Street from Artic Street to Plastics Street (one-hour parking);
- Harding Street from Winter Street to Temple Street (two-hour parking);
- Temple Street from Green Street to Grafton Street (one-hour and unrestricted);
- Winter Street from Green Street to Beach Street (30-minute parking); and
- Winter Street from Beach Street to Water Street/Grafton Street (two-hour parking).

On-street parking observations are summarized in Table 3. Detailed parking observations are provided in Appendix B.

Time/ Location	Franklin Street	Temple Street	Winter Street	Harding Street	Total Spaces Occupied	Total Spaces Available
Capacity	12	51	25	10	N/A	98
Early morning (before 7:00 a.m.)	0	9	1	0	10	88
Mid-morning (9 – 11 a.m.)	0	8	3	1	12	86
Mid-afternoon (3 – 5 p.m.)	0	8	4	0	12	86
Late night (after 9:00 p.m.)	0	7	14	3	24	74

Table 3. **On-street Public Parking Occupancy**

Observations indicate that 70 or more on-street public parking spaces are available in the near vicinity throughout the day at any time. In the time period with the least available on-street parking usage (late night), 74% of on-street spaces near the Project Site were unoccupied.



Vehicle Ownership

Census data from the American Community Survey (ACS) provides information on vehicle availability for housing units. Data was obtained for the entirety of the City of Worcester as well as the census tract for the Project (Tract 7322.03) and the tracts immediately adjacent to the Project. In Worcester, owner-occupied units have an average of 1.85 vehicles per household; renter-occupied units have an average of 1.09 vehicles per household. Vehicle ownership decreases for census tracts closer to the Massachusetts Bay Transportation Authority (MBTA) Commuter Rail station. Vehicle ownership data are summarized in **Table 4**.

The Worcester MBTA Commuter Rail/Amtrak Station is located along the border between Tract 7317 and Tract 7325. The Project is located to the east of Tract 7325 in Tract 7322.03. Tract 7324, located immediate south of the Project Census Tract, is the most populated residential tract abutting Union Station. Tract 7317 has the fewest vehicles per household in this area of Worcester. On average, a quarter of renter-occupied units in Worcester do not own a vehicle. It is expected that the Project vehicle ownership demographics will be very similar to those of other rental units in this area. Census data is provided in **Appendix C**.

Vehicle Ownership	Worcester	Tract 7317 (north of station, west of Grafton)	Tract 7325 (south of station, west of Grafton)	Tract 7324 (south of station, south of Grafton)	Tract 7322.03 (Project tract, east of station, north of Grafton)			
	Vehicles per Household							
Owner	1.85	1.10	1.29	1.97	1.63			
Renter	1.09	0.92	0.98	1.20	1.32			
		Households	without Vehicles					
Owner	5%	8%	22%	2%	8%			
Renter	25%	26%	26%	16%	8%			
		Ηοι	useholds					
Owner	33,253	181	200	458	371			
Renter	45,724	1,703	669	2,195	894			

Table 4.Vehicle Ownership: Owner- vs. Renter-occupied Units

Source: 2022 ACS Census Data



Conclusion

In the Worcester Zoning Bylaw, Section IX, Commercial Corridors Overlay District (CCOD), the purpose and intent of the CCOD is outlined as "to encourage compact, pedestrian-friendly development that is physically and functionally integrated through site design, *dimensional and parking standards that limit parking*, provide flexibility for development initiatives and provide incentives for mixed-use development" [emphasis added]. Section 1 of Article IX also notes that the intent is to avoid over-dedication of land to surface parking. Residential developments that provide less parking attract residents with fewer vehicles.

The Project is seeking a Special Permit to provide fewer than the required vehicle parking spaces onsite (361 spaces on-site versus 401 spaces required by zoning). Taking into account the parking provided by the Project and the available on- and off-street parking supplies in the area, adequate parking is available in the CCOD. It is expected that the Project vehicle ownership demographics will be similar to those of Tract 7317, which has a vehicle ownership of 0.92 vehicles/household (see **Table 4**). The parking ratio if the special permit is approved would be 0.99 parking spaces/unit. The modification to the parking requirement by special permit should have no impact on neighboring properties, as there is sufficient on- and off-street parking capacity available within one quarter mile of the Project site. The Project proposes that if a resident of the building needs a parking space and one is not available on-site, they could apply for a monthly permit to park in one of the nearby municipal lots or garages. The Project has reviewed and addressed the impacts of traffic flow and safety in the area, including access to the parking and loadings areas of the Project.



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Appendix A

Truck Trip Generation

274 FRANKLIN STREET | WORCESTER, MA

274 Franklin Street, Worcester

Truck Generation Assessment

HOWARD STEIN HUDSON

24-Sep-2024

				ITE ¹				CTPS ²		
Land Use	Size	Category	Directional Split	ITE Average Trip Rate	ITETruck Trips	CTPS Light Rate	CTPS Heavy Rate	-	CTPS Heavy Truck Trips	
Daily Peak Hour										
Residential ³	364	Total		0.034	12	0.031	0.003	11	1	6
(empirical)	units	In	50%	0.017	6					
		Out	50%	0.017	6					
Retail	0	Total		0.090	0	0.700	0.070	0	0	0
	KSF	In	50%	0.045	0					
		Out	50%	0.045	0					
Total		Total			12			11	1	6
		In			6					
		Out			6					

1. ITE Trip Generation Manual, 11th Edition, LUC 820 (Retail), average rate

2. "Truck Trip Generation Rates by Land Use in the Central Artery/Tunnel Project Study Area", Central Transportation Planning Staff, September 1993



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Appendix B

Parking Observations

274 FRANKLIN STREET | WORCESTER, MA

24174 - 274 Franklin St

- . :

Parking Occupancy Observations

Date: 9/26/27Time: 5:00 - 7:00 AM Prepared By: MW

On-Street Parking Temple Street Green St - Harding St (South Side) Green St - Harding St (North Side) 2 2 \mathcal{O} Harding St - Grafton St (South Side Only) head and and and and a star and and Winter Street Grafton St - Harding St (North Side Only) Harding St - Green St (South Side Only) Harding Street Winter St - Temple St (East Side Only) OFranklin Street Artic St - Plastic St (South Side Only) **Artic Street** Franklin St - Plastic St (East Side) Franklin St - Plastic St (West Side) O()

Off-Street P	Public Par	king		
Temple St (B		l the		
49 TE	MPLE S	ĞΤ		22
Temple St (S	mall Lot)			
12 Got	DALD	Sτ		31
Grafton Stree	et Lot (Nor	th): Parking By Permit Only (see photo)	
				47-
	re 28	th) SPACES FOR THE DINER IN COUNT. Y WERE OCCUPI	бД	20
Union Statior	i Garage			
Lv 0:	F		~	
WPD:	5	Management:	0	
ZipCar:	0	Compact (Pub):	0	8
Handicap:	1	EV:	2	
L v 1: Public:	47			47
Lv 2:				
CCC:	6	Compact (Pub):	0	13
Public:	7			
.v 3:	2			2
Public:	2			2
.v 4: Public:	Ø	j.		0
v 5: Public:	0			0

WPD = Worcest Police Department, 11 spaces; Zipcar = 1 space; Handicap = 10 spaces; Management = Garage Management, 2 spaces; Compact (assumed public) = 2 (Lv 0), 1 (Lv 2) spaces; CCC = Cannabis Control Commission, 15 spaces

24174 - 274 Franklin St

Parking Occupancy Observations

4.1

Date: 9/26/24 Time: 9:00 - 11:00 AM Prepared By: MW

On-Street Parking			
Temple Street			
Green St - Harding St (North Side)	Green St - Harding St (South Side)	1.11.9.11.141	Nº L.
0	0		0
Harding St - Grafton St (South Side Only)			_
2			8
	$= \mathcal{N}_{\mathcal{A}} \left\{ \left \lambda_{\mathcal{B}} \left(x - x \right) \right \right\} = \left x - x \right \left 1 - x \right \right\} = \left 1 - 1 \right \left 1 - 1 \right \right $	25 - st	64 (J.)
Winter Street	Weight Contraction (1998)		
Grafton St - Harding St (North Side Only)		20 g 4 2 -	1
1			L
Harding St - Green St (South Side Only)	5		
2			2
Harding Street			
Winter St - Temple St (East Side Only)			1
1			L
Franklin Street		10 10	
Artic St - Plastic St (South Side Only)		a 61	-
0			0
Artic Street			
Franklin St - Plastic St (East Side)	Franklin St - Plastic St (West Side)		
0	0		0

Off-Street P	ublic Park	ing			
Temple St (Bi	ig Lot)	X - 0			
49 TE	MPLE	ST		42	
Temple St (Si	mall Lot)				
12 G	ODDAR	o St		33	
Grafton Stree	et Lot (Nort	h): Parking By Permit Only (see photo)		
				36	
Grafton Stree	-	h) SPACES FOR THE DINER		2.1	
NOT INC		IN COUNT. THERE WERE		34	
Union Station					
Lv 0: WPD:	3	Management:			
ZipCar:	0	Compact (Pub):	1	8	
Handicap:	1	EV:	3		
Lv 1: Public:				89	
Lv 2: CCC:	6	Compact (Pub):	0	35	
Public:	29			22	
Lv 3:					
Public:				6	
Lv 4: Public:				0	
Lv 5: Public:				0	(134

WPD = Worcest Police Department, 11 spaces; Zipcar = 1 space; Handicap = 10 spaces; Management = Garage Management, 2 spaces; Compact (assumed public) = 2 (Lv 0), 1 (Lv 2) spaces; CCC = Cannabis Control Commission, 15 spaces

24174 - 274 Franklin St

Parking Occupancy Observations

24

1

Date: 9/26/24 Time: 3:00 - 5:00 PM Prepared By: MW

On-Street Parking				
Temple Street				
Green St - Harding St (North Side)		Green St - Harding St (South Side)	South Early	18
0		0		0
Harding St - Grafton St (South Side Only)				Q
		and the state of the state of the	480 25	સંગોધરને.
Winter Street	8.20		120221-00-010	1 20 May
Grafton St - Harding St (North Side Only)				1
			3	4
Harding St - Green St (South Side Only)	164		_	2
	÷.		1	3
Harding Street				
Winter St - Temple St (East Side Only)				0
Franklin Street	-			
Artic St - Plastic St (South Side Only)				0
Artic Street				
Franklin St - Plastic St (East Side)		Franklin St - Plastic St (West Side)		\sim
0		0		0

Off-Street	Public Parkin	g		
Temple St (I	Big Lot)	3		
49 71	emple st	r		20
Temple St (S	Small Lot)			
12 0	GODDARD	ST		10
Grafton Stre	et Lot (North):	Parking By Permit Only (see photo)	
				39
THERE		SPACES FOR THE DINER IN COUNT. O WERE (35
Union Statio	n Garage			
L v 0: WPD:	5	Management:	0	
ZipCar:	0	Compact (Pub):	2	11_
Handicap:	1	EV:	3	
L v 1: Public:				82
L v 2: CCC:	6	Compact (Pub):	0	21
Public:	30			36
.v 3:				
Public:				6
.v 4: Public:				1
v 5: Public:				1 (

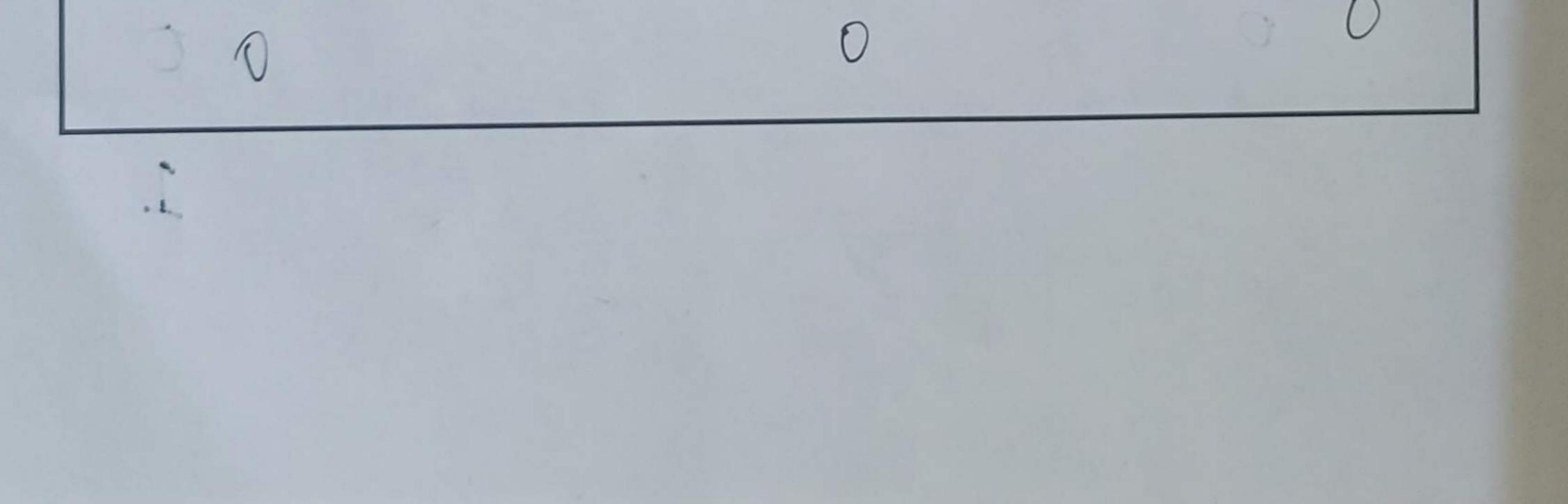
WPD = Worcest Police Department, 11 spaces; Zipcar = 1 space; Handicap = 10 spaces; Management = Garage Management, 2 spaces; Compact (assumed public) = 2 (Lv 0), 1 (Lv 2) spaces; CCC = Cannabis Control Commission, 15 spaces

24174 - 274 Franklin St Parking Occupancy Observations

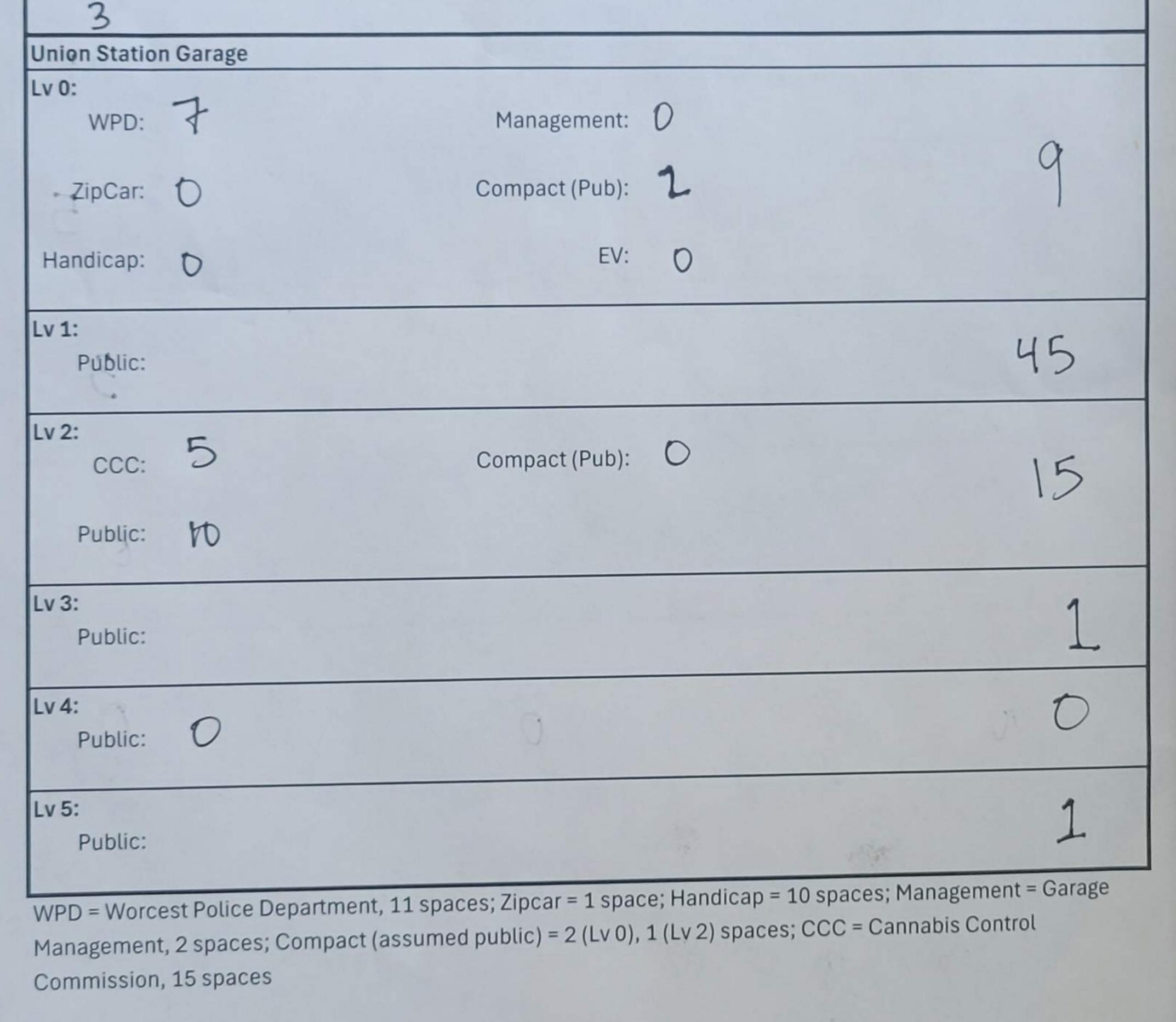
Date: 9/26/24 Time: 9:00 - 11:00 PM Prepared By: MW

On-Street Parking		
Temple Street Green St - Harding St (North Side)	Green St - Harding St (South Side)	12
0	1	1
Harding St - Grafton St (South Side Only)		6
Winter Street		0
Grafton St - Harding St (North Side Only)		

			9
Harding St - Green St (South Side Only)	5		5
		0	
Harding Street Winter St - Temple St (East Side Only)			3
Franklin Street Artic St - Plastic St (South Side Only)			0
Artic Street Franklin St - Plastic St (East Side)	Franklin St - Plastic St (West Side)		0



Off-Street Public Parking	
Temple St (Big Lot)	
49 TEMPLE ST	26
Temple St (Small Lot)	
12 GODDARD ST	1
Grafton Street Lot (North): Parking By Permit Only (see photo)	
	44
Grafton Street Lot (South)	
	33





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Census Data

274 FRANKLIN STREET | WORCESTER, MA

	2022 5-year Estimate					
	Worcester	7317	7325	7324	7322.03	
Owner occupied:	33,253	181	200	458	371	
No vehicle available	1,555	15	44	9	30	
1 vehicle available	11,024	132	61	118	157	7319 7319
2 vehicles available	13,996	34	89	209	103	
3 vehicles available	4,566	0	6	122	81	7316.02
4 vehicles available	1,748	0	0	0	0	
5 or more vehicles available	364	0	0	0	0	7308.02 7316.01 7318.02 7318.01
Renter occupied:	45,724	1,703	669	2,195	894	7322.0
No vehicle available	11,457	443	174	356	71	7315 7317 7322.02
1 vehicle available	22,233	1,021	335	1,295	507	Totalde
2 vehicles available	9,288	167	160	298	272	7322.03
3 vehicles available	2,177	72	0	246	44	7314
4 vehicles available	445	0	0	0	0	7312.03 7325 7323.02
5 or more vehicles available	124	0	0	0	0	12.02 7313 7324 7323.02
						7323.
		202	2 5-year Estin	nate		1 7330 7326
hicles per Household	Worcester	7317	7325	7324	7322.03	1327
Owner	1.85	1.10	1.29	1.97	1.63	
Renter	1.09	0.92	0.98	1.20	1.32	7329.02
Household without Vehicles						
Owner	5%	8%	22%	2%	8%	
Renter	25%	26%	26%	16%	8%	
ouseholds						
	33,253	181	200	458	371	
Owner	33,233				894	



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