ZONING BOARD OF APPEALS

Thursday, June 24, 2021

6:00 pm

Council Board Room One Batavia City Centre, Batavia, NY

AGENDA

- I. Roll Call
- II. Call to order
- III. Pledge of Allegiance
- IV. Approval of May 27, 2021 minutes
- V. Statement about the role of the Zoning Board of Appeals and the procedure it follows
- VI. Variance Requests

Request 204 Oak Street

Lou Terragnoli, agent for Quicklee's

Area Variance: Reuse this existing commercial property. The proposed

<u>project involves construction of a four pump fuel station</u> island with canopy and underground fuel storage tanks, and

a change of use for the existing 3, 771 sq.' restaurant

building. The convenience store with retail fuel sales will use 2,771 sq.' and the remaining 1,000 sq.' will be utilized

for a drive-through restaurant

- 1. Review application
- 2. Public hearing and discussion
- 3. Action by the board
- VII. Setting of Next Meeting: July 22, 2021
- VIII. Adjournment



City of Batavia Department of Public Works Bureau of Inspections

One Batavia City Center, Batavia, New York 14020

(585)-345-6345

(585)-345-1385 (fax)

To:

Genesee County Planning

Planning and Development Committee

Zoning Board of Appeals

From:

Doug Randall, Code Enforcement Officer

Date:

6/1/21

Re:

204 Oak St.

Tax Parcel No. (71.014-2-5.2)

Zoning Use District: C-2

The applicant, Patricia Bittar, Director of Land Development Projects at WM Schutt Associates for Quicklee's, has filed a Special Use Permit application and area variance application for reuse this existing commercial property. The proposed project involves construction of a four pump fuel station island with canopy and underground fuel storage tanks, and a change of use for the existing 3,771 square foot restaurant building. 2,771 sq.ft. will be used for a convenience store with retail fuel sales. 1,000 sq.ft will be utilized for a drive thru restaurant.

Review and Approval Procedures:

County Planning Board- Pursuant to General Municipal Law 239 m, referral to the County Planning Board is required since the property is within 500 feet of the boundary of the city; the right of way of a state parkway, throughway, expressway, road or highway.

City Planning and Development Committee- Pursuant to section 190-44 B(1) of the zoning ordinance, the Planning and Development Committee is authorized to conduct site plan reviews.

190-37 PDC

PDC may authorize special use permits that comply with the terms and specifications of this chapter.

190-44 C (1)(c)

PDC shall review special use permit applications for site plan compliance.

190-13 C (5) Automobile service stations and drive-in restaurants are permitted with issuance of a special use permit when in compliance with 190-37- E (1-14) and 190-37 K (1-14).

Zoning Board of Appeals- Pursuant to BMC Sec. 190-49 of the zoning ordinance, the ZBA shall review and act on required variances.

Required variances- Area

- 1) Area variance is required from 190-37 E (10) Service stations may not be located within 500 feet of a public entrance to a church.
- 2) Area variance is required from 190-37 E (8) 40 parking spaces are required for the drive-in restaurant (4 per 100 sq.' of floor area) and 28 spaces for the service station (1 per 100 sq.' of floor area). A total of 68 spaces are required, 40 spaces are proposed.

The Planning and Development Committee will be the lead agency to conduct SEQR.

GENESEE COUNTY DEPARTMENT OF PLANNING 3837 West Main Street Road

Batavia, NY 14020-9404 Phone: (585) 815-7901

DEPAR	TMENT	USE	ONLY:	
GCDP Referral # _				_
_				



* GENESEE COUNTY * PLANNING BOARD REFERRAL

Required According to:

GENERAL MUNICIPAL LAW ARTICLE 12B, SECTION 239 L, M, N (Please answer ALL questions as fully as possible)

1. Referring Board(s) Information	2. APPLICANT INFORMATION
Board(s) PDC and ZBA	Name Patricia Bittar, Dir. Land Devel. WM Schutt
Address One Batavia City Centre	Address 37 Central Ave.
City, State, Zip Batavia, NY 14020	City, State, Zip Lancaster, NY 14086
Phone (585) 345 - 6345 Ext.	Phone (716) 683 - 5961 Ext. Email pbittar@wmschutt.com
MUNICIPALITY: City Town	Village of Batavia
3. TYPE OF REFERRAL: (Check all applicable items)	
Use Variance Zoning	Map Change Subdivision Proposal Text Amendments Preliminary Tehensive Plan/Update Final
4. LOCATION OF THE REAL PROPERTY PERTA	INING TO THIS REFERRAL:
A. Full Address 204 Oak St.	
B. Nearest intersecting road Noonan Dr.	
C. Tax Map Parcel Number <u>71.014-2-5.2</u>	
D. Total area of the property 1.4	Area of property to be disturbed .5
E. Present zoning district(s)	
5. <u>REFERRAL CASE INFORMATION:</u> A. Has this referral been previously reviewed by	the Genesee County Planning Board?
☐ NO ☐ YES If yes, give date and action	n taken
B. Special Use Permit and/or Variances refer to	the following section(s) of the present zoning ordinance and/or law
BMC 190-37 E and 190-37 K for SUP.	BMC 190-37 E (8 and 10)
C. Please describe the nature of this request Ap	proval of site plan, Special Use permit and area variance for service
station with drive-in / drive-through restau	ant.
6. ENCLOSURES – Please enclose copy(s) of all app.	ropriate items in regard to this referral
■ Site plan	g text/map amendments on map or tax maps ion drawings Other: Cover letter
7. <u>CONTACT INFORMATION</u> of the person represe	enting the community in filling out this form (required information)
Name Douglas Randall Title	Code Enf. Officer Phone (585) 345 -6327 Ext.
Address, City, State, Zip One Batavia City Centre	e, Batavia, NY 14020 Email drandall@batavianewyork.com

Meg Chilano

From:

Douglas E. Randall

Sent:

Thursday, May 20, 2021 10:47 AM

To:

Meg Chilano

Subject:

FW: Oak St proposal for Old Bob Evans Location

Meg,

Please save this with the 204 Oak St. file for future distribution to the PDC.

Thanks, Doug

From: Stephen Rumery <srrumery@yahoo.com>

Sent: Tuesday, May 18, 2021 12:15 PM

To: Douglas E. Randall <DRandall@batavianewyork.com> **Subject:** Fw: Oak St proposal for Old Bob Evans Location

Sent from Yahoo Mail on Android

---- Forwarded Message -----

From: "Stephen Rumery" <srrumery@yahoo.com>

To: "DRandall@bataviany.com" <drandall@bataviany.com>

Cc: "steve rumery" < srrumery@yahoo.com>, "Rose Rumery" < roserumery@gmail.com>

Sent: Tue, May 18, 2021 at 7:35 AM

Subject: Oak St proposal for Old Bob Evans Location

Hello Doug,

We spoke a couple of weeks ago and you mentioned that you could share our concerns regarding a proposed gas station and store at this location. Please share our concerns with the planning board for consideration.

A number of years ago the DOT changed the traffic flow on Oak St from 2 lanes in each direction to 1 lane each way with turning lanes. With the increase in traffic this has caused problems over the years. I live at 201 Oak st. which is directly across the street from the old Bob Evans. There is also the Monsignor Kirby senior living faculty with over 30 apartments directly behind our home.

With one lane of traffic in each direction my vehicle has been hit twice in the last few years as I waited to turn into our driveway.

We and a number of residents of Monsignor Kirby are concerned over the current congested traffic flow on Oak st and a new exit lane on the old Bob Evans property would only cause more traffic congestion.

We also already find discarded garbage from the gas station around the corner on our lawn and our concerned that another gas station/store would add to this issue.

We have general environmental concerns about having a gas station close to our residence.

Please share our concerns the with planning board for consideration.

Steve and Rose Rumery 201 Oak St.





SPECIAL USE PERMIT

CITY OF BATAVIA, NEW YORK

Application Date:
Application Date: Tax Parcel No.: 71.014-2-5.2
Phone No. 716-228-8860
X ZONING VARIANCE REQUIRED
No HISTORIC DISTRICT
No HISTORIC LANDMARK
No CITY ENGINEER REVIEW
NO CITY COUNCIL REVIEW
ZBA OTHER
PROPOSED USE: C2
N.Y.S. BLDG. CODE OCC. CLASS: Mand B
LOT AREA: 1.4 acres
Fee \$100 (DW)
ALAPPROVAL WITH CONDITIONS
DATE:
4/
// Issuing Officer
1.1



CITY OF BATAVIA

APPLICATION TO THE ZONING BOARD OF APPEALS

Application No.: Hearing Date/Time: Quicklee's l.terragnoli@quicklees.com Lou Terragnoli, APPLICANT: E-Mail Address Name 2697Lakeville Road, Suite 1 716-228-8860 Phone Fax 14414 Street Address Avon Zip City JUN - 1 2021 Agent for Owner Contractor STATUS: X_ Owner Same as Applicant CITY OF BATAVIA

CLERK-TREASURER OWNER: E-Mail Address Name Phone Fax Street Address City State Zip 204 Oak Street, Batavia LOCATION OF PROPERTY: _ Quicklee's is proposing a convenience store/gas station at the DETAILED DESCRIPTION OF REQUEST: former location of a Bob Evan's restaurant at 204 Oak Street. The existing structure will be maintained, with modifications made internally for the proposed use. Existing parking lot will require modifications. The requested area variances are from 190-37 E (10) construction of a Service station within 500-ft of a public entrance to a church and from 190-37 E (8) proposed 40 parking spaces wherean 8-aire required (All aparenter duine in most auranticia de 28 papares bouque auvica station)-sponsibility of the applicant to present evidence sufficient to satisfy the Zoning Board of Appeals that the benefit of the applicant does not outweigh the health, safety, morals, nesthetics and general welfare of the community or neighborhood. Date Owner's Signature To be Filled out by Zoning Officer TAX PARCEL: 71.014-2-6.3 ZONING DISTRICT: 4-3 FLOOD PLAIN: _ C__ FEE: ___ \$50 (One or Two Family Use) TYPE OF APPEAL: Area Variance \$100 (All other Uses) Use Variance Interpretation Decision of Planning Committee Provision(s) of the Zoning Ordinance Appealed: BMC 190-37 E

Criteria to Support Area Variance

In making its determination, the zoning Board of Appeals shall take into consideration the benefit to the applicant if the variance is granted, as weighed against the detriment to the health, safety, moral, aesthetics and welfare of the neighborhood or community. The Zoning Board of Appeals shall consider the following test, as per §81-b of the General City Law when making its determination:

Explain <u>how</u> the proposal conforms to EACH of the following requirements:

1.	Undesirable Change in neighborhood Character. The granting of the variance will not produce an undesirable change in the neighborhood or a defriment to nearby properties. See attachment
2.	Alternative Cure Sought. There are no other means feasible for the applicant to pursue that would result in the difficulty being avoided or remedied, other than the granting of the area variance. See attachment
3.	Substantiality. The requested area variance is not substantial. See attachment
4,	Adverse Effect or Impact. The requested variance will not have an adverse effect or impact on the physical or environmental condition in the neighborhood or community. See attachment
5.	Not Self-Created. The alleged difficulty existed at the time of the enactment of the provision or was created by natural force or governmental action, and was not the result of any action by the owner or the predecessors in title. See attachment
A	pplicant's Signature Date

CRITERIA TO SUPPORT AREA VARIANCE PROPOSED QUICKLEE'S CONVENIENCE STORE/GAS STATION 204 OAK STREET

1. Undesirable Change in Neighborhood Character:

The site was previously occupied by a Bob Evans restaurant. The existing structure will be maintained, as well as a majority of the parking lot. There will be aesthetic upgrades to the exterior of the structure, with layout modifications internally. The site is zoned commercial, allowing the proposed convenience store use, with a Special Use Permit required for the proposed gas island and store drive-thru. The proposed project will re-use an existing developed site, abutting other existing commercial uses. The site is also located at a ramp to the NYS 90 Interstate Thruway. The proposed use does not cause an undesirable change to the surrounding area, as it will reuse an existing structure while providing aesthetic upgrades to the structure and surrounding landscape.

Proposed landscaping will specifically be enhanced along the Noonan property frontage which abuts the Emmanuel Baptist Church. Also, based on traffic studies done on similar developments and for this site, the peak hours of operation are anticipated from 7 am to 9 am and 4 pm to 6 pm. These peak hours of operation are not anticipated to overlap the peak times of conducting mass services and related activities of the abutting church. Additionally, the Applicant has contacted Pastor Tharpe of the Emmanual Baptist Church. Pastor Tharpe advised he is in support of the project.

The number of required parking spaces required by City code (68), exceeds the needed parking spaces (43) for operation of the proposed project. Quicklee's would prefer to maintain as much green area as possible and does not want to provide parking that is well above their need. Also, by limiting any increase in impervious surface, the associated stormwater runoff rate will be maintained.

The site location to the NYS Thruway, as well as to the immediate surrounding existing uses (hotels, businesses, church buildings and several residences) is an ideal location for the proposed services to be provided.

The proposed Quicklee's project allows for rehabilitation of a presently developed site. The proposed project will improve site aesthetics and offer employment opportunities.

2. Alternative Cure Sought:

The site chosen for the proposed project will reuse an existing developed site that has been vacated by the former Owner. Choosing an alternate location could result in disturbing a

native piece of property, as opposed to trying to establish another commercial use at a formerly active site. By pursuing the proposed project at this location, the proximity of the proposed gas island to an existing church cannot be avoided.

As stated above, the City code requires a significant increase in required parking spaces at the site. The increase in parking spaces in not warranted by the proposed development and the Applicant would prefer to preserve as much greenspace as possible. There is also insufficient area within the limits of the property to construct the required increase in parking. The amount of queuing within the proposed drive-thru is estimated at a maximum of 6 vehicles during peak operation times. This combined with parking/access for the proposed convenience store and gas island operation can be sufficiently addressed with minimal increase in impervious surface at the site.

3. Substantiality:

For section 190-37 E (10) of the City code, service stations shall not be located within 500-ft of a public entrance to a church. The existing site has a curb cut along Noonan Drive that is almost directly aligned with the existing curb cut along Noonan Drive that provides access to the abutting church. It is proposed to maintain all existing access points at the project site for necessary access and circulation. From the proposed gas island to the closest building entrance of the church is approximately 230+/- ft.

For section 190-37 E (8) of the City code, required parking spaces is 40 for the drive thru plus 28 for the service station, resulting in a total of 68 required spaces. Per the proposed Site Layout Plan, the total number of parking spaces to be provided is 43. A majority of the existing asphalt area is proposed to be maintained, with an expanded area of asphalt for the gas island along the west side of the site. Additionally, two sections of existing pavement along the south side of the site will be converted back to green space. The Applicant wants to provide as much green space as possible, while meeting the projects needs for parking and access. Per the Applicant, the proposed 43 spaces and associated access drives are more than sufficient to meet the needs of the intended development, while maintaining all circulation activity within the limits of the project site. The proposed spaces are approximately 59% of the required spaces.

4. Adverse Effect or Impact:

The existing site zoning, C2 allows for the proposed convenience store, with addition of a Special Use Permit for the proposed building drive-thru and gas island. The immediate surrounding area includes several existing hotels (Motel 8 and Days Inn) to the east, Thruway Maintenance Building to the north, US Department of Homeland Security Building and several residences/apartment buildings to the west and two churches with several residences to the south. The site operated as a former full-service restaurant until being vacated. The proposed use will not negatively impact the surrounding area and will provide improvements to building/site aesthetics, as well as increasing employment opportunity.

5. Not Self-Created:

The project site is currently occupied by an existing vacant structure and associated parking area. The proposed project will rehabilitate an existing developed site, as opposed to clearing a naturally vegetated site for the proposed project. The parcel size is 1.4 acres. In addition to the required number of parking spaces being well above the needs of the proposed use, the site has insufficient area to provide the required parking spaces.

In order to rehabilitate a vacant development area, the proposed use will be inserted into a surrounding developed area. At this location, the convenience store/gas island would be inserted in close proximity to an existing church. The proposed operation of the Quicklee's development is anticipated to have minimal negative impact on the church operation, as peak hours of operation are not anticipated to overlap and site aesthetics will improve.

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:		
Proposed Quicklee's convenience store with drive-thru restaurant and gas island		
Project Location (describe, and attach a location map):		
204 Oak Street, City of Batavia		
Brief Description of Proposed Action:	*.44.2	
The proposed project is a Quicklee's convenience store with drive-thru restaurant and gas isla 204 Oak Street. The project site is 1.4 acres in size and the existing structure will be maintain the building and landscape improvements. The inside of the building will also be modified to restaurant operation. A gas island is proposed along the west side of the existing structure, to parking area will require some modifications to accommodate the added gas island, as well a drive-thru window.	ned, with proposed improveme accommodate the convenienc o include a total of 4 fuel pump s reconfiguration of parking la	ents to the exterior facade of te store and drive-thru ps. The existing asphalt yout and access lane to the
The overall level of impervious surface is estimated to increase by 4600 sf, increasing from 3 drive thru restaurant will require a Special Use Permit. The proposed location of the gas islar to be provided will also require area variances from the ZBA.	6,000+/- sf to 40,600/- sf. The nd to an existing church and th	e proposed gas island and ne number of parking spaces
Name of Applicant or Sponsor:	Telephone: 716-228-8860)
Lou Terragnoli, Quicklee's	E-Mail: Lterragnoli@quicl	klees.com
Address:		
2697 Lakeville Road, Suite 1		· · · · · · · · · · · · · · · · · · ·
City/PO:	State:	Zip Code:
Avon	NY	14414
1. Does the proposed action only involve the legislative adoption of a plan, local administrative rule, or regulation?	il law, ordinance,	NO YES
If Yes, attach a narrative description of the intent of the proposed action and the e may be affected in the municipality and proceed to Part 2. If no, continue to ques	environmental resources that ion 2.	at 🔽 🗀
2. Does the proposed action require a permit, approval or funding from any other		NO YES
If Yes, list agency(s) name and permit or approval: City of Batavia Site Plan approval variances, Building Permit, NYSD	,Special Use Permit, ZBA area	
a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?	1.4 +/- acres 0.5+/- acres 1.4+/- acres	
4. Check all land uses that occur on, are adjoining or near the proposed action:		
Urban Rural (non-agriculture) Industrial Commerci	al 🚺 Residential (subui	rban)
Forest Agriculture Aquatic Other(Spe	cify):	
Parkland		

Page Lof 3

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?		V	
b. Consistent with the adopted comprehensive plan?		V	
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?		NO	YES
6. Is the proposed action consistent with the predominant character of the existing carte of material targets appear			$\overline{\mathbf{V}}$
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		NO	YES
If Yes, identify:		\checkmark	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?		NO	YES
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?		NO	YES
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:		NO	IES
if the proposed action with exceed requirements, describe design readiles and technologies.			
10. Will the proposed action connect to an existing public/private water supply?		NO	YES
If No, describe method for providing potable water:			
11. Will the proposed action connect to existing wastewater utilities?		NO	YES
If No, describe method for providing wastewater treatment:			
			✓
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district	et	NO	YES
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		V	
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? 13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain		NO	YES
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:			
There is an existing wetland area to the east, along the east side of Boces Rd., and to the west, on the west side of Oak St., no wetland area is identified within the limits of the project site.	0		
			1

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:		
Shoreline Forest Agricultural/grasslands Early mid-successional		
☐ Wetland ☑ Urban ☐ Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or	NO	YES
Federal government as threatened or endangered?	$ \checkmark $	
16. Is the project site located in the 100-year flood plan?	NO	YES
	V	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES
a. Will storm water discharges flow to adjacent properties?		
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:		V
The site includes an existing detention basin along the east property line. The basin will be maintained and all stormwater runoff from the site will continue to be directed to the basin.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water	NO	YES
or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment;		
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	NO	YES
If Yes, describe:		
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or	NO	YES
completed) for hazardous waste?		
If Yes, describe:		
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BE	ST OF	'
MY KNOWLEDGE		
Applicant/sponsor/name: LON JERRAGNOCI NIRECTOR OF IGAC STATE Date: 5/06/d	02) L 1	
Applicant/sponsor/name: LON TERRAGNOCI DIRECTOR OF REACETING Date: 5/06/d Signature:	late	





204 OAK STREET PART OF LOT 4 AND 5 CITY OF BATAVIA - GENESEE COUNTY - NEW YORK

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF BATAWA STANDARD
 CONSTRUCTION SPECIFICATIONS AND/OR SUBJECT TO THE LATEST REVISIONS APPROVED
 BY THE CITY ENGINEER. THE CONTRACTOR IS REQUIRED TO SUBMIT SHOP DRAWINGS TO
 THE TOWN OF CLARENCE TOWN ENGINEER.
- 2. THE LOCATION OF UTILITIES AND OTHER FEATURES, AS SHOWN ON THE PLANS, ARE FROM THE BEST INFORMATION AVAILABLE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD INVESTIGATE AND DETERMINE THE EXACT LOCATIONS OF UTILITIES PRIOR TO CONSTRUCTION IN ORDER TO AVOID CONFLICTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT, SUPPORT AND MAINTAIN ALL EXISTING UTILITIES DURING THE COURSE OF HIS OPERATIONS. DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ALL PROVISIONS OF THE NEW YORK STATE INDUSTRIAL CODE RULE 53 AND THE NEW YORK STATE VOLTAGE PROXIMITY ACT MUST BE FOLLOWED. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADVISE ALL UTILITIES AND AGENCIES OF HIS PROPOSED OPERATIONS.
- 4. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS TO EXISTING PAVEMENT, SHOULDERS, DRIVES AND STORM DRAINAGE FACILITIES SHALL BE REPAIRED OR REPLACED IN KIND BY THE CONTRACTOR AT HIS EXPENSE. ALL REPAIRS OR REPLACEMENTS MADE BY THE CONTRACTOR SHALL BE ACCEPTABLE TO THE OWNER OR AGENCY HAVING JURISDICTION.
- 5. THE CONTRACTOR SHALL TAKE ANY PRECAUTIONS NECESSARY TO PROTECT TREES AND SHRUBBERY FROM DAMAGE, UNLESS SPECIFICALLY ORDERED FOR CLEARING.
- THE CONTRACTOR SHALL BE AWARE THAT SOIL CONDITIONS ARE UNKNOWN AND ASSUMED TO VARY AT DIFFERENT DEPTHS AND LOCATIONS.
- ALL UTILITY OPEN CUT ROAD CROSSINGS SHALL BE BACKFILLED WITH NO. 2 RUN OF CRUSHER STONE AND COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY ASTM D-1557 PER TRENCH DETAILS. SELECT BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF 5-FEET BEYOND EOGE OF PAYEMEN.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STATEMEDATION THE PREVENTION AND ABATEMENT OF SOIL EROSION, SEDIMENTATION AND WATER POLLUTION.
- 9. THE PLANS AND SPECIFICATIONS FOR THIS PROJECT HAVE BEEN PREPARED WITH CARE AND ARE INTENDED TO SHOWAS CLEARLY AS IS PRACTICABLE THE WORK REQUIRED TO BE DONE. THE CONTRACTOR MUST REALIZE, HOWEVER, THAT CONSTRUCTION DETAILS CAN NOT ALWAYS BE ACCURATELY ANTICIPATED AND THAT IN EXECUTING THE WORK, FIELD CONDITIONS MAY REQUIRE REASONABLE MODIFICATIONS IN THE DETAILS OF PLANS AND QUANTITIES OF WORK INVOLVED. ALL WORK MUST BE CARRIED OUT TO MEET ACTUAL FIELD CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND DEVELOPER IN ACCORDANCE WITH THEIR INSTRUCTIONS.



LOCATION MAP

37 CENTRAL AVE. LANCASTER, NY 14086-2143 PH. 716-683-5961 FAX 716-683-0169 WWW.WMSCHUTT.COM

SHEET INDEX

Sheet Number	Sheet Title
C1	COVER SHEET
BT-1	BOUNDARY AND TOPOGRAPHIC SURVEY
C2	DEMOLITION PLAN AND NOTES
C3	SITE PLAN AND NOTES
C3.1	SITE DETAILS
C3.2	SITE DETAILS
C4	STORM DRAINAGE, GRADING PLAN, NOTES & DETAILS
C5	EROSION AND SEDIMENT CONTROL PLAN, NOTES & DETAILS
C5.1	EROSION AND SEDIMENT CONTROL DETAILS
C6	LANDSCAPE PLAN AND DETAILS
07	DUOTOMETRIC DI ANI

DEVELOPER: QUICKLEE'S 2697 LAKEVILLE RD., SUITE 1

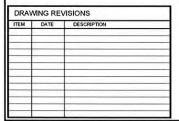
DATE:

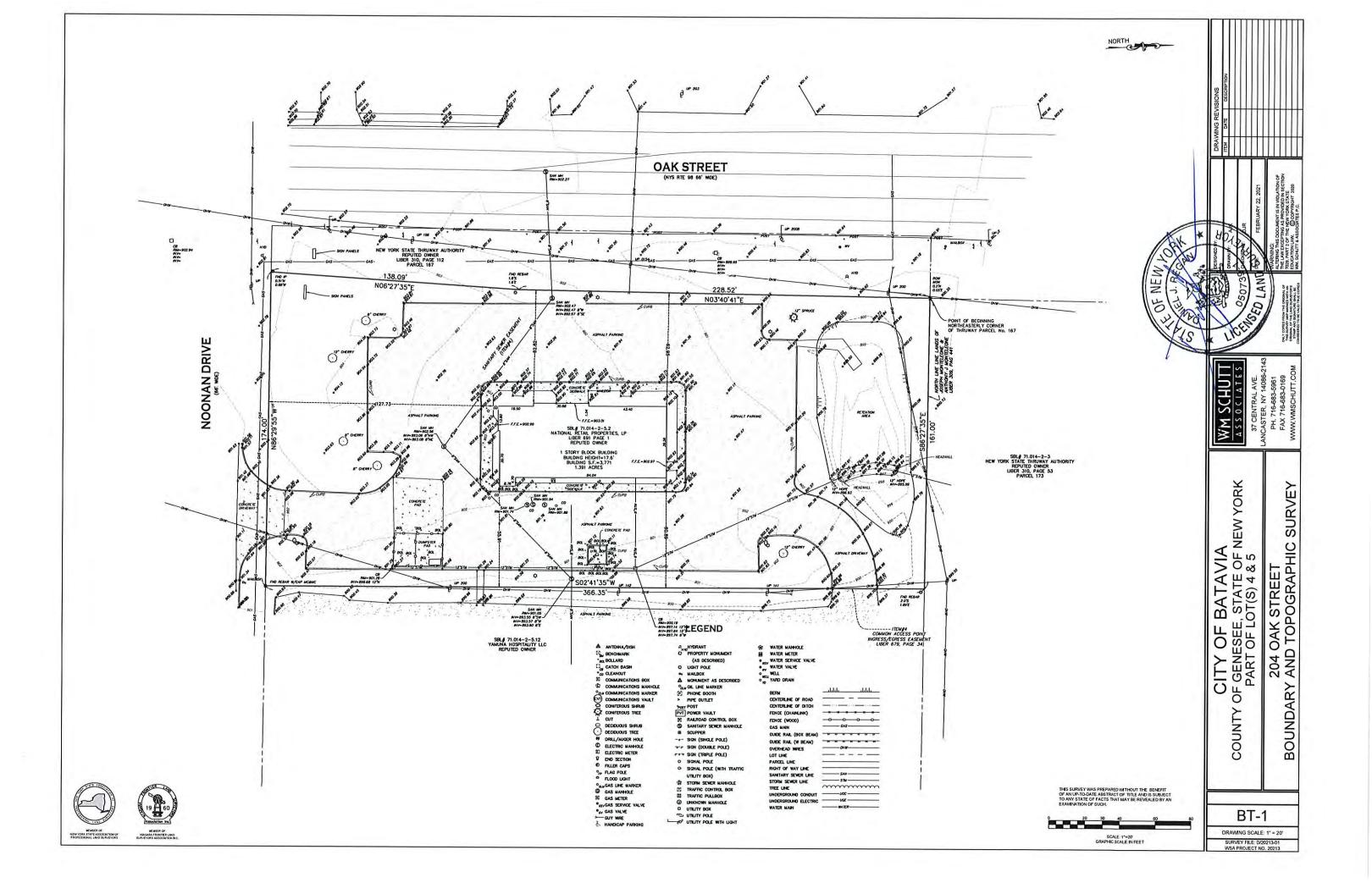


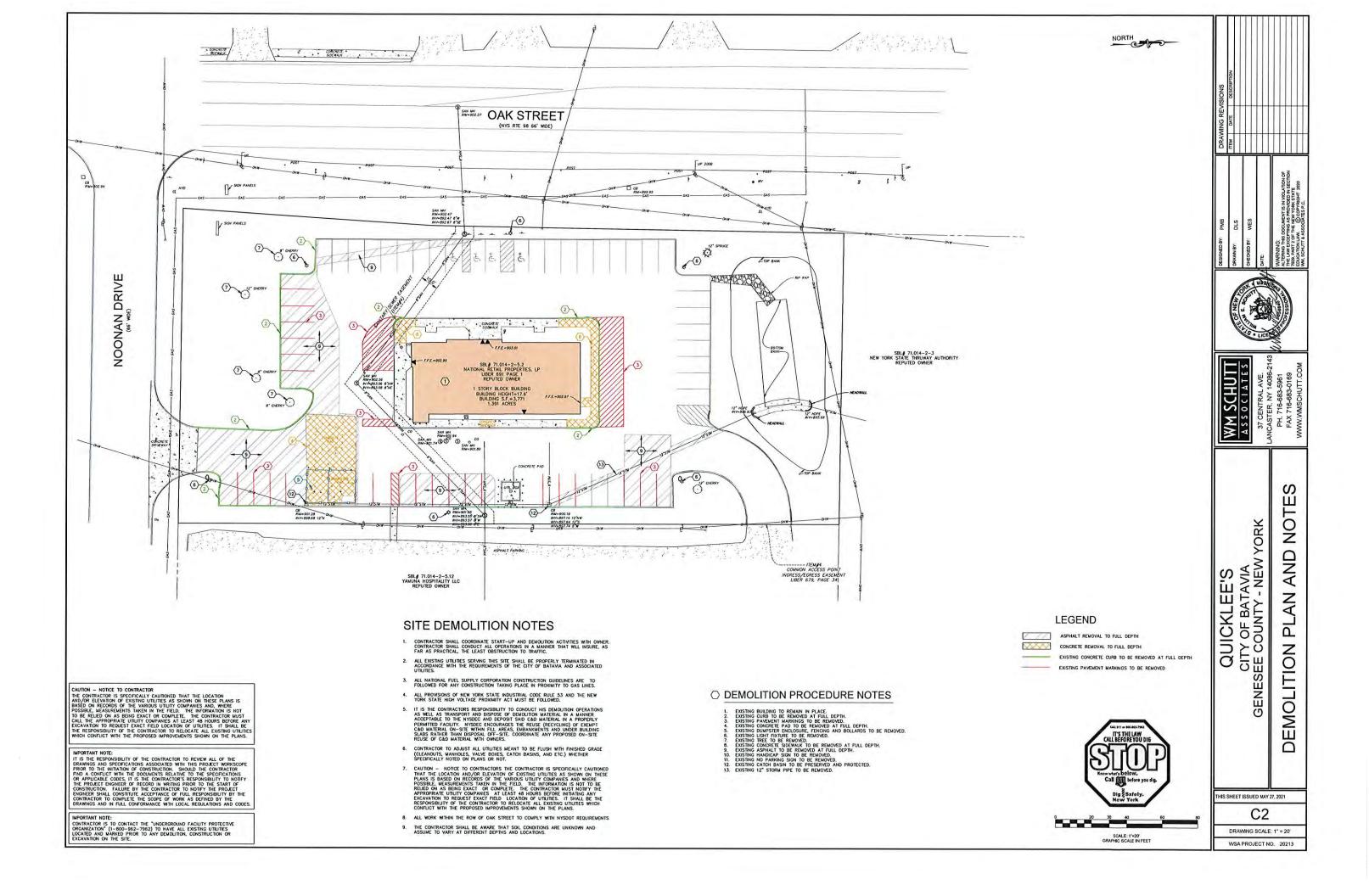
THIS SHEET ISSUED MAY 27, 2021

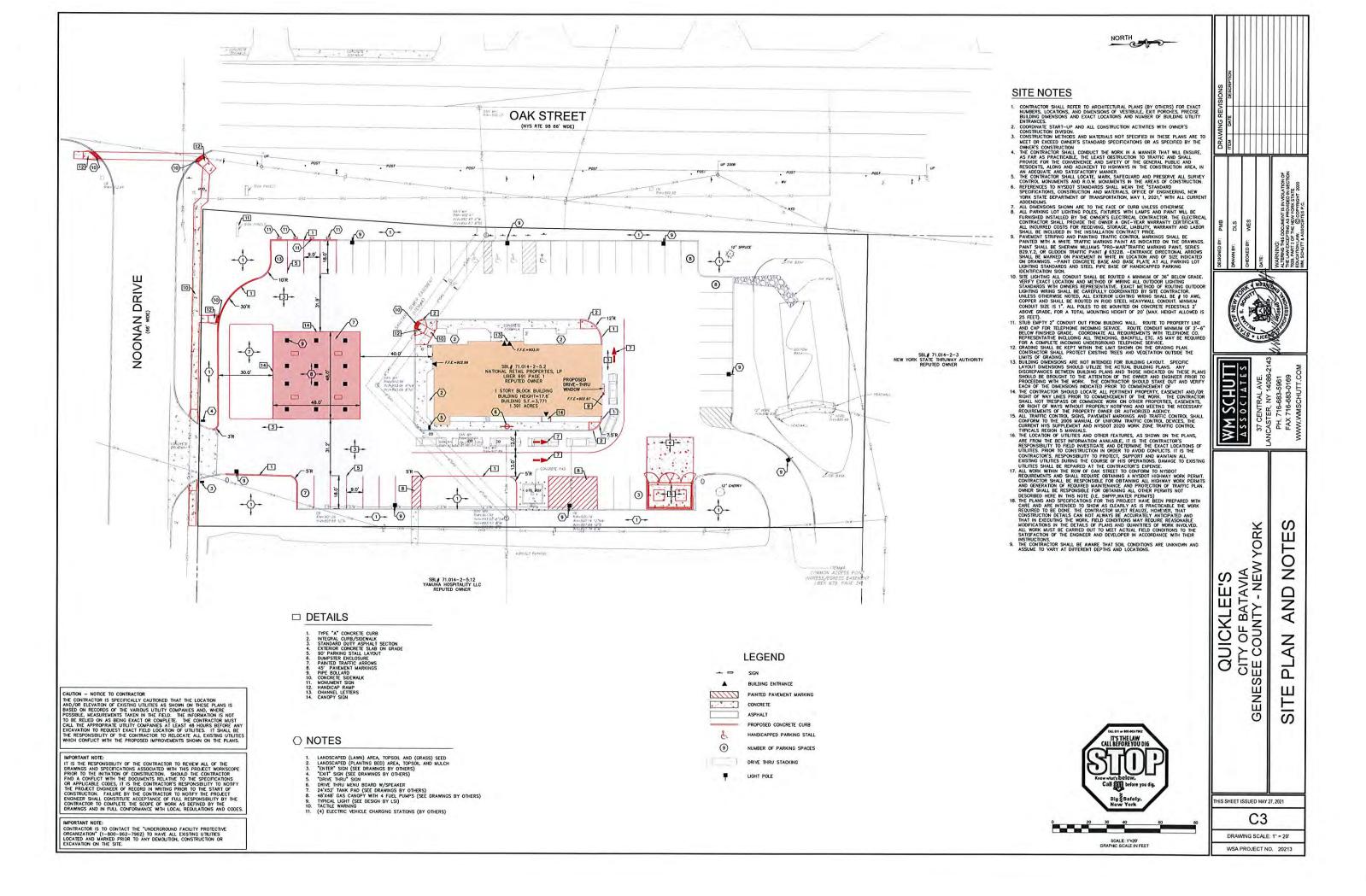
C1

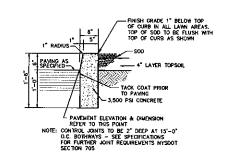
WSA PROJECT NO. 01172C



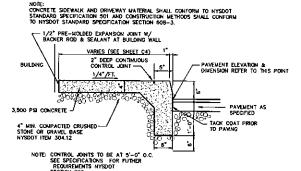




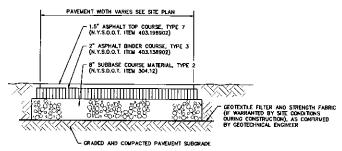




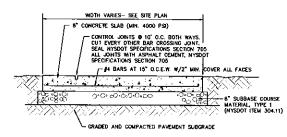
TYPE "A" CONCRETE CURB - 1



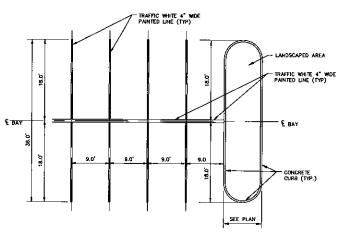
INTEGRAL CURB/SIDEWALK DETAIL - 2



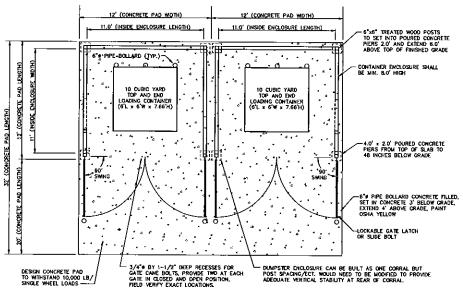
STANDARD DUTY ASPHALT SECTION - 3



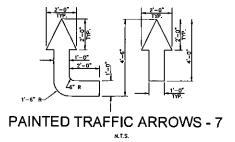
EXTERIOR CONCRETE SLAB ON GRADE- 4

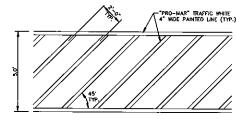


90° PARKING SPACE STRIPING - 5

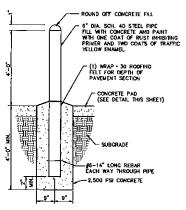


DUMPSTER ENCLOSURE - 6

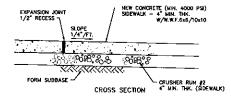




45° PAVEMENT MARKING - 8



PIPE BOLLARDS - 9



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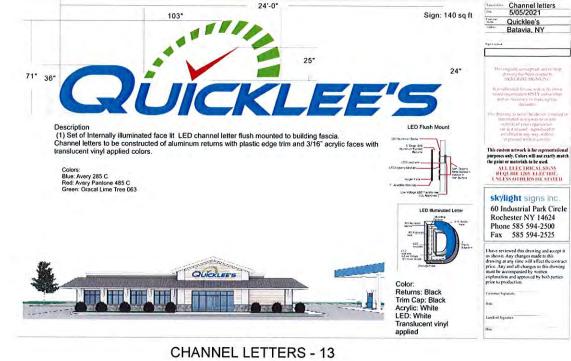
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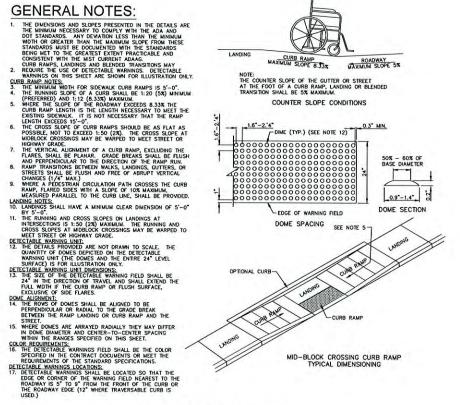


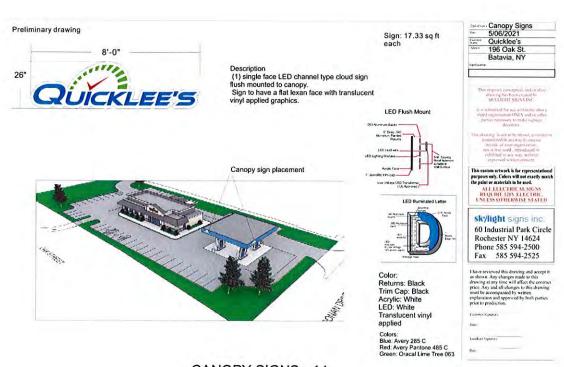
GENERAL NOTES:

Monument Sign 5/05/2021









CANOPY SIGNS - 14

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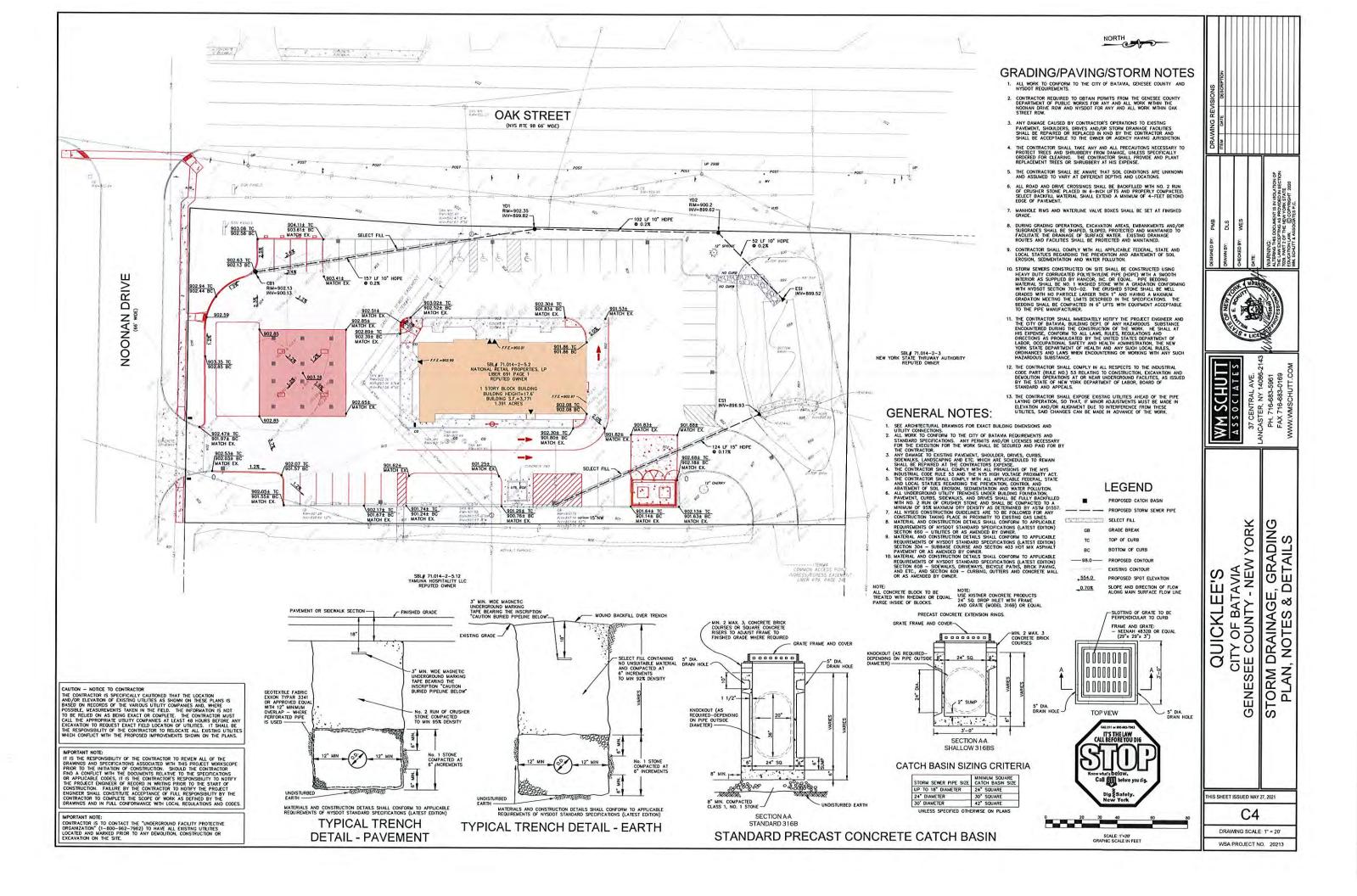
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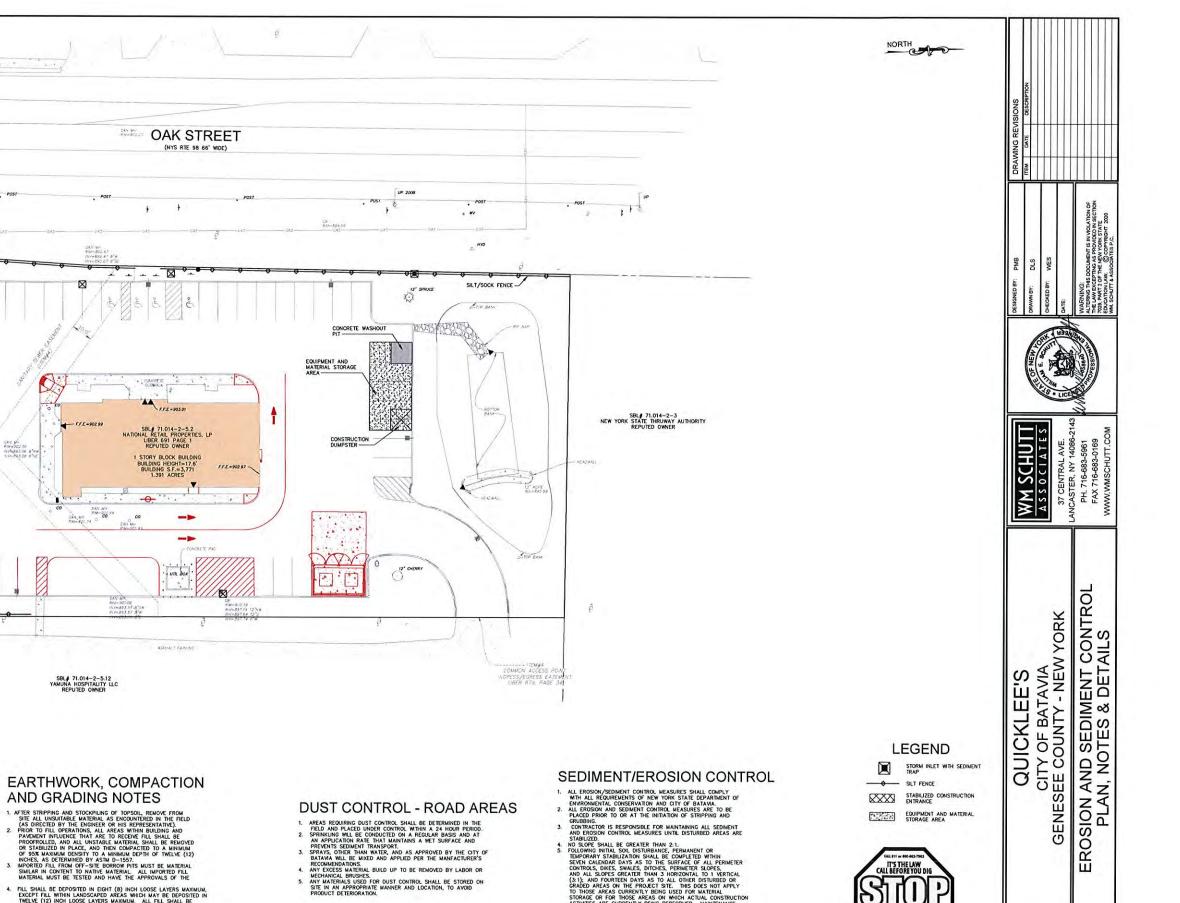
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CAUTION - NOTICE TO CONTRACTOR CAUTION — NOTICE TO CONTRACTOR THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, MERR POSSBEL, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT BE RELIED ON AS BEING EXACT OR COMPILET. THE CONTRACTOR MUST FACE PROPERTY UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY THAT PROPOSED UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY THE PROPOSED OF THE PROPOSED THE PROPOSED OF T

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IMPORTANT NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE
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FIND A CONFLICT WITH THE DOCUMENTS RELIATIVE TO THE SPECIFICATIONS
OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY
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THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF
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DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES

CONTRACTOR IS TO CONTACT THE "UNDERGROUND FACILITY PROTECTIVE ORGANIZATION" (1-800-962-7962) TO HAVE ALL EXISTING UTILITIES LOCATED AND MARKED PRIOR TO ANY DEMOUTION, CONSTRUCTION OR EXCAVATION ON THE SITE.

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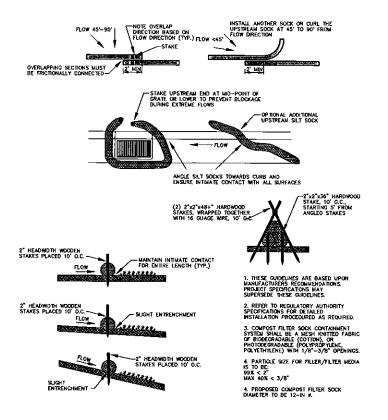
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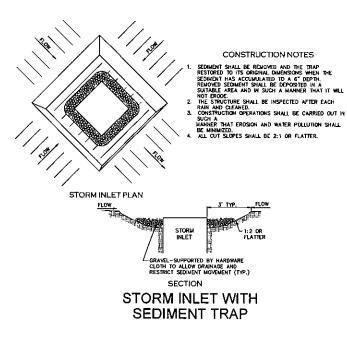


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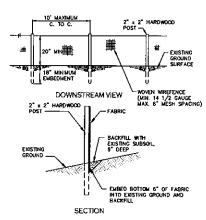
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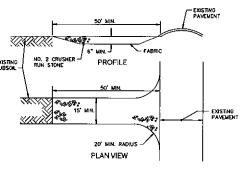
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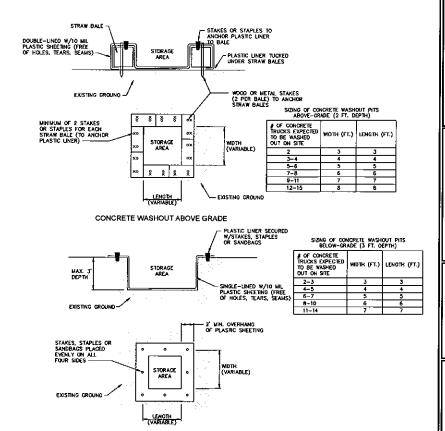


CONSTRUCTION NOTES

- CONSTRUCTION NOTES

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STABILIZED CONSTRUCTION **ENTRANCE**



CONCRETE WASHOUT BELOW GRADE

CONCRETE WASHOUT

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 6. A SINGLE CENTRALIZED WASHOUT AREA WAY BE UTILIZED FOR MULTIPLE SUBLOTS.

- 7. THE WASHOUT PIT MUST SE INSPECTED FREQUENTLY TO ENSURE THE LINER IS INTACT.

 8. ONCE 75XXX OF THE ORIGINAL VOLUME OF THE WASHOUT PIT IS FILED OR IF THE LINER IS TORN, THE MATERIAL MUST BE REMOVED AND PROPERTLY DISPOSED OF ONCE IT IS COMPLETELY HARRONED. ONCE THE HARRONED CONCETTE IS REMOVED, THE LINER MUST BE REPLACED (IF TORN). A NEW PIT MUST BE CONSTRUCTED IF THE ORIGINAL STRUCTURE IS NO CONDER SUITABLE, REMOVAL:

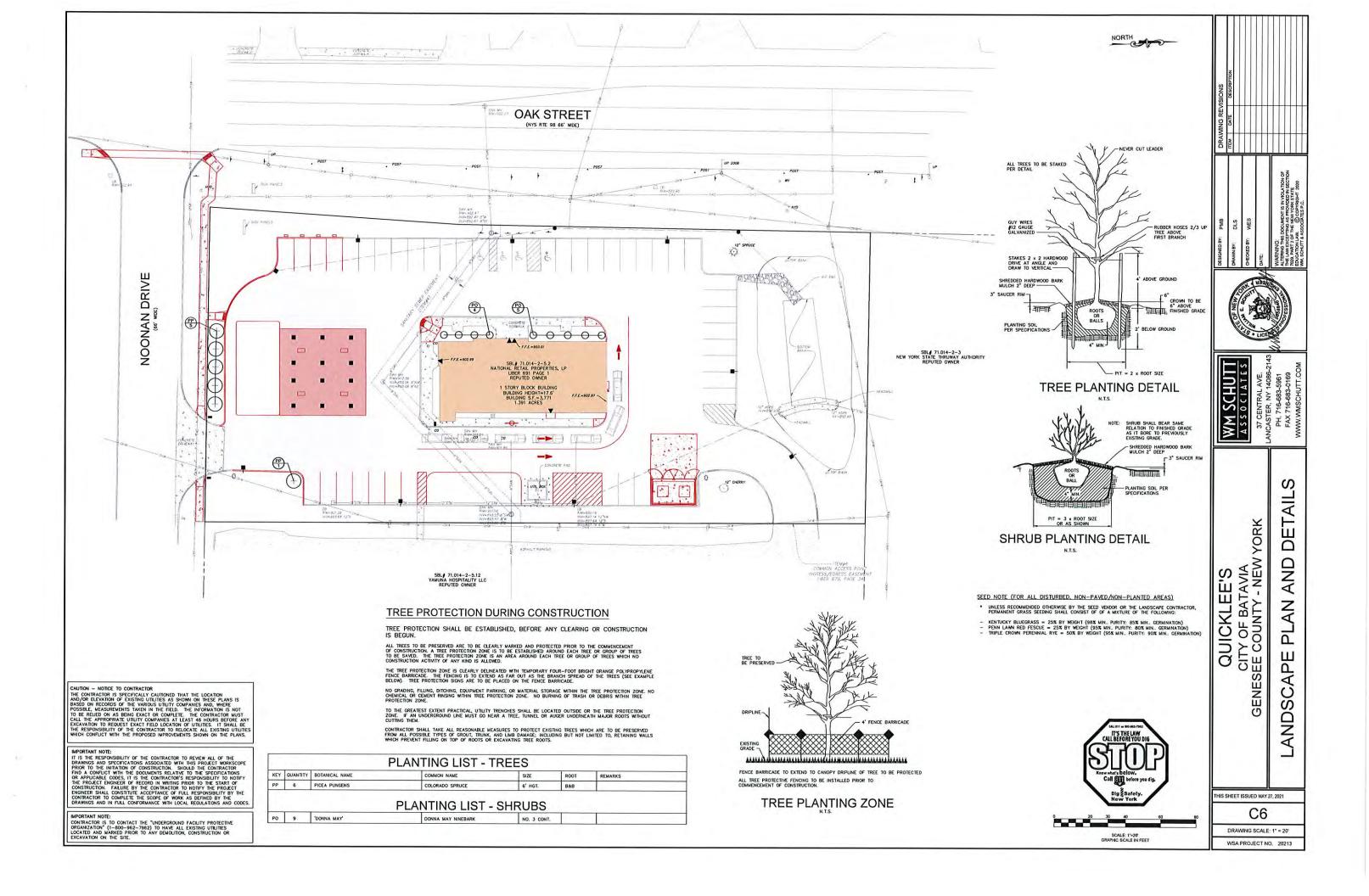
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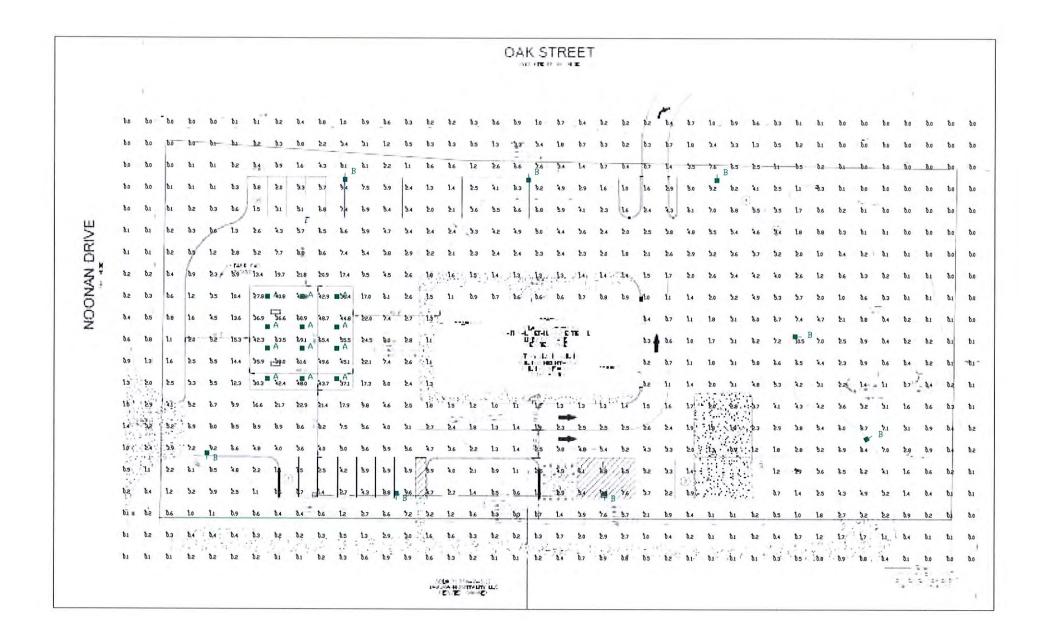
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THIS SHEET ISSUED MAY 27, 2021

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Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC PDINTS	Illuminance	Fc	3.98	69.1	0.0	N.A.	N.A.
CANDPY	Illuminance	Fc	46.00	69.1	27.8	1.65	2.49
INSIDE CURB	Illuminance	FC	4.97	24.5	0.2	24.85	122.50

Drawing scaled or converted from PDF file or scanned / submitted image. Dimensions are approximate.

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved nethods. Actual performance of any nanufacturer's luminaires nay vary due to changes in electrical voltage, tolerance in lappa/ELD's and other variable filed conditions. Calculations do not include obstructions such as buildings, curbs, landscoping, or any other architectural elements unless noted. Fixture nonenclature noted does not include nounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

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LIGHTING PROPOSAL LO-153703

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Traffic Impact Study

for the proposed

Proposed Quicklee's Development

City of Batavia Genesee County, New York

Project No. 41033

April 2021

Prepared For:



2697 Lakeville Rd, Suite I Avon, NY 14414

Prepared By:



3495 Winton Place Building E, Suite 110 Rochester, New York 14623

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LIST OF REFERENCES

- 1. <u>Highway Capacity Manual 6th Edition</u>. Transportation Research Board (TRB). The National Academies, Washington, DC. 2016.
- 2. <u>Trip Generation 10th Edition</u>. Institute of Transportation Engineers (ITE). Washington, DC. 2017
- 3. Trip Generation Handbook 3rd Edition. ITE. Washington, DC. 2017.
- 4. New York State Department of Transportation (NYSDOT) Traffic Data Viewer. 2021. Retrieved from https://www.dot.ny.gov/tdv.
- 5. OnTheMap. U.S. Census Bureau. 2021.
- 6. <u>Manual on Uniform Traffic Control Devices</u>. Federal Highway Administration (FHWA). Washington, D.C., 2009.



EXECUTIVE SUMMARY

OVERVIEW

The purpose of this report is to identify and evaluate the potential traffic impacts with the proposed Quicklee's Development in the City of Batavia, New York. Within this report, the operating characteristics of the proposed access drives and impacts to the adjacent roadway network are identified and evaluated, and mitigating measures, if needed, are provided to minimize capacity or safety concerns.

To define traffic impacts, this analysis establishes existing traffic conditions, projects background traffic flow including area growth, and projects changes in traffic flow due to the Proposed Quicklee's Development.

The proposed Quicklee's Development is located at the northeast corner of Oak Street (NY-98) and Noonan Drive in the City of Batavia, Genesee County, New York. The site is currently occupied by a vacant restaurant building. To ensure a comprehensive analysis of potential traffic impacts, a geographically broad study area was selected consisting of the following two (2) existing intersections and two (2) proposed site driveways:

- Oak Street/Park Road/I-90 Entrance and Exit Ramps
- Oak Street/Noonan Drive
- Noonan Drive/Proposed Driveway
- Oak Street/Proposed Right-out Only Driveway

The proposed Quicklee's Development includes a Quicklee's Convenience Store ($\pm 2,772$ SF), a Tim Horton's ($\pm 1,000$, 12 indoor seats, and a drive-thru window), and associated fueling pumps with eight vehicle fueling positions. The site is currently occupied by a vacant Bob Evans restaurant. The existing site is served by one existing driveway on Noonan Drive and one existing driveway that connects to the Super 8 parking lot.

Access to the Quicklee's Development will be provided via the existing full access driveway on Noonan Drive and one right-out only driveway on Oak Street. The internal access driveway that connects to the Super 8 parking lot will remain.

Construction of the proposed project is anticipated to reach full build-out in approximately one year (2021). Widely accepted methodology for preparing traffic impact studies requires that any projects in the study area that are currently approved and/or under construction must be considered in the traffic analysis. Local municipality personnel were contacted to discuss any other specific projects that are currently approved or under construction that would generate additional traffic in the study area. The Town identified a proposed medical office building on NY-98 opposite Federal Drive as well as a proposed hotel along Federal Drive. The site trips generated by these developments added to the study area intersections.

To account for normal increases in background traffic growth, including any unforeseen developments in the project study area aside from the two identified projects, a growth rate of 1.8% has been applied to the 2021 existing base traffic volumes in the study area based upon a review of historical traffic information obtained from the NYSDOT.



CONCLUSIONS & RECOMMENDATIONS

This Traffic Impact Study identified and evaluated the potential traffic impacts that can be expected from the proposed Quicklee's Development in the City of Batava, New York. Based upon the results of this study, it is our firm's professional opinion that the existing transportation network can adequately accommodate the projected traffic volumes and resulting impacts to study area intersections. The following sets forth our firm's conclusions and recommendations based upon the results of the comprehensive traffic analysis conducted:

- 1. The proposed development is expected to generate approximately 158 entering/141 exiting vehicle trips during the weekday AM peak hour and 104 entering/110 exiting vehicle trips during the weekday PM peak hour. Not all these driveway volumes are new, but instead a portion of the proposed volume is reduced considering pass-by adjustments. Thus, the proposed site is expected to generate approximately 79 entering/71 exiting primary new vehicle trips during the weekday AM peak hour and 53 entering/55 exiting primary new vehicle trips during the weekday PM peak hour.
- 2. The existing crash investigation did not reveal inherent safety deficiencies related to the geometric design of the study area intersections.
- 3. Under background conditions, projected delays at the intersection of Oak Street/Park Road/I-90 are expected to be moderate to long at times during the AM and PM peak hours. The projected minor impacts resulting from the proposed project will contribute to this condition. For example, between background and full build conditions, the northbound left movement during the PM peak hour changes from LOS "E" to "F". However, it should be noted that the proposed project constitutes approximately 4% of total intersection traffic during the AM peak hour and 2% during the PM peak hour. Specifically, the project is projected to add nine vehicles to the northbound left-turn movement during the PM peak hour (approximately 4.5% of total traffic for that movement).
- 4. The intersection of Oak Street/Park Road/I-90 should be monitored to determine actual operations. Given that adjustments were made to the existing 2021 data to establish baseline conditions, a post-study of operations when pandemic-related restrictions are lifted is important in determining the actual extent of projected impacts.
- 5. The drive-thru queuing assessment during the AM peak hour showed that there is sufficient storage space to accommodate the projected drive-thru traffic patronizing the proposed coffee shop.
- Despite the projected moderate to long delays at times during the peak hours at the intersection of Oak Street/Noonan Drive under full build conditions, based on the results of the signal warrant investigation, a three-color traffic signal is not recommended.
- 7. The projected new traffic volumes generated by full development of the project can be accommodated by the existing transportation system.



I. INTRODUCTION

The purpose of this report is to identify and evaluate the potential traffic impacts with the proposed Quicklee's Development in the City of Batavia, New York. Within this report, the operating characteristics of the proposed access drives and impacts to the adjacent roadway network are identified and evaluated, and mitigating measures, if needed, are provided to minimize capacity or safety concerns.

To define traffic impacts, this analysis establishes existing traffic conditions, projects background traffic flow including area growth, and projects changes in traffic flow due to the Proposed Quicklee's Development.

II. LOCATION

The proposed Quicklee's Development is located at the northeast corner of Oak Street (NY-98) and Noonan Drive in the City of Batavia, Genesee County, New York. The site is currently occupied by a vacant restaurant building. To ensure a comprehensive analysis of potential traffic impacts, a geographically broad study area was selected consisting of the following two (2) existing intersections and two (2) proposed site driveways:

- Oak Street/Park Road/I-90 Entrance and Exit Ramps
- Oak Street/Noonan Drive
- Noonan Drive/Proposed Driveway
- Oak Street/Proposed Right-out Only Driveway

The site location and study area are illustrated in Figure 1 (all figures are included at the end of this report).

III. EXISTING HIGHWAY SYSTEM

A. Vehicular Network Description

The following information outlined in Table 1 provides a description of the existing roadway network within project study area. Figure 2 illustrates the lane geometry at the study intersections and the Annual Average Daily Traffic (AADT) volumes on the study roadways. The AADTs reflect the most recently collected data obtained from the New York State Department of Transportation (NYSDOT). Where recent data is not available, traffic data is shown as an extrapolation of turning movement counts performed by SRF Associates.

1



April 2021

TABLE I: EXISTING HIGHWAY SYSTEM

ROADWAY ¹	CLASS ²	AGENCY ³	SPEED LIMIT ⁴	# OF TRAVEL LANES ⁵	TRAVEL PATTERN/ DIRECTION	EST. AADT ⁶ & SOURCE ⁷
Oak Street (NY-98)	14	NYSDOT	30	2/3	Two-way/ North-South	14,336 NYSDOT (2018)
Park Road	17	City of Batavia	30	2	Two-way/ East-West	9,712 NYSDOT (2019)
Noonan Drive	19	City of Batavia	30	2	Two-way/ East-West	850 SRF (2021)

Notes:

- 1. Route Name/Number: "NY" = New York; "CR" = County Road
- 2. State Functional Classification of Roadway (All are Urban): 14 = Principal Arterial, 17 = Major Collector, 19 = Local
- 3. Jurisdictional Agency of Roadway. "NYSDOT" = New York State Department of Transportation; "MCDOT" = Monroe County Department of Transportation
- 4. Posted or Statewide Limit in Miles per Hour (mph).
- 5. Excludes turning/auxiliary lanes developed at intersections.
- 6. Estimated AADT in Vehicles per Day (vpd).
- 7. AADT Source (Year).

B. <u>Multi-Modal Network Description</u>

This evaluation reviewed the study area's pedestrian, bicycle, and transit network via field and aerial reconnaissance. A description of the multi-modal infrastructure is described hereafter.

Pedestrian & Bicycle Facilities

Sidewalks currently exist along both sides of Oak Street to the south of Noonan Drive. There are no other sidewalks within the study area. ADA compliant curb ramps are not present.

There are no dedicated bicycle facilities; however, bicyclists are permitted to share the road on all roadways within the study area, except for the I-90 ramps and approach.

Transit Facilities

No public transit service is provided within the study area.

IV. EXISTING TRAFFIC CONDITIONS

A. Peak Intervals for Analysis

Given the functional characteristics of the corridors, adjacent land uses, and the functional characteristics of the proposed Quicklee's Development, the peak hours selected for analysis are the weekday commuter AM and PM peak periods. The combination of site traffic and adjacent through traffic produces the greatest demand during these time periods.

2



April 2021

B. Existing Traffic Volume Data

Turning movement traffic counts were collected by SRF Associates at the study area intersections described. Traffic counts were conducted from 7:00-9:00 AM and 4:00-6:00 PM on Tuesday, April 6, 2021 and Thursday, April 8, 2021. The peak hour traffic periods for each study intersection are noted in the table. The peak hours generally occurred from 7:15-8:15 AM and 4:00-5:00 PM. The unadjusted weekday commuter AM and PM peak hour volumes are reflected in Figure 3A.

All turning movement count data was collected on a typical weekday. It is noted, however, that traffic volumes are currently lower than normal because of business restrictions resulting from COVID-19. The collected traffic volumes were reviewed to confirm the accuracy and relative balance of the collective traffic counts. Traffic volumes were compared to 2018 and 2019 traffic data collected in various locations along Oak Street and Park Road by the NYSDOT and adjusted to reflect 2021 traffic conditions by increasing the collected traffic volumes. The collected traffic volumes were generally found to be approximately 30% lower during the AM peak hour and approximately 17% lower during the PM based upon comparison to the historical data. The collected traffic volume data were increased by the respective percentages and the representative 2021 weekday peak hour base volumes used for analysis purposes in this study are reflected in Figure 3B.

C. Field Observations

The study intersections were observed during the peak intervals to assess current traffic operations. Signal timing and phasing information was collected in the field during the peak hours. This information was used to support and/or calibrate capacity analysis models described in detail later in this report.

D. Existing Crash Investigation

The purpose of this crash analysis is to identify inherent safety issues by studying and quantifying historical crashes at the study intersections and identifying potential crash patterns and clusters.

A crash cluster is defined as an abnormal occurrence of similar crash types occurring at approximately the same location or involving the same geometric features. The severity of the crashes should also be considered. A history of crashes is an indication that further analysis is required to determine the cause(s) of the crash(es) and to identify what actions, if any, could be taken to mitigate the crashes.

A crash investigation within the study area was conducted to assess the safety history from February 1, 2018 through January 31, 2021. The data was provided by the NYSDOT through a Freedom of Information (FOIL) request.

Reportable (non-injury, injury, and fatal injury) type crashes are defined as damage to one person's property in the amount of \$1,001 or more. The Non-Reportable type crashes result in property damage of \$1,000 or less. Crash rates were computed for the study intersections and compared with New York State Department of Transportation average crash rates for similar intersections, as summarized in the following table. Intersection rates are listed as accidents (crashes) per million entering vehicle (Acc/MEV). Pertinent crash data is provided in the Appendices.



3 April 2021

TABLE II: EXISTING ACCIDENT INVESTIGATION

INTERSECTION	TOTAL NO. OF ACCIDENTS	ACTUAL CRASH RATE	STATEWIDE AVERAGE CRASH RATE
Oak Street/Park Road/I-90	21	0.86	0.23
Oak Street/Noonan Drive	3	0.20	0.18

Oak Street/Park Road/I-90

As shown in Table II, the study intersection has a crash rate that is 3.7 times higher than the statewide average crash rate for similar intersections. Of the 21 crashes, 12 were classified as rear end events. Notable crash clusters—approaches with three or greater identifiable consistent crash patterns—at this location include:

- Rear-end (12 total crashes)
 - Eastbound (five crashes)
 - Southbound (three crashes)
- Left Turn (three total crashes)
 - Northbound (two crashes)
- Overtaking (three total crashes)
 - o Eastbound (two crashes)

The frequency of rear-end crashes is characteristic of signalized intersections along moderately corridors. Most of these crashes, in addition to the other reported crashes, were caused by driver inattention, following too closely, or disregard of the traffic control device. Despite the number of crashes, no inherent safety deficiencies exist related to the geometric conditions of the intersection.

Oak Street/Noonan Drive

The intersection has a crash rate lower than the statewide average. Of the three total crashes, one was classified as fixed object, one was rear end in the northbound direction, and one was classified as "Other" in the northbound. No inherent safety deficiencies exist related to the geometric conditions of the intersection.

V. FUTURE AREA DEVELOPMENT AND LOCAL GROWTH

Construction of the proposed project is anticipated to reach full build-out in approximately one year (2021). Widely accepted methodology for preparing traffic impact studies requires that any projects in the study area that are currently approved and/or under construction must be considered in the traffic analysis. Local municipality personnel were contacted to discuss any other specific projects that are currently approved or under construction that would generate additional traffic in the study area. The Town identified a proposed medical office building on NY-98 opposite Federal Drive as well as a proposed hotel along Federal Drive. The site trips generated by these developments added to the study area intersections.

To account for normal increases in background traffic growth, including any unforeseen developments in the project study area aside from the two identified projects, a growth rate of 1.8% has been applied

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to the 2021 existing base traffic volumes in the study area based upon a review of historical traffic information obtained from the NYSDOT. All ambient growth calculations are included in the Appendix. The 2022 background traffic volumes are depicted in Figure 4.

VI. PROPOSED DEVELOPMENT

A. <u>Description of the Proposed Quicklee's Development</u>

The proposed Quicklee's Development includes a Quicklee's Convenience Store (±2,772 SF), a Tim Horton's (±1,000, 12 indoor seats, and a drive-thru window), and associated fueling pumps with eight vehicle fueling positions. The site is currently occupied by a vacant Bob Evans restaurant. The existing site is served by one existing driveway on Noonan Drive and one existing driveway that connects to the Super 8 parking lot.

Access to the Quicklee's Development will be provided via the existing full access driveway on Noonan Drive and one right-out only driveway on Oak Street. The internal access driveway that connects to the Super 8 parking lot will remain. Figure 5 illustrates the proposed concept plan.

B. Site Traffic Generation

The volume of traffic generated by a site is dependent on the intended land use and size of the development. Trip generation is an estimate of the number of trips generated by a specific building or land use. These trips represent the volume of traffic entering and exiting the development. Trip Generation, 10th Edition (2017) published by the Institute of Transportation Engineers (ITE) is used as a reference for this information. The trip rate for the peak hour of the generator may or may not coincide in time or volume with the trip rate for the peak hour of adjacent street traffic. Volumes generated during the peak hour of the adjacent street traffic and proposed land uses, in this case, the weekday commuter AM and PM peaks, represent a more critical volume when analyzing the capacity of the system; those intervals will provide the basis of this analysis.

According to the ITE, the following steps are recommended when determining trip generation for proposed land uses:

- i. Check for the availability of local trip generation rates for comparable uses.
- If local trip data for similar developments are not available and time and funding permit, ii. conduct trip generation studies at sites with characteristics similar to those of the proposed development.

Traffic volume data was collected by SRF Associates at the exiting Quicklee's site located at 873 Holt Rd in Webster, NY. Traffic entering and exiting the exiting site was counted on Thursday October 1, 2020. The Holt Road site includes 12 vehicle fueling positions, a ±2,820 SF convenience store building, a Dunkin Donuts drive-thru and counter area within the convenience store building, a twobay automatic car wash, and three vacuum stations. Gasoline sales are approximately 10% lower at this time however convenience store sales have increased because of the COVID-19 pandemic. Consideration was given to adjusting the Holt Road data given the larger site program compared to the proposed Batavia site. However, given the similar contexts and higher daily traffic volumes passing the Batavia site—over 14,000 vehicles per day versus approximately 9,000 vehicles per day at the Holt Road site—no adjustments have been made to the data collected at the Holt Road site. All trip generation information has been included in the Appendices.



Table III summarizes the volume of projected site trips during the weekday AM and PM peak hours.

TABLE III: SITE GENERATED TRIPS

LAND USE	SOURCE	AM PEA	K HOUR	PM PEA	K HOUR
LAND USE	SOURCE	ENTER	EXIT	ENTER	EXIT
Quicklee's Development	Holt Road Site Data	158	141	105	110

C. Determination of Pass-by Trips

For certain types of developments, the total number of trips generated is different from the amount of new traffic added to the adjacent highway network by the generator. Service-oriented developments (such as convenience stores, gas stations, shopping centers, discount stores, restaurants, service stations, retail storefronts, and supermarkets) often locate adjacent to busy streets to attract the motorists already passing the site on the adjacent street, in this case Oak Street. The "pass-by" traffic refers to the amount of existing traffic already on the roadway adjacent to the site that, as it "passes by" the site, will enter the site driveways to patronize the project site. The quantifying of "pass-by" trips has the net result of reducing the volume of new traffic that is added to the site driveways and/or adjacent roadways.

ITE data indicates that pass-by rates for gas stations and convenience store uses can vary from 60% to 65% during both the AM and PM peak hours. Given the nature of the surrounding area and considering the location of the site along Oak Street (which are moderately traveled commuter routes), pass-by rates of 50% were used during both the AM and PM peak hours. Table IV shows the total site generated trips, pass-by trips, and resulting primary (new) trips that are added to the existing highway system for full development of the project. Pass-by trip calculations are included in the Appendices.

TABLE IV: SITE GENERATED TRIPS AND ADJUSTMENTS

Total Primary Trips	79	71	53	55
Pass-by Trips	-79	-70	-52	-55
Quicklee's Development	158	141	105	110
LAND OOL -	ENTER	EXIT	ENTER	EXIT
LAND USE -	AM PEA	K HOUR	PM PEA	K HOUR

The proposed development is expected to generate approximately 158 entering/141 exiting vehicle trips during the weekday AM peak hour and 104 entering/110 exiting vehicle trips during the weekday PM peak hour. Not all these driveway volumes are new, but instead a portion of the proposed volume is reduced considering pass-by adjustments. Thus, the proposed site is expected to generate approximately 79 entering/71 exiting primary new vehicle trips during the weekday AM peak hour and 53 entering/55 exiting primary new vehicle trips during the weekday PM peak hour.



D. Site Traffic Distribution

The cumulative effect of site traffic on the transportation network is dependent on the origins and destinations of that traffic and the location of the access drives serving the site. The proposed arrival/departure distribution of traffic to be generated at this site is considered a function of several parameters, including the following:

- Existing highway network.
- Proximity and access to local area highways.
- Population centers.
- Employment centers.
- Existing traffic patterns, traffic conditions, and controls.
- Location of site access driveways.

The detailed distribution of site trips was based on a combination of population centers, existing traffic patterns along Oak Street, and existing traffic patterns exiting Noonan Drive during the peak hours. Based on these parameters, Figure 6 shows the anticipated trip distribution patterns for the proposed project. Figure 7 illustrates the peak hour of site-generated traffic based on those percentages for the proposed Quicklee's development.

VII. FULL DEVELOPMENT VOLUMES

The projected design hour traffic volumes were developed for the weekday AM and PM peak hours by combining the future background traffic conditions (Figure 4), and projected site generated volumes for full build-out of the proposed site (Figure 7) to yield the total traffic conditions expected at full development. Figure 8 illustrates the total weekday AM and PM peak hour volumes anticipated for the proposed development under full build-out conditions.

VIII. CAPACITY ANALYSIS

A. <u>Description of Capacity Analysis</u>

A capacity analysis is a technique used for determining a measure of effectiveness for a section of roadway and/or intersection based on the number of vehicles during a specific time period. The measure of effectiveness used for the capacity analysis is referred to as a Level of Service (LOS). Levels of Service are calculated to provide an indication of the amount of delay that a motorist experiences while traveling along a roadway or through an intersection. Since the most amount of delay to motorists usually occurs at intersections, capacity analysis focuses on intersections, as opposed to highway segments.

Six Levels of Service are defined for analysis purposes. They are assigned letter designations, from "A" to "F", with LOS "A" representing the conditions with little to no delay, and LOS "F" conditions with very long delays. Suggested ranges of service capacity and an explanation of Levels of Service are included in the Appendices.

The standard procedure for capacity analysis of signalized and un-signalized intersections is outlined in the <u>Highway Capacity Manual (HCM 2016)</u> published by the Transportation Research Board (TRB).



Traffic analysis software, Synchro 11, which is based on procedures and methodologies contained in the HCM, was used to analyze operating conditions at study area intersections. The procedure yields a Level of Service based on the HCM as an indicator of how well intersections operate.

B. Capacity Analysis Results

2021 existing base and 2022 background operating conditions during the peak study periods are evaluated to determine a basis for comparison with the projected future conditions. The future traffic conditions generated by the project were analyzed to assess the operation of the study area intersections. Capacity results for existing, background and full development conditions are listed in Table V. The discussion following the table summarizes capacity conditions. All capacity analysis calculations are included in the Appendices.



TABLE V: CAPACITY ANALYSIS RESULTS

INTERSECTION		EXISTIN)21 NG BAS ITIONS	_		BACK	022 GROUNI DITIONS)		FUL	20 L BUILD	22 CONDI	TIONS
		AM		PM	-	AM	PM		A		AM		PM
Oak St/Park Rd/I-90 Entrance and Exit	Ram	ps (S)											
EB Left - Park Rd	В	13.4	В	18.2	В	14.7	С	27.1		В	14.9	С	26.9
EB Thru/Right - Park Rd	С	24.8	С	34.6	С	26.5	D	52.1		С	27.1	D	53.0
WB Left - I-90 Entrance and Exit Ramps	С	21.0	С	31.3	С	23.6	D	45.2		С	26.9	D	48.1
WB Thru - I-90 Entrance and Exit Ramps	С	26.0	D	37.0	С	29.2	D	44.2		С	30.2	D	44.4
WB Right - I-90 Entrance and Exit Ramps	Α	3.5	Α	8.2	Α	6.4	В	10.2		Α	6.4	В	10.3
NB Left - Oak St	С	23.2	D	52.9	С	26.4	Е	71.0		С	33.6	F	98.9
NB Thru - Oak St	В	15.2	В	17.0	В	16.9	В	15.0		В	17.4	В	15.3
NB Right - Oak St	Α	3.5	Α	3.5	Α	3.4	Α	2.6		Α	3.4	Α	2.7
SB Left - Levitt PI	В	14.6	В	15.5	В	15.9	В	14.0		В	16.3	В	14.1
SB Thru/Right - Levitt Pl	С	21.9	С	21.1	С	23.9	С	22.3		С	25.0	С	23.3
Overall LOS	В	17.5	C 24.3		B 19.2		C 30.0			C 20.5		5 C	
Volume-to-Capacity (v/c) Ratio	().71	().84	0).74	C).92		0.75		5 1	
2.Oak St/Noonan Dr (U)													
WB - Noonan Dr	С	17.3	В	14.7	С	19.3	В	14.9		F	93.2	F	54.0
SB - Oak St	Α	8.9	Α	8.8	Α	9.2	Α	8.8		Α	9.9	Α	9.4
3. Noonan Dr/Proposed Driveway (U)													
EB - Noonan Dr		NA -		NA		NA -		NA		Α	7.5	Α	7.4
SB - Proposed Driveway		IVA —		INA		INA -		INA		Α	8.7	Α	8.6
. Oak St/Proposed Right Out Driveway (U)												
													12.5

Notes:

- 1. A(2.8) = Level of Service (Delay in seconds per vehicle)
- 2. EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound
- 3. (S) = Signalized; (U) = Unsignalized
- 4. N/A = Approach does not exist and/or was not analyzed during this condition
- 5. Green shaded cells indicate low delays, yellow shaded cells indicate moderate delays, red shaded cells indicate long delays.
- 6. The v/c ratio, also referred to as degree of saturation, represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available and vehicles are not expected to experience significant queues and delays. A v/c ratio between 0.85 and 0.95 generally indicates an intersection is nearing capacity. Intersections with a v/c ratio of 1.0 or greater generally indicate conditions at or above capacity.



1. Oak Street/Park Road/I-90

All movements operate at LOS "D" or better under existing conditions during both peak hours. In general urban/suburban contexts, LOS "D" is considered an acceptable condition. Under projected background conditions, the northbound left movement operates at LOS "E" during the PM peak hour. During the PM peak hour, the eastbound thru/right and westbound left movements change from LOS "C" to "D" during the PM peak hour. All other movements are projected to operate at LOS "D" or better during both peak hours with short to moderate delays. Minor signal timing changes are recommended between existing and background conditions to optimize, to the extent practicable, signal operations. However, the traffic signal is fully actuated and will respond to changes in traffic patterns to accommodate demands within defined parameters.

Between background and full build conditions, the northbound left movement during the PM peak hour changes from LOS "E" to "F". It should be noted that the proposed project constitutes approximately 4% of total intersection traffic during the AM peak hour and 2% during the PM peak hour. Specifically, the project is projected to add nine vehicles to the northbound left-turn movement during the PM peak hour (approximately 4.5% of total traffic for that movement).

There is the potential need for future capacity improvements (e.g., additional turn lanes). As described in the 2011 Genesee County Central Corridor Plan, the plan recommended a roundabout replacing the existing traffic signal. This is consistent with the currently planned activities to increase capacity throughout the NY-98 corridor, namely future widening between I-90 and W. Saile Drive and a possible roundabout at NY-98/W. Saile Drive.

The intersection should be monitored to determine actual operations. Given that adjustments were made to the existing 2021 data to establish baseline conditions, a post-study of operations when pandemic-related restrictions are lifted is important in determining the actual extent of projected impacts.

No improvements are recommended because of the projected new traffic volumes generated by full development of the project.

2. Oak Street/Noonan Drive

All movements operate at LOS "C" or better under existing and projected background conditions during both peak hours. Between background and full build conditions, the westbound movement changes from LOS "C" to "F" during the AM peak hour and from LOS "B" to "F" during the PM peak hour. Projected delays are expected to be moderate to long during the peak hours, notably due to projected left-turn drivers exiting Noonan Drive during the AM peak hour. These delays are a characteristic of unsignalized side roads along moderate to heavily trafficked roadways, such as Oak Street.

Based upon the projected delays, this study performed a preliminary traffic signal warrant investigation using available traffic data obtain from the NYSDOT and the study's turning movement counts. A full traffic signal warrant investigation includes nine warrants, as per the 2009 <u>Manual on Uniform Traffic Control Devices</u>; three of which are volume-related warrants: Eight-Hour, Four-Hour, and Peak Hour. The NYSDOT bases justification for installing traffic signals on these strict guidelines are there are positives and negatives associated with signalizing an intersection.

Under full build conditions, the volume-related warrants are not fully satisfied, as indicated in Table VI in the following section. The signal warrant calculations are included in the Appendices. Based upon these results, proximity to the existing signal at Oak Street/Park Road/I-90 (585 feet between



intersection centerlines), and likely delays being less for most hours of the day, a traffic signal is not warranted nor recommended.

3. Noonan Drive/Proposed Driveway

All movements are projected to operate at LOS "A" during both peak hours. No improvements are warranted nor recommended.

4. Oak Street/Proposed Right-Out Only Driveway

The westbound right-turn movement is projected to operate at LOS "B" during both peak hours. No improvements are warranted nor recommended.

IX. TRAFFIC SIGNAL WARRANT INVESTIGATION

This study performed a traffic signal warrant analysis at the Oak Street/Noonan Drive intersection. The need for a traffic signal is determined by comprehensive investigation of existing traffic conditions and physical characteristics at the location. The <u>Standard Specifications Update for the adoption of the National MUTCD (FHWA)</u> and the <u>New York State Supplement</u> were reviewed to investigate the need for a traffic control signal at this location. There are nine (9) warrants, and they are as follows:

Warrant 1	Eight-Hour Vehicular Volume
Warrant 2	Four-Hour Vehicular Volume
Warrant 3	Peak Hour Vehicular Volume
Warrant 4	Pedestrian Volume
Warrant 5	School Crossing
Warrant 6	Coordinated Signal System
Warrant 7	Crash Experience
Warrant 8	Roadway Network
Warrant 9	Intersection Near a Grade Crossing

Detailed signal warrant calculations are included in the Appendices for full build conditions. Prior to applying warrants, the MUTCD suggests consideration of the effects of right-turn volumes on the minor street approach, and a reduction taken in the number of right turning vehicles, where appropriate. A certain number of right-turn vehicles will execute a right-turn on the red (RTOR) indication without actuating a traffic signal (if one were in place). For purposes of this analysis, it is assumed that 25% of the right-turning vehicles exiting Noonan Drive would execute a RTOR and should, therefore, be subtracted for the purposes of the warrant analysis. The posted speed limit on Oak Street is 30 MPH, thus 100% thresholds in Table 4C-1, Figure 4C-1, and Figure 4C-3 are used as a basis for analysis.

1. Warrant 1 is subdivided into Condition A and Condition B. The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. The Interruption of Continuous Traffic, Condition B, is intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. These conditions are satisfied when, for each of any eight hours of an average day, anticipated volumes on the artery and side road are more than the minimum values presented in Tables 4C-1 in the MUTCD. Based upon these calculations, Conditions A is not satisfied, and Condition B is satisfied for one of eight hours. This warrant is not satisfied.



- 2. Warrant 2, the Four-Hour Vehicular Volume signal warrant conditions, are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal. This warrant stipulates that for any four hours of a day, minimum threshold volumes are met on the artery and side road. This warrant is satisfied for one of four hours.
- 3. Warrant 3 is intended for application where minor street traffic suffers undue delay in entering or crossing the major street for one hour of the day. It stipulates that the warrant shall be applied in unusual cases (high-occupancy vehicle facilities i.e., shopping centers, office parks) where a large number of vehicles discharge over a short period of time. **This warrant is not satisfied.**
- 4. Warrant 4 is met when pedestrians experience excessive delay in crossing the major street because the traffic volumes are so heavy. The intersection currently has low pedestrian activity. **This warrant is not satisfied.**
- 5. Warrant 5 is met when a sufficient number of gaps in traffic do not exist for certain size and frequency of school children to cross the major roadway. **This warrant is not applicable.**
- 6. Warrant 6 is met when a traffic signal is needed to maintain progressive movement and vehicle platooning in a coordinated signal system. **This warrant is not applicable.**
- 7. Warrant 7 is intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal. The need for a traffic control signal shall be considered if *all* of the following criteria are met:
 - a. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce crash frequency. **Condition A is not satisfied.**
 - b. Five (5) or more reported crashes, of types susceptible to correction by a traffic signal, to have occurred within a 12-month period, each crash involving a personal injury or property damage. Three (3) crashes were documented in the crash analysis over a 36-month period. **Condition B is not satisfied.**

Given that both Conditions A and B are not satisfied, this warrant is not satisfied.

- 8. Warrant 8 is met when a traffic signal might encourage concentration and organization of traffic flow on a roadway network. This warrant primarily focuses on two major intersecting roadways, which is not the case at the study intersection. **This warrant is not applicable.**
- 9. Warrant 9 is applicable when an intersection is located near an at-grade rail crossing. **This** warrant is not applicable.



TABLE VI: TRAFFIC SIGNAL WARRANT SUMMARY

WARRANT	SATISFACTION OF WARRANTS
1A – Eight-Hour Condition A	NOT SATISFIED
1B – Eight-Hour Condition B	NOT SATISFIED
2 – Four-Hour	NOT SATISFIED
3 - Peak-Hour	NOT SATISFIED
4 - Pedestrian Volume	NOT SATISFIED
5 - School Crossing	N/A
6 - Coordinated Signal System	N/A
7 - Crash Experience	NOT SATISFIED
8 - Roadway Network	N/A
9 - Intersection Near a Grade Crossing	N/A

Table VI summarizes the signal warrants at the study intersection under full build conditions and the results of the investigation. Despite the projected moderate to long delays at times during the peak hours, based on the results of the signal warrant investigation, a three-color traffic signal is not recommended.

X. DRIVE-THRU QUEUE ASSESSMENT

This study conducted a drive-thru queuing analysis during the AM peak hour to determine the anticipated queue length and adequacy of the proposed on-site stacking space using the drive-thru facility. A formula was developed based upon the average service rates and observed queuing to estimate queue lengths at coffee/donut shops given the projected arrival rates at the drive-thru. This formula assumes that both arrival and service rates are random. This is based on observations that vehicle arrivals are random, and that service times in the drive-thru vary based on type and number of items ordered. For example, the service time for ordering a coffee is less than that of a customer who orders coffee and a breakfast sandwich or donuts.

Since both the arrival and service times at the proposed drive-thru are randomly distributed, stochastic queuing equations were used for this analysis. The peak projected arrival rate at the drive-thru is a conservative 45 vehicles per hour during the AM peak hour based upon ITE trip generation projections. It is noted that some patronage will occur by visitors already on-site for other reasons, such as fueling their vehicle. Using a service rate of approximately 35 seconds (excluding the waiting time in a storage area immediately in advance of the service positions after placing an order at the order window) during the AM peak hour, the average service rate in the drive-thru is 103 vehicles per hour. This service rate in the drive-thru is based on service by two persons. Based on service rates collected at similar single-order drive-thru facilities in the Western New York and Finger Lakes Region, there is variability in service times ranging from 25 to 35 seconds.

Table VII summarizes the results of the proposed drive-thru queue assessment.



TABLE VII: PEAK HOUR DRIVE-THRU QUEUING RESULTS

PEAK HOUR	PARAMETER	RESULTS
	Arrival Rate	45 vph
AM Peak Hour	Service Rate	103 vph
	95% Confidence Queue Length	3 vehicles
Note: 1. vph = Vehicles	per Hour.	

The results of the drive-thru queuing analysis indicate 95th percentile queue lengths of three (3) vehicles during the AM peak hour. Based on an analysis of the current site plan, the drive-thru provides storage for approximately 10 passenger vehicles. The analyses indicate that there is sufficient stacking space on-site to accommodate the projected drive-thru demands during the AM peak hour.

XI. CONCLUSIONS & RECOMMENDATIONS

This Traffic Impact Study identified and evaluated the potential traffic impacts that can be expected from the proposed Quicklee's Development in the City of Batava, New York. Based upon the results of this study, it is our firm's professional opinion that the existing transportation network can adequately accommodate the projected traffic volumes and resulting impacts to study area intersections. The following sets forth our firm's conclusions and recommendations based upon the results of the comprehensive traffic analysis conducted:

- 1. The proposed development is expected to generate approximately 158 entering/141 exiting vehicle trips during the weekday AM peak hour and 104 entering/110 exiting vehicle trips during the weekday PM peak hour. Not all these driveway volumes are new, but instead a portion of the proposed volume is reduced considering pass-by adjustments. Thus, the proposed site is expected to generate approximately 79 entering/71 exiting primary new vehicle trips during the weekday AM peak hour and 53 entering/55 exiting primary new vehicle trips during the weekday PM peak hour.
- 2. The existing crash investigation did not reveal inherent safety deficiencies related to the geometric design of the study area intersections.
- 3. Under background conditions, projected delays at the intersection of Oak Street/Park Road/I-90 are expected to be moderate to long at times during the AM and PM peak hours. The projected minor impacts resulting from the proposed project will contribute to this condition. For example, between background and full build conditions, the northbound left movement during the PM peak hour changes from LOS "E" to "F". However, it should be noted that the proposed project constitutes approximately 4% of total intersection traffic during the AM peak hour and 2% during the PM peak hour. Specifically, the project is projected to add nine vehicles to the northbound left-turn movement during the PM peak hour (approximately 4.5% of total traffic for that movement).
- 4. The intersection of Oak Street/Park Road/I-90 should be monitored to determine actual operations. Given that adjustments were made to the existing 2021 data to establish baseline



- conditions, a post-study of operations when pandemic-related restrictions are lifted is important in determining the actual extent of projected impacts.
- 5. The drive-thru queuing assessment during the AM peak hour showed that there is sufficient storage space to accommodate the projected drive-thru traffic patronizing the proposed coffee shop.
- 6. Despite the projected moderate to long delays at times during the peak hours at the intersection of Oak Street/Noonan Drive under full build conditions, based on the results of the signal warrant investigation, a three-color traffic signal is not recommended.
- 7. The projected new traffic volumes generated by full development of the project can be accommodated by the existing transportation system.

XII. FIGURES

Figures 1 through 8 are included on the following pages.

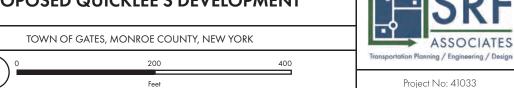


FIGURE 1: SITE LOCATION AND STUDY AREA NOONAN DR Key PROPOSED QUICKLEE'S DEVELOPMENT

Study Intersection
Proposed Intersection

Study Area

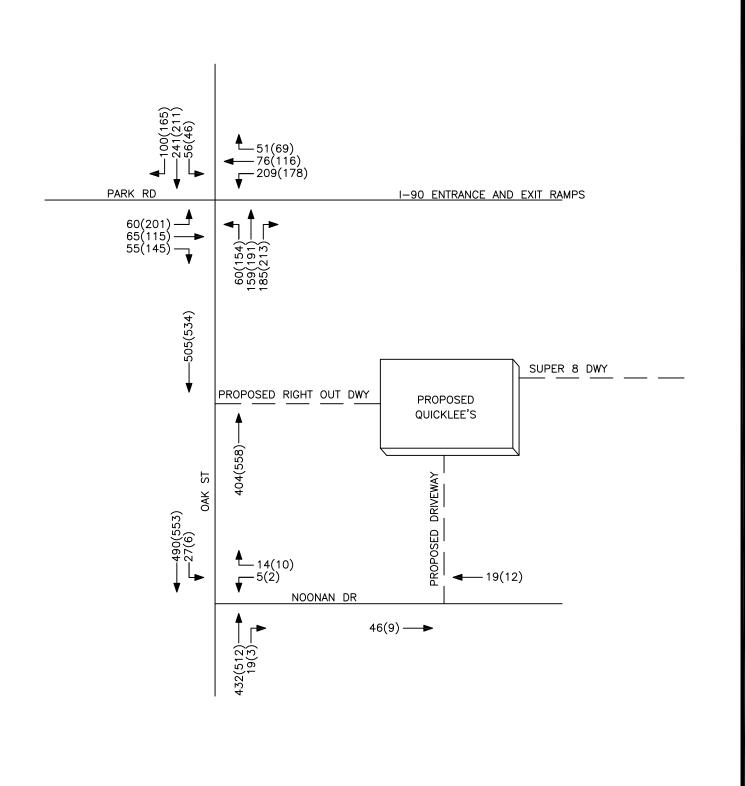
Site Location



Note: All counts by New York State Dept of Transportation V.P.D. = Vehicles Per Day 9,712 V.P.D. ADT (2019) NYSDOT PARK RD I-90 ENTRANCE AND EXIT RAMPS SUPER 8 DWY PROPOSED RIGHT OUT DWY PROPOSED QUICKLEE'S 14,336 V.P.D. ADT (2018) NYSDOT PROPOSED DWY OAK NOONAN DR PROJECT NO: 41033 KEY FIGURE 2 LANE GEOMETRY & AVERAGE DAILY TRAFFIC ASSOCIATES PROPOSED QUICKLEE'S, WWW.SRFA.NET NOT TO SCALE

CITY OF BATAVIA, NY

Transportation Engineering & Planning Consultants



AM: 7:15-8:15 PM: 4:00-5:00

PROJECT NO: 41033

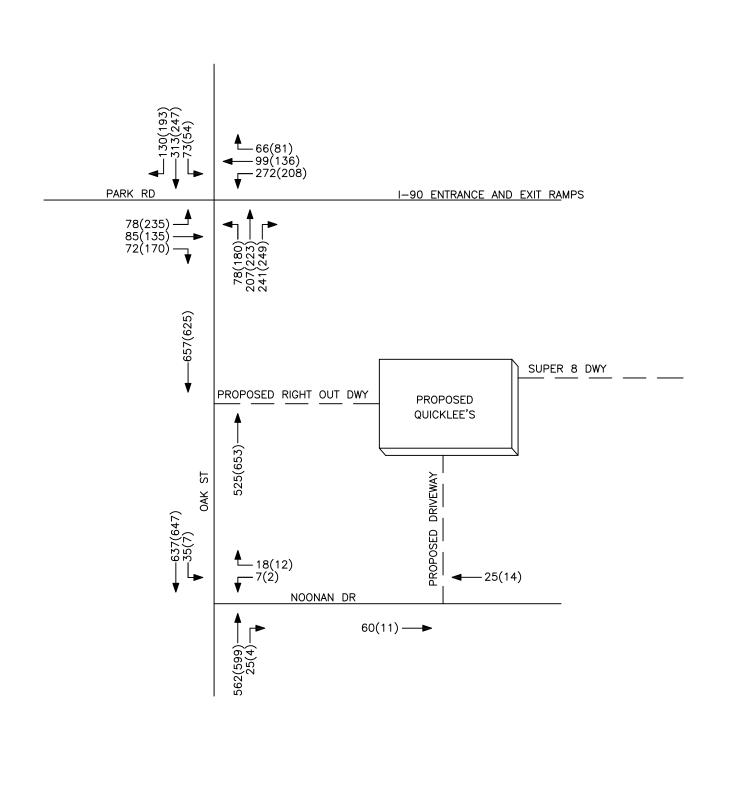
00(00) = AM(PM)

NOT TO SCALE

FIGURE 3A

PEAK HOUR VOLUMES 2021 EXISTING BASE CONDITIONS





AM: 7:15-8:15 PM: 4:00-5:00

PROJECT NO: 41033

OO(00) = AM(PM)

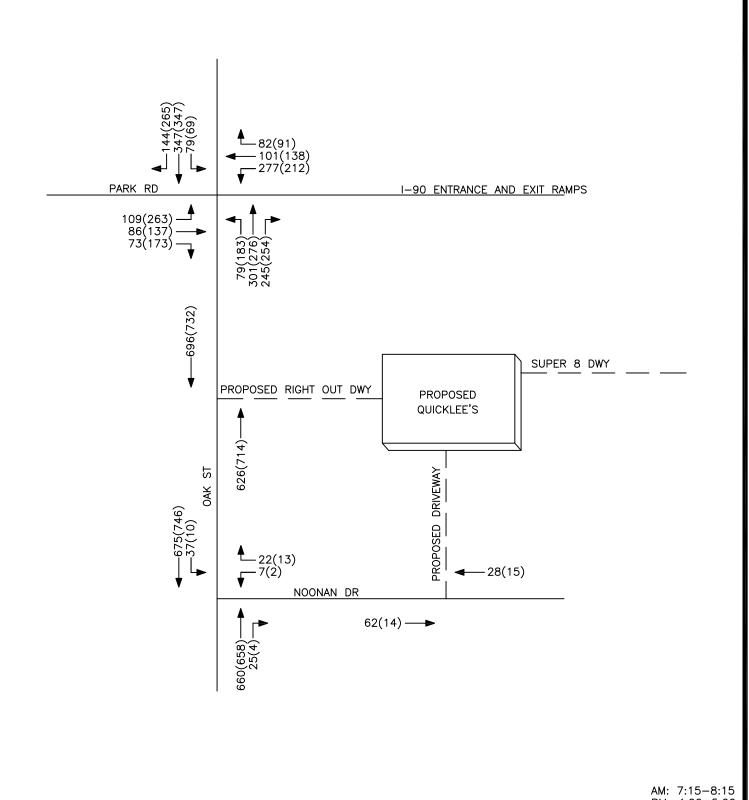
N

NOT TO SCALE

FIGURE 3B

PEAK HOUR VOLUMES 2021 ADJUSTED BASE CONDITIONS





AM: 7:15-8:15 PM: 4:00-5:00

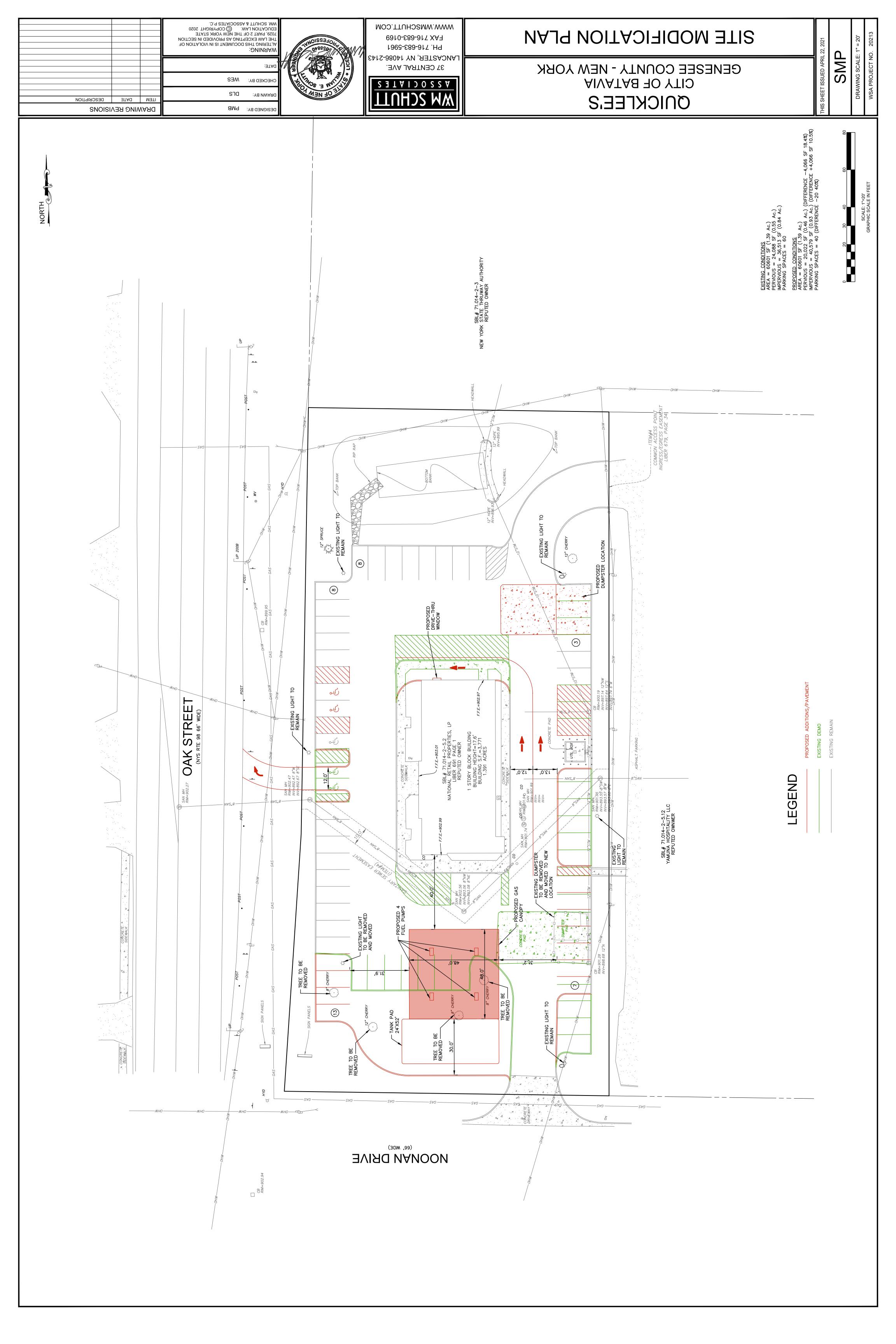
PROJECT NO: 41033 00(00) = AM(PM)

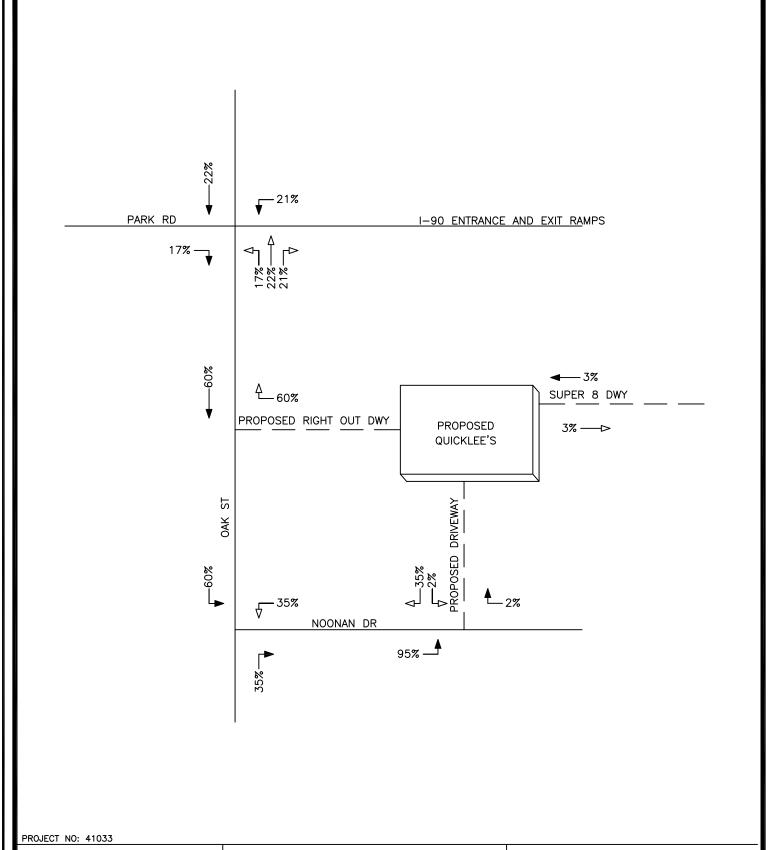
NOT TO SCALE

FIGURE 4

PEAK HOUR VOLUMES **BACKGROUND CONDITIONS**









NOT TO SCALE

00(00) = AM(PM)

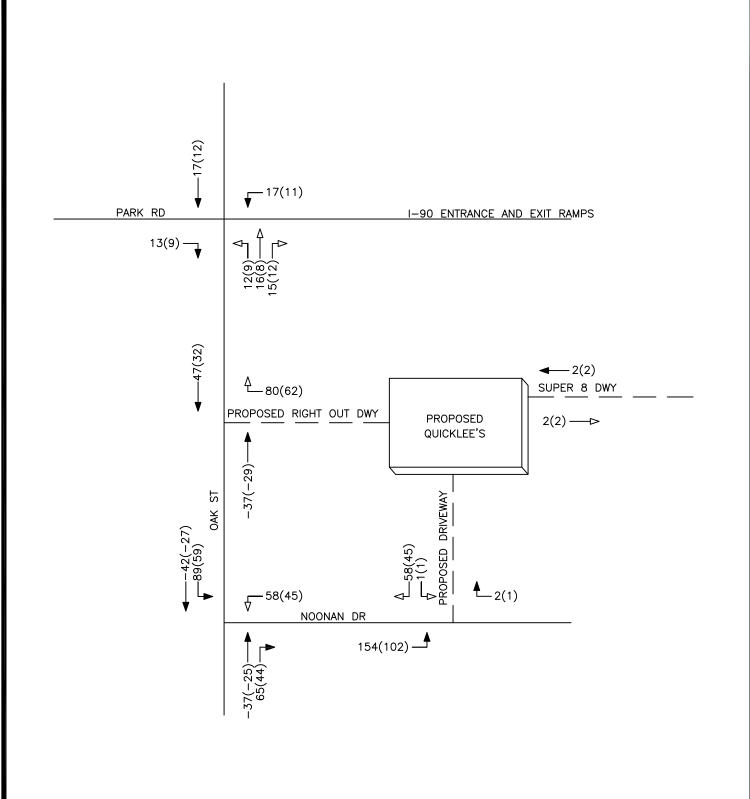
→ = ENTERING TRIPS

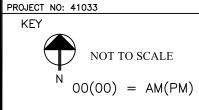
 \implies = EXITING TRIPS

FIGURE 6

TRIP DISTRIBUTION





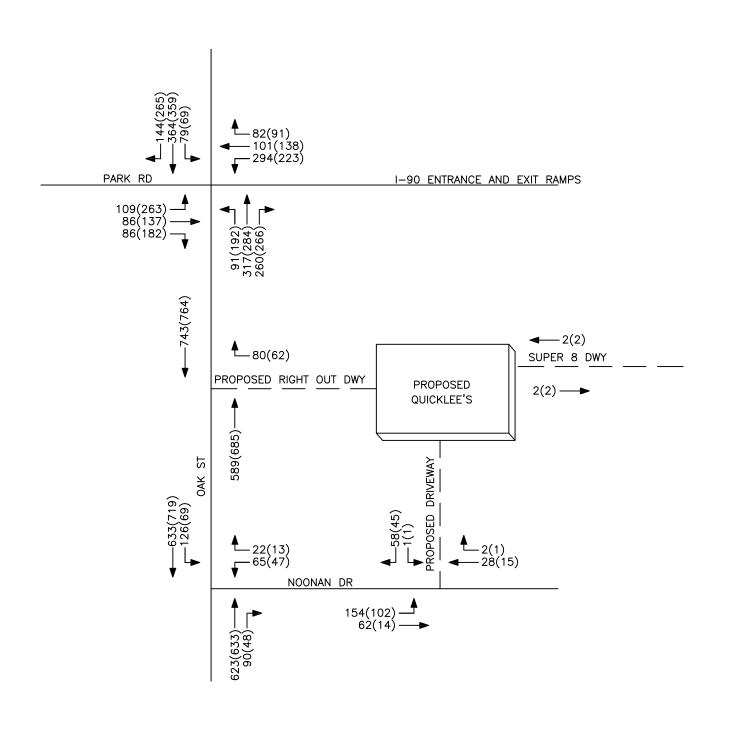


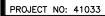
→ = ENTERING TRIPS → = EXITING TRIPS

FIGURE 7

SITE GENERATED TRIPS







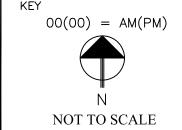


FIGURE 8

PEAK HOUR VOLUMES FULL DEVELOPMENT CONDITIONS



APPENDICES

A1

Collected Traffic Volume Data

File Name: NY-98 at Noonan Site Code: 11111111

Start Date : 4/8/2021

					Gro	ups Pri	nted- l	Jnshift	ed - Baı								
	NY	-98 (Oa	k Stree	et)		Noonan	Drive		NY	'-98 (Oa	k Stree	et)					
		Southb	ound			Westb	ound			Northb	ound	-		Eastbo	und		
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	78	1	0	2	0	0	0	2	105	1	0	0	0	0	0	189
07:15 AM	0	114	3	0	1	0	2	0	1	122	0	0	0	0	0	0	243
07:30 AM	0	132	11	0	4	0	2	0	7	97	0	0	0	0	0	0	253
07:45 AM	0	131	9	0	2	0	0	0	6	110	0	0	0	0	0	0	258
Total	0	455	24	0	9	0	4	0	16	434	1	0	0	0	0	0	943
08:00 AM	0	113	4	0	7	0	1	0	5	103	0	0	0	0	0	0	233
08:15 AM	0	109	3	0	4	0	1	0	7	96	0	0	0	0	0	0	220
08:30 AM	0	97	3	0	3	0	3	0	1	101	0	0	0	0	0	0	208
08:45 AM	0	96	1	0	1	0	1	0	1	94	0	0	0	0	0	0	194
Total	0	415	11	0	15	0	6	0	14	394	0	0	0	0	0	0	855
*** BREAK ***																	
DREAN																	
04:00 PM	0	153	0	0	3	0	2	1	0	124	1	0	0	0	0	0	284
04:15 PM	0	134	2	0	2	0	0	Ö	2	136	Ó	0	0	0	0	0	276
04:30 PM	0	134	2	0	1	0	Ö	0	0	127	0	0	0	0	0	0	264
04:45 PM	0	132	2	0	4	Ö	0	0	1	125	0	0	0	0	0	ő	264
Total	0	553	6	0	10	0	2	1	3	512	1	0	0	0	0	0	1088
,			_	- 1		-	_	•			•	- 1	_		_	- 1	
05:00 PM	0	132	0	0	0	0	1	0	1	147	0	0	0	0	0	0	281
05:15 PM	0	148	4	0	2	0	1	0	0	129	0	0	0	0	0	0	284
05:30 PM	0	128	1	0	6	0	1	0	0	94	0	0	0	0	0	0	230
05:45 PM	0	136	2	0	1	0	1	0	0	104	0	0	0	0	0	0	244
Total	0	544	7	0	9	0	4	0	1	474	0	0	0	0	0	0	1039
Grand Total	0	1967	48	0	43	0	16	1	34	1814	2	0	0	0	0	0	3925
Apprch %	0	97.6	2.4	0	71.7	0	26.7	1.7	1.8	98.1	0.1	0	0	0	0	0	
Total %	0	50.1	1.2	0	1.1	0	0.4	0	0.9	46.2	0.1	0	0	0	0	0	
Unshifted	0	1967	48	0	43	0	16	1	34	1814	2	0	0	0	0	0	3925
% Unshifted	0	100	100	0	100	0	100	100	100	100	100	0	0	0	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

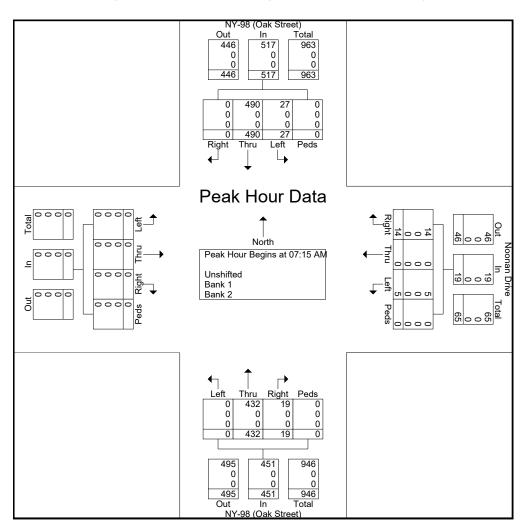
SRF ASSOCIATES, D.P.C.

3495 Winton Place, Building E, Suite 110 Rochester, New York 14623

File Name: NY-98 at Noonan

Site Code : 11111111 Start Date : 4/8/2021

		NY-98	(Oak	Stree	t)		Noc	nan I	Drive			NY-98	(Oak	Stree	t)						
		So	uthbo	und			We	estbo	und			No	rthbo	und			Ea	ıstboı	ınd		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A								1 of 1													
Peak Hour f	or Ent	ire Inte	ersecti	on Be	gins at	07:15	AM														
07:15 AM	0	114	3	0	117	1	0	2	0	3	1	122	0	0	123	0	0	0	0	0	243
07:30 AM	0	132	11	0	143	4	0	2	0	6	7	97	0	0	104	0	0	0	0	0	253
07:45 AM	0	131	9	0	140	2	0	0	0	2	6	110	0	0	116	0	0	0	0	0	258
08:00 AM	0	113	4	0	117	7	0	1	0	8	5	103	0	0	108	0	0	0	0	0	233
Total Volume	0	490	27	0	517	14	0	5	0	19	19	432	0	0	451	0	0	0	0	0	987
% App. Total	0	94.8	5.2	0		73.7	0	26.3	0		4.2	95.8	0	0		0	0	0	0		
PHF	.000	.928	.614	.000	.904	.500	.000	.625	.000	.594	.679	.885	.000	.000	.917	.000	.000	.000	.000	.000	.956
Unshifted	0	490	27	0	517	14	0	5	0	19	19	432	0	0	451	0	0	0	0	0	987
% Unshifted	0	100	100	0	100	100	0	100	0	100	100	100	0	0	100	0	0	0	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



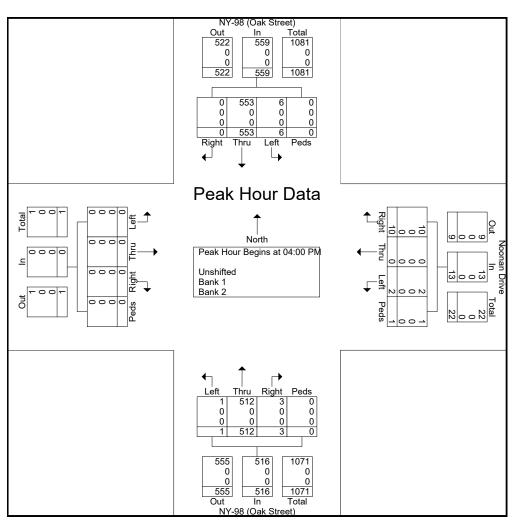
SRF ASSOCIATES, D.P.C.

3495 Winton Place, Building E, Suite 110 Rochester, New York 14623

File Name: NY-98 at Noonan

Site Code : 11111111 Start Date : 4/8/2021

		NY-98	(Oak	Stree	t)		Noc	nan I	Drive			NY-98	(Oak	Stree	t)						
		So	uthbo	und			We	estbo	und			No	rthbo	und			Ea	astbou	ınd		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	,							1 of 1													
Peak Hour f	or Ent	ire Inte	ersecti	ion Be	gins at	04:00	PM														
04:00 PM	0	153	0	0	153	3	0	2	1	6	0	124	1	0	125	0	0	0	0	0	284
04:15 PM	0	134	2	0	136	2	0	0	0	2	2	136	0	0	138	0	0	0	0	0	276
04:30 PM	0	134	2	0	136	1	0	0	0	1	0	127	0	0	127	0	0	0	0	0	264
04:45 PM	0	132	2	0	134	4	0	0	0	4	1	125	0	0	126	0	0	0	0	0	264
Total Volume	0	553	6	0	559	10	0	2	1	13	3	512	1	0	516	0	0	0	0	0	1088
% App. Total	0	98.9	1.1	0		76.9	0	15.4	7.7		0.6	99.2	0.2	0		0	0	0	0		
PHF	.000	.904	.750	.000	.913	.625	.000	.250	.250	.542	.375	.941	.250	.000	.935	.000	.000	.000	.000	.000	.958
Unshifted	0	553	6	0	559	10	0	2	1	13	3	512	1	0	516	0	0	0	0	0	1088
% Unshifted	0	100	100	0	100	100	0	100	100	100	100	100	100	0	100	0	0	0	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SRF ASSOCIATES, D.P.C. 3495 Winton Place, Building E, Suite 110

Rochester, New York 14623

File Name: NY-98 at Thruway

Site Code : 11111111 Start Date : 4/6/2021

Page No : 1

Groups Printed- Unshifted - Bank 1 - Bank 2

	Unshift	ed - Ba															
	NY	-98 (Oa	k Stree	et)		NYS Th	ruway		N	'-98 (Oa	k Stree	et)		Park	Road		
		Southb	ound			Westb	ound			Northb	ound			Eastb	ound		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	12	26	14	1	8	11	32	0	64	26	12	0	13	17	12	0	248
07:15 AM	26	38	17	0	20	14	46	0	57	54	9	0	13	11	16	0	321
07:30 AM	24	78	17	0	12	24	55	0	52	42	16	0	8	21	17	0	366
07:45 AM	32	75	11_	0	11	25	56	0	38	39	14	0	24	15	16	0	356
Total	94	217	59	1	51	74	189	0	211	161	51	0	58	64	61	0	1291
08:00 AM	18	50	11	0	8	13	52	0	38	24	21	0	10	18	11	0	274
08:15 AM	16	37	14	0	16	27	47	0	39	37	14	0	14	15	11	0	287
08:30 AM	28	29	9	0	15	24	44	0	30	26	18	0	14	10	15	0	262
08:45 AM	24	36	12	0	17	15	44	0	38	35	24	0	15	15	13	0	288
Total	86	152	46	0	56	79	187	0	145	122	77	0	53	58	50	0	1111
*** BREAK ***																	
04:00 PM	41	58	16	1	24	23	41	0	51	43	45	0	36	42	55	0	476
04:15 PM	50	46	10	0	12	22	42	0	51	43	26	0	40	24	56	0	422
04:30 PM	39	47	10	0	23	44	53	0	58	52	41	0	36	28	46	2	479
04:45 PM	35	60	10	0	10	27	42	0	53	53	42	0	33	21	44	0	430
Total	165	211	46	1	69	116	178	0	213	191	154	0	145	115	201	2	1807
05:00 PM	39	49	7	0	23	25	58	0	55	46	21	0	37	25	43	0	428
05:15 PM	31	31	20	0	22	27	58	0	49	45	34	0	43	16	64	0	440
05:30 PM	31	31	12	0	16	29	53	0	43	34	31	0	24	17	45	1	367
05:45 PM	29	26	8	0	10	24	45	0	32	28	23	0	34	25	28	0	312
Total	130	137	47	0	71	105	214	0	179	153	109	0	138	83	180	1	1547
Grand Total	475	717	198	2	247	374	768	0	748	627	391	0	394	320	492	3	5756
Apprch %	34.1	51.5	14.2	0.1	17.8	26.9	55.3	0	42.4	35.5	22.1	0	32.6	26.5	40.7	0.2	
Total %	8.3	12.5	3.4	0	4.3	6.5	13.3	0	13	10.9	6.8	0	6.8	5.6	8.5	0.1	
Unshifted	475	717	198	2	247	374	768	0	748	627	391	0	394	320	492	3	5756
<u>% Unshifted</u>	100	100	100	100	100	100	100	0	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>% Bank 1</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

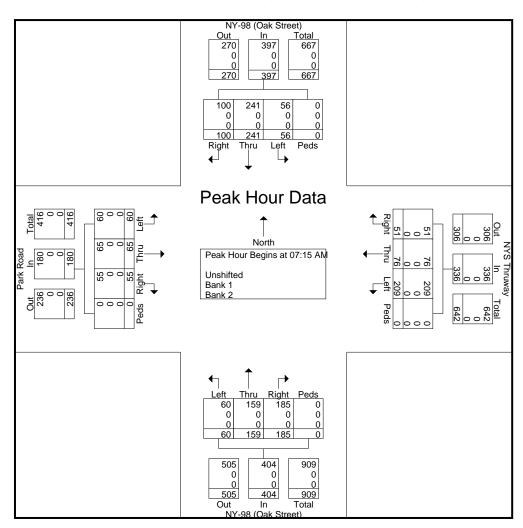
SRF ASSOCIATES, D.P.C. 3495 Winton Place, Building E, Suite 110

Rochester, New York 14623

File Name: NY-98 at Thruway

Site Code : 11111111 Start Date : 4/6/2021

	NY-98 (Oak Street)						NY	S Thru	ıway			NY-98	(Oak	Stree	t)	Park Road					
		So	uthbo	und			W	estbo	und			No	rthbo	und			Ea	astbo	und		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour /	Analys	is Fro	m 07:0	00 AM	to 11:4	5 AM	- Peak	(1 of 1	1												
Peak Hour f	or Ent	ire Inte	ersecti	ion Be	gins at	07:15	AM														
07:15 AM	26	38	17	0	81	20	14	46	0	80	57	54	9	0	120	13	11	16	0	40	321
07:30 AM	24	78	17	0	119	12	24	55	0	91	52	42	16	0	110	8	21	17	0	46	366
07:45 AM	32	75	11	0	118	11	25	56	0	92	38	39	14	0	91	24	15	16	0	55	356
MA 00:80	18	50	11	0	79	8	13	52	0	73	38	24	21	0	83	10	18	11	0	39	274
Total Volume	100	241	56	0	397	51	76	209	0	336	185	159	60	0	404	55	65	60	0	180	1317
% App. Total	25.2	60.7	14.1	0		15.2	22.6	62.2	0		45.8	39.4	14.9	0		30.6	36.1	33.3	0		
PHF	.781	.772	.824	.000	.834	.638	.760	.933	.000	.913	.811	.736	.714	.000	.842	.573	.774	.882	.000	.818	.900
Unshifted	100	241	56	0	397	51	76	209	0	336	185	159	60	0	404	55	65	60	0	180	1317
% Unshifted	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



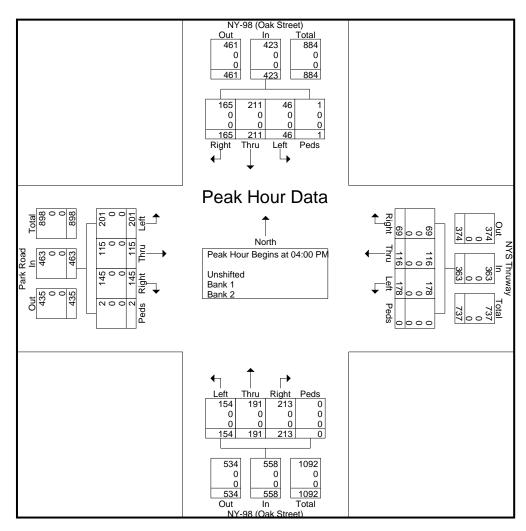
SRF ASSOCIATES, D.P.C. 3495 Winton Place, Building E, Suite 110

Rochester, New York 14623

File Name: NY-98 at Thruway

Site Code : 11111111 Start Date : 4/6/2021

	NY-98 (Oak Street)					NYS	S Thru	ıway			NY-98	(Oak	Stree	t)	Park Road						
		So	uthbo	und			We	estbo	und			No	rthbo	und			Ea	stbo	und		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A								1 of '	1												
Peak Hour f	or Ent	ire Inte	ersecti	ion Be	gins at	04:00	PM														
04:00 PM	41	58	16	1	116	24	23	41	0	88	51	43	45	0	139	36	42	55	0	133	476
04:15 PM	50	46	10	0	106	12	22	42	0	76	51	43	26	0	120	40	24	56	0	120	422
04:30 PM	39	47	10	0	96	23	44	53	0	120	58	52	41	0	151	36	28	46	2	112	479
04:45 PM	35	60	10	0	105	10	27	42	0	79	53	53	42	0	148	33	21	44	0	98	430
Total Volume	165	211	46	1	423	69	116	178	0	363	213	191	154	0	558	145	115	201	2	463	1807
% App. Total	39	49.9	10.9	0.2		19	32	49	0		38.2	34.2	27.6	0		31.3	24.8	43.4	0.4		
PHF	.825	.879	.719	.250	.912	.719	.659	.840	.000	.756	.918	.901	.856	.000	.924	.906	.685	.897	.250	.870	.943
Unshifted	165	211	46	1	423	69	116	178	0	363	213	191	154	0	558	145	115	201	2	463	1807
% Unshifted	100	100	100	100	100	100	100	100	0	100	100	100	100	0	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



A2

Miscellaneous Traffic Data and Calculations



Proposed Quicklee's, City of Batavia, Genesee County, NYDocumentation of Ambient Traffic Volume Growth

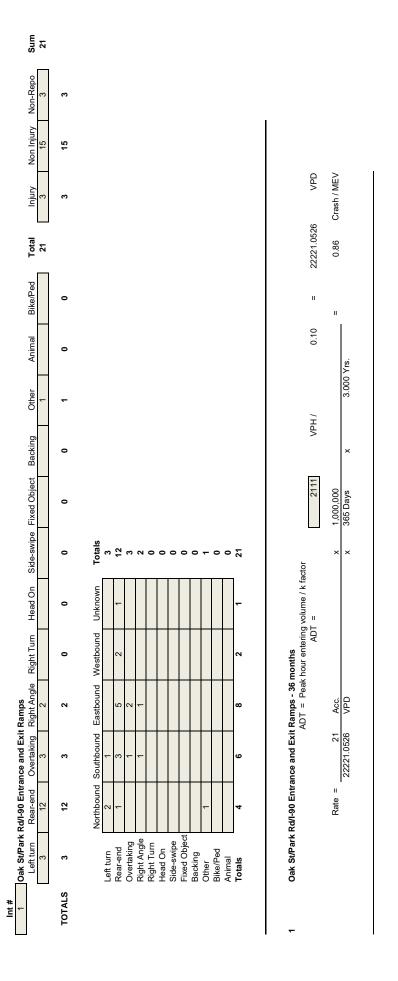
Roadway	Segment starts at	Segment end at	2010	2014	2016	2017	2018	2019	Annual Growth
Oak St	Rte 5	Rte 90I	12,145		15,624		14,336		2.09%
Park Rd	Veterans Memorial Dr	Oak St		9,062		9,749		9,712	1.40%
								AVERAGE	1.74%

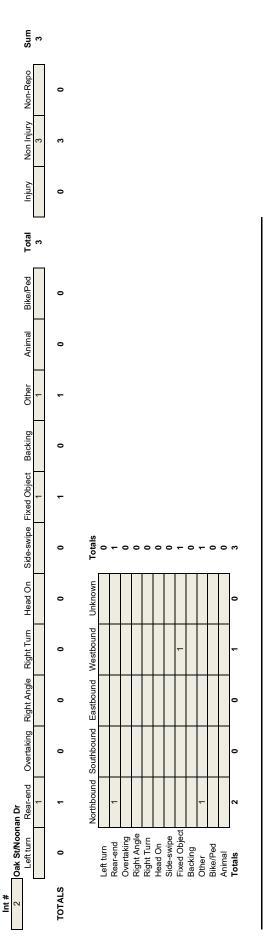
Queue Theory Coffee Shop Drive-Thru AM Peak Hour - 35 Second Service Rate



The formula assumes both arrival and service distributions are random

Arrivate Rate (Per Hour) Service Rate (Per Hour)	45 103	ALWAYS A	ARRIVAL RATE > SERVICE RAT THIS SCENARIO	E UNDER
Average queue in the system = Average Time in System = Average Waiting Time only =	0.8 62.2 27.2	Veh Sec Sec	(waiting and service)	1 1
95% confident that there will be fewer th	nan	3	vehicles in the queue	
98% confident that there will be fewer th	nan	4	vehicles in the queue	
100% confident that there will be fewer t	6	vehicles in the queue		





VPD

13378.9474

Crash / MEV

0.20

PROJECT: Proposed Quicklee's

LOCATION: Oak St, City of Batavia, New York

PEAK HOUR: AM Peak

Figure Number: 3a 3b 4 6 7 8

Num of yrs

	I		2021	1 2022	Medical		2022		Proposed	Quicklee's				
LOCATION NUMBER	INTERSECTION DESCRIPTION	Unadjusted Volumes	Adjusted	Bkgd Vol	Office	Fairfield Inn	Background	Enter	Exit	Trips IN	Trips OUT	Pass-by Trips	Total Site Trips	Full Build Volumes
1	Oak St/Park Rd/	7 0.14.1.100	Base	1.8%	Building		Volumes	Dist. %	Dist. %	79	71	тірз	pc	10.0
	I-90 Entrance and Exit Ramps		1.30											
	SR	100	130	132	9	3	144 347							144
	ST	241	313	319	22	6	347	22%		17			17	364
	SL WR	56 51	73	74 67	3 12	2	79							79
	WR WT	76	66 99	101	12	3	82 101							82 101
	WL	209	272	277			277	21%		17			17	294
	NR	185	241	245			277 245	2170	21%		15		15	260
	NT	159	207	210	82	9	301		22%		16		16	317
	NL	60	78	79			79		17%		12		12	91
	ER ET	55 65	72 85	73 86			73	17%		13			13	86 86
	EL	60	78	79	26	4	86 109							109
2	Oak St/	00	70	7.0	20		100							100
_	Noonan Dr													
	SR													
	ST	490	637	648	21	6	675					-42	-42	633
	SL	27 14	35	36	1		37	60%		47		42	89	126
	WR WT	14	18	19	3		22							22
	WL	5	7	7			7		35%		25	33	58	65
	NR	19	25	25			25	35%	0070	28		37	65	90
	NT	432	562	572	79	9	660					-37	-37	623
	NL													
	ER													
	ET EL													
3	Noonan Dr/													
	Proposed Dwy													
	SR								35%		25	33	58	58
	ST													
	SL								2%		1		1	1
	WR WT	19	25	25	3		28	2%		2			2	2 28
	WL	19	25	25	3		20							20
	NR NR													
	NT													
	NL													
	ER													
	ET EL	46	60	61	1		62	95%		75		79	154	62 154
4	Oak St/							95%		75		79	104	154
7	Proposed Right Out Dwy													
	SR													
	ST	505	657	668	22	6	696	60%		47			47	743
	SL													
	WR w.t								60%		43	37	80	80
	WT WL													
	NR								-		 			
	NT	404	525	535	82	9	626		1			-37	-37	589
	NL													
	ER								1					
	ET EL													
5	Super 8 Dwy/													
	Site Parking Lot								1					
	SR SR													
	ST													
	SL													
	WR WT							3%		_			_	2
	W I WL							3%	1	2			2	2
	NR													
	NT													
	NL										<u> </u>			
	ER													
	ET								3%		2		2	2
	EL								ı	1	1			

PROJECT: Proposed Quicklee's

LOCATION: Oak St, City of Batavia, New York

PEAK HOUR: PM Peak

Figure Number: 3a 3b 4 6 7 8

Num of yrs

Marked M				justed 2021 Medical Fairfield 2022 Proposed Quicklee's								Foll Boild			
1	LOCATION NUMBER	INTERSECTION DESCRIPTION	Unadjusted Volumes	Adjusted	Bkgd Vol	Office		Background	Enter Dist. %	Exit	Trips IN	Trips OUT 55	Pass-by Trips		Full Build Volumes
SR 156 169 1797 650 3 250 179 179 650 3 250 179 179 650 3 250 179 179 650 3 250 179 179 179 179 179 179 179 179 179 179	1					J									
Sal. 4db 5d 55 12 2 2 6db															
Sal. 4db 5d 55 12 2 2 6db		SR	165				3	265	000/		40			40	
WIT								347	22%		12			12	
WIT							2	01							
W.L. 178 208 212 213 214 11 223 215 12 12 216 12 216 12 216 12 216 12 216 12 216 12 216 12 216 12 216 12 216 12 216 12 216 216 12 216						U	3								
NT								212	21%		11			11	
NT								254		21%		12			
ER 146 170 173 173 179 9 1822 ER 145 170 135 137 20 4 283 2			191	223		39	10	276		22%			-4	8	284
ET 115 135 235 239 20 4 285 2		NL	154	180	183			183		17%		9			192
EL 201 235 239 20 4 283								173	17%		9			9	
Column C		ET	115	135	137										137
Nocean Dr			201	235	239	20	4	263							263
SR St	2														
ST 553 647 659 81 6 746 7 3 10 00% 32 27 59 88 13 WR 10 12 12 11 13 3															
SL 6 7 7 3 1 10 60% 32 27 59 88 WR 10 12 12 1 13 13 14 19 26 45 47 47 18 18 18 18 18 18 18 18 18 18 18 18 18		SR eT	550	647	650	0.1	6	746					27	27	710
WR 10 12 12 12 1 13 13							0		60%		22				
WT								13	00 /0		JZ		21	Ja	
MIL 2 2 2 2 3 4 4 4 8 10 1 10 10 10 10 10 10 10 10 10 10 10 1											1				
NR NR NT 512 599 610 38 10 658 35% 19 25 44 48 83% 10 658 83 10 65			2	2	2			2		35%	1	19	26	45	47
NT NL 512 599 610 38 10 658									35%		19				
ER ET EL EL STATE						38	10								
ET EL SL SA SON ST ST SL SL ST SL SL ST SL SL SL ST SL		NL													
EL															
Nonan Dif Proposed Duy SR ST SI SI SI SI SI SI SI															
Proposed Dwy															
SR ST SI	3														
ST SL WR WR 12 14 14 1 15 2% 1 1 1 1 1 1 1		Proposed Dwy													
SL WR WR 12 14 14 1 15 2% 1 1 1 1 1 15		SR								35%		19	26	45	45
WR WT WI WI 12 14 14 14 1 15 2% 1 1 1 15 15 NR NR NR NT NL ER ET 9 11 11 3 14 95% 50 52 102 14 102 102 102 102 102 102 102 103 104 105 105 105 105 105 105 105 105 105 105										00/					
WT 12 14 14 1 15									20/	2%	- 1	1			
WIL NR NT NIL			12	1.1	1.1	4		15	2%		1			1	
NR NT NI			12	14	14	'		15							13
NT NL ER ET 9 11 11 3 14 95% 50 52 102 102 102 102 102 102 102 102 102 10															
NL															
ET															
EL		ER													
A		ET	9	11	11	3		14							14
Proposed Right Out Dwy SR ST 534 625 636 90 6 732 60% 32 32 32 764									95%		50		52	102	102
SR ST 534 625 636 90 6 732 60% 32 32 764 WR WR WT WL STATE	4														
ST		Proposed Right Out Dwy													
SL WR WT WL NR NT S58 653 665 39 10 714 -29 -29 685 8R ET EL EL SR SR ST SL WR WT WL NR NT NL SR SR ST SL WR WT WL NR NT NL ER ET EL SR ST SL ER ET SL ER ET SL ER SR ST SL ER SR ST SL SL ER SR ST SL SL ER SR SR ST SL SL SR SR ST SL SR SR SR ST SL SR SR SR ST SL SR SR SR ST SL SR															
WR WT WL			534	625	636	90	6	732	60%		32			32	764
WT WL NR NT 558 653 665 39 10 714										600/		20	20	60	60
WL NR NT 558 653 665 39 10 714 -29 -29 685 ER ET EL ER ET EL ER ET EL ER ET EL ER ET ET										60%		33	29	62	62
NR NT 558 653 665 39 10 714											1				
NT															
NL			558	653	665	39	10	714					-29	-29	685
ER ET EL 5 Super 8 Dwy/ Site Parking Lot SR ST SL WR WT WT WL NR NT NT NL ER ET 3% 2 2 2 2			- 30				Ŭ				1				
ET EL		ER													
5		ET									1				
Site Parking Lot															
SR ST SL	5														
ST SL WR WT 3% 2 2 2 2 2		Site Parking Lot													
SL WR WT WL 3% 2 2 2 2 2		SR									1				
WR WT		ST													
WT WL 3% 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2												ļ			
WL NR NT NL ER ET 3% 2 2 2 2		WK WT							20/		2			2	2
NR NT NL									370					2	2
NT NL		VVL NR													
NL ER ET 3% 2 2 2											1				
ER ET 3% 2 2 2											1				
ET 3% 2 2										1	 	t			
										3%		2		2	2
		EL								1		1			

Traffic Signal Warrant Analysis

NY-98 @ Noonan Drive - Proposed Conditions City of Batavia, NY | Genesee County

				g Fluctuation	,	umes		Exiting Hourly					
			per 2018	per 2018	per 2018			Fluctuation of ITE	Total Hourly Volumes				
			NYSDOT	NYSDOT	NYSDOT		2022 Proposed Artery	LUC 945 - Gas	Exiting Noonan Drive	Warrant I -	Warrant I -	Warrant 2 -	Warrant 3 -
			count on NY-	count on NY-	count on NY-	Hourly	Volume on	Station w/	under	Condition A	Condition B	4 hour	Peak hour
			98	98	98	Fluctuation	NY-98	Convenience	Full Build Conditions	(70%)	(70%)	(70%)	(70%)
F	lou	ır	NB	SB	Two-Way	Two-Way	Total	Total		500/150	750/75	80 vph	100 vph
7:00 AM	to	8:00 AM	566	485	1051	7.33%	1248	6.10%	51	N	N	N	N
8:00 AM	to	9:00 AM	455	480	935	6.52%	1472	6.10%	82	N	Y	Y	N
9:00 AM	to	10:00 AM	416	451	867	6.05%	1030	5.50%	46	N	N	N	N
10:00 AM	to	11:00 AM	418	449	867	6.05%	1030	5.40%	45	N	N	N	N
11:00 AM	to	12:00 PM	484	495	979	6.83%	1163	5.30%	44	N	N	N	N
12:00 PM	to	1:00 PM	499	514	1013	7.07%	1203	5.90%	49	N	N	N	N
1:00 PM	to	2:00 PM	513	512	1025	7.15%	1217	5.60%	47	N	N	N	N
2:00 PM	to	3:00 PM	515	529	1044	7.28%	1240	6.10%	51	N	N	N	N
3:00 PM	to	4:00 PM	619	580	1199	8.36%	1424	6.60%	55	N	N	N	N
4:00 PM	to	5:00 PM	608	629	1237	8.63%	1469	6.80%	57	N	N	N	N
5:00 PM	to	6:00 PM	536	581	1117	7.79%	1326	6.80%	57	N	N	N	N
6:00 PM	to	7:00 PM	427	440	867	6.05%	1030	6.10%	51	N	N	N	N
7:00 PM	to	8:00 PM	306	304	610	4.26%	724	4.90%	41	N	N	N	N
8:00 PM	to	9:00 PM	225	206	431	3.01%	512	4.00%	34	N	N	N	N
9:00 PM	to	10:00 PM	172	186	358	2.50%	425	3.30%	28	N	N	N	N
10:00 PM	to	11:00 PM	128	137	265	1.85%	315	2.60%	22	N	N	N	N
		·			14,336	·	17,025	0.87	838	9	9	12	I

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

	nes for moving ch approach	Vehicle (tot	s per hou al of both	r on majo approach	r street nes)			on higher- h (one dire	
Major Street	Minor Street	100%a	80% ^b	70%	56%4	100%*	80%	70%	56%4
1	1	500	400	350	280	150	120	105	84
2 or more	1 -	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
8	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

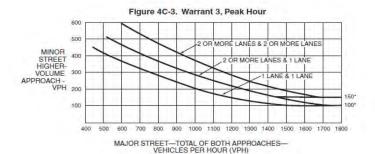
Number of lar traffic on ea	nes for moving ch approach	Vehicle (tot	s per hou al of both	r on majo approach	r street les)			on higher- h (one dire	
Major Street	Minor Street	100%a	80% ^b	70%°	56% ^d	100%*	80%	70%°	56% ^d
7	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	66
1	2 or more	750	600	525	420	100	80	70	56

- Basic minimum hourly volume

 1 Used for combination of Conditions A and B after adequate trial of other remedial measures

 1 May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less
 than 10,000

 1 May be used for combination of Conditions A and B after adequate trial of other remedial measures when the
 major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

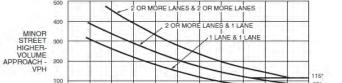


Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

MAJOR STREET—TOTAL OF BOTH APPROACHES— VEHICLES PER HOUR (VPH) "Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

600 700 800 900

1000 1100 1200

1300 1400

300 400 500



Existing Quicklee's 873 Holt Road Webster, NY Data collected Thursday October 1, 2020

AM Peak

	Right Turn In	<u>Left Turn In</u>	Right Turn Out	Left Turn Out	Total Enter	Total Exit	
7:00-7:15	19	19	25	5			
7:15-7:30	9	22	27	7			
7-30-7:45	12	24	28	5			
7:45-8:00	15	25	23	11	145	131	276
8:00-8:15	16	18	31	5	141	137	278
8:15-8:30	12	29	28	7	151	138	289
8:30-8:45	14	29	25	11	158	141	299
8:45-9:00	3	25	28	8	146	143	289

PM Peak

	Right Turn In	<u>Left Turn In</u>	Right Turn Out	Left Turn Out	Total Enter	Total Exit	
4:00-4:15	11	20	24	6			
4:15-4:30	6	17	15	11			
4:30-4:45	11	18	24	5			
4:45-5:00	5	17	18	7	105	110	215
5:00-5:15	6	19	24	3	99	107	206
5:15-5:30	3	20	15	4	99	100	199
5:30-5:45	4	17	22	2	91	95	186
5:45-6:00	6	13	17	6	88	93	181

A3

Level of Service: Criteria and Definitions

Level of Service Criteria

Highway Capacity Manual 2016

SIGNALIZED INTERSECTIONS

Level of Service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Level of Service for signalized intersections is defined in terms of delay specifically, average total delay per vehicle for a 15 minute analysis period. The ranges are as follows:

Level	Control Delay
of	per vehicle
Service	(seconds)
Α	< 10
В	10 – 20
С	20 – 35
D	35 – 55
Е	55 – 80
F	>80

UNSIGNALIZED INTERSECTIONS

Level of Service for unsignalized intersections is also defined in terms of delay. However, the delay criteria are different from a signalized intersection. The primary reason for this is driver expectation that a signalized intersection is designed to carry higher volumes than an unsignalized intersection. The total delay threshold for any given Level of Service is less for an unsignalized intersection than for a signalized intersection. The ranges are as follows:

Level	Control Delay
of	per vehicle
Service	(seconds)
Α	< 10
В	10 – 15
С	15 – 25
D	25 – 35
Е	35 - 50
F	>50

A4

Level of Service Calculations: Existing Conditions

Lanes, Volumes, Timings 2021 Existing Base Conditions - AM Peak Hour 1: Oak St & Park Rd/l-90 Entrance and Exit Ramps

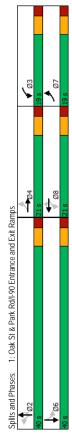
Part		١	t	•	•			-	-			۰	,
1	anoug	FBI	FBT	FBR	WBI	WBT	WBR	NBI	NBT	NBR	SBI	SBT	SBR
(c)	Configurations	je.	æ,		K	*	¥.	*	*	*	*	¢\$	
(vph) 78 85 72 272 99 66 1900 1900 1900 1900 1900 1900 1 1 0 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Volume (vph)	78	82	72	272	66	99	78	207	241	73	313	13
1900 1900	· Volume (vph)	78	82	72	272	66	99	78	207	241	73	313	130
140	-low (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
1 0 110 1.00 1.00 1.00 1.00 1.00 0.950 0.931 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.950 0.90 0.9	te Length (ft)	140		0	0		0	140		0	240		
(vph)	le Lanes	_		0	_		-	_		-	_		
(vph)	Length (ft)	22			22			22			22		
(c) (%) (%) (%) (%) (%) (%) (%) (%) (%) (%	Jtil. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
(c)			0.931				0.850			0.850		0.956	
(yph)	tected	0.950			0.950			0.950			0.950		
(vpi)	Flow (prot)	1770	1734	0	1770	1863	1583	1770	1863	1583	1770	1781	
(ic/%) (i	mitted	0.686			0.647			0.283			0.610		
(t)	Flow (perm)	12/8	1/34	0	1205	1863	1583	27/	1863	1583	1136	1/8/	:
(ii) 672	Turn on Red			Yes			Yes			Yes		0	Yes
(t) 673 830 830 830 830 830 830 830 830 830 83	Flow (RTOR)		48				109			268		33	
(iv) 672 672 673 674 674 674 674 674 674 674 674 674 674	peed (mph)		30			30			S 5			30	
Signature (%) 19.3 (19.4) (19.	Islance (III)		7/0			740			281			4/0	
Traffic (%) 1) Traffic (%) T	IIme (s)	000	15.3	0	000	12.7	0	000	13.2	0	8	10.7	d
10	Hour Factor	0.90	0.90	0.90	0.90	0.30	0.90	0.90	0.60	0.90	0.90	0.90	0.90
Instituc (%) Insti	ow (vph)	/8	94	8	302	01.1	/3	8	730	768	50	348	144
ses 7 4 9 902 110 73 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	d Lane Traffic (%)	5	,	c	COC	7	F	C	C	ò	5	COT	
ses 7 4 8 9 11 11 11 11 11 11 11 11 11 11 11 11 1	Group Flow (vpn)	/8	4/1	0	302	01	/3	/8	730	708	- 5	492	
sees 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ype tod Dhococ	m+md	YA		nu+hiid	Y C	= 	■	Y C	<u> </u>	<u></u>	Y.	
14(s) 50 50 50 50 50 50 50 5	ted Phases	_ <	4		n c	×	c	c	7	c	7	0	
(s) 50 5.0 5.0 5.0 5.0 5.0 (s) 10.5 16.0 10.5 16.0 16.0 2.10 19.0 21.0 19.0 21.0 2.10 19.0 21.0 21.0 2.38 23.8% 26.3% 23.8% 26.3% 50.3 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 5.5 5.5 5.5 4.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 6.6 5.5 5.5 6.7 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.8 6.7 6.7 7.5 7.5 7.5 7.5 7.5	ired Filases		7		~ ~	α	0 00	7 (2	7	9	9	
(s) 5.0 5.0 5.0 5.0 5.0 5.0 (s) 10.5 16.0 10.5 16.0 16.0 16.0 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Phase					,	•	1	•	•	•	•	
(\$) 105 16.0 10.5 16.0 16.0 2.10 17.0 19.0 21.0 17.0 17.0 17.0 17.0 17.0 17.0 17.0 1	um Initial (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	5.0	2.0	2.0	
190 21.0 19.0 21.0 21.0 21.0 4.0 21.0 21.0 4.0 21.0 21.0 4.0 21.8% 26.3%	um Split (s)	10.5	16.0		10.5	16.0	16.0	23.5	23.5	23.5	23.5	23.5	
en (s) 138	Split (s)	19.0	21.0		19.0	21.0	21.0	40.0	40.0	40.0	40.0	40.0	
en (s) 135 15.5 13.5 15.5 15.5 15.5 35 35 35 35 35 35 35 35 35 35 35 35 35	Split (%)		26.3%		23.8%	26.3%	26.3%	20.0%	20.0%	20.0%	20.0%	20.0%	
(s) 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	num Green (s)	13.5	15.5		13.5	15.5	15.5	34.5	34.5	34.5	34.5	34.5	
(s) 2.0 2.0 2.0 2.0 2.0 1	/ Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
Inter(s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	d Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
le (s) 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.	ime Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	
Lag Lead Lag Lead Le	ost Time (s)	2.5	2.5		2.5	2.5	2.5	2.5	2.5	5.5	2.5	2.5	
sion (s) 3.0 3.0 3.0 3.0 3.0 8.5 yes yes sion (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	-ag	Lag	Lead		Lag	Lead	Lead						
sion (s) 3.0 3.0 3.0 3.0 3.0 10.0 kg loops 1.5 cm 1.5	Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
None Mone None None None None None None None N	e Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Ratio 0.31 0.17 27.6 15.7 15.7 2 Ratio 0.31 0.17 0.37 0.27 0.27 0.27 0.27 0.27 0.27 0.27 0.2	Mode	None	None		None	None	None	None	None	None	None	None	
Ratio 0.31 0.17 0.34 0.27 0.27 0.27 0.27 0.27 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 0.25 0.15 <t< td=""><td>fct Green (s)</td><td>18.2</td><td>10.1</td><td></td><td>21.6</td><td>15.7</td><td>15.7</td><td>21.9</td><td>21.9</td><td>21.9</td><td>21.9</td><td>21.9</td><td></td></t<>	fct Green (s)	18.2	10.1		21.6	15.7	15.7	21.9	21.9	21.9	21.9	21.9	
0.16 0.32 0.57 0.22 0.13 0.00 0.00 0.00 0.00 0.00 0.00 0.00	led g/C Kallo	0.31	7 0		0.37	0.27	0.27	0.37	0.3/	0.37	0.3/	0.37	
134 24.8 21.0 26.0 3.5 4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 134 24.8 21.0 26.0 3.5 5 B C C A	0110	0.10	70.0		0.57	0.22		0.44	0.33	0.35	0.19	0.72	
13.4 24.8 21.0 26.0 3.5 5 B C C C A	or Delay	13.4	24.8		71.0	76.0	3.5	73.7	7.51	3.5	0.4	6.12	
Delay 13.4 24.8 21.0 26.0 3.5 A	e Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	Jelay	13.4	24.8		0.12	76.0	3.5	73.7	15.2	3.5	0.4	6.12	
300	Solor dos	20	ر ح		ر	ر ا	∢	ر	, t	∢	α	ی و	
Approach Delay 21.0 19.5	ach Delay		0.12			19.5			=			20.3	
ددد						α			α				ر

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 1

Lanes, Volumes, Timings 2021 Existing Base Conditions - AM Peak Hour 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps 04/26/2021

	1	†	<u> </u>	\	ţ	4	•	←	•	۶	→	•
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	17	36		89	35	0	21	54	0	18	129	
Queue Length 95th (ft)	25	115		163	96	18	70	121	41	52	273	
Internal Link Dist (ft)		265			612			201			330	
Turn Bay Length (ft)	140						140			240		
Base Capacity (vph)	623	519		683	571	290	327	1159	1086	707	1121	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.14	0.34		0.44	0.19	0.13	0.27	0.20	0.25	0.11	0.44	
Intersection Summary												
	Other											
Cycle Length: 80												
Actuated Cycle Length: 58.9												
Natural Cycle: 60												
Control Type: Actuated-Uncoordinated	ordinated											
Maximum v/c Ratio: 0.72												
Intersection Signal Delay: 17.5	.5			Ē	Intersection LOS: B	LOS: B						
Intersection Capacity Utilization 71.0%	ion 71.0%			⊇	U Level o	ICU Level of Service C	S					
Analysis Period (min) 15												



Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2: Oak St & Noonan Dr

2021 Existing Base Conditions - AM Peak Hour

→	SBT	+	637	637	1900				1.00			1863		1863	30	581	13.2	96:0	664		664	Free				Service A
۶	SBL	<u>_</u>	32		1900	140	_	25	1.00		0.950	1770	0.950	1770				96:0	36		36					ICU Level of Service A
₹	NBT NBR	4	562 25		1900 1900	0	0		1.00 1.00	0.994		1852 0		1852 0	30	318	7.2	96.0 96.0	585 26		611 0	Free				
4	WBR		18	18	1900 1	0	0		1.00	0		0		0				96.0	19		0					
>	WBL	*	7	7	1900	0	_	22	1.00	0.901	0.987	1657	0.987	1657	8	728	16.5	0.96	7		78	Stop		Other		ation 43.5%
	Lane Group	Lane Configurations	Traffic Volume (vph)	Future Volume (vph)	Ideal Flow (vphpl)	Storage Length (ft)	Storage Lanes	Taper Length (ft)	Lane Util. Factor	뜐	Fit Protected	Satd. Flow (prot)	Fit Permitted	Satd. Flow (perm)	Link Speed (mph)	Link Distance (ft)	Travel Time (s)	Peak Hour Factor	Adj. Flow (vph)	Shared Lane Traffic (%)	Lane Group Flow (vph)	Sign Control	Intersection Summary	Area Type:	Control Type: Unsignalized	Intersection Capacity Utilization 43.5% Analysis Period (min) 15

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 3

HCM 6th TWSC 2: Oak St & Noonan Dr

2021 Existing Base Conditions - AM Peak Hour 04/26/2021

Int Delay, s/veh	9.0						
	į,	00/41	F		5	5	
	WBL	WBK	NBI	NBK	SBL	SBI	
Lane Configurations	>		æ		<u>, </u>	*	
Traffic Vol, veh/h	7	18	295	22	35	637	
Future Vol, veh/h	7	9	562	22	32	637	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized			•	None	•	None	
Storage Length	0	٠	•	•	140	ľ	
Veh in Median Storage, a	0 #		0	1	1	0	
Grade, %	0	٠	0			0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehicles, %	7		7	7	7	2	
Mvmt Flow	7		282	26	36	664	
Major/Minor Mi	Minor1	2	Major1	2	Major2		
Conflicting Flow All	1334	298	0	0	611	0	
Stage 1	268	٠	•	•	•		
Stage 2	736	,	٠	٠		'	
Critical Hdwy	6.42	6.22	1	1	4.12		
Critical Hdwy Stg 1	5.42	٠	٠	٠	•		
Critical Hdwy Stg 2	5.42	1	•	•	1	1	
	3.518	3	٠	٠	2.218		
Pot Cap-1 Maneuver	170	205	•	•	896		
Stage 1	549	•	•	•	•	'	
Stage 2	474	1	1	1	1	1	
Platoon blocked, %			٠	٠			
Mov Cap-1 Maneuver	164	205	•	•	896	1	
Mov Cap-2 Maneuver	164	•	•	•	•		
Stage 1	549	1	1	1	1	1	
Stage 2	456	٠	٠	٠	•	'	
Approach	WB		NB		SB		
HCM Control Delay, s	17.3		0		0.5		
	ပ						
Minor Lane/Major Mvmt		NBT	NBRWBLn1	/BLn1	SBL	SBT	
Capacity (veh/h)		1	1		896	1	
HCM Lane V/C Ratio				- 0.082	0.038		
HCM Control Delay (s)		٠	٠	17.3	8.9		
HCM Lane LOS		٠	٠	ပ	A		

Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2021 Existing Base Conditions - PM Peak Hour 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps 04/26/2021

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2102	Ē	TOT	ממו	IOW	TOW	COM	ā	FON	CON	5	Tab	000
-ane Group	EBL	EBI	EBK	WBL	WBI	WBK	NBL	NBI	NBK	SBL	SBI	SBK
Lane Configurations	-	æ,		-	•	ĸ_	-	+	ĸ_	-	Ť,	
raffic Volume (vph)	235	132	130	708	136	<u>~</u>	8	223	249	24	247	193
uture Volume (vph)	235	135	170	708	136	8	92	223	249	24	247	193
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	0		0	275		0	240		0
Storage Lanes	_		0	-		-	-		_	_		0
Faper Length (ft)	22			22			75			22		
ane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ŧ		0.916				0.850			0.850		0.934	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1706	0	1770	1863	1583	1770	1863	1583	1770	1740	0
-It Permitted	0.665			0.351			0.320			0.589		
Satd. Flow (perm)	1239	1706	0	654	1863	1583	269	1863	1583	1097	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				4			265		22	
-ink Speed (mph)		30			30			30			30	
ink Distance (ft)		672			692			281			470	
ravel Time (s)		15.3			15.7			13.2			10.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	250	144	181	221	145	98	191	237	265	22	263	205
Shared Lane Traffic (%)												
-ane Group Flow (vph)	250	325	0	221	145	98	191	237	265	22	468	0
Furn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm	Perm	A	
Protected Phases	7	4		3	∞			2			9	
Permitted Phases	4			∞		∞	2		2	9		
Detector Phase	7	4		co	∞	∞	2	2	2	9	9	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Minimum Split (s)	10.5	16.0		10.5	16.0	16.0	23.5	23.5	23.5	23.5	23.5	
Fotal Split (s)	19.0	26.0		18.0	25.0	25.0	46.0	46.0	46.0	46.0	46.0	
Fotal Split (%)	21.1%	28.9%		20.0%	27.8%	27.8%	51.1%	51.1%	51.1%	51.1%	51.1%	
Maximum Green (s)	13.5	20.5		12.5	19.5	19.5	40.5	40.5	40.5	40.5	40.5	
rellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
ost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Fotal Lost Time (s)	2.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
-ead/Lag	Lag	Lead		Lag	Lead	Lead						
ead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
/ehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	None	None	None	None	
Act Effct Green (s)	30.5	16.1		21.5	11.4	11.4	27.1	27.1	27.1	27.1	27.1	
Actuated g/C Ratio	0.43	0.23		0.30	0.16	0.16	0.38	0.38	0.38	0.38	0.38	
//c Ratio	0.39	0.75		0.62	0.49	0.26	0.84	0.33	0.35	0.14	0.67	
Control Delay	18.2	34.6		31.3	37.0	8.2	52.9	17.0	3.5	15.5	21.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Fotal Delay	18.2	34.6		31.3	37.0	8.2	52.9	17.0	3.5	15.5	21.1	
S0-	ω	O		ပ	۵ ا	⋖	٥	Ω ;	⋖	ω	ں ا	
Approach Delay		27.4			28.7			21.7			20.5	

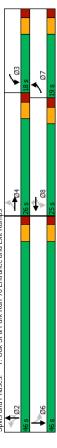
Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 1

Lanes, Volumes, Timings 2021 Existing Base Conditions - PM Peak Hour 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps 94/26/2021

Lame Group EBI EBI EBI WBI WBI WBI NBI NBI NBI SBI A10 PA A20 A11 A1 A1 A20 A20	EBI EBIT EBR WBI WBR NBI NBI NBI NBI NBI SBI SBI <th></th> <th>4</th> <th>†</th> <th><u> </u></th> <th>\</th> <th>Ļ</th> <th>4</th> <th>•</th> <th>←</th> <th>•</th> <th>•</th> <th>→</th> <th>•</th>		4	†	<u> </u>	\	Ļ	4	•	←	•	•	→	•
69 110 60 62 0 77 74 0 16 149 #259 132 130 33 #201 134 41 41 140 689 576 440 551 537 366 1146 1076 675 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	69 110 60 62 0 77 74 0 16 149 #259 132 130 33 #201 134 41 41 140 592 612 501 501 240 140 689 576 440 551 537 366 1146 1076 675 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
149 #259 132 130 33 #201 134 41 41 41 41 592 612 591 134 41 41 41 41 410 592 612 501 275 501 240 689 576 440 551 537 366 1146 1076 675 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	149 #259 132 130 33 #201 134 41 41 41 41	Queue Length 50th (ft)	69	110		09	62	0	77	74	0	16	150	
140 689 576 689 670 689 670 680 670 670 670 670 670 670 670 670 670 67	140 592 612 501 240 618 619 619 619 619 619 619 619 619 619 619	Queue Length 95th (ft)	149	#259		132	130	33	#201	134	41	41	264	
140 689 576 440 551 537 366 1146 1076 675 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	140 689 576 440 551 537 366 1146 1076 675 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Internal Link Dist (ft)		265			612			201			330	
689 576 440 551 537 366 1146 1076 675 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	689 576 440 551 537 366 1146 1076 675 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Turn Bay Length (ft)	140						275			240		
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Base Capacity (vph)	689	216		440	551	537	366	1146	1076	675	1092	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
0.36 0.56 0.50 0.26 0.16 0.52 0.21 0.25 0.08 Other Incoordinated 24.3 Intersection LOS: C acceeds capacity, queue may be longer. In mailler two evcles.	0.36 0.56 0.50 0.10 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
0.36 0.56 0.50 0.26 0.16 0.52 0.21 0.25 0.08 Other ncoordinated 24.3 Intersection LOS: C Exceeds capacity, queue may be longer. num after two cycles.	0.36 0.56 0.50 0.26 0.16 0.52 0.21 0.25 0.08 Other ncoordinated	Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Other ncoordinated 24.3 zation 82.1% exceeds capacity, queue may be long on mar after two cycles.	Other recordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	Reduced v/c Ratio	0.36	0.56		0.50	0.26	0.16	0.52	0.21	0.25	0.08	0.43	
Other 1 ncoordinated 24.3 zation 82.1% exceeds capacity, queue may be long on martler two cycles.	Other ncoordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	Intersection Summary												
1 24.3 zatron 82.1% e exceeds capacity, queue may be long num aflet two cycles.	ncoordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	Area Type:	Other											
1 ncoordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	1 recordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	Cycle Length: 90												
ncoordinated 24.3 zation 82.1% exceeds capacity, queue may be long num after two cycles.	ncoordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	Actuated Cycle Length: 71												
ncoordinated 24.3 zation 82.1% exceeds capacity, queue may be long num after two cycles.	ncoordinated 24.3 zation 82.1% e exceeds capacity, queue may be long num after two cycles.	Natural Cycle: 50												
24.3 zation 82.1% e exceeds capacity, queue may be long num affer two cycles.	24.3 zalion 82.1% e exceeds capacity, queue may be long num after two cycles.	Control Type: Actuated-Unc	coordinated											
24.3 zation 82.1% e exceeds capacity, queue may be long num affer two cycles.	24.3 zation 82.1% e exceeds capacify, queue may be long num after two cycles.	Maximum v/c Ratio: 0.84												
zation 82.1% e exceeds capacity, queue may be long num after two cycles.	zation 82.1% e exceeds capacily, queue may be long num after two cycles.	Intersection Signal Delay: 2	4.3			☱	ersection	LOS: C						
Analysis Period (min) 15 # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	Analysis Period (min) 15 # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	Intersection Capacity Utiliza	ation 82.1%			2	U Level o	f Service	ш					
# 95th percentile volume exceeds capacity, queue may be longer. Oueue shown is maximum after two cycles.	# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	Analysis Period (min) 15												
Queue shown is maximum after two cycles.	Queue shown is maximum after two cycles.	# 95th percentile volume	exceeds car	pacity, qui	eue may	be longer								
		Queue shown is maximu	um after two	cycles.										

Splits and Phases: 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps



Proposed Ouicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2: Oak St & Noonan Dr

2021 Existing Base Conditions - PM Peak Hour

	\	1	←	•	٠	→	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	×		¢		r	+	
Traffic Volume (vph)	2	12	266	4	7	647	
Future Volume (vph)	2	12	266	4	7	647	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		0	140		
Storage Lanes	-	0		0	-		
Taper Length (ft)	52				7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.883		0.999				
Fit Protected	0.993				0.950		
Satd. Flow (prot)	1633	0	1861	0	1770	1863	
Fit Permitted	0.993				0.950		
Satd. Flow (perm)	1633	0	1861	0	1770	1863	
Link Speed (mph)	8		8			30	
Link Distance (ft)	728		318			581	
Travel Time (s)	16.5		7.2			13.2	
Peak Hour Factor	96:0	96.0	96:0	96.0	96:0	96.0	
Adj. Flow (vph)	2	13	624	4	7	674	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	15	0	979	0	7	674	
Sign Control	Stop		Free			Free	
Intersection Summary							
Area Type: Oth	Other						
Control Type: Unsignalized							
Intersection Capacity Utilization 44.1%	n 44.1%			⊇	J Level of	ICU Level of Service A	
Analysis Period (min) 15							

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 3

HCM 6th TWSC 2: Oak St & Noonan Dr

2021 Existing Base Conditions - PM Peak Hour

Int Delay chah	0.0						
III Delay, sveii	7.						
Movement	WBL	WBR	NBT NBR		SBL	SBT	
Lane Configurations	>		4		F	*	
raffic Vol, veh/h	7	12	266	4	7	647	
Future Vol, veh/h	7	15	266	4	7	647	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized		None	1	None		None	
Storage Length	0	•	•	•	140		
Veh in Median Storage,	0 #	•	0			0	
Grade, %	0	٠	0	٠	٠	0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehides, %	2	2	2	2	2	2	
Wrmt Flow	2	13	624	4	7	674	
				•	-		
	Minori	_	MajorT	2	Major2		
Conflicting Flow All	1314	979	0	0	628	0	
Stage 1	626	1			1	í	
Stage 2	889	•		٠	•		
Critical Hdwy	6.42	6.22			4.12	,	
Critical Hdwy Stg 1	5.42	•		•	٠		
Critical Hdwy Stg 2	5.45	1		•	•		
		$^{\circ}$	•	٠	2.218		
Pot Cap-1 Maneuver	174	484		•	954		
Stage 1	533	1	•	•	1		
Stage 2	499	•	•	•	•		
Platoon blocked, %			•	٠			
Mov Cap-1 Maneuver	173	484		•	954		
Mov Cap-2 Maneuver	173	٠	٠	٠	٠		
Stage 1	533	•	1	•	•	í	
Stage 2	496	*	*	٠	٠		
Approach	WB		NB		SB		
HCM Control Delay, s	14.7		0		0.1		
HCM LOS	Ф						
Minor Lane/Major Mvmt		NBT	NBRV	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		•			954		
HCM Lane V/C Ratio				- 0.038	0.008		
HCM Control Delay (s)				14.7	8.8		
HCM Lane LOS		•	•	В	⋖		

Proposed Quicklee's Development SRF Associates, D.P.C.

A5

Level of Service Calculations: Background Conditions

2022 Background Conditions - AM Peak Hour Ips 202 Lanes, Volumes, Timings 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps

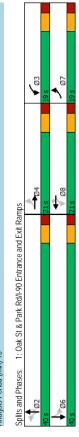
	١	t	•	•		,	-				•	,
	į		.					. !	- !	į	. !	
ane Group	EBL	EBI	EBR	WBL	WBI	WBR	NBL	NBT	NBR	SBL	SBI	SBR
Lane Configurations	<u>_</u>	2		F	+	*	F	←	*	<u>, </u>	æ	
raffic Volume (vph)	109	98	73	277	101	85	79	301	245	79	347	144
Future Volume (vph)	109	98	73	277	101	85	79	301	245	79	347	144
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	0		0	140		0	240		0
Storage Lanes	_		0	-		_	_		_	-		0
aper Length (ft)	22			25			25			22		
ane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ŧ		0.931				0.850			0.850		0.956	
-It Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1734	0	1770	1863	1583	1770	1863	1583	1770	1781	0
-It Permitted	0.685			0.635			0.247			0.484		
Satd. Flow (perm)	1276	1734	0	1183	1863	1583	460	1863	1583	905	1781	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47				109			272		33	
ink Speed (mph)		30			30			30			30	
Link Distance (ft)		672			692			281			470	
ravel Time (s)		15.3			15.7			13.2			10.7	
Peak Hour Factor	06:0	06:0	0.90	0.00	0.90	0.90	06:0	0.90	06:0	0.90	06.0	0.90
Adj. Flow (vph)	121	96	83	308	112	91	88	334	272	88	386	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	177	0	308	112	91	88	334	272	88	546	0
urn Type	pm+pt	A		pm+pt	Α	Perm	Perm	N	Perm	Perm	A	
Protected Phases	7	4		က	00			2			9	
Permitted Phases	4			∞		∞	2		2	9		
Detector Phase	7	4		က	∞	∞	2	2	2	9	9	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Minimum Split (s)	10.5	16.0		10.5	16.0	16.0	23.5	23.5	23.5	23.5	23.5	
otal Split (s)	19.0	21.0		19.0	21.0	21.0	40.0	40.0	40.0	40.0	40.0	
otal Split (%)	23.8%	26.3%		23.8%	26.3%	26.3%	20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	13.5	15.5		13.5	15.5	15.5	34.5	34.5	34.5	34.5	34.5	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	
otal Lost Time (s)	2.5	5.5		2.2	5.5	2.5	5.5	2.5	2.5	2.5	2.5	
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	None	None	None	None	
Act Effct Green (s)	19.5	10.3		21.0	12.8	12.8	24.1	24.1	24.1	24.1	24.1	
Actuated g/C Ratio	0.32	0.17		0.34	0.21	0.21	0.39	0.39	0.39	0.39	0.39	
v/c Ratio	0.25	0.54		0.62	0.29	0.22	0.49	0.46	0.35	0.25	0.76	
Control Delay	14.7	26.5		23.6	29.5	6.4	26.4	16.9	3.4	15.9	23.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	14.7	26.5		23.6	29.2	6.4	26.4	16.9	3.4	15.9	23.9	
TOS	В	ပ		ပ	ပ	٧	ပ	В	A	В	ပ	
Approach Delay		21.7			21.8			12.8			22.8	
(i i i i i i i i i i i i i i i i i i i												

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 1

2022 Background Conditions - AM Peak Hour NPs Lanes, Volumes, Timings 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps

	1	†	<u> </u>	>	ţ	4	•	←	•	۶	→	•
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	27	45		79	39	0	24	88	0	21	159	
Queue Length 95th (ft)	89	117		167	46	53	9/	178	41	26	317	
Internal Link Dist (ft)		265			612			201			330	
Turn Bay Length (ft)	140						140			240		
Base Capacity (vph)	109	464		621	206	206	271	1099	1045	532	1064	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.20	0.36		0.50	0.22	0.18	0.32	0.30	0.26	0.17	0.51	
Intersection Summary												
Area Type:	Other											
Cycle Length: 80												
Actuated Cycle Length: 61.8	œ.											
Natural Cycle: 60												
Control Type: Actuated-Uncoordinated	ncoordinated											
Maximum v/c Ratio: 0.76												
Intersection Signal Delay: 19.2	19.2			Ī	Intersection LOS: B	LOS: B						
Intersection Capacity Utilization 74.1%	zation 74.1%			⊇	U Level o	ICU Level of Service D	D					
Analysis Period (min) 15												



Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2: Oak St & Noonan Dr

2022 Background Conditions - AM Peak Hour

→	SBT	*	675	675	1900				1.00			1863		1863	30	581	13.2	0.96	703		703	Free				Service A	
٠	SBL				_	140	_	22	1.00		0.950	1770	0.950	1770				96:0	39		39					ICU Level of Service A	
•	r NBR				0061	0	0		0 1.00	10		3 0		3 0	_	~		96.0 9	3 26		0	0)					
┿-	NBT NBT	4		099 7	1900	0	0		1.00	0.995		0 1853		0 1853	8	318			889		0 714	Free					
∢	WBR		22	22	1900	_	_		1.00			_						0.96	23		_					. 0	
-	WBL	>	7	7	1900	0	_	25	1.00	0.896	0.988	1649	0.988	1649	8	728	16.5	0.96	7		8	Stop		Other		on 46.39	
	Lane Group	Lane Configurations	Traffic Volume (vph)	Future Volume (vph)	Ideal Flow (vphpl)	Storage Length (ft)	Storage Lanes	Taper Length (ft)	Lane Util. Factor	Frt	Fit Protected	Satd. Flow (prot)	Flt Permitted	Satd. Flow (perm)	Link Speed (mph)	Link Distance (ft)	Travel Time (s)	Peak Hour Factor	Adj. Flow (vph)	Shared Lane Traffic (%)	Lane Group Flow (vph)	Sign Control	Intersection Summary		Control Type: Unsignalized	Intersection Capacity Utilization 46.3% Analysis Period (min) 15	

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 3

HCM 6th TWSC 2: Oak St & Noonan Dr

2022 Background Conditions - AM Peak Hour

Int Delay, s/veh	9.0						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
ane Configurations	>		2		-	*	
Fraffic Vol, veh/h	7	22	099	22	37	675	
Future Vol, veh/h	7	22	099	22	37	675	
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	•	•	٠	140	٠	
/eh in Median Storage,	0 #	•	0	٠	٠	0	
Grade, %	0		0	٠		0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehicles, %	2	2	2	2	2	2	
Wwmt Flow	7	23	889	79	39	703	
Major/Minor N	Minor1	_	Major1	2	Major2		
Conflicting Flow All	1482	701	0	0	714	0	
Stage 1	701	•	•	٠	٠	٠	
Stage 2	781		•	•	٠	٠	
Critical Hdwy	6.42	6.22	•	٠	4.12	٠	
Critical Hdwy Stg 1	5.42				•	1	
Critical Hdwy Stg 2	5.42		•	٠		٠	
	3.518	3.318		٠	2.218	٠	
Pot Cap-1 Maneuver	138	439	1	•	988	•	
Stage 1	492	•	1	•	•	٠	
Stage 2	451	1	1	•	1	•	
Platoon blocked, %			•	•		٠	
Mov Cap-1 Maneuver	132	439	•	•	988	•	
Mov Cap-2 Maneuver	132	•	•		•	•	
Stage 1	492		1	•		•	
Stage 2	431	•	•	٠	٠	٠	
Approach	WB		B		SB		
HCM Control Delay, s	19.3		0		0.5		
HCM LOS	ပ						
Viinor Lane/Major Mvmt		NBT	NBRV	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		1	1	281	988	1	
HCM Lane V/C Ratio				- 0.108	0.044	•	
HCM Control Delay (s)		•	•	19.3	9.5	•	
HCM Lane LOS		•		ပ	⋖	•	
V. V							

Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2022 Background Conditions - PM Peak Hour 1: Oak St & Park Rd/l-90 Entrance and Exit Ramps 04/26/2021

		ì					-	-			۰	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u></u>	æ		y -	*	*-	<u>, -</u>	*	¥C	je-	æ	
Traffic Volume (vph)	263	137	173	212	138	16	183	276	254	69	347	265
Future Volume (vph)	263	137	173	212	138	91	183	276	254	69	347	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	0		0	2/2		0	240		0
Storage Lanes	- i		0	- i		-	<u> </u>		-	- i		0
Taper Length (#)	22 23	6	5	25	6	5	75	5	6	5 22	6	5
Lane UIII. Factor	9.	00.1	3.	90:1	90:1	00.1	00.1	3.	00.1	3.	00.1	9
T-1	0	0.916		0		0.850	0		0.850	0	0.935	
FIT Protected	0.950	70,0	d	0.950	0,00	7	0.950	7	7	0.950	1	(
Satd. Flow (prot)	0//1	90/	0	0//1	863	1583	0//1	1863	1383	0//0	1/47	0
Cotd Flow(norm)	1146	1704	c	0.520	1042	1502	707	1042	1502	1000	1740	
Satu. Flow (perm)	140	00/	0 0	-	2002	202	471	1003	202	1002	74/1	0 0
Right Flam On Red		67	res			£ 5			Les OFC		C	res
Satd. Flow (RTUR)		03			ć	16		8	7/0		26	
Link Speed (mph)		30			30			8			30	
Link Distance (II)		7/9			769			28			4/0	
Travel Time (s)		15.3			15.7			13.2			10.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph) Shared Lane Traffic (%)	280	146	184	226	147	76	195	294	270	73	369	282
I ane Group Flow (vph)	280	330	C	226	147	76	195	294	070	73	651	0
Turn Type	pm+pt	A		pm+pt	Α	Perm	Perm	A	Perm	Perm	Ą	'
Protected Phases	7	4		က	00			2			9	
Permitted Phases	4			∞		∞	2		2	9		
Detector Phase	7	4		က	00	8	2	2	2	9	9	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Minimum Split (s)	10.5	16.0		10.5	16.0	16.0	23.5	23.5	23.5	23.5	23.5	
Total Split (s)	18.0	24.0		17.0	23.0	23.0	49.0	49.0	49.0	49.0	49.0	
Total Split (%)	20.0%	26.7%		18.9%	25.6%	25.6%	54.4%	54.4%	54.4%	54.4%	54.4%	
Maximum Green (s)	12.5	18.5		11.5	17.5	17.5	43.5	43.5	43.5	43.5	43.5	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.5	2.5		2.5	5.5	5.5	2.5	2.5	2.5	2.5	2.5	
Lead/Lag	rag :	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	None	None	None	None	
Act Effct Green (s)	32.2	16.9		23.1	12.2	12.2	43.6	43.6	43.6	43.6	43.6	
Actuated g/C Ratio	0.37	0.19		0.26	0.14	0.14	0.50	0.50	0.50	0.50	0.50	
v/c Ratio	0.53	0.87		0.74	0.57	0.32	0.92	0.32	0.29	0.15	0.73	
Control Delay	27.1	52.1		45.2	44.2	10.2	71.0	15.0	2.6	14.0	22.3	
Oueue Delay	0:0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	27.1	27.1		45.2	44.2	10.2	71.0	15.0	2.6	14.0	22.3	
507	ပ	Δ :		۵	۵ إ	m	ш	e i	⋖	m	ပ	
Approach Delay		40.6			37.7			250			21.4	

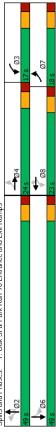
Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 1

Lanes, Volumes, Timings 2022 Background Conditions - PM Peak Hour 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps

	1	†	<i>></i>	\	Ļ	1	•	←	•	٠	→	•
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	112	147		87	6/	0	101	86	0	22	797	
Queue Length 95th (ft)	179	#289		#146	132	40	#242	155	39	48	404	
Internal Link Dist (ft)		265			612			201			330	
Turn Bay Length (ft)	140						275			240		
Base Capacity (vph)	230	409		316	371	392	211	923	920	496	892	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.53	0.81		0.72	0.40	0.25	0.92	0.32	0.29	0.15	0.73	
Intersection Summary												
Area Type: Ol	Other											
Cycle Length: 90												
Actuated Cycle Length: 87.9												
Natural Cycle: 60												
Control Type: Actuated-Uncoordinated	ordinated											
Maximum v/c Ratio: 0.92												
Intersection Signal Delay: 30.0	0			Ī	Intersection LOS: C	LOS: C						
Intersection Capacity Utilization 92.5%	n 92.5%			⊇	ICU Level of Service F	Service	L					
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.	ceeds cap	acity, que	eue may	be longer.								
Queue shown is maximum after two cycles.	after two	cycles.										

Splits and Phases: 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps



Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2: Oak St & Noonan Dr

2022 Background Conditions - PM Peak Hour

	>	4	←	•	٠	→	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	>		æ		, -	*	
Traffic Volume (vph)	2	13	929	4	10	746	
Future Volume (vph)	2	13	929	4	10	746	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		0	140		
Storage Lanes	-	0		0	_		
Taper Length (ft)	22				75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.882		0.999				
Fit Protected	0.994				0.950		
Satd. Flow (prot)	1633	0	1861	0	1770	1863	
Fit Permitted	0.994				0.950		
Satd. Flow (perm)	1633	0	1861	0	1770	1863	
Link Speed (mph)	8		8			30	
Link Distance (ft)	728		318			581	
Travel Time (s)	16.5		7.2			13.2	
Peak Hour Factor	96:0	96.0	96:0	96.0	96:0	96.0	
Adj. Flow (vph)	2	14	982	4	10	777	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	16	0	689	0	10	777	
Sign Control	Stop		Free			Free	
Intersection Summary							
Area Type: Ott	Other						
Control Type: Unsignalized							
Intersection Capacity Utilization 49.3%	n 49.3%			D D	J Level of	ICU Level of Service A	
Analysis Period (min) 15							

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 3

HCM 6th TWSC 2: Oak St & Noonan Dr

2022 Background Conditions - PM Peak Hour

Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	>		æ		-	*	
Traffic Vol, veh/h	5	13	929	4	10	746	
Future Vol, veh/h	7	13	658	4	10	746	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop		Free	Free	Free	Free	
RT Channelized			•	None	٠	None	
Storage Length	0		'	•	140		
Veh in Median Storage,	0 #		0	٠	٠	0	
Grade, %	0		0	٠	٠	0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehicles, %	7	7	7	7	7	7	
Mvmt Flow	2	14	685	4	10	111	
Major/Minor IV	Minor1	_	Major1	2	Major2		
w All	1484	189	0	0	689	0	
Stage 1	687	1	1	1	1	1	
Stage 2	797			٠	٠	•	
Critical Hdwy	6.42	6.22	1	1	4.12	•	
Critical Hdwy Stg 1	5.42	•		•	•	•	
Critical Hdwy Stg 2	5.45		1	1	1	1	
		3.318	•	٠	2.218		
Pot Cap-1 Maneuver	137	447	1	1	902	1	
Stage 1	499	•	•	٠	٠	٠	
Stage 2	444	1	1	1	1	1	
Platoon blocked, %			•	1		1	
Mov Cap-1 Maneuver	135	447	•	•	902	1	
Mov Cap-2 Maneuver	135	1	1	1	1	1	
Stage 1	499	1	•	•	•	•	
Stage 2	439	1	1	•	٠	٠	
Approach	WB		BB		SB		
HCM Control Delay, s	16		0		0.1		
HCM LOS	O						
Minor Lane/Major Mvmt		NBT	NBRWBLn1	/BLn1	SBL	SBT	
Capacity (veh/h)		'	'	342	902	1	
HCM Lane V/C Ratio		•	٠	- 0.046 0.012	0.012		
HCM Control Delay (s)		•	٠	16	6	٠	
HCM Lane LOS		1	٠	ပ	A		
THE PERSON NAMED OF THE PE							

Proposed Quicklee's Development SRF Associates, D.P.C.

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Level of Service Calculations: Full Development Conditions

Lanes, Volumes, Timings 2022 Full Build Conditions - AM Peak Hour 1: Oak St & Park Rd/l-90 Entrance and Exit Ramps 04/26/2021

Lane Group Lane Configurations Traffic Volume (vph) Future Volume (vph) deal Flow (vphp) Storage Length (ft) Storage Lanes	EBL		•	•			-	-	- 2	ā	• d	
ane Group ane Configurations Traffic Volume (vph) deal Flow (vphp) Storage Length (ft)	EBL	H							2	-	1	כככ
-ane Configurations Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl) Storage Length (ft)		EBI	EBR	WBL	WBT	WBR	NBL	NBT	NBK	SBL	SBT	SBK
Traffic Volume (vph) -uture Volume (vph) deal Flow (vphpl) Storage Length (ft)	F	\$		F	+	*_	F	+	*_	<u>r</u>	4	
Future Volume (vph) deal Flow (vphpl) Storage Length (ft) Storage Lanes	109	98	88	294	101	82	91	317	260	79	364	144
deal Flow (vphpl) Storage Length (ft) Storage Lanes	109	98	88	294	101	82	91	317	260	79	364	144
Storage Length (ft) Storage Lanes	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Lanes	140		0	0		0	0		0	240		0
	_		0	_		_	_		_	_		0
Taper Length (ft)	22			22			25			22		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.925				0.850			0.850		0.957	
-It Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1723	0	1770	1863	1583	1770	1863	1583	1770	1783	0
Fit Permitted	0.685			0.591			0.230			0.462		
Satd. Flow (perm)	1276	1723	0	1101	1863	1583	428	1863	1583	861	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26				109			289		31	
-ink Speed (mph)		30			30			8			30	
ink Distance (ft)		672			692			367			470	
Fravel Time (s)		15.3			15.7			8.3			10.7	
Peak Hour Factor	06:0	06:0	0.00	0.00	0.00	0.00	06:0	0.90	06.0	0.00	0.00	0.90
Adj. Flow (vph)	121	96	%	327	112	91	101	352	289	88	404	160
Shared Lane Traffic (%)												
ane Group Flow (vph)	121	192	0	327	112	91	101	352	289	88	264	0
urn Type	bm+pt	Ϋ́		pm+pt	A	Perm	Perm	Α	Perm	Perm	A	
Protected Phases	7	4		က	∞			2			9	
Permitted Phases	4 1			∞ (d	∞ (2	•	2	9 .		
Detector Phase	,	4		20	∞	x	7	7	7	9	9	
switch Phase	e e						1					
Minimum Initial (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Minimum Split (s)	10.5	16.0		10.5	16.0	16.0	23.5	23.5	23.5	23.5	23.5	
Fotal Split (s)	19.0	21.0		19.0	21.0	21.0	40.0	40.0	40.0	40.0	40.0	
Fotal Split (%)	23.8%	26.3%		23.8%	26.3%	26.3%	20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	13.5	15.5		13.5	15.5	15.5	34.5	34.5	34.5	34.5	34.5	
rellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
ost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
otal Lost Time (s)	2.5	5.5		5.5	5.5	5.5	5.5	2.5	5.5	2.5	2.5	
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
_ead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	0	0	0		0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
recall Mode	None	None		None	None	None	None	None	None	None	None	
Act effet Green (S)	20.5	0.0		7.17	6.71	6.71	72.7	7:07	72.7	7:07	72.7	
Actualed by Ivalio	0.02	0.57		0.04	0.20	0.20	0.40	0.40	0.40	0.40	0.40	
Control Delay	149	77.1		26.90	30.2	6.4	33.6	174	3.4	16.3	25.0	
Dilette Delay	00	00		00	0.0	0.0	0.0	00	00	00	0.0	
Total Delay	14.9	27.1		26.9	30.2	6.4	33.6	17.4	3.4	16.3	25.0	
0.5	æ	U		U	U	A	U	В	⋖	В	U	
Approach Delay		22.4			24.1			14.2			23.9	
Approach LOS		O			U			В			O	

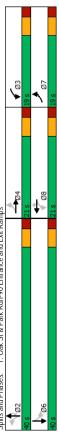
Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 1

Lanes, Volumes, Timings 2022 Full Build Conditions - AM Peak Hour 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps

Queue Length 50th (ft) 29 50 88 42 0 31 100 0 23 179 Dacet Length 55th (ft) 68 124 178 97 29 #104 189 42 59 333 Dacet Capacify (m) 140 591 484 590 491 497 246 1029 492 103 Asse Capacify (mph) 591 484 590 491 497 245 1064 492 103 Asse Capacify (mph) 591 484 590 491 497 245 1064 492 103 103 Asse Capacify (mph) 591 484 590 491 497 245 1064 90 0<	29 50 60 88 42 0 31 100 0 23 68 124 178 97 29 #104 189 42 59 140 592 612 287 240 140 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		√ BB	† EBI	► BR	WBL	₩	WBR	✓ NBL	→ NBT	NBR	≯ SBL	→	SBR
68 124 178 97 29 #104 189 42 59 140 592 612 287 289 140 591 484 590 491 497 245 1066 1029 492 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	68 124 178 97 29 #104 189 42 59 140 287 612 287 240 140 591 484 590 491 497 245 1066 1029 492 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	th (ft)	50	20		88	42	0	31	100	0	23	179	
140 1592 612 287 240 140 591 484 590 491 497 245 1066 1029 492 11 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	140 1592 612 287 240 140 1591 484 590 491 497 245 1066 1029 492 11 00 00 00 00 00 00 00 00 00 00 00 00	5th (ft)	89	124		178	46	59	#104	189	42	26	333	
140 1591 484 590 491 497 245 1066 1029 492 70 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	140 240 540 491 497 245 1066 1029 492 70 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	t (E)		265			612			287			330	
591 484 590 491 497 245 1066 1029 492 7 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	591 484 590 491 497 245 1066 1029 492 7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	urn Bay Length (ft)	140									240		
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sase Capacity (vph)	291	484		260	491	497	245	1066	1029	492	1034	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.20 0.40 0.55 0.23 0.18 0.41 0.33 0.28 0.18 Other a.3.7 coordinated Intersection LOS; C 205 ICU Level of Service D ICU Level Of Servi	Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
020 0.40 0.55 0.23 0.18 0.41 0.33 0.28 0.18 Other accordinated intersection LOS: C zation 77.4% ICU Level of Service D acceeds capacity, queue may be longer.	020 0.40 0.55 0.23 0.18 0.41 0.33 0.28 0.18 Other ncoordinated Intersection LOS: C azlion 77.4% ICU Level of Service D Exerceds capacity, queue may be longer.	Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Other 3.7 ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long	Other ncoordinated ncoordinated 20.5 exceeds capacity, queue may be long num after two cycles.	Reduced v/c Ratio	0.20	0.40		0.55	0.23	0.18	0.41	0.33	0.28	0.18	0.55	
Other 3.7 ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long	Other ncoordinated ncoordinated 20.5 azation 77.4% exceeds capacity, queue may be long num after two cycles.	ummary												
3.7 ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long	3.7 ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long num after two cycles.	0	Other											
3.7 ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long	3.7 ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long num after two cycles.	80												
ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long	ncoordinated 205 zation 77.4% exceeds capacity, queue may be long num after two cycles.	e Length: 63.7												
ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long	ncoordinated 20.5 zation 77.4% e exceeds capacity, queue may be long num after two cycles.	Vatural Cycle: 60												
20.5 zation 77.4% e exceeds capacity, queue may be long	20.5 zalion 77.4% e exceeds capacily, queue may be long num after two cycles.	Actuated-Unc	pordinated											
20.5 zation 77.4% e exceeds capacity, queue may be long	20.5 zation 77.4% e exceeds capacity, queue may be long num after two cycles.	Ratio: 0.78												
zation 77.4% e exceeds capacity, queue may be long	ntersection Capacity Utilization 77.4% ICU Level of Service D Analysis Period (min) 15 # 95th percentile volume exceeds capacitly, queue may be longer. Queue shown is maximum after two cycles.	ignal Delay: 20	.5			₹	ersection	LOS: C						
d (min) 15 ntile volume exceeds capacity, queue may be longer.	d (min) 15 antile volume exceeds capacity, queue may be longer. wn is maximum after two cycles.	apacity Utilizat	ion 77.4%			2	U Level o	f Service	D					
ntile volume exceeds capacity, queue may be longer.	ntile volume exceeds capacity, queue may be longer. wn is maximum after two cycles.	d (min) 15												
	wn is maximum after two cycles.	intile volume e	xceeds cap	acity, que	eue may t	be longer								

Splits and Phases: 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps



Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2: Oak St & Noonan Dr

2022 Full Build Conditions - AM Peak Hour

-	SBT	*	633	633	1900				1.00			1863		1863	30	214	4.9	96:0	629		629	Free				
ၨ	SBL	*	126	126	1900	140	_	22	1.00		0.950	1770	0.950	1770				96:0	131		131					
•	NBR		06	06	1900	0	0		1.00			0		0				96.0	94		0					
•	NBT	æ	623	623	1900				1.00	0.983		1831		1831	8	318	7.2	96:0	649		743	Free				
4	WBR		22	22	1900	0	0		1.00			0		0				96.0	23		0					
>	WBL	>	92	92	1900	0	_	22	1.00	0.966	0.964	1735	0.964	1735	8	192	4.4	96:0	89		91	Stop		Other		
	Lane Group	Lane Configurations	Traffic Volume (vph)	Future Volume (vph)	Ideal Flow (vphpl)	Storage Length (ft)	Storage Lanes	Taper Length (ft)	Lane Util. Factor	Frt	Fit Protected	Satd. Flow (prot)	Flt Permitted	Satd. Flow (perm)	Link Speed (mph)	Link Distance (ft)	Travel Time (s)	Peak Hour Factor	Adj. Flow (vph)	Shared Lane Traffic (%)	Lane Group Flow (vph)	Sign Control	Intersection Summary	Area Type:	Control Type: Unsignalized	

Proposed Quicklee's Development SRF Associates, D.P.C.

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HCM 6th TWSC 2: Oak St & Noonan Dr

2022 Full Build Conditions - AM Peak Hour

Int Delay s/yeh	٧						
III Delay, sveri	0						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	>		æ		*	*	
raffic Vol, veh/h	65	22	623	8	126	633	
Future Vol, veh/h	92	22	623	8	126	633	
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	•	•	٠	140	٠	
Veh in Median Storage,	0 #	1	0	1	1	0	
Grade, %			0	'		0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehides, %	7	2	2	7	2	7	
Wvmt Flow	89	23	649	94	131	629	
Major/Minor N	Minor1	_	Major1	2	Major2		
Conflicting Flow All	1617	969	0	0	743	0	
Stage 1	969	•	•	•	٠	٠	
Stage 2	921			٠	•	٠	
Critical Hdwy	6.42	6.22	1	1	4.12	ì	
Critical Hdwy Stg 1	5.42			•	•	٠	
Critical Hdwy Stg 2	5.45	1	1	•	1	•	
-ollow-up Hdwy	3.518	$_{\rm co}$	•	٠	2.218	٠	
Pot Cap-1 Maneuver	114	442	•	•	864	•	
Stage 1	495	1	1	•	•	٠	
Stage 2	388			•	1	•	
Platoon blocked, %			•	•		٠	
Mov Cap-1 Maneuver	4	442	•	•	864	•	
Vov Cap-2 Maneuver	4	•	•		•	٠	
Stage 1	495	•	•	•		•	
Stage 2	329	1	1	1	1	1	
Approach	WB		NB		SB		
HCM Control Delay, s	93.2		0		1.6		
HCM LOS	ш						
Vinor Lane/Major Mvmt		NBT	NBRV	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		1	1		864	1	
HCM Lane V/C Ratio		•	•		0.152	٠	
HCM Control Delay (s)		•	•	93.2	6.6	1	
HCM Lane LOS		•	•	ш	⋖	٠	
7 7 0 11.70 THE 0 1 CO.							

Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 3: Noonan Dr & Proposed

2022 Full Build Conditions - AM Peak Hour

o. Noonan or a ripposed owy						0 = 5 = 5
	†	↓	4	٠	<i>*</i>	
EBL	EBT	WBT	WBR	SBL	SBR	
	÷	\$		>		
154	62	78	2	. —	28	
154	62	78	2	—	28	
1900	1900	1900	1900	1900	1900	
1.00	1.00	1.00	1.00	1.00	1.00	
		0.992		0.867		
	996.0			0.999		
0	1799	1848	0	1613	0	
	996.0			0.999		
0	1799	1848	0	1613	0	
	30	30		30		
	192	534		267		
	4.4	12.1		6.1		
0.92	0.92	0.92	0.92	0.92	0.92	
167	19	30	2	-	63	
0	234	32	0	64	0	
	Free	Free		Stop		
ntersection Capacity Utilization 28.8%			ਹ	J Level of	Service A	
		EBT 62 62 62 62 62 62 62 1900 1.00 1.00 1.966 1.799 3.00 1.92 8.4.4 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7	EBT 62 62 62 62 62 62 62 62 62 63 63 64 64 64 67 67 67 67 67 67 67 67 67 67 67 67 67	EBT WBT WBR 4	EBT WBT WBR 4	EBT WBT WBR SBL S 4

Intersection Summary
Area Type:
Control Type: Unsignalized
Intersection Capacity Utilizat
Analysis Period (min) 15

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Proposed Quicklee's Development SRF Associates, D.P.C.

HCM 6th TWSC 3: Noonan Dr & Proposed Dwy

2022 Full Build Conditions - AM Peak Hour 04/26/2021

Int Delay, s/veh	5.5						
Movement	FB	FRT	WRT	WBR	SB	SBR	
ane Configurations		4	41		>		
Traffic Vol. veh/h	154	62	78	2	_	22	
Future Vol, veh/h	154	62	78	7	-	82	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	1	None	. '	None	
Storage Length				,	0		
Veh in Median Storage, #	,	0	0	•	0	•	
Grade, %		0	0	•	0	1	
Peak Hour Factor	35	92	92	35	92	35	
Heavy Vehicles, %	7	7 !	2	2	7	7	
Wrmt Flow	16/	/9	30	7	_	83	
Major/Minor Ma	Major1	2	Major2	2	Minor2		
Conflicting Flow All	33	0	•	0	432	33	
Stage 1	٠	1	1	1	31	1	
Stage 2	٠	٠		,	401	٠	
Critical Hdwy	4.12	•	1	1	6.42	6.22	
Critical Hdwy Stg 1		٠	٠	٠	5.42	٠	
Critical Hdwy Stg 2		٠	٠	٠	5.42	٠	
	2.218	٠			3.518	3.318	
euver	1580	1	1	1	281	581 1043	
Stage 1		٠	•	1	992	٠	
Stage 2		1	1	•	9/9	1	
		•	•	٠			
	1580	1	1	•	217	1043	
Mov Cap-2 Maneuver		٠	•	٠	517	٠	
Stage 1	٠	•		٠	883	•	
Stage 2	٠	٠	1	1	9/9	1	
Approach	EB		WB		SB		
HCM Control Delay, s	5.4		0		8.7		
HCM LOS					⋖		
Winor Lane/Major Mvmt		EB	EBT	WBT	WBR SBLn1	BLn1	
Capacity (veh/h)		1580				1025	
HCM Lane V/C Ratio	0	0.106			1	0.063	
HCM Control Delay (s)		7.5	0			8.7	
HCM Lane LOS		Þ	A	٠		⋖	

Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 4: Oak St & Proposed Right Out Dwy

2022 Full Build Conditions - AM Peak Hour

	/	4	←	•	٠	→	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations		X	444			*	
Traffic Volume (vph)	0	80	289	0	0	743	
Future Volume (vph)	0	80	289	0	0	743	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		0	0		
Storage Lanes	0	_		0	0		
Taper Length (ft)	22				25		
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00	
Frt		0.865					
Flt Protected							
Satd. Flow (prot)	0	1611	5085	0	0	1863	
FIt Permitted							
Satd. Flow (perm)	0	1611	5085	0	0	1863	
Link Speed (mph)	8		8			30	
Link Distance (fl)	132		214			367	
Travel Time (s)	3.0		4.9			8.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	87	640	0	0	808	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	87	640	0	0	808	
Sign Control	Stop		Free			Free	
Intersection Summary							
	Other						
Control Type: Unsignalized							
Intersection Capacity Utilization 42.4% Analysis Period (min) 15	ion 42.4%			<u>ವ</u>	J Level of	ICU Level of Service A	

Proposed Quicklee's Development SRF Associates, D.P.C.

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2022 Full Build Conditions - AM Peak Hour HCM 6th TWSC 4: Oak St & Proposed Right Out Dwy

04/26/2021

Sic Sic Minor
Stop Stop Free Free Free
zed sign sign sign sign sign sign sign sign
9ge, # 0
99e,# 0
Minor1 Major1 Major2 Minor1 Major1 Major2 7 12 2 2 2 2 2 2 3 4 4 6 4 0 0 80 1 320 0
Minor1 Major1 Major2 Minor1 Major1 Major2 7.13
Minor1 Major1 Major2 320 0
Miror1 Major1 Major2 320 0
Minor1 Major1 Major2 320 0
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r 7.13
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rr 0 577
rr 0 577 · · · 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
er 577 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
er 577
er . 577
er . 577
. 5/7
WB NB SB 12.3 0 0
WB NB SB 12.3 0 0
WB NB SE 12.3 0 0
WB NB S 12.3 0
WB NB S 12.3 0
12.3 0

Proposed Quicklee's Development SRF Associates, D.P.C.

2022 Full Build Conditions - PM Peak Hour Lanes, Volumes, Timings 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps

	\	Ť	*	•		/	•	-	L	۶	→	*
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	-	2		-	*	*	-	+	*-	r	2	
Traffic Volume (vph)	263	137	182	223	138	16	192	284	266	69	329	265
Future Volume (vph)	263	137	182	223	138	91	192	284	266	69	326	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Lengtn (rt)	140		0 0	o ,		О,	o ,		о,	740		0 0
Storage Lanes	- i		0	- i		_	- i		-	- i		0
l aper Length (ft)	22 23	6	5	750	6	5	750	5	5	2, 2,	6	5
Lane Util. Factor	00.1	00.1	36.	1.00	00.1	00.1	1.00	30.	00.1	9.	00.1	3
- L	9	0.914		1		0.850			0.850		0.936	
Fit Protected	0.950		,	0.950			0.950	,		0.950		•
Satd. Flow (prot)	1770	1703	0	1770	1863	1583	1770	1863	1583	1770	1744	0
FIt Permitted	0.614			0.328			0.217			0.529		
Satd. Flow (perm)	1144	1703	0	611	1863	1583	404	1863	1583	982	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		49				6			283		22	
Link Speed (mph)		30			30			9			30	
Link Distance (fl)		672			692			364			470	
Travel Time (s)		15.3			15.7			8.3			10.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	280	146	194	237	147	76	204	302	283	73	382	282
Shared Lane Traffic (%)												
Lane Group Flow (vph)	280	340	0	237	147	16	204	302	283	73	664	0
Turn Type	td+md	N		pm+pt	A	Perm	Perm	A	Perm	Perm	Α	
Protected Phases	7	4		3	∞			2			9	
Permitted Phases	4			∞		∞	2		2	9		
Detector Phase	7	4		33	∞	∞	2	2	2	9	9	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Minimum Split (s)	10.5	16.0		10.5	16.0	16.0	23.5	23.5	23.5	23.5	23.5	
Total Split (s)	18.0	24.0		17.0	23.0	23.0	49.0	49.0	49.0	49.0	49.0	
Total Split (%)	20.0%	26.7%		18.9%	25.6%	25.6%	54.4%	54.4%	54.4%	54.4%	54.4%	
Maximum Green (s)	12.5	18.5		11.5	17.5	17.5	43.5	43.5	43.5	43.5	43.5	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	
Total Lost Time (s)	2.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None								
Act Effct Green (s)	32.8	17.2		23.3	12.2	12.2	43.6	43.6	43.6	43.6	43.6	
Actuated g/C Ratio	0.37	0.19		0.26	0.14	0.14	0.49	0.49	0.49	0.49	0.49	
v/c Ratio	0.52	0.88		0.78	0.57	0.32	1.03	0.33	0.31	0.15	0.75	
Control Delay	26.9	53.0		48.1	44.4	10.3	6.86	15.3	2.7	14.1	23.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	26.9	53.0		48.1	44.4	10.3	6.86	15.3	2.7	14.1	23.3	
TOS	ပ	۵		۵	۵	В	ш	В	⋖	В	ပ	
Approach Delay		41.2			303			32.4			223	
					>: >							

Proposed Quicklee's Development SRF Associates, D.P.C.

Synchro 11 Report Page 1

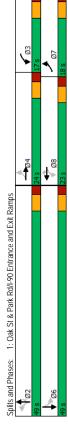
2022 Full Build Conditions - PM Peak Hour Lanes, Volumes, Timings 1: Oak St & Park Rd/I-90 Entrance and Exit Ramps

	^	†	<u> </u>	\	ļ	1	•	←	•	٠	→	•
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	112	152		92	79	0	-127	101	0	22	272	
Queue Length 95th (ft)	179	#300		#162	132	40	#263	160	40	48	419	
Internal Link Dist (ft)		592			612			784			390	
Turn Bay Length (ft)	140									240		
Base Capacity (vph)	537	410		314	369	391	199	918	923	485	888	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.52	0.83		0.75	0.40	0.25	1.03	0.33	0.31	0.15	0.75	
Intersection Summary												
Area Type: Ott	Other											
Cycle Length: 90												
Actuated Cycle Length: 88.4												
Natural Cycle: 65												
Control Type: Actuated-Uncoordinated	rdinated											
Maximum v/c Ratio: 1.03												
Intersection Signal Delay: 32.9				Ī	Intersection LOS: C	LOS: C						
Intersection Capacity Utilization 94.8%	n 94.8%			⊇	ICU Level of Service F	f Service	ш					
Analysis Period (min) 15												
 Volume exceeds capacity, queue is theoretically infinite. 	queue is	theoretica	ally infinit	ai								

Oueue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Oueue shown is maximum after two cycles.



Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 2: Oak St & Noonan Dr

2022 Full Build Conditions - PM Peak Hour

WBL	₩	→	✓ NBR	JBS ◆	→ SBT	
>		æ		r	*	
47	13	633	48	69	719	
47	13	633	48	69	719	
1900	1900	1900	1900	1900	1900	
0	0		0	140		
-	0		0	-		
22				25		
1.00	1.00	1.00	1.00	1.00	1.00	
0.970		0.660				
0.963				0.950		
1740	0	1844	0	1770	1863	
0.963				0.950		
1740	0	1844	0	1770	1863	
8		9			30	
192		318			217	
4.4		7.2			4.9	
	96.0	96:0	96.0	96:0	96.0	
46	14	629	20	72	749	
63	0	400	0	72	749	
Stop		Free			Free	
Other						
ntersection Capacity Utilization 53.4%			<u>D</u>	J Level of	ICU Level of Service A	

Proposed Quicklee's Development SRF Associates, D.P.C.

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HCM 6th TWSC 2: Oak St & Noonan Dr

2022 Full Build Conditions - PM Peak Hour

Int Delay, s/veh	2.5						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	>		æ		-	*	
Traffic Vol, veh/h	47	13	633	48	69	719	
Future Vol, veh/h	47	13	633	48	69	719	
Conflicting Peds, #/hr	0	0	0	0	0	0	
	Stop	Stop	Free	Free	Free	Free	
RT Channelized		None	•	None	٠	None	
Storage Length	0		'	,	140		
Veh in Median Storage,	0 #	•	0	٠	٠	0	
Grade, %	0	•	0	٠	•	0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehicles, %	7	2	2	2	7	2	
Wrmt Flow	49	14	629	20	72	749	
Major/Minor M	Minor1	_	Major1	2	Major2		
Conflicting Flow All	1577	684	0	0	402	0	
Stage 1	684	•	•	٠	٠		
Stage 2	893		٠	•	٠		
Critical Hdwy	6.42	6.22	1	1	4.12	ì	
Critical Hdwy Stg 1	5.42			•	•		
Critical Hdwy Stg 2	5.42	1	1	1	1	ì	
		3.318	•	•	2.218		
Pot Cap-1 Maneuver	121	449	•	•	830		
Stage 1	201	•	1	1	٠		
Stage 2	400	1	1	1	1		
Platoon blocked, %				•			
Mov Cap-1 Maneuver	=	449	•	•	830		
Vov Cap-2 Maneuver	=	٠	٠	٠	٠		
Stage 1	201	1	1	1	1	ì	
Stage 2	368	•	•	•	٠		
Approach	WB		NB		SB		
HCM Control Delay, s	54		0		8.0		
HCM LOS	ш						
Winor Lane/Major Mvmt		NBT	NBRWBLn1	/BLn1	SBL	SBT	
Capacity (veh/h)					890		
HCM Lane V/C Ratio		•	•		0.081		
HCM Control Delay (s)		•	•	24	9.4		
HCM Lane LOS			1	ш	⋖		
CONTRACTOR OF THE PROPERTY OF				,	•		

Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 3: Noonan Dr & Proposed Dwy

2022 Full Build Conditions - PM Peak Hour

Lane Group EBL EBT WBT WBR SBR Lane Configurations 4 1 1 4 1 Lane Configurations 102 14 15 1 1 45 Traffic Volume (vph) 102 14 15 1 1 45 Future Volume (vph) 102 190 1900 1900 1900 1900 Lane Utill. Factor 1.00 1.00 1.00 1.00 1.00 1.00 Lane Utill. Factor 0.992 0.988 0.988 0.988 0.988 0.988 Sald. Flow (port) 0 1785 1848 0 1615 0 FI Ponicted 0 1785 1848 0 1615 0 Link Speed (mph) 0 1785 1848 0 1615 0 Link Speed (mph) 192 534 267 267 17 14 17 Adj. Flow (wp) 0 0.96 0.96	EBL E urations 102		ı	ı		
102 14 15 1 102 14 15 1 1900 1900 1900 1900 1.00 1.00 1.00 1.00 0.958 0.92 0.958 1848 0 0.958 1848 0 192 534 121 12 0 192 534 121 12 0 192 534 121 12 0 192 534 121 12 0 193 6.958 1958 1958 1958 1958 1958 1958 1958 1	102				SBL	SBR
102 14 15 1 102 14 15 1 190 1900 1900 1900 1.00 1.00 1.00 1.00 0.958 0.92 0.958 1848 0 0.958 1848 0 0.958 1848 0 0.96 0.96 0.96 102 121 17 0 Free Free	102	÷	æ		>	
102 14 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		14	15	-	-	45
1900 1900 1900 1900 1900 1900 1.00 1.00	102	14	15	-	-	45
1.00 1.00 1.00 1.00 1.00 0.958 0.992 0.958 1848 0 0.958 1848 0 0.958 1848 0 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.	1900					1900
0,958 0,958 0,958 0,958 185 185 184 0,96 192 192 192 192 192 192 192 192	1.00		00.1		1.00	1.00
0.958 0.785 1848 0.785 1848 0.795 1848 0.30 30 30 30 30 30 44 12.1 106 15 16 17 0 Free Free	Frt	0	992	0	898	
0 1785 1848 0 0 0.588 0 0.588 0 1785 1848 0 0 1785 1848 0 0 1785 1848 0 0 1785 1848 0 0 1785 1848 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		958		0	666	
0.958 1848 0 1785 1848 0 1785 1848 0 1785 1848 0 1849 0 18	0		848		1615	0
0 1785 1848 0 30 30 30 30 30 30 30 30 30 30 30 30 3		928		0	666	
30 30 192 534 192 534 192 634 106 0,96 0,96 0,96 106 15 16 1 0 121 17 0 Free Free Other	0		848		1615	0
192 534 4.4 112.1 0.96 0.96 0.96 0.96 106 15 16 1 0 121 17 0 Free Free Other		30	30		30	
4.4 12.1 0.96 0.96 0.96 0.96 106 15 16 1 0 12.1 17 0 Free Free			534		267	
0.96 0.96 0.96 0.96 190 106 15 16 1 10 17 17 0 121 17 0 17 18 190 190 190 190 190 190 190 190 190 190			12.1		6.1	
106 15 16 1 0 121 17 0 Free Free Other ad Ization 23.1%	96:0				96:0	96:0
0 121 17 0 Free Free Other cd tzation 23.1%	106	15	16	-	-	47
0 121 17 0 Free Free Other cal Easton 23.1%	Shared Lane Traffic (%)					
Free Free Other Sd St	0	121	17	0	48	0
Other ed ization 23.1%			.ee		Stop	
Other ed ization 23.1%	Intersection Summary					
ed ization 23.1%						
ization 23.1%	Control Type: Unsignalized					
	Intersection Capacity Utilization 23.1%			IO3	Level of 3	Service A
Analysis Period (min) 15	Analysis Period (min) 15					

Proposed Quicklee's Development SRF Associates, D.P.C.

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HCM 6th TWSC 3: Noonan Dr & Proposed Dwy

2022 Full Build Conditions - PM Peak Hour

Int Delay, s/veh	6.5						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	~
Lane Configurations		÷	æ		>		
Traffic Vol, veh/h	102	14	15	_	_	45	- Qu
Future Vol, veh/h	102	14	15	-	—	45	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free		Free	Free	Stop	Stop	a
RT Channelized	1	None	1	None		None	ω.
Storage Length	٠	٠	٠	٠	0	ľ	
Veh in Median Storage, #	*	0	0	٠	0	,	
Grade, %	٠	0	0	٠	0		
Peak Hour Factor	%	96	96	%	96	%	9
Heavy Vehicles, %	2	2	2	2	7	2	2
Mvmt Flow	106	15	16	_	-	47	7
		•					
	Majori	_	Major2	2	Minor2		
Conflicting Flow All	17	0	•	0	244	17	_
Stage 1	•	•	•		17		
Stage 2	'	'	,	٠	227	ľ	
Critical Hdwy	4.12	,	,	•	6.42	6.22	2
Critical Hdwy Stg 1				٠	5.42	ľ	
Critical Hdwy Stg 2	•	•	•	•	5.45		
Follow-up Hdwy	2.218		٠	,		3.318	80
Pot Cap-1 Maneuver	1600	•	•		744	1062	2
Stage 1	٠	٠	٠	٠	1006	ľ	
Stage 2	1	1	1		811	-	
Platoon blocked, %		•	•	٠			
Mov Cap-1 Maneuver	1600	•	•	•	694	1062	5
Mov Cap-2 Maneuver	٠	٠	٠	٠	694	ľ	
Stage 1	1	1		•	939		
Stage 2	1	1	1	•	811	1	
	í				ć		
Approach	EB		WB		SB		
HCM Control Delay, s	6.5		0		9.0		
HCMLOS					⋖		
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR SBLn1	BLn1	
Capacity (veh/h)		1600	,		,	1050	0
HCM Lane V/C Ratio		990.0	•	٠	•	- 0.046	9
HCM Control Delay (s)		7.4	0	•		8.6	9
HCM Lane LOS		⋖	⋖	٠	١	A	4
A CONTRACTOR OF THE PARTY OF TH							

Proposed Quicklee's Development SRF Associates, D.P.C.

Lanes, Volumes, Timings 4: Oak St & Proposed Right Out Dwy

2022 Full Build Conditions - PM Peak Hour

	>	4	←	•	٠	→	
ane Group	WBL	WBR	NBT	NBR	SBL	SBT	
ane Configurations		¥C	444			*	
raffic Volume (vph)	0	62	989	0	0	764	
uture Volume (vph)	0	62	982	0	0	764	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		0	0		
Storage Lanes	0	_		0	0		
er Length (ft)	22				25		
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00	
		0.865					
It Protected							
Satd. Flow (prot)	0	1611	5085	0	0	1863	
It Permitted							
Satd. Flow (perm)	0	1611	5085	0	0	1863	
ink Speed (mph)	8		8			30	
ink Distance (ft)	132		217			364	
ravel Time (s)	3.0		4.9			8.3	
Peak Hour Factor	96:0	96.0	96:0	96.0	96:0	0.96	
4dj. Flow (vph)	0	99	714	0	0	962	
Shared Lane Traffic (%)							
.ane Group Flow (vph)	0	99	714	0	0	796	
Sign Control	Stop		Free			Free	
ntersection Summary							
∿rea Type:	Other						
Control Type: Unsignalized							
ntersection Capacity Utilization 43.5% Analysis Period (min) 15	ation 43.5%			ರ	J Level of	ICU Level of Service A	

Proposed Quicklee's Development SRF Associates, D.P.C.

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HCM 6th TWSC 4: Oak St & Proposed Right Out Dwy

2022 Full Build Conditions - PM Peak Hour

Int Delay, s/veh	0.5						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations		*-	**			+	
Traffic Vol, veh/h	0	62	982	0	0	764	
Future Vol, veh/h	0	62	982	0	0	764	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	1	None	1	None	•	None	
Storage Length	•	0	•	•	•	•	
Veh in Median Storage,	*	•	0	٠	٠	0	
Grade, %	0		0	٠	٠	0	
Peak Hour Factor	%	96	96	%	96	%	
Heavy Vehicles, %	7	7 ;	2	2	7	2	
WVmt Flow	0	69	/14	0	0	96/	
Major/Minor N	Minor1	_	Major1	2	Major2		
Conflicting Flow All	٠	357	0	٠	٠		
Stage 1	•	1	1	1	1	1	
Stage 2	,			,	٠		
Critical Hdwy	1	7.13	1	1	1	1	
Critical Hdwy Stg 1	•	•		٠	•	•	
Critical Hdwy Stg 2	1	1	1	•	1	1	
Follow-up Hdwy	•	3.919	•		٠	•	
Pot Cap-1 Maneuver	0	547	•	0	0	1	
Stage 1	0	•	1	0	0	•	
Stage 2	0	1	1	0	0	1	
Platoon blocked, %			•			•	
Mov Cap-1 Maneuver	•	247	•	•	•	1	
Mov Cap-2 Maneuver	•	•	•		٠	•	
Stage 1	•	1		٠	•	1	
Stage 2	•	•	•	٠	٠	1	
Approach	WB		NB		SB		
HCM Control Delay, s	12.5		0		0		
HCMLOS	В						
Minor Lane/Major Mvmt	_	NBTA	NBTWBLn1	SBT			
Capacity (veh/h)			547				
HCM Lane V/C Ratio			- 0.118	,			
HCM Control Delay (s)		1	12.5	•			
HCM Lane LOS		•	В	•			

Proposed Quicklee's Development SRF Associates, D.P.C.



GENESEE COUNTY PLANNING BOARD REFERRALS

STATE	NOTIC	CE OF FINAL ACTION
1802	GCDP Referral ID	C-11-BAT-6-21
30000000000000000000000000000000000000	Review Date	6/10/2021
Municipality	BATAVIA, C.	
Board Name	ZBA/CITY PLANNING AN	D DEVELOPMENT COMM.
Applicant's Name	Patricia Bittar - WM Schu	utt Assoc.
Referral Type	Special Use Permit	
Variance(s)	Area Variance(s)	
Description:		Variances to convert a previous restaurant to a drivence store with a four fuel-pump station island. Church Public Entrance
Location	204 Oak St. (NYS Rt. 98)	, Batavia
Zoning District	General Commercial (C-	2) District
PLANNING BOARD	DECISION	* 0.13 L
APPROVAL		

EXPLANATION:

The proposed development should pose no significant county-wide or inter-community impact.

June 10, 2021

Date

If the County Planning Board disapproved the proposal, or recommends modifications, the referring agency shall NOT act contrary to the recommendations except by a vote of a majority plus one of all the members and after the adoption of a resolution setting forth the reasons for such contrary action. Within 30 days after the final action the referring agency shall file a report of final action with the County Planning Board. An action taken form is provided for this purpose and may be obtained from the Genesee County Planning Department.





(no subject)

1 message

yashstitching stitching <yashstitching@gmail.com> To: "19jennhanlon69@gmail.com" <19jennhanlon69@gmail.com> Mon, Jun 14, 2021 at 10:19 PM

Respected sir,

This is the owner of the Days Inn and Super 8 in Batavia. We recieved a mail regarding a construction of a new property adjacent to our property at 204 Oak St, Batavia ,NY 14020. We want to address some issues regarding the structure coming next to our property.

- 1. Since a Gas Station is comimg near to our property the premium of our insuarance will increased. It should be compensated in the property tax.≠
- 2. There is an exit that passes through the properties' parking lot. We want the exit to be closed or baricaded so the passing vehicles dont use that exit.
- 3. We also want to be assured that any sort of nuisance will not be created when the gas station starts its operations.

Regards, Piyushkumar Patel