

APPENDIX L
PARKING ASSESSMENT

Nelson & Pope

June 2011

PARKING ASSESSMENT

NEW FRONTIER

North Amityville

Town of Babylon

June 2011

N & P JOB NO. 09084

Parking Assessment

New Frontier is a proposed mixed-use development to be located on the east side of NYS Route 110 between Brefni Street and Nathalie Avenue in North Amityville. The proposed mixed-use development comprised of 500- one and two bedroom apartments along with 45,500 SF of retail space fronting on NYS Route 110. The following table calculates the parking required in accordance with the Town of Babylon Code.

Table 1: Parking Requirement

Use	Code Requirement	Parking required
Retail (45,500 SF)	1 parking space per 200 SF	228
Residential		
213 – one bedroom apartments	2 parking spaces per unit	426
287 – two bedroom apartments	2.5 parking spaces per unit	718
Total parking required		1372
Total parking provided		790

The purpose of this analysis is to determine the parking needs of the proposed mixed-use development. This was accomplished by conducting parking surveys at six similar apartment complexes and one similar retail center. The specific facilities studied are listed on the following table.

Table 2: Uses Studied

Name	Use	Location	Size
Washington Square Apartments	Apartments	100 Washington Street, Hempstead, NY	525 units
Woods Edge Apartments	Apartments	110 Jerusalem Avenue, Hempstead, NY	128 units
700 Broadhollow Gardens	Apartments	NYS Route 110, Amityville, NY	52 units
777 Terrace Garden Apartments	Apartments	County Line Road, Amityville, NY	50 units
The Pavilion at Amityville	Co-ops	Harrison Avenue, Amityville, NY	87 units
290 Broadway Apartments	Apartments	290 Broadway Amityville	22 units
CVS Shopping Center	Shopping Center	CVS Shopping Center 349 Broadway Amityville,	22, 570 SF

The parking surveys were conducted on Wednesday June 1, 2011 from 4:00 AM to 8:00 AM and from 3 PM to 10PM and on Saturday June 4, 2011 from 4:00 AM to 8:00 AM and from 11 AM to 4 PM, on a half hourly basis. The following tables show the existing parking counts at these sites.

**Table 3: Parking Observations– Wednesday June 1, 2011, 4:00AM to 8:00AM
and 3:00PM to 10:00PM**

Time of Day	Residential							Retail
	Washington Square Apartments (525 units)	Woods Edge Apartment (128 units)	700 Broadhollow Gardens (52 units)	777 Terrace Garden Apartments (50 units)	The Pavilion at Amityville (87 units)	290 Broadway Apartments (22 units)	Total (864 units)	CVS Shopping Center (22,570 SF)
	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles
4:00 AM	495	84	63	52	105	18	817	0
4:30 AM	495	84	63	52	104	18	816	0
5:00 AM	492	84	63	52	104	18	813	0
5:30 AM	490	80	62	52	104	17	805	2
6:00 AM	475	78	60	48	100	17	778	4
6:30 AM	431	75	54	47	98	12	717	5
7:00 AM	363	60	52	35	82	9	601	9
7:30 AM	343	55	40	30	69	5	542	11
8:00 AM	290	53	25	23	46	6	443	14
3:00 PM	198	43	23	25	49	8	346	62
3:30 PM	193	47	21	23	52	5	341	69
4:00 PM	201	52	24	21	47	7	352	75
4:30 PM	208	50	26	26	50	9	369	70
5:00 PM	239	55	32	24	59	9	418	47
5:30 PM	259	65	38	28	62	11	463	45
6:00 PM	295	71	45	37	68	12	528	45
6:30 PM	356	74	39	39	88	10	606	42
7:00 PM	378	76	43	36	92	12	637	34
7:30 PM	382	76	45	40	95	12	650	34
8:00 PM	399	77	49	42	94	13	674	32
8:30 PM	412	78	51	40	97	12	690	30
9:00 PM	435	78	52	42	94	12	713	21
9:30 PM	456	78	59	44	95	14	746	15
10:00 PM	479	78	60	46	106	17	786	5

**Table 4: Parking Observations – Saturday June 4, 2011, 4:00AM to 8:00AM
and 11:00AM to 4:00PM**

Time of Day	Residential							Retail
	Washington Square Apartments (525 units)	Woods Edge Apartment (128 units)	700 Broadhollow Gardens Apartments (52 units)	777 Terrace Garden Apartments (50 units)	The Pavilion at Amityville (87 units)	290 Broadway Apartments (22 units)	Total (864 units)	CVS Shopping Center (22,570 SF)
	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles	Parked Vehicles
4:00 AM	456	78	60	47	102	19	762	0
4:30 AM	456	78	60	47	102	19	762	0
5:00 AM	452	78	61	47	103	20	761	0
5:30 AM	449	78	61	46	104	20	758	1
6:00 AM	438	75	62	43	104	18	740	2
6:30 AM	442	75	59	41	102	17	736	5
7:00 AM	433	75	59	41	100	12	720	5
7:30 AM	426	76	53	38	96	7	696	7
8:00 AM	420	77	46	32	89	7	671	5
11:00 AM	295	65	40	36	98	10	544	57
11:30 AM	276	62	45	33	102	8	526	69
12:00 PM	265	58	43	34	96	7	503	80
12:30 PM	274	55	35	28	94	9	495	80
1:00 PM	263	57	32	25	89	8	474	76
1:30 PM	288	59	36	26	91	6	506	72
2:00 PM	291	60	33	22	85	7	498	69
2:30 PM	278	58	31	24	82	6	479	78
3:00 PM	277	61	35	26	87	9	495	66
3:30 PM	245	62	33	23	85	9	457	64
4:00 PM	265	60	31	25	87	11	479	65

A review of Tables 3 and 4 reveal that the peak parking demand for residential and retail uses do not coincide. The peak parking demand for the residential uses occurred at 4:00 AM during the weekday and Saturday and the peak parking demand for the retail center occurred at 4:00 PM during the weekday and at 12 PM on Saturday.

In order to estimate the parking demand for the proposed mixed-use development (500 unit apartments and 45,500 SF retail), peak parking rates calculated for the similar uses were applied to the square footage of the proposed mixed-use development. The following tables summarize the results of the estimated parking demand of the proposed mixed-use development on a half hourly basis.

Table 5: Estimated weekday Parking Demand for proposed mixed-use development (Based on parking survey)

Time of Day	Residential			Retail			Combined
	Apartments (864 units)	Parking Rate	Estimated parking demand for proposed 500 apartments	The CVS Shopping Center (22,570 SF)	Parking Rate	Estimated parking demand for proposed 45,500 SF Retail	Total Estimated parking demand for proposed mixed-use project
	Parked Vehicles	Spaces/unit	Parked Vehicles	Parked Vehicles	Spaces/1000 SF	Parked Vehicles	Parked Vehicles
4:00 AM	817	0.946	473	0	0.000	0	473
4:30 AM	816	0.944	472	0	0.000	0	472
5:00 AM	813	0.941	471	0	0.000	0	471
5:30 AM	805	0.932	466	2	0.089	4	470
6:00 AM	778	0.900	450	4	0.177	8	458
6:30 AM	717	0.830	415	5	0.222	10	425
7:00 AM	601	0.696	348	9	0.399	18	366
7:30 AM	542	0.627	314	11	0.487	22	336
8:00 AM	443	0.513	257	14	0.620	28	285
3:00 PM	346	0.400	200	62	2.747	125	325
3:30 PM	341	0.395	198	69	3.057	139	337
4:00 PM	352	0.407	204	75	3.323	151	355
4:30 PM	369	0.427	214	70	3.101	141	355
5:00 PM	418	0.484	242	47	2.082	95	337
5:30 PM	463	0.536	268	45	1.994	91	359
6:00 PM	528	0.611	306	45	1.994	91	397
6:30 PM	606	0.701	351	42	1.861	85	436
7:00 PM	637	0.737	369	34	1.506	69	438
7:30 PM	650	0.752	376	34	1.506	69	445
8:00 PM	674	0.780	390	32	1.418	65	455
8:30 PM	690	0.799	400	30	1.329	60	460
9:00 PM	713	0.825	413	21	0.930	42	455
9:30 PM	746	0.863	432	15	0.665	30	462
10:00 PM	786	0.910	455	5	0.222	10	465

Table 6: Estimated Saturday Parking Demand for proposed mixed-use development (Based on parking survey)

Time of Day	Residential			Retail			Combined
	Apartments (864 units)	Parking Rate	Estimated parking demand for proposed 500 apartments	The CVS Shopping Center (22,570 SF)	Parking Rate	Estimated parking demand for proposed 45,500 SF Retail	Total Estimated parking demand for proposed mixed-use project
	Parked Vehicles	Spaces/unit	Parked Vehicles	Parked Vehicles	Spaces/1000 SF	Parked Vehicles	Parked Vehicles
4:00 AM	762	0.882	441	0	0.000	0	441
4:30 AM	762	0.882	441	0	0.000	0	441
5:00 AM	761	0.881	441	0	0.000	0	441
5:30 AM	758	0.877	439	1	0.044	2	441
6:00 AM	740	0.856	428	2	0.089	4	432
6:30 AM	736	0.852	426	5	0.222	10	436
7:00 AM	720	0.833	417	5	0.222	10	427
7:30 AM	696	0.806	403	7	0.310	14	417
8:00 AM	671	0.777	389	5	0.222	10	399
11:00 AM	544	0.630	315	57	2.525	115	430
11:30 AM	526	0.609	305	69	3.057	139	444
12:00 PM	503	0.582	291	80	3.545	161	452
12:30 PM	495	0.573	287	80	3.545	161	448
1:00 PM	474	0.549	275	76	3.367	153	428
1:30 PM	506	0.586	293	72	3.190	145	438
2:00 PM	498	0.576	288	69	3.057	139	427
2:30 PM	479	0.554	277	78	3.456	157	434
3:00 PM	495	0.573	287	66	2.924	133	420
3:30 PM	457	0.529	265	64	2.836	129	394
4:00 PM	479	0.554	277	65	2.880	131	408

A review of tables 5 and 6 reveal the anticipated peak demand and the fluctuation in demand throughout weekday and Saturday key periods for the proposed mixed-use development. Good engineering practice dictates a safety factor be included for design purposes. To be conservative, the estimated peak parking demand of 473 spaces has been increased by 10% (47 spaces) to a design total of 520 parking spaces.

It should be noted that due to the substantial offset in the residential and retail uses this peak parking demand is composed entirely of residential parking. Therefore, it was important to examine the site plan to insure that there is sufficient parking in the residential portion of the site. Approximately 610 parking spaces are provided in the residential portion of the site. This is more than sufficient to accommodate the design parking requirement of 520 spaces with a 90 space surplus.

The estimated parking demand for the retail of 161 spaces when adjusted by 10% to the design total equals 177 parking spaces. Approximately 180 parking spaces are provided in the retail portion of the site.

As noted earlier, the peak parking accumulation for this mixed-use development occurs at 4AM on weekdays and is composed entirely of residential parking demand. At that time there are 90 residential spaces and 180 retail spaces available. A site total of 270 available spaces.

The peak parking accumulation of the retail use occurs at 12 noon on Saturday. At that time, there will be 3 retail spaces and 290 residential spaces available.

Conclusions

From the review of the results of the parking analyses, it can be seen that the total design peak parking demand for the proposed mixed-use development will be 520 parking spaces. The 790 parking spaces proposed to be provided by the applicant substantially exceed the peak parking demand. In addition, the retail and residential parking areas each contain ample parking to meet their separate parking need. It should be noted that, the peak times for the retail and residential portions of the projects will not coincide; hence there is also an opportunity for shared parking. In addition, although not needed to meet the parking needs of this mixed-use development, approximately 30 parking spaces are conveniently located along the curbs of Geraldine Avenue. It is therefore the professional opinion of Nelson & Pope that the parking spaces provided are more than adequate to meet the peak parking demand for the proposed mixed use development.