

April 27, 2020

Mr. Gary D. Hirsch
Elk Homes, LLC.
411 Theodore Fremd Avenue
Rye, NY 10580

**Re: Traffic and Parking Evaluation
Proposed Redevelopment
108-114 Chatsworth Avenue
Village of Larchmont, Westchester County, NY**

PROJECT UNDERSTANDING

Elk Homes, LLC proposes to redevelop the property at 108-114 Chatsworth Avenue (the “subject site”) to provide new multifamily housing, first floor retail and parking. The subject site is currently developed with approximately 5,800-square feet (sf) of retail space. Parking for approximately 8 vehicles is provided at the rear of the property (behind the existing building) and these spaces are accessed via a 10-foot wide easement that runs along the west side of the site to Wendt Avenue.

With the proposed Project, the existing building on the site will be demolished and a new building constructed containing 14 new residential units, 2,450* +/- sf of retail space and up to 25 on-site parking spaces accessed from Wendt Avenue over the existing easement (the “Project”).

This traffic and parking evaluation incorporates by reference and builds upon the results of a previous traffic study for the Project prepared by Kimley-Horn, dated November 12, 2018 and revised April 9, 2019. This evaluation provides an assessment of existing and future traffic operating conditions at key intersections as well as of future parking needs at the Project. As noted above, vehicular access to the Project site will continue to be provided from Wendt Avenue; therefore, any impacts the Project might have would be most noticeable at the Wendt Avenue intersections with Palmer Avenue and Vanderburgh Avenue. Any intersection further from these intersections would see even more diminished impacts. The hours evaluated included the weekday evening peak hour and the Saturday midday peak hour, as available data (NYSDOT and Institute of Transportation Engineers’) indicate that these are the busiest hours for traffic at the Project as well as the busiest hours on the adjacent streets (if the Project does not have a traffic impact in the weekday PM or Saturday Midday hours, it will not have an impact in the weekday AM peak hour, when both ambient and Project traffic volumes are slightly lower).

TRAFFIC

The 2,450* +/- sf of retail space proposed is less than half the size of the existing retail space. As such, based on published data from the Institute of Transportation Engineers (ITE), the new commercial component of the Project is projected to reduce the volume of traffic generated by the site by 20 trips in the busiest hours. Due to the proximity of the development to the Larchmont train station, as well as its situation in a “downtown” portion of the Village, the residential component of the development is expected to add only 6 trips to the surrounding roadways during the busiest hour. Thus, the net result is that the Project will reduce traffic on the surrounding streets by 14 vehicles (or one third) in the busiest hour. This nominal decrease in traffic volumes will have no perceptible impact on area traffic operating conditions.

* Typographic error corrected 9/26/20

Capacity analyses of future traffic operating conditions, performed with and without the proposed action (Build and No-Build condition, respectively), revealed that the intersections most likely to be impacted by the Project (the intersections of Wendt Avenue with Palmer Avenue and Vanderburgh Avenue) will continue to operate at acceptable levels and not experience any perceptible change in vehicular delays or operating conditions.

PARKING

The proposed development will have the capacity to accommodate up to 25 parked vehicles on site. These spaces will primarily be for the new residents and the parking provided will equate to approximately 1.8 spaces per unit. An extensive review of parking data for several other similar developments in Westchester suggests a peak overnight parking demand of 16 vehicles. Between 9 a.m. and 6 p.m., there may be an opportunity to provide parking in the development's parking garage for the Project's merchants. The above projections are subject to final design and engineering review.

As stated above, the proposed retail component of the Project will be less than half the size of the retail space currently developed on the site. Based on a review of Institute of Transportation Engineers' (ITE) parking data (from *Parking Generation 5th Edition*), and accounting for the downtown location of the retail space, it is calculated that the current 5,800 +/- sf of retail space would generate a peak parking demand of 19 vehicles, 11 more vehicles than the 8 could be accommodated in the parking area located behind the existing building (see attached).

The 2,450*sf +/- sf of retail space proposed will be neighborhood oriented (with many walk-in customers from the surrounding homes and businesses, and possible merchant parking within the Project garage when residents are out during the day). The ITE Parking Generation manual indicates that the proposed retail space will generate a maximum parking demand of 8 vehicles, 11 fewer than the maximum parking demand associated with the existing retail space and the same number as the current retail space's parking deficit. Thus, because the projected maximum parking demand is low and because it is the same or less than would be added to the surrounding streets and public parking facilities by the existing retail space, retail new space will not have a significant adverse impact on area parking

SAFETY

After accounting for maneuvering and structures at the back of the building, the parking area behind the existing 5,800 +/- sf retail building can accommodate approximately 8 vehicles. A review of online, historical, aerial snap shots of this parking area shows that as many as seven (7) vehicles were parked in this rear lot, which suggests that approximately 1/3 of the property's parking (and by association) traffic activity was accommodated by this lot. Based on this estimate, as many as 12 trips per hour are calculated to have used the driveway to Wendt Avenue in the busiest hours.

With access for the proposed 14 apartments proposed across the easement, and conservatively assuming that the Project's retail employees may parking in the Project garage, it is calculated that the Project could generate 11 trips on the access easement in the busiest hours (6 from the residential component of the development and 5 from the retail component). This is virtually the same as the estimated former activity across the easement associated with the existing building and, therefore, does not represent a significant impact.

At one trip every 5.5 minutes, the level of traffic activity forecast is very low as will speeds be on the easement. Therefore, it is concluded that the easement can safely accommodate the projected volume of

* Typographic error corrected 9/26/20

traffic. If no retail parking is accommodated in the Project garage, the level of peak-hour Project traffic on the easement will be reduced by just less than half.

Based on the results of the analyses conducted for this evaluation, it is concluded that:

- The proposed development will result in a net reduction in traffic as compared to the potential traffic that could be generated by the existing building.
- The proposed development will not adversely impact the adjacent roadways and does not warrant any mitigation.
- The proposed action will have sufficient parking to support the Project's residential needs and parking associated with the small retail component of the Project will not have a significant adverse impact on area parking.

Very truly yours,

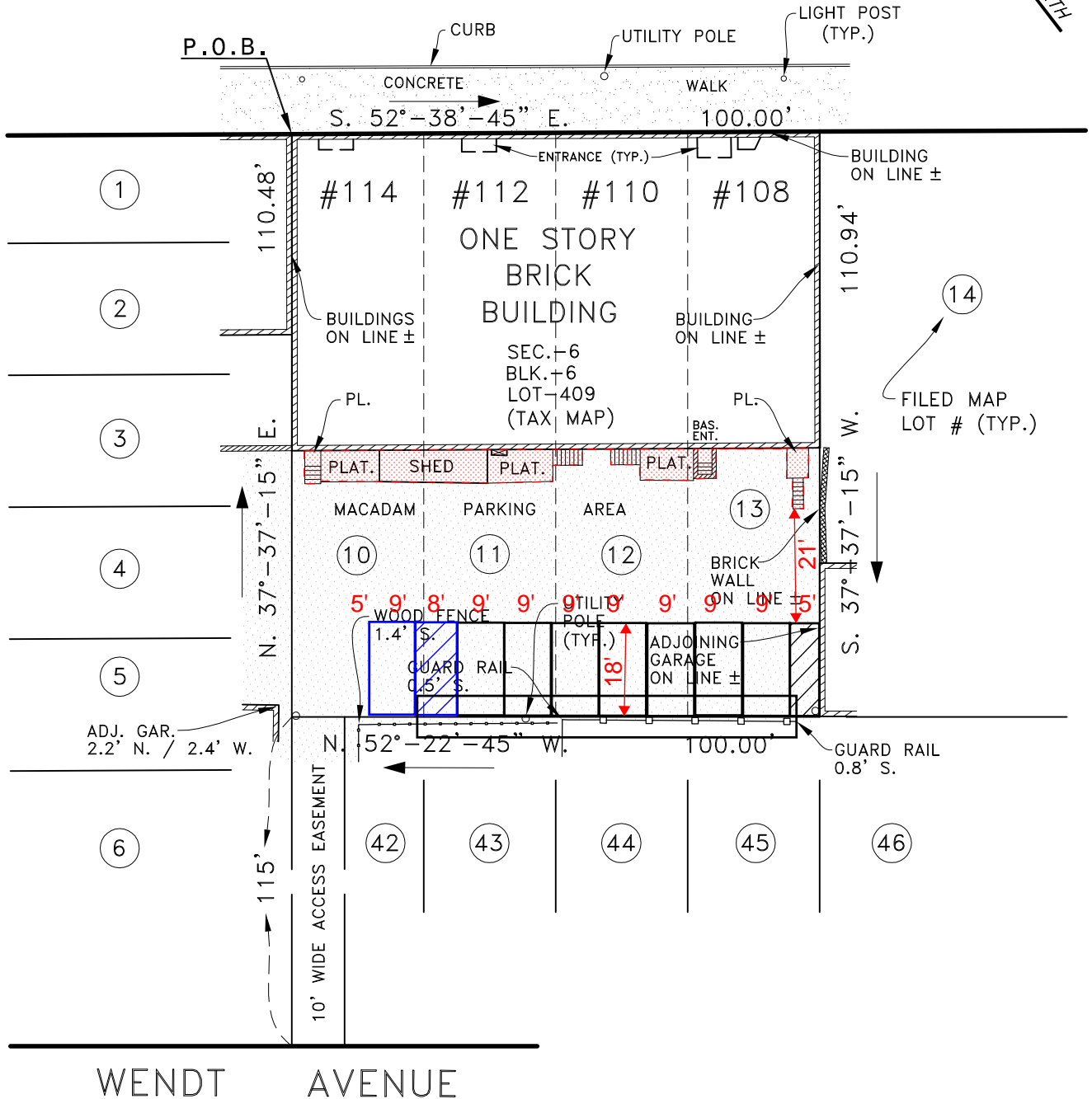
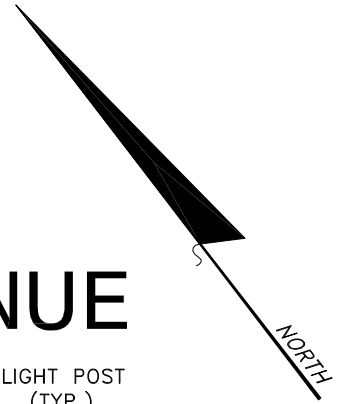
KIMLEY-HORN OF NEW YORK, P.C.



By: John Canning, P.E.
Project Manager

OFFSET DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION.
 SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
 NOTE: GROUND SNOW COVERED AT TIME OF SURVEY.

CHATSWORTH AVENUE



WENDT AVENUE

SURVEY OF PROPERTY

#108-#114 CHATSWORTH AVENUE

LOT 409, BLOCK 6, SECTION 6

LARCHMONT, WESTCHESTER CO., NY

Certified to:

SCALE: 1"=30' DATE: JAN. 10, 2018

Map Reference: Being known as Lot Nos. 10, 11, 12 and 13 on a map entitled: "Map of Larchmont Center, property of Carsten Realty Corporation, Town of Mamaroneck, Westchester County, N.Y." filed in the Westchester County Clerk's Office on January 7, 1914 as Map No. 2043.

STEPHEN F. HOPPE, L.S.
 LICENSED PROFESSIONAL LAND SURVEYOR
 111 ROUTE 303
 TAPPAN, NEW YORK 10983
 NY LIC. NO. 50539

L.S.

TITLE NO.-

DRAWN BY- JMC

REVISED:

FILE NO.- 4745-18

July 27, 2020

The Honorable Lorraine Walsh, Mayor
and Village of Larchmont Trustees
Village Hall
120 Larchmont Ave, Larchmont, NY 10538

**Re: Centro Larchmont
Garage Access**

Dear Mayor Walsh and Honorable Trustees:

We represent Elk Chatsworth LLC, the “Applicant” on the above matter. On the July 16, 2020, the Applicant and its professional team met with the Village Planning Board to review an updated submission to the Board in response to requests made at an earlier meeting. These meetings were to enable to the Planning Board to provide the Board of Trustees comments on the application for a special permit.

We understand that the Planning Board has submitted those comments to the Board of Trustees. This communication addresses one of the principal concerns raised by the Planning Board at the July 16 meeting; the ability to provide safe vehicular access to the site via the existing 10-foot wide easement that serves the subject property.

We acknowledge and respect the diligence of the Planning Board in exercising their authority/responsibility to ensure that all new development in the Village results in a safe and improved environment. It is our presumption that in exercising this responsibility this issue would have been considered at the time of the recent site plan review for 1912 Palmer Avenue. Additionally, fully appreciating the awareness of a need for community safety by both the neighborhood and the Village authorities had there been any substantive examples of safety being an issue with the use of the easement, the Village would have taken steps many years ago to address the situation and would have certainly asked the owner of 1912 Palmer Avenue to include in its site plan the additional traffic control measures that the Applicant has agreed to provide.

For the reasons detailed hereafter, it is our professional opinion that the easement, as proposed, will continue to serve the community in a safe and efficient manner:

1. **The easement has served the subject property, 1912 Palmer Avenue and 65 Wendt Avenue safely for decades** - To the best of the Applicant’s knowledge there has never been an incident at the point of ingress or egress to the easement with either pedestrians or other vehicles. The Applicant contacted the Village Police Department which confirmed (see attached) that there is no record of any accidents occurring on the easement in the past 10 years (the period for which data was readily available). Thus, there is a long-established record of safe operations at this location. In light of the substantial long-standing empirical data, there is no basis for speculation that the easement is not safe.
2. **The level of activity on the easement will not change appreciably** - Surveys, conducted in April of 2019, when only half of the 5,800 sf of retail space located at 108-114 Chatsworth Avenue was occupied, revealed a maximum of 5 trips across the easement in the busiest hour. When the former, 5,800 sf retail space was fully and occupied, this number was more likely 10 trips in and out on the easement in the busiest hour and, more recently, the easement has seen increased activity with the construction of 1912, Palmer Avenue.

Located in the downtown business district and just a short walk from the train station, industry data indicates that the proposed 14 new residences will generate only 6 trips in the peak hour. With the potential for on-site retail parking limited to merchant employees, retail-generated use of the easement will be limited to 4 vehicles or less in the peak -hours. Thus, the total peak-hour project traffic generated by the project on the easement will be no more than 10 trips, the same or less than was previously generated on the easement by the subject property. Most of the day non-peak activity will be minimal (most likely 5 or fewer trips per hour) and far less than there would be if the existing lot were used to provide transient parking for the existing retail store area.

3. **The easement access is not unique in the Village** - It is noteworthy that driveways of the same approximate width as the easement are routinely used in the closest nearby neighborhood, all apparently without incident. These examples include active transient parking in the Village parking lot that is approximately 40 feet from the easement, the alley between Winetasters and Andersons on Chatsworth, and the large apartment building at 3-5-7 East Avenue.

At the municipal parking lot at abutting the site, the ingress lane and exit from that lot are of virtually identical dimensions as the easement and have been used safely by Village residents and visitors for many decades. The activity from this 54-parking space lot far exceeds the planned activity over the easement.

The alley between Winetasters and Andersons on Chatsworth is labeled for use by transient Winetasters customers and yet vehicles egressing the space are required to back up across the sidewalk and onto busy Chatsworth Avenue with very restricted visibility.

At the apartment building at 3-5-7 East Avenue, the building has a below grade garage that appears to accommodate a substantial number of vehicles. Entrance and exit from the garage are through a single steep driveway that is less than 10 feet wide. Visibility of the sidewalk and street on egress is severely restricted due to the steep incline. There are no traffic controls, signage or warnings on the sidewalk or driveway.

These are far less desirable conditions than exist for the continued use of the easement. In these three instances, as well as others, it is our presumption that the Village would have taken remedial actions if these conditions had a history of incidents and were considered unsafe. We are aware of no data to suggest that these are unsafe conditions. Rather, the apparent absence of any incidents at this location as well as the others demonstrates that established safety of the subject easement.

4. **The users of the easement will be familiar with its limitations** – Part of the reason the easement has operated safely is that the motorists using it are all familiar with the condition of the easement. This favorable condition will not change as the easement will only be used by residents and, potentially, store employees. Thus, even without additional traffic control measures, it is our opinion that the easement would continue to operate safely with the new development.
5. **Pro-active traffic control measures will be added to the easement making for an even safer driving environment** - Notwithstanding the exemplary safety record of the easement, the Planning Board has requested, and the Applicant has agreed to enhance the safety of the easement even further. Subject to finalization of specifications and design, the Applicant will install coordinated and integrated traffic control devices at both ends of the easement. These will include devices that detect pedestrians and cars that will alert and give direction to users of the easement to prevent potential conflicts.

As indicated above, it is our professional opinion that, based on the decades-long safe operation of the easement, and because of the same, low volume and speeds along the easement by drivers who know it's environment, supplemented by the proposed new traffic control devices, the easement has and will continue to provide safe access to the properties it serves, including the new development at 108-114 Chatsworth Avenue.

Very truly yours,

KIMLEY-HORN OF NEW YORK, P.C.

A handwritten signature in blue ink that reads "John Canning". The signature is written in a cursive style with a long, sweeping underline.

By: John Canning, P.E.
Project Manager

Canning, John

Subject: FW: Accident request for the Lane serving the back of 65 Wendt Avenue, 1912 Palmer Avenue and 112 Chatsworth Avenue

From: Board Secretary <dmyers@villageoflarchmont.org>

Sent: Monday, July 20, 2020 9:01 AM

To: Canning, John <John.Canning@kimley-horn.com>

Subject: FW: Accident request for the Lane serving the back of 65 Wendt Avenue, 1912 Palmer Avenue and 112 Chatsworth Avenue

Good morning,

As requested, please see information below from Lt. Olsen of the Larchmont Police department.

Kind regards,

Donna Myers

Board Secretary
Village of Larchmont
Building Department
914-834-4349 ext. 2050

From: Cecilia DePinho <clerk@larchmontpolice.org>

Sent: Monday, July 20, 2020 8:43 AM

To: Board Secretary <dmyers@villageoflarchmont.org>

Subject: Accident request for the Lane serving the back of 65 Wendt Avenue, 1912 Palmer Avenue and 112 Chatsworth Avenue

CAUTION: This email originated from outside of the organization. Do not click or open attachments unless you validate the sender and know the content is safe.

Per Lt. Olsen, from June 1 2010 to July 1 2020 there were no accidents that could be found for the area in the photo submitted for a search.

(area was the easement)

Regards,

Cecilia

Larchmont Police Clerk

Email: clerk@larchmontpolice.org

914-834-1000 x-2035

Fax: 914-834-1050

From: Canning, John [<mailto:John.Canning@kimley-horn.com>]

Sent: Friday, July 17, 2020 11:22 AM

To: Clerk@Larchmontpolice.org

Cc: Gary D. Hirsch <gdhirsch@elkhomes.com>

Subject: Accident request for the Lane serving the back of 65 Wendt Avenue, 1912 Palmer Avenue and 112 Chatsworth Avenue

Thank you for taking my call this morning:

I am an engineer working for a property owner with an application (Centro) that appeared before the Planning Board last night and will appear before the Village Board on Monday night.

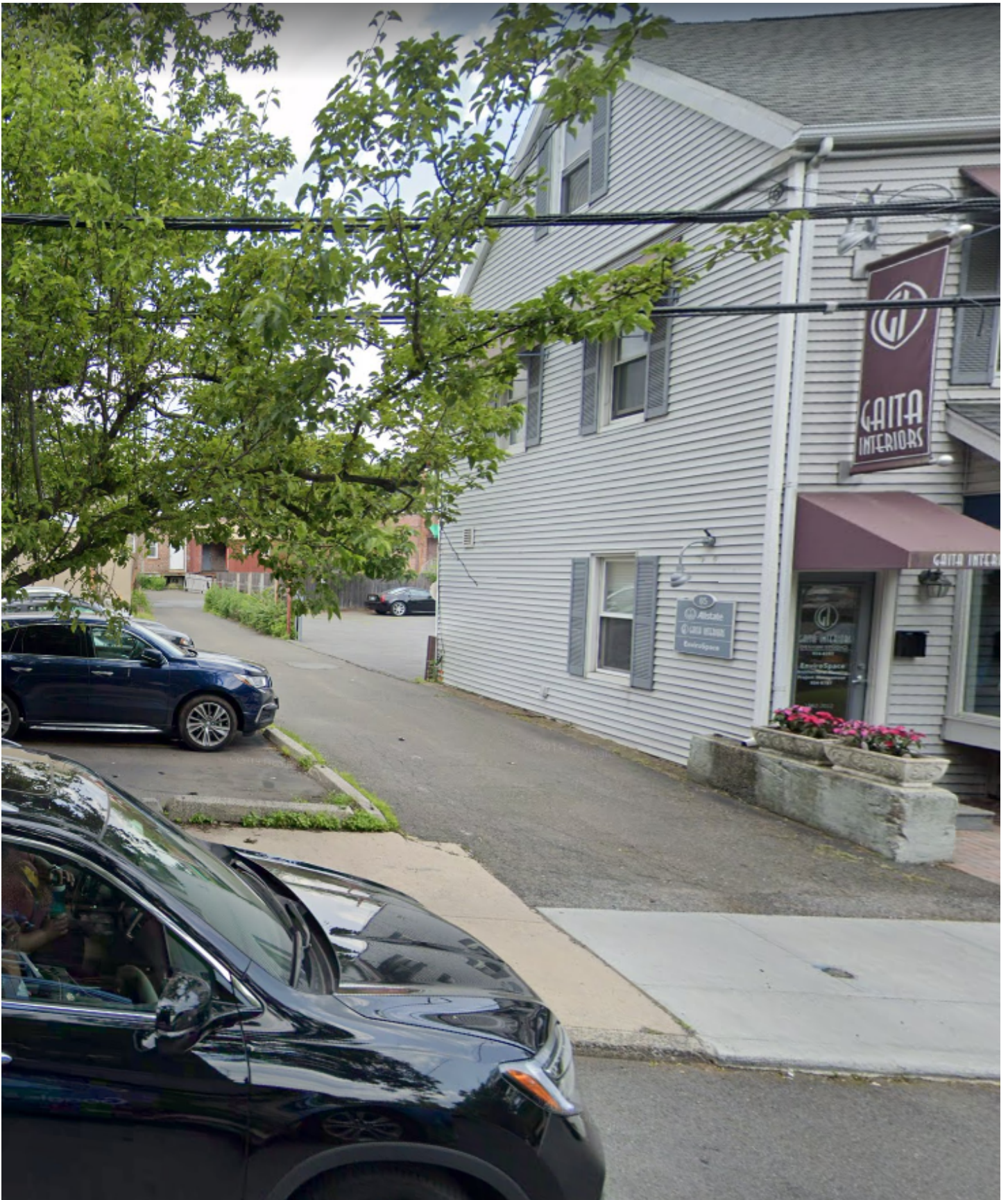
The Planning Board has expressed concern about the safety of the use of the lane (shown below) for continued use to access the 112 Chatsworth Avenue development.

We would like to know if the police department has any record of accidents occurring on this lane, and if so how many, from now until as far back as accident records are readily available.

Please call me if you have any questions or need clarification.

Thanks again





John Canning, P.E.

Kimley-Horn | 1 N. Lexington Ave. Suite 1575, White Plains, NY 10601
Direct Phone: 914-368-9188

From: Patrick Cleary [<mailto:cleary@optonline.net>]

Sent: Tuesday, August 11, 2020 1:59 PM

To: Lorraine Walsh <mayor@villageoflarchmont.org>; Staudt James <JStaudt@mgslawyers.com>

Cc: Brosy Amanda L. <ABrosy@mgslawyers.com>

Subject: Elk/Centro

CAUTION: This email originated from outside of the organization. Do not click or open attachments unless you validate the sender and know the content is safe.

Attached are Georges comments regarding the Elk ROW.

Pat, I reviewed the July 27, 2020 letter by Kimley Horn regarding the Centro Larchmont Garage Access, the July 27, 2020 letter by HKP regarding the Centro Larchmont site plan approval and the slides by Perkins Eastman Architects showing the proposed operational controls of the access easement, a potential alternative access through the adjacent municipal lot and the layout and cross-sections of the pedestrian path on the east side of the proposed project. I also spent some time on google earth street view to check the conditions of this access drive as well as other similar driveway connections in the Village.

I would like to address two elements of the access drive easement:

1. Vehicular conflicts: as the 10-foot wide easement has to serve vehicles circulating in opposite directions, there may be an instinctive reaction based on the image of a frontal collision that this is dangerous. In fact, this is a situation that exists in many places, and because speeds are very low and sight conditions are good, it can operate safely. The fact that the access is 10 feet wide as compared to 12 or 15 feet, helps in slowing traffic and inducing drivers to pay attention. Because of these reasons, I do not see the need for the "STOP Traffic in Alley" signs proposed at the exit of this garage and of the 19212 Palmer parking lot. The first thing that drivers leaving either one of these parking areas will do is look down the alley and if they see a vehicle driving up they will wait to see where that vehicle is driving to, and if needed, they will maneuver their vehicle in such a way where they avoid any conflict.
2. Conflicts with pedestrians on the Wendt Avenue sidewalk: Vehicles driving down this alley will arrive at the sidewalk at a low speed and will face a STOP sign before they reach the sidewalk. There would be an additional sign indicating the prohibition of right turns out of the shared driveway. Even though some drivers may not observe the STOP sign and may not make a full stop, they will slow down at that location. They will have fairly good sight conditions of pedestrians on the sidewalk, and vice versa, pedestrians will have good views of the cars exiting. Whereas the "Vehicle Approaching Warning" sign would encourage pedestrians to pay attention at this location (presumably the sign will light up or will start flashing, when a car approaches), it does send an ambiguous message to pedestrians. First, it is the driver's responsibility to pay attention and not hit pedestrians, especially when pedestrians are on a sidewalk midblock where they have the right-of-way. Second, if we ask pedestrians to pay attention at this location, we would need to install similar signs at other locations that have more vehicles existing and have less favorable sight conditions. Otherwise we send a message that this location is hazardous and other locations are not hazardous. To conclude, I would not recommend the "Vehicle Approaching Warning" sign at this location. If the Village decides to require the applicant to install this warning sign, presumably activated by a vehicle detector along the driveway, I would suggest that the detector be installed along the driveway maybe ten feet downstream from the driveway to the 65 Wendt Avenue parking area.

To conclude, I believe that this is a situation that is organically safe, because of the narrow driveway and resulting low speeds and because the sight conditions along the driveway and at the Wendt Avenue sidewalk are relatively good. I do recommend the installation of the STOP and the "Do-not-turn right" at the location where the driveway meets the Wendt Avenue sidewalk.

Pat, feel free to call me if you want to discuss. I am at (845) 339 6988

Thanks

Georges

Patrick Cleary, AICP, CEP, PP, LEED AP



Planning & Environmental Services

P - 631-754-3085

email - cleary@optonline.net

www.clearyplanning.com

Comparison of Traffic generated by Former & Proposed Uses on the Site on the Easement

	PM			Saturday		
	In	Out	Total	In	Out	Total
Half Vacant 112 Chatsworth	2	4	6	3	3	6
Reoccupancy other half of 112	2	4	6	3	3	6
Former Site Traffic on Easement	4	8	12	6	6	12
14 Centro Residential Units	4	2	6	3	3	6
Centro Retail Employees	2	3	5	2	2	4
Project Traffic on the Easement	6	5	11	5	5	10
Traffic Difference on the easement between former and proposed uses of the site	2	-3	-1	-1	-1	-2

10: easement & Wendt NB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Total Stops	1	2	1	0	0	0	0	2	0	1	0	0

10: easement & Wendt NB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Total Stops	1	1	0	0	1	0	0	0	2	0	0	1

10: easement & Wendt NB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Total Stops	1	1	0	0	0	0	0	0	0	0	1	0

10: easement & Wendt SB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Total Stops	1	1	0	0	0	0	1	1	2	1	1	0

10: easement & Wendt SB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Total Stops	1	1	1	0	1	1	1	2	0	0	2	0

10: easement & Wendt SB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Total Stops	0	0	4	3	0	1	0	0	0	1	2	1

12: Wendt Avenue & easement EB,* Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Total Stops	0	0	0	0	0	0	0	0	0	1	0	0

12: Wendt Avenue & easement EB,* Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Total Stops	1	1	0	0	1	0	0	0	0	0	0	1

12: Wendt Avenue & easement EB,* Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Total Stops	0	0	0	0	1	0	0	0	0	0	0	0

During the Peak PM Hour on a weekday, eastbound vehicles on Wendt Avenue turning left onto the easement had to stop and wait for traffic exiting the easement 17 times in 35 hours (once every 2 hours).

* All Stops here are included at Node 12 except for Run 35

PM Peak Hour

10: easement & Wendt NB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Stop Del/Veh (s)	3.4	4.7	1.1	0.0	0.0	0.0	0.0	4.5	0.0	3.4	0.0	0.0

10: easement & Wendt NB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Stop Del/Veh (s)	3.0	1.0	0.0	0.0	0.4	0.0	0.0	0.0	1.9	0.0	0.0	2.0

10: easement & Wendt NB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Stop Del/Veh (s)	2.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.8

10: easement & Wendt SB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Stop Del/Veh (s)	1.1	4.5	0.5	0.1	0.4	0.4	1.4	0.3	3.2	1.2	5.2	0.2

10: easement & Wendt SB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Stop Del/Veh (s)	0.3	1.4	5.2	0.1	2.4	0.6	0.4	1.6	0.1	0.0	1.3	0.0

10: easement & Wendt SB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Stop Del/Veh (s)	0.2	0.1	1.8	7.2	0.2	1.4	0.2	0.0	0.3	0.4	2.9	1.6

12: Wendt Avenue & easement EB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Stop Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

12: Wendt Avenue & easement EB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Stop Del/Veh (s)	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1

12: Wendt Avenue & easement EB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Stop Del/Veh (s)	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Maximum delay to EB Wendt Avenue traffic, 8.7 Seconds $(8.7+.8+0.1)/2=4.7+0.1$

Queuing and Blocking Report

PM Peak Hour

09/27/2020

Intersection: 10: easement & Wendt

Movement	NB	SB
Directions Served	T	T
Maximum Queue (ft)	11	17
Average Queue (ft)	0	1
95th Queue (ft)	6	9
Link Distance (ft)	2	19
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: Wendt Avenue & easement

Movement	EB	SB
Directions Served	LT	L
Maximum Queue (ft)	5	42
Average Queue (ft)	0	8
95th Queue (ft)	4	31
Link Distance (ft)	100	2
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

During the Peak PM Hour on a weekday, the maximum queue documented by SimTraffic in 35 hours was 16 feet (11+5) or 1 vehicle. The 95th percentile queue was 10 feet (6+4), also 1 vehicle. The distance between the crosswalk on Wendt Avenue at Palmer Avenue and the easement is 100 feet, sufficient to accommodate 5 vehicles. Therefore, delays to eastbound traffic on Wendt Avenue at the easement will not impact traffic operating conditions at the intersection of Wendt Avenue with palmer Avenue.

10: easement & Wendt NB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Total Stops	0	0	0	0	0	0	1	0	0	0	0	0

10: easement & Wendt NB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Total Stops	1	1	0	1	2	0	1	0	1	0	1	0

10: easement & Wendt NB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Total Stops	0	0	0	0	0	0	1	0	0	0	0	0

10: easement & Wendt SB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Total Stops	0	2	0	0	1	0	0	3	0	1	0	0

10: easement & Wendt SB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Total Stops	0	1	0	0	0	0	1	3	0	1	0	0

10: easement & Wendt SB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Total Stops	0	0	0	2	0	0	0	0	0	0	0	0

12: Wendt Avenue & easement EB,* Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Total Stops	0	0	1	0	0	0	0	0	0	0	1	0

12: Wendt Avenue & easement EB,* Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Total Stops	0	1	2	0	0	0	1	1	0	0	0	0

12: Wendt Avenue & easement EB,* Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Total Stops	0	0	0	0	0	0	0	0	0	0	0	0

During the Peak Hour on a Saturday, eastbound vehicles on Wendt Avenue turning left onto the easement had to stop and wait for traffic exiting the easement 15 times in 35 hours (less than once every 2 hours)

10: easement & Wendt NB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Stop Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0

10: easement & Wendt NB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Stop Del/Veh (s)	1.8	2.0	0.0	0.5	2.5	0.0	1.5	0.0	3.2	0.0	1.1	0.0

10: easement & Wendt NB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Stop Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.6

10: easement & Wendt SB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Stop Del/Veh (s)	0.0	0.8	0.0	0.0	7.4	0.0	0.0	2.5	0.0	2.4	0.0	0.0

10: easement & Wendt SB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Stop Del/Veh (s)	0.0	0.2	0.0	0.0	0.0	0.0	0.2	5.2	0.0	0.4	0.0	0.0

10: easement & Wendt SB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Stop Del/Veh (s)	0.0	0.0	0.0	7.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9

12: Wendt Avenue & easement EB, Performance by run number

Run Number	1	10	11	12	13	14	15	16	17	18	19	2
Stop Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1

12: Wendt Avenue & easement EB, Performance by run number

Run Number	20	21	22	23	24	25	26	27	28	29	3	30
Stop Del/Veh (s)	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2

12: Wendt Avenue & easement EB, Performance by run number

Run Number	31	32	33	34	35	4	5	6	7	8	9	Avg
Stop Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Maximum delay to EB Wendt Avenue traffic, 4.5 Seconds $(4.5+.6+0.1)/2=2.5+0.1$

Queuing and Blocking Report

Saturday Build Peak Hour

09/27/2020

Intersection: 10: easement & Wendt

Movement	NB	SB
Directions Served	T	T
Maximum Queue (ft)	8	8
Average Queue (ft)	0	0
95th Queue (ft)	5	6
Link Distance (ft)	2	19
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: Wendt Avenue & easement

Movement	EB	SB
Directions Served	LT	L
Maximum Queue (ft)	5	35
Average Queue (ft)	0	6
95th Queue (ft)	5	27
Link Distance (ft)	100	2
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

During the Peak Hour on a Saturday, the maximum queue documented by SimTraffic in 35 hours was 13 feet (8+5) or 1 vehicle. The 95th percentile queue was 10 feet (5+5), also 1 vehicle. The distance between the crosswalk on Wendt Avenue at Palmer Avenue and the easement is 100 feet, sufficient to accommodate 5 vehicles. Therefore, delays to eastbound traffic on Wendt Avenue at the easement will not impact traffic operating conditions at the intersection of Wendt Avenue with palmer Avenue.