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*Chairman*

ANTHONY GIANNICO  
*Vice Chairman*

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**TOWN OF CARMEL  
PLANNING BOARD**



60 McAlpin Avenue  
Mahopac, New York 10541  
Tel. (845) 628-1500 – Ext.190  
[www.ci.carmel.ny.us](http://www.ci.carmel.ny.us)

MICHAEL CARNAZZA  
*Director of Code  
Enforcement*

RICHARD FRANZETTI, P.E.  
*Town Engineer*

PATRICK CLEARY,  
AICP, CEP, PP, LEED AP  
*Town Planner*

**PLANNING BOARD AGENDA  
JANUARY 23, 2019 – 7:00 P.M.**

**MEETING ROOM #2**

**TAX MAP #   PUB. HEARING   MAP DATE   COMMENTS**

**RESOLUTION**

1. McDonald's USA, LLC. – 154 Route 6	86.11-1-22	10/8/18	Amended Site Plan
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**SITE PLAN**

2. Joe Zakon d/b/a 14 Nicole Way LLC – 14 Nicole Way	65.6-1-22	10/8/18	Site Plan
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**MISCELLANEOUS**

3. Multi-Family Housing Zoning Referral			Discussion
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Planning Board

Town of Carmel

60 McAlpin Avenue

Carmel, NY 10541

December 21, 2018

Re: Joe Zakon Property

Site Plan application

Corner of NYS Route 6 & Nicole Way

TM: 65.01-1-22

To Planning Board Chairman and Members,

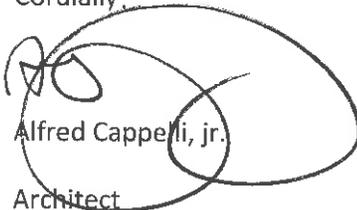
Attached, please find a Site Plan Application for a two building commercial development proposed at the above referenced location.

We have attached for your review, 11 copies of the Application and EAF along with a Project Narrative describing the project along with all of the required submission requirements, including five (5) sets of plans.

We would very much like to be placed on the next available Planning Board agenda to discuss this project with the Board.

If you have any questions or need additional data or information, please do not hesitate to contact our office.

Cordially,



Alfred Cappelli, jr.  
Architect

1136 Route 9

Wappingers Falls, NY

APPLICATION, PROJECT NARRATIVE & EAF

FOR COMMERCIAL DEVELOPMENT

FOR

JOE ZAKON dba

14 NICOLE WAY LLC

Corner of NYS ROUTE 6 & NICOLE WAY

TOWN OF CARMEL

PUTNAM CONTY

NEW YORK

PREPARED BY:

ALFRED CAPPELLI, JR.

ARCHITECT

1136 ROUTE 9

WAPPINGERS FALLS, NY

(845) 632-6500

[ACAPPE2102@AOL.COM](mailto:ACAPPE2102@AOL.COM)

DECEMBER 18,2018

## JOE ZAKON – COMMERCIAL DEVELOPMENT – ROUTE 6

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PROJECT NARRATIVE  
FOR COMMERCIAL DEVELOPMENT  
FOR  
JOE ZAKON dba  
14 NICOLE WAY LLC  
Corner of NYS ROUTE 6 & NICOLE WAY  
TOWN OF CARMEL, NY

DECEMBER 18, 2018

## ZAKON COMMERCIAL PROPERTY

### PROJECT NARRATIVE

#### 1. PROJECT OBJECTIVE

It is the intent of the applicant to construct two separate new buildings as described hereinafter for commercial use along with related infrastructure, including but not limited to parking area, utilities, storm water drainage, water supply, and on site sewage disposal system.

#### 2. APPLICANT

The applicant is Joe Zakon, 14 Nicole Way, LLC., and owner of local business, Optimum Oil and Propane whose current business location is in the Town of Carmel. Mr. Zakon also resides in the Town of Carmel as well.

#### 3. PROJECT LOCATION

The project location is on the southeast corner of the intersection of NYS Route 6 and Nicole Way, in the Town of Carmel, Putnam County, NY and is also identified as TM 65.06-1-22.

#### 4. SITE DESCRIPTION

The site is a corner vacant lot, approximately 201" x 207", approximately 1.417 acres.

The lot is lightly wooded and gradually slopes up from Route 6 up to Nicole Way in the rear

#### 5. ZONING

The zoning of the property is Commercial (C) and allows the uses proposed.

## 6. PROJECT DESCRIPTION / APPLICANTS PROPOSAL

It is the applicant/owners intent to construct two separate buildings on the site.

Building Number 1 would be a 60 x 80 structure with an attached 24 x 24 appendage.

Within the 60 x 80 portion of the building, the owners own operation, Optimum Oil & Propane would occupy this space for the storage of four-five fuel oil delivery trucks.

When in storage at night, the trucks would be empty of fuel oil as required by code and insurance regulations,

Trucks will leave in the morning and go to the terminals to fill up before delivering fuel oil to local residences and businesses.

A small section of the garage will be used for storage of parts and equipment incidental to the fuel oil business for service repairs.

The 24 x 24 appendage to the building will be utilized for offices for the business, used for Mr. Zakon and clerical personnel.

There will be a service counter area for those who may stop by to pay bills in person or the occasional pick up of a small part for their heating system.

This is not intended to be a retail establishment.

There will be 4-5 employees driving the trucks, depending on the season, with the maximum number in the winter and less drivers in the summer, in addition to Mr. Zakon and one secretary. The drivers will be on the road all day, so in reality there will be only two full time occupants.

There will be no oil trucks parked outside of the garage, particularly in the evening.

Business hours will be 8:00 a.m. to 4:30 p.m., monday through friday and 8:00 a.m. to 12:00 noon on saturday. There will be no business hours on sunday or in the evenings.

The owner, however, reserves the right, depending on emergency situations, to occasionally have a fuel oil or service vehicle exit or enter the site beyond the hours noted above, but this

should be on rare occasions.

Please note, that although fuel oil is a necessity in many case 52 weeks per year, there will be fewer deliveries in the off season with the maximum number of satffand vehicles in operation between october and april.

There will no noise generated from idling trucks warming up in the morning as they are being parked in a heated environmental, eliminating the need for long warmups.

There will also be no on site repair of the trucks either outside or inside the buiding. Mr. Zakon has his vehicles serviced elsewhere.

Building number 2 will be a 50 x 90, 4,500 s.f. structure, which is intended to be rented out and broken down into a maximum of three suites.

The intended use of the building wiould be contractors storage for their vehicles, equipment and supplies.

Small contractors today are in need for spaces to store equipment and supplies and their business vehicles.

It is not uncommen today for zoning ordinances to not allow commercial vehicles of any type to be parked in residential districts, at their residences.

This facility will provide for that vehicle storage along with storage of equipment and supplies along with the possibility of a small office for themselves.

There will be no parking of these commercial vehicles outside in the evenings and there will be no outdoor storage of any kind for any exterior contractor storage. Everything must be in the building in the evenings.

The hours of operation will probably be a little longet than the fuel oil business in building 1, perhaps 7:00 a.m. to 6:00 p.m.

There will be no manufacturing allowed on site, inside or outside of the building, but that does not mean that an occasional piece of equipment or material, a pipe for instance, may be cut on site, but thoseactivities will be minimal.

## 7. BUILDING DESIGN

The nature of the building uses suggest a durable material to take the abuse of day to day

activities, hence masonry in the form of poured concrete and concrete block will be utilized for the exterior construction material for the buildings.

The roof will be a gable roof utilizing asphalt shingles as the finished roofing material.

The buildings have been situated and designed to have all activities, the garage doors, the parking, etc., facing Route 6.

The buildings themselves, will, in fact buffer any noise and site lighting from the residences.

Also, the fact that buildings, by virtue of the topography, will be built into the hillside and create a much lower profile and be less imposing to the residential neighborhood.

There will be no windows facing Nicole Way from either building, again to minimize any impacts to the residences.

## 8. SITE UTILITIES

Potable water for the buildings use will be by way of an on site drilled well.

The sanitary system will be composed of an on site sewage disposal system to handle the minimal water use of these two types of buildings and the nature of their use.

Both of the above will require Putnam County Health Department approval.

Storm water will be collected in catch basins discharging into an on site infiltration system which will collect and dissipate the storm water that is created by the newly created impervious areas.

Individual underground electric service will service each of the two buildings.

## 9. OTHER SITE IMPROVEMENTS AND SITE AMENITIES

Other site improvements and amenities will include, but not necessarily limited to:

- asphalt paved driveway and parking area
- concrete and asphalt curbing

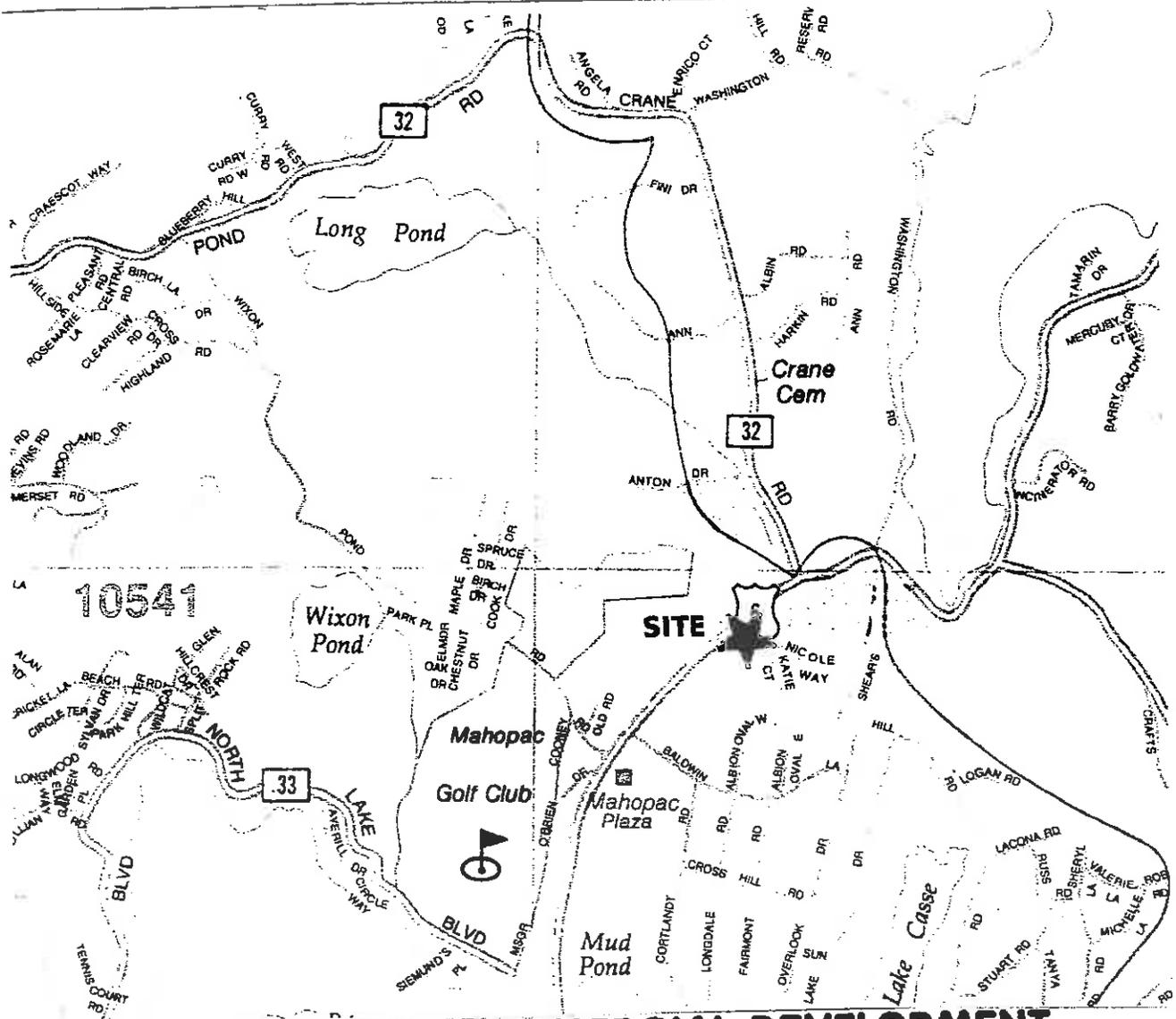
- concrete sidewalks

- landscaping

- site lighting

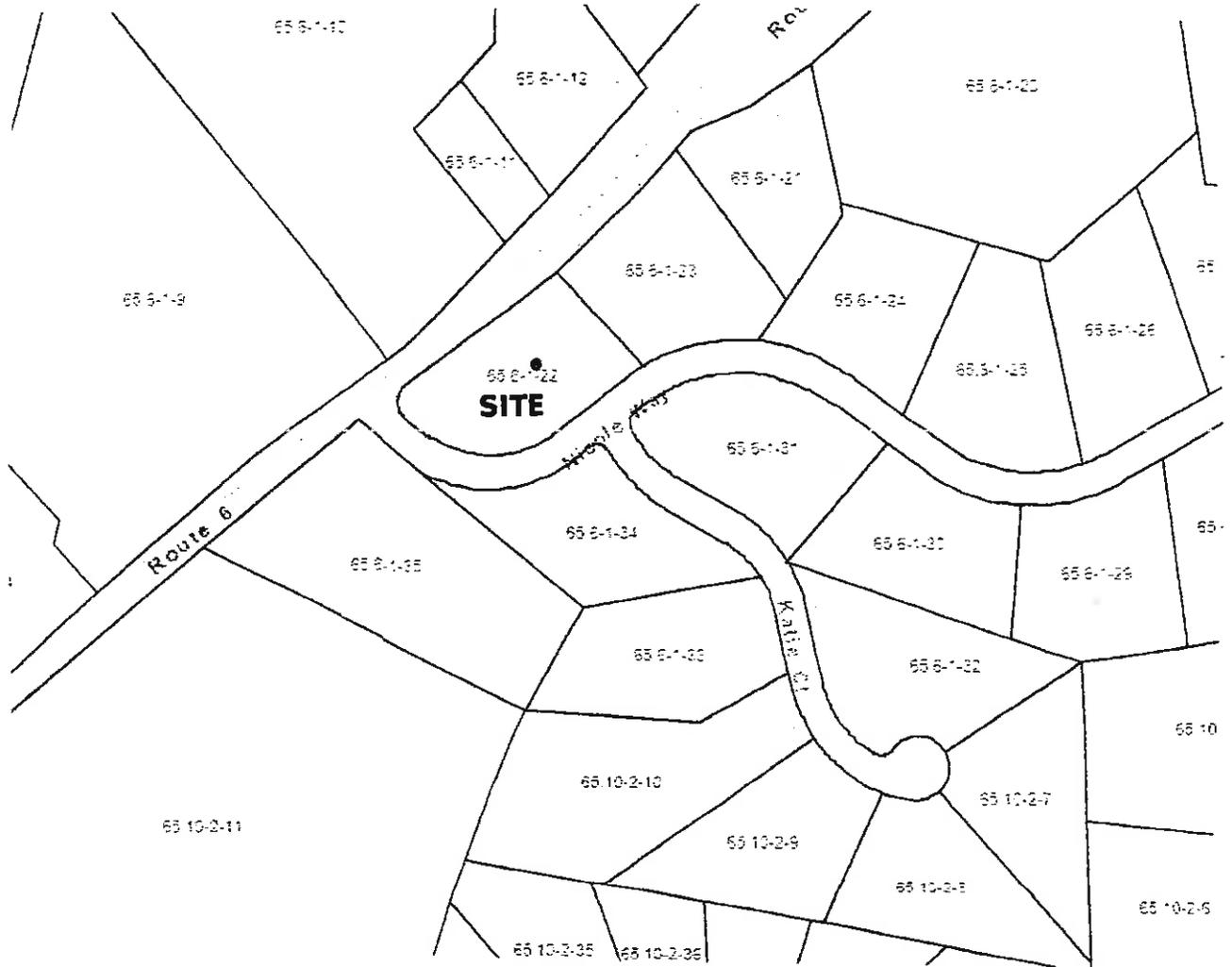
- vinyl fencing to protect, secure and visually obscure and outside storage area for building one for Optimum Oil & Propanes storage for propane canisters and small tanks for residential use.  
This area will be inaccessible to the public

# LOCATION MAP



**JOE ZAKON - COMMERCIAL DEVELOPMENT**  
**14 NICOLE WAY & NYS ROUTE 6**

# AREA MAP



**JOE ZAKON – COMMERCIAL DEVELOPMENT**

**14 NICOLE WAY & NYS ROUTE 6**



# TOWN OF CARMEL SITE PLAN APPLICATION INSTRUCTIONS



The Town of Carmel Planning Board meetings are held twice a month, on the second and fourth Wednesday's, at 7:00 PM at Carmel Town Hall, 60 McAlpin Avenue, Carmel

The submission deadline is 10 days prior to the Planning Board meeting. New site plan applications that have been deemed complete will be placed on the agenda in the order they are received.

**No application will be placed on the agenda that is incomplete**

**Pre-Submission:**

Prior to the formal submission of the site plan, a pre-submission conference may be requested by the applicant to be conducted with representatives from the Town, which may include the Town Planner, Town Engineer, Director of Code Enforcement and/or the Planning Board Attorney. This conference will serve to educate the applicant on the process he/she must follow, clarify the information required to submit a complete site plan application, and to highlight any specific areas of concern. You may arrange a pre-submission conference through the Planning Board Secretary at (845) 628-1500 extension 190.

**Submission Requirements:**

At least 10 days prior to the Planning Board meeting, the site plan application shall be submitted to the Planning Board Secretary as follows:

All site plans shall be signed, sealed and foiled with the title box legible. The application package shall include:

- 11 copies of the Site Plan Application Form, signed and notarized.
- 11 copies of the SEQR Environmental Assessment Form (use of short form or long form shall be determined at pre-submission conference).
- 5 full size sets of the Site Plan (including floor plans and elevations)
- 1 CD (in pdf. format) containing an electronic version of the Site Plan
- 2 copies of the Disclosure Statement
- 11 copies of the Site Plan Completeness Certification Form
- All supplemental studies, reports, plans and renderings.
- 2 copies of the current deed.
- 2 copies of all easements, covenants and restrictions.
- The appropriate fee, determined from the attached fee schedule. Make checks payable to the *Town of Carmel*.

*Rose Yonkowitz* 11/10/18  
 Planning Board Secretary; Date

*Recy DDA* 12/27/18  
 Town Engineer; Date

*POD 01/00/19*  
 1 of 3



# TOWN OF CARMEL SITE PLAN APPLICATION



Per Town of Carmel Code - Section 156 - Zoning

SUBDIVISION INFORMATION			
Application Name: <b>JOE ZAKON</b>		Application # <b>19-0002</b>	Date Submitted: <b>12/21/18</b>
Site Address: No. <b>1A</b> Street: <b>NICOLE WAY</b> Hamlet:			
Property Location: (Identify landmarks, distance from intersections, etc.) <b>SE CORNER OF NYS ROUTE 6 &amp; NICOLE WAY</b>			
Town of Carmel Tax Map Designation: Section <b>69.06</b> Block <b>1</b> Lot(s) <b>22</b>		Zoning Designation of Site: <b>COMMERCIAL (C)</b>	
Property Deed Recorded in County Clerk's Office Date <b>5/9/18</b> Liber <b>207</b> Page <b>364</b>		Liens, Mortgages or other Encumbrances Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Existing Easements Relating to the Site <input checked="" type="checkbox"/> No Yes Describe and attach copies:		Are Easements Proposed? <input checked="" type="checkbox"/> No Yes Describe and attach copies:	
Have Property Owners within a 500' Radius of the Site Been Identified? Yes <input type="checkbox"/> No <input type="checkbox"/> Attached List to this Application Form			
APPLICANT/OWNER INFORMATION			
Property Owner: <b>JOE ZAKON</b>		Phone #: <b>518-632-6500</b>	E: <b>joezakon@gmail.com</b>
Owners Address: No. <b>P.O. Box 1A</b> Street: <b>NICOLE WAY</b> Town: <b>CARMEL</b>		State: <b>NY</b>	Zip: <b>12102</b>
Applicant (if different than owner): <b>SAME AS OWNER</b>		Phone #: <b>518-632-6500</b>	Email: <b>joezakon@gmail.com</b>
Applicant Address (if different than owner): No. <b>P.O. Box 1A</b> Street: <b>NICOLE WAY</b> Town: <b>CARMEL</b>		State: <b>NY</b>	Zip: <b>12102</b>
Individual/ Firm Responsible for Preparing Site Plan: <b>Alfred Cappell, Jr, Architect</b>		Phone #: <b>845-632-6500</b>	Email: <b>ALCAPPE2102@AOL.COM</b>
Address: No. <b>1136</b> Street: <b>Route 9</b> Town: <b>Wappingers Falls, NY</b>		State: <b>NY</b>	Zip: <b>12590</b>
Other Representatives:		Phone #: <b>518-632-6500</b>	Email: <b>joezakon@gmail.com</b>
Owners Address: No. <b>P.O. Box 1A</b> Street: <b>NICOLE WAY</b> Town: <b>CARMEL</b>		State: <b>NY</b>	Zip: <b>12102</b>
PROJECT DESCRIPTION			
Describe the project, proposed use and operation thereof:  <b>Construction of two commercial buildings 60 x 80 and 50 x 90 on vacant commercial parcel at the corner of NYS Route 6 &amp; Nicole way</b>			

# TOWN OF CARMEL SITE PLAN APPLICATION

Lot size: Acres: <u>1.41 ac</u> <u>61,752sf</u> Square Feet:	Square footage of all existing structures (by floor):
# of existing parking spaces:	# of proposed parking spaces:
# of existing dwelling units: <u>0</u>	# of proposed dwelling units: <u>0</u>
Is the site served by the following public utility infrastructure:	
<ul style="list-style-type: none"> <li>▪ Is project in sewer district or will private septic system(s) be installed? <u>private</u></li> <li>▪ If yes to Sanitary Sewer answer the following: <ul style="list-style-type: none"> <li>▶ Does approval exist to connect to sewer main? Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> <li>▶ Is this an in-district connection? _____ Out-of district connection? _____</li> <li>▶ What is the total sewer capacity at time of application? _____</li> <li>▶ What is your anticipated average and maximum daily flow _____</li> </ul> </li> </ul>	
For Town of Carmel Town Engineer	
<ul style="list-style-type: none"> <li>▪ Water Supply      Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> <li>    If Yes: <ul style="list-style-type: none"> <li>▶ Does approval exist to connect to water main? Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> <li>▶ What is the total water capacity at time of application? _____</li> <li>▶ What is your anticipated average and maximum daily demand _____</li> </ul> </li> <li>▪ Storm Sewer      Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> <li>▪ Electric Service      Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> <li>▪ Gas Service      Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> <li>• Telephone/Cable Lines      Yes: <input type="checkbox"/> No: <input type="checkbox"/></li> </ul>	
For Town of Carmel Town Engineer	
Water Flows <u>NA</u> <u>12/27/18</u>	
Sewer Flows <u>NA</u> <u>12/27/18</u>	
Town Engineer; Date	
What is the predominant soil type(s) on the site?	What is the approximate depth to water table? <u>NONE ENCOUNTERED TO 7 FT.</u>
Site slope categories:	15-25% <u>100</u> %      25-35% <u>0</u> %      >35% <u>0</u> %
Estimated quantity of excavation:	Cut (C.Y.) _____      Fill (C.Y.) _____
Is Blasting Proposed	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> Unknown: <input type="checkbox"/>
Is the site located in a designated Critical Environmental Area?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Does a curb cut exist on the site?      Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Are new curb cuts proposed?      Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
What is the sight distance? Left <u>250</u> Right <u>100</u>	
Is the site located within 500' of:	
• The boundary of an adjoining city, town or village	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
• The boundary of a state or county park, recreation area or road right-of-way	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
• A county drainage channel line.	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
• The boundary of state or county owned land on which a building is located	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>

## TOWN OF CARMEL SITE PLAN APPLICATION

Is the site listed on the State or Federal Register of Historic Place (or substantially contiguous)  
 Yes:  No:

Is the site located in a designated floodplain?  
 Yes:  No:

Will the project require coverage under the Current NYSDEC Stormwater Regulations  
 Yes:  No:

Will the project require coverage under the Current NYCDEP Stormwater Regulations  
 Yes:  No:

Does the site disturb more than 5,000 sq ft  
 Yes:  No:

Does the site disturb more than 1 acre  
 Yes:  No:

Does the site contain freshwater wetlands?  
 Yes:  No:

Jurisdiction:  
 NYSDEC:  Town of Carmel:

*If present, the wetlands must be delineated in the field by a Wetland Professional, and survey located on the Site Plan.*

Are encroachments in regulated wetlands or wetland buffers proposed? Yes:  No:

Does this application require a referral to the Environmental Conservation Board? Yes:  No:

Does the site contain waterbodies, streams or watercourses? Yes:  No:

Are any encroachments, crossings or alterations proposed? Yes:  No:

Is the site located adjacent to New York City watershed lands? Yes:  No:

Is the project funded, partially or in total, by grants or loans from a public source?  
 Yes:  No:

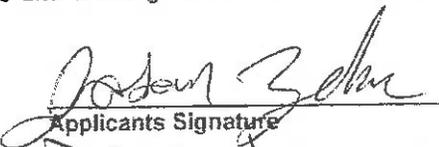
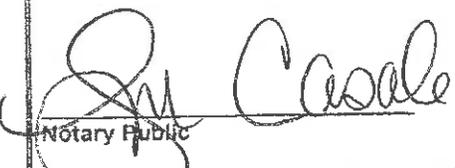
Will municipal or private solid waste disposal be utilized?  
 Public:  Private:

Has this application been referred to the Fire Department? Yes:  No:

What is the estimated time of construction for the project?  
 Spring 2019

ZONING COMPLIANCE INFORMATION			
Zoning Provision	Required	Existing	Proposed
Lot Area	40,500 sf	61,752 sf	61,572 sf
Lot Coverage	32% 15,525 sf	-	19.9% 9,876 sf
Lot Width	200	200	300
Lot Depth	200	200	200
Front Yard	40	-	59
Side Yard	25	-	49
Rear Yard	40	-	55' x 42'
Minimum Required Floor Area			9,876 sf
Floor Area Ratio			
Height	35'	-	25'
Off-Street Parking	10	-	10
Off-Street Loading	1	-	1

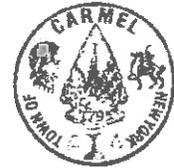
## TOWN OF CARMEL SITE PLAN APPLICATION

Will variances be required? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	If yes, identify variances:
<b>PROPOSED BUILDING MATERIALS</b>	
Foundation	POURED CONCRETE
Structural System	CONC BLOCK EXT. WALLS W/ ROOF TRUSS
Roof	ASPHALT SHINGLES
Exterior Walls	CONCRETE BLOCK & GIPS
<b>APPLICANTS AGREEMENT</b>	
I hereby depose and certify that all the above statements and information, and all statements and information contained in the supporting documents and drawings attached hereto are true and correct.	
<u>Joseph Zekan</u> Applicants Name	 Applicants Signature
Sworn before me this <u>20</u> day of <u>December</u> 20 <u>18</u>	
 Notary Public	

**SUE CASALE**  
 Notary Public State of New York  
 Qualified in Westchester County  
 Reg. No. 01CA6234199  
 My Commission expires Jan. 18, 2019



# TOWN OF CARMEL SITE PLAN COMPLETENESS CERTIFICATION FORM



All Site Plans submitted to the Planning Board for review shall include the following information and details, as set forth in Section 156-61 B of the Town of Carmel Zoning Ordinance.

This form shall be included with the site plan submission

	Requirement Data	To Be Completed by the Applicant	Waived by the Town
1	Name and title of person preparing the site plan	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
2	Name of the applicant and owner (if different from applicant)	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
3	Original drawing date, revision dates, scale and north arrow	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
4	Tax map, block and lot number(s), zoning district	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
5	All existing property lines, name of owner of each property within a 500' radius of the site	<input type="checkbox"/>	<input type="checkbox"/>
6	Contour lines at two-foot intervals, grades of all roads, driveways, sanitary and storm sewers	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
7	The location of all water bodies, streams, watercourses, wetland areas, wooded areas, rights-of-way, streets, roads, highways, railroads, buildings, structures	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
8	The location of all existing and proposed easements	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
9	The location of all existing and proposed structures, their use, setback dimensions, floor plans, front, side and rear elevations, buildable area.	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
10	On site circulation systems, access, egress ways and service roads, emergency service access and traffic mitigation measures	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
11	Sidewalks, paths and other means of pedestrian circulation	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
12	On-site parking and loading spaces and travel aisles with dimensions	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
13	The location, height and type of exterior lighting fixtures	<input checked="" type="checkbox"/> ✓	<input type="checkbox"/>
14	Proposed signage	<input type="checkbox"/>	<input type="checkbox"/>
15	For non-residential uses, an estimate of the number of employees who will be using the site, description of the operation, types of products sold, types of machinery and equipment used	<input checked="" type="checkbox"/> ✓ <i>NOT on drawing</i>	<input type="checkbox"/>



# TOWN OF CARMEL SITE PLAN COMPLETENESS CERTIFICATION FORM

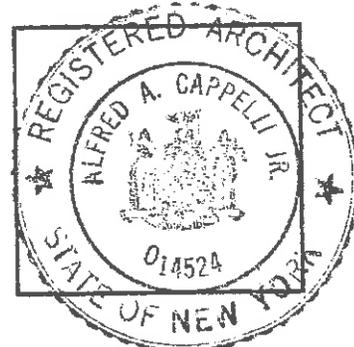


	Requirement Data	To Be Completed by the Applicant	Waived by the Town
16	The location of clubhouses, swimming pools, open spaces, parks or other recreational areas, and identification of who is responsible for maintenance	<input type="checkbox"/> <i>NA</i>	<input type="checkbox"/>
17	The location and design of buffer areas, screening or other landscaping, including grading and water management. A comprehensive landscaping plan in accordance with the Tree Conservation Law	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18	The location of public and private utilities, maintenance responsibilities, trash and garbage areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19	A list, certified by the Town Assessor, of all property owners within 500 feet of the site boundary	<input type="checkbox"/>	<input type="checkbox"/>
20	Any other information required by the Planning Board which is reasonably necessary to ascertain compliance with this chapter	<input type="checkbox"/>	<input type="checkbox"/>

*??*

Applicants Certification (to be completed by the licensed professional preparing the site plan:

I Alfred Cappelli Jr hereby certify that the site plan to which I have attached my seal and signature, meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:



Professionals Seal

*Jim Zuder*  
Signature - Applicant

12/20/18  
Date

*Jim Zuder*  
Signature - Owner

12/20/18  
Date



# TOWN OF CARMEL SITE PLAN COMPLETENESS CERTIFICATION FORM



Town Certification (to be completed by the Town)

I \_\_\_\_\_ hereby confirm that the site plan meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

Rose Yonchetti

Signature - Planning Board Secretary

1/10/19  
Date

[Signature]

Signature - Town Engineer

1/10/19  
Date

# Short Environmental Assessment Form

## Part 1 - Project Information

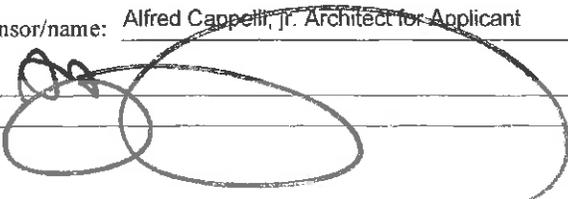
### Instructions for Completing

**Part 1 – Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

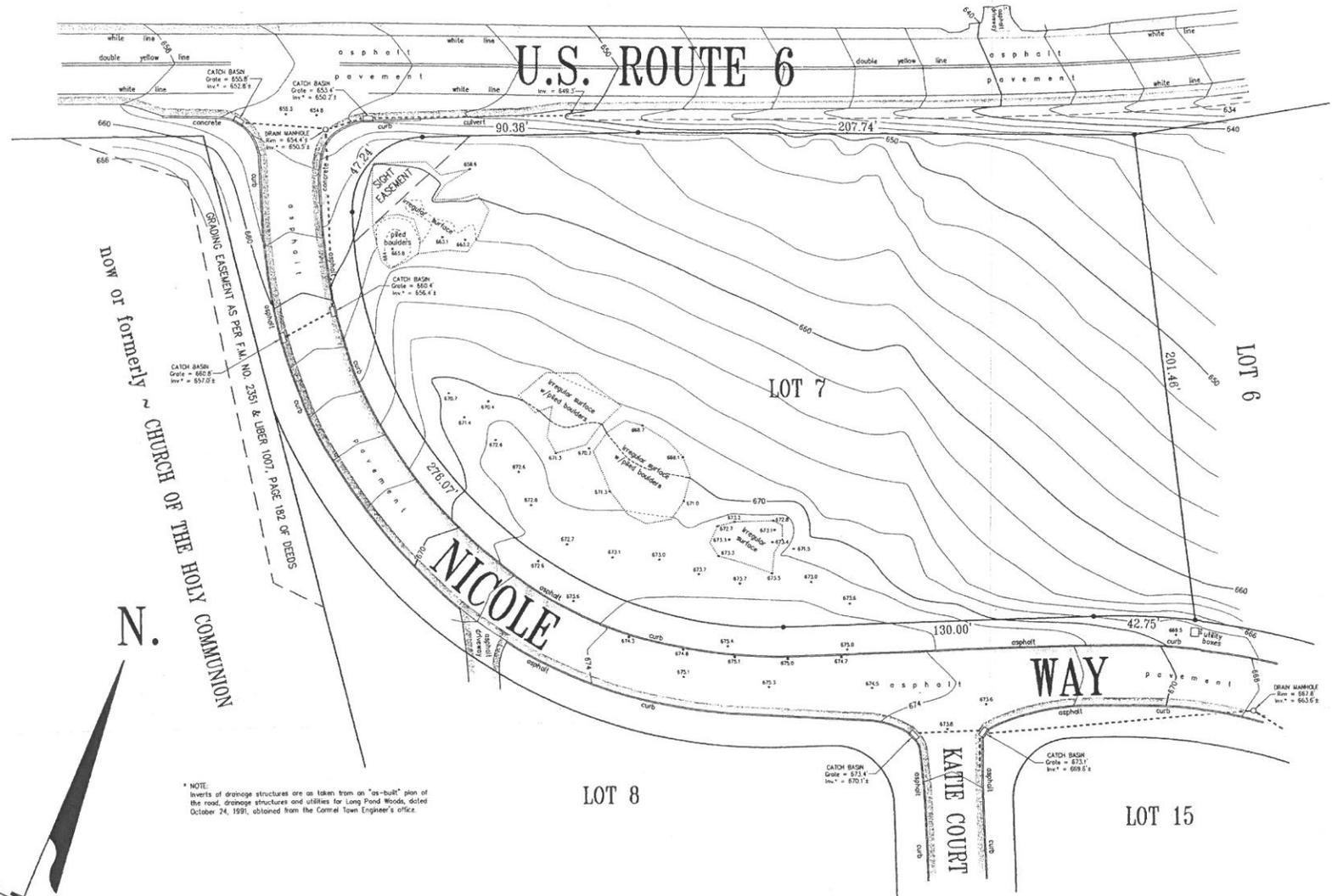
Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information			
Name of Action or Project: Joe Zakon Commercial Building			
Project Location (describe, and attach a location map): 14 Nicole Way, corner of NYS Route 6 & Nicole Way, TM#: 65.06-1-22			
Brief Description of Proposed Action: Construction of two commercial buildings Bldg. 1 - 60 x 80 plus 24 x 24 - 5,376 sf Bldg. 2 - 50 x 90 - 4,500 sf			
Name of Applicant or Sponsor: Joe Zakon dba 14 Nicole Way LLC		Telephone: _____	
		E-Mail: _____	
Address: P.O. Box 14			
City/PO: Mahopac		State: NY	Zip Code: 10541
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input checked="" type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Planning Board for Site Plan, Building Dept. for Building Permit, Putnam County Health Dept. for Water and Sewage			YES <input checked="" type="checkbox"/>
3. a. Total acreage of the site of the proposed action?			1.41 acres
b. Total acreage to be physically disturbed?			0.5 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?			1.41 acres
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input type="checkbox"/> Parkland			

	NO	YES	N/A
5. Is the proposed action, a. A permitted use under the zoning regulations? b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	<input type="checkbox"/>	NO	YES <input checked="" type="checkbox"/>
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
8. a. Will the proposed action result in a substantial increase in traffic above present levels? b. Are public transportation services available at or near the site of the proposed action? c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
	<input checked="" type="checkbox"/>		<input type="checkbox"/>
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ new drilled well to serve buildings	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ new sewage disposal systems to be constructed to service the two buildings	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?  b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
	<input checked="" type="checkbox"/>		<input type="checkbox"/>
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?  b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____	<input checked="" type="checkbox"/>	NO	YES <input type="checkbox"/>
	<input checked="" type="checkbox"/>		<input type="checkbox"/>

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Will storm water discharges flow to adjacent properties?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____		
_____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____		
_____		
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____		
_____		
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____		
_____		
<b>I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b>		
Applicant/sponsor/name: <u>Alfred Cappelli, Jr. Architect for Applicant</u> Date: <u>12/18/18 rev. 1/8/19</u>		
Signature:  Title: <u>project architect</u>		





ROW of formerly ~ CHURCH OF THE HOLY COMMUNION

\* NOTE:  
 Inverts of drainage structures are as taken from an "as-built" plan of the road, drainage structures and utilities for Long Pond Woods, dated October 24, 1991, obtained from the Carmel Town Engineer's office.

**EXISTING CONDITIONS SURVEY**

SCALE: 1 inch = 20 feet

EXISTING CONDITIONS SURVEY AS PREPARED BY BAXTER LAND SURVEYING, P.C. DATE: MAY 4, 2018.

REVISIONS	BY

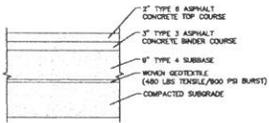
**ALFRED A. CAPPELLI, JR., AIA**  
 ARCHITECT  
 1136 ROUTE 9 WAPPINGERS FALLS, N.Y. 12590  
 Phone: (518) 531-0500  
 acappelli@aol.com

PROPOSED NEW RETAIL AND VEHICLE STORAGE BUILDING FOR  
**JOE ZAKON**  
 CORNER OF ROUTE 6 & NICOLE WAY TOWN OF CAMEL, NY

**EXISTING CONDITIONS SURVEY**

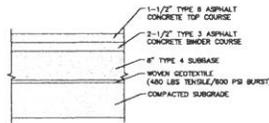
DATE	10/8/18
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OF SHEETS	





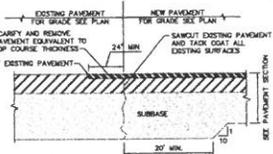
**NOTES:**

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION, JANUARY 1, 2003, AND ALL ADDENDA THERETO, THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
2. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 - SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 403-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 303-EXCAVATION AND EMBARMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

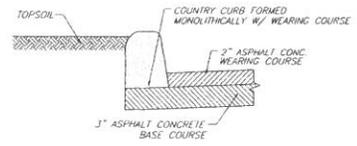


**NOTES:**

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION, JANUARY 1, 2003, AND ALL ADDENDA THERETO, THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
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3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 403-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 303-EXCAVATION AND EMBARMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

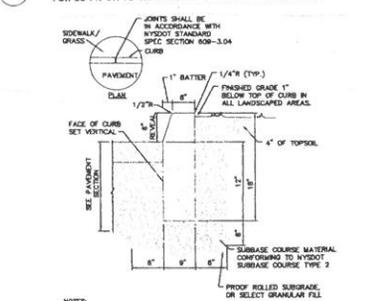


**3 PAVEMENT TRANSITION @ SITE ENTRANCE**



**4 ASPHALT CURB DETAIL**

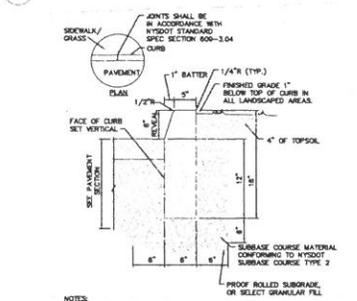
**1 PAVING DETAIL @ SITE ENTRANCE**



**NOTES:**

1. CONCRETE CURBS SHALL BE IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 404.
2. PRECAST CONCRETE CURBS MAY BE SUBSTITUTED WHEN ALTERNATE CONSTRUCTION DETAILS ARE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

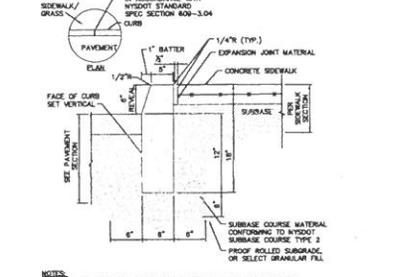
**2 PAVING DETAIL @ LOT INTERIOR**



**NOTES:**

1. CONCRETE CURBS SHALL BE IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 404.
2. PRECAST CONCRETE CURBS MAY BE SUBSTITUTED WHEN ALTERNATE CONSTRUCTION DETAILS ARE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

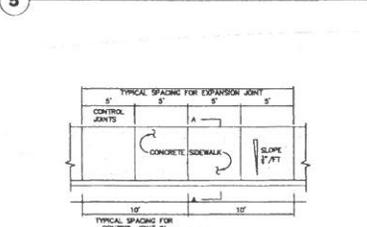
**3 PAVEMENT TRANSITION @ SITE ENTRANCE**



**NOTES:**

1. CONCRETE CURBS SHALL BE IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 404.
2. PRECAST CONCRETE CURBS MAY BE SUBSTITUTED WHEN ALTERNATE CONSTRUCTION DETAILS ARE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

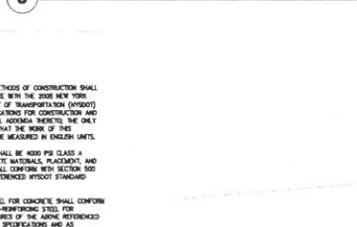
**5 CONCRETE CURB @ SITE ENTRY**



**NOTES:**

1. 1/4" SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.

**6 CONCRETE CURB @ SITE INTERIOR**



**NOTES:**

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE 2003 NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS AND ALL ADDENDA THERETO, THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
2. ALL CONCRETE SHALL BE 4000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 302 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
3. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 308-REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS OTHERWISE CALLED OUT IN THE DRAWINGS.
4. ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH.
5. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 30'-0" ON CENTER OR AS INDICATED ON PLANS.
6. JOINTS SHALL NOT BE SAW CUT.
7. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SURFLOUNT"/"SURFLOUNT" 90-2000 WHETHER BRUSH APPLIED OR BY AIR. BRUSH APPLIED SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
8. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
9. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 303-EXCAVATION AND EMBARMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
10. ALL WORK SHALL CONFORM WITH SECTION 309-GENERIC OPERATIONS AND DETAIL PLANS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

**7 CONCRETE CURB @ SIDEWALK**



**NOTES:**

1. CONCRETE CURBS SHALL BE IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 404.
2. PRECAST CONCRETE CURBS MAY BE SUBSTITUTED WHEN ALTERNATE CONSTRUCTION DETAILS ARE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

**8 VINYL STOCKADE FENCE DETAIL**



**9 CONCRETE SIDEWALK DETAIL**



**NOTES:**

1. ALL DISTANCES SUBJECT TO CURRENT ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE W/ ADA STANDARDS.

**10 PAVEMENT MARKING**



**11 SINGLE POST SIGN MOUNTING**



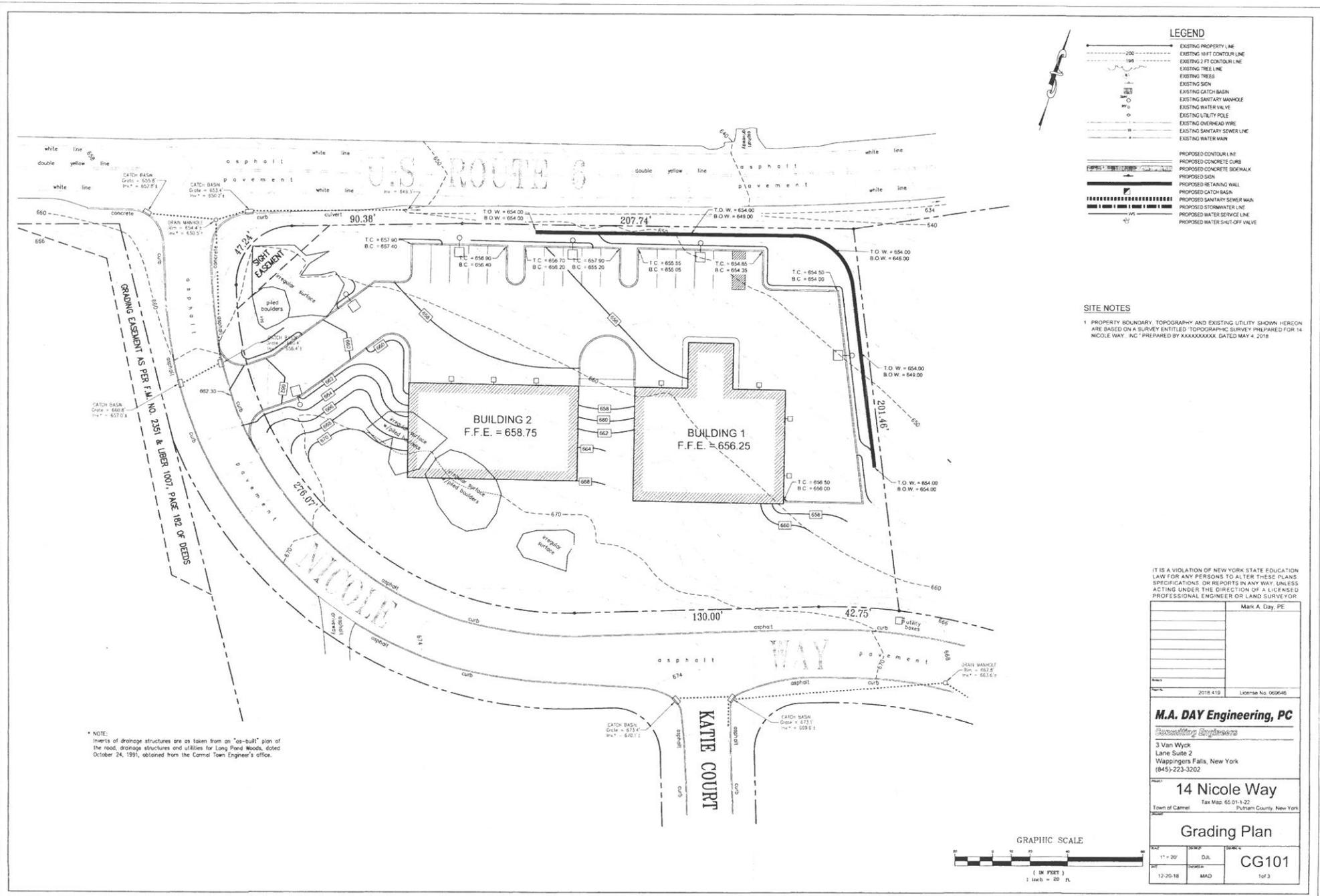
**NOTES:**

1. SIGN MOUNTING HEIGHT SHALL BE A MINIMUM OF 7'. MINIMUM MOUNTING HEIGHT MAY BE ADJUSTED ONLY IN ACCORDANCE WITH PROVISIONS OUTLINED IN "TRUCK CHAPTER UNIFORM TRAFFIC CONTROL DEVICES".
2. SIGN POST SHALL BE IN ACCORDANCE W/ NYSDOT STANDARD SPEC SECTION 730.

SIGN SCHEDULE					
SIGN NO.	SIGN TYPE	NUMBER	SIZE	COLORS	LEGEND
1	NO PARKING ANY TIME	M12-1	24"x24"	BLUE	WHITE
2	NO PARKING ANY TIME	P1-1C (ONE ARROWS)	12"x18"	WHITE	RED
3	STOP	R1-18	24"x24"	RED	WHITE

**SIGNAGE NOTES:**

1. ALL SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, SECTION 840 AND THE CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK (NYSDOT) TITLE 17-TRANSPORTATION VOLUME 8-CHAPTER V "UNIFORM TRAFFIC CONTROL DEVICES".



**LEGEND**

---	EXISTING PROPERTY LINE
- - - -	EXISTING 10 FT CONTOUR LINE
- · - · -	EXISTING 2 FT CONTOUR LINE
---	EXISTING TREE LINE
~	EXISTING TREES
---	EXISTING SLOPE
---	EXISTING CATCH BASIN
---	EXISTING SANITARY MANHOLE
---	EXISTING WATER VALVE
---	EXISTING UTILITY POLE
---	EXISTING OVERHEAD WIRE
---	EXISTING SANITARY SEWER LINE
---	EXISTING WATER MAIN
---	PROPOSED CONTOUR LINE
---	PROPOSED CONCRETE CURB
---	PROPOSED CONCRETE SIDEWALK
---	PROPOSED SLOPE
---	PROPOSED RETAINING WALL
---	PROPOSED CATCH BASIN
---	PROPOSED SANITARY SEWER MAIN
---	PROPOSED STORMWATER LINE
---	PROPOSED WATER SERVICE LINE
---	PROPOSED WATER SHUT-OFF VALVE

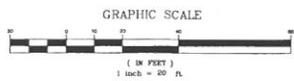
**SITE NOTES**

1. PROPERTY BOUNDARY, TOPOGRAPHY AND EXISTING UTILITY SHOWN HEREON ARE BASED ON A SURVEY ENTITLED "TOPOGRAPHIC SURVEY PREPARED FOR 14 NICOLE WAY, INC." PREPARED BY XXXXXXXXX, DATED MAY 4, 2018.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS SPECIFICATIONS OR REPORTS IN ANY WAY UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR

Mark A. Day, PE	
2018 419 License No. 069646	
<b>M.A. DAY Engineering, PC</b>	
Consulting Engineers	
3 Van Wyck Lane Suite 2 Wappingers Falls, New York (845)-223-3202	
14 Nicole Way	
Tax Map: 55-01-1-22 Putnam County, New York	
<b>Grading Plan</b>	
DATE: 11-20-18	DESIGNER: MAD
DATE: 12-20-18	DESIGNER: MAD
<b>CG101</b>	
1 of 3	

\* NOTE:  
Inverts of drainage structures are as taken from an "as-built" plan of the road, drainage structures and utilities for Long Pond Woods, dated October 24, 1991, obtained from the Cornell Town Engineer's office.





**L400 Series**

**L400 Series**  
L401/L402 Models  
LED Street and Area Light

The L400 Series captures the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. The L400 Series is the better alternative for traditional street and area lighting with quick payback and improved performance.

**Applications:** Roadway, parking lots, walkways and general area spaces.

**Warranty:**

- Ten year limited warranty.

0.1°  
at beam  
10 ft  
100 ft

Model	Quantity	Power	Color	Distribution	Control System	Height	Foot Candles
L401	1	75W	4000K	12 Type 1	10-0-100 (Dimming)	18' Street	100-170FC
L402	1	150W	4000K	15 Type 1	10-0-100 (Dimming)	24' Street	100-170FC

**Standard Features:**

- Standard 7 Pin Photocell (see ANSI C136.41)
- Standard 100/1000 Surge Suppression Device (default factory for 20KV / 20KA region)
- Terminal block accepts 14-8 AWG conductors (Line, Neutral, Ground) (consult factory for 600V, 85A, 14-2AWG terminal block)
- Two Ball Mounting accommodates 1 1/4" NPT or 2" NPT horizontal bases (pre-configured for 2" NPT)
- Integral 1.8 adjustment steps 15°
- Ball joint
- Top-Lock Entry
- Input Voltage 120-277V, 50/60Hz
- Power Factor > 0.9 at full load and Total Harmonic Distortion < 20% at full load
- Ambient Operating Temperature 40°C to +50°C

DLG LISTED

1 POLE MOUNTED LIGHT FIXTURE  
NOT TO SCALE

**L400 Series**

**L400 Series**  
L401/L402 Models  
LED Street and Area Light

**Performance Data**

**Lumen Output:**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data are considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end user environment and application. Actual wattage may differ by +/- 10%. Contact factory for performance data on any configurations not shown here.

Model	LEDs	Current	Power	Beam Type	30k (3000K, FC/ft²)			40k (4000K, FC/ft²)		
					Lumens	B.U.	CFM	Lumens	B.U.	CFM
L401	10	0.7 A	25 W	12 Type 1	1000	1.0	1.0	1200	1.2	1.2
					1000	1.0	1.0	1200	1.2	1.2
L402	15	1.0 A	45 W	15 Type 1	1500	1.5	1.5	1800	1.8	1.8
					1500	1.5	1.5	1800	1.8	1.8

**Electrical Data:**

Model	LED	LED Type	Power	Operating Current (A)
L401	10	2835	25W	0.70
L402	15	2835	45W	1.00

**Lumen Ambient Temperature (SAT) Multipliers:**

Ambient Temp	Multiplier
25°C	1.00
30°C	0.90
35°C	0.80
40°C	0.70

**Luminaire Lumen Maintenance Factors (LMF)**

100% lifetime luminaire lumen maintenance is guaranteed for the following period of 100,000 hours based on 10,000 hours of LED testing based on IESNA LM-80 test and extrapolated to 100,000 hours (L70 @ 100,000h).

Model	LED	LED Type	Power	Operating Current (A)
L401	10	2835	25W	0.70
L402	15	2835	45W	1.00

**Accessories (sold separately):**

Category #	Description
LCPCW	LED compatible external warm & cool mount elec. trace glazer/cover

2 WALL MOUNTED LIGHT FIXTURE  
NOT TO SCALE

**HOWARD LIGHTING PRODUCTS** Specification Sheet **MWP**

**Medium Wall Pack - LED**

**Features:**

- One piece die cast aluminum housing and hinged, removable die-cast aluminum door
- One piece silicone gasket with the optical chamber
- Housing has a standard bronze finish
- Biostatic molded glass lens
- 1/2" conduit access, surface, top, or rear knockouts
- Photocell, photocell and LUL tested for wet locations
- LED driver and electrical components are mounted to the die-cast housing for optimal heat sinking and operating efficiency
- UL recognized integral LED electronic driver is Class 2 rated for 120-277V, 50/60Hz
- High output LEDs provide 80+ CRI at 5000+ K CCT
- The LED operates delivers on average 170k of lumen maintenance @ 70% at 60,000 hours
- Suitable for ambient temperature up to 55°C (131°F)
- 5 year warranty

**Classic look - modern performance**

DLG LISTED

**Ordering Information:** Select the Model, Color, Configuration, and Factory Installed Accessories.

Model	Color	Configuration	Factory Installed Accessories
MWP	2835	2835 LED MV	2835 LED MV
MWP	4000	4000 LED MV	4000 LED MV
MWP	5000	5000 LED MV	5000 LED MV

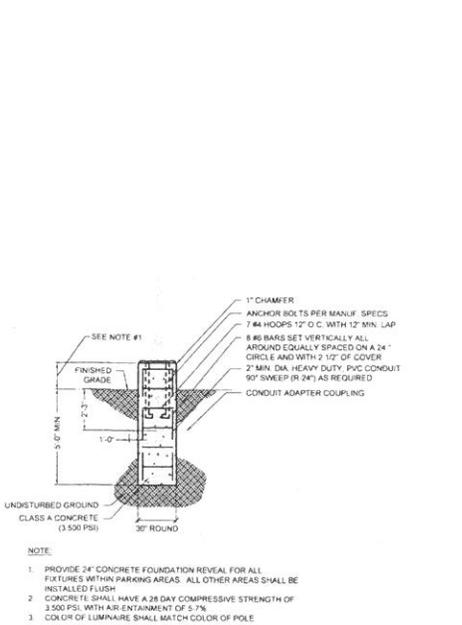
**Applications:** Ideal for parking facilities, entry ways, perimeter/pathway lighting for underpasses.

**Dimensions:** 14.2" H, 14.2" W, 4.5" D.

**Accessories (sold separately):**

Category #	Description
LCPCW	LED compatible external warm & cool mount elec. trace glazer/cover

3 LIGHT POLE BASE DETAIL  
NOT TO SCALE



3 LIGHT POLE BASE DETAIL  
NOT TO SCALE

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Mark A. Day, PE

2018.418 License No. 061645

**M.A. DAY Engineering, PC**

3 Van Wyck Lane Suite 2 Wappingers Falls, New York (845)-223-3202

14 Nicole Way  
Tax Map 65-01-1-22  
Pleasant County, New York

**Lighting Details**

DATE	BY	CHKD.	APP'D.
As Noted	DJL		
12-20-18	MAD		

**LL501**

3 of 3

TRAFFIC STUDY  
FOR COMMERCIAL DEVELOPMENT  
FOR  
JOE ZAKON dba  
14 NICOLE WAY LLC  
Corner of NYS ROUTE 6 & NICOLE WAY  
TOWN OF CARMEL, NY

DECEMBER 18, 2018



Engineers  
Planners  
Surveyors  
Landscape Architects  
Environmental Scientists

400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
T: 914.347.7500  
F: 914.347.7266  
www.maserconsulting.com

July 30, 2018

VIA E-MAIL

Mr. Joe Zakon  
14 Nicole Way Inc.  
P.O. Box 14  
Mahopac, NY 10541

Re: Proposed Commercial Building  
14 Nicole Way and U.S. Route 6  
Town of Carmel, New York  
MC Project No. 18004114A

Dear Mr. Zakon:

As requested, Maser Consulting P.A. has completed our traffic evaluation for the above referenced site (Figure No. 1), which is proposed to be developed to include an approximately 4,000 square foot retail building and an adjacent 4,800 square foot vehicle storage building. The following describes the tasks undertaken in completing our evaluation.

1. Existing Traffic Volumes and Roadway Conditions (*Figures No. 2 and 3*)

Turning movement traffic counts were collected at the intersection of NYS Route 6 and Nicole Way on July 25<sup>th</sup> and 26<sup>th</sup> of 2018 during the weekday AM and PM peak hours to identify existing traffic volumes and traffic patterns. The data was also compared with historical data from the New York State Department of Transportation (NYSDOT) for Route 6 and also Nicole Way. These were also used to adjust for any seasonal variation. The AM and PM peak hour turning movement traffic volumes are shown on the attached, Figures No. 2 and 3.

At the time of the traffic counts, roadway conditions, including lane widths and posted speed limits, were also observed. At this location, Nicole Way has an uncontrolled "T" intersection with U.S. Route 6. The pavement width of Nicole Way is approximately 24 feet and consists of no center line striping and has asphalt curbs on either side.

U.S. Route 6 at this location consists of one lane in each direction plus a paved shoulder. It has a double yellow centerline and a white fog line on each side of the roadway. Located in the southwest corner of the intersection is the Holy Communion Episcopal Church.



The sight distance looking east exiting from Nicole Way is currently slightly restricted due to excess of vegetation, which could be cleared along the property frontage and within the Route 6 R.O.W. to improve sight lines. Sight distance looking to the west is fairly clear except for some minor pruning of existing branches. Note that the speed limit heading west of the intersection is posted at 40 MPH and the speed limit of 45 MPH is posted heading eastbound just in advance of the intersection. The proposed access location is on Nicole Way, east of U.S. Route 6 and the sight distances will have to be improved as part of the construction to clear existing vegetation.

The remaining development along Nicole Way is single family residential. It should also be noted that Nicole Way connects with Shear Hill Road and other existing residential areas to the east and south.

2. Projected Traffic Volumes (*Figures No. 4 and 5*)

The Existing Traffic Volumes were increased by 2% to account for background growth. These volumes are shown on Figure No. 4 and 5 for the AM and PM peak hours, respectively.

3. Site Traffic Generation (*Table No. 1*)

Estimates of expected traffic generation for the site were computed based on data published by the Institute of Transportation Engineers (ITE) as contained in their report entitled *Trip Generation, 10<sup>th</sup> Edition, 2017*. Table No. 1 summarized the expected trip generation during the AM and PM peak hours.

4. Arrival and Departure Distributions (*Figures No. 6 and 7*)

Based on a review of the existing patterns on the roadway and the location of the site access, an arrival and departure distribution was developed, which is shown on Figures No. 6 and 7.

5. Build Traffic Volumes (*Figures No. 8, 9, 10, and 11*)

The site generated traffic volumes shown on Table No. 1 were assigned to the driveway and adjacent intersection. The expected site generated traffic volumes are shown on Figures No. 8 and 9 for the AM and PM peak hours. These traffic volumes were combined with the existing traffic volumes to obtain the Build traffic volumes, which are shown on Figures No. 10 and 11, respectively. The site driveway was analyzed to determine the Levels of Service, which indicated a Level of Service "A" during peak hours.



Mr. Joe Zakon  
MC Project No. 18004114A  
July 30, 2018  
Page 3 of 3

6. Summary of Findings and Recommendations

As indicated previously, in order to provide adequate sight distances, clearing of vegetation along the Nicole Way frontage will be required at the U.S. Route 6 intersection, as well as at the driveway connection to Nicole Way to provide the minimum sight distances.

Based on a review of the above information, with the completion of the sight distance and striping improvements identified above, the traffic generated by proposed development should be accommodated on the adjacent roadway system.

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A handwritten signature in blue ink, appearing to read 'Philip J. Grealy', is written over the typed name below.

Philip J. Grealy, Ph.D., P.E.  
Principal/Department Manager

PJG/ces  
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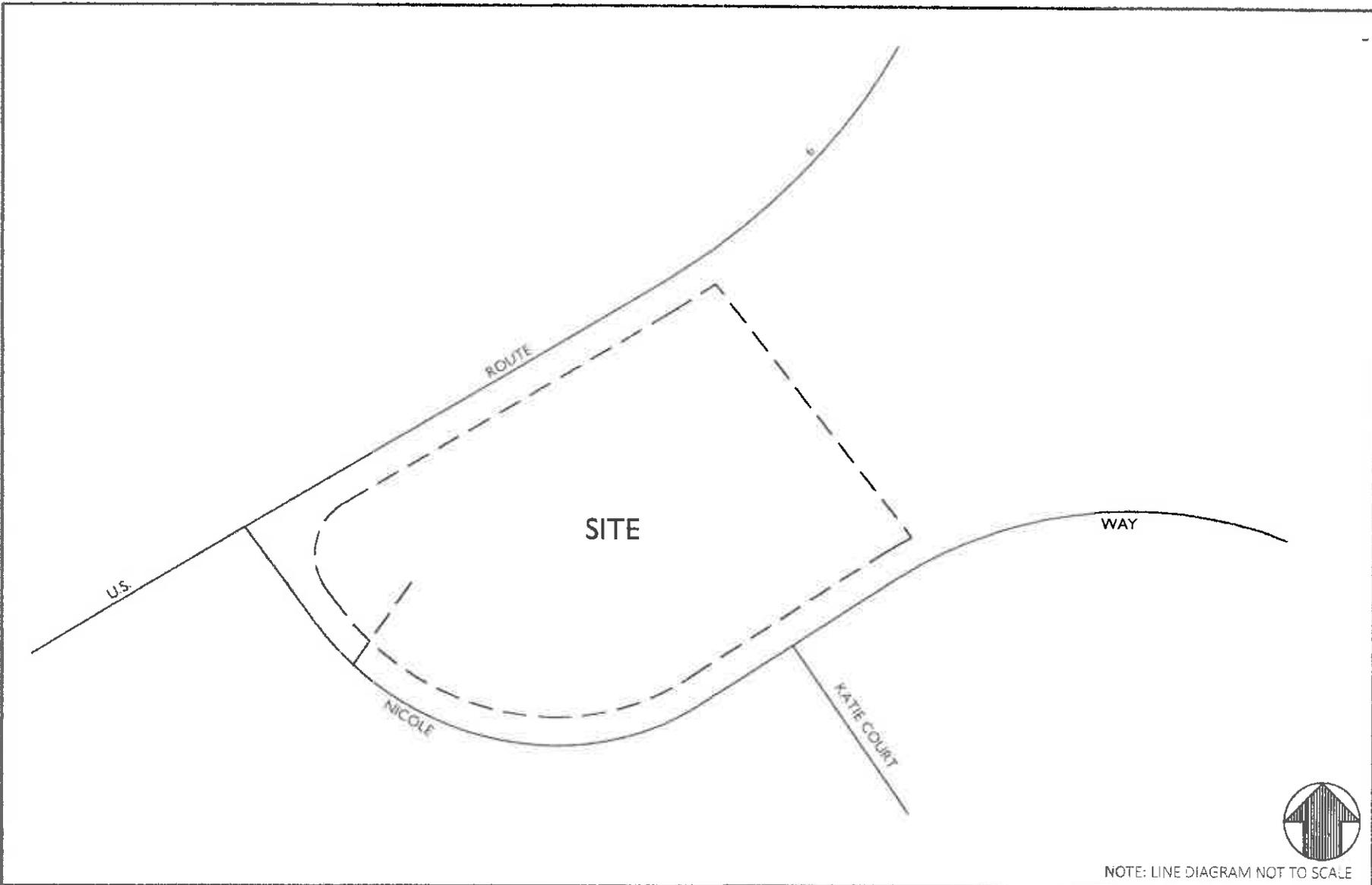


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**APPENDIX A**

**FIGURES**



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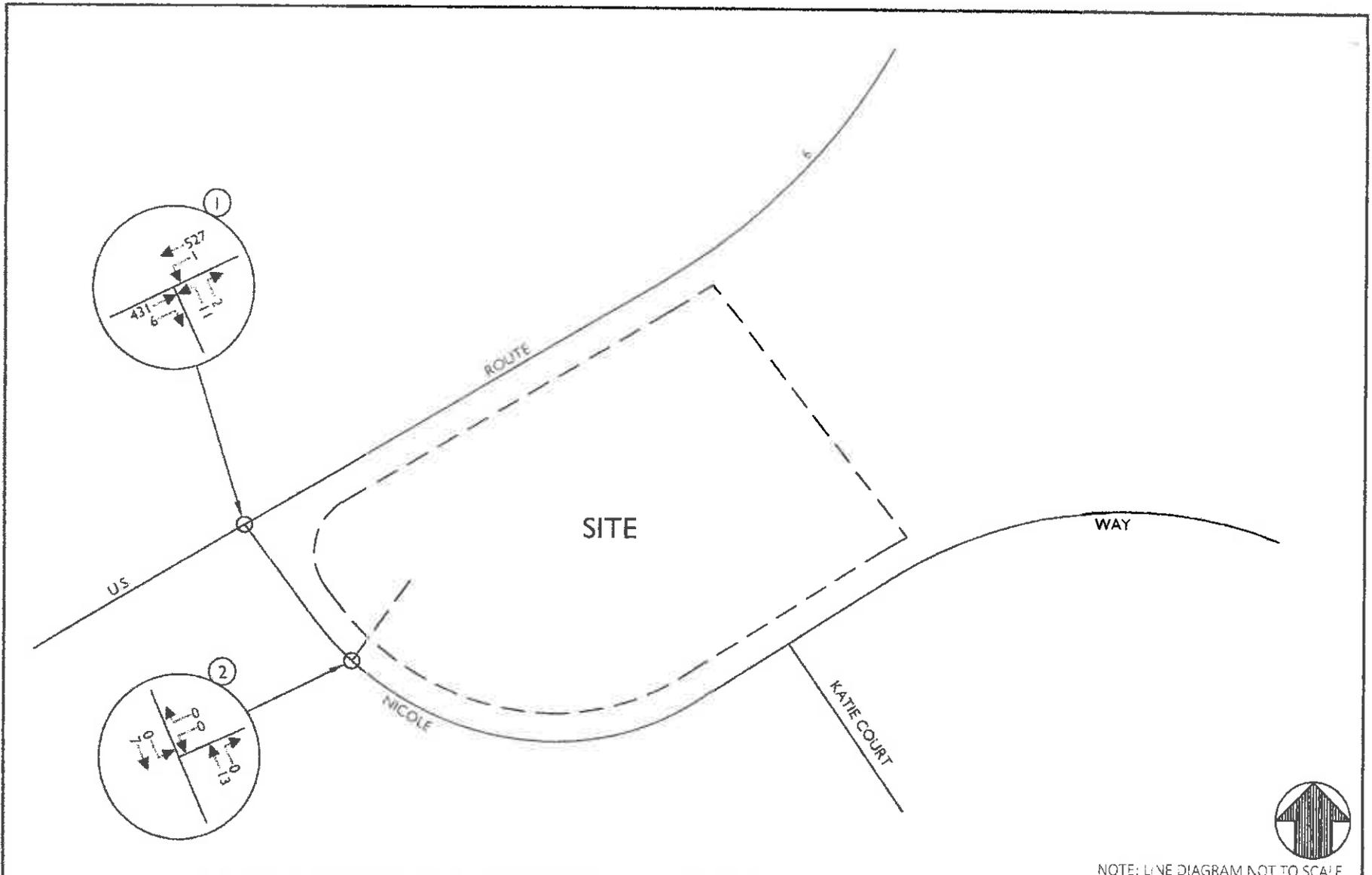
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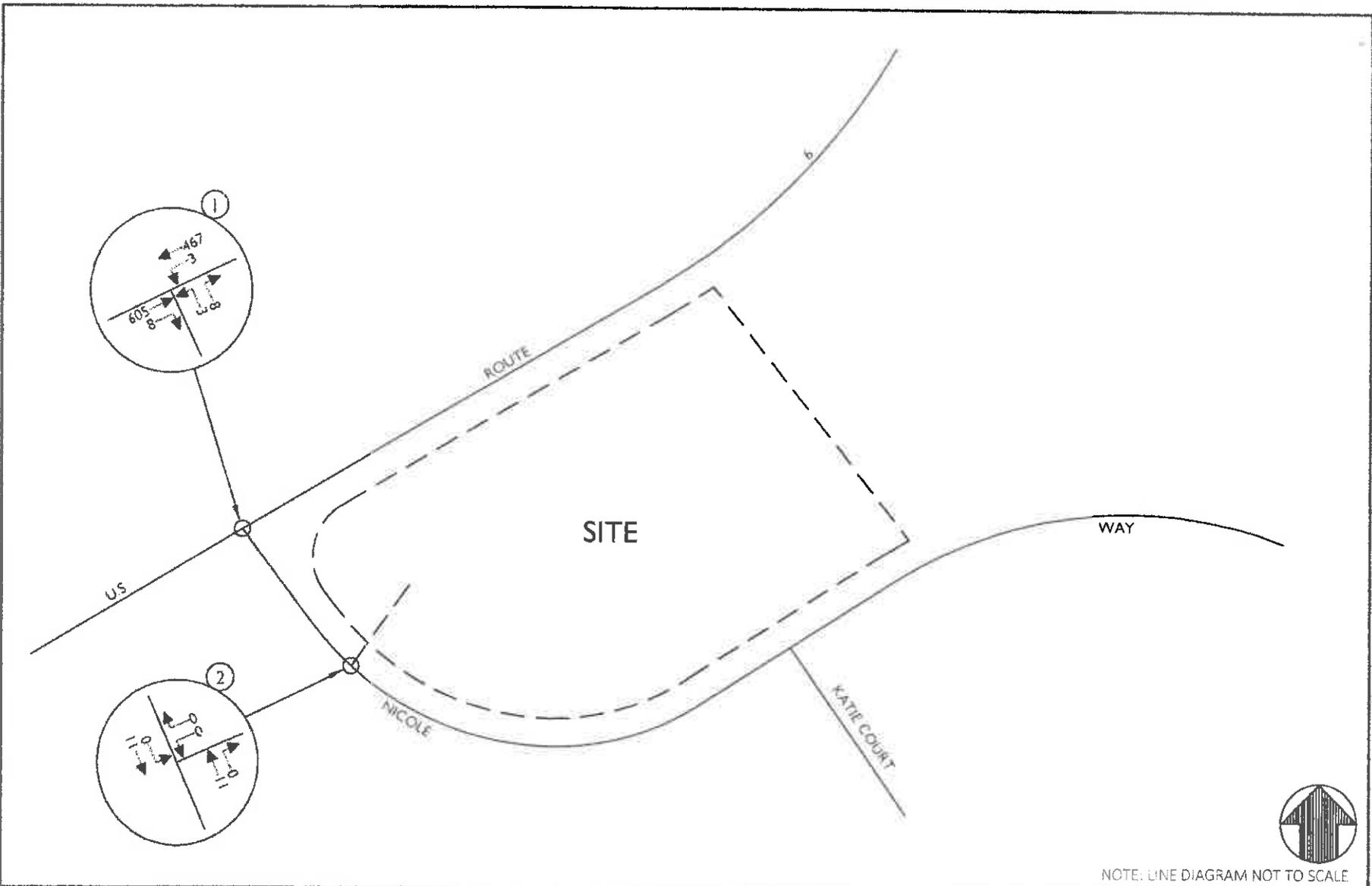
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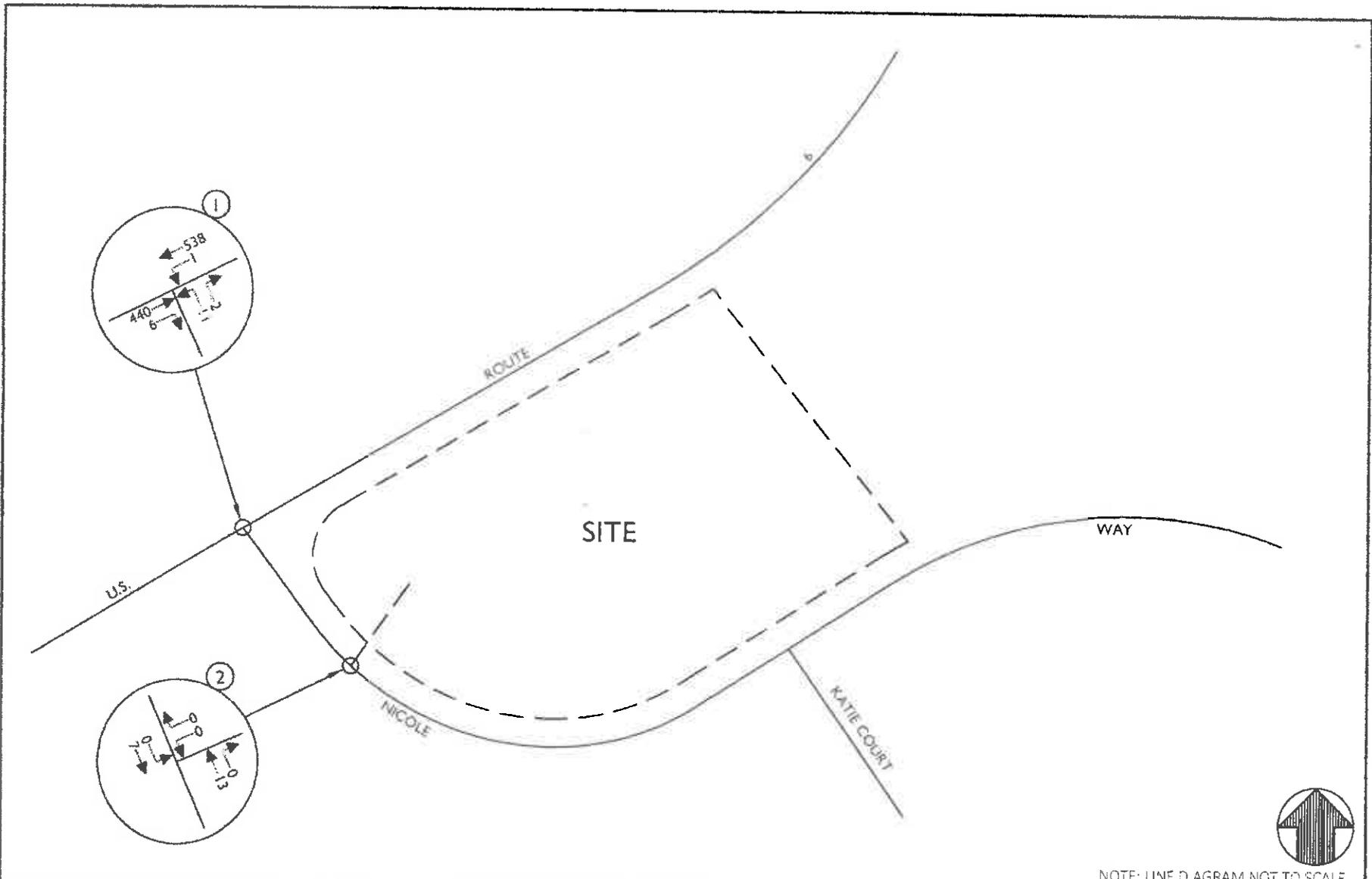
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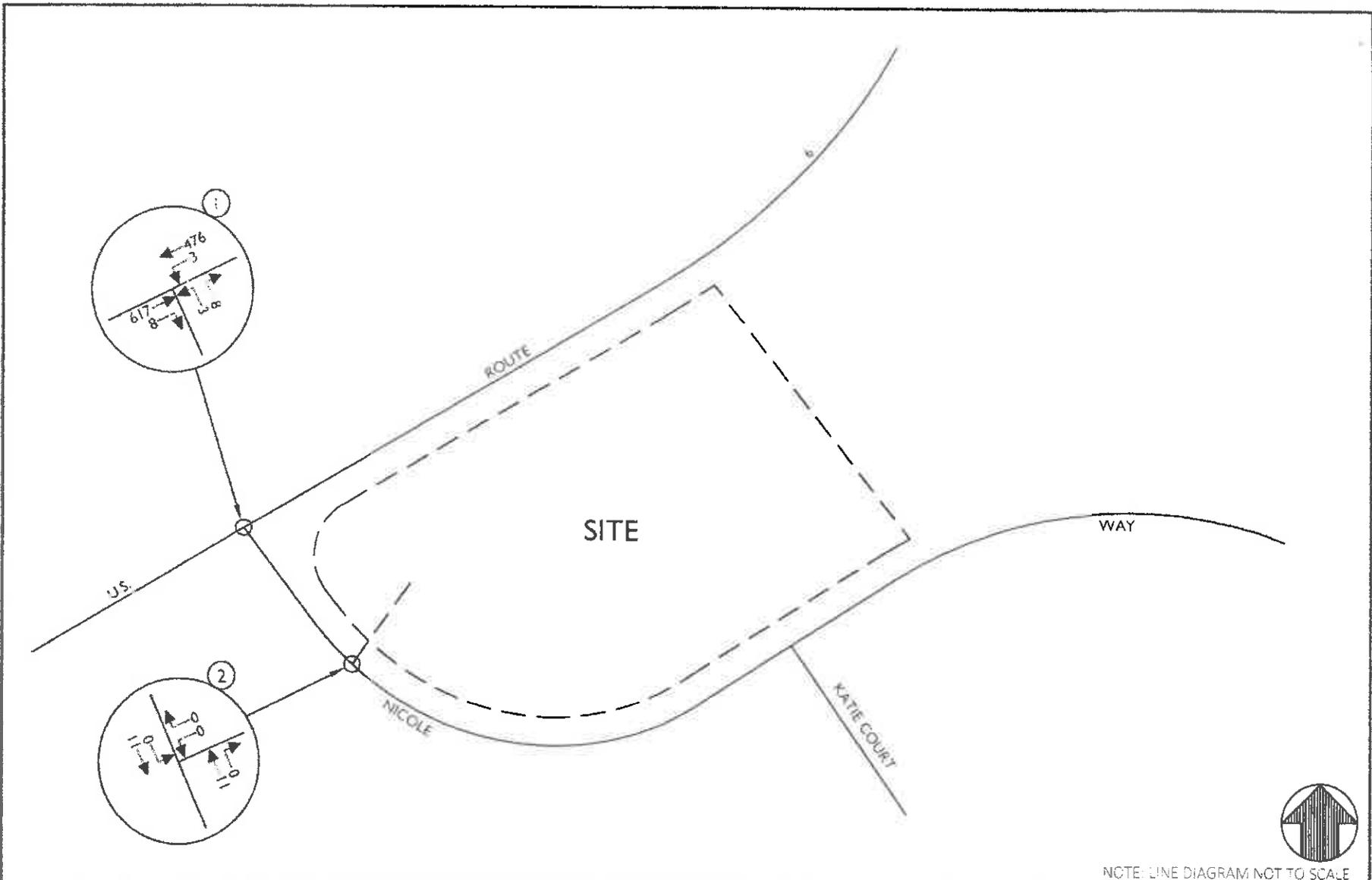
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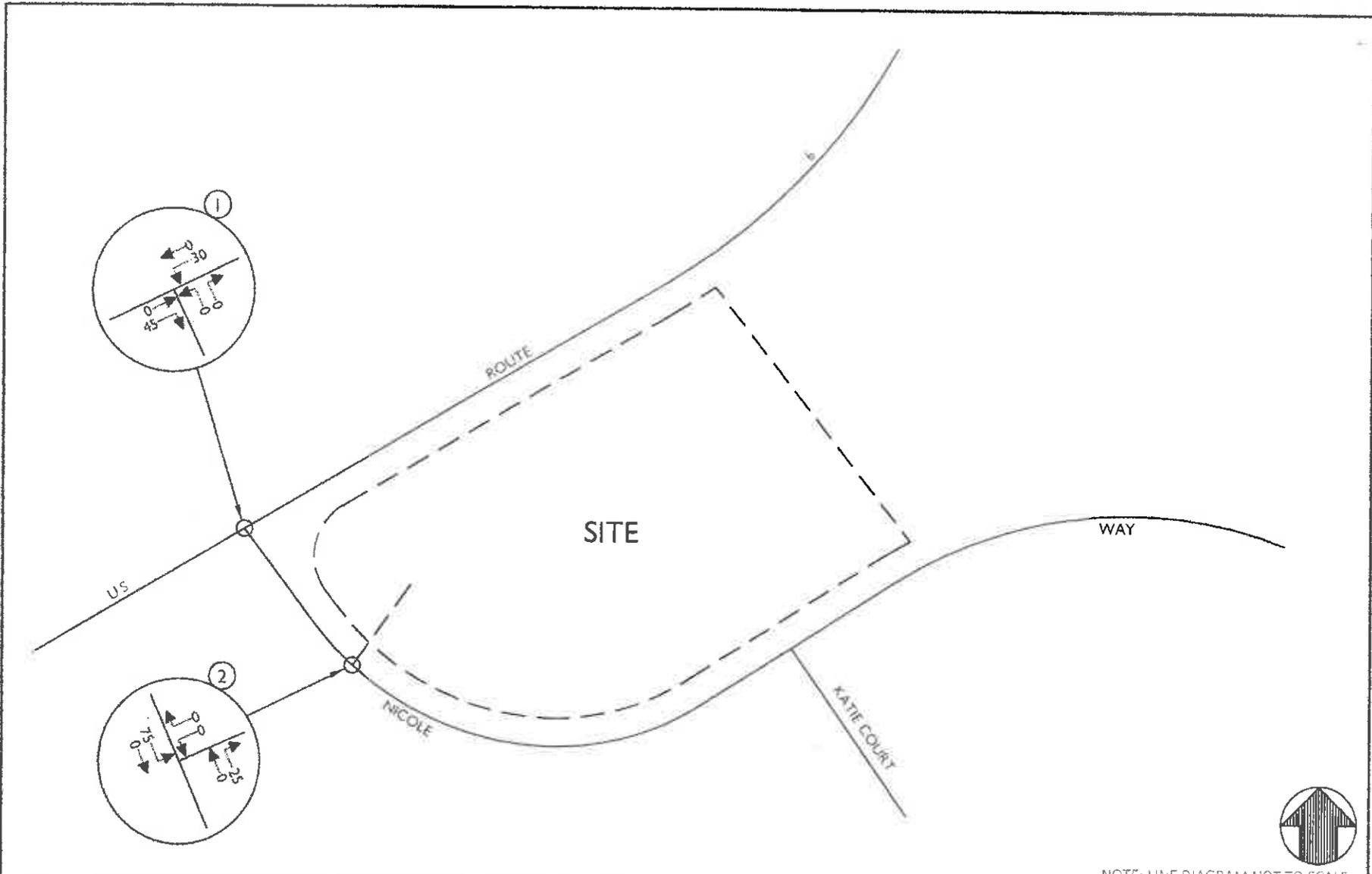
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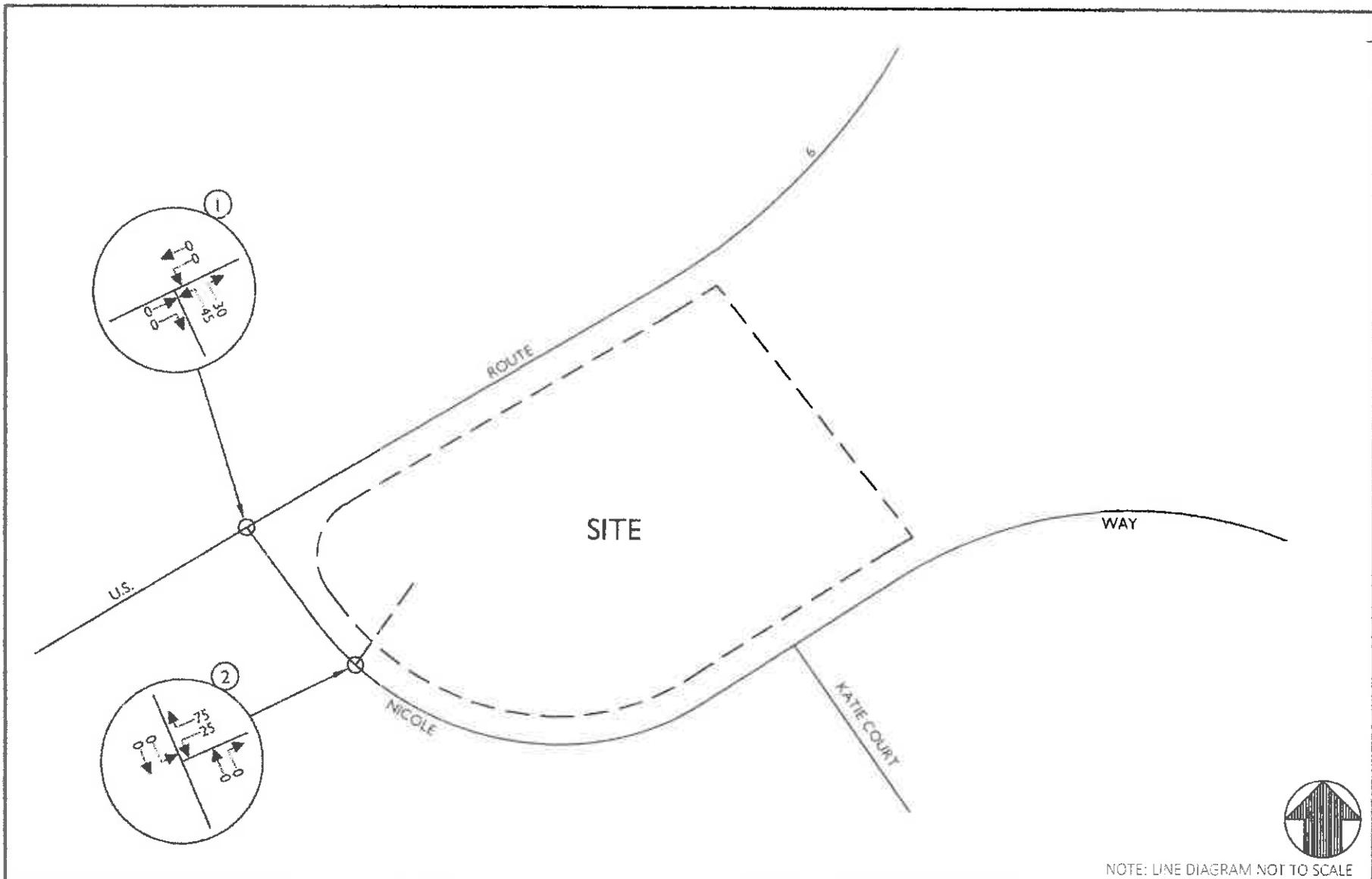
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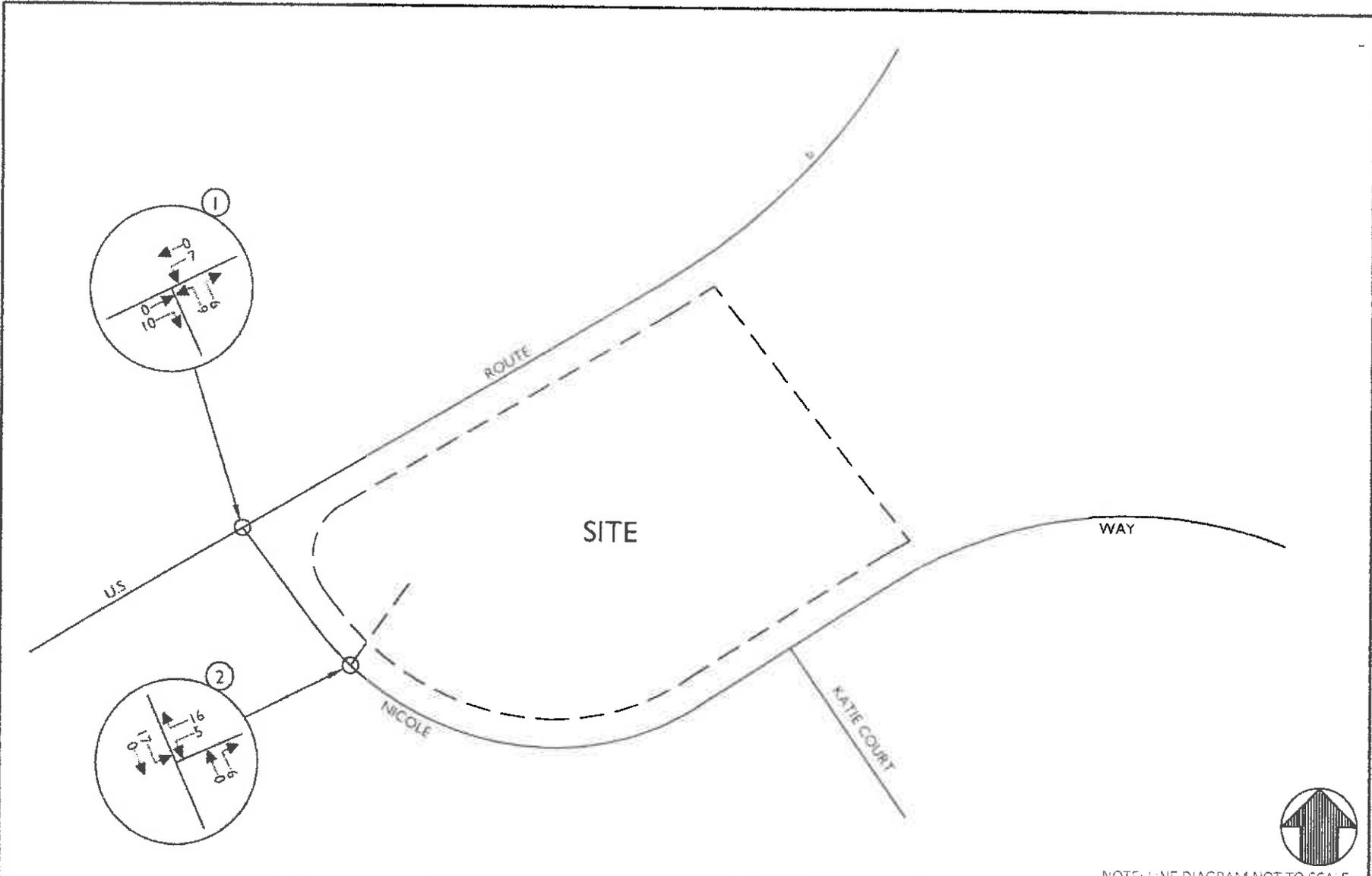
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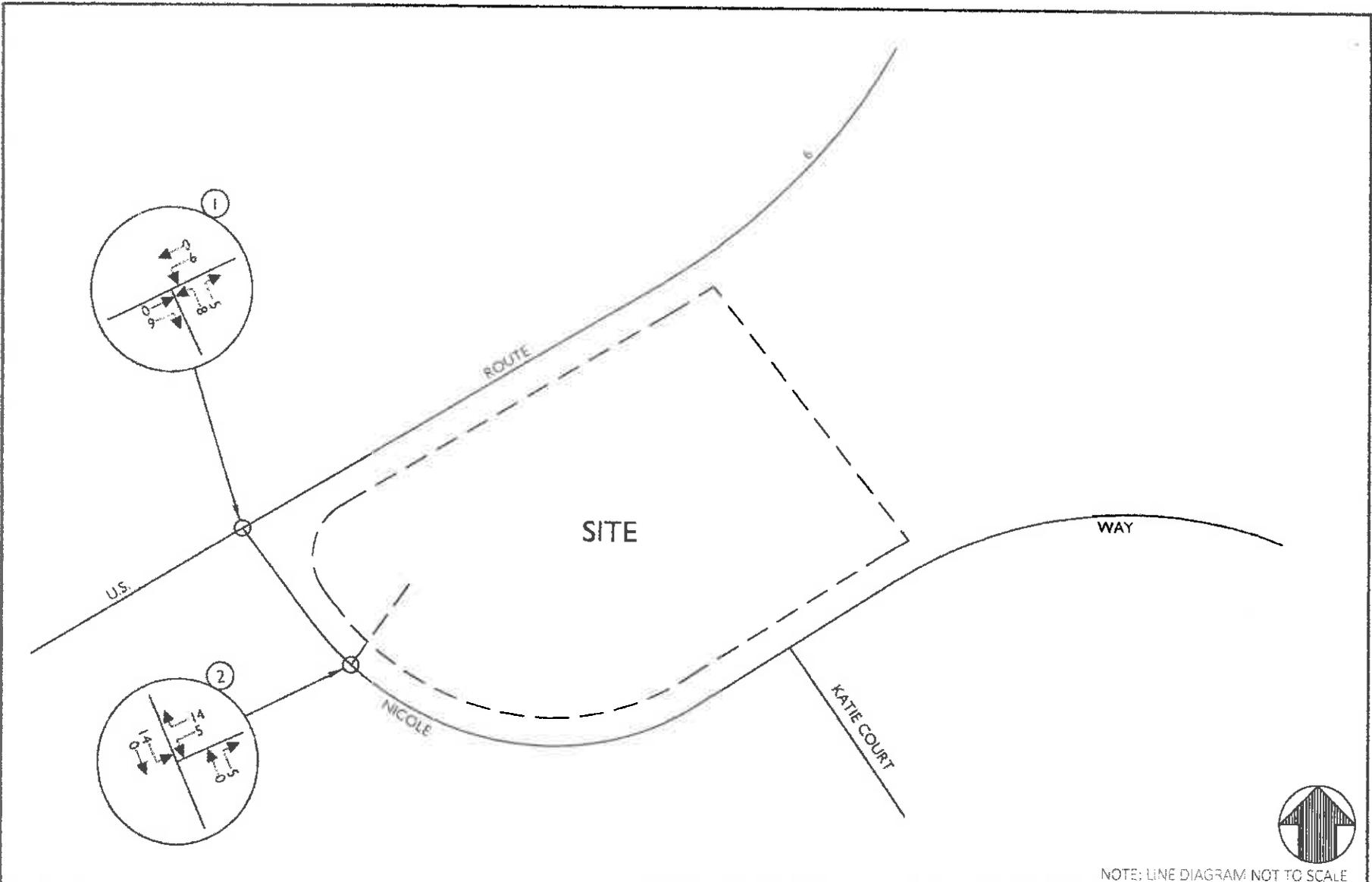
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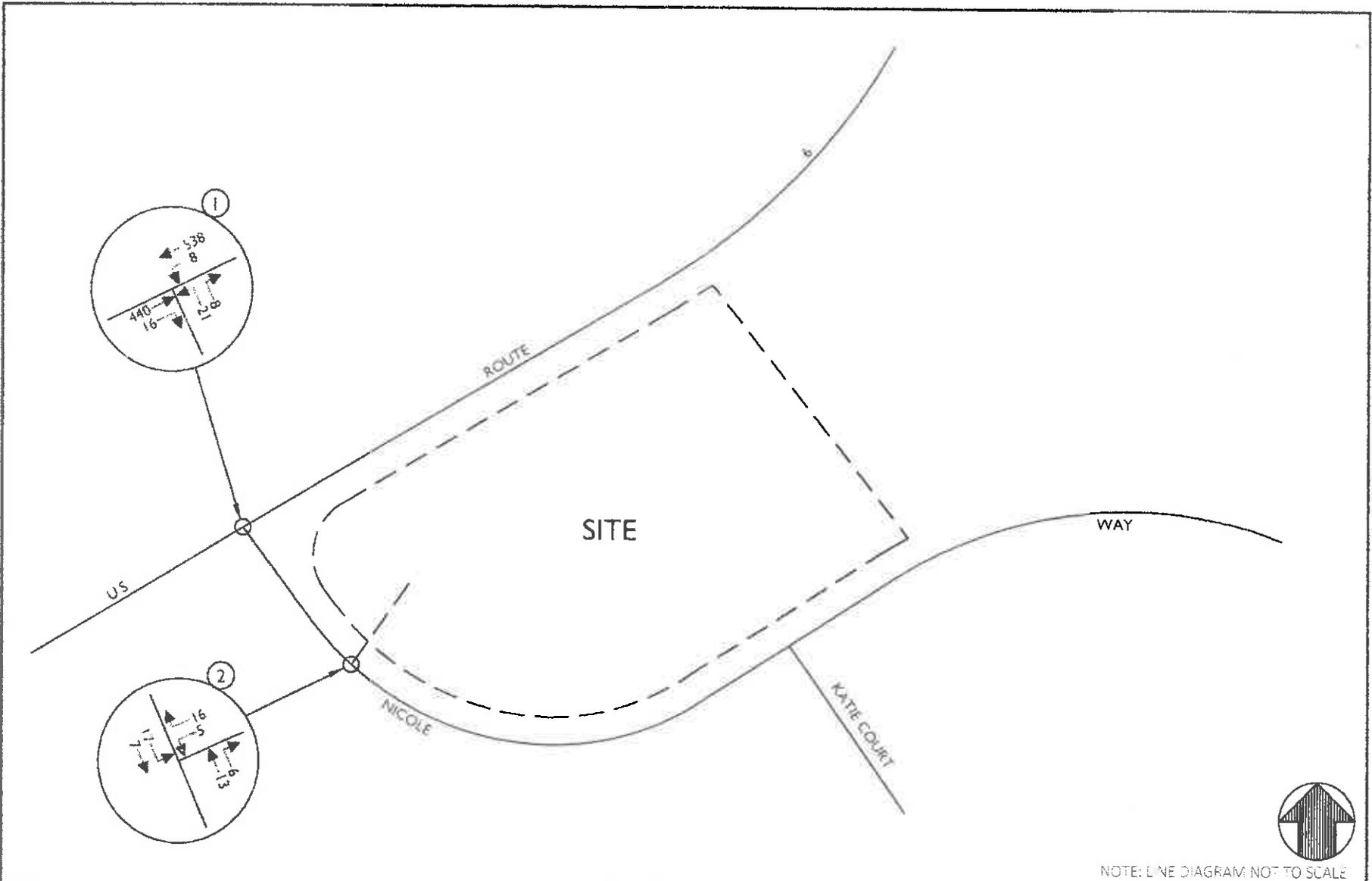
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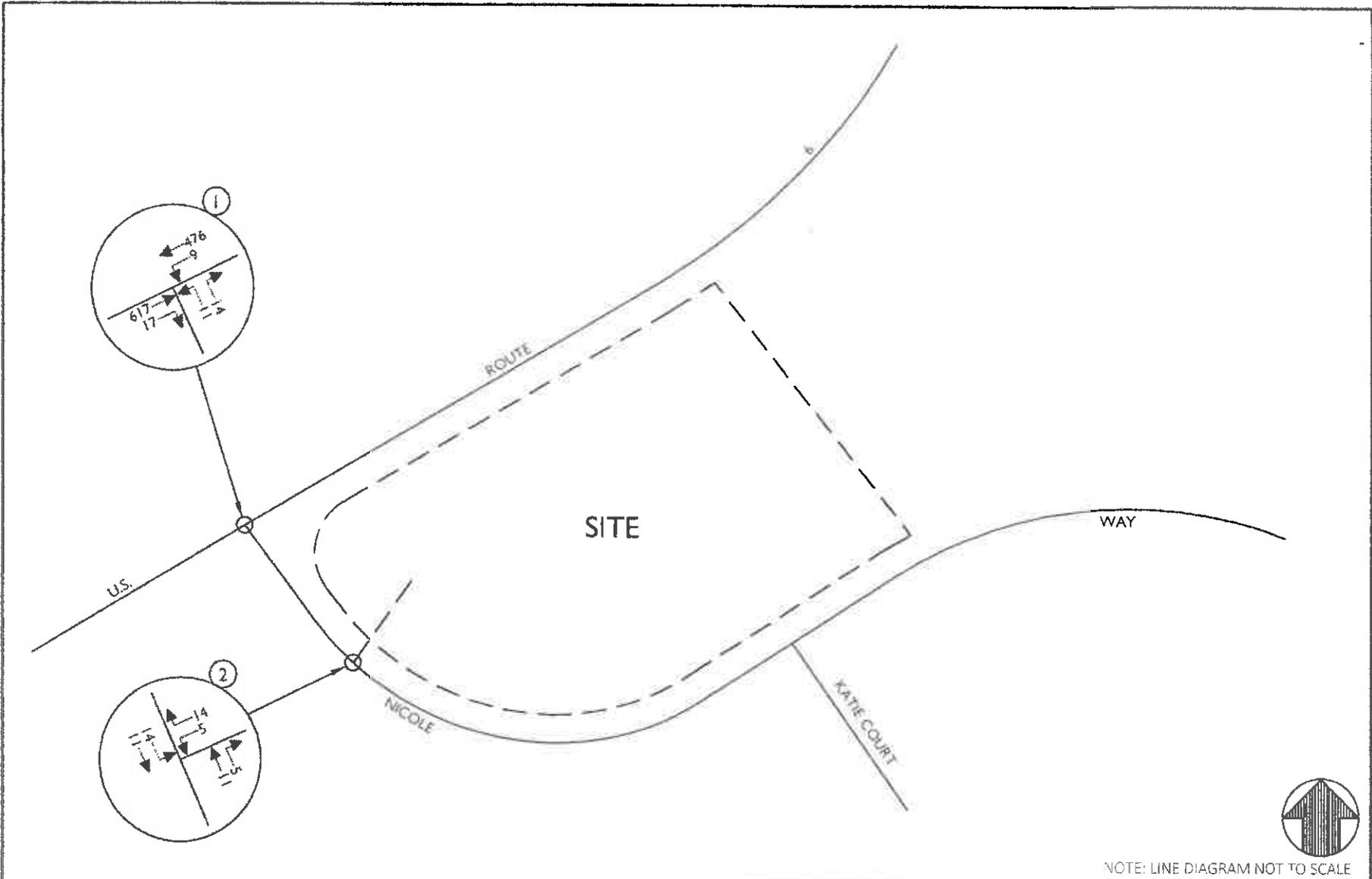
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AS SHOWN	7-26-09	R.H.	R.J.G.
PROJECT NUMBER	8004-14A	DRAWING NAME	180726R- FIGURE
BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR			
11			



Traffic Impact Study  
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# ***ZAKON PROPERTY***

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## **APPENDIX B**

### **TABLES**

**TABLE 1**  
**HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED**  
**SITE GENERATED TRAFFIC VOLUMES**

ZAKON PROPERTY CARMEL, NY	ENTRY		EXIT	
	HTGR*	VOLUME	HTGR*	VOLUME
RETAIL (4,000 S F )				
PEAK AM HOUR	3.75	15	3.25	13
PEAK PM HOUR	2.75	11	2.50	10
STORAGE (4,800 S.F)				
PEAK AM HOUR	1.67	8	1.67	8
PEAK PM HOUR	1.67	8	1.67	8
TOTAL		VOLUME		VOLUME
PEAK AM HOUR	-	23	-	21
PEAK PM HOUR	-	19	-	18

NOTES:

1) \* HTGR-HOURLY TRIP GENERATION RATES EXPRESSED IN TERMS OF TRIPS PER 1000 S F FOR LAND USES ; BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) PUBLICATION ENTITLED "TRIP GENERATION".

## TABLE NO. 2

### LEVEL OF SERVICE SUMMARY TABLE

		2018 EXISTING		PROJECTED		BUILD	
		AM	PM	AM	PM	AM	PM
1	U.S. ROUTE 6 & NICOLE WAY	A[8.3] C[18.3]	A[8.9] C[15.4]	A[8.3] C[18.7]	A[8.9] C[15.7]	A[8.4] C[18.9]	A[9.0] C[18.4]
2	NICOLE WAY & SITE ACCESS DRIVEWAY	- -	- -	- -	- -	A[8.6] A[7.3]	A[8.6] A[7.3]

**NOTES:**

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS.

2) SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.



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## ***ZAKON PROPERTY***

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### **APPENDIX C**

#### **LEVEL OF SERVICE STANDARDS**

## LEVEL OF SERVICE STANDARDS

### LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

**LOS A** describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

**LOS B** describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

**LOS C** describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

**LOS D** describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.



**LOS E** describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.

**LOS F** describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 18-4 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 18-4**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10-20	B	F
> 20-35	C	F
> 35-55	D	F
> 55-80	E	F
> 80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.



**LEVEL OF SERVICE CRITERIA**  
**FOR TWO-WAY STOP-CONTROLLED (TWSC) UNSIGNALIZED INTERSECTIONS**

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 19-1 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 19-1**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c > 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street.  
 LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 19-1 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.



**LEVEL OF SERVICE CRITERIA**

**FOR ALL-WAY STOP-CONTROLLED (AWSC) UNSIGNALIZED INTERSECTIONS**

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 20-2. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 20-2 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 20-2**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c > 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.



Traffic Impact Study  
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# ***ZAKON PROPERTY***

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## **APPENDIX D**

### **CAPACITY ANALYSIS**

2018 Existing Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak AM Hour  
07/27/2018

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	11	2	431	6	1	527
Future Volume (vph)	11	2	431	6	1	527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%			5%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981		0.998			
Flt Protected	0.959					
Satd. Flow (prot)	1752	0	1779	0	0	1764
Flt Permitted	0.959					
Satd. Flow (perm)	1752	0	1779	0	0	1764
Link Speed (mph)	30		45			40
Link Distance (ft)	152		487			570
Travel Time (s)	3.5		7.4			9.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	5%	2%	2%	5%
Adj. Flow (vph)	12	2	459	6	1	561
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	465	0	0	562
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	1.03	1.03
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type	Other					
Control Type:	Unsignalized					

2018 Existing Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak AM Hour  
07/27/2018

Intersection						
Int Delay, s/veh	0.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	Y		Y			Y
Traffic Vol, veh/h	11	2	431	6	1	527
Future Vol, veh/h	11	2	431	6	1	527
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	3	-	-	5
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	12	2	459	6	1	561

Major/Minor	Minor1	Major1	Major2	Major3	Major4
Conflicting Flow All	1025	462	0	0	465
Stage 1	462	-	-	-	-
Stage 2	563	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	260	600	-	-	1096
Stage 1	634	-	-	-	-
Stage 2	570	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	260	600	-	-	1096
Mov Cap-2 Maneuver	260	-	-	-	-
Stage 1	633	-	-	-	-
Stage 2	570	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	18.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT
Capacity (veh/h)	-	-	285	1096
HCM Lane V/C Ratio	-	-	0.049	0.001
HCM Control Delay (s)	-	-	18.3	8.3
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0

2018 Existing Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak PM Hour  
07/27/2018

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	3	8	605	8	3	467
Future Volume (vph)	3	8	605	8	3	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%			5%
Lane Util Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.899		0.998			
Flt Protected	0.988					
Satd. Flow (prot)	1655	0	1780	0	0	1765
Flt Permitted	0.988					
Satd. Flow (perm)	1655	0	1780	0	0	1765
Link Speed (mph)	30		45			40
Link Distance (ft)	152		487			570
Travel Time (s)	3.5		7.4			9.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	5%	2%	2%	5%
Adj. Flow (vph)	3	9	644	9	3	497
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	0	653	0	0	500
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	1.03	1.03
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

2018 Existing Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak PM Hour  
07/27/2018

Intersection						
Int Delay, s/veh	0.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	W		T			T
Traffic Vol, veh/h	3	8	605	8	3	467
Future Vol, veh/h	3	8	605	8	3	467
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage #	0	-	0	-	-	0
Grade, %	0	-	3	-	-	5
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	3	9	644	9	3	497

Major/Minor	Minor1	Major1	Major2	Major3	Major4
Conflicting Flow All	1152	649	0	0	653
Stage 1	649	-	-	-	-
Stage 2	503	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	219	470	-	-	934
Stage 1	520	-	-	-	-
Stage 2	607	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	218	470	-	-	934
Mov Cap-2 Maneuver	218	-	-	-	-
Stage 1	518	-	-	-	-
Stage 2	607	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	15.4	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	357	934	-
HCM Lane V/C Ratio	-	-	0.033	0.003	-
HCM Control Delay (s)	-	-	15.4	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Projected Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak AM Hour  
07/27/2018

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	11	2	440	6	1	538
Future Volume (vph)	11	2	440	6	1	538
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%			5%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981		0.998			
Flt Protected	0.959					
Satd. Flow (prot)	1752	0	1779	0	0	1764
Flt Permitted	0.959					
Satd. Flow (perm)	1752	0	1779	0	0	1764
Link Speed (mph)	30		45			40
Link Distance (ft)	152		487			570
Travel Time (s)	3.5		7.4			9.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	5%	2%	2%	5%
Adj. Flow (vph)	12	2	468	6	1	572
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	474	0	0	573
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	1.03	1.03
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type	Other					
Control Type:	Unsignalized					

Projected Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak AM Hour  
07/27/2018

Intersection						
Int Delay, s/veh	0.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	W		T			T
Traffic Vol. veh/h	11	2	440	6	1	538
Future Vol, veh/h	11	2	440	6	1	538
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	3	-	-	5
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	12	2	468	6	1	572
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1045	471	0	0	474	0
Stage 1	471	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	253	593	-	-	1088	-
Stage 1	628	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	253	593	-	-	1088	-
Mov Cap-2 Maneuver	253	-	-	-	-	-
Stage 1	627	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	18.7	0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NER	NWL	n1	SWL	SWT
Capacity (veh/h)	-	-	277	1088	-	-
HCM Lane V/C Ratio	-	-	0.05	0.001	-	-
HCM Control Delay (s)	-	-	18.7	8.3	0	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-	-

Projected Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak PM Hour  
07/27/2018

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	3	8	617	8	3	476
Future Volume (vph)	3	8	617	8	3	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%			5%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.899		0.998			
Flt Protected	0.988					
Satd. Flow (prot)	1655	0	1780	0	0	1765
Flt Permitted	0.988					
Satd. Flow (perm)	1655	0	1780	0	0	1765
Link Speed (mph)	30		45			40
Link Distance (ft)	152		487			570
Travel Time (s)	3.5		7.4			9.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	5%	2%	2%	5%
Adj. Flow (vph)	3	9	656	9	3	506
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	0	665	0	0	509
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	1.03	1.03
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type	Other					
Control Type	Unsignalized					

Projected Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak PM Hour  
07/27/2018

Intersection						
Int Delay, s/veh	0.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	Y		P			P
Traffic Vol, veh/h	3	8	617	8	3	476
Future Vol, veh/h	3	8	617	8	3	476
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	3	-	-	5
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	3	9	656	9	3	506

Major/Minor	Minor1	Major1	Major2	Major3	Major4	Major5
Conflicting Flow All	1173	661	0	0	665	0
Stage 1	661	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	212	462	-	-	924	-
Stage 1	514	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	211	462	-	-	924	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	511	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	15.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT
Capacity (veh/h)	-	-	349	924
HCM Lane V/C Ratio	-	-	0.034	0.003
HCM Control Delay (s)	-	-	15.7	8.9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Build Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak AM Hour  
07/27/2018

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	21	8	440	16	8	538
Future Volume (vph)	21	8	440	16	8	538
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%			5%
Lane Util Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.961		0.995			
Flt Protected	0.966					0.999
Satd. Flow (prot)	1729	0	1775	0	0	1763
Flt Permitted	0.966					0.999
Satd. Flow (perm)	1729	0	1775	0	0	1763
Link Speed (mph)	30		45			40
Link Distance (ft)	152		487			570
Travel Time (s)	3.5		7.4			9.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	5%	2%	2%	5%
Adj. Flow (vph)	22	9	468	17	9	572
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	0	485	0	0	581
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	1.03	1.03
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type	Other					
Control Type:	Unsignalized					

Build Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak AM Hour  
07/27/2018

Intersection

Int Delay, s/veh 0.6

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	Y		B			A
Traffic Vol, veh/h	21	8	440	16	8	538
Future Vol, veh/h	21	8	440	16	8	538
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	3	-	-	5
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	22	9	468	17	9	572

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1067	477	0
Stage 1	477	-	-
Stage 2	590	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	246	588	-
Stage 1	624	-	-
Stage 2	554	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	243	588	-
Mov Cap-2 Maneuver	243	-	-
Stage 1	617	-	-
Stage 2	554	-	-

Approach	NW	NE	SW
HCM Control Delay, s	18.9	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT
Capacity (veh/h)	-	-	290	1078	-
HCM Lane V/C Ratio	-	-	0.106	0.008	-
HCM Control Delay (s)	-	-	18.9	8.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Build Traffic Volumes  
2: Nicole Way & Site Access

Peak AM Hour  
07/27/2018



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	17	7	13	6	5	16
Future Volume (vph)	17	7	13	6	5	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.955		0.899	
Flt Protected		0.966			0.988	
Satd Flow (prot)	0	1799	1779	0	1655	0
Flt Permitted		0.966			0.988	
Satd Flow (perm)	0	1799	1779	0	1655	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		152	376		135	
Travel Time (s)		3.5	8.5		3.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	19	8	14	7	6	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	27	21	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Build Traffic Volumes  
2: Nicole Way & Site Access

Peak AM Hour  
07/27/2018

Intersection						
Int Delay, s/veh	4.8					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	17	7	13	6	5	16
Future Vol, veh/h	17	7	13	6	5	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	8	14	7	6	18

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	21	0	0	64	18
Stage 1	-	-	-	18	-
Stage 2	-	-	-	46	-
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	1595	-	-	942	1061
Stage 1	-	-	-	1005	-
Stage 2	-	-	-	976	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1595	-	-	931	1061
Mov Cap-2 Maneuver	-	-	-	931	-
Stage 1	-	-	-	993	-
Stage 2	-	-	-	976	-

Approach	SE	NW	SW
HCM Control Delay, s	5.2	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1
Capacity (veh/h)	-	-	1595	- 1027
HCM Lane V/C Ratio	-	-	0.012	- 0.023
HCM Control Delay (s)	-	-	7.3	0 8.6
HCM Lane LOS	-	-	A	A A
HCM 95th %tile Q(veh)	-	-	0	- 0.1

Build Traffic Volumes  
1: U.S. Route 6 & Nicole Way

Peak PM Hour  
07/27/2018

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	11	14	617	17	9	476
Future Volume (vph)	11	14	617	17	9	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%			5%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.925		0.996			
Flt Protected	0.978					0.999
Satd. Flow (prot)	1685	0	1777	0	0	1763
Flt Permitted	0.978					0.999
Satd. Flow (perm)	1685	0	1777	0	0	1763
Link Speed (mph)	30		45			40
Link Distance (ft)	152		487			570
Travel Time (s)	3.5		7.4			9.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	5%	2%	2%	5%
Adj. Flow (vph)	12	15	656	18	10	506
Shared Lane Traffic (%)						
Lane Group Flow (vph)	27	0	674	0	0	516
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.02	1.02	1.03	1.03
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

**Build Traffic Volumes**  
**1: U.S. Route 6 & Nicole Way**

Peak PM Hour  
 07/27/2018

Intersection						
Int Delay, s/veh	0.5					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	W		T			T
Traffic Vol, veh/h	11	14	617	17	9	476
Future Vol, veh/h	11	14	617	17	9	476
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	3	-	-	5
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	12	15	656	18	10	506
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1191	665	0	0	674	0
Stage 1	665	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	207	460	-	-	917	-
Stage 1	511	-	-	-	-	-
Stage 2	593	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	204	460	-	-	917	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	503	-	-	-	-	-
Stage 2	593	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	18.4	0	0.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	296	917	-	
HCM Lane V/C Ratio	-	-	0.09	0.01	-	
HCM Control Delay (s)	-	-	18.4	9	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Build Traffic Volumes  
2: Nicole Way & Site Access

Peak PM Hour  
07/27/2018



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	14	11	11	5	5	14
Future Volume (vph)	14	11	11	5	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.955		0.902	
Flt Protected		0.972			0.987	
Satd. Flow (prot)	0	1811	1779	0	1658	0
Flt Permitted		0.972			0.987	
Satd. Flow (perm)	0	1811	1779	0	1658	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		152	376		128	
Travel Time (s)		3.5	8.5		2.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	12	12	6	6	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	28	18	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Build Traffic Volumes  
2: Nicole Way & Site Access

Peak PM Hour  
07/27/2018

Intersection						
Int Delay, s/veh	4.4					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations		↔	↔		↔	↔
Traffic Vol, veh/h	14	11	11	5	5	14
Future Vol, veh/h	14	11	11	5	5	14
Conflicting Peds. #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	12	12	6	6	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	18	0	-	0	59 15
Stage 1	-	-	-	-	15 -
Stage 2	-	-	-	-	44 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1599	-	-	-	948 1065
Stage 1	-	-	-	-	1008 -
Stage 2	-	-	-	-	978 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1599	-	-	-	939 1065
Mov Cap-2 Maneuver	-	-	-	-	939 -
Stage 1	-	-	-	-	998 -
Stage 2	-	-	-	-	978 -

Approach	SE	NW	SW
HCM Control Delay, s	4.1	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1
Capacity (veh/h)	-	-	1599	- 1029
HCM Lane V/C Ratio	-	-	0.01	- 0.021
HCM Control Delay (s)	-	-	7.3	0 8.6
HCM Lane LOS	-	-	A	A A
HCM 95th %tile Q(veh)	-	-	0	- 0.1



## ***MEMORANDUM***

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**To:** Chairman Gary & Members of the Planning Board  
**From:** Patrick Cleary, AICP, CEP, PP, LEED AP  
**Date:** November 11, 2018  
**Re:** Multi-Family Housing Zoning

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### **1.0 INTRODUCTION**

In 2002 the Town of Carmel amended the Zoning for the Town by replacing its traditional hierarchy of multiple residential zoning districts (R-60, R-60/40, R-40/30, R-40/20, R-40/10, R-MF, R-MFA)<sup>1</sup> with a single 3-acre single family district as the Town's only residential zone. It was anticipated that up-zoning would reduce development pressures, including concerns over increases in school district enrollments, by slowing home building as fewer parcels would be available for development, which would correspondingly increase housing prices. The Town's action in 2002 for all practical purposes eliminated the potential for development of new market-rate multifamily housing options for the general population.

Having only one residential zone in the entire Town, which requires a minimum of 3 acres for the development of a residential dwelling unit, leaves those with more diverse needs unable to find housing within the Town. As illustrated by the data in this report, the Town of Carmel is composed of a population of varying ages and income levels. There is an unmet need to provide housing for entry level homebuyers, young people just out of college, millennials, divorcees, empty nesters who are preparing for retirement and older people who may prefer to live in a general population community rather than a designated senior housing complex. Experience has demonstrated that large lot 3-acre zoning promotes sprawl, requires more infrastructure, and creates isolated neighborhoods that rely solely on automobiles. Large lot zoning is not the most effective measure for providing environmental protection to New York City watershed lands, nor does it meet the needs of the Town's existing demographics. This "exclusionary" zoning makes the Town vulnerable to a federal fair housing

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<sup>1</sup> Prior to 2002, in previously existing zoning districts such as R-40/10, higher density minimum lot area would apply only if public sewer and water were available.

lawsuit similar to Westchester County which affected many of its municipalities in recent years.

Currently, some limited provisions for multifamily housing exist in Town, but these are restricted to the waterfront of Lake Mahopac, which is already mostly fully developed. Multifamily Housing for the Elderly is permitted as a Special Permit Conditional use in the residential, commercial/business park and commercial zones. The conditions which need to be met in order to develop market-rate multifamily housing for the elderly include, among others, the following;

- The site must be in or contiguous to the residential zone and CBP or commercial zones.
- The site must be a minimum of 5 acres.
- The site must be served by municipal or community water and municipal or community sewer.

## **2.0 DEMOGRAPHIC ANALYSIS**

Table 1 provides a summary of the population and housing statistics for the Town of Carmel. The Table provides a comparison of historic values from 2000 and 2010, compared to current 2018 data and provides a projection over the next 5 years to 2023.

As can be seen, according to the US Census data, the rate of growth which was approximately 14.4% over the previous decade, slowed to approximately 4% from 2000 to 2010 and has slowed to a projected 1.9% in the current decade. Projections by ESRI Demographic Forecasts indicate population growth will to continue to decrease to an annual rate of one tenth of a percent. Taking a long lens look, growth of the Town was very tepid from 2000 to 2010 and has virtually stopped since 2010 which is the same time period when the impact of the Town's rezoning to exclusively large lots began to be felt.

The US Census data also indicates that during these same time periods the median age of Town residents has steadily increased from 37.1 in 2000 to 43.2 in 2018. This indicates the population is aging. Population aging is a trend that is being experienced throughout the region. In response, the Town placed an emphasis on providing housing for its Seniors. Putnam County and the Town of Carmel are aging at the fastest pace in the region. As a review of local real estate data confirms, existing homeowners are remaining in their homes and "aging in place", a likely result of the 2008 recession, and the lack of suitable housing alternatives.

The limited inventory of available housing choices has also restricted the influx of younger entry level residents. Increasing housing costs and a limited supply has

resulted in a steady decline in the ability to own a home. Steadily increasing prices make it hard for entry level homebuyers to get into the housing market. The housing market in Putnam and northern Westchester has continued to appreciate in value, putting home ownership out of reach for many entry level homebuyers.

A report was prepared by the Urban Land Institute (ULI) in conjunction with the Sierra Club and the American Institute of Architects (AIA) and the National Multi-Housing Council (NMHC), herein referred to as the ULI Study, entitled Higher Density Development Myth and Fact.<sup>2</sup> The Study provided data to refute popular myths which surround the potential development of multi-family housing. In the introduction the ULI Study states,

*“New markets are emerging for real estate that offers a more convenient lifestyle than is offered by many low-density sprawling communities. New Compact Development with a mix of uses and housing types throughout the country are being embraced as a popular alternative to sprawl. At the core of the success of these developments is density, which is the key to making these communities walkable and vibrant.”*

Similar claims are made by ULI in their 2016 report “Emerging Trends in Real Estate® United States and Canada 2016”<sup>3</sup>, as discussed below.

As the housing market continues to sort itself out after the 2008 recession, a reasonable expectation is for the homeownership rate to settle in a narrow range around its 50-year average of 65 percent, indicating the rental and multifamily housing sectors will remain strong. This translates into the fact that housing demand will be greater across all residential segments.

Economic and demographic factors are influencing the housing market as it deals with issues around providing the type of housing desired by the baby boom generation, millennials, a population making an urban/suburban choice, and finding a way to provide housing that fits into the budgets of a changing workforce. A trend has emerged toward greater diversity in demand and supply across different sectors of the housing market.

In the Housing field, a simplistic focus on averages or medians can gravely miss key statistical points that can illuminate both opportunities and risks in the marketplace. Superior profit potential has skewed recent housing production toward the luxury end of product. What is not so obvious is that a shortfall of supply in the mid-to-lower end of the residential market is putting upward pressure on pricing for such units, exacerbating already severe budget limitations of entry-level home buyers.

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<sup>2</sup> Higher-Density Development – Myth and Fact, Urban Land Institute, Sierra Club, National Multi Housing Council, American Institute of Architects, Washington D.C. 2005.

<sup>3</sup>“Emerging Trends in Real Estate® United States and Canada 2016” Urban Land Institute, 2016

The percentage of renter occupied units in Carmel has grown from 14.8 percent to 20.9 percent. The ULI study confirms this trend around the country and states “One-third of Americans rent their housing.” There has also been a significant migration of young persons out of Carmel to other areas in search of rental dwelling units and entry level housing within their budget. Young persons who witnessed the housing crisis of 2008 are also demonstrating a preference for rental housing because they view the stability of the investment in a home warily, and no longer assume that single-family home ownership is a sound investment in creating a nest-egg. Moreover, the paradigm of long-term employment stability is giving way to more transient and mobile employment in the “gig economy.” Being tied down to a single-family home in the suburbs, which may prove to be a bad financial investment, is no longer the typical American Dream, particularly in the New York metropolitan area.

Entry level housing on small lots and condo ownership which do not result in an over extension of household budgets, will help to mitigate the risks of homeownership for first time home buyers. This is gateway housing for the Town. The ULI study indicates that housing preferences for millennials tend toward higher density housing. “Communities are being developed using the best concept of traditional communities—smaller lots, a variety of housing types, front porches and sidewalks, shops and offices within walking distance and public transit nearby.”<sup>4</sup>

Year	2000	2010	2018	2023
Total Population	32,997	34,305	34,935	35,290
Median Age	37.1	41.2	43.2	43.7
Number of Households	10,838	11,672	11,874	11,989
Rate of Growth	1990-2000 14.4%	2000-2010 4.0%	2010-2018 1.9%	2018-2023 1.0%
Total Housing Units	11,274	12,348	12,624	12,862
Owner Occupied Housing Units	9,160	9,668	9,227	9,467
Renter Occupied Housing Units	1,678	2,004	2,647	2,522
% Renter Occupied	14.8%	16.2%	20.9%	19.6%
Median Home Value	\$375,600	\$459,200	\$459,320	\$506,379
Average Home Value	\$430,955	\$523,015	\$523,152	\$582,465
Median Household Income	\$77,406	\$98,226	\$106,822	\$116,638
Average Household Income	\$86,467	\$114,496	\$136,133	\$157,023
Source: US Census Data, ESRI Demographic Forecasts.				

<sup>4</sup> Ibid, pg. 31

Table 1 shows the Town's median age has been steadily increasing since 2000. Also shown in Table 1, the Town's rate of growth has steadily decreased from slow growth in 2000 to almost no growth since 2010. The proportion of renter occupied housing has steadily increased due in part to the fact that there isn't any new entry level housing or condominiums available for sale.

Table 2 provides a detailed breakdown of the Carmel's population by age category for the years 2010, 2018 and projection to 2023 and a further projection extrapolated out to 2028. As Table 2 shows there has been a steady aging of the population. The numbers and percentages of the 35 to 55-year-old population is consistently decreasing while the number and percentage of the 55 to 75-year-old population is projected to continue to steadily rise and almost double in a 20-year period.

It is noteworthy that the 25 to 34-year cohort has the potential for growth showing a modest increase in the percentage of the population that is represented. This cohort would include recent college graduates looking for that first career job and is very likely composed of young people who have moved back in with their parents after college in addition to other entry level homebuyers. This population specifically includes those persons in a category ripe to utilize multifamily housing, if it were available.

Without an influx of young families, the family-oriented nature of the Town of Carmel and Putnam County will inevitably change. Community priorities will shift. Recreation facilities and municipal services will need to cater to an older population not a family-oriented community. Section 4.0 below discusses the impacts this type of shift is having on the Town's school districts.

As Table 2 shows, the age categories 35 to 55 and below are losing population and all categories 55 + are continuing to grow. The projected growth in Carmel over the eighteen-year period between 2010 and 2028 is only 1,340 persons.

<b>Table 2</b>								
<b>Town of Carmel - Detailed Age Profile</b>								
<b>Age</b>	<b>&lt;25</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65-74</b>	<b>75+</b>	<b>Total</b>
<b>Number of Persons</b>								
2010	11,141	3,109	5,090	6,390	4,339	2,458	1,805	34,305
2018	10,311	3,790	4,109	5,506	5,418	3,451	2,350	34,935
2023 (projection)	9,512	4,177	4,546	4,643	5,642	3,921	2,849	35,290
2028 (projection)	8,775	3,885	4,319	4,861	6,066	4,391	3,348	35,645
<b>Percent</b>								
2010	32.4%	9.1%	14.8%	18.6%	12.6%	7.1%	5.3%	100%
2018	29.6%	10.8%	11.7%	15.8%	15.5%	9.9%	6.8%	100%
2023 (projection)	26.7%	11.9%	12.9%	13.2%	16.0%	11.2%	8.0%	100%
2028 (projection)	24.6	10.9	12.1	13.6	17.1	12.3	9.4	100%
Source; US Census; ESRI Demographic Forecasts								

Table 3 provides data on the 2018 household income, broken down by age category. In every age category between age 25 and 74, the highest percentage of household incomes is \$100,000 to \$149,999, indicating that this is the household income necessary to live in the Town of Carmel. There are also high percentages of the 45-54 and 55-64 age groups where the household income is over \$200,000. There is a marked decrease in incomes after age 75 with more than 75 percent of the over 75-year-old population having annual household incomes less than \$75,000. As this segment of the population continues to rise, the economic profile of the Town will change, which has the potential to hurt the business sector in the Town for years to come.

<b>Table 3</b> <b>Town of Carmel</b> <b>2018 Household Income Profile</b>							
Age	<25	25-34	35-44	45-54	55-64	65-74	75+
Total number of persons	10,311	3,790	4,109	5,506	5,418	3,451	2,350
Income by Household							
<\$34,999	11%	10.7%	8.3%	6.7%	10.3%	15%	34.6%
\$35,000-\$49,999	12.9%	7.6%	5.0%	4.4%	5.0%	6.6%	14.6%
\$50,000-\$74,999	27.7%	13.9%	9.6%	9.0%	10.7%	18.0%	26.3%
\$75,000-\$99,999	19.8%	17.2%	13.5%	11.1%	12.9%	16.2%	4.9%
\$100,000-\$149,999	17.8%	30.3%	24.8%	27.2%	23.4%	20.5%	9.7%
\$150,000-\$199,999	4.0%	9.2%	17.0%	16.5%	15.0%	9.8%	5.0%
\$200,000+	6.9%	11.0%	21.8%	25.2%	22.6%	13.9%	5.0%
Source; US Census; ESRI Demographic Forecasts. Table prepared by TMA 2018.							

Table 4 provides a comparison of population growth in the counties that make up the region including the lower Hudson Valley, southern Connecticut and northern New Jersey. As illustrated in Table 4 below, the 0.41 percent annual growth experienced in Putnam County during the period from 2000 to 2010 slowed to 0.12 percent annual growth during the period 2010 to 2018. This slowdown in growth is certainly influenced by the actions taken by the Carmel Town Board in 2002 in combination with the 2007 - 2008 recession. It is noteworthy that the growth in the surrounding Counties did not slow down to nearly the same extent, indicating the Zoning action taken by the Town of Carmel had a real impact. As Table 4 shows, the population density of 433 persons per square mile is by far the lowest of the Counties in the region, with only Orange County being close to the sparse density of Putnam County.

**Table 4  
Population Growth Comparison by County 2000 - 2023**

County	Land Area (Sq. Miles)	2000 Population	2010 Population	2010 Population Density (Person / Sq. Mile)	2018 Population	2023 Population Projection	2000-2010 Annual Rate	2010-2018 Annual Rate	2018-2023 Annual Rate Projection
Putnam	246	95,745	99,710	433	100,715	101,398	0.41%	0.12%	0.14%
Westchester	500	923,459	949,113	880	977,073	997,054	0.27%	0.35%	0.41%
Rockland	199	286,753	311,687	1,890	328,812	339,495	0.84%	0.65%	0.64%
Orange	839	341,367	372,813	471	393,529	407,897	0.89%	0.66%	0.72%
Bergen	247	884,118	905,116	4,070	951,353	979,924	0.24%	0.61%	0.59%
Fairfield	837	882,567	916,829	1,520	958,883	982,066	0.38%	0.55%	0.48%

Source: US Census; ESRI Demographic Forecast; Putnam County Department of Planning

As shown in Table 5, during this same time period, the over 50 population grew compared to the overall population. Putnam County has the highest percentage of seniors with 41.4 percent of the population over the age of 50 in 2018. The ESRI Demographic Forecasts show this trend is projected to continue with estimates of 43 percent of the total population being over 50 by 2023. This trend is directly related to the availability of senior housing in combination with the lack of new market-rate entry level housing that would attract young families. The current Carmel residential 3- acre zoning exacerbates these demographic trends by failing to provide balanced housing opportunities, especially for young people including millennials.

Given the current economic conditions, the existing smaller unit housing stock on smaller lots is not becoming available to young entry level buyers as existing residents are staying in their homes longer and ageing in place. The Town can rectify this by adding a non-age-restricted multi-family zone to balance the senior multi-family zone that currently exists in the Town.

**Table 5  
Population Age 50+ Comparison by County 2010 - 2023**

County	2010 Population 50+	2010 % of Total Population	2018 Population 50+	2018 % of Total Population	2023 Population Projection 50+	2023 % of Total Population
Putnam	34,831	34.9%	41,665	41.4%	43,579	43.0%
Westchester	326,888	34.4%	375,233	38.4%	397,142	39.8%
Rockland	100,395	32.2%	115,559	35.1%	121,326	35.7%
Orange	110,943	29.8%	134,130	34.1%	144,086	35.3%
Bergen	324,155	35.8%	379,590	39.9%	404,354	41.3%
Fairfield	303,038	33.1%	358,900	37.4%	383,056	39.0%

Source: ESRI Demographic Forecasts based upon US Census Data.

Table 6 provides a summary of the demographic profiles of the region. This comparison shows that Putnam has the lowest population, but the highest median age. Putnam County shows a steep drop in the rate of growth from 2000 to 2010 and an even steeper drop from 2010 to 2018 compared to the surrounding counties. The ESRI population projections to 2023 are also substantially lower than for the other counties. As shown in Table 5, the 2018 data shows that Putnam County has the highest percentage of over 50 population and this trend is expected to continue

through 2023. Putnam County also has the highest percentage of owner-occupied units (76%) compared to other counties, which are generally at about 64%.

County	2018 Population	2018 Median Age	Total Households 2018	Owner Occupied Housing Units 2018	Renter Occupied Housing Units 2018	Percent of Owner / Rental Housing units	Median Household Income 2018	Average Home Value 2018
Putnam	100,715	44.0	35,299	26,830	8,469	76% / 24%	\$103,445	\$498,140
Westchester	977,073	41.2	355,434	209,823	145,611	59% / 41%	\$95,623	\$752,190
Rockland	328,812	37.0	103,673	71,245	32,428	69% / 31%	\$97,147	\$559,161
Orange	393,529	37.2	131,853	84,155	47,698	64% / 36%	\$78,935	\$360,589
Bergen	951,353	42.6	348,209	221,653	126,556	64% / 36%	\$92,940	\$586,135
Fairfield	958,883	40.6	346,445	222,550	123,895	64% / 36%	\$90,961	\$632,735

Source; US Census; ESRI Demographic Forecast

### **3.0 SCHOOLDISTRICT ENROLLMENTS**

The Town of Carmel is located primarily in the Carmel and Mahopac Central School Districts. There is a very small portion of the northeast corner of the Town located in the Brewster Central School District, which based upon the relative size is not included in this study.

According to the demographic projections provided by the Mahopac and Carmel Central School Districts, enrollments have been steadily declining in both the Carmel and Mahopac Central School Districts for more than ten years.

Peak enrollment for the Carmel CSD occurred in 2002 when enrollment was 4,956 students; compared to the 2018 enrollment which was 4,040 students, a reduction of 916 students or an 18.5 percent decline from peak enrollments. According to the projections made by Westchester Southern BOCES, this trend is expected to continue to 2023 and beyond, with the 2023 enrollment for the Carmel School District estimated at 3,662, which represents a 26.1 % decline from the peak enrollment. Carmel School District projections to 2028 estimate the student population to be 3,479, which is a reduction of approximately 1,500 students equating to an almost a 30% decline from peak enrollments district wide.

Similarly, peak enrollment for the Mahopac CSD occurred in 2004 when enrollment was 5,369 students; compared to the 2018 enrollment which was 4,138 students a reduction of 1,231 students or about a 22.9 % decline. This trend is expected to continue to 2028 and beyond, with the 2023 enrollment estimated at 3,671 which represents a 31.6 % decline from the peak enrollment of 2004. Projections for 2028 estimate 3,448 students which is a reduction of almost 2,000 students which equates to a decline of more than 35% compared to the 2004 peak enrollments.

**Table 7  
School Populations - Town of Carmel 2002 to 2028**

School District	Peak Year Enrollment	2010 Enrollment	2018 Enrollment	Decline from Peak to 2018	2023 Enrollment Projection	Decline from Peak to 2023	2023 Reduction in number of Students from Peak	2028 Enrollment Projection	Decline from Peak to 2028	2028 Reduction in number of Students from Peak
Carmel (Peak 2002)	4,956	4,581	4,040	18.5%	3,662	26.1%	1,294	3,479	29.8%	1,477
Mahopac (Peak 2004)	5,369	4,922	4,138	22.9%	3,671	31.6%	1,698	3,448	35.7%	1,921

Source: Mahopac School District, Superintendent of Business, July 2018  
Carmel Superintendent of Business, Western Suffolk BOCES, NYS ED BEDS 2018

The Superintendent for Business in the Mahopac Central School District indicated, that although enrollments are declining there are no plans for expansion or contraction at this time<sup>5</sup>. A review of both school district's budget for the 2018-2019 school year indicates that both districts have allocated funds for School Bus Replacement and for the provision of School Safety Officers. No other capital improvements are currently scheduled.

A Review of current school enrollment and budget data and school enrollment projections for the next 5 to 10 years indicate continuing declines for both the Carmel and Mahopac School Districts by more than 30% compared to peak enrollments. This substantial declining enrollment trend has the potential to result in excess infrastructure, where the number of students is significantly lower than the enrollment capacity. The potential for the elimination of school clubs, sports teams and other extra-curricular activities will increase as enrollments continue to decline.

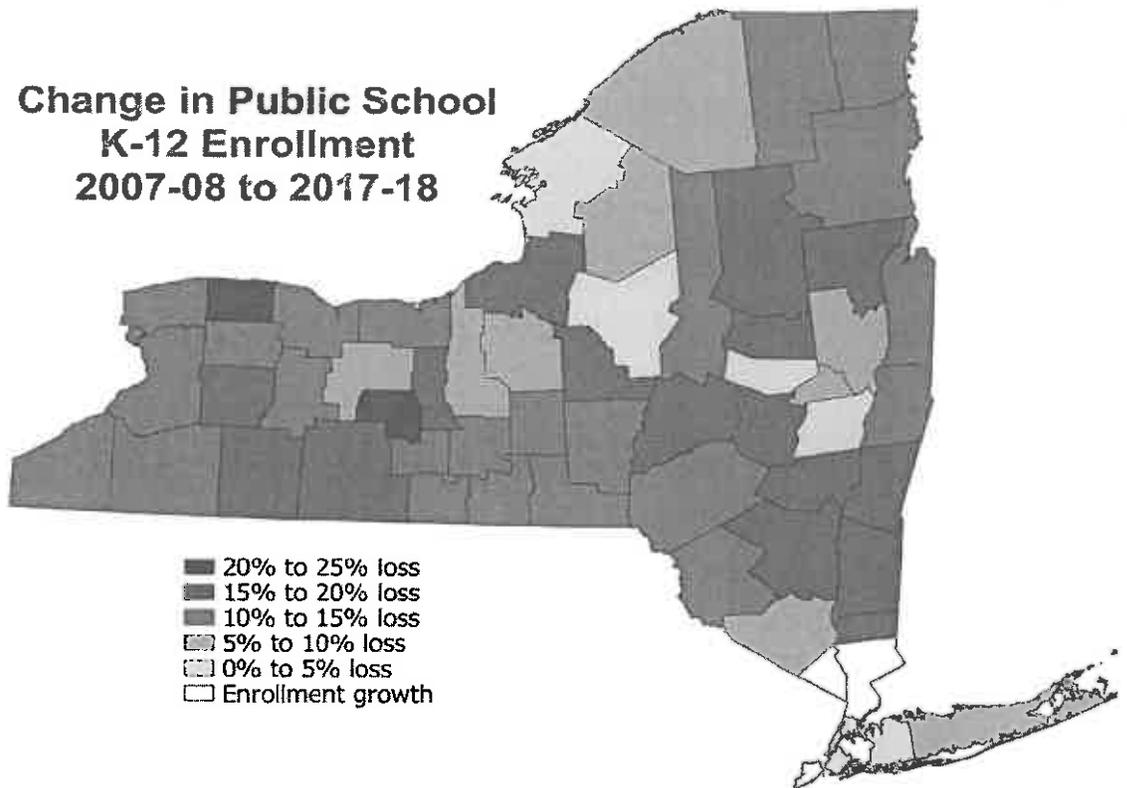
A recent report by the New York State Empire Center indicates enrollment reductions are taking place statewide with few exceptions.<sup>6</sup> The map below focuses on trends over the past 10 years. It should be noted that both Westchester and Rockland Counties are seeing school enrollment growth.

In contrast, Putnam County is seeing enrollment losses of 20 to 25%. The Carmel and Mahopac School Districts have lost 21% of their enrollment since their respective peaks in 2002 and 2004 and are projected to lose up to 35 percent of their peak enrollment by the 2028 school year.

<sup>5</sup> Phone call with Greg Sullivan, Superintendent for Business Mahopac CSD, July 11, 2018

<sup>6</sup> NYS Empire Center Research & Data, September 2018; Data posted at <http://www.p12.nysed.gov/irs/statistics/enroll-n-staff/home/html>

**Change in Public School  
K-12 Enrollment  
2007-08 to 2017-18**



At the same time enrollments are declining, legacy costs, i.e. pensions, disability, state mandated expenses, which make up about 50% of the school budget costs continue to increase. Although school districts can take measures to control their operating expenses, the legacy costs are not optional and cannot be reduced.

An increase in residential development would result in an increase in the assessed valuation of the School Districts, which translates into additional school tax revenues. Since the infrastructure and staff resources are already in place, the costs for new students associated with multi-family housing would be minimal. It should also be noted that while market-rate multifamily housing would provide a significant increase in the districts assessed valuation, the ratio of students associated with multifamily housing is low compared to traditional single-family housing – and as such would not over-burden the schools. Families are having fewer children than the previous generation in general and market-rate multifamily housing results in an even lower generation of school age children. A review of the Census data in Table 9 indicates the make-up of the families today is much different that it was 25 years ago. Current demographic research is being conducted<sup>7</sup>. Preliminary data indicates that today’s market-rate multi-family buyer has even fewer children than previously projected.

<sup>7</sup> New Jersey Planning Conference January 25-28, 2018. Demographic Multipliers Progress, Research and Applications. David Listoken, Ph.D. CUPR.

The ULI study indicates that market-rate multifamily housing typically pays its own way. A typical mixed-use development with retail, office, and market-rate multifamily housing may subsidize the schools and other public services required by residents of low-density housing in the same community.”<sup>8</sup> The ULI Study further states, “Thus, introducing higher density projects into a community will actually increase that community’s revenue without significantly increasing the infrastructure and public service burdens.” Blending market-rate multifamily housing into low-density communities can help pay for school expenses without drastic increases in the number of students. Diversifying housing options and adding amenities like shops and offices close by will improve the quality of life and attract businesses and people that will strengthen the community’s economic stability. Increasing density provides a real economic boost to the community and helps pay for the infrastructure and public services that everyone needs.”<sup>9</sup>

The lack of market-rate multifamily housing for young people advances the demographic trend in Carmel that sees the population of people aged 35 to 55 declining, and the portion of people aged 55 and over growing significantly, creating significant adverse consequences for Carmel and Mahopac schools and other adverse economic and fiscal impacts. As shown in Table 2, by 2028 it is estimated that the population below 25 will be less than 25% of the overall population and that the over 55 population will constitute about 32% of the population. This population distribution will have ramifications as to where the emphasis is placed on allocating Town resources. This in turn has the potential to negatively affect the commercial businesses in the Town. Failed businesses will ultimately have a negative implication on the tax bases of the Carmel and Mahopac School Districts and hurt the hamlet business districts with empty stores and closed businesses.

#### **4.0 NEED FOR MARKET-RATE MULTIFAMILY HOUSING**

The severe slowdown in growth in Putnam County and the Town of Carmel compared to the surrounding counties indicates there are contributing factors that need to be addressed.

The demographic analysis above shows the declining population of persons 35-55 years old, the age cohorts most likely to have young families. There is a need for additional housing for this segment of the population. Aging baby boomers are tending to stay in their houses longer while ageing in place, closing out opportunities for the young home buyer and millennials to enter the housing market. The declining school enrollments underscore the need for additional young families to fill the existing school infrastructure, while at the same time increasing the assessed valuation in the districts to help to broaden the overall tax base. A review of the data presented in Table 3, illustrates that a household income of \$100,000 to \$149,999 is

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<sup>8</sup> Higher-Density Development – Myth and Fact, Urban Land Institute, Sierra Club, National Multi Housing Council, American Institute of Architects, Washington D.C. 2005. Pg. 11

<sup>9</sup> Ibid, Pg. 12

generally necessary to live in Carmel today. This is a significant number, typically requiring more than one income per household.

The current residential zoning in Carmel is almost exclusively restricted to single family homes on three acre lots, which does not provide for an array of balanced housing opportunities, particularly entry level housing for young households and transitional housing for divorcees and others in transition. The failure to provide balanced housing opportunities, exacerbates the current demographic trends especially for young people. This failure leads to the lost economic and fiscal benefits for the Town and the business community and could easily be defined as “exclusionary zoning.” Younger families mature into families with higher incomes which results in more disposable income, which helps support the businesses and overall economic vitality of the Town.

The provision of multifamily housing can help to meet the Town’s housing needs and alter the current demographic trends in the Town of Carmel and Putnam County of an aging population and increase in the number of younger people. The lack of young people creates a social void and results in a hole in the fabric of the community. Entry-level housing opportunities will serve to encourage the growth of this segment of the population. Younger families can have a positive impact on economic and fiscal matters, including impacts on real estate taxes and commercial businesses. As shown in the attached Table 10, family households of 3 to 5 people spend much more money in Carmel than smaller senior households of 1 to 2 people. Once comfortable with the Town and the school system, as members of the community, these people could eventually sell their entry level house and buy a larger single-family home on a larger lot for their expanding family in the Town and School District.

The ULI Study states, “Providing balanced housing options to people of all income groups is important to a region’s economic vitality. The availability of multifamily housing helps attract and retain the workers needed to keep any economy thriving. In many American towns and cities, rapidly rising house prices are forcing working families to live farther away from their jobs.”<sup>10</sup>

Most recently an article in the NY Times Real Estate section confirms that the trends predicted by ULI are indeed happening. <sup>11</sup>In this area, millennials desire to move to the suburbs and are looking for housing that meets their needs and fits their budget.

The millennials who are looking to buy houses today have somewhat different priorities compared to the generation before them. They are focused on a life balance and value their free time as much as their careers. They are looking for smaller lots, low maintenance, common amenities, and no need for major renovations. As described above they are usually balancing home and work with family life and want

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<sup>10</sup> Ibid, pg. 32

<sup>11</sup> NY Times, September 30, 2018, Real Estate

a home that's easy to maintain. Their needs are very similar to the needs of active adults 55+. The housing that is desirable for seniors is the same type of housing desirable to young families. Young people desire 2 to 3 bedrooms while seniors desire 2 bedrooms plus a home office. Common amenity space and low maintenance is important to both groups. Both of these populations clearly prefer new or recently updated housing in move-in condition.

Based upon the similarities in the needs of young people starting out and active adults 55+ or senior citizens, general population multifamily housing would likely accommodate a mix of young families and seniors. If the age restriction is lifted, the new non-age restricted communities likely will have a mix of 50% age 55 and up and 50% age 55 and below, similar to the mix at Heritage Hills in Somers<sup>12</sup>. By encouraging the development of market-rate multifamily units that are conducive to senior living, i.e. master down single living level layouts, the Town can continue to provide for the needs of its seniors within general population communities. A combination of active adult housing for persons above age 55 and non-age restricted market-rate multi-family housing for young people can serve to address both the current and future needs of Carmel and Putnam demographics within the same new communities. If a senior wants to live in a community that is exclusively 55+, they have the option to buy at one of the 55 and over communities that currently exist in the Town.

Young entry level homebuyers will eventually get comfortable as community members of the Town and School Districts, and develop a tangible stake in the community. As they outgrow an entry-level home they will likely look to buy a larger single-family home in the Town of Carmel, utilizing the substantial number of larger single-family homes on 1 to 3 acres currently existing throughout Carmel.

The ULI Study supports these concepts. "Higher density development can be a viable housing choice for all income groups and people in all phases of their lives. Many financially secure baby boomers, who have seen their children leave the nest, have chosen to leave behind the yard maintenance and repairs required of a single-family house for the more carefree and convenient lifestyle multifamily housing provides. Interestingly, the baby boomers' children, the echo boomers, are entering the age where many will likely live in multifamily housing. Just entering careers, many are looking for the flexibility of multi-family living to follow job opportunities. Their grandparents, likely on a fixed income, may also prefer or need to live in multifamily housing as physical limitations may have made living in a single-family house too challenging."<sup>13</sup>

A recent Study (2017), by the National Association of Realtors (NAR) that millennials are finally buying residences of their own. Of all the homebuyers in the U.S. more than a third were millennials in 2017. They aren't buying in the cities where they

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<sup>12</sup> Heritage Hills was constructed as an age-restricted community of more than 2,500 total units but was ultimately converted to a general population development based upon market conditions.

<sup>13</sup> Ibid, pg. 32

have been renting for over a decade. Those who choose to own their home are packing their bags and moving largely to the suburbs.<sup>14</sup>

The ULI Study indicated “This country’s population is changing, and so are its real estate preferences. For the first time there are more single-person households (26.4 percent) than married couples with children (23.3 percent). The groups growing the fastest, people in their mid-20’s and empty nesters in their 50’s, are the groups most likely to look for an alternative to low-density, single family housing.”<sup>15</sup> The most recent Census indicates this trend is continuing as illustrated in Table 8. Based upon the 2010 Census Data, there continue to be more single-person households (26.7 percent) than married couples with children (20.2 percent).

The Country’s population is changing and so is family structure. It is no longer necessarily the norm to have two married parents, two to four children and a dog. There is a significant number of married couples without children, there are many blended families as a result of current divorce rates, there is a growing number of same sex family units and there are other types of non-family households.

Table 8 below shows the current statistics of households by type as reported in the 2010 US Census. These numbers are likely to show an even wider range when the Census is updated in 2020.

Married Couples with Children	20.2%
Married Couples without Children	28.2%
Other Family Households	18.1%
Men Living Alone	11.9%
Women Living Alone	14.8%
Other non-Family Households	6.9%
Source: US Census 2010: DP-1	

The numbers in Table 8 above are striking. There are more married couples without children than there are married couples with children. The Town must adapt and address this real change in household types. The household makeup above is very different than just 20 or 30 years ago. Large lot single family housing no longer meets the needs of a majority of homebuyers today as shown by the data above and yet these new household configurations need somewhere to live that suits their needs.

### **5.0 EXCLUSIONARY ZONING**

The current administration in Washington is continuing the direction of the prior administration by taking an aggressive stance regarding the enforcement of the Federal Fair Housing Act<sup>16</sup>. Ben Carson, Secretary of Housing and Urban Development, wants to spur the construction of multi-family housing all over the

<sup>14</sup> Nation Association of Realtors Report, 2017.

<sup>15</sup> Ibid, pg. 29

<sup>16</sup> NY Times, August 21,2018.

Country. The goal is to end exclusionary zoning that restricts housing choices and affordability for the general population, particularly new homebuyers.

Exclusively large lot zoning does not meet the needs of the Town's existing demographics nor provide opportunities for future growth. This exclusionary zoning makes the Town very vulnerable to a federal fair housing lawsuit similar to Westchester County which affected many of its municipalities in recent years. The Federal Fair Housing Act, guarantees the opportunity to choose where one lives free from obstacles. This promise of fair housing choice requires vigorous enforcement of laws advancing the community's commitment to fair housing. A community must take appropriate actions to overcome the effects of any impediments to Affirmatively Further Fair Housing (AFFH). The provision of a diverse housing market that meets the needs of all members of the community is necessary to help in meeting these goals. Clearly the Town's current 3-acre zoning creates a barrier and severely limits the housing choices for many people. In addition, large lot zoning has a significant impact on housing affordability which leaves the Town vulnerable to a federal lawsuit similar to Westchester County.

#### **6.0 SURROUNDING PROPERTY VALUES**

The ULI Study concludes, "No discernible difference exists in the appreciation rate of properties located near higher-density development and those that are not. Some research even shows that higher-density development can increase property values."<sup>17</sup>

A well-designed multifamily development can add to the value of the surrounding neighborhood. There is more flexibility of design and opportunities for creativity in larger cluster developments in terms of landscaping, site layout, amenity packages and cohesive architecture. When designed well, the multifamily development creates a sense of place where a community of people live together.

The ULI publication provides the results of three separate studies which indicate the value of surrounding single family real estate does not suffer declines in value as a result of nearby market-rate multifamily development. One study by the National Association of Home Builders looked at data from the American Housing Survey, which is conducted every two years by the U.S. Census Bureau and the Department of Housing and Urban Development. It found that between 1997 and 1999, the value of single-family houses within 300 feet of an apartment or condo-minimum building went up 2.9 percent a year, slightly higher than the 2.7 percent rate for single-family homes without multifamily properties nearby. A long-term study by Harvard University's Joint Center for Housing Studies published in 2003 also confirmed that multifamily units pose no threat to nearby single-family house values, based on U.S. Census data from 1970 to 2000. Not only is there compelling evidence that increased density does not hurt property values of nearby neighbors; researchers at Virginia Tech University have concluded that over the long run, well-placed market-rate multifamily housing with attractive design and landscaping actually increases the overall value of detached houses nearby. They cite three possible reasons. First, the new condominiums could themselves be an indicator that an area's economy is vibrant

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<sup>17</sup> Ibid, Pg. 13

and growing. Second, multifamily housing may increase the pool of potential future homebuyers, creating more possible buyers for existing owners when they decide to sell their houses. Third, new multifamily housing, particularly as part of mixed-use development, often makes an area more attractive than nearby communities that have fewer housing and retail choices.<sup>18</sup>

<b>TABLE 9</b>				
<b>Average Annual Appreciation for Single Family Detached Homes in Proximity to Multifamily Housing</b>				
	<b>Not Near Multifamily</b>	<b>Near Multifamily</b>	<b>Near Low-Rise Multifamily</b>	<b>Near Mid- or High-Rise Multifamily</b>
<b>Appreciation Rate</b>	2.66%	2.90%	2.91%	2.79%
Source: NAHB based upon American Community Housing Survey; US Census; US Department of Housing and Urban Development				

### **7.0 RETAIL GOODS & SERVICES**

Attachment A, provides a comparison of the Retail Goods and Services expenditures for a general population multifamily housing community, based upon the example of Heritage Hills Village in the adjacent Town of Somers; to an all senior citizen housing community, based upon the example of Jefferson Village down Route 6, in the Town of Yorktown.

The data in the table shows the average annual household expenditure on various spending categories. As the table shows the median income and financial assets of the all senior development is equal to or less than half that of the general population community. Similarly, expenditures on food, apparel, entertainment, household expenses, transportation and travel are generally half from the senior community compared to the general population community. Younger families of 3-5 people eat out more after sporting events and other school activities. They also spend more on retail goods and services, i.e. clothes and shoes for growing children, electronics, groceries school supplies, etc.

The reduced income and expenditures of the senior population affects the economy of the Towns commercial base. Senior households of 1-2 persons, being on a fixed income, typically have less discretionary income to spend. Seniors needs also tend to be simpler, they don't need new sneakers every 6 months, nor a new soccer ball or ballet costume and constant new clothes purchases the same way a young family might.

The spending habits of young professionals and families supports and maintains a wider diversity of the Town's business types. These families are more likely to need a new car, purchase new computers or cell phones, spend money on pets and have a higher entertainment budget for movie, video games, sports centers, etc. A younger professional population will help create a stronger local economy, which will help

<sup>18</sup> Ibid, Pg. 14

retain and attract businesses. The differential in consumer expenditure potential between senior households and young professionals and families will help to feed the Town of Carmel business community allowing it to thrive and prosper and will result in increased sales tax revenue to Putnam County.

Market-rate multi-family housing, which serves as entry-level housing, has the ability to attract younger households, due to the difference in monthly housing expenses compared to a large single-family home on three acres. It also provides a housing option for young people who have grown up in Carmel and those looking to return to Carmel after college to continue to live, work and shop in the area. This could also help divorced persons to remain close to their families.

Appendix A also provides a comparison to the Retail Goods & Services of a typical single-family development in the Town of Carmel, based upon the example of the Willow Ridge Development. As the Table shows there are similar spending patterns for the Multifamily Mixed-use development as there are from the single-family residential neighborhood.

An important aspect of the provision of multifamily housing is the provision of a growing and ready supply of future occupants for the larger move-up single-family housing stock already existing in the Town. Once an entry level resident has established roots in the community, they are more likely to look for housing in Town to grow into. These people will have a stake in the community, be comfortable with the schools and other community programs and have established spending patterns that support the local economy. General population multi-family housing provides this opportunity while at the same time bringing new residents who will support the local economy in a similar manner to single family housing. Multi-family housing will not only serve as entry level housing but will also be a viable option for seniors.

## **8.0 OTHER CONSIDERATIONS**

### **8.1 Brain Drain**

Putnam County and the surrounding area is a great place to raise a family. The new homebuyers of the 1960's thru the 1980's raised many families here. Those children are now grown and starting families of their own. The lack of housing options for persons in the entry level housing market, generally the population (25 - 40) is forcing many people who grew up in Carmel to leave or not return. Young persons who do not return to the area after attending college results in a lost potential for them to utilize their education here. The lack of multi-family housing in Carmel is contributing to the brain drain problem in Carmel and the lower Hudson Valley. The lack of such housing is forcing educated millennials to leave the area or not even consider moving here in search of housing choices or reasonably priced housing that meets their needs. This is a loss to the business community, the many volunteer organizations and to the larger corporations who have located in the region and support the economy.

## **8.2 Community Needs**

The Town government is tasked with the job of meeting their resident's needs. Carmel's aging population will have an impact on the Town's priorities for recreation facilities, municipal services and spending. If the existing demographic trends continue, such priorities will need to shift away from facilities serving families and be shifted toward a clearly growing senior population. This creates a negative disincentive cycle as fewer services for families will encourage even more families to leave or not to come to Carmel to live and raise a family.

In a similar manner, the infrastructure needs and curriculum of the Town's School districts will need to adjust if school enrollments continue to decline. There may also be budgeting conflicts as a growing number of residents no longer have students enrolled in the school and are thus less inclined to support increases in expanding school budgets. By 2028 the reduction in school enrollment is projected to approach 35%. Continuing legacy costs will continue to rise without any way to slow down the cost increases. This trend can already be felt. The 2018 Budget for the Carmel Central School District passed by a vote of 678 to 554, not an overwhelming margin. The voting margin on the school budget in Mahopac was more supportive at 1,261 to 573 in support of the 2018-2019 Budget.

Infrastructure needs in general are a continuing concern of Putnam County and the local municipalities. Putnam County has recently (July 2018) published a study entitled Putnam County Commercial Corridors Study<sup>19</sup> which identifies the need for additional sewer infrastructure and transportation improvements by region in the County. The County acknowledges the need for diversity of housing, identifies the infrastructure improvements necessary to support a higher density of housing and acknowledges the contribution additional development would provide to help defray the costs of the associated costs of the improvements. Carmel is fortunate to have areas that are already serviced by municipal water and sewer and are ideal areas for both non-age restricted multifamily housing and senior housing developments. It should be noted that a common community septic and common community sewer is a viable option for clustered multifamily development in areas where sewer is not available. Common community water supply (wells) is also a viable option where municipal water service is not available.

Volunteer organizations such as the volunteer fire department, volunteer ambulance, Lions, Knights of Columbus, scout leaders, sports programs etc. are most typically populated by young family-oriented persons. A lack of housing that meets the needs of this population will result in fewer persons who are inclined to volunteer in the many valuable community organizations that help create real community character and a special Town. Continuing Town and School legacy costs will continue to rise without any way to slow down the cost increases.

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<sup>19</sup>Putnam County Commercial Corridors Study, July 2018

### **8.3 Traffic**

As discussed in Section 5.0, the housing needs of active adults, seniors and young millennials are similar. It is likely that a general population multifamily housing project could include a significant percentage of residents over the age of 55 who would be looking for a cost-effective, maintenance free lifestyle. Trip generation characteristic of a 100 % age 55 and above community compared to a mixed non-age restricted community where approximately half the residents are below age 55, would be similar. Trip generation rates for senior housing and non-age restricted multifamily housing development are among the lowest residential trip rates.

The ULI study confirms the comparatively low trip generation rates of multifamily housing compared to traditional single-family suburban housing and indicates that single family detached houses have an average of 10 trips per day, whereas a multifamily unit has an average of 6.3 trips per day. This is consistent with NYS DOT counts which indicates that traffic volumes have gone down over the past 10 years, leaving additional capacity on area roadways.

The number of trips per unit is going down. The most recent (2017) Institute of Transportation Engineers (ITE), publication Trip Generation 10<sup>th</sup> Edition the average total trips per day for Single family is 9.5 compared to the average total trips per day from a multifamily unit of 5.4 trips. Both of these factors have dropped since the last edition of Trip Generation. Multifamily residents typically have fewer cars and fewer drivers than a typical suburban single-family residence. Multifamily living is also more conducive to transit opportunities. Even in semi-rural environments, the concentration of population in a multi-family development lends itself to being a designated bus stop or car-pooling location.

### **9.0 RECOMMENDATIONS**

Zoning is the legal mechanism for implementation of a community's goals with regard to development including housing and business development. Revisiting the concept of general population, non-age restricted multifamily housing in the Town would provide for balance in the Towns housing options to help to address the unmet need for entry level and maintenance free housing options for all ages. It would also allow the Town to comply with the Federal Fair Housing Law.

It is recommended that the existing multi-family development provision that erroneously remains in the Zoning Code (§156-28), even though the use is currently prohibited in Town, be re-used and updated to allow for the use.

Then following zoning text is recommended:

*Key:*

Text in black is existing

~~Text in Red is proposed to be deleted~~

Text in Blue is proposed to be added.

**§ 156-28 Multifamily developments.**

**A.** In the R Residential Zones, C – Commercial and C-BP – Commercial Business Park Zones, multifamily developments and their on-site accessory uses for parking and recreation shall be permitted as ~~a garden apartment design or townhouse design~~, provided that:

- (1) The site of the development shall be at least ~~10~~ 5 acres for multi-family developments of 39 or fewer units, or 10 acres for multi-family developments of 40 units or more.
- (2) The site of a multi-family development consisting of 40 or more units in the R – Residential zoning district must be adjacent to property located within the C – Commercial or C/BP – Commercial Business Park zoning districts in the Town of Carmel.
- (3) The site of a multi-family development consisting of 40 or more units in either the C – Commercial or C/BP – Commercial Business Park zoning districts must be adjacent to property located within the R – Residential zoning district in the Town of Carmel.
- (4) The maximum permitted density shall not exceed five units per acre, in a R-MF and 3.4 units per acre in an R-MFA Zone.
- (5) Multi-family developments consisting of 40 or more units must have its primary access driveway directly off a State Highway located in the Town of Carmel, and said access shall not run through land in any another municipality.
- (6) All multi-family developments consisting of 40 or more units shall be served by municipal or community water and municipal or community sewer or septic.
- (7) For each housing unit there shall be provided a minimum of two on-site parking spaces for each three-bedroom unit, 1.5 on-site parking spaces for each two-bedroom unit, 1 on-site parking space for each one-bedroom unit and 1.25 on-site parking spaces for each studio unit. Additionally, 2 guest parking space shall be provided for every 5 units. ~~two on-site parking spaces as defined in this chapter. However, for multifamily developments (nonapartment) that are designated for occupancy by the elderly exclusively, there shall be a minimum of 1.5 on site parking spaces for every dwelling unit. No parking space shall be located in a front setback area or within 10 feet of any side or rear lot line, with the exception of driveway parking for townhouses.~~
- (8) The building height for a multi-family development of 40 or more units shall not exceed ~~35~~ 40 feet. A maximum of 3 stories shall be permitted above an enclosed or semi-enclosed garage. The building height for a multi-family development of 39 or fewer units shall not exceed 35 feet. A maximum of 2 stories shall be permitted above an enclosed or semi-enclosed garage.

- (9) Coverage of the lot by buildings shall not exceed 30% for multi-family developments of 40 or more units, or 35% for multi-family developments of 39 or fewer units.
- (10) There shall be a distance ~~of at least 50 feet~~ between all buildings of a distance sufficient to meet Fire Code access requirements.
- (11) No building shall exceed a length of 200 feet in multi-family developments of 40 or more units, or 100 feet in length in multi-family developments of 39 or fewer units.
- (12) There shall be a perimeter building setback area of at least ~~100~~ 50 feet for apartment developments and 30 feet for detached buildings and townhouses, on all sides of the site. A comprehensive landscaping and screening plan shall be provided which shall be designed to mitigate visual impacts created by the multi-family development.
- (13) A total of not less than 300 square feet per dwelling unit shall be improved with recreational facilities, such as swimming pools, tennis, basketball and other court games, playground or other recreational equipment, gazebos, or walking, jogging or fitness trails for the use of the residents of the site and their guests. Such facilities shall not be operated for profit. No such recreational facilities shall be required for developments of 8 units or less.
- (14) In addition to the required 300 square feet per dwelling unit which shall be provided for recreational facilities for use by the residents of the site, the applicant shall pay to the Town of Carmel an amount to be established annually by the Town Board and on file in the office of the Town Clerk, for each dwelling unit shown on the site plan prior to the issuance of the certificate of occupancy. This amount shall constitute a trust fund to be used by the Town exclusively for park, playground or other recreational purposes, including the acquisition of property.
- (15) A landscaped buffer area of at least ~~10~~ 15 feet in width shall be provided along all property lines and around all parking areas. Such buffer planting shall be maintained at a height of at least four feet to satisfactorily screen the parking area.
- (16) No multifamily development ~~in a R-District~~ with direct access to a State Road shall contain more than 150 dwelling units per lot.
- (17) No multi-family development with direct access to a County or Local Road shall contain more than 39 dwelling units for projects served by municipal or community sewer and municipal or community water, or 20 units served by a subsurface septic system.
- (18) Adequate water supplies shall be made available the entire year for fire protection purposes. These sources may be pressured systems, cisterns or dry hydrants. The quantity available must meet NFPA Standard 1231

entitled "Standard on Water Supplies for Suburban and Rural Fire Fighting," primarily Tables 5-1.1(a) and (b). All water supply distribution points shall be readily accessible and so located that the maximum travel distance for fire-fighting apparatus shall not exceed 1,000 feet from distribution point to farthest delivery point.

- (19)** All apartment buildings shall contain a fire suppression system.
- (20)** A minimum of 650 square feet shall be provided for all dwelling units. The maximum number of bedrooms in an multi-family dwelling unit shall be three.
- (21)** All requirements of the New York State Uniform Fire Prevention and Building Code and all applicable State, County and Town regulations shall be met.

Attachment A

Retail Goods and Services Expenditures

	2018 Population	Households	Median Age	Median Household Income	Financial Assets	Food At Home	Food away from Home	Apparel & Services	Entertainment & Recreation	Household Furnishings & Equipment	Hosuehold Operations	Transportation	Travel	Annual Household Total
Heritage Village Somers	2,715	1,240	55.6	\$115,246	\$70,012	\$14,298	\$6,979	\$3,625	\$5,778	\$2,367	\$3,010	\$9,759	\$3,220	\$49,036
Jefferson Village Yorktown	2,132	1,216	69.1	\$44,061	\$35,889	\$4,510	\$3,583	\$1,759	\$2,968	\$1,219	\$1,543	\$5,007	\$1,570	\$22,159
Census Tract 115 Block group 4 including Pulte Active Adult	1,778	722	46.6	\$72,320	\$47,731	\$6,266	\$5,143	\$2,713	\$4,105	\$1,649	\$2,183	\$6,779	\$2,225	\$31,063
Census Tract 115 Block group 3 including Willow Ridge	1,259	430	45.5	\$119,110	\$68,500	\$8,165	\$6,787	\$3,680	\$5,579	\$2,223	\$3,078	\$9,009	\$3,236	\$41,757
Town of Carmel	34,935	11,874	43.2	\$106,822	\$61,444	\$7,396	\$6,184	\$3,334	\$5,037	\$2,025	\$2,765	\$8,248	\$2,885	\$37,874

These figures represent the average spending in certain categories per household on an annual basis for comparison. They do not represent all household spending.