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Langan CT, Inc.

555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142

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**To:** Mr. Antonio Iadarola, P.E.

**From:** Christopher McLean, P.E.  
John D. Plante, P.E.

**Date:** 21 February 2022

**Re:** Consolidated School Site Bus Lot Traffic Memo  
Consolidated Early Learning Academy  
12 Gillotti Road, New Fairfield, Connecticut  
Langan Project No.: 140215351

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Langan has prepared this traffic memorandum to identify the potential traffic impacts for the operations at the proposed bus lot located at the Consolidated School site at 12 Gillotti Road in New Fairfield, Connecticut.

## PROJECT DESCRIPTION & PROPOSED OPERATIONS

The Consolidated Early Learning Academy (CELA), proposed and previously approved at 24 Gillotti Road, is an elementary school for students in kindergarten through 5<sup>th</sup> grade in the Town of New Fairfield, Fairfield County, Connecticut (See **Figure 1**). CELA will combine the existing Meeting House Hill School, located at 24 Gillotti Road, with the existing Consolidated School, located at 12 Gillotti Road. The Consolidated School site improvements include the demolition of the existing, approximately 79,000 square-foot Consolidated School and the relocation of the school bus parking lot from the Meeting House Hill School site to this location.

The school bus parking lot will be located at the northern portion of the site. Space for 26 regular-size school buses and 9 smaller buses and/or vans will be provided within a new, fenced lot. A ±400 square-foot bus operations structure is proposed within this area as well. The existing parking lot off Ball Pond Road is proposed to remain to provide parking during school hours to bus drivers and at off-hours parking will be open to the public utilizing the fields on site. Additionally, the parking lot off Gillotti Road is also proposed to remain. A new connection driveway between the bus parking lot and the existing southern parking lot is proposed to support one-way bus circulation through the site.

As part of Langan's previously approved Traffic Assessment prepared for CELA, dated December 2020, Langan identified the traffic operations and capacity analysis associated with the proposed bus lot without the internal connection to the southern parking lot. In Langan's assessment, it was shown that the driveways for the bus lot operate at LOS A under 2022 build conditions. The site plan for the bus lot has been revised to add the internal connection to the southern parking

# MEMO

lot to allow for one-way circulation through the site. Buses are to enter the site from the driveway on Ball Pond Road and exit the lot at the southeast driveway to Gillotti Road. Bus drivers will park their personal vehicles at the northeast corner of the site in the lot located next to the Ball Pond Road driveway upon arrival. After arriving, they will proceed to get into their respective buses, which will be parked in the new proposed lot, and then exit through the driveway on Gillotti Road. Once bus drivers have finished their pick-up or drop-off route, they will enter the bus lot from the Ball Pond Road driveway and leave in their personal vehicles at the Ball Pond Road driveway. These proposed revisions will promote one-way bus circulation on the Consolidated School site and allow for safe and efficient bus pick-up and drop-off operations for the town.

## CAPACITY ANALYSIS

To determine the traffic impacts on the area roadway network, we analyzed the operating conditions of the two site driveways for the proposed bus lot. As part of the previous traffic assessment for this site, the site driveways were analyzed using Synchro Plus SimTraffic 10 capacity analysis software for the existing, background and build peak-hour conditions. With the new proposed one-way operation of the bus lot, build peak-hour conditions were re-analyzed. Copies of the analysis reports are provided in **Appendix C. Table 1** provides a comparison of the traffic operating conditions for the periods evaluated.

<b>TABLE 1</b> <b>PEAK-HOUR LEVEL OF SERVICE SUMMARY</b> <b>A.M. (P.M)</b> <b>Unsignalized Intersections</b>					
<b>INTERSECTION</b>	<b>APPROACH</b>	<b>2020 EXISTING* (PREVIOUS STUDY)</b>	<b>2022 BACKGROUND* (PREVIOUS STUDY)</b>	<b>2022 BUILD* (PREVIOUS STUDY)</b>	<b>2022 BUILD</b>
Gillotti Road & Consolidated School Southwest Driveway	EB	A (A)	A (A)	-	-
	WB	A (A)	A (A)	-	-
Gillotti Road & Consolidated School Southeast Driveway	EB	A (A)	A (A)	A (A)	A (A)
	WB	A (A)	A (A)	A (A)	A (A)
	SB	C (B)	C (B)	A (A)	A (A)
Ball Pond Road & Consolidated School Northeast Driveway	EB	B (B)	B (B)	A (A)	A (A)
	SB	A (A)	A (A)	A (A)	A (A)
	NB	A (A)	A (A)	A (A)	A (A)

\* Traffic operations based on previous Langan traffic assessment

# MEMO

**Table 1** indicates that the site driveways for the new bus lot will maintain overall acceptable levels-of-service after the proposed school redevelopment without the need for any off-site improvements. The site driveways studied are adequate to accommodate the change in the bus lot operations. Since, overall, the traffic volumes at the location of the bus lot are to be decreased from existing conditions due to the demolition of the school, the existing site driveways on Gillotti Road and Ball Pond Road are expected to operate satisfactorily with the new bus lot operations.

## SAFETY ANALYSIS

### Intersection Sight Distance (ISD)

Intersection sight distances were measured at each driveway intersection of the Consolidated School site.

**Table 2** compares the intersection sight distance at the driveways associated with the bus lot with the New Fairfield roadway standards. Required intersection sight distances were based off of roadway classifications in the CTDOT *New Fairfield Functional Classification Map*. Gillotti Road is identified as an urban collector roadway and Ball Pond road is identified as an urban arterial roadway.

TABLE 2 INTERSECTION SIGHT DISTANCE SUMMARY					
LOCATION	Design Speed	Intersection Sight Distance			
		Passenger Car		Single-Unit Truck/Bus	
		Required	Provided	Required	Provided
Consolidated School Southeast Driveway (Un-Signalized) Looking Right (Gillotti Road eastbound) Looking Left (Gillotti Road westbound)	25 mph	280 ft	350 ft	350 ft	350 ft
	25 mph	280 ft	280 ft <sup>1</sup>	350 ft	280 ft <sup>1</sup>
Consolidated School Northeast Driveway (Un-Signalized) Looking Right (Ball Pond Road southbound) Looking Left (Ball Pond Road northbound)	25 mph	280 ft	610 ft <sup>2</sup>	350 ft	610 ft <sup>2</sup>
	25 mph	280 ft	229 ft	350 ft	229 ft

<sup>1</sup> Distance to the intersection of Gillotti Road & Barnum Road

<sup>2</sup> Distance to the intersection of Ball Pond Road & Brush Hill Road

As shown in **Table 2**, the existing intersection sight distances at the Consolidated School Southeast Driveway looking right meets the New Fairfield DPW standards, however looking left towards Barnum Road does not meet the standards. However, when looking left from the Gillotti Road Driveway, there is sufficient sight distance to see the intersection of Gillotti Road and Barnum Road, as well as approximately 150 feet on Barnum Road in both directions, which will allow drivers to see vehicles on Barnum Road as they approach the Gillotti Road intersection.

# MEMO

Additionally, the existing sight distances at the Consolidated School Northeast Driveway looking right meets the DPW standards, but looking left does not. At the intersection of Ball Pond Road and the Consolidated School Northeast driveway, the sight line looking left is obstructed by the brush along the west side of Ball Pond Road. Stated previously in Langan's traffic assessment for CELA, we recommend removing vegetation within the right-of-way to maximize sight lines at this driveway.

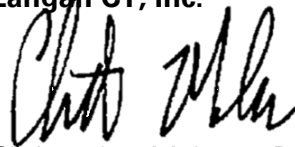
## SUMMARY AND CONCLUSIONS

This memo investigates the potential traffic impacts generated by the revised operations for the proposed bus lot which will be located at the Consolidated School site at 12 Gillotti Road in New Fairfield. Previously, both the driveways for the proposed bus lot were anticipated to operate as full movement enter/exit. The driveway operations have been revised to have the northeast driveway on Ball Pond Road be enter only for school buses, and the southeast driveway on Gillotti Road be exit only for school buses. The assessment indicates that the anticipated changed in bus lot operations will not have a significant adverse impact to the traffic operating conditions of the site driveways studied. To address safety and vehicular-access concerns we offer the following recommendations, which were also previously recommended in Langan's Traffic Assessment for CELA dated December 2020:

- Ball Pond Road & Consolidated School Northeast Driveway Intersection
  - Trim trees/shrubs along the west side of Ball Pond Road to improve intersection sight distance looking left.

Sincerely,

**Langan CT, Inc.**



Christopher McLean, P.E.  
Senior Staff Engineer



John D. Plante, P.E.  
Managing Principal/Executive Vice President



# MEMO

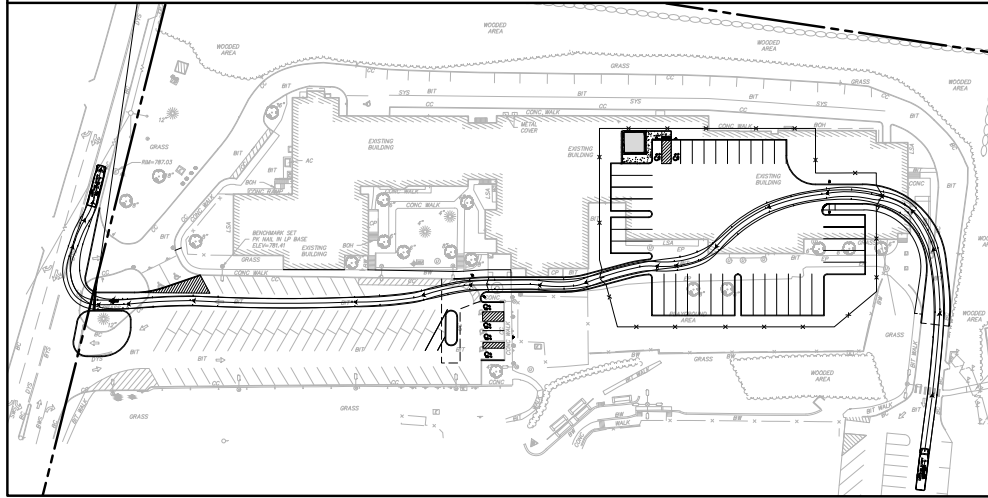
Consolidated School Site Bus Lot Traffic Memo  
Consolidated Early Learning Academy  
12 Gillotti Road, New Fairfield, Connecticut  
Langan Project No.: 140215351  
21 February 2022

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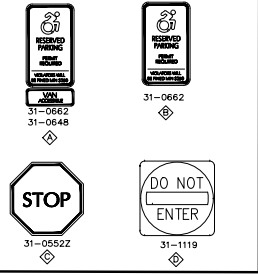
## Appendix A

### Site Plan

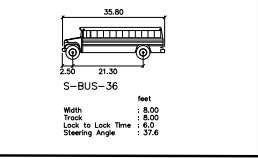
**S-BUS-36 - TURNING MOVEMENT**



**SIGN LEGEND**



**VEHICLE PROFILE**

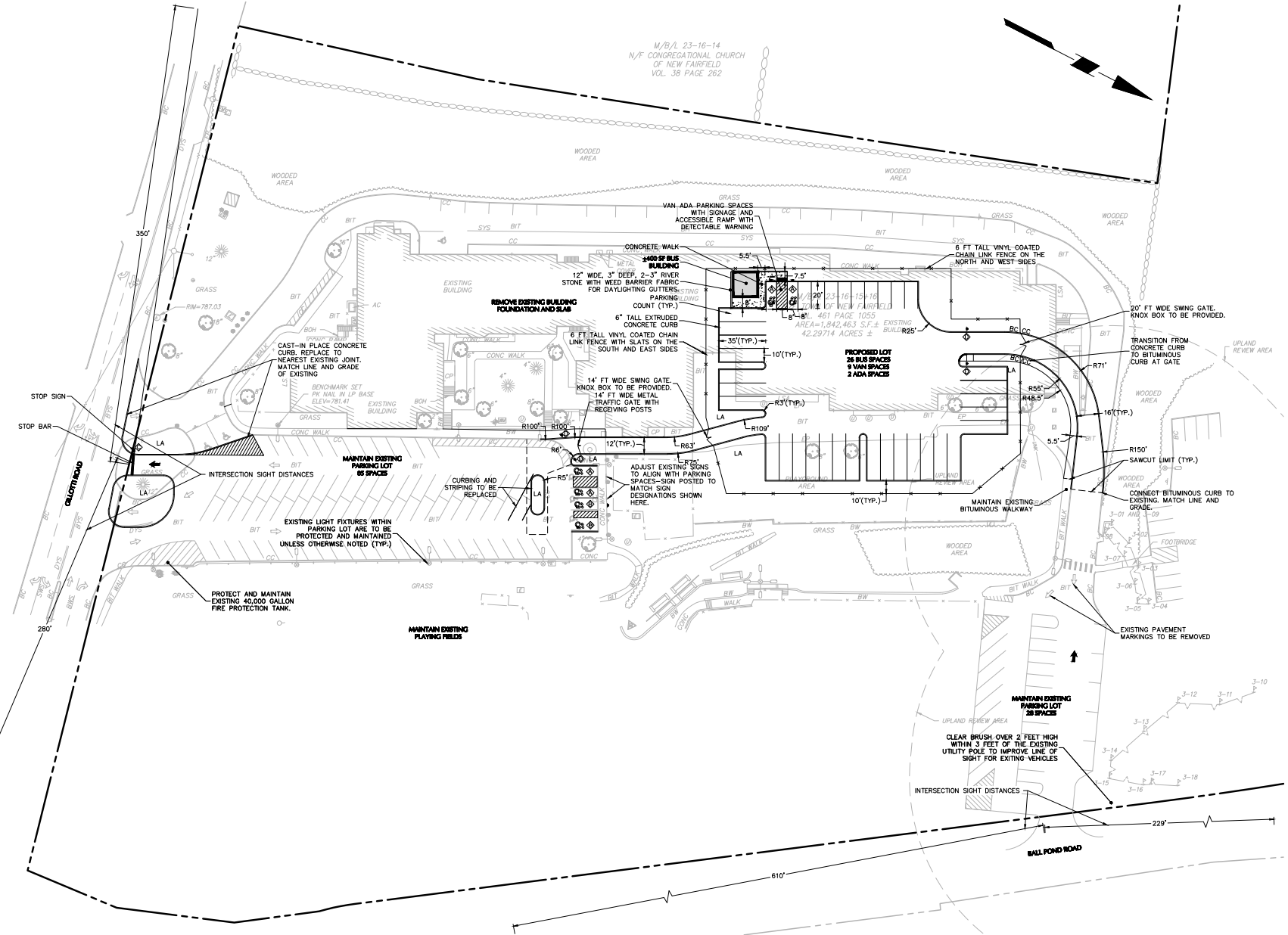


**LEGEND**

	EXISTING	PROPOSED
PROPERTY LINE	[Symbol]	[Symbol]
LIMIT OF WETLANDS	[Symbol]	[Symbol]
UPLAND REVIEW AREA	[Symbol]	[Symbol]
BUILDING LINE	[Symbol]	[Symbol]
BUILDING DOOR	[Symbol]	[Symbol]
CURB LINE	[Symbol]	[Symbol]
FLUSH CURB LINE	[Symbol]	[Symbol]
SAWCUT LINE	[Symbol]	[Symbol]
FENCE	[Symbol]	[Symbol]
TRAFFIC SIGN	[Symbol]	[Symbol]
TRAFFIC SIGN DESIGNATION	[Symbol]	[Symbol]
CONCRETE	[Symbol]	[Symbol]
HEAVY DUTY PAVEMENT	[Symbol]	[Symbol]

**GENERAL NOTES**

- EXISTING INFORMATION OBTAINED FROM THE FOLLOWING PLANS
  - "PARTIAL BOUNDARY AND TOPOGRAPHIC SURVEY", MEETING HOUSE HILL SCHOOL, 24 GILLOTTI ROAD, NEW FAIRFIELD, CT, DATED APRIL 9, 2020, AND PREPARED BY LANGAN.
  - "PARTIAL BOUNDARY AND TOPOGRAPHIC SURVEY", CONSOLIDATED SCHOOL, 12 GILLOTTI ROAD, NEW FAIRFIELD, CT, DATED APRIL 9, 2020, AND PREPARED BY LANGAN.
  - "SEPTIC SYSTEM REPAIR RECORD", MEETING HOUSE HILL & CONSOLIDATED SCHOOLS, GILLOTTI ROAD, NEW FAIRFIELD, CT, DATED 12-12-00, AND PREPARED BY CCA, LLC.
- PROPOSED BUILDING FOOTPRINT RECEIVED ELECTRONICALLY FROM JCJ ARCHITECTURE IN AUGUST 2020.
- WETLANDS WERE DELINEATED AND FIELD LOCATED BY ALL-POINTS TECHNOLOGY CORPORATION DURING THE MONTH OF MARCH 2020.
- THE SITE IS LOCATED WITHIN ZONE X, AN AREA OF MINIMAL FLOODING, PER FEMA FIRM MAP 090101C0128F, EFFECTIVE DATE 6/18/2010.



**CONSOLIDATED EARLY LEARNING ACADEMY**

302 BALL POND ROAD  
NEW FAIRFIELD, CT 06812

State Project Number: 091-0045EA

**JCJ ARCHITECTURE**

120 HUYSHOPE AVENUE  
SUITE 400  
HARTFORD, CT 06106  
860.247.9226

© 2020 JCJ Architecture

CONSULTANT:

Reference Cover  
Sheet for Consultant  
Directory

**LANGAN**

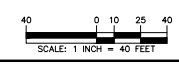
ZC SUBMISSION  
2-22-2022

NOT FOR CONSTRUCTION

PIC [PB]	DL [LBB]
PM [CO]	DTL [WA]
ISSUE	ISSUE FOR ZC SUBMISSION
JOB	H19079.00
DRAWN	KMS
SCALE	1"=40'
REVISIONS	

SITE PLAN -  
CONSOLIDATED SCHOOL

**C-320**



# MEMO

Consolidated School Site Bus Lot Traffic Memo  
Consolidated Early Learning Academy  
12 Gillotti Road, New Fairfield, Connecticut  
Langan Project No.: 140215351  
21 February 2022

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## Appendix B Traffic Figures





**LANGAN**

Langan CT, Inc.  
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Project

**CONSOLIDATED  
SCHOOL**

NEW FAIRFIELD

CONNECTICUT

Drawing Title

**SITE LOCATION MAP**

Project No.

**140215351**

Date

**10-16-2020**

Drawn By

**BDB**

Checked By

**CJM**

Drawing No.

**FIG. 1**

**0**





**LANGAN**  
 Langan CT, Inc.  
 555 Long Wharf Drive  
 New Haven, CT 06511  
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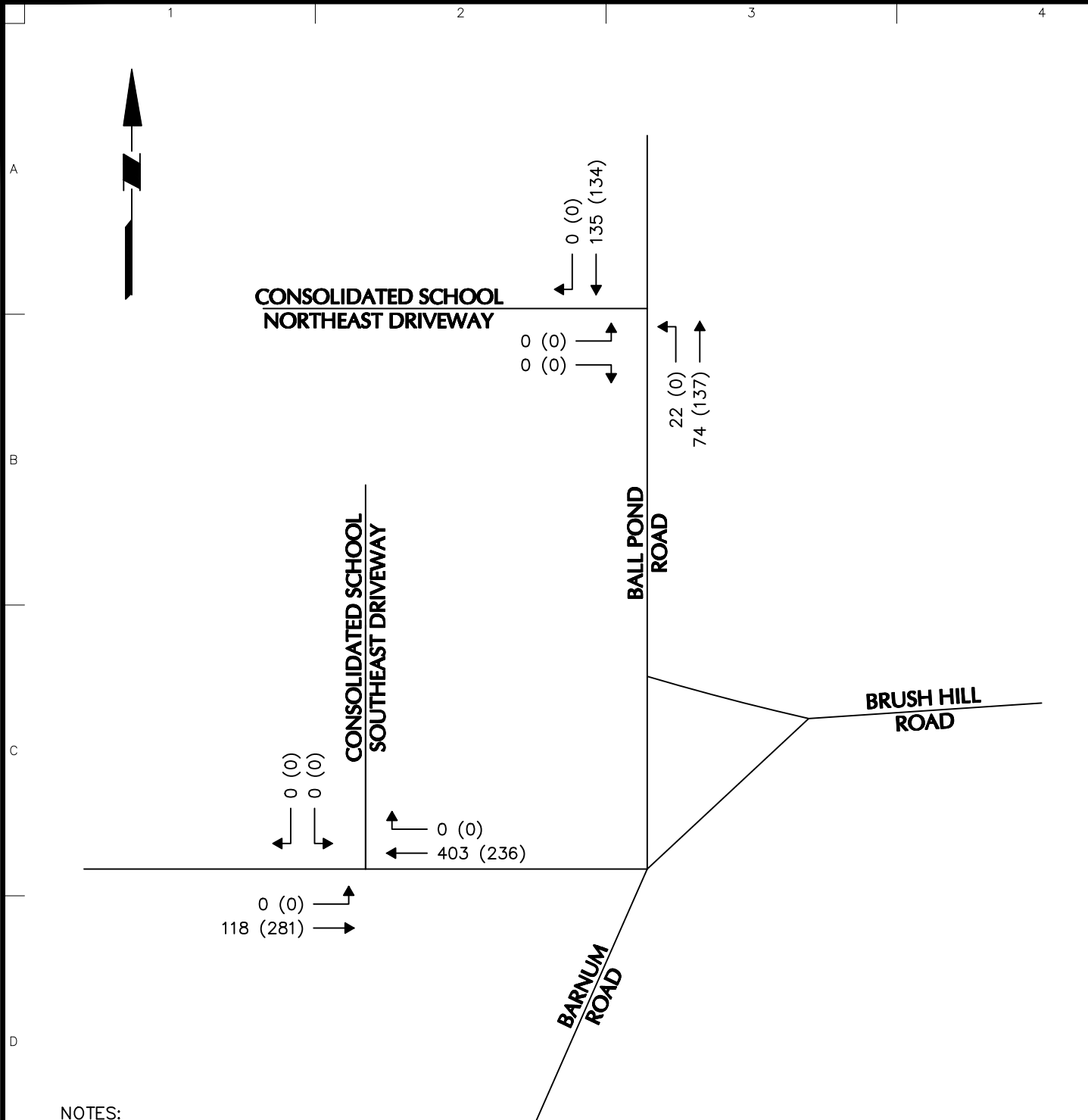
Project  
**CONSOLIDATED SCHOOL**  
 NEW FAIRFIELD CONNECTICUT

Drawing Title  
**STUDY INTERSECTIONS MAP**

Project No.  
**140215351**  
 Date  
**10-16-2020**  
 Drawn By  
**BDB**  
 Checked By  
**CJM**

Drawing No.  
**FIG. 2**





NOTES:

1. WEEKDAY MORNING AND EVENING 2022 BUILD PEAK-HOUR TRAFFIC VOLUMES ARE BASED ON VOLUMES FROM FIGURE 7 OF THE TRAFFIC ASSESSMENT FOR THE CONSOLIDATED EARLY LEARNING ACADEMY (CELA) PREPARED BY LANGAN IN DECEMBER 2020.
2. MORNING PEAK-HOUR: 8:00 A.M. - 9:00 A.M.
3. EVENING PEAK-HOUR: 3:00 P.M. - 4:00 P.M.

LEGEND	
PEAK-HOUR VOLUMES	AM (PM)
DIRECTION OF TRAFFIC	← ↑ →

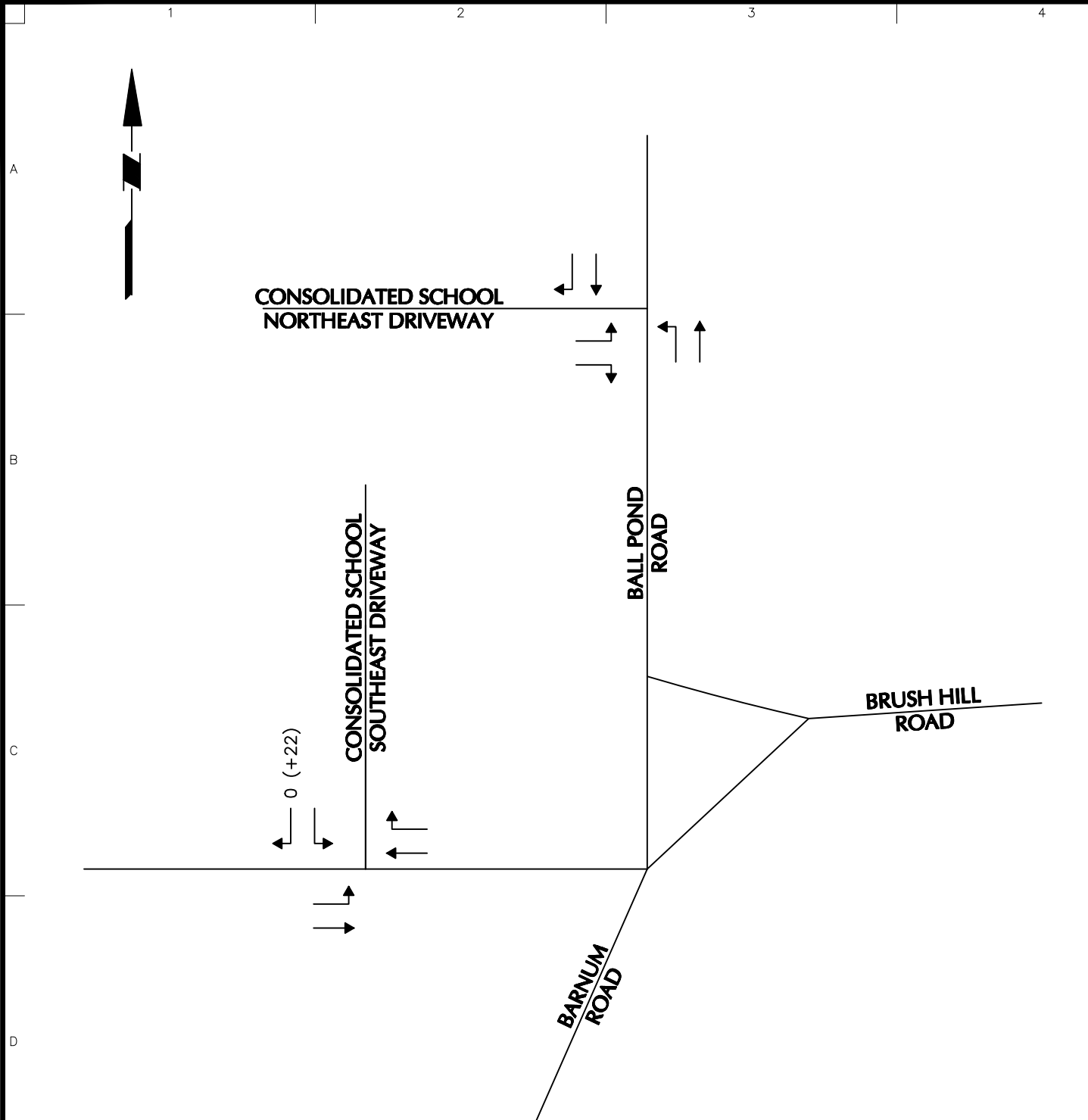
**LANGAN**  
 Langan Engineering and Environmental Services, Inc.  
 555 Long Wharf Drive  
 New Haven, CT 06511  
 T: 203.562.5771 F: 203.789.6142 www.langan.com

Project  
**CONSOLIDATED SCHOOL**  
 NEW FAIRFIELD  
 FAIRFIELD COUNTY CONNECTICUT

Drawing Title  
**PREVIOUSLY APPROVED 2022 BUILD PEAK-HOUR TRAFFIC VOLUMES**

Project No.  
**140215351**  
 Date  
**10-19-2020**  
 Drawn By  
**BDB**  
 Checked By  
**CJM**

Drawing No.  
**FIG 3**  
 Sheet of 1

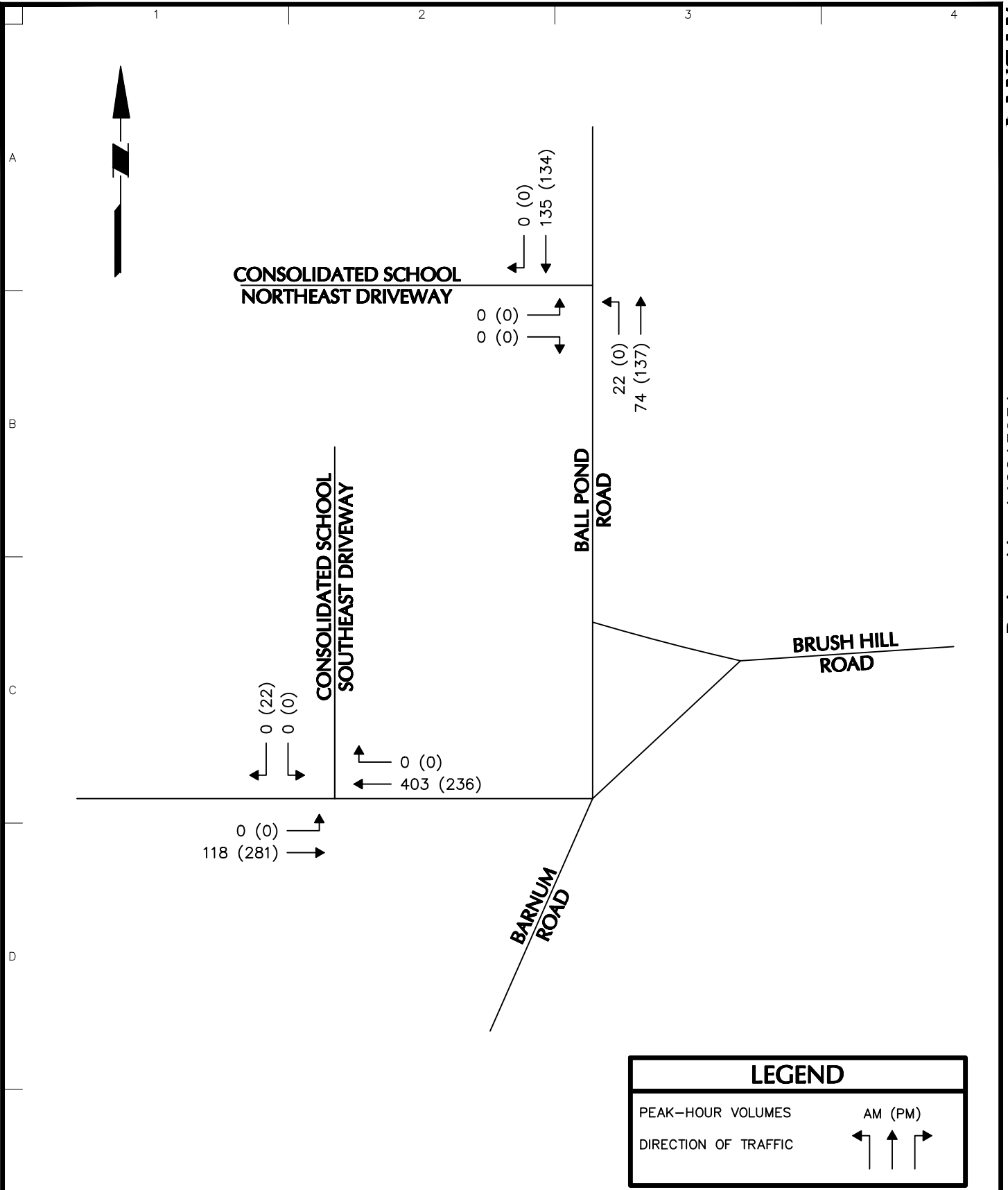


**NOTES:**

1. WEEKDAY MORNING AND EVENING PEAK-HOUR TRAFFIC VOLUMES ARE BASED ON A 1% AMBIENT GROWTH RATE APPLIED TO THE TRAFFIC VOLUMES SHOWN IN FIGURE 3 OF THIS REPORT.
2. MORNING PEAK-HOUR: 8:00 A.M. - 9:00 A.M.
3. EVENING PEAK-HOUR: 3:00 P.M. - 4:00 P.M.

LEGEND	
PEAK-HOUR VOLUMES	AM (PM)
DIRECTION OF TRAFFIC	

<p>Langan Engineering and Environmental Services, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com</p>	Project	Drawing Title	Project No.	Drawing No.
	<b>CONSOLIDATED SCHOOL</b>	<b>BUS TRIP ASSIGNMENT</b>	<b>140215351</b>	<b>FIG 4</b>
	NEW FAIRFIELD		Date	Sheet of 1
	FAIRFIELD COUNTY CONNECTICUT		10-19-2020	
			Drawn By	
			<b>BDB</b>	
			Checked By	
			<b>CJM</b>	



<p><b>LANGAN</b> Langan Engineering and Environmental Services, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com</p>	Project	Drawing Title	Project No.	Drawing No.
	<b>CONSOLIDATED SCHOOL</b>	<b>2022 BUILD PEAK-HOUR TRAFFIC VOLUMES</b>	<b>140215351</b>	<b>FIG 5</b>
	NEW FAIRFIELD		Date	
	FAIRFIELD COUNTY CONNECTICUT		<b>10-19-2020</b>	
			Drawn By	Sheet of 1
			<b>BDB</b>	
			Checked By	
			<b>CJM</b>	



# MEMO

Consolidated School Site Bus Lot Traffic Memo  
Consolidated Early Learning Academy  
12 Gillotti Road, New Fairfield, Connecticut  
Langan Project No.: 140215351  
21 February 2022

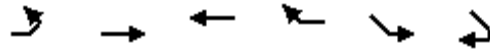
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## Appendix C

### Build Synchro Analysis

#### 4: Gillotti Road & Consolidated School Southeast Driveway Lanes, Volumes, Timings

2022 BUILD AM



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations		↔↑	↑	↗	↘	
Traffic Volume (vph)	0	118	403	0	0	0
Future Volume (vph)	0	118	403	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	16	16
Storage Length (ft)	0			125	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
<b>Fr</b>						
<b>Flt Protected</b>						
Satd. Flow (prot)	0	2932	1766	1837	2153	0
<b>Flt Permitted</b>						
Satd. Flow (perm)	0	2932	1766	1837	2153	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		106	263		88	
Travel Time (s)		2.4	6.0		2.0	
Peak Hour Factor	0.88	0.88	0.85	0.85	0.80	0.80
Heavy Vehicles (%)	0%	19%	4%	0%	0%	0%
Adj. Flow (vph)	0	134	474	0	0	0
<b>Shared Lane Traffic (%)</b>						
Lane Group Flow (vph)	0	134	474	0	0	0
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	24.5%			ICU Level of Service A		
Analysis Period (min)	15					

4: Gillotti Road & Consolidated School Southeast Driveway  
 HCM 6th TWSC

2022 BUILD AM

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations		↑↑	↑	↑	↑	↑
Traffic Vol, veh/h	0	118	403	0	0	0
Future Vol, veh/h	0	118	403	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	125	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	85	85	80	80
Heavy Vehicles, %	0	19	4	0	0	0
Mvmt Flow	0	134	474	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	474	0	-	0	541
Stage 1	-	-	-	-	474
Stage 2	-	-	-	-	67
Critical Hdwy	4.1	-	-	-	6.6
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1099	-	-	-	491
Stage 1	-	-	-	-	630
Stage 2	-	-	-	-	954
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1099	-	-	-	491
Mov Cap-2 Maneuver	-	-	-	-	491
Stage 1	-	-	-	-	630
Stage 2	-	-	-	-	954

Approach	EB	WB	SE
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1099	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

5: Ball Pond Road & Consolidated School Northeast Driveway  
Lanes, Volumes, Timings

2022 BUILD AM



Lane Group	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	135	0	22	74
Future Volume (vph)	0	0	135	0	22	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.989
Satd. Flow (prot)	1900	0	1837	0	0	1480
Flt Permitted						0.989
Satd. Flow (perm)	1900	0	1837	0	0	1480
Link Speed (mph)	30		30			30
Link Distance (ft)	299		549			556
Travel Time (s)	6.8		12.5			12.6
Peak Hour Factor	0.80	0.80	0.80	0.80	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	0%	100%	0%
Adj. Flow (vph)	0	0	169	0	25	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	169	0	0	110
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	18.9%
Analysis Period (min)	15
	ICU Level of Service A

5: Ball Pond Road & Consolidated School Northeast Driveway  
 HCM 6th TWSC

2022 BUILD AM

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	135	0	22	74
Future Vol, veh/h	0	0	135	0	22	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	87	87
Heavy Vehicles, %	0	0	0	0	100	0
Mvmt Flow	0	0	169	0	25	85

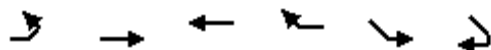
Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	304	169	0	0	169
Stage 1	169	-	-	-	-
Stage 2	135	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	5.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	3.1
Pot Cap-1 Maneuver	692	880	-	-	982
Stage 1	866	-	-	-	-
Stage 2	896	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	673	880	-	-	982
Mov Cap-2 Maneuver	673	-	-	-	-
Stage 1	866	-	-	-	-
Stage 2	872	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	0	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	982	-	-	-	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	8.8	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

#### 4: Gillotti Road & Consolidated School Southeast Driveway Lanes, Volumes, Timings

2022 BUILD PM



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations		↕↕	↑	↗	↘↘	
Traffic Volume (vph)	0	281	236	0	0	22
Future Volume (vph)	0	281	236	0	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	16	16
Storage Length (ft)	0			125	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Fr <sub>t</sub>					0.865	
Fl <sub>t</sub> Protected						
Satd. Flow (prot)	0	3323	1733	1837	1863	0
Fl <sub>t</sub> Permitted						
Satd. Flow (perm)	0	3323	1733	1837	1863	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		106	263		88	
Travel Time (s)		2.4	6.0		2.0	
Peak Hour Factor	0.72	0.72	0.89	0.89	0.80	0.80
Heavy Vehicles (%)	0%	5%	6%	0%	0%	0%
Adj. Flow (vph)	0	390	265	0	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	390	265	0	28	0
Sign Control		Free	Free		Stop	

#### Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	22.4%
ICU Level of Service	A
Analysis Period (min)	15

4: Gillotti Road & Consolidated School Southeast Driveway  
 HCM 6th TWSC

2022 BUILD PM

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations		↑↑	↑	↑	↑	↑
Traffic Vol, veh/h	0	281	236	0	0	22
Future Vol, veh/h	0	281	236	0	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	125	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	89	89	80	80
Heavy Vehicles, %	0	5	6	0	0	0
Mvmt Flow	0	390	265	0	0	28

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	265	0	-	0	460 265
Stage 1	-	-	-	-	265 -
Stage 2	-	-	-	-	195 -
Critical Hdwy	4.1	-	-	-	6.6 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1311	-	-	-	549 779
Stage 1	-	-	-	-	784 -
Stage 2	-	-	-	-	825 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1311	-	-	-	549 779
Mov Cap-2 Maneuver	-	-	-	-	549 -
Stage 1	-	-	-	-	784 -
Stage 2	-	-	-	-	825 -

Approach	EB	WB	SE
HCM Control Delay, s	0	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1311	-	-	-	779
HCM Lane V/C Ratio	-	-	-	-	0.035
HCM Control Delay (s)	0	-	-	-	9.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

5: Ball Pond Road & Consolidated School Northeast Driveway  
Lanes, Volumes, Timings

2022 BUILD PM



Lane Group	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	134	0	0	137
Future Volume (vph)	0	0	134	0	0	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1766	0	0	1783
Flt Permitted						
Satd. Flow (perm)	1900	0	1766	0	0	1783
Link Speed (mph)	30		30			30
Link Distance (ft)	299		549			556
Travel Time (s)	6.8		12.5			12.6
Peak Hour Factor	0.80	0.80	0.83	0.83	0.81	0.81
Heavy Vehicles (%)	0%	0%	4%	0%	0%	3%
Adj. Flow (vph)	0	0	161	0	0	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	161	0	0	169
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	10.5%
ICU Level of Service	A
Analysis Period (min)	15



5: Ball Pond Road & Consolidated School Northeast Driveway  
 HCM 6th TWSC

2022 BUILD PM

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	134	0	0	137
Future Vol, veh/h	0	0	134	0	0	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	83	83	81	81
Heavy Vehicles, %	0	0	4	0	0	3
Mvmt Flow	0	0	161	0	0	169

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	330	161	0	0	161
Stage 1	161	-	-	-	-
Stage 2	169	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	669	889	-	-	1430
Stage 1	873	-	-	-	-
Stage 2	866	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	669	889	-	-	1430
Mov Cap-2 Maneuver	669	-	-	-	-
Stage 1	873	-	-	-	-
Stage 2	866	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	1430	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-