

## **TRAFFIC MANAGEMENT MEMORANDUM**

**To:** Sirwan Shahooei, PhD, PE, PTOE  
Senior Traffic Engineer  
City of Lewisville

**From:** Justin Taylor, PE, PTOE

**Date:** May 29, 2025

**Re:** Traffic Management Memorandum  
Proposed Warehouse  
421 Bennett Lane  
E Aday Survey, Abstract 11, Tracts 21-25  
City of Lewisville, Denton County, TX  
DT #4006 24-04280



As requested by the City of Lewisville, Dynamic Traffic has prepared the following Traffic Management Memorandum for the proposed construction of a 98,800 SF warehouse located along the westbound (northerly) side of Bennett Lane on the northeast quadrant of its intersection with Yates Street in the City of Lewisville, Denton County. Access to the site is proposed to be provided via one (1) full-movement driveway along Bennett Lane and one (1) full-movement driveway along Yates Street at the southern end of the property and one (1) enter only driveway at the northern end of the property. This memorandum details the trip generation, trip distribution and auxiliary lane analysis associated with the proposed development.

### **Trip Generation**

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code (LUC) 150 – Warehousing in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual, 11<sup>th</sup> Edition*. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites. The following table shows the anticipated trip generation for The Project during a weekday, the weekday morning and weekday evening peak street hours (PSH).

**Table 1**  
**ITE Trip Generation**

Use	Trip Type	Daily	AM PSH			PM PSH		
			In	Out	Total	In	Out	Total
<b>Proposed</b> 98,800 SF Warehouse ITE LUC 150	Total	194	27	8	35	10	28	38
	Truck	59	1	1	2	2	1	3
	Passenger Vehicle	135	26	7	33	8	27	35

As can be seen above, the project is anticipated to generate a maximum of 35 peak hour trips and a maximum of three (3) truck peak hour trips. It is noted that no credit was taken for the existing commercial use that currently generates heavy vehicle and tractor trailer traffic on the site. The impact of truck traffic in the future condition is, therefore, anticipated to be negligible.

### **Trip Distribution**

The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways and major signalized intersections. It is anticipated that 80% of automobile traffic will be oriented to/from the west along Bennett Road and 15% to/from the east along Bennett. The remaining 5% is oriented to/from Yates Street to the north. The distribution of the truck traffic is also anticipated to be primarily to/from the west along Bennett Road since this provides access to the state and interstate highway network. Further, the northern access aisle is proposed to be one-way in the eastbound direction which will require all exiting maneuvers from the loading dock area to be through the Bennett Lane driveway. Figures depicting the anticipated peak hour and daily distributions and traffic volumes are appended.

### **Auxiliary Lane Analysis**

The projected site generated traffic along Bennet Lane and Yates Street were compared to the thresholds set forth in the Lewisville Development Code. According to the Lewisville Development Code, Section IX.4.5(D), deceleration lanes are required at commercial driveways which access streets where the speed limit is less than 45 mph and where the driveway ingress volume is greater than 50 vehicles per hour (VPH); and access streets where the speed limit is greater than or equal to 45 miles per hour and where driveway ingress volume is greater than 60 vehicles per hour (VPH). Table 2 below compares the right turn volume threshold and the anticipated entering volume at each of the proposed driveways.

**Table 2**  
**Deceleration Lane Analysis**

<b>Roadway</b>	<b>Speed Limit</b>	<b>Driveway</b>	<b>Ingress Volume Threshold</b>	<b>AM PSH Entering Volume</b>	<b>PM PSH Entering Volume</b>	<b>Deceleration Lane Warranted?</b>
Bennet Lane	40	Driveway	50	0	0	No
Yates Street	30	Northerly Driveway	50	0	0	No
		Southerly Driveway	50	25	8	No

As shown in the Table above, all three (3) of the proposed driveways do not warrant the construction of a deceleration lane during either of the weekday morning and weekday evening peak hours.

### **Truck Circulation**

As previously mentioned, a maximum of three (3) truck peak hour trips are anticipated for the proposed warehouse which equates to approximately one (1) truck trip per 20 minutes during the peak hour. The access management plan of the site has been designed to accommodate truck traffic through the Bennett Lane driveway and northerly Yates Street driveway. The truck circulation throughout the site showing each of the design turning movements at the previously mentioned site driveways is enclosed.

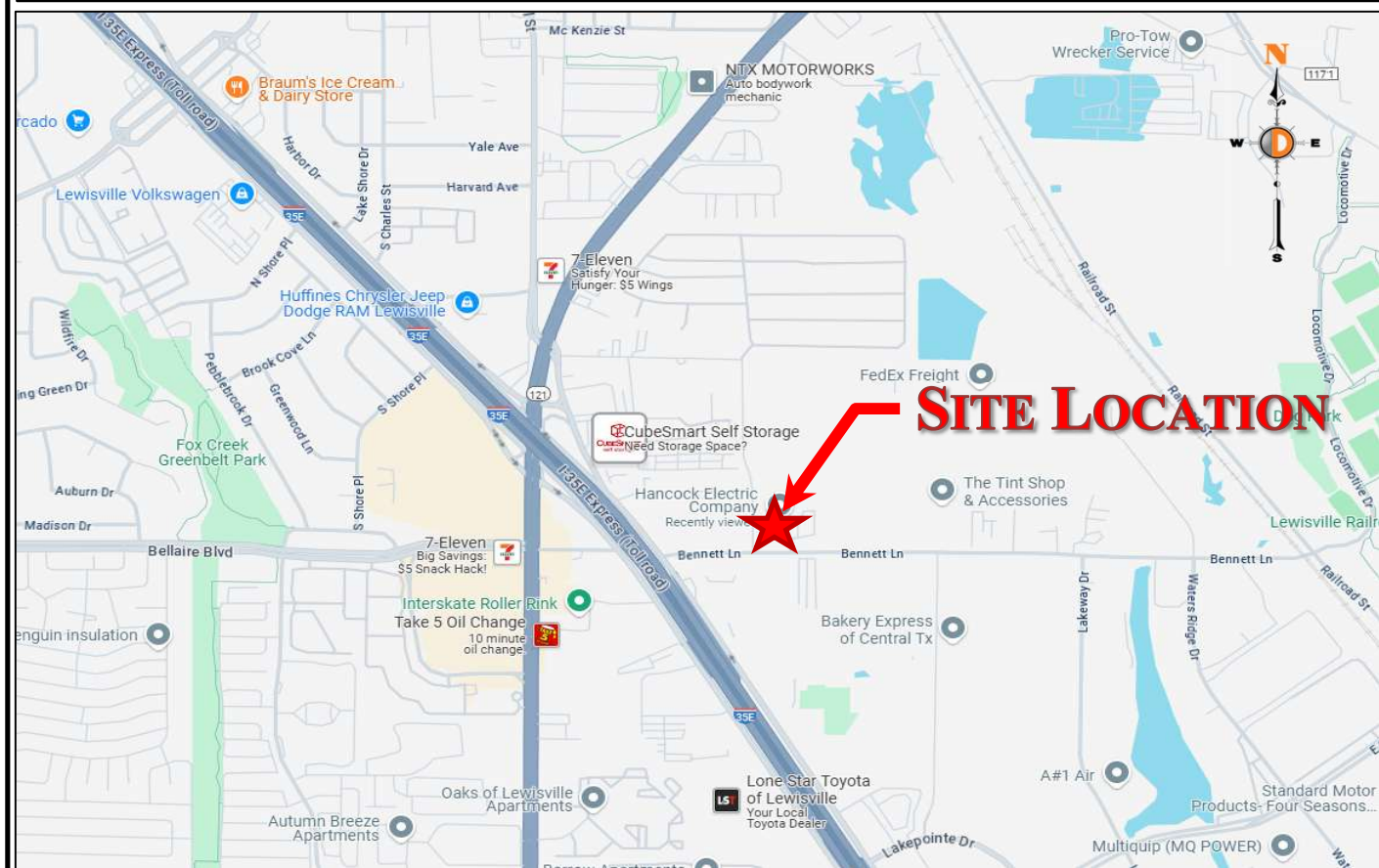
## Conclusion

Based upon the projected trip generation for the site and the anticipated directional distribution, it is the professional opinion of Dynamic Traffic that the proposed redevelopment of the site will not have any detrimental impact to the surrounding roadway network. The existing street network and proposed driveway design orient traffic to and from Bennett Lane and away from points north along Yates Street. Should you have any questions or require any additional information, please do not hesitate to contact our office.

c: David Russell  
James Yu  
Josh Edge/Lindsey Mayer

File: T:\TRAFFIC PROJECTS\4006 Lovett Industrial\24-04280 Lewisville TX\Engineering\Planning\2025-05-29 Traffic Management Memo\2025-05-29 Traffic Management Memo.docx

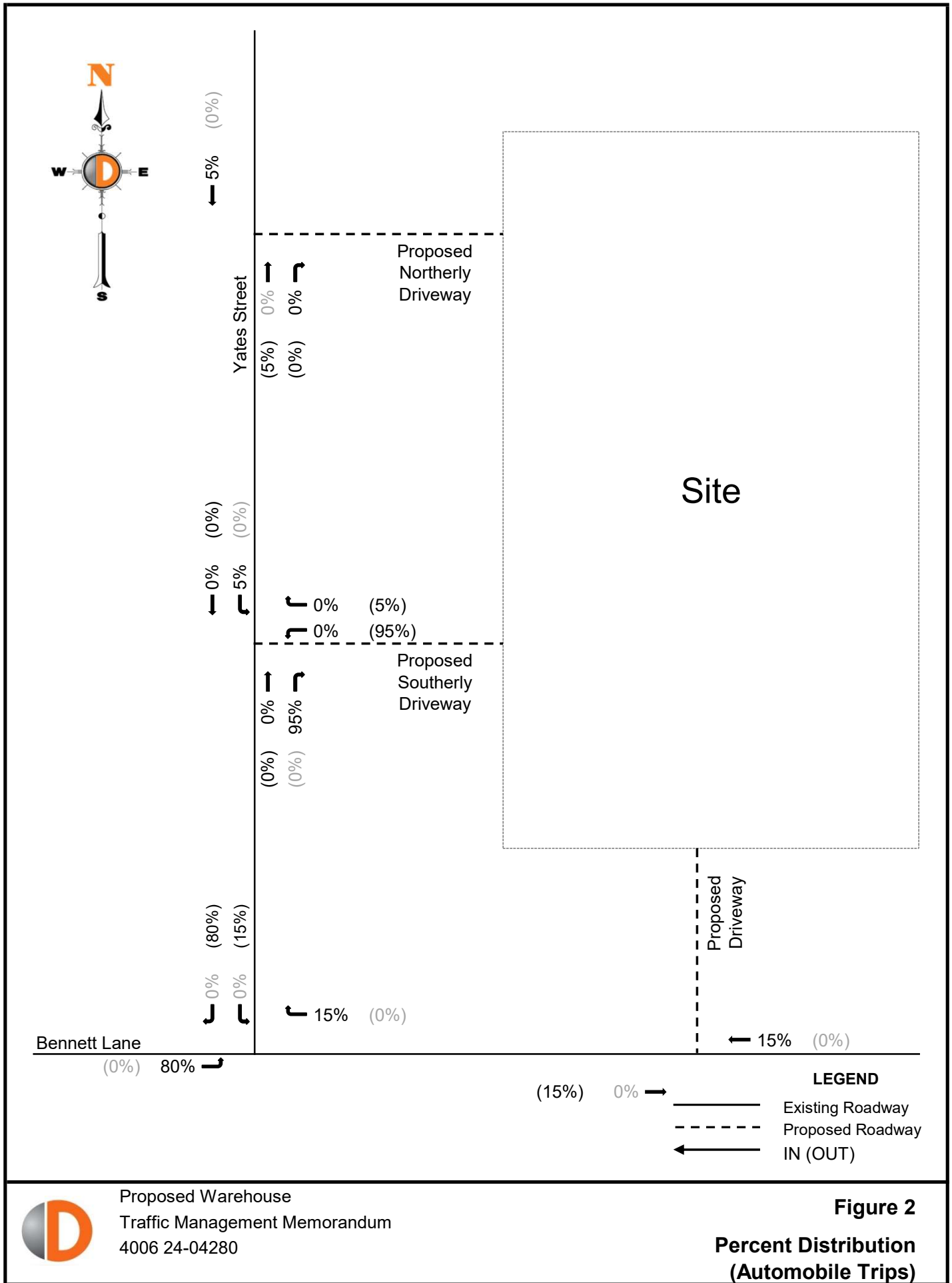


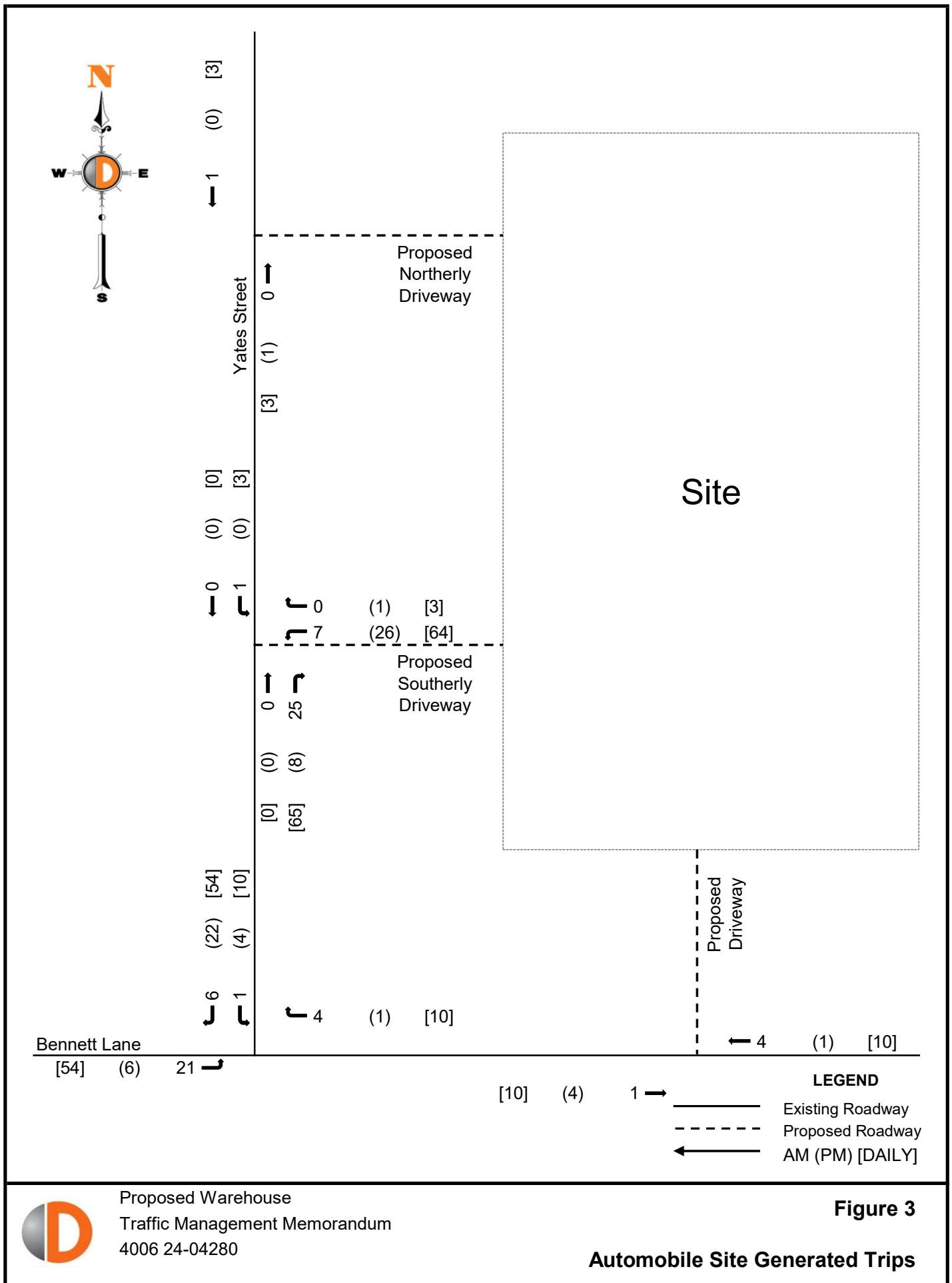


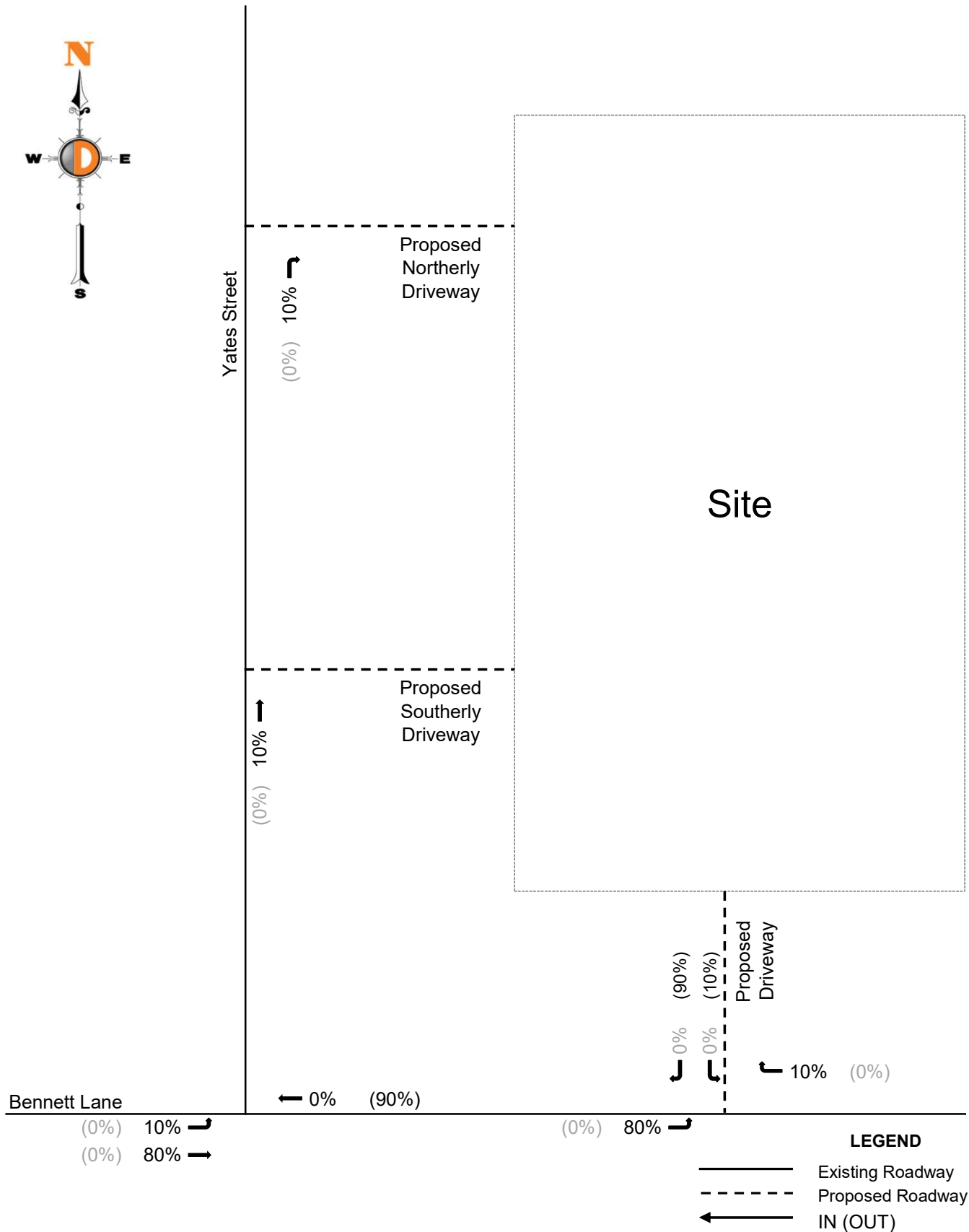
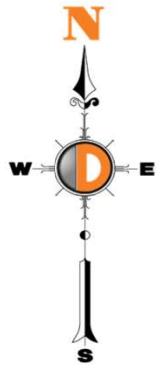
Proposed Warehouse  
Traffic Management Memorandum  
4006 24-04280

Figure 1

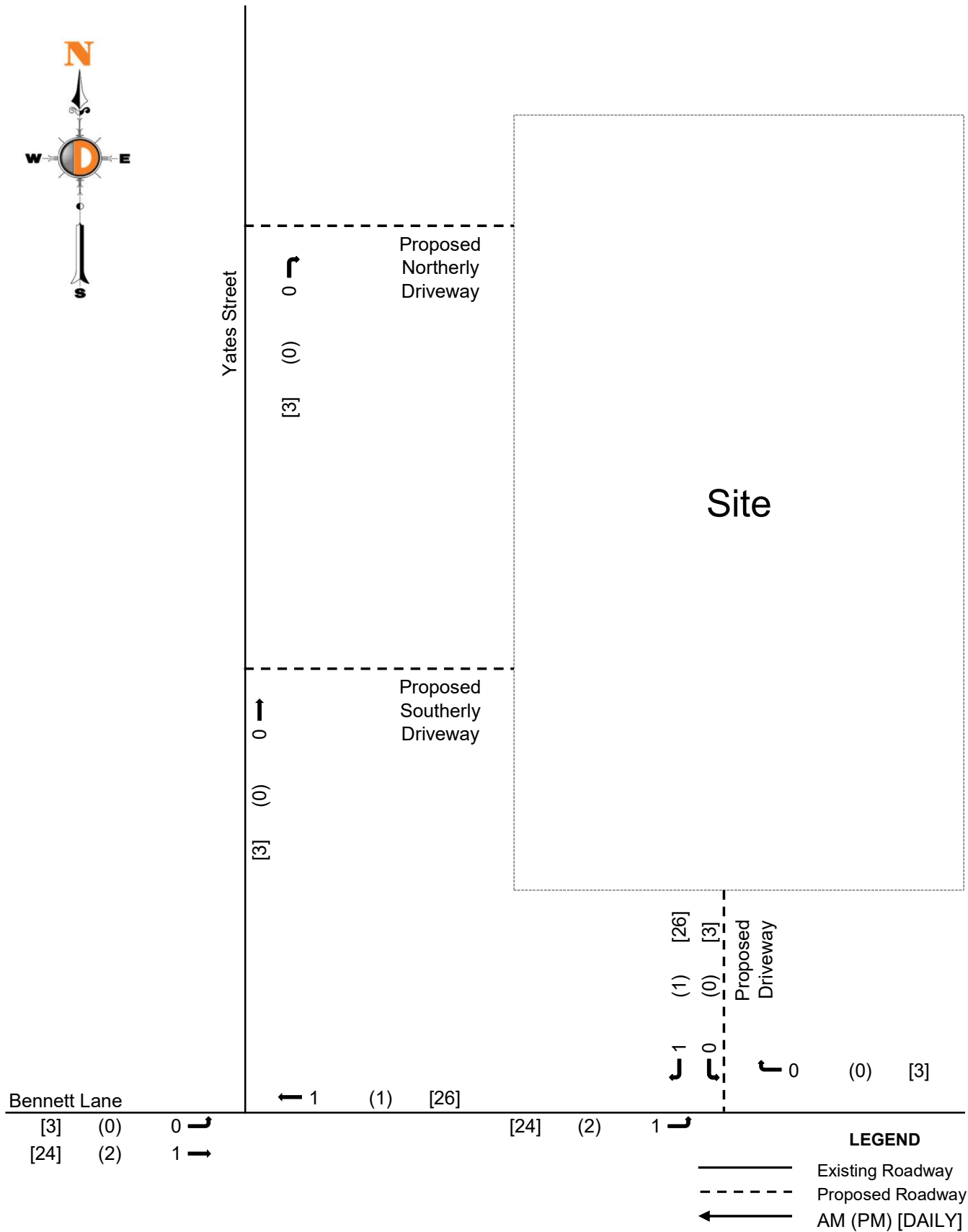
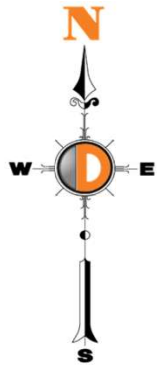
Site Location Map



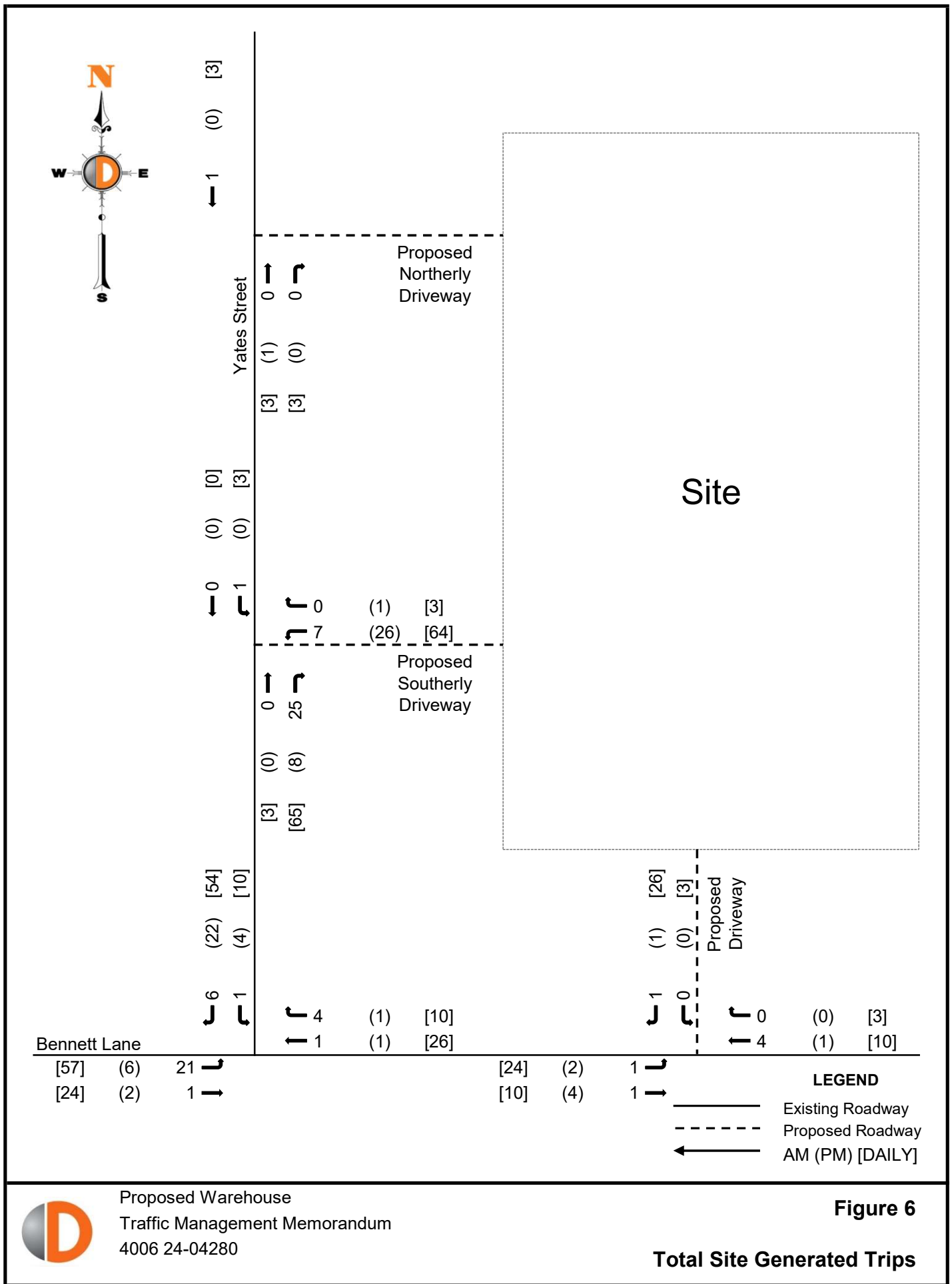


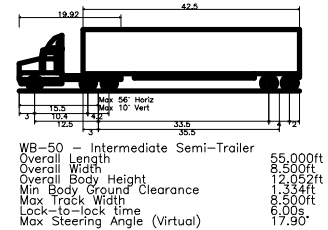
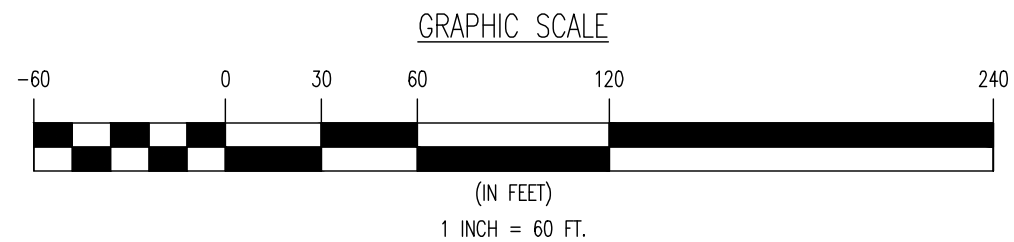
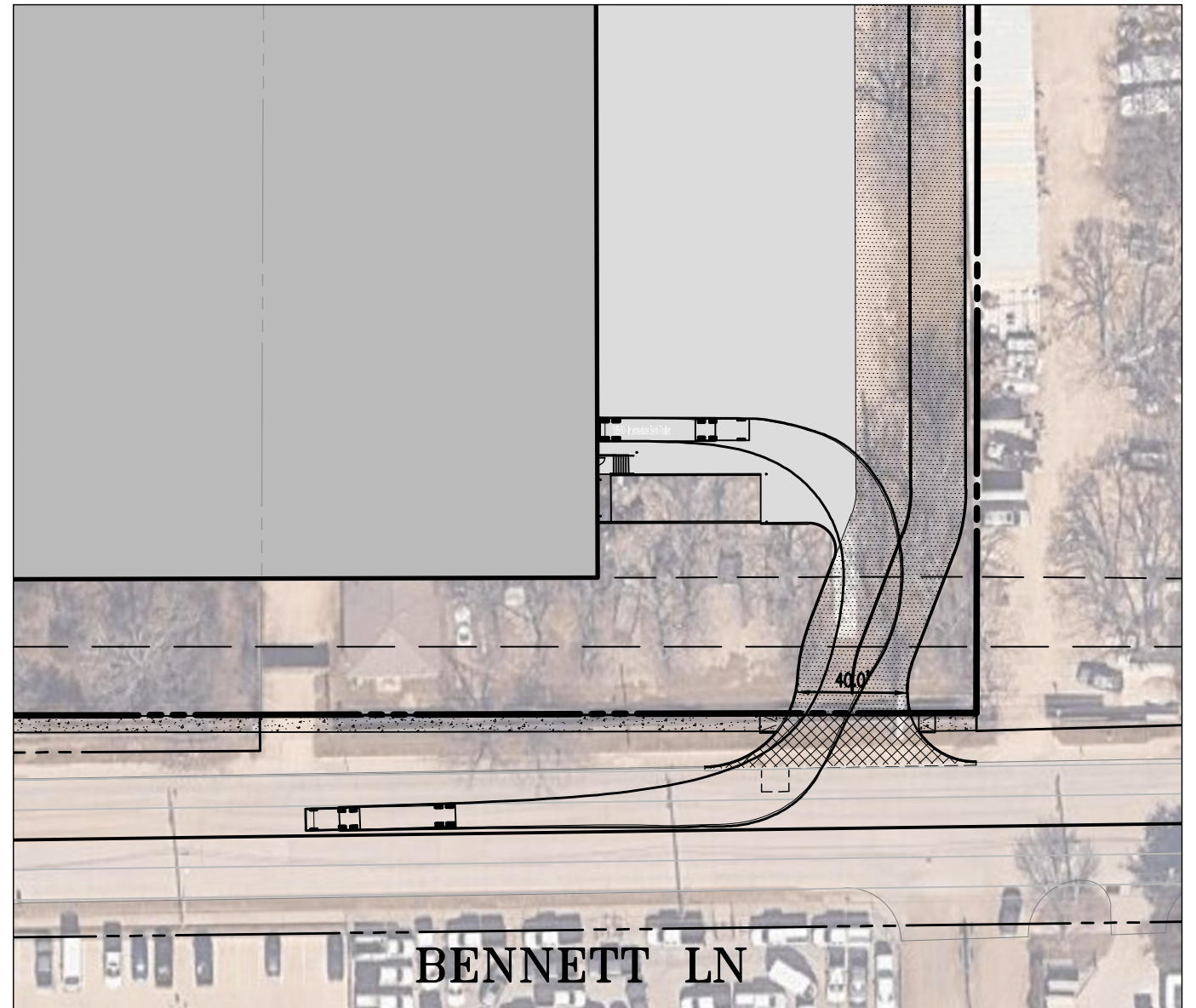
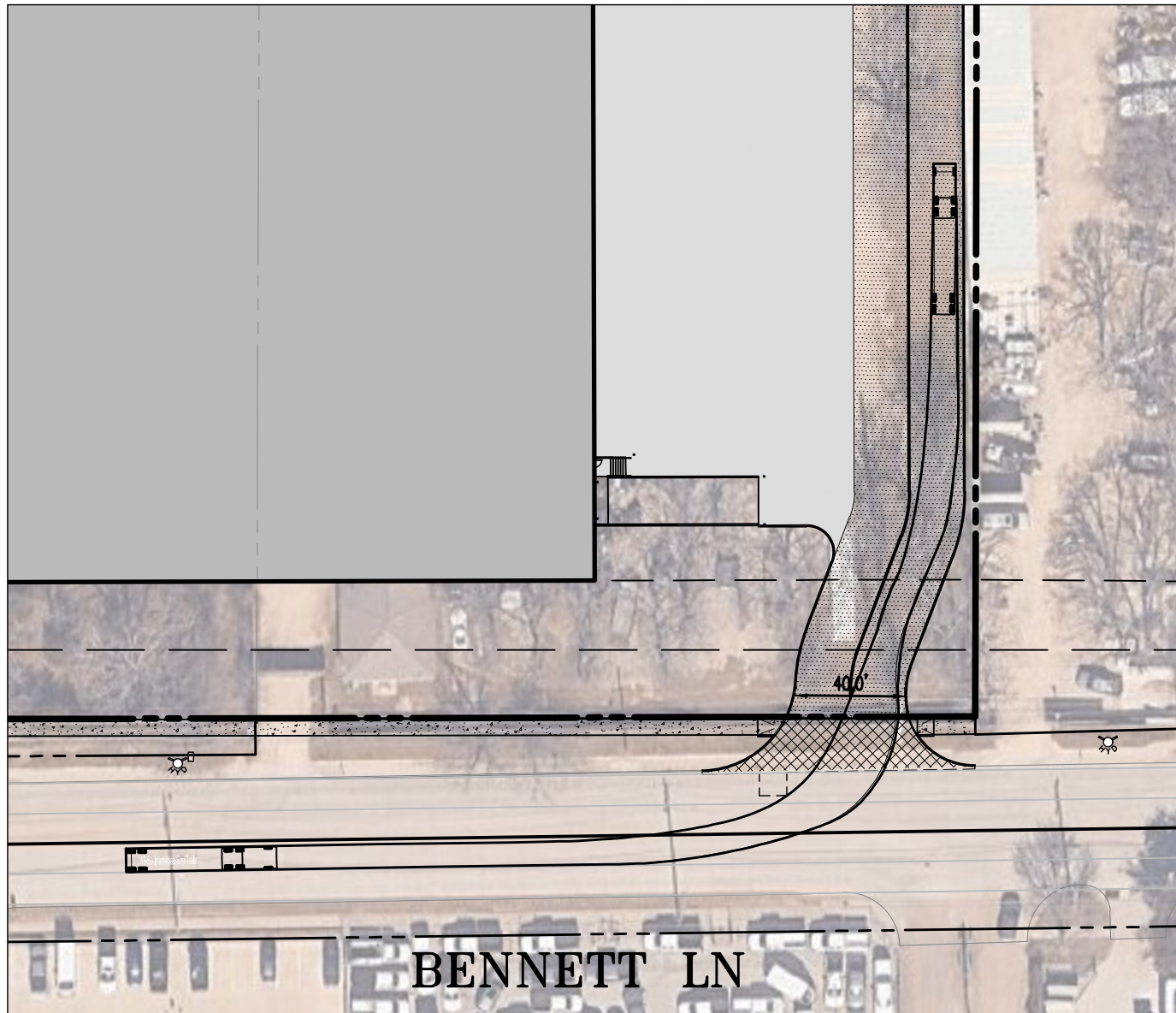












SCALE: (H) 1"=60'  
(V)

JOB No:  
24-04280

SHEET No:  
**1**  
OF 2

DRAWN BY:  
JLN  
DESIGNED BY:  
JLN  
CHECKED BY:  
JPT  
DATE:  
05/29/25

TITLE:  
**WB-50 TRUCK CIRCULATION EXHIBIT**

PROJECT: **LEWISVILLE BENNET 35**  
**LOVETT INDUSTRIAL**  
E ADAY SURVEY, ABSTRACT 11, TRACTS 21-25  
421 BENNETT LANE  
LEWISVILLE, DENTON COUNTY, TEXAS 75057

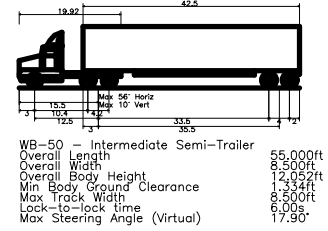
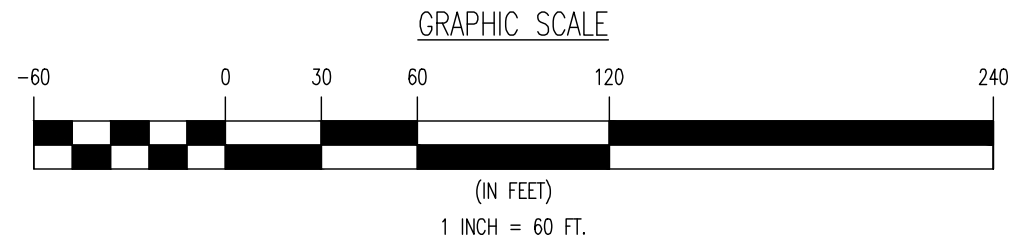
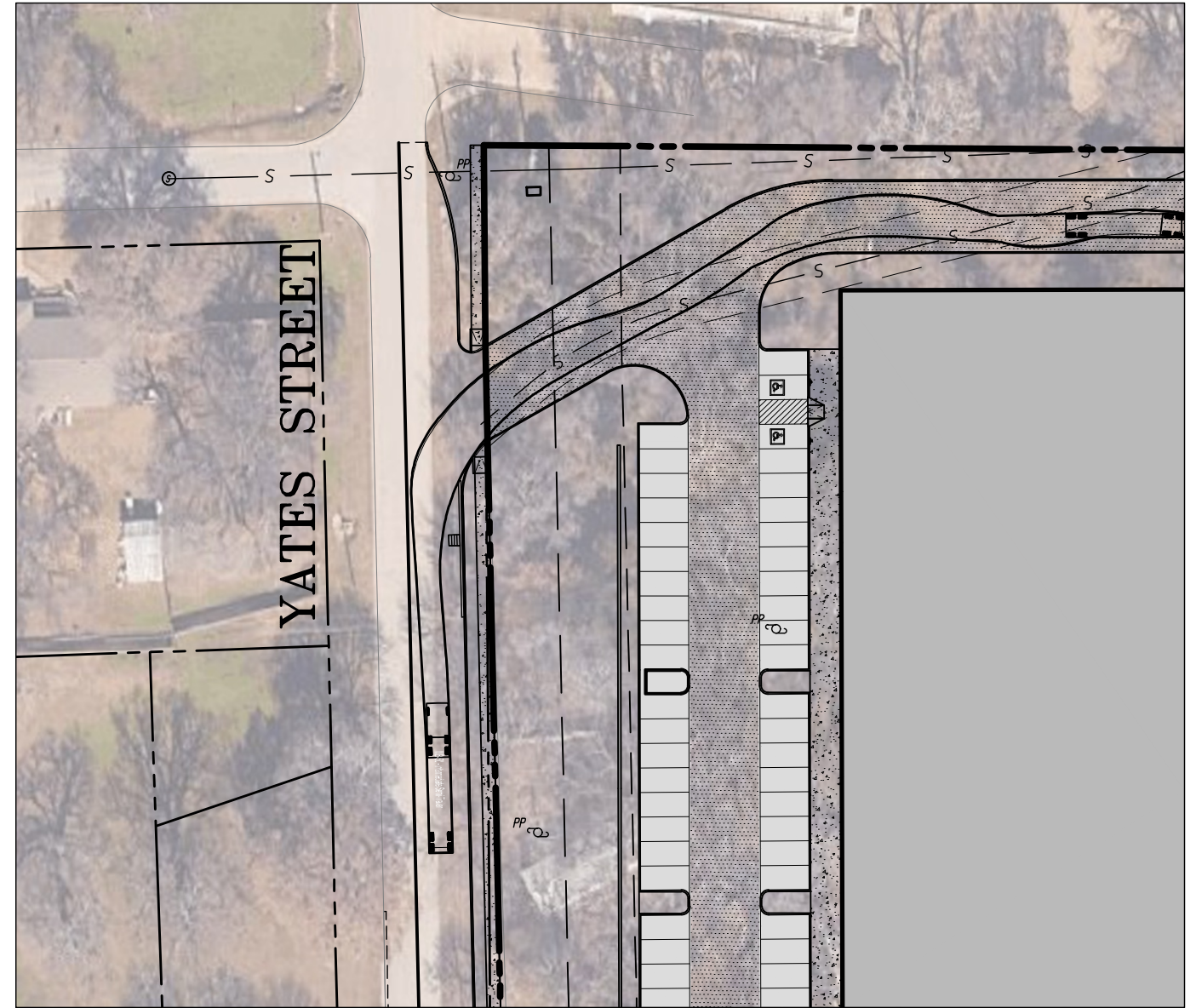
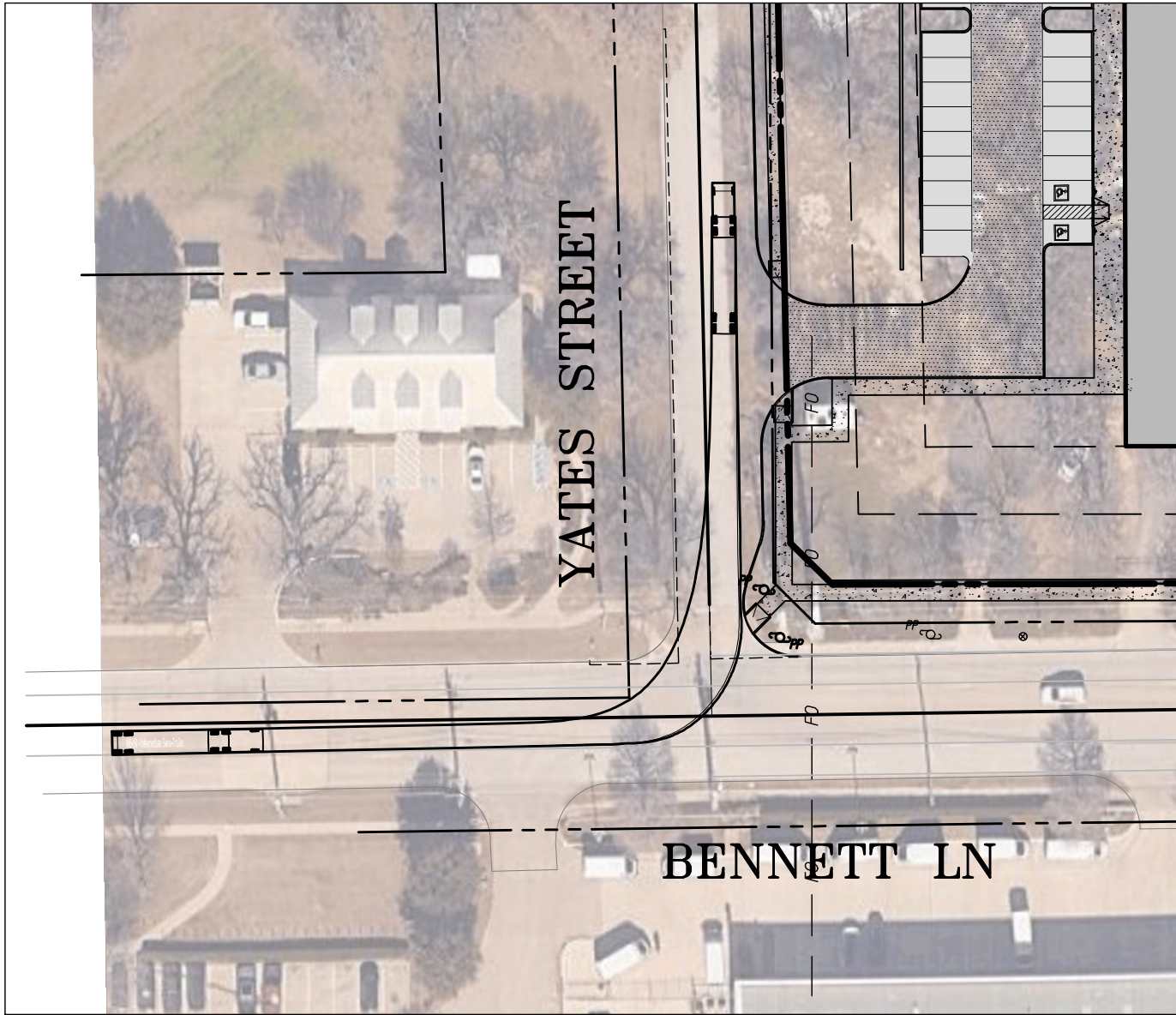
Rev. # 0 DEC Client Code: 4006



1904 Main Street  
Lake Como, NJ 07719

T: 732.681.0760 | F: 732.974.3521  
[www.dynamictraffic.com](http://www.dynamictraffic.com)  
New Jersey Certificate of Authorization No. 122942417





SCALE: (H) 1"=60'  
(V)

JOB No:  
24-04280

SHEET No:  
**2**  
OF 2

DRAWN BY:  
JLN  
DESIGNED BY:  
JLN  
CHECKED BY:  
JPT  
DATE:  
05/29/25

TITLE:  
**WB-50 TRUCK CIRCULATION EXHIBIT**

PROJECT: **LEWISVILLE BENNET 35**  
**LOVETT INDUSTRIAL**  
E ADAY SURVEY, ABSTRACT 11, TRACTS 21-25  
421 BENNETT LANE  
LEWISVILLE, DENTON COUNTY, TEXAS 75057

Rev. # 0 DEC Client Code: 4006



1904 Main Street  
Lake Como, NJ 07719  
T: 732.681.0760 | F: 732.974.3521  
[www.dynamictraffic.com](http://www.dynamictraffic.com)  
New Jersey Certificate of Authorization No. 122942417