Hesketh

Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

F. A. Hesketh
& Associates, Inc.

May 6, 2022

Boundaries, LLC
P.O. Box 184
179 Pachaug River Drive
Griswold, CT 06351

Attn: Mr. John U. Faulise Jr., L.S.

RE: Traffic Impact Report
Gateway Terminal / Uncasville, LLC
125 & 133 Depot Road
Montville, CT
Our File: 22028

Dear Mr. Faulise:

Pursuant to your request our office has prepared this statement outlining the potential traffic impact of a proposed Terminal facility for the storage and sale of salt and sand products on property located at 125 & 133 Depot Road in the Town of Montville, CT. The site proposed for development is shown in Figure 1. This letter presents our findings.

The proposed development will utilize the Thames River and the existing New England Central Railroad (NECR) to import salt for storage and sale. Sand will be delivered by rail and will be shipped out via barge. The facility will make use of the existing docks, and several proposed railroad sidings to take delivery of product. The salt product will be stored on site and sold in bulk with deliveries/customer pick up to be made by tractor trailer or dump truck to customers throughout southeastern Connecticut. A small office/guard shack consisting of 160 s.f. of floor area will be the only building on site. A total of 3 to 5 employees are anticipated. A total of 5 parking spaces are proposed. Access to the site is proposed from Depot Road at three locations. There are two driveways to Depot Road, one located either side of the proposed salt storage area. A third driveway is an existing driveway, that is an extension of Depot Road crossing the railroad tracks, to the proposed sand storage area.

Depot Road is a town maintained roadway that originates at a signalized intersection with Route 32 and Route 163. Depot Road extends in an easterly direction to a four way stop sign controlled intersection with Lathrop Road and Pink Row. Depot Road continues east past Peter

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Avenue, the Comstock Cemetery, and the subject site. There are two existing site driveways to the site on the south side of the roadway east of the cemetery. A third site driveway exists as an extension of Depot Road to the east across the NECR. Depot Road turns to the north, a distance of approximately 1,000 feet, to service a handful of additional residential properties. The roadway generally provides 25 feet of pavement with a single travel lane in each direction separated by a painted double yellow centerline. A sidewalk is present on the south side of the roadway between the two site existing site driveways. The roadway is posted at 25 miles per hour. Land use along the roadway is residential, with the exception of the properties fronting to Route 32, the Comstock Cemetery, and the subject site.

Route 32, also known as the Norwich-New London Turnpike, is a state maintained roadway that originates in New London and extends in a northerly direction through Montville to Norwich. The roadway generally parallels the Thames River. Within the vicinity of Depot Road, Route 32 provides a single travel lane and painted shoulder of variable width in each direction, separated by a painted double yellow centerline. The roadway is posted at 30 miles per hour. Land use along the roadway is a mix of residential and commercial uses. Traffic signals are provided at Maple Avenue and Route 163/Depot Road.

Route 163, known locally as Palmertown Road, originates at a signalized intersection with Route 32 and Depot Road and extends in a northwesterly direction. Route 163 provides access to I-395 and continues northwesterly as Oakdale Road. Route 163 provides a single travel lane and painted shoulder in each direction separated by a painted double yellow centerline. The roadway widens on the approach to Route 32 to provide a dedicated left turn lane at the signalized intersection. The roadway is posted at 30 miles per hour. Land use along the roadway is a mix of residential and commercial uses. A traffic signal is provided at the I-395 NB Ramps.

The site has frontage to Dock Road as well. Dock Road is a town maintained roadway that originates at an unsignalized intersection with Lathrop Road. The roadway extends in an easterly direction past Peter Avenue, the Comstock Cemetery to the subject site. The roadway generally provides 20-22 feet of pavement with a single travel lane in each direction. The roadway is posted at 25 miles per hour and is unmarked. There is a stop sign located east of

Peter Avenue for eastbound traffic. East of that stop sign, the roadway narrows to a width of 17 feet, with stone walls on each side of the pavement. The roadway lies on a downgrade and turns slightly to the north, as one travels east towards the Thames River. Sightlines in each direction are restricted as a result of the walls, grade change and roadway curvature. This section of the roadway operates as an alternating one way roadway. Land use along the roadway is residential, with the exception of the Comstock Cemetery, the subject site, and a town boat launch.

The Connecticut DOT maintains a traffic volume count program on all state highways and some local roadways. Included in the database are counts on Route 32 north of Route 163 and on Route 163 west of Route 32. The most recent counts were conducted during April 2020. Those counts conducted during Covid show volumes substantially lower than the previous counts at the same locations. A February 2017 count conducted on Route 32 indicates an average daily traffic volume (ADT) of 13,900 vehicles with peak hour volumes of 1,010 vehicles during the morning peak hour (7:00 a.m.) and 1,219 vehicles during the afternoon peak hour (4:00 p.m.). A June 2011 count conducted on Route 163 indicates an average daily traffic volume (ADT) of 7,200 vehicles with peak hour volumes of 473 vehicles during the morning peak hour (8:00 a.m.) and 644 vehicles during the afternoon peak hour (4:00 p.m.). The ConnDOT counts are presented in Tables 1 and 2.

Our office arranged for the installation of an automated traffic volume counter on Depot Road for a three day period between March 21 and March 25, 2022. The count indicates a weekday ADT of 467 vehicles, with peak hour volumes of 44 vehicles during the morning peak hour (8:00 a.m.) and 60 vehicles during the afternoon peak hour (4:00 p.m.). This count is presented in Table 3.

In addition to the automated counts described above, manual turning movement counts were conducted at the intersection of Route 32 with Route 163 and Depot

Road during the morning and afternoon peak hours during March 2022. Copies of the counts are provided in the appendix. Figure 2 presents the observed traffic volumes. Figure 3 represents the 2022 existing traffic volumes within the study area, balanced between count locations by holding the higher observed volumes.

A review of recent ConnDOT counts, pre Covid, indicates that traffic volumes have decreased slightly on Route 163 and increased approximately 0.5% per year on Route 32. To be conservative, a 1% per year growth rate was applied to grow the traffic to a 2024 design year. In addition, we have added the traffic for the recently approved Oxobox Lofts, the Village Apartments and the Townhouses at 245 Route 32. The results are presented in Figure 4 as the 2024 background traffic volumes.

Site Generated Traffic

The Institute of Transportation Engineers (ITE) *Trip Generation* Report was consulted for the purpose of estimating the trip generation of the proposed facility. *Trip Generation* presents trip generation estimates for many land uses based on counts conducted at existing facilities throughout the country. Unfortunately, the report does not include any uses that are applicable to the proposed facility. Therefore, we have spoken to the end user to determine the trip generation potential for the site.

The proposed facility is expected to have a total of 3 to 5 employees at any one time. Based on their current operations at a similar facility in New Haven, the end user anticipates an average of 10 trucks per day during normal non winter operations. During the winter months, the truck volume increases to an average of 50 trucks per day. In the lead up to a major storm, the volume could grow to a total of 200 trucks per day, for a two to three day period. Based on these numbers we project daily volumes of 40 trips, 120 trips and 420 trips per day during the summer, winter and pre storm periods. Peak hour volumes are estimated to be 7 trips during summer operations, 25

trips during the winter months, and a peak hour of 65 trips in the days leading up to a storm event. These volumes were estimated based on the following. There are 5 employees, each arrives during the morning peak hour and departs during the afternoon peak hour. Each employee makes two additional trips throughout the day, for a total of 20 trips per day. Truck traffic is estimated by doubling the average volume of trucks serviced per day. Peak hour truck traffic was estimated assuming equal volumes over an 8 hour day then rounding up to the nearest 10. The facility will actually operate for a total of 14 hours a day (6 am to 8 pm). Therefore, the peak hour volumes outlined in this paragraph represent a conservative, or higher volume than should be realized. These volumes are presented in Table 4.

Based on the proposed site plan and the location of the site access driveways, 100% of the site traffic will access the site by use of Depot Road. We further estimate that 80% will use Route 163 to access I-395. We have assumed 10% of the site traffic will use Route 32 both north and south of Depot Road. Figure 5 depicts the site generated traffic based on this distribution. By adding the site generated traffic to the background traffic, the combined traffic volumes upon completion of the development can be determined. These volumes represent the 2022 combined traffic volumes as presented in Figure 6.

Capacity Analysis

Capacity analyses were conducted for the background and combined traffic volumes for the intersection of Route 32 with Route 163 and Depot Road utilizing the intersection capacity analysis program called SYNCHRO. Since the site is located at the end of Depot Road, except for three residences, a review of the site driveway intersections was not conducted. The analyses were conducted for the morning and afternoon peak hours. The analysis results are shown in Table 4.

Route 32 at Route 163 and Depot Road - This is an existing, four-way signalized intersection with Route 32 oriented in the north/south direction. Route 163 approaches from the west. Depot Road approaches from the east. The northbound and southbound Route 32 approaches each provide a single lane approach. The northbound approach provides a very generous shoulder that allows for through traffic to by-pass a waiting left turn vehicle. Route 163 provides a dedicated left turn lane and a shared through/right turn lane. Depot Road provides a single lane approach. The intersection is under signalized control and is controlled along with the Maple Avenue Intersection. The signal operates with four phases with the northbound and southbound approaches moving simultaneously followed by an internal clearance, followed by the eastbound and westbound approaches operating simultaneously, followed by the east/west approaches at Route 163 ad Depot Road operating with the southbound approach at Maple Avenue. The signal provides detection on all approaches and a 112 second cycle length.

Analysis indicates that the intersection operates at an overall LOS B during the morning peak hour and at a LOS C during the afternoon peak hour under the background traffic volume conditions. With the introduction of the site generated traffic for the pre-storm scenario, the intersection will continue to operate at the same levels of service as in the background conditions.

Depot Road at Lathrop Road and Pink Row - This is an existing four way, all way stop sign controlled intersection. Depot Road lies in an east/west orientation. Lathrop Road approaches from the south. Pink Row approaches from the north. Based on the low volume of traffic observed on Depot Road, the intersection was not analyzed, but likely operates at a LOS A on all approaches during peak hours under the combined traffic volume scenarios.

Driveway Location and Design

The site has three proposed site driveways, all to Depot Road. The westerly most driveway is an enter only driveway for salt pick up. The easterly driveway is an exit only driveway from the salt storage area. This driveway provides 30 feet of pavement and will operate under stop sign control. The third driveway is an extension of Depot Road and crosses the train tracks. This location is a four way intersection with Depot Road occupying the west and north legs of the intersection. The two site driveways occupy the south and west legs of the intersection. The northbound, southbound and eastbound approaches will operate under stop sign control. The westbound approach will operate under stop sign control as well. The stop sign will be located on the east side of the tracks, allowing vehicles to exit the site to do so without the need to stop on the railroad tracks.

Observations at the proposed easterly site driveway location indicate that a sight distance of 525 feet is available looking to the west and extends into the site across the railroad tracks, looking to the east. The 525 foot sight distance meets the current ConnDOT requirement for an approach speed of 30 miles per hour. Depot Road is posted at 25 miles per hour. Vehicles exiting the site will likely be travelling 15 mph or less. The stop sign control on all approaches virtually negates the need for intersection sight distance.

Truck Traffic

The proposed development is not a high traffic volume generator, either on a daily basis or on an hourly basis, but the traffic that it does generate is mostly truck traffic. As indicated above there are only expected to be 5 employees on site. The facility will operate during normal business hours, typically between 6 a.m. and 8 p.m. During severe storm events, the facility may operate longer based on demand.

Accident Data

The University of Connecticut Crash Data Repository gathers and compiles traffic accident data for all state highways and some major local roadways. A list of accidents occurring in the area from January 1st, 2019 through December 31st, 2021 includes the most recent 3 years of available data. The data is presented by mile marker and includes information such as date, time, roadway and weather conditions, collision types, and other variables.

A 3-year accident history was compiled for Route 32 from a point 250 feet south of Route 163 to a point 250 feet north of Route 163, on Route 163 from Route 32 to a point ¼ mile west of Route 32, and for the length of Depot Road and Dock Road. A total of twenty six (26) accidents occurred within the defined study area. Twelve (12) accidents occurred at the intersection of Route 32 and Route 163, eight (8) accidents occurred at the intersection of Route 32 and Maple Avenue. Three accidents occurred on Route 163. There was one accident on Depot Road and two accidents on Dock Road. Ten (10) of the accidents were rear end accidents, there were six (6) angle accidents, three (3) sideswipe accidents, and six accidents involving fixed objects.

Of the twenty six (26) accidents, twenty-three (23) were property damage only, two (2) involved suspected minor injuries, and one involved possible injuries. There were no reported fatalities.

Conclusions

The proposed development is projected to generate fewer than 10 trips an hour during normal operations, with a seasonal high volume of 25 trips an hour. During storm events, a peak hour volume of 65 trips will be experienced over short periods. Based on the low volume of site generated traffic, and the current roadway and traffic volume conditions, it is my professional opinion that the local roadway network has sufficient

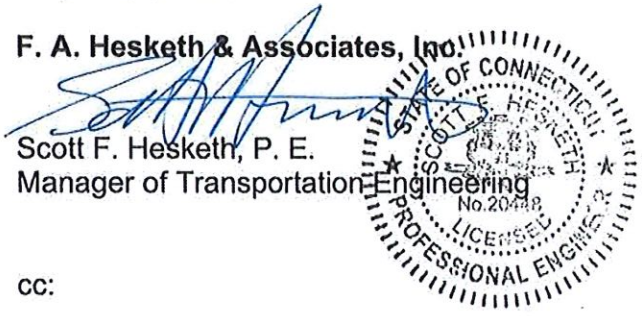
capacity to accommodate the traffic volumes associated with the proposed development.

The site has been designed to eliminate the use of Dock Road as a means of access. proposed site access is located such that minimum intersection sight distances for the observed 85% speed will meet current ConnDOT requirements. The driveway is properly designed to accommodate the anticipated driveway volumes.

We appreciate the opportunity to provide this information to you. A representative from our firm will be available to present testimony before local commissions if needed. If you require any additional information, please do not hesitate to contact our office.

Very truly yours,

F. A. Hesketh & Associates, Inc.



Scott F. Hesketh, P. E.
Manager of Transportation Engineering

cc:

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Status: OK

Table 1

MONT-025 - North & South Route 32 - 5.62 mi NE of Route 163

Town.....Montville
Station.....25
Location..... 41.437187,-72.109307
2015-Minor Arterial 4.....2015-Urban
Start Report.....07-Feb-2017 12:00AM
End Report.....07-Feb-2017 11:00PM
Axle Correction Factor.....None

24-Hour Count...13613 * G4(1.02) = 13885.3
UnRounded AADT.....13885.3 / 1 = 13885.3
OK 2020 Tue 21-Apr 7500
OK 2017 Tue 07-Feb -this report-...13900
OK 2008 Mon 07-Apr 13500

	07-Feb Tue
12:00am	78
01:00am	28
02:00am	31
03:00am	31
04:00am	112
05:00am	290
06:00am	503
07:00am	1010
08:00am	875
09:00am	730
10:00am	766
11:00am	831
12:00pm	843
01:00pm	972
02:00pm	1144
03:00pm	1149
04:00pm	1219
05:00pm	908
06:00pm	640
07:00pm	483
08:00pm	380
09:00pm	292
10:00pm	151
11:00pm	147
Totals	13613

TABLE 2
ConnDOT TRAFFIC VOLUMES
Route 163 west of Route 32
STATION NO. 28

	23-Jun-11 Thursday			24-Jun-11 Friday		
	EB	WB	Total	EB	WB	Total
12:00				25	53	78
1:00				18	28	46
2:00				20	43	63
3:00	13	29	42			
4:00	26	39	65			
5:00	97	86	183			
6:00	207	128	335			
7:00	279	188	467			
8:00	**249**	**224**	**473**			
9:00	228	208	436			
10:00	221	186	407			
11:00	277	239	516			
12:00	265	293	558			
1:00	282	264	546			
2:00	275	276	551			
3:00	302	308	610			
4:00	**308**	**336**	**644**			
5:00	266	267	533			
6:00	207	204	411			
7:00	176	162	338			
8:00	125	143	268			
9:00	92	91	183			
10:00	71	51	122			
11:00	48	63	111			
	4014	3785	7799	63	124	187

2011 ADT = 7,200 for station 28 in Montville

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Phone: (860) 653-8000

Depot Rd east of
Route 32 (Norwich-New London Tpke)
Montville, CT 06382
Job No. 22028

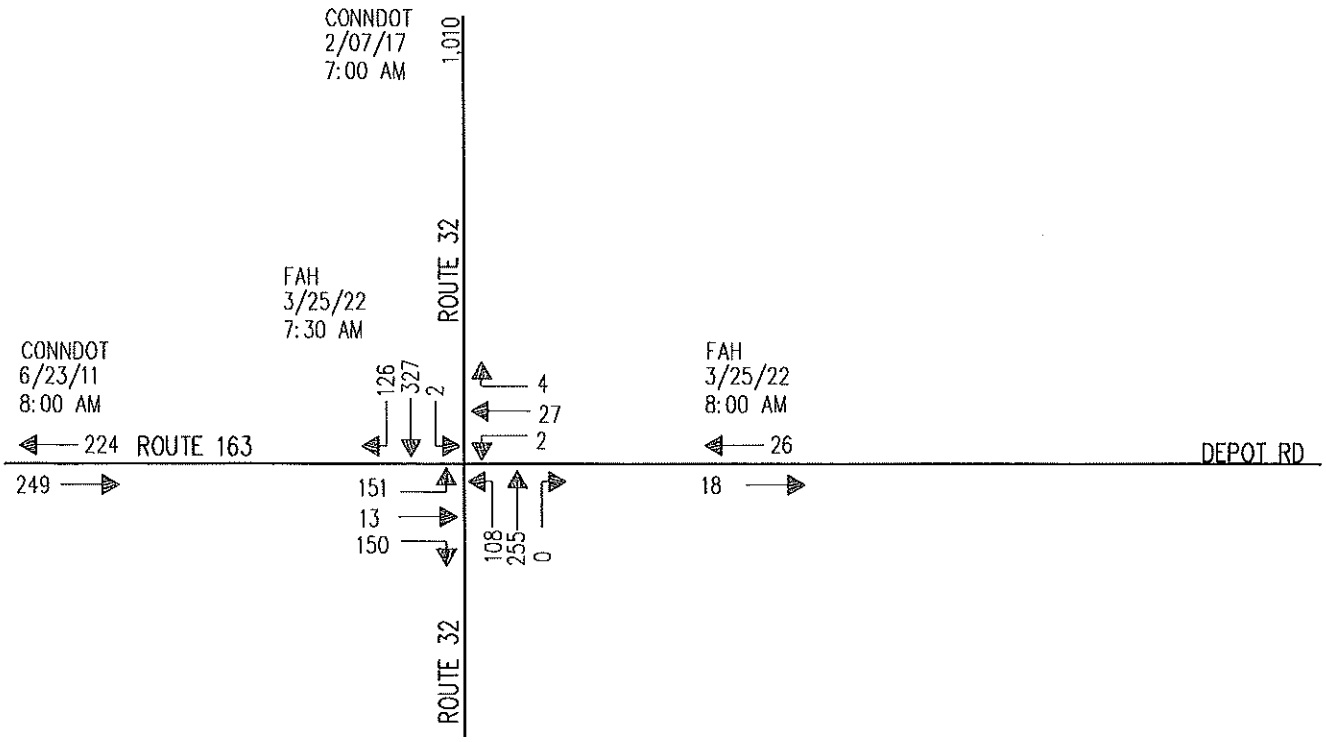
Table 3

Date Start: 21-Mar-22
Date End: 25-Mar-22

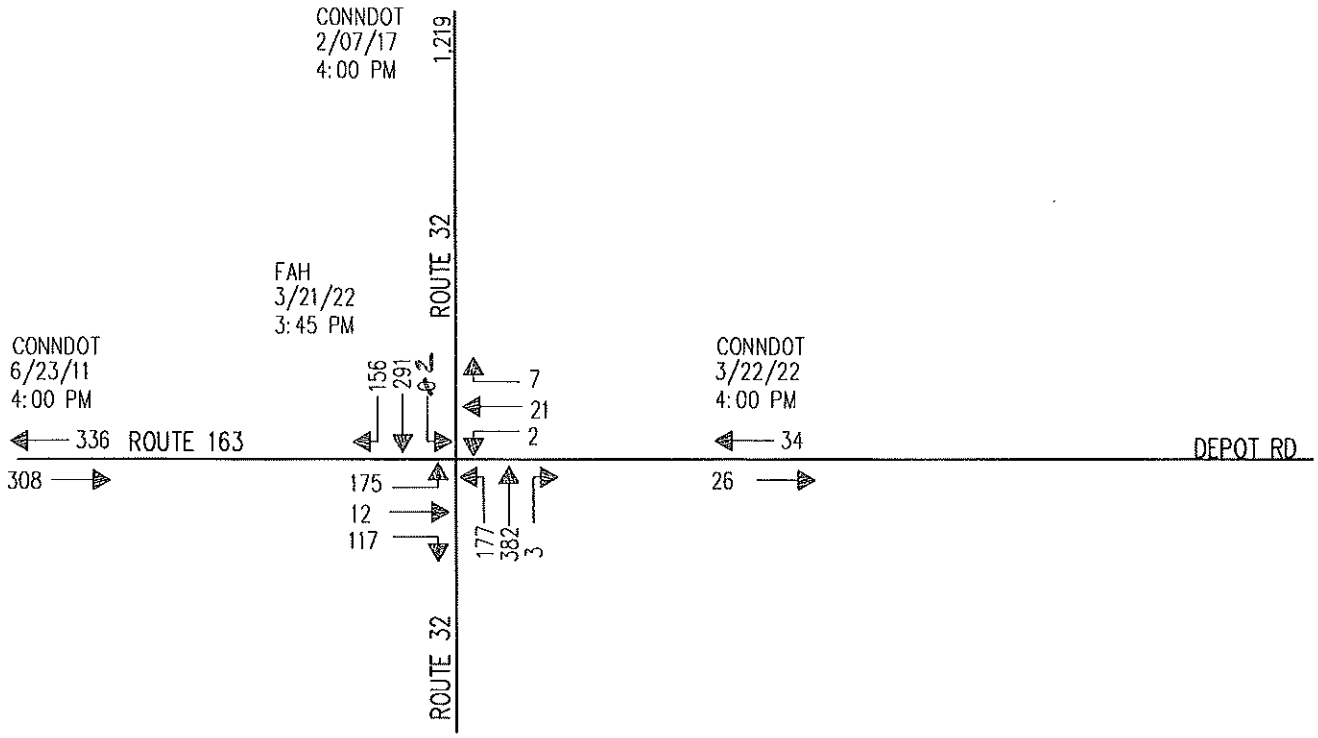
Start	21-Mar-22		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	3	1	1	0	5	2	0	0	*	*	*	*	2	1
01:00	*	*	1	0	1	1	0	3	1	0	*	*	*	*	1	1
02:00	*	*	0	0	3	1	1	3	0	0	*	*	*	*	1	1
03:00	*	*	2	0	1	0	1	0	1	0	*	*	*	*	1	0
04:00	*	*	1	3	0	0	0	3	1	2	*	*	*	*	0	2
05:00	*	*	4	5	3	4	4	5	2	4	*	*	*	*	3	4
06:00	*	*	11	12	13	5	13	7	17	9	*	*	*	*	14	8
07:00	*	*	14	15	9	23	12	18	11	28	*	*	*	*	12	21
08:00	*	*	14	17	9	13	15	13	18	26	*	*	*	*	14	17
09:00	*	*	9	10	15	15	8	11	4	9	*	*	*	*	9	11
10:00	*	*	8	12	15	10	6	12	0	0	*	*	*	*	7	8
11:00	*	*	23	20	19	20	17	21	*	*	*	*	*	*	20	20
12:00 PM	*	*	18	17	14	20	15	14	*	*	*	*	*	*	16	17
01:00	*	*	23	17	15	15	11	18	*	*	*	*	*	*	16	17
02:00	9	7	20	29	11	18	16	22	*	*	*	*	*	*	14	19
03:00	13	33	19	34	19	29	22	25	*	*	*	*	*	*	18	30
04:00	20	21	26	34	17	21	16	17	*	*	*	*	*	*	20	23
05:00	19	16	14	23	19	18	16	27	*	*	*	*	*	*	17	21
06:00	19	18	9	12	21	8	7	6	*	*	*	*	*	*	14	11
07:00	10	6	11	7	3	6	5	3	*	*	*	*	*	*	7	6
08:00	4	2	5	2	4	4	4	3	*	*	*	*	*	*	4	3
09:00	4	2	4	3	8	5	3	1	*	*	*	*	*	*	5	3
10:00	3	1	2	1	3	4	5	2	*	*	*	*	*	*	3	2
11:00	0	1	5	0	0	0	1	2	*	*	*	*	*	*	2	1
Lane	101	107	246	274	223	240	203	238	55	78	0	0	0	0	220	247
Day	208		520		463		441		133		0		0		467	
AM Peak	-	-	11:00	11:00	11:00	07:00	11:00	11:00	08:00	07:00	-	-	-	-	11:00	07:00
Vol.	-	-	23	20	19	23	17	21	18	28	-	-	-	-	20	21
PM Peak	16:00	15:00	16:00	15:00	18:00	15:00	15:00	17:00	-	-	-	-	-	-	16:00	15:00
Vol.	20	33	26	34	21	29	22	27	-	-	-	-	-	-	20	30

Comb. Total	208	520	463	441	133	0	0	467

ADT ADT 468 AADT 468



A.M. PEAK HOUR



P.M. PEAK HOUR

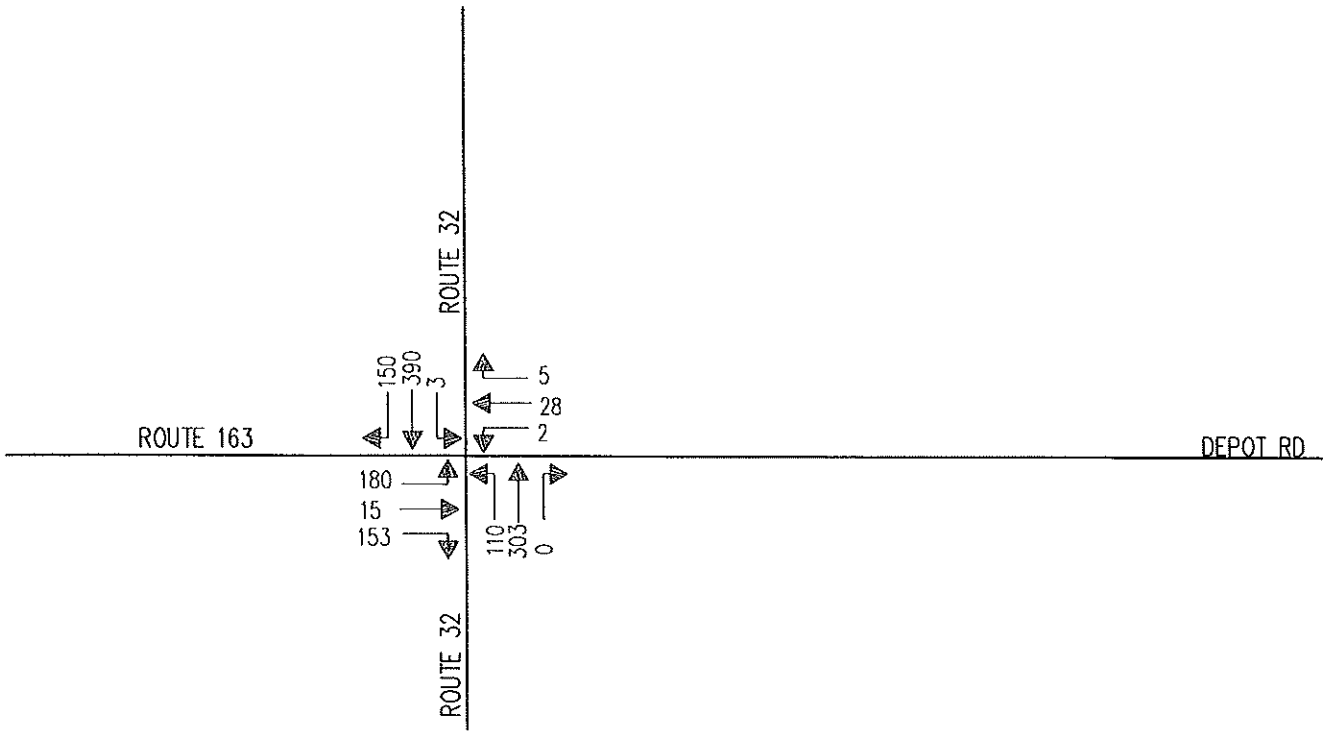
FIGURE 2 1-13-2022

OBSERVED TRAFFIC VOLUMES
A.M. & P.M. PEAK HOURS

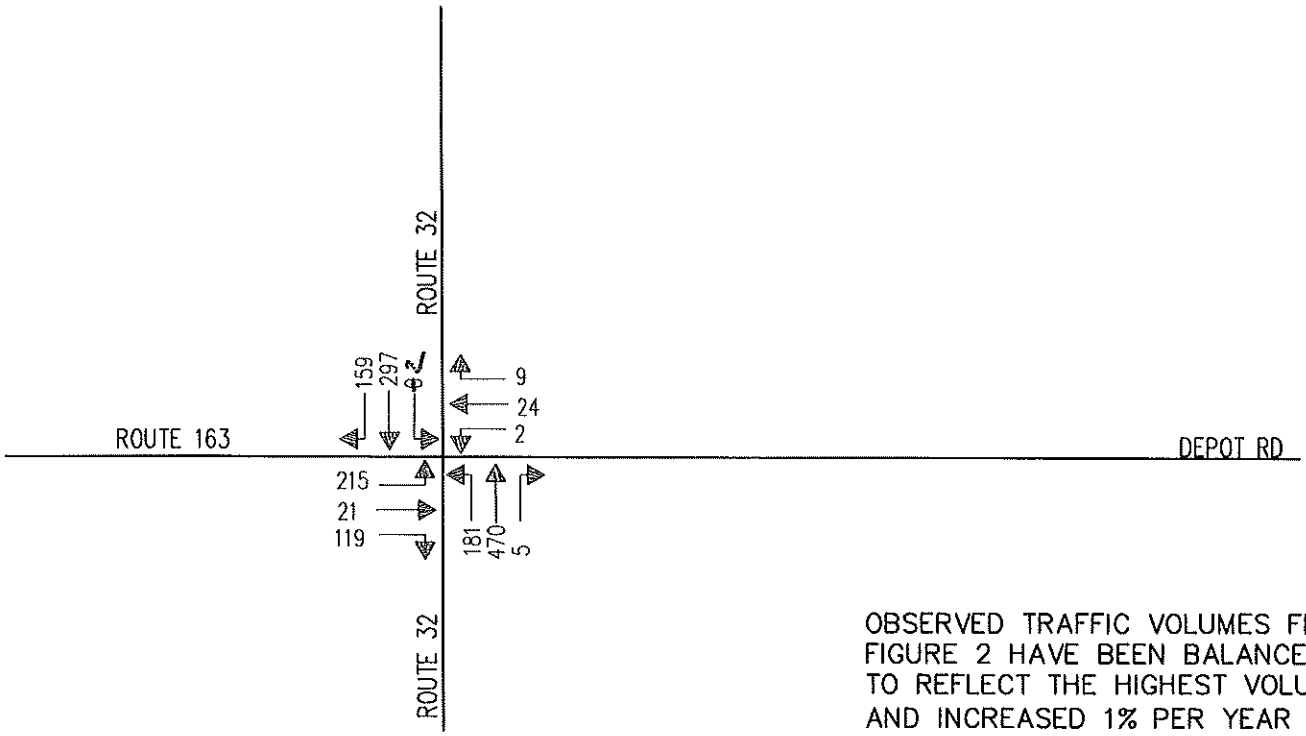
SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE



A.M. PEAK HOUR



P.M. PEAK HOUR

OBSERVED TRAFFIC VOLUMES FROM FIGURE 2 HAVE BEEN BALANCED TO REFLECT THE HIGHEST VOLUMES AND INCREASED 1% PER YEAR (2% TOTAL) TO PROVIDE THE 2024 BACKGROUND TRAFFIC VOLUMES.

FIGURE 3 1-13-2022

2024 EXISTING TRAFFIC VOLUMES
A.M. & P.M. PEAK HOURS

SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
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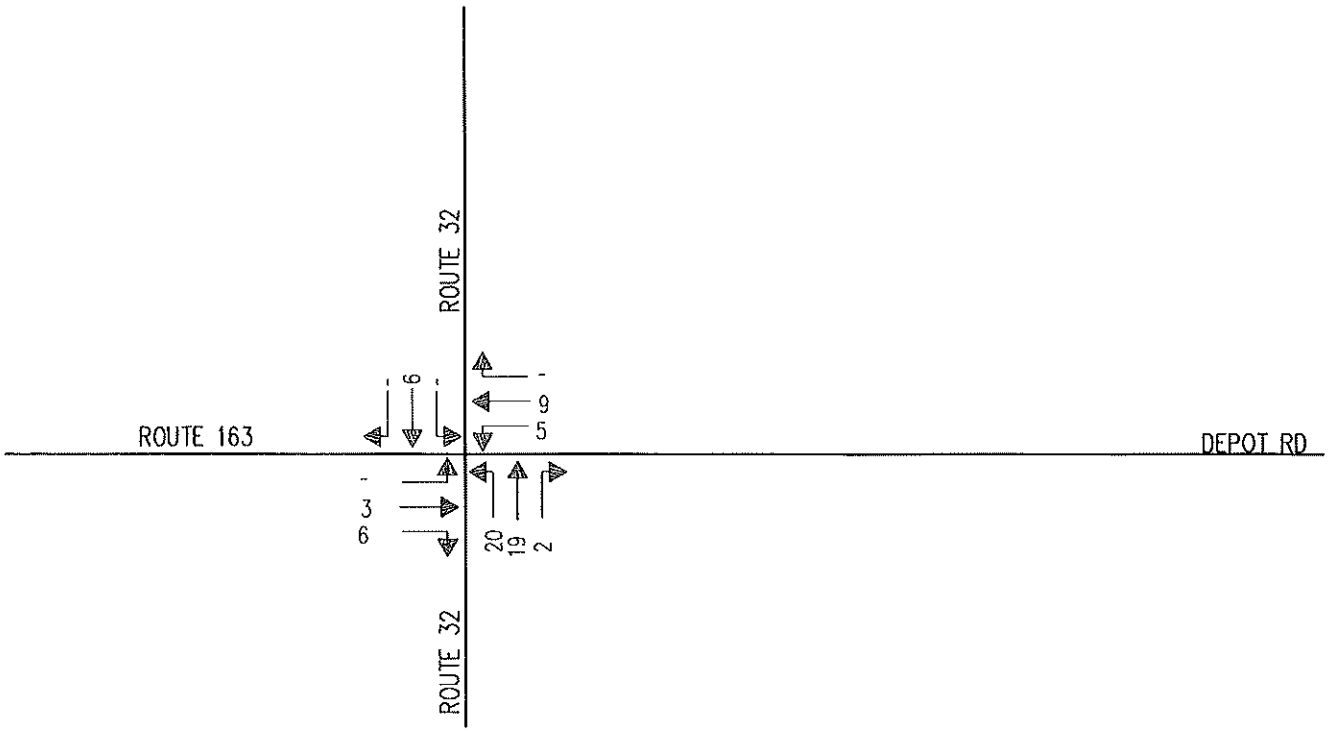
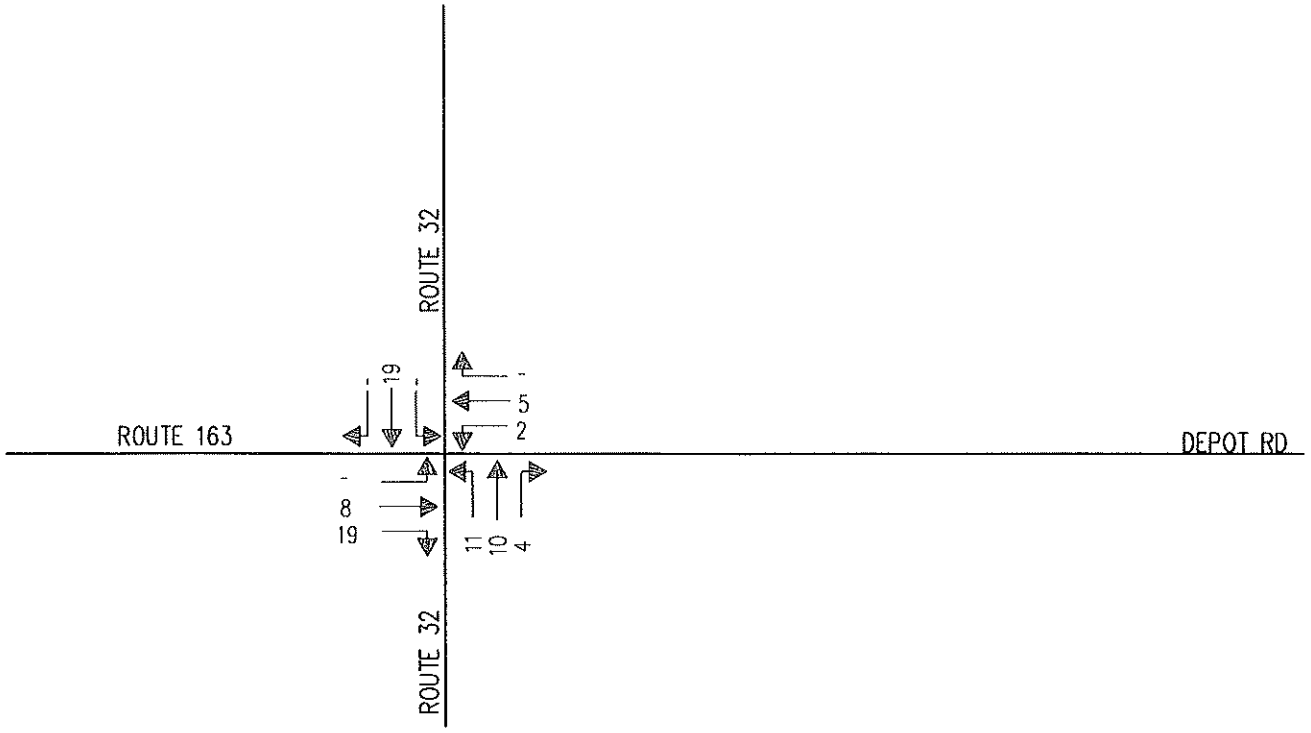
NOT TO SCALE



A.M. PEAK HOUR



P.M. PEAK HOUR

FIGURE 4 1-13-2022

COMBINED TRAFFIC VOLUMES
OTHER APPROVED DEVELOPMENTS
A.M. & P.M. PEAK HOURS
SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
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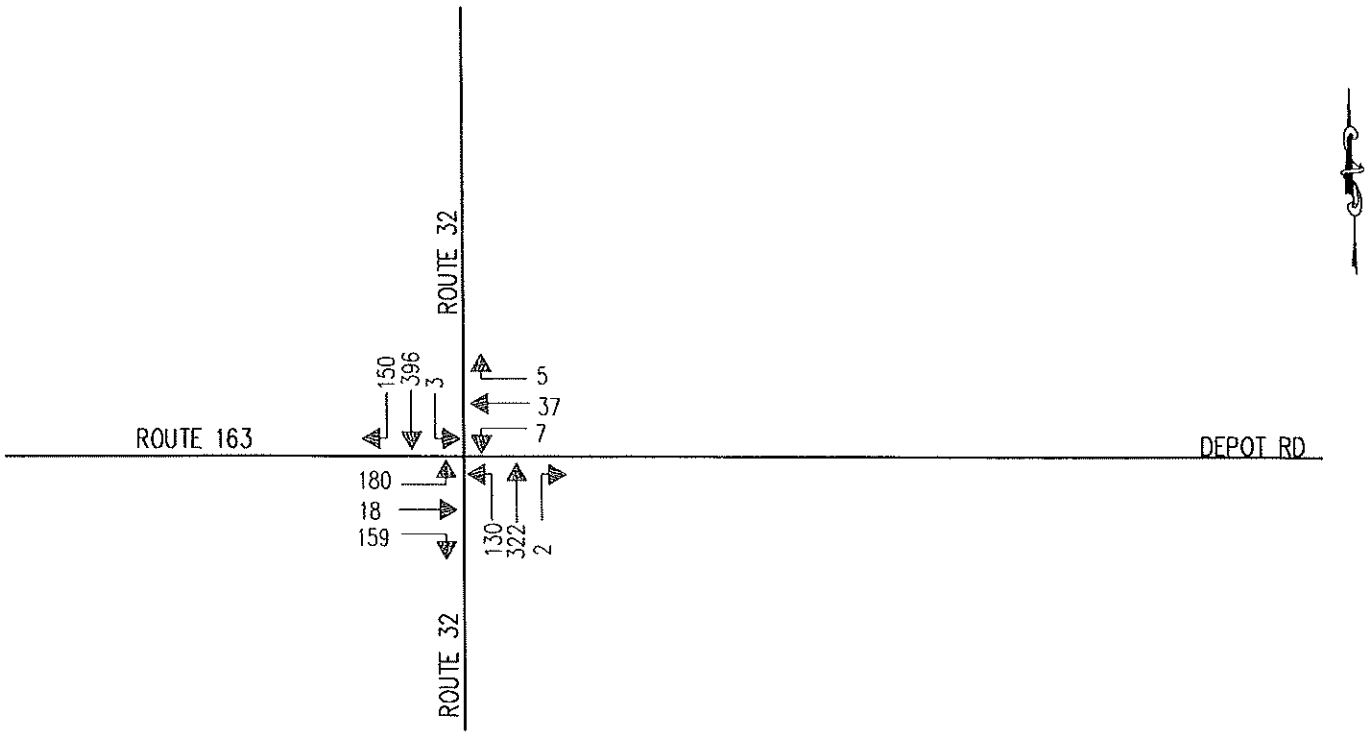
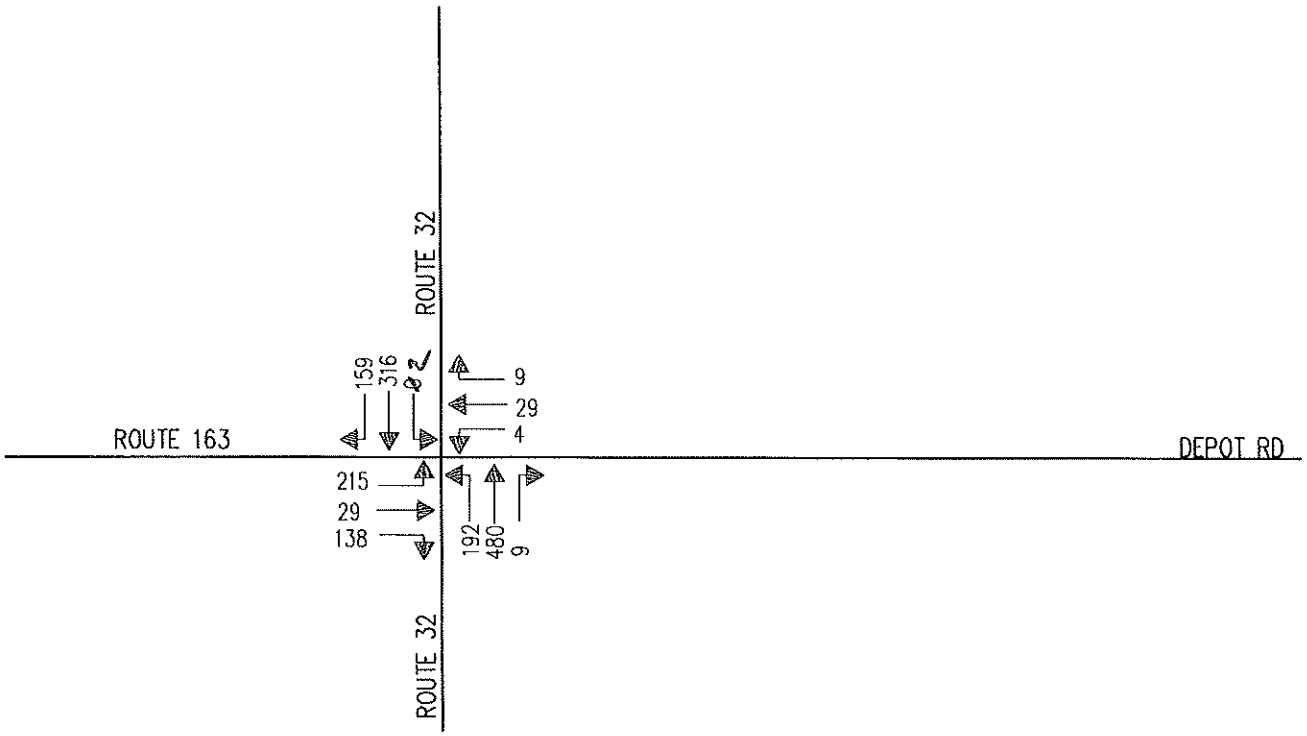


A.M. PEAK HOUR



P.M. PEAK HOUR

EXISTING TRAFFIC VOLUMES FROM FIGURE 2 PLUS OTHER DEVELOPMENT TRAFFIC FROM FIGURE 3.

FIGURE 5

2024 BACKGROUND TRAFFIC VOLUMES
A.M. & P.M. PEAK HOURS

SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

1-13-2022

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
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NOT TO SCALE

Table 4
Trip Generation Summary
Salt / Sand Storage Facility
Montville, CT

Land Use	ADT	A.M. Peak Hour			P.M. Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Proposed Development							
Summer Operations	40	6	1	7	1	6	7
Winter Operations	120	15	10	25	10	15	25
Pre-Storm Operations	420	35	30	65	30	35	65

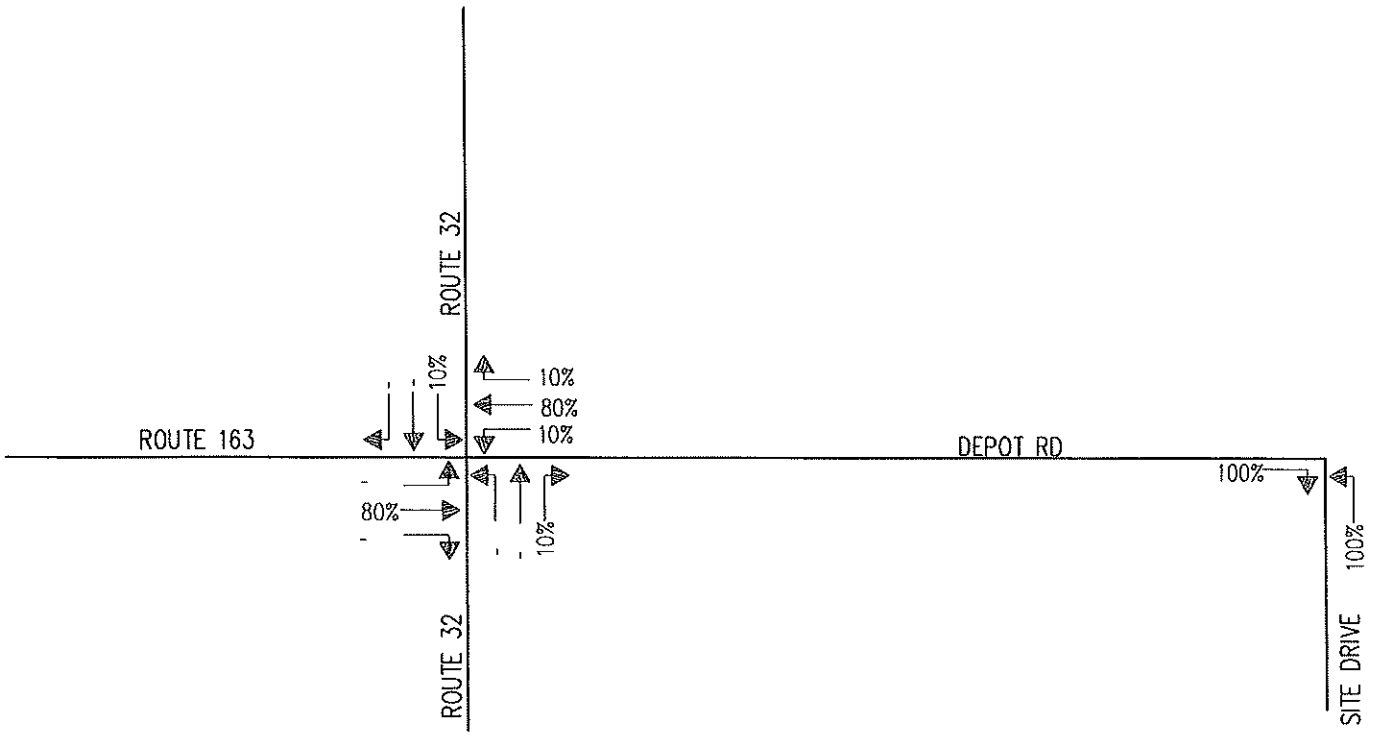

FIGURE 6 1-13-2022

DIRECTIONAL DISTRIBUTION OF
SITE GENERATED TRAFFIC VOLUMES
ALL PEAK HOURS
SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
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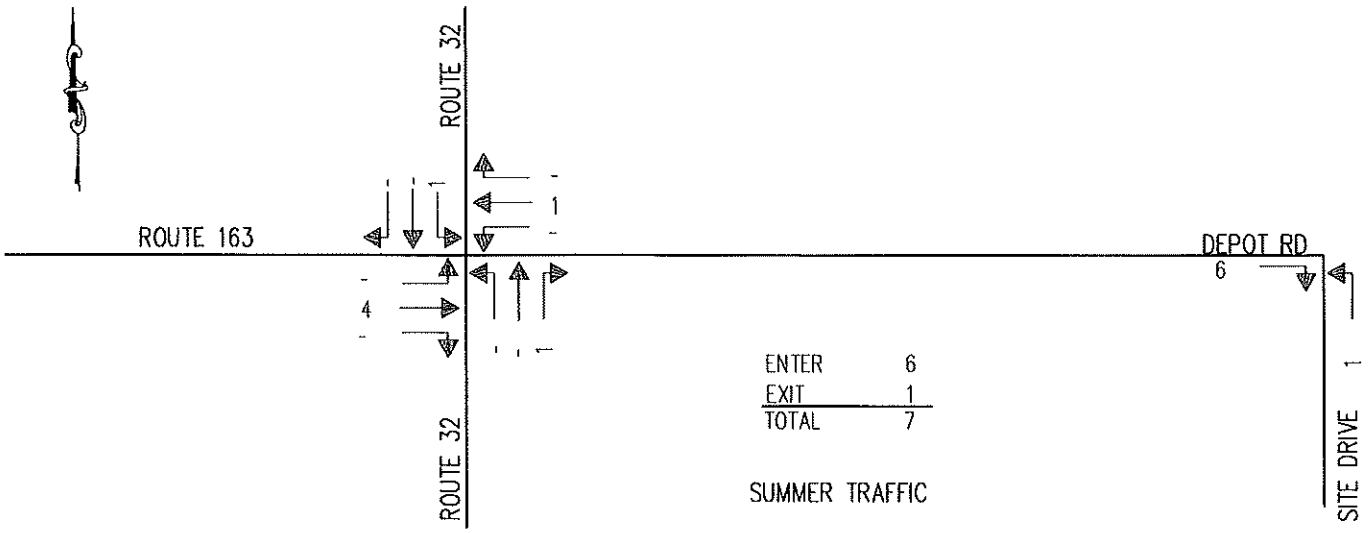
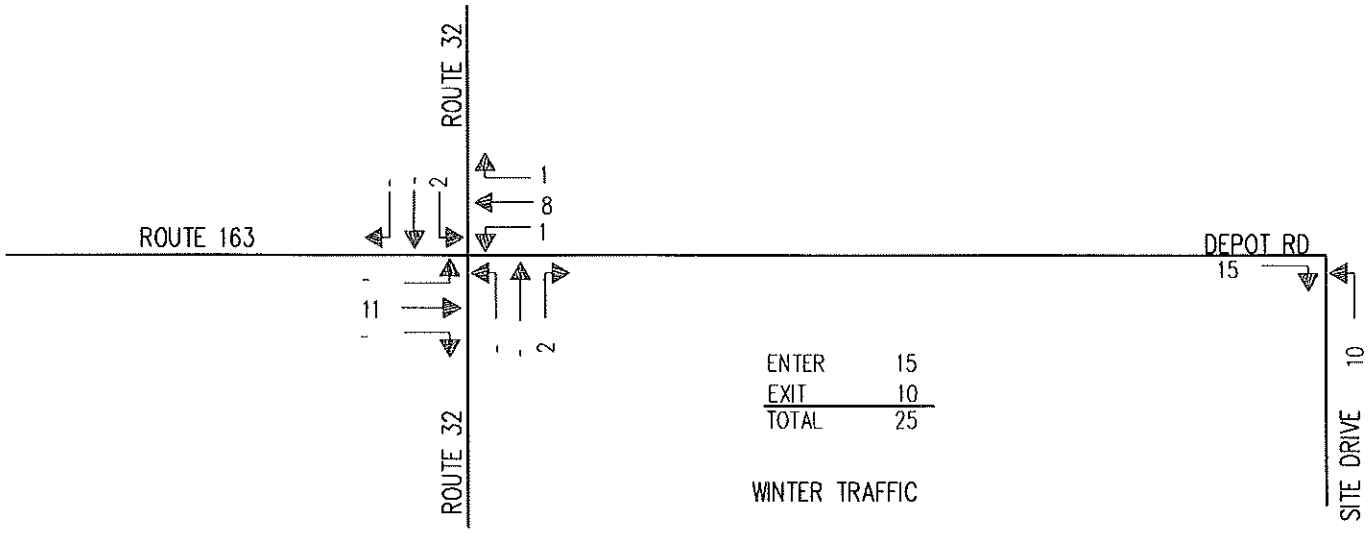
NOT TO SCALE





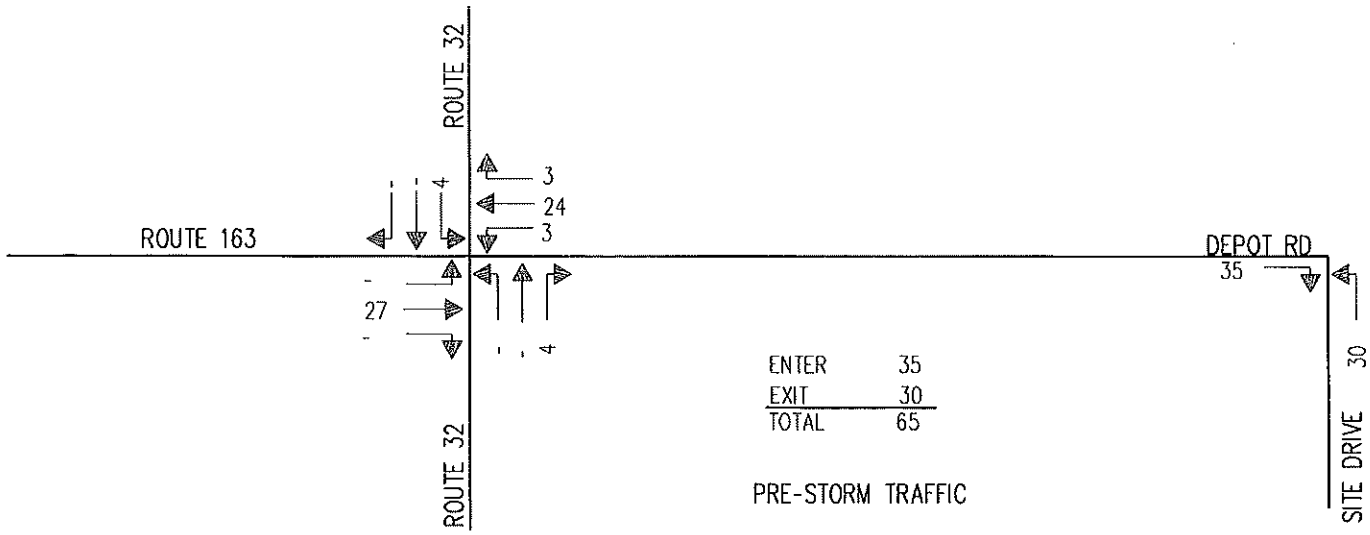


FIGURE 5

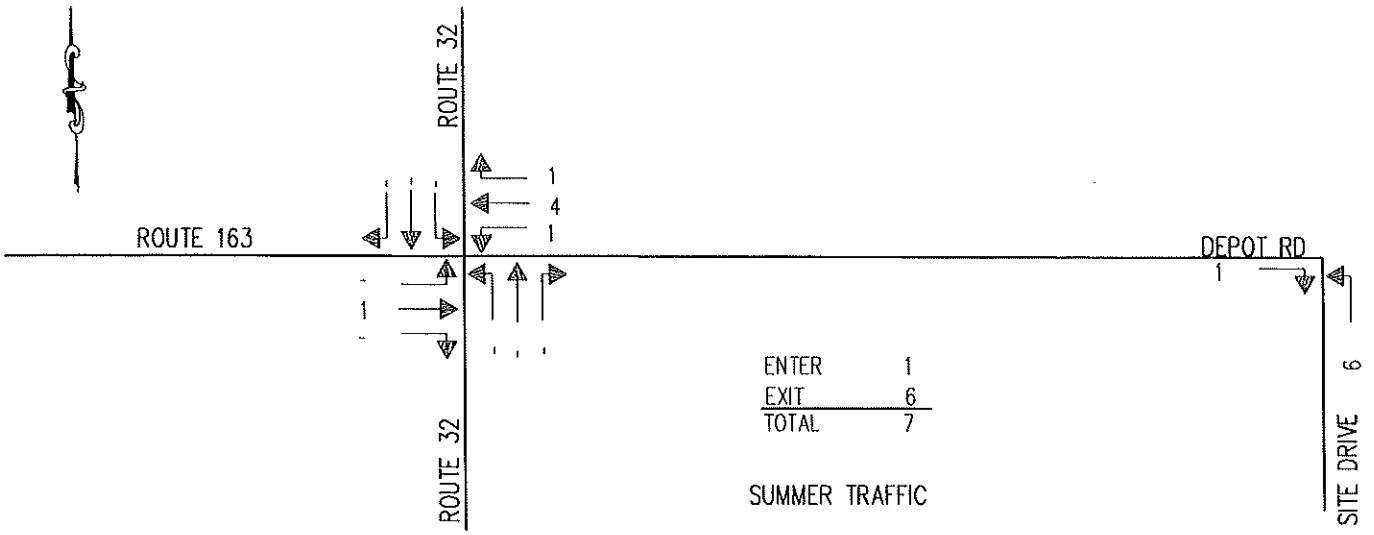
1-13-2022

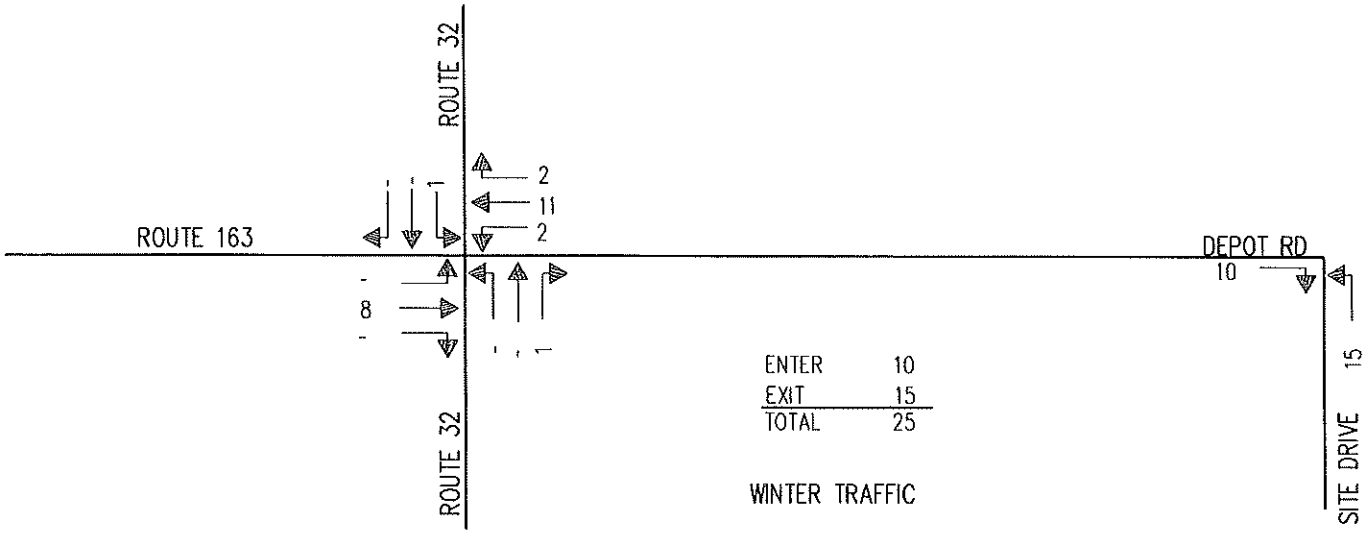
SITE GENERATED TRAFFIC
A.M. PEAK HOURS

SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE





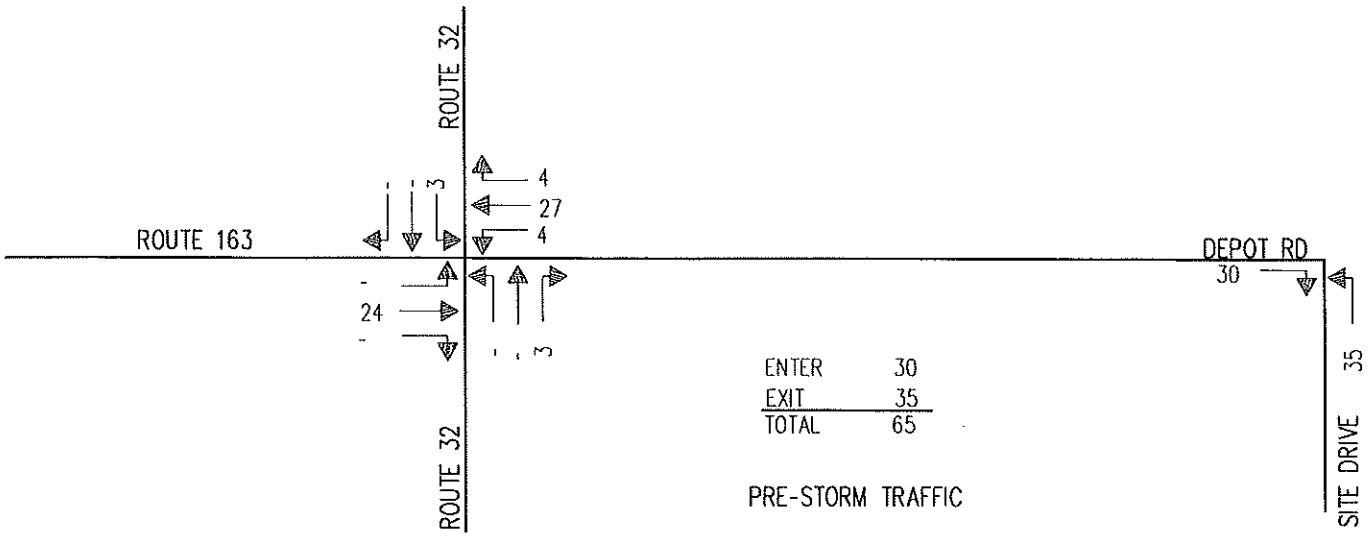


FIGURE 8

1-13-2022

SITE GENERATED TRAFFIC
P.M. PEAK HOURS

SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE

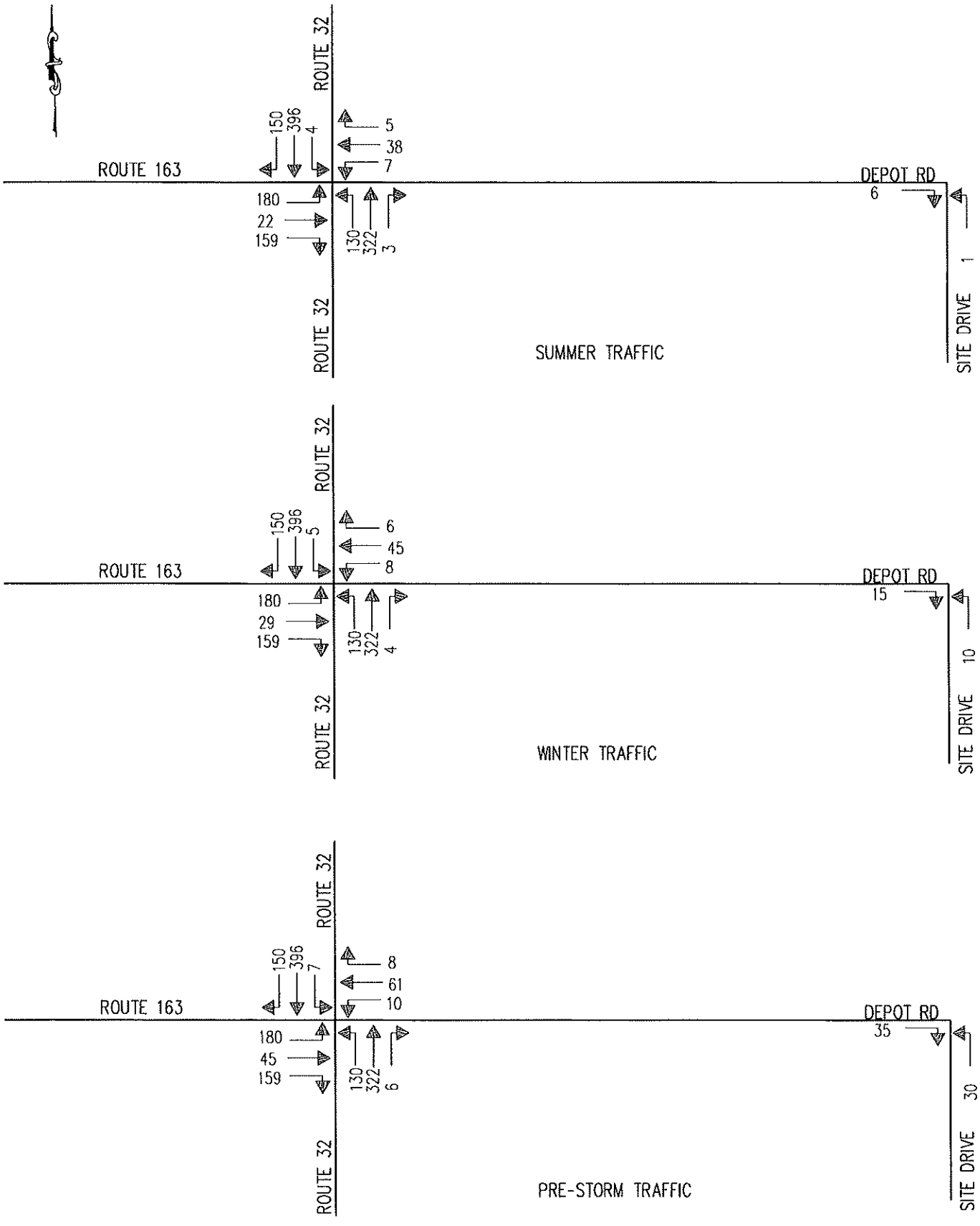


FIGURE 9

1-13-2022

2024 COMBINED TRAFFIC
A.M. PEAK HOURS

SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE

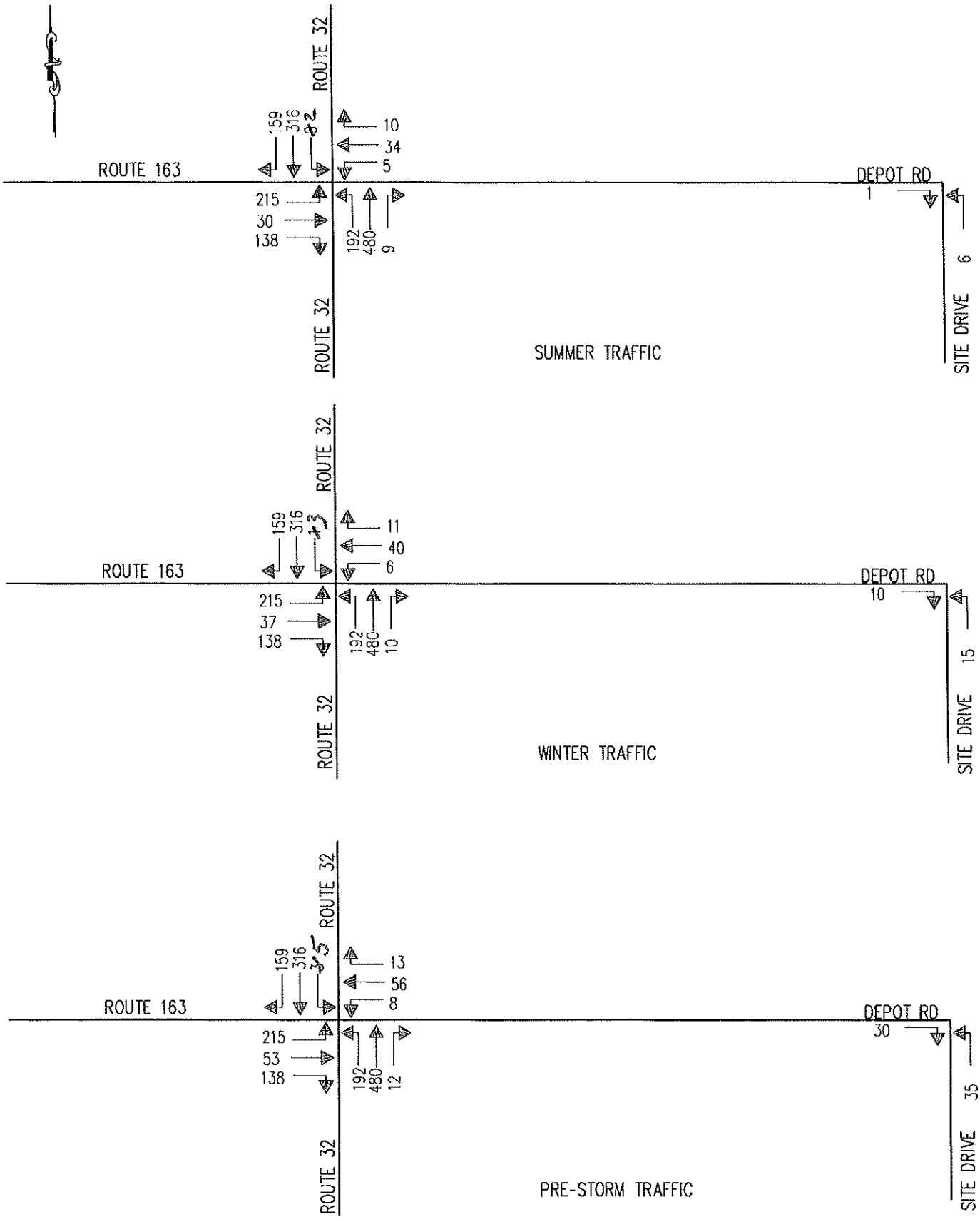


FIGURE 8 10

1-13-2022

2024 COMBINED TRAFFIC
P.M. PEAK HOURS

SALT STORAGE FACILITY
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026

FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE

Table 5

Level of Service Summary

Proposed Salt Storage Facility
Depot Road - Montville, CT

Time Period		A.M. Peak Hour								P.M. Peak Hour							
		Background Traffic				Combined Traffic				Background Traffic				Combined Traffic			
		LOS	delay	v/c	Queue	LOS	delay	v/c	Queue	LOS	delay	v/c	Queue	LOS	delay	v/c	Queue
Route 32 at Route 163 & Depot Road																	
EB	Left	C	25.2	0.47	134	C	26.4	0.51	137	C	26.8	0.52	158	C	26.1	0.50	157
	Thru/Right	A	5.6	0.33	41	A	6.9	0.36	55	A	6.5	0.28	51	A	8.1	0.31	66
WB		B	18.2	0.13	37	B	19.2	0.21	54	B	15.7	0.10	32	B	17.5	0.17	54
NB		B	17.7	0.80	#394	B	19.6	0.82	#420	D	35.5	0.98	#632	D	42.4	1.00	#660
SB		B	16.4	0.65	324	B	17.4	0.67	347	B	12.9	0.50	249	B	13.6	0.51	264
	Overall:	B	16.7	0.80		B	17.9	0.82		C	23.8	0.98		C	26.6	1.00	

APPENDIX

Manual Turning Movement Counts

F.A. Hesketh & Associates, Inc.
3 Creamery Brook
East Granby, CT 06026
Phone: (860) 653-8000

Route 163/Depot Rd
at Route 32
Montville, CT 06382
Job No. 22028

File Name : PM Count
Site Code : 00011111
Start Date : 3/21/2022
Page No : 1

Groups Printed- Unshifted

	Route 32 From North				Depot Rd From East				Route 32 From South				Route 163 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
03:30 PM	34	84	0	118	1	9	1	11	0	103	34	137	25	4	42	71	337
03:45 PM	40	66	0	106	1	9	0	10	1	101	30	132	29	2	39	70	318
Total	74	150	0	224	2	18	1	21	1	204	64	269	54	6	81	141	655
04:00 PM	54	67	0	121	1	6	2	9	0	89	51	140	29	4	44	77	347
04:15 PM	24	83	0	107	1	3	0	4	1	97	42	140	30	4	38	72	323
04:30 PM	38	75	0	113	4	3	0	7	1	95	54	150	29	2	54	85	355
04:45 PM	37	54	1	92	1	2	1	4	0	91	30	121	19	7	34	60	277
Total	153	279	1	433	7	14	3	24	2	372	177	551	107	17	170	294	1302
05:00 PM	44	88	0	132	0	3	0	3	0	78	34	112	35	1	43	79	326
05:15 PM	25	71	0	96	1	3	0	4	3	90	41	134	32	5	47	84	318
Grand Total	296	588	1	885	10	38	4	52	6	744	316	1066	228	29	341	598	2601
Apprch %	33.4	66.4	0.1		19.2	73.1	7.7		0.6	69.8	29.6		38.1	4.8	57.0		
Total %	11.4	22.6	0.0	34.0	0.4	1.5	0.2	2.0	0.2	28.6	12.1	41.0	8.8	1.1	13.1	23.0	

	Route 32 From North				Depot Rd From East				Route 32 From South				Route 163 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 03:30 PM to 05:15 PM - Peak 1 of 1																	
Intersection	03:45 PM																
Volume	156	291	0	447	7	21	2	30	3	382	177	562	117	12	175	304	1343
Percent	34.9	65.1	0.0		23.3	70.0	6.7		0.5	68.0	31.5		38.5	3.9	57.6		
04:30 Volume	38	75	0	113	4	3	0	7	1	95	54	150	29	2	54	85	355
Peak Factor																	0.946
High Int.	04:00 PM				03:45 PM				04:30 PM				04:30 PM				
Volume	54	67	0	121	1	9	0	10	1	95	54	150	29	2	54	85	
Peak Factor				0.924				0.750				0.937				0.894	

Peak Hour From 03:30 PM to 05:15 PM - Peak 1 of 1

By Approach	03:30 PM				03:30 PM				03:45 PM				04:30 PM				
Volume	152	300	0	452	4	27	3	34	3	382	177	562	115	15	178	308	
Percent	33.6	66.4	0.0		11.8	79.4	8.8		0.5	68.0	31.5		37.3	4.9	57.8		
High Int.	04:00 PM				03:30 PM				04:30 PM				04:30 PM				
Volume	54	67	0	121	1	9	1	11	1	95	54	150	29	2	54	85	
Peak Factor				0.934				0.773				0.937				0.906	

F.A. Hesketh & Associates, Inc.
3 Creamery Brook
East Granby, CT 06026
Phone: (860) 653-8000

Route 163/Depot Rd
at Route 32
Montville, CT 06382
Job No. 22028

File Name : AM Count
Site Code : 02203466
Start Date : 3/25/2022
Page No : 1

Groups Printed- Unshifted

	Route 32 From North				Depot Rd From East				Route 32 From South				Route 163 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	24	42	0	66	0	5	0	5	0	44	14	58	11	0	17	28	157
07:15 AM	24	43	0	67	0	3	1	4	1	66	16	83	25	1	37	63	217
07:30 AM	43	87	1	131	1	7	0	8	0	96	31	127	27	1	59	87	353
07:45 AM	29	105	0	134	1	6	1	8	0	43	23	66	45	6	38	89	297
Total	120	277	1	398	2	21	2	25	1	249	84	334	108	8	151	267	1024
08:00 AM	27	71	1	99	0	4	0	4	0	50	30	80	38	3	34	75	258
08:15 AM	27	64	0	91	2	10	1	13	0	66	24	90	40	3	20	63	257
08:30 AM	21	60	0	81	0	3	0	3	0	42	24	66	24	3	34	61	211
08:45 AM	32	50	1	83	0	5	0	5	0	58	22	80	42	4	49	95	263
Total	107	245	2	354	2	22	1	25	0	216	100	316	144	13	137	294	989
Grand Total	227	522	3	752	4	43	3	50	1	465	184	650	252	21	288	561	2013
Apprch %	30.2	69.4	0.4		8.0	86.0	6.0		0.2	71.5	28.3		44.9	3.7	51.3		
Total %	11.3	25.9	0.1	37.4	0.2	2.1	0.1	2.5	0.0	23.1	9.1	32.3	12.5	1.0	14.3	27.9	

	Route 32 From North				Depot Rd From East				Route 32 From South				Route 163 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	126	327	2	455	4	27	2	33	0	255	108	363	150	13	151	314	1165
Percent	27.7	71.9	0.4		12.1	81.8	6.1		0.0	70.2	29.8		47.8	4.1	48.1		
07:30 Volume	43	87	1	131	1	7	0	8	0	96	31	127	27	1	59	87	353
Peak Factor																	0.825
High Int.	07:45 AM				08:15 AM				07:30 AM				07:45 AM				
Volume	29	105	0	134	2	10	1	13	0	96	31	127	45	6	38	89	
Peak Factor				0.849				0.635				0.715				0.882	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:30 AM				07:30 AM				07:30 AM				07:15 AM				
Volume	126	327	2	455	4	27	2	33	0	255	108	363	135	11	168	314	
Percent	27.7	71.9	0.4		12.1	81.8	6.1		0.0	70.2	29.8		43.0	3.5	53.5		
High Int.	07:45 AM				08:15 AM				07:30 AM				07:45 AM				
Volume	29	105	0	134	2	10	1	13	0	96	31	127	45	6	38	89	
Peak Factor				0.849				0.635				0.715				0.882	

ITE Trip Generation Worksheets

Other Developments

Graph Look Up

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

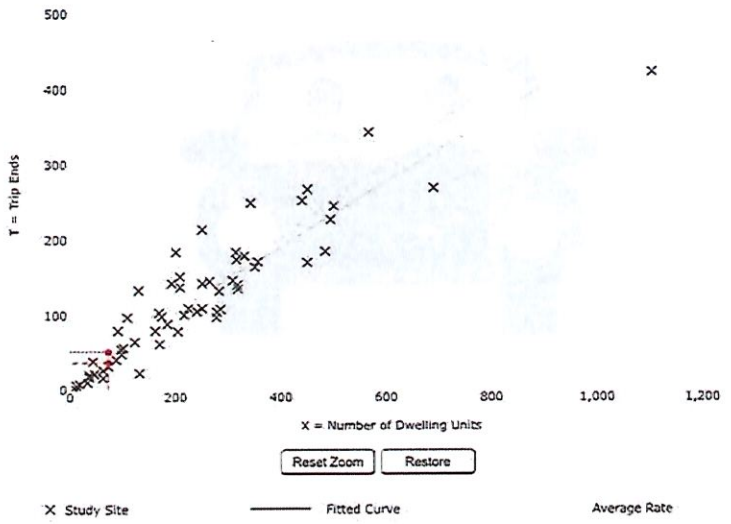
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffi

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
72 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
59

Avg. Num. of Dwelling Units:
241

Average Rate:
0.51

Range of Rates:
0.09 - 1.04

Standard Deviation:
0.15

Fitted Curve Equation:
T = 0.43(X) + 20.55

R^2:
0.84

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 37 (Total), 23 (Entry), 14 (Exit)
Fitted Curve: 52 (Total), 32 (Entry), 20 (Exit)

Graph Look Up

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

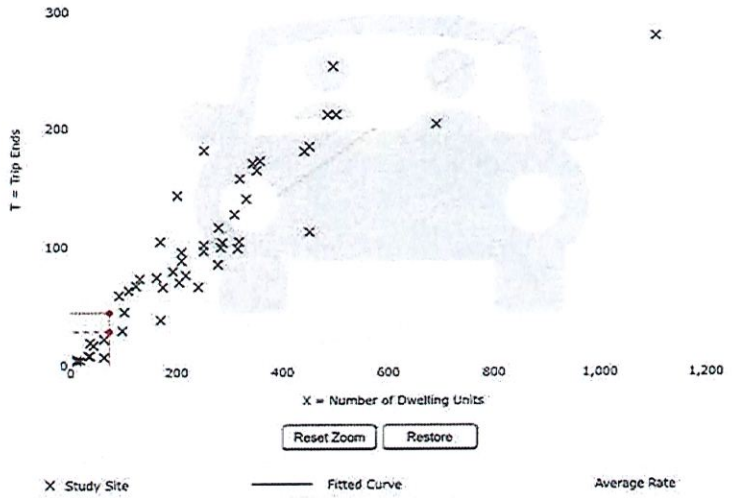
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffi

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
72 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
49

Avg. Num. of Dwelling Units:
249

Average Rate:
0.40

Range of Rates:
0.13 - 0.73

Standard Deviation:
0.12

Fitted Curve Equation:
T = 0.31(X) + 22.85

R^2:
0.79

Directional Distribution:
24% entering, 76% exiting

Calculated Trip Ends:
Average Rate: 29 (Total), 7 (Entry), 22 (Exit)
Fitted Curve: 45 (Total), 11 (Entry), 34 (Exit)

Graph Look Up

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

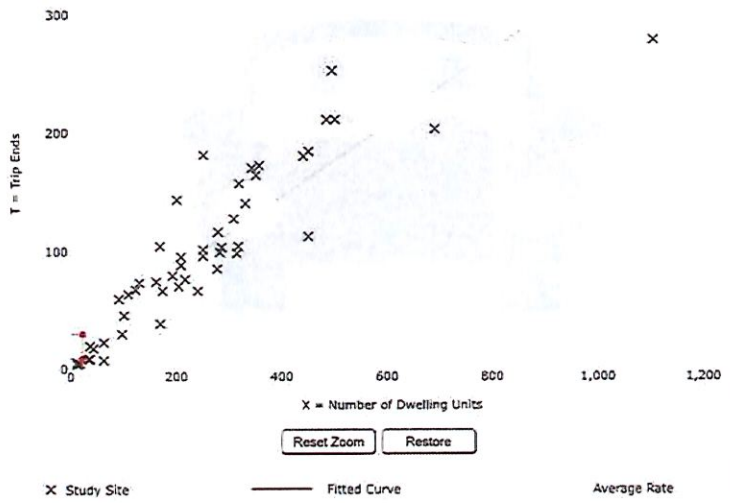
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffi

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
22 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
49

Avg. Num. of Dwelling Units:
249

Average Rate
0.40

Range of Rates:
0.13 - 0.73

Standard Deviation:
0.12

Fitted Curve Equation:
T = 0.31(X) + 22.85

R^2:
0.79

Directional Distribution:
24% entering, 76% exiting

Calculated Trip Ends:
Average Rate: 9 (Total), 2 (Entry), 7 (Exit)
Fitted Curve: 30 (Total), 7 (Entry), 23 (Exit)

Graph Look Up

Quick Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

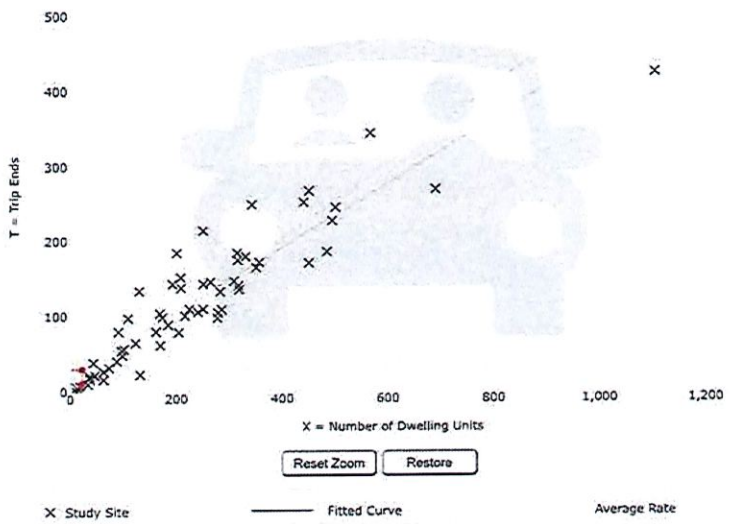
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffi

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
22 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
59

Avg. Num. of Dwelling Units:
241

Average Rate:
0.51

Range of Rates:
0.08 - 1.04

Standard Deviation:
0.15

Fitted Curve Equation:
T = 0.43(X) + 20.55

R^2:
0.84

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 11 (Total), 7 (Entry), 4 (Exit)
Fitted Curve: 30 (Total), 19 (Entry), 11 (Exit)

Graph Look Up

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

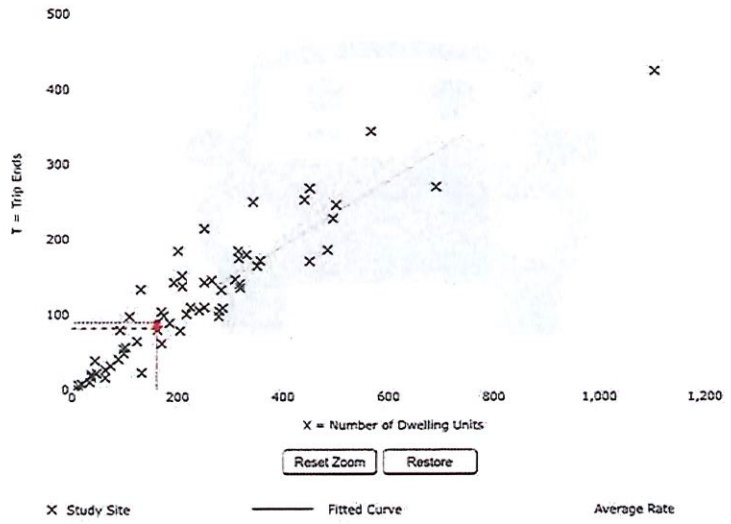
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffi

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
160 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
59

Avg. Num. of Dwelling Units:
241

Average Rate:
0.51

Range of Rates:
0.08 - 1.04

Standard Deviation:
0.15

Fitted Curve Equation:
T = 0.43(X) + 20.55

R^2:
0.84

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 82 (Total), 51 (Entry), 31 (Exit)
Fitted Curve: 89 (Total), 56 (Entry), 33 (Exit)

Graph Look Up

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

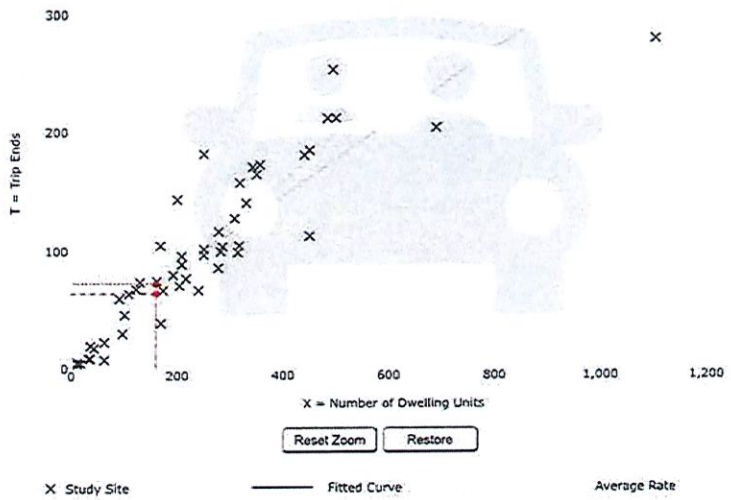
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffi

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
160 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
49

Avg. Num. of Dwelling Units:
249

Average Rate:
0.40

Range of Rates:
0.13 - 0.73

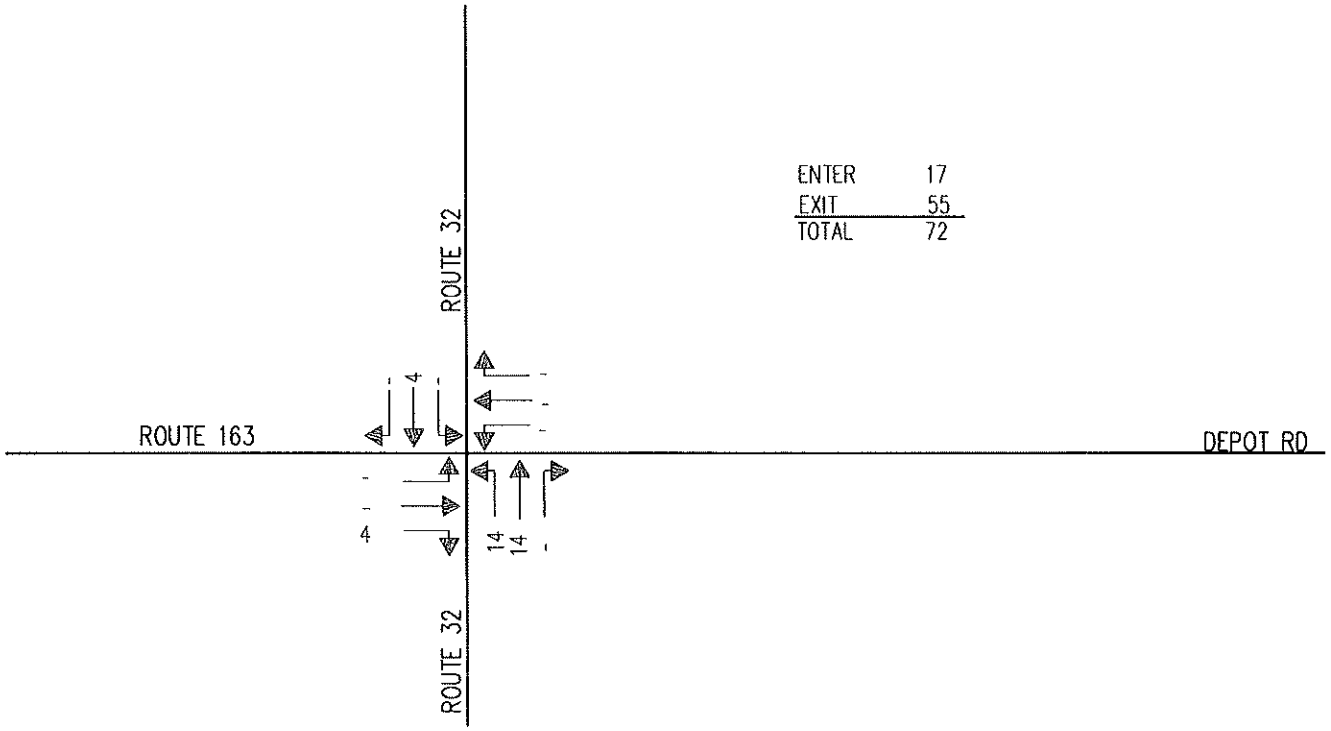
Standard Deviation:
0.12

Fitted Curve Equation:
T = 0.31(X) + 22.85

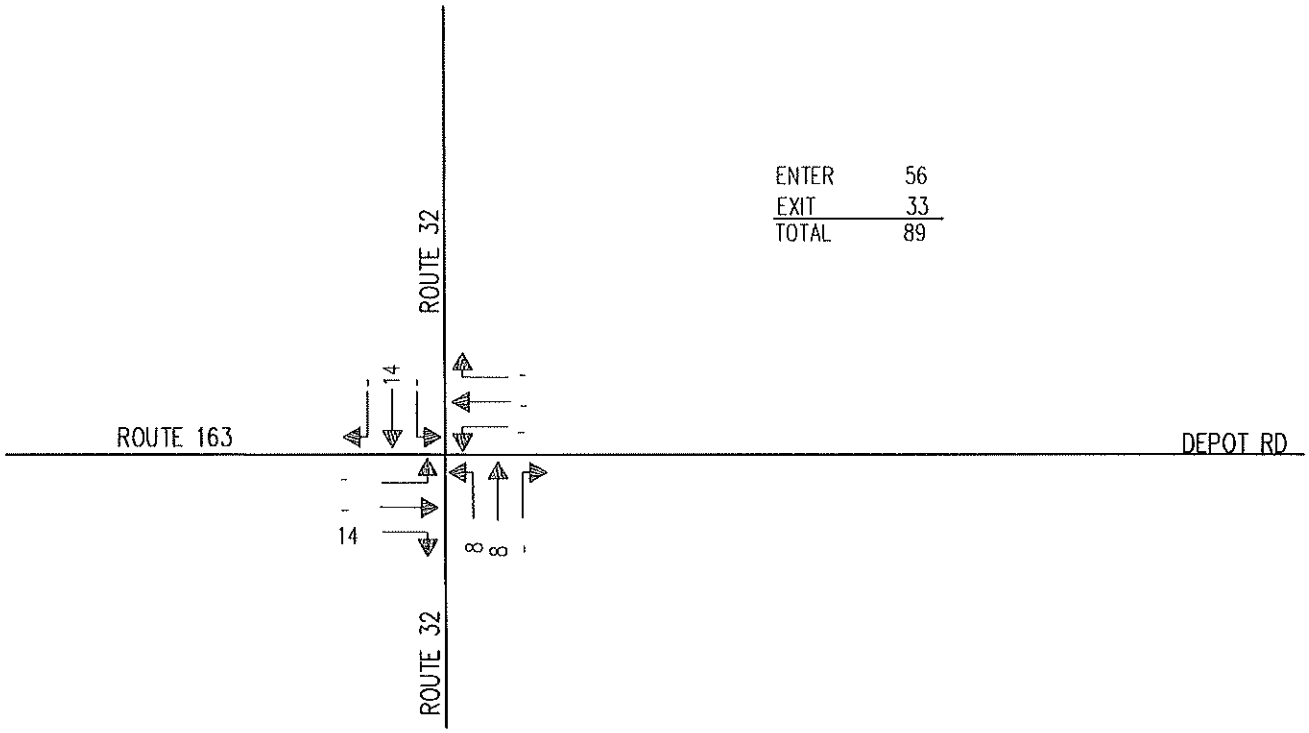
R^2:
0.79

Directional Distribution:
24% entering, 76% exiting

Calculated Trip Ends:
Average Rate: 64 (Total), 15 (Entry), 49 (Exit)
Fitted Curve: 72 (Total), 17 (Entry), 55 (Exit)



A.M. PEAK HOUR



P.M. PEAK HOUR

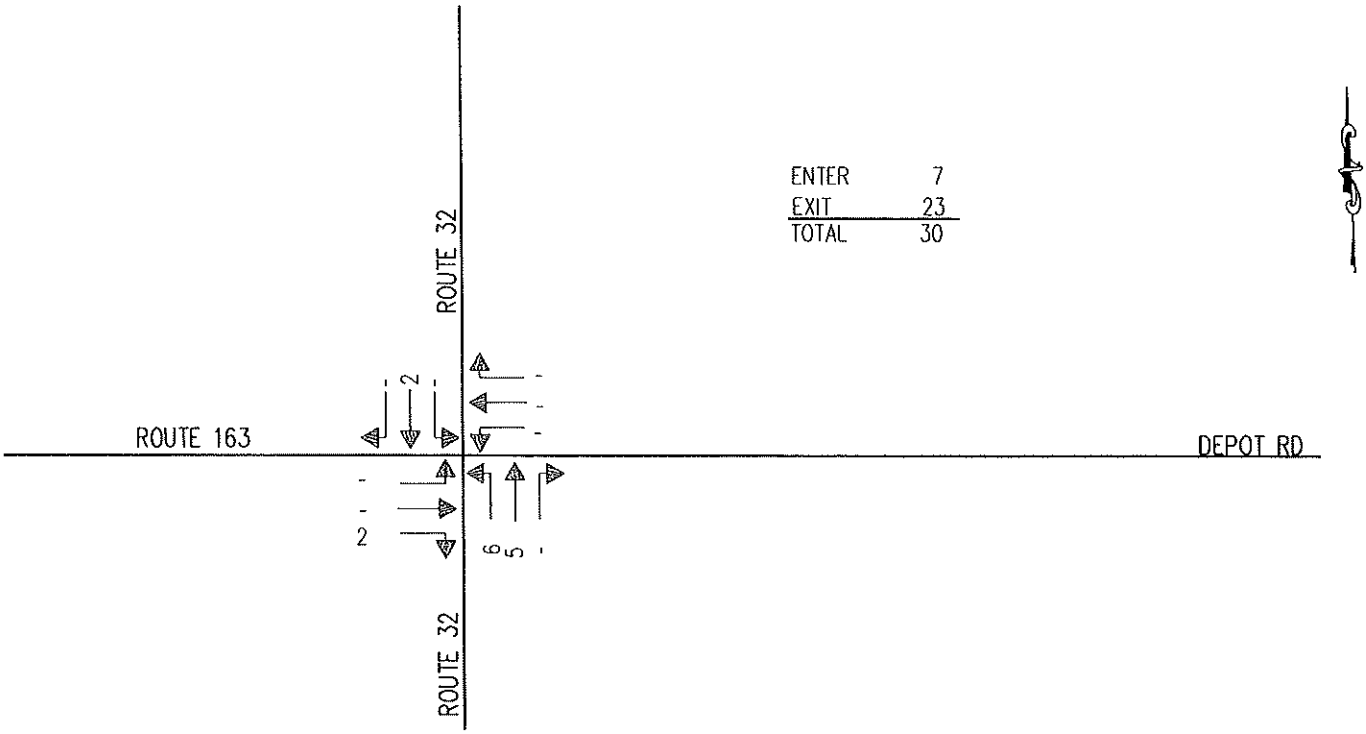
FIGURE A 1-13-2022

VILLAGE APARTMENTS TRAFFIC
A.M. & P.M. PEAK HOURS

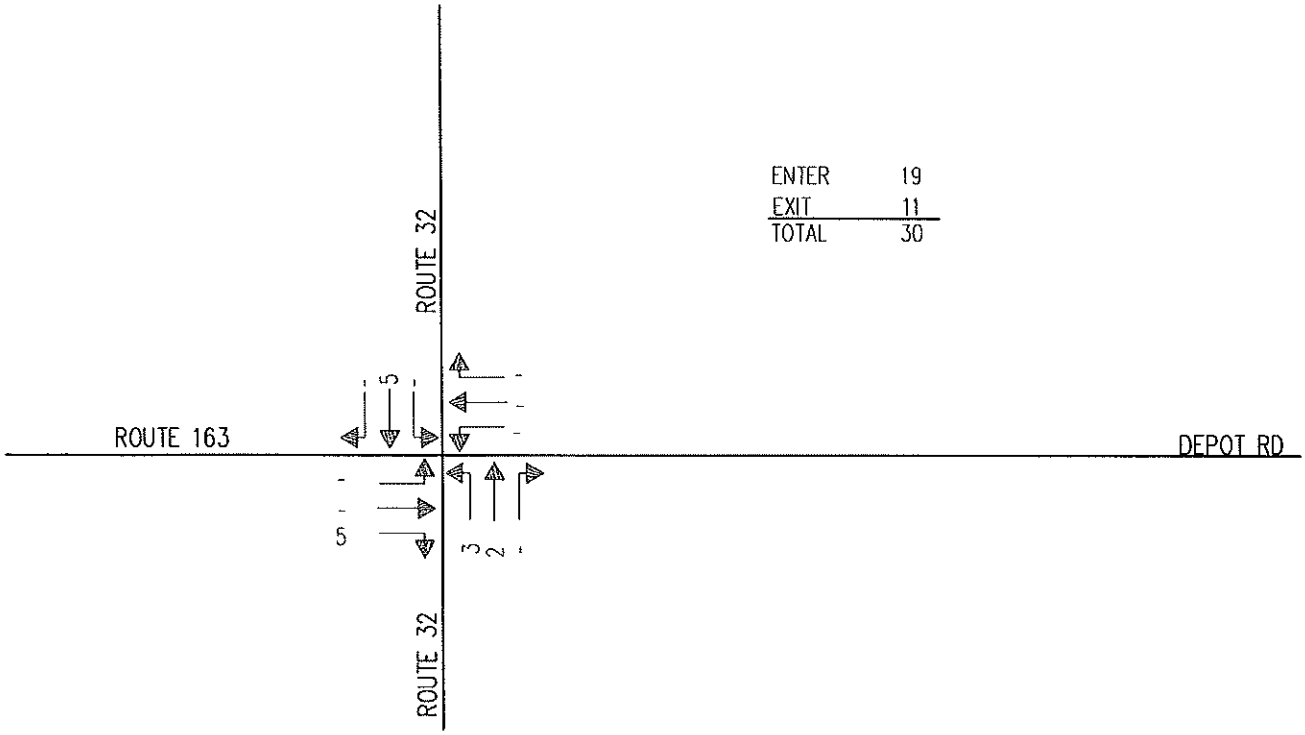
TRINITY HEALTH NEW ENGLAND
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE



A.M. PEAK HOUR



P.M. PEAK HOUR

FIGURE B 1-13-2022

245 ROUTE 32 TRAFFIC VOLUMES
A.M. & P.M. PEAK HOURS

TRINITY HEALTH NEW ENGLAND
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
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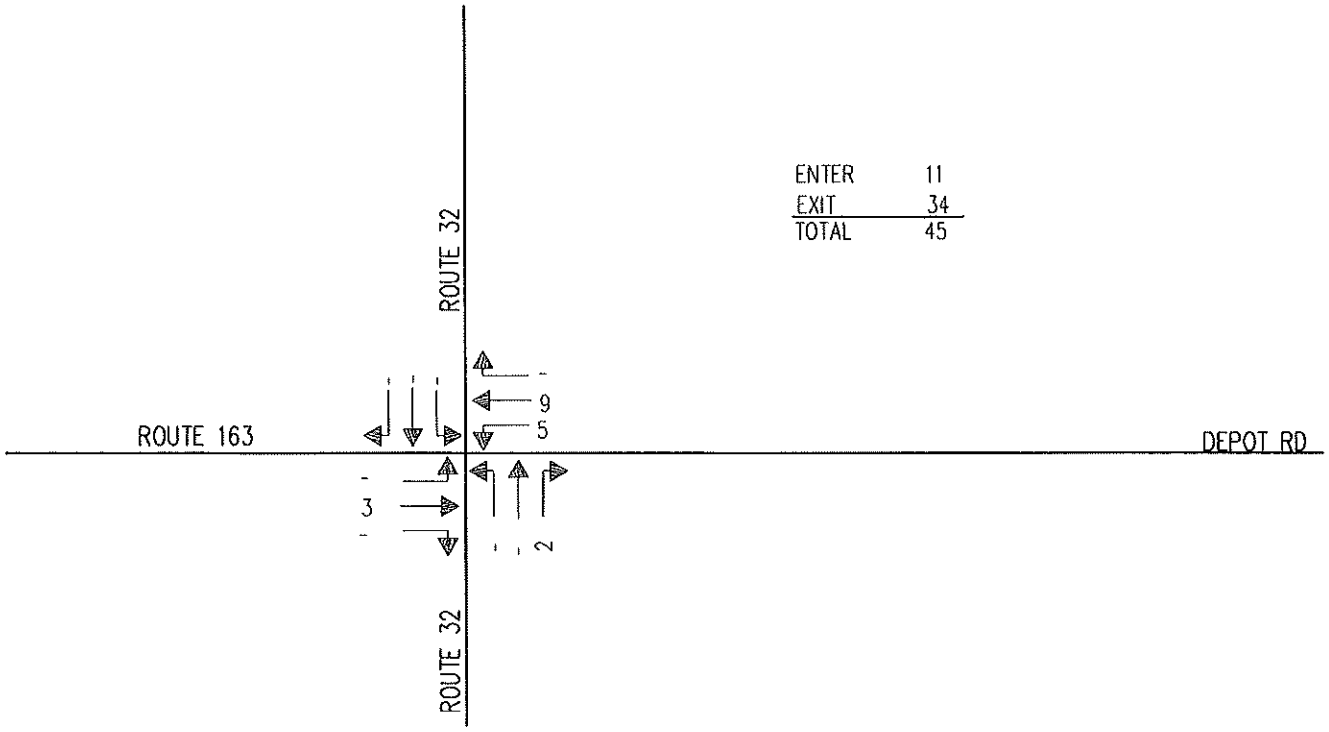
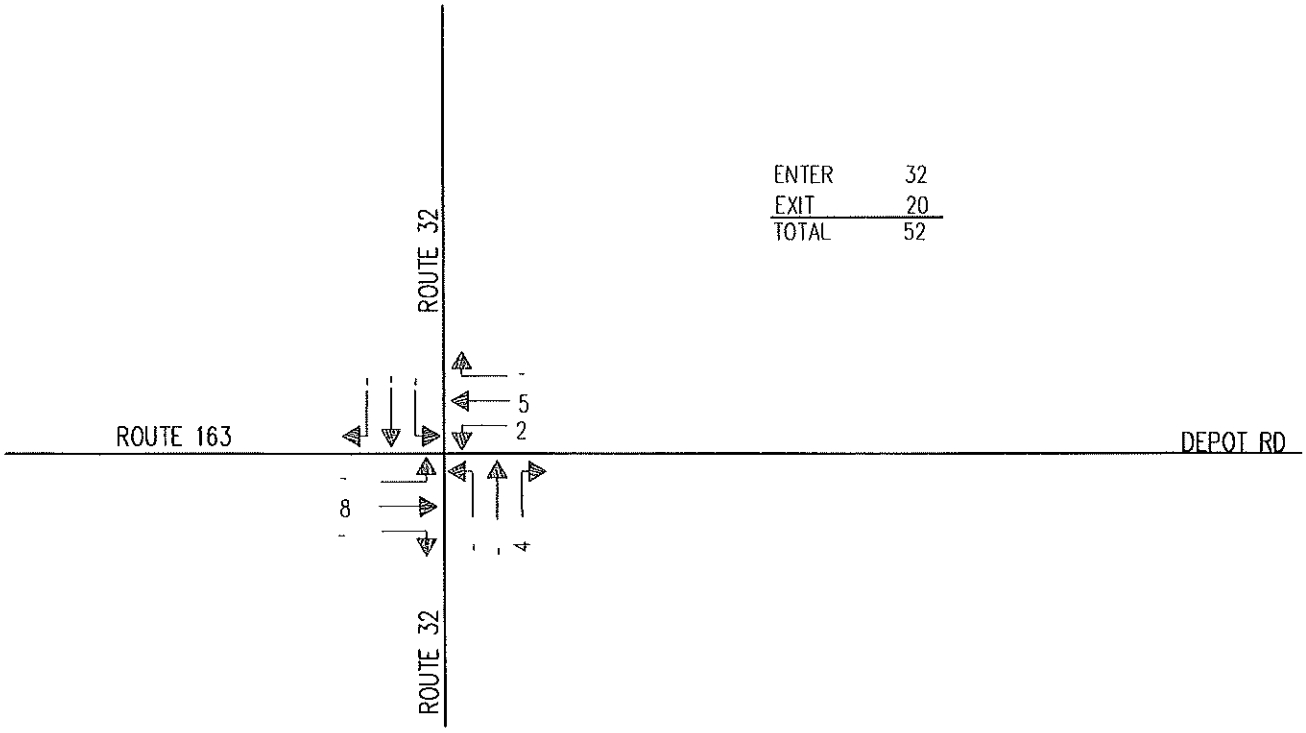


A.M. PEAK HOUR



P.M. PEAK HOUR

FIGURE C 1-13-2022

42 PINK ROW TRAFFIC VOLUMES
A.M. & P.M. PEAK HOURS

TRINITY HEALTH NEW ENGLAND
2 DEPOT ROAD
MONTVILLE, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026
FAH
TRAFFIC
PLANNING
ENGINEERING
DESIGN

NOT TO SCALE

SYNCHRO Capacity Analysis Worksheets

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	18	159	7	37	5	130	322	2	3	396	150
Future Volume (vph)	180	18	159	7	37	5	130	322	2	3	396	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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		0.865			0.986						0.963	
Flt Protected	0.950				0.993			0.986				
Satd. Flow (prot)	1770	1611	0	0	1824	0	0	1837	0	0	1794	0
Flt Permitted	0.766				0.956			0.653			0.998	
Satd. Flow (perm)	1427	1611	0	0	1756	0	0	1216	0	0	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		192			6						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		792			598			255			345	
Travel Time (s)		18.0			13.6			5.8			7.8	
Peak Hour Factor	0.83	0.83	0.83	0.64	0.64	0.64	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	217	22	192	11	58	8	157	388	2	4	477	181
Shared Lane Traffic (%)												
Lane Group Flow (vph)	217	214	0	0	77	0	0	547	0	0	662	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		4 9			4 9		3	2 3			2	
Permitted Phases	4 9	4 9		4 9	4 9		2			2		

Lane Group	Ø4	Ø9
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	4	9
Permitted Phases		