California Department of Transportation

DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
(619) 985-1587 | FAX (619) 688-4299 TTY 711
www.dot.ca.gov

June 11, 2024

11-IMP-98
PM 30.9
Cal 98 Holdings Logistics
MND/SCH #2024031103

Mr. Derek Newland
Imperial County Planning Development
801 Main Street
El Centro, CA 92243

Dear, Mr. Newland:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for Mitigated Negative Declaration of the proposed Cal 98 Holdings development project located near State Route 98 (SR-98). The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Caltrans has the following comments:

After reviewing a set of Traffic Studies from LLG in 2023 and most recently January 2024, Caltrans continues to have comments on the Traffic Study. Comments from previous Caltrans reviews have not been addressed. Please see Caltrans November 2023 Letter.

The applicant and the lead agency will need to address Hydraulics and Traffic Analysis items prior to applying for an encroachment permit for proposed improvements at SR-98/Kemp Road and Dogwood Road. Early coordination with Caltrans is strongly recommended as obtaining an encroachment permit requires an extensive coordination effort.

An Intersection Control Evaluation (ICE) will be required for the proposed work at the intersections with SR-98 at Kemp Road and Dogwood Road.

Attached please see the January 2024 Traffic Study with Caltrans comments in red lines.

Hydraulics
Caltrans has previously asked for a drainage study, however, it has not been provided. Please provide hydraulics studies, drainage and grading plans to Caltrans for review.

Caltrans generally does not allow development projects to impact hydraulics within the State's Right-of-Way. Any modification to the existing Caltrans drainage and/or increase in runoff to State facilities will not be allowed.

Right-of-Way
Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.

Any work performed within Caltrans' R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within Caltrans' R/W prior to construction. As part of the encroachment permit process, the applicant must provide approved final environmental documents for this project, corresponding technical studies, and necessary regulatory and resource agency permits, specifically, the California Environmental Quality Act determination or exemption.

If you have any questions or concerns, please contact Roger Sanchez, LDR Coordinator, at (619) 987-1043 or by e-mail sent to roger.sanchez-rangel@dot.ca.gov.

Sincerely,

Kimberly D. Dodson

Kimberly D. Dodson, GISP
Branch Chief
Local Development Review

Attachments:

- January 2024 Traffic Study with Caltrans comments in red lines
- Caltrans November 2023 Letter

California Department of Transportation

DISTRICT 11
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November 17, 2023

11-IMP-98
PM 30.9
Charger Logistics Cal 98 Holdings (Zone Change #23-0007)
Traffic Study August 2023

Mr. Derek Newland
Imperial County
Planning and Development Services
801 Main Street
El Centro, CA 92243

Dear Mr. Newland:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the proposed Charger Logistics Cal 98 Holdings project located near State Route 98 (SR-98). The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Safety is one of Caltrans' strategic goals. Caltrans strives to make the year 2050 the first year without a single death or serious injury on California's roads. We are striving for more equitable outcomes for the transportation network's diverse users. To achieve these ambitious goals, we will pursue meaningful collaboration with our partners. We encourage the implementation of new technologies, innovations, and best practices that will enhance the safety on the transportation network. These pursuits are both ambitious and urgent, and their accomplishment involves a focused departure from the status quo as we continue to institutionalize safety in all our work.

Caltrans has the following comments:

Traffic Analysis
According to the August 2023 Traffic Study, all truck access to the proposed development will be through a newly constructed southward extension of Dogwood Road, and all employees traffic will be able to use the improved driveways at Kemp Road and Dogwood Road.

Please provide a construction cost estimate for the work within Caltrans R/W.

The revised transportation impact analysis (TIA) dated August 29, 2023, needs to be updated to reflect the correct posted speed limit on SR-98 along the immediate segment of the development property.

The TIA Section 3.1 states, "The speed limit is posted at 55 mph approximately 1,110 feet east of Kemp Road on the north side of the roadway (for westbound traffic). The speed limit is posted at 40 mph approximately 1,800 feet east of Kemp Road on the south side of the roadway (for eastbound traffic)." This is incorrect.

The 40 mph posted speed ends on the east side of the All-American Canal, approximately 2,000 feet east from Kemp Road intersection. This segment of SR-98 is 65 mph per the latest posted signage.

Please consider the following correction: "The speed limit is posted at 65 mph approximately 870 feet east of Kemp Road on the north side of the roadway (for westbound traffic). The speed limit is posted at 40 mph approximately 2,100 feet east of Kemp Road on the south side of the roadway (for eastbound traffic)."

Section 4.2 of the TIA needs to include an existing + project traffic scenario. The document is also missing a horizon year analysis. Please clarify.

Please include a table like the one used in Section 8, Table 8-1, to compare existing operations to existing + project operations.

Section 7.3 "Trip Assignment," states that truck traffic will be prohibited from entering the proposed development site via Dogwood Road extension through westbound SR-98. All incoming truck traffic from Mexico will be forced to use Cole Boulevard and Dogwood Road to access the proposed driveway at Dogwood Road.

Please clarify if the outbound trucks leaving the site, will be using eastbound SR-98.

If the project intends to prohibit heavy-truck/ semi-truck access from SR-98, coordination with Caltrans' Signage/Striping Branch, Traffic Safety Operations, and Traffic Analysis will be required to evaluate such modification, which would include a need for a revised traffic study.

The TIA Section 9.0 "Site Access," states that all truck access to the proposed development will be through a newly constructed southward extension of Dogwood Road, and all employees traffic will be able to use the proposed driveways at Kemp Road and Dogwood Road.

- The proposed Intersection Improvements at SR-98 and Dogwood Road intersection, along with change in lane configurations on SR-98 to add left-turn pockets, will require an Intersection Control Evaluation Analysis per Caltrans Traffic Operations Policy Directive (TOPD) 13-02.
- The proposed SR-98 westbound left-turn pocket at Kemp Road (speed posted at 55 mph)," will also require widening of SR-98 and an Intersection Control Evaluation Analysis per Caltrans (TOPD) 13-02. In addition, please change current speed to 65 mph as stated previously.

Section 9.0 and 3.1 of the traffic study, states that a Class I Multi-use Path is being proposed along SR-98 from Dogwood Road to Eady Avenue. Please coordinate with Caltrans Active Transportation Branch, the City and the County of Imperial as this proposed development may impact the Class 1 Multi Use- Path.

The proposed improvements at Kemp Road and SR-98 Intersection, and Dogwood Road/ SR-98, will require an ICE report. This document will need to evaluate the appropriate intersection control and lane configuration.

- Please refer to the latest Caltrans Highway Design Manual (HDM) Chapter 400 for appropriate design standards for Intersections at grade.

- Please clarify if the existing dirt road portion of Dogwood Road south of SR-98 will be paved. Caltrans recommends that this dirt road section be paved to minimize or eliminate tracking onto SR-98.
- All proposed left and right turn pockets will require a queue analysis to confirm a 95th percentile storage queue.

Please see attached documents with red lines for reference and details.
- *Cal98Logistics_Revised_TIA_Traffic_Study20230829*
- *TEA_Review_ZC_23-0007_IS_23-0033_Request_for_Comments*

Hydrology and Drainage Studies
Caltrans generally does not allow development projects to impact hydraulics within the State's Right-of-Way (R/W). Any modification to the existing Caltrans drainage and/or increase in runoff to State facilities will not be allowed.

Please provide a drainage study to evaluate impacts to state facilities as they relate to the proposed roadway improvements at SR-98.

Complete Streets and Mobility Network
Caltrans views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation network. Caltrans supports improved transit accommodation through the provision of Park and Ride facilities, improved bicycle and pedestrian access and safety improvements, signal prioritization for transit, bus on shoulders, ramp improvements, or other enhancements that promotes a complete and integrated transportation network.

The City of Calexico has a Class I Bike Path planned along Birch Street/ SR-98 in the project area. Please refer to the 2018 Calexico Bicycle Master Plan Update.

Please continue to coordinate with Caltrans and the City of Calexico for locations that may affect both Caltrans, Calexico and Imperial County.

Right-of-Way
Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.

Any work performed within Caltrans' ROW will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans' ROW prior to construction. As part of the encroachment permit process, the applicant must provide approved final environmental documents for this project, corresponding technical studies, and necessary regulatory and resource agency permits, Specifically, CEQA determination or exemption.

If you have any questions or concerns, please contact Roger Sanchez, LDR Coordinator, at (619) 987-1043 or by e-mail sent to roger.sanchez-rangel@dot.ca.gov.

Sincerely,

Rogelio Sanchez

Rogelio Sanchez
Acting Branch Chief
Local Development Review

Enclosures: Cal98Logistics_Revised_TIA_Traffic_Study20230829
TEA_Review_ZC_23-0007_IS_23-0033_Request_for_Comments

LINSCOTT LAW & GREENSPAN engineers

TRANSPORTATION IMPACT ANALYSIS

CHARGER LOGISTICS CAL-98 HOLDINGS PROJECT

County of Imperial, California
January 2024

LLG Ref. 3-22-3596

Prepared by:
Zahira Chayeb
Transportation Engineer II

Under the Supervision of:
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Principal

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CHARGER LOGISTICS CAL-98 HOLDINGS PROJECT

County of Imperial, California
January 2024

1.0 INTRODUCTION

The following traffic impact analysis has been prepared to determine the potential impacts to the local circulation system due to the construction of the proposed Charger Logistics Cal-98 Holdings project in the County of Imperial, California. This report includes the following sections:

- Project Description
- Existing Conditions
- Analysis Approach and Methodology
- Substantial Effect Criteria
- Analysis of Existing Conditions
- Trip Generation / Distribution / Assignment
- Existing + Project Analysis
- Near-Term (Existing + Cumulative) Analysis
- Horizon Year 2050 Analysis
- Site Access Discussion
- Vehicle Miles Travelled (VMT) Discussion
- Conclusions and Recommendations

An Intersection Control Evaluation (ICE) will be prepared under a separate cover, per Caltrans standards, addressing the appropriate Caltrans controlled intersections.

2.0 PROJECT DESCRIPTION

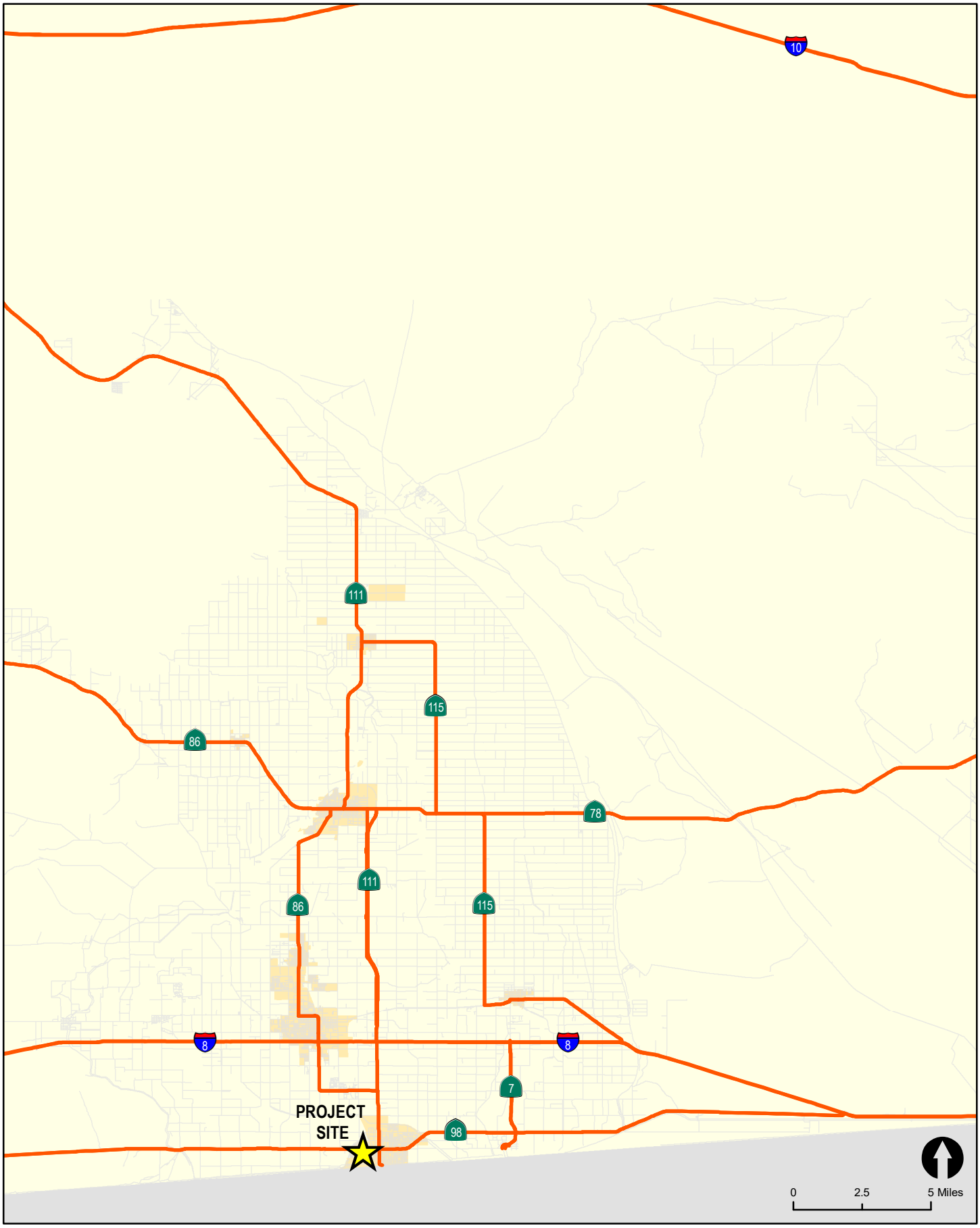
The project is located on the southwest corner of the SR-98 and Kemp Road intersection in the County of Imperial.

The project proposes 91,881 square feet (SF) of warehousing, 16,460 SF of service space, and 11,904 SF of office space. Additionally, the project proposes to provide 832 trailer parking spaces, 20 truck parking spaces, and 42 car parking spaces.

Access to the site will be provided via two driveways. One driveway will be located on the west side of the project site south of SR-98 via the southward extension of Dogwood Road, and one driveway will be located on the east side of the project site at Kemp Road.

The project proposes to provide warehousing, order fulfillment, logistics and transportation services. Trucks will travel to/from Mexico, San Diego, and Imperial County.

Figure 2–1 depicts the project vicinity with ***Figure 2–2*** depicts a more details project area map and ***Figure 2–3*** shows the project's site plan.



LINSCOTT LAW & GREENSPAN engineers

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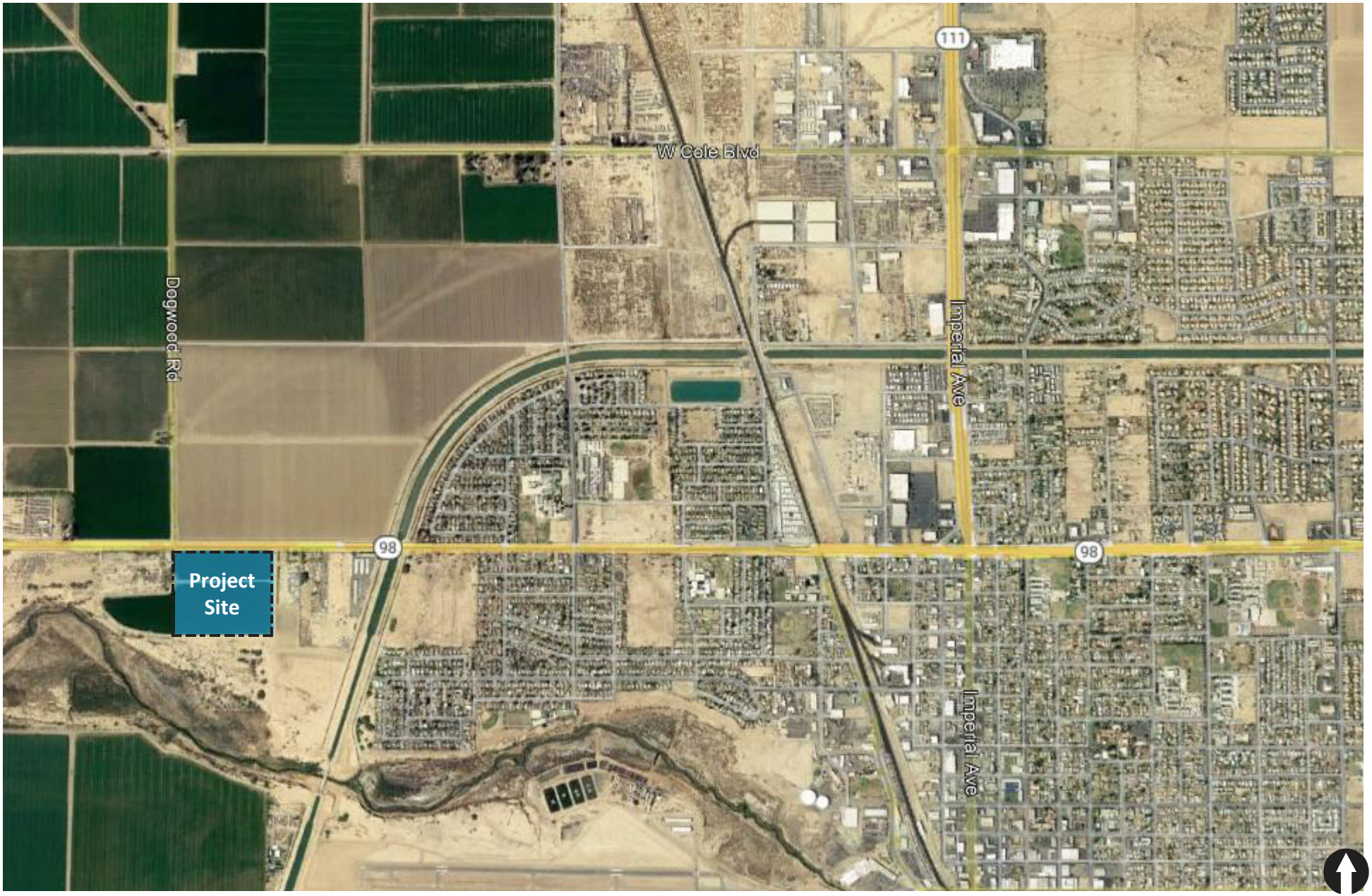
Figure 2-1

Project Vicinity Map

Charger Logistics Project



Linscott Law & Greenspan engineers

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Figure 2-2

Project Area Map

Charger Logistics Project

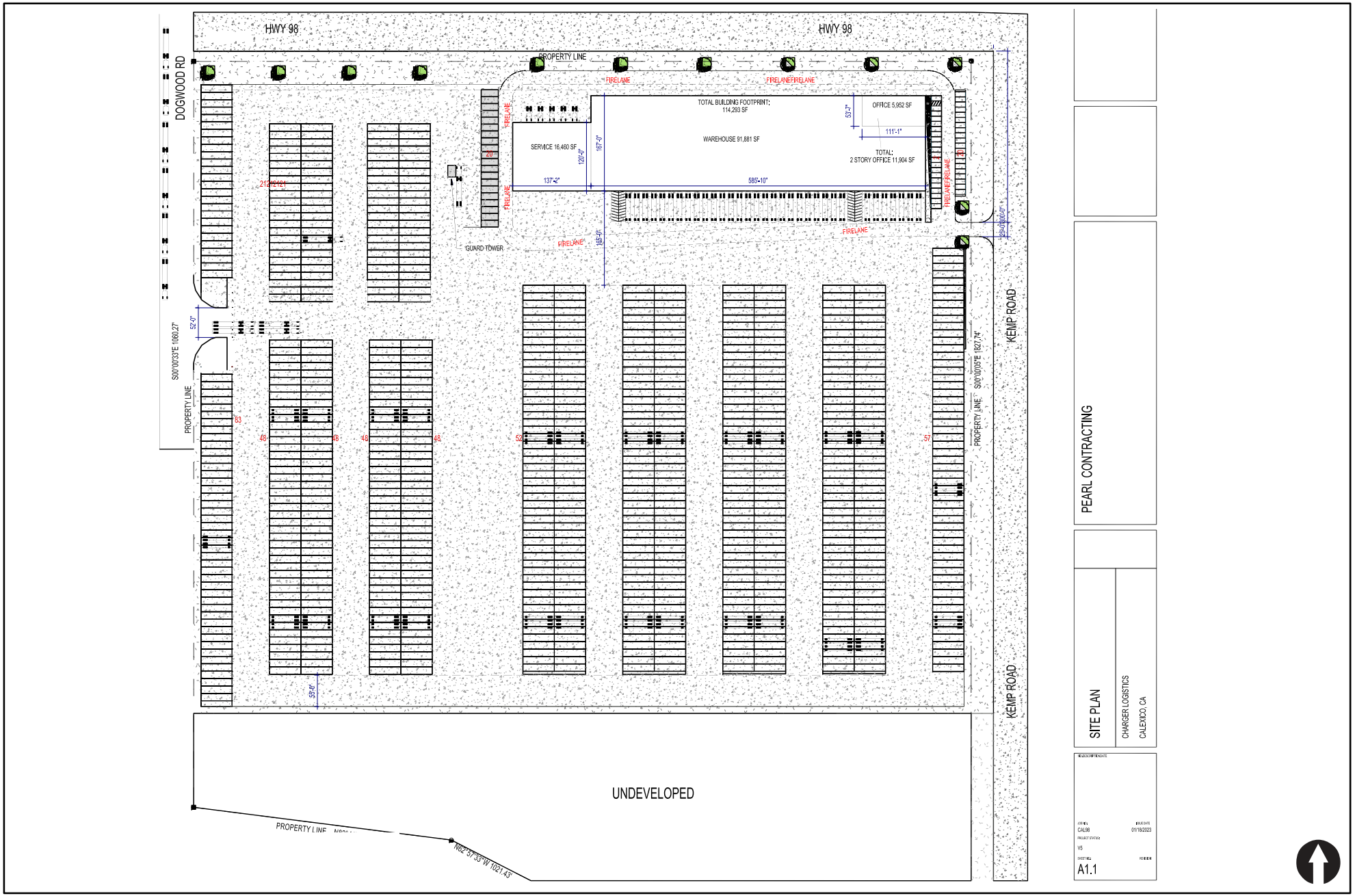

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Figure 2-3

Site Plan

CHARGER LOGISTICS PROJECT

3.0 EXISTING CONDITIONS

3.1 Existing Street Network

Following is a brief description of the street segments within the project area. ***Figure 3–1*** illustrates the existing conditions, including the lane geometry, for the key intersections in the study area.

State Route 98 (SR-98/Birch Street) is classified as a Highway/Secondary Roadway. SR-98 is an east-west highway running through Calexico, parallel to the international border. It is generally constructed as a two-lane undivided roadway outside the Calexico city limit. It is currently constructed as a two-lane undivided roadway between Dogwood Road and Cesar Chavez Boulevard and between East Rivera and SR-7. Between Cesar Chavez Boulevard and East Riviera, SR-98 is built as a four-lane divided roadway with intermittent turn lanes. Sidewalks are only provided between W. Williams Avenue and Imperial Avenue. Class II bike lanes are only provided on both sides of the roadway between W. Williams Avenue and Cesar Chavez Boulevard. Curbside parking is not provided. The speed limit is posted at 65 mph approximately 860 feet east of Kemp Road on the north side of the roadway (for westbound traffic). The speed limit is posted at 40 mph approximately 2,100 feet east of Kemp Road on the south side of the roadway (for eastbound traffic).

Per the *Imperial County Regional Active Transportation Plan*, a Class I Multi-Use Path is proposed along SR-98 from Dogwood Road to Eady Avenue.

State Route 111 (SR-111/Imperial Avenue) is classified as an Expressway/Highway/Primary Arterial in the *City of Calexico General Plan Circulation Element*. SR-111 is a north-south highway connecting the three largest cities in Imperial County and runs from I-10 in Riverside County to the international border. SR-111 is classified as a 6-lane expressway north of Cole Boulevard, a 4-lane highway south of Cole Boulevard, and a primary arterial south of SR-98. SR-111 is currently constructed as a 4-lane divided roadway north of SR-98 and a 4-lane undivided roadway with a two-way left turn lane south of SR-98. Contiguous sidewalks are provided on both sides of the roadway south of SR-98. Curbside parking and bike lanes are not provided. The posted speed limit is 65 mph north of SR-98 and 35 mph south of SR-98.

Per the *Imperial County Regional Active Transportation Plan*, a Class II Bike Lane is proposed along SR-111 along its entire stretch.

State Route 7 (SR-7) is classified as a State Highway/Expressway in the *Imperial County General Plan Circulation Element*. SR-7 is a north-south highway, beginning at the international border and ending at I-8. It is currently constructed as a four-lane divided roadway and the speed limit is 65 mph within the project vicinity.

W. Cole Boulevard is classified as a Primary/Major Arterial in the *City of Calexico General Plan Circulation Element*. It is currently constructed as a two-lane undivided roadway between Dogwood Road and Towncenter Way and between Bowker Road and SR-98. Between Towncenter Way and SR-111, and between Rockwood Avenue and Bowker Road, W. Cole Boulevard is built as a four-

lane undivided roadway. It is also currently built as a six-lane divided roadway between SR-111 and Rockwood Avenue. Curbside parking and bike lanes are not provided. Sidewalks are provided intermittently on both sides of the roadway between Towncenter Way and Bowker Road. The posted speed limit is 35 mph.

Per the *Imperial County Regional Active Transportation Plan*, a Class II Bike Lane is proposed along Cole Boulevard along its entire stretch.

Dogwood Road (SR-31) is classified as a Primary Arterial in the *City of Calexico General Plan Circulation Element*. It is currently constructed as a two-lane undivided roadway within the project vicinity. Curbside parking is prohibited, and bike lanes are not provided. There are no sidewalks provided along the roadway. There is no posted speed limit within the project vicinity.

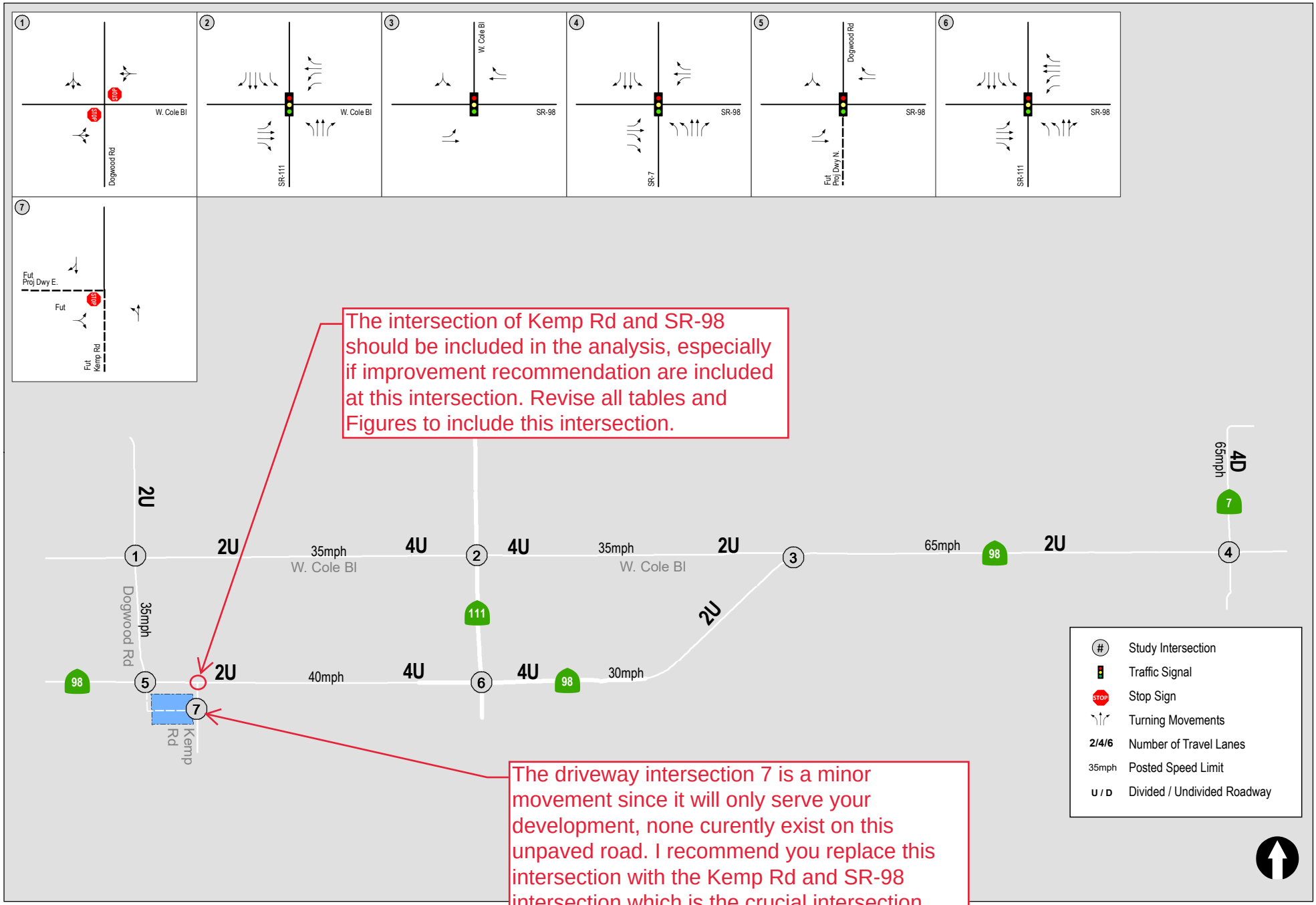
Per the *Imperial County Regional Active Transportation Plan*, a Class I Multi-Use Path is proposed along Dogwood Road from SR-98 and northward.

Kemp Road is an unclassified roadway. It is currently constructed as a two-lane undivided unpaved roadway. Kemp Road borders the east side of the project site. Curbside parking is prohibited, and bike lanes are not provided. There are no sidewalks provided along the roadway. There is no posted speed limit.

3.2 Existing Traffic Volumes

AM and PM peak hour intersection turning movement volume counts at study area intersections were commissioned by LLG Engineers in June 2022. It should be noted that all intersection volumes were applied a growth factor of 10% to represent non-summer conditions. The Dogwood Road Bridge at Willoughby Road was closed when the original traffic counts were conducted in June 2022. The bridge reopened in mid-2023. Traffic counts at the Dogwood Road / Cole Boulevard and Dogwood Road / SR-98 intersections were re-conducted in August 2023 to accurately depict the traffic conditions with the bridge open.

Figure 3–2 depicts the existing traffic volumes on both an ADT and peak hour basis. ***Appendix A*** contains the manual intersection count sheets.



LINSCOTT LAW & GREENSPAN engineers

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Figure 3-1

Existing Conditions Diagram

CHARGER LOGISTICS PROJECT

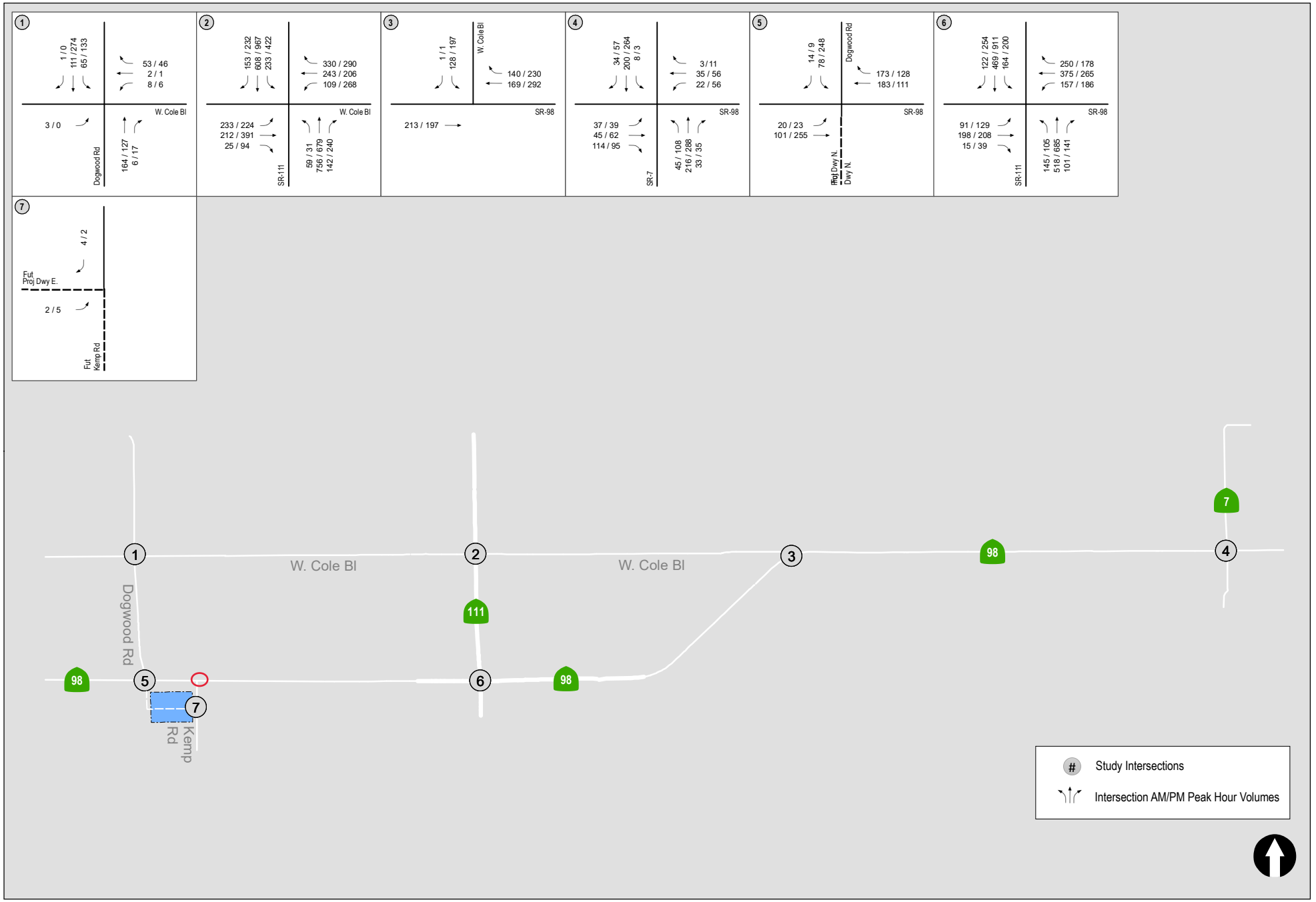

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Figure 3-2

Existing Traffic Volumes

CHARGER LOGISTICS PROJECT

4.0 ANALYSIS APPROACH AND METHODOLOGY

4.1 Project Study Area

The following intersections and segments were analyzed in this study and were chosen since they will carry the majority of project truck and employee traffic.

Intersections:

1. Dogwood Road / Cole Boulevard
2. SR 111 / Cole Boulevard
3. SR 98 / Cole Boulevard
4. SR 7 / SR 98
5. SR 98 / Dogwood Road
6. SR 111 / SR 98
7. Kemp Road / East Project Driveway

4.2 Analysis Scenarios

The following scenarios are analyzed in this report:

- Existing traffic
- Existing + Project traffic
- Existing + Cumulative traffic
- Existing + Cumulative traffic + Project traffic
- Horizon Year 2050 traffic
- Horizon Year 2050 + Project traffic

4.3 Analysis Methodology

The operations of the project area intersections and segments are characterized using the concept of "Level of Service" (LOS). LOS is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A through F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

Table 4–1 summarizes the description for each level of service. ***Table 4–2*** depicts the criteria, which are based on the average control delay for any particular minor movement (unsignalized intersections).

TABLE 4–1
INTERSECTION LEVEL OF SERVICE DESCRIPTIONS

Level of Service	Description
A	Occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	Generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	Generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	Generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.
F	Considered to be unacceptable to most drivers. This condition often occurs with over saturation i.e. when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume-to-capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

TABLE 4–2
UNSIGNALIZED INTERSECTION LOS & DELAY RANGES

LOS	Delay (seconds/vehicle)
A	≤ 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	≥ 50.1

Source: 2000 Highway Capacity Manual

TABLE 4–3
IMPERIAL COUNTY STANDARD STREET CLASSIFICATION AVERAGE DAILY VEHICLE TRIPS

Road		Level of Service W/ADT*				
Class	**X-Section**	**A**	**B**	**C**	**D**	**E**
Expressway	128 / 210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106 / 136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82 / 102	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	64 / 84	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	40 / 70	1,900	4,100	7,100	10,900	16,200
Residential Street	40 / 60	*	*	< 1,500	*	*
Residential Cul-de-Sac / Loop Street	40/60	*	*	< 1,500	*	*
Industrial Collector	76 / 96	5,000	10,000	14,000	17,000	20,000
Industrial Local Street	44 / 64	2,500	5,000	7,000	8,500	10,000

* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors. It should be noted that for segments along SR-111, the capacities of a 6-lane expressway were reduced by one-third and utilized to calculate level of service.

5.0 SUBSTANTIAL EFFECT CRITERIA

The County of Imperial does not have published significance criteria. However, the County General Plan does state that the level of service (LOS) goal for intersections and roadway segments is to operate at LOS C or better. Therefore, if an intersection or segment degrades from LOS C or better to LOS D or worse with the addition of project traffic, the impact is considered significant. If the location operates at LOS D or worse with and without project traffic, the impact is considered significant if the project causes the intersection delta to increase by more than two (2) seconds, or the V/C ratio to increase by more than 0.02. These amounts are consistent with those used in the City of El Centro and the County of Imperial in numerous traffic studies.

TABLE 5–1
TRAFFIC IMPACT SIGNIFICANT THRESHOLDS

Level of Service with Project [a]	Allowable Increase Due to Project Impacts [b]					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
D, E & F (*or ramp meter delays above 15 minutes*)	0.01	1	0.02	1	2	2[c]

Footnotes:

a. All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume. The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

b. If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are deemed to be significant. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigations (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note a above), or if the project adds a significant amount of peak hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating significant impact changes.

c. The allowable increase in delay at a ramp meter with more than 15 minutes of delay and freeway LOS E is 2 minutes and at LOS F is 1 minute.

General Notes:

1. V/C = Volume to Capacity Ratio
2. Speed = Arterial speed measured in miles per hour
3. Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters.
4. LOS = Level of Service

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Peak Hour Intersection Levels of Service

The project study area is located in a rural setting and all project driveways are unsignalized. As seen in ***Table 6–1,*** all study area intersections are calculated to currently operate at LOS C or better during both the AM and PM peak hours with the exception of the following intersections:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay [a]	**LOS** [b]
1. Dogwood Road / Cole Boulevard	TWSC [c]	AM	14.5	B
		PM	11.0	B
2. SR 111 / Cole Boulevard	Signal	AM	59.9	E
		PM	60.5	E
3. SR 98 / Cole Boulevard	Signal	AM	15.6	B
		PM	15.5	B
4. SR 7 / SR 98	Signal	AM	25.9	C
		PM	29.3	C
5. SR 98 / Dogwood Road	Signal	AM	26.5	C
		PM	21.2	C
6. SR 111 / SR 98	Signal	AM	38.7	D
		PM	37.3	D
7. Kemp Road / East Project Driveway	OWSC [d]	AM	DNE [e]	DNE
		PM	DNE	DNE

Footnotes:

a. Delay per vehicle in seconds
b. LOS – Level of service
c. TWSC – Two-Way STOP Controlled intersection.
d. OWSC – One-Way STOP Controlled intersection.
e. DNE – Does Not Exist

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

7.1 Trip Generation

Project trips consist of vehicular trips added to the street system which begin or end at the Project site and are generated by the proposed development. Trip generation estimates for the Project are based on site specific information provided by the applicant.

The traffic generated by the Project will consist of two main trip types (Employees and Trucks) as described below. Project traffic generation was calculated for each trip type as shown in ***Table 8-1.*** As seen in *Table 7–1*, the Project is calculated to generate a total of 650 ADT, with 30 inbound / 27 outbound trips during the AM peak hour, and 27 inbound / 30 outbound trips during the PM peak hour. A passenger car equivalence factor (PCE) was applied to the truck trips, as discussed below.

- ***Employees*** A total of 20 on-site employees are expected each day. The majority of the employees are expected to drive alone in their own vehicle (i.e., not carpool). Only a small amount of employees are expected to work a 8AM – 5PM shift. In order to provide a conservative analysis, 20% of the total employees were assumed to enter the site (traveling inbound) during the AM peak, and 20% of the total employees were assumed to exit the site (traveling outbound) during the PM peak.
- ***Heavy-Duty Truck Trips:*** A total of 100 heavy-duty trucks are expected to access the site each day. Heavy-duty trucks are assumed to access the site consistently between the hours of 9AM and 9PM (approximately 8 heavy vehicles per hour for 12-hours). A Passenger Car Equivalence (PCE) of 3.0 was applied to account for the diminished performance characteristics of heavy trucks in traffic flow (as compared to passenger vehicles) based on data contained in the Highway Capacity Manual (HCM).

In order to account for miscellaneous trips (such as visitors and deliveries), 10 additional ADT trips were assumed, as well as 1 inbound and 1 outbound trip during both the AM and PM peak hours.

TABLE 7–1
TRIP GENERATION

Use	Quantity	PCE [a]	Daily Trips		AM Peak Hour			PM Peak Hour		
			Rate	ADT [b]	In	Out	*Total*	In	Out	*Total*
Employees	20	1.0	2/vehicle	40	4	1	5	1	4	5
Heavy Vehicles (trucks)	100	3.0	2/vehicle	600	25	25	50	25	25	50
Miscellaneous Deliveries & Visitors	5	1.0	2/vehicle	10	1	1	2	1	1	2
Total				***650***	***30***	***27***	***57***	***27***	***30***	***57***

Footnotes:
a. PCE = Passenger Car Equivalent
b. ADT = Average Daily Traffic (24-hour total bi-directional traffic on a roadway segment)

General Notes:
1. The project site will operate only when the Port is operating (9AM-9PM)
2. 12 hours of truck activity evenly spread throughout the day
3. 20% of employees assured to work 8AM-5PM shift

7.2 Trip Distribution

It should be noted that separate distributions were derived for trucks and employees (and miscellaneous) trips since they will have very different travel patterns.

7.2.1 *Truck Traffic Distribution*

The distribution for trucks is based on the *City of Calexico General Plan Interim and Ultimate Truck Routes*, November 2006 (see ***Appendix B***). The distribution for trucks is also based on the expected inbound and outbound destinations.

The project expects 65% of trucks inbound from Mexico, 15% inbound from San Diego (west of the project site), and 20% inbound from Imperial County (north of project site).

In terms of outbound trips, the project expects 30% outbound to Mexico, 50% outbound to San Diego, and 20% outbound to Imperial County.

The project expects most of the trucks to come in from Mexico (65% assumed), and less trucks to enter back into Mexico (30% assumed).

Figure 7–1 shows the distribution of trucks.

7.2.2 *Employee / Miscellaneous Traffic Distribution*

Project trip distribution was developed based on existing traffic patterns, location of residential areas where employees may live, and the regional roadway network. The employee / miscellaneous distribution assumes 20% along SR-7 to/from Mexico, 15% along Dogwood Road, 55% along SR-111 north of Cole Boulevard, 10% along SR-111 south of SR-98, and 5% along SR-98 west of the project site.

Figure 7–2 shows the distribution of employee passenger car / miscellaneous trips operations traffic

7.3 Trip Assignment

Separate trip assignments were prepared for each trip type based on the distribution percentages detailed above.

For trucks coming inbound from Mexico, the route taken will be directed as follows:

- Travel northbound along SR-7 from the U.S./Mexico border.
- Travel westbound along Cole Blvd.
- Travel southbound via Dogwood Road to reach the project site.

Travel westbound along SR-98 then onto Cole Blvd

For outbound trucks traveling to Mexico, the route taken will be directed as follows:

- Travel northbound along Dogwood Road

Travel Eastbound along Cole Blvd then onto SR-98.

- Travel eastbound along Cole Blvd.
- Travel southbound via SR-7 to reach the U.S./Mexico border.

Trucks traveling to/from San Diego will travel via SR-98. Trucks traveling to/from Imperial County will travel via SR-111.

Trucks will be prohibited from entering the site from the east and using the Kemp Road driveway. All trucks will use the Dogwood Road driveway only. In addition, the majority (90%) of employees are expected to use the Kemp Road driveway. This report assumes 10% of employees will use the Dogwood Road driveway.

The Project truck traffic assignment is shown on ***Figure 7–3***. ***Figure 7–4*** shows the Project employee (and miscellaneous) traffic assignment. ***Figure 7–5*** depicts the total Project traffic assignment.

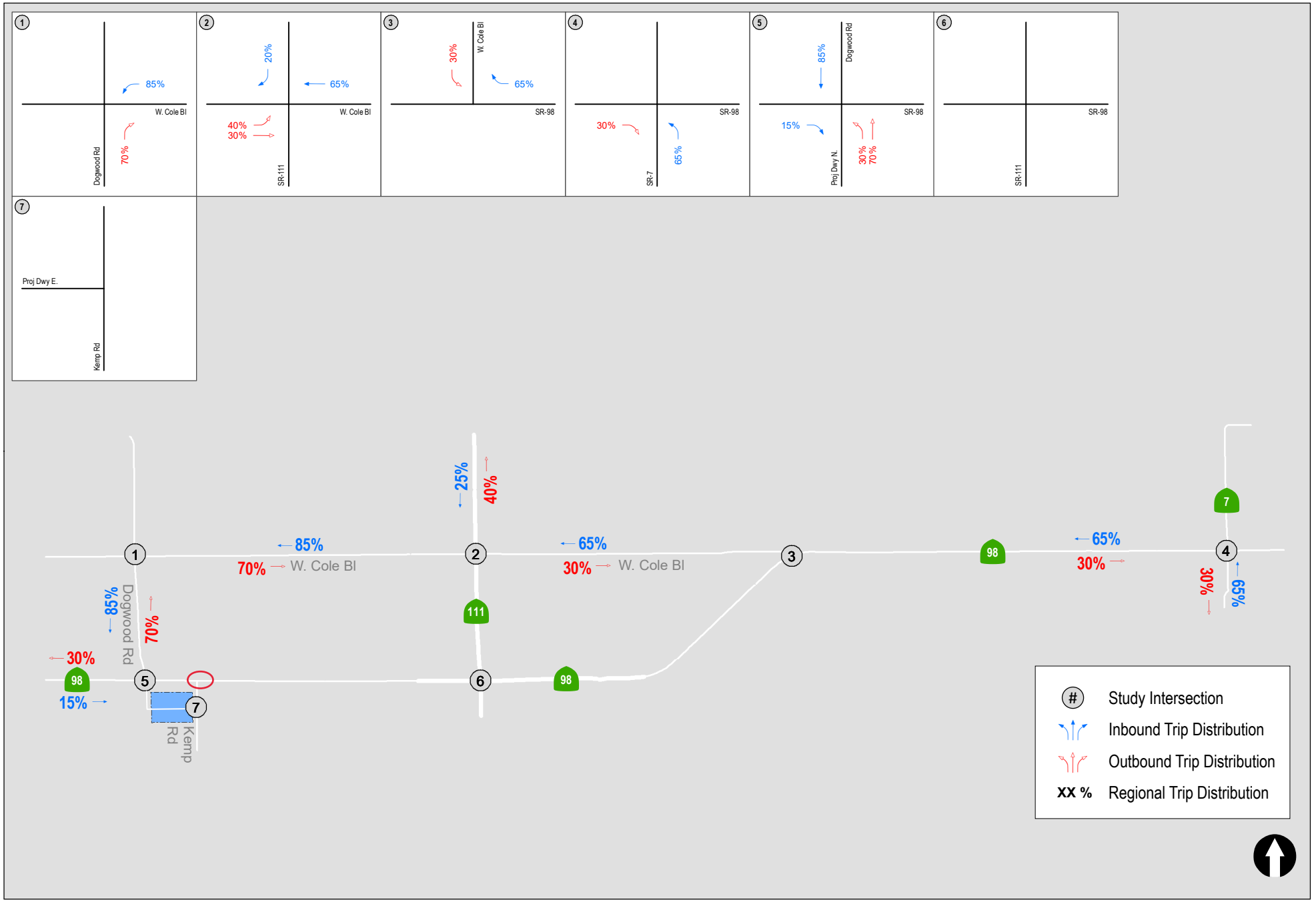

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Figure 7-1

Truck Trip Distribution

CHARGER LOGISTICS PROJECT

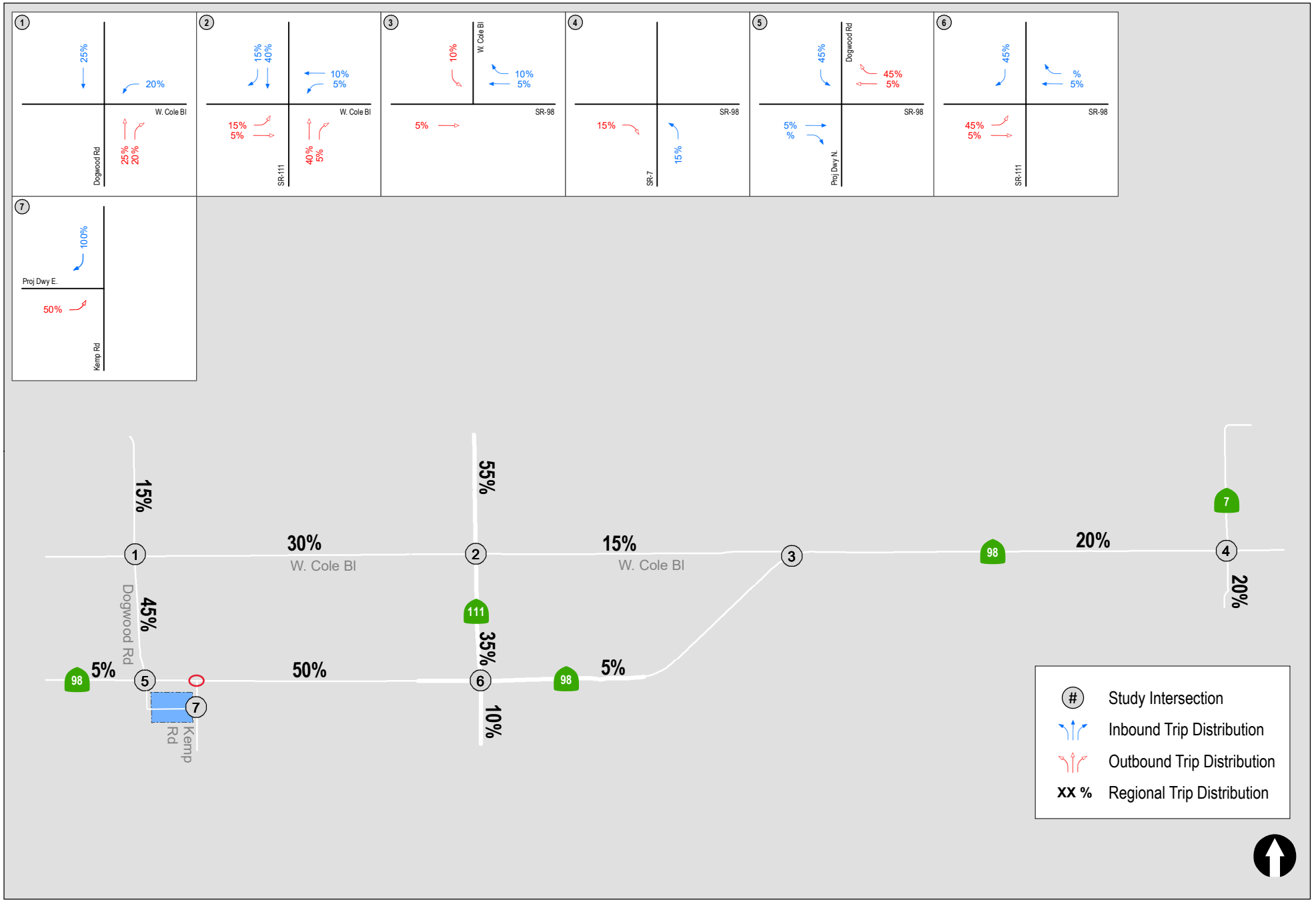

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Figure 7-2

Employee Trip Distribution

CHARGER LOGISTICS PROJECT

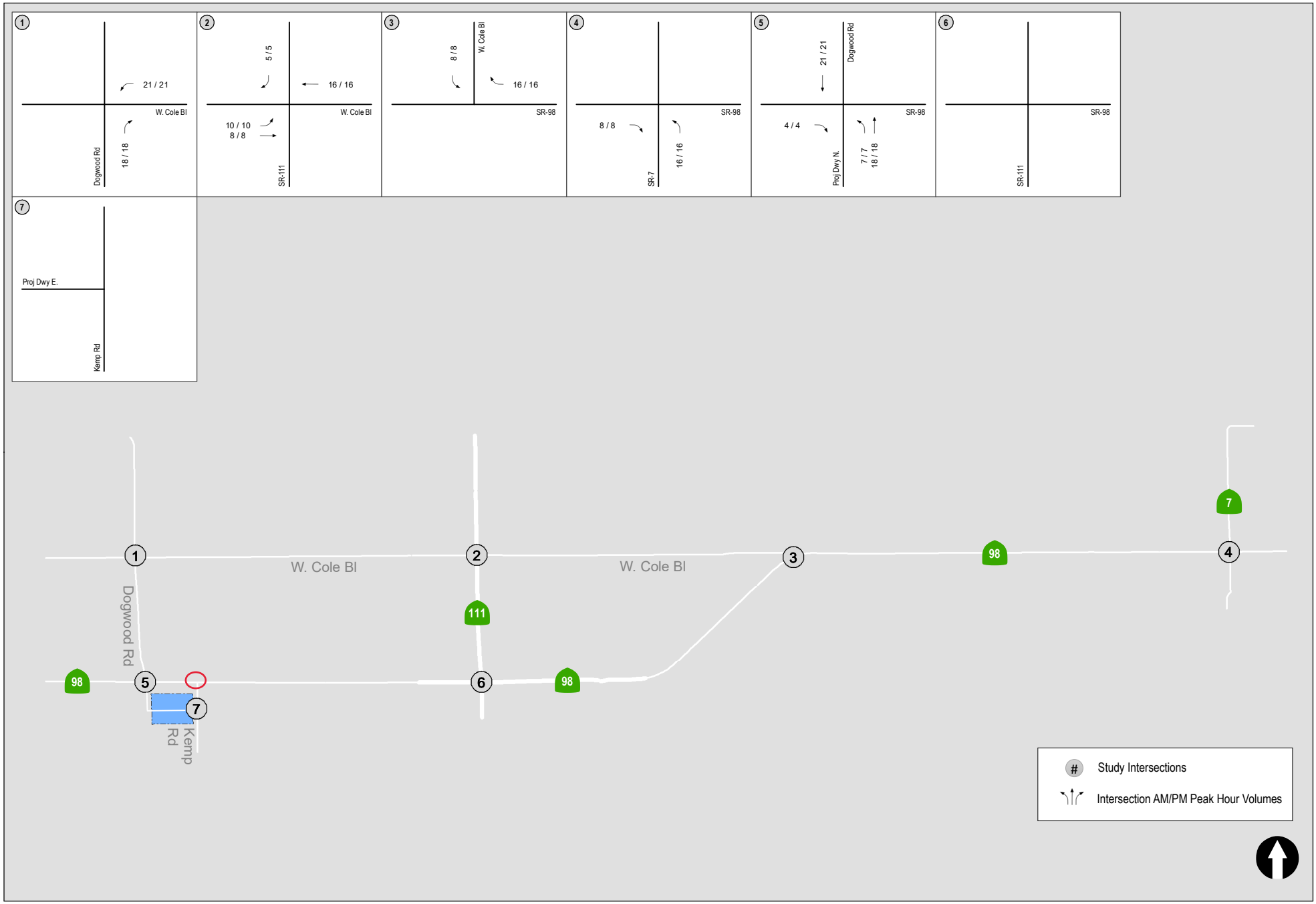

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Figure 7-3

Project Traffic Volumes

Trucks

CHARGER LOGISTICS PROJECT

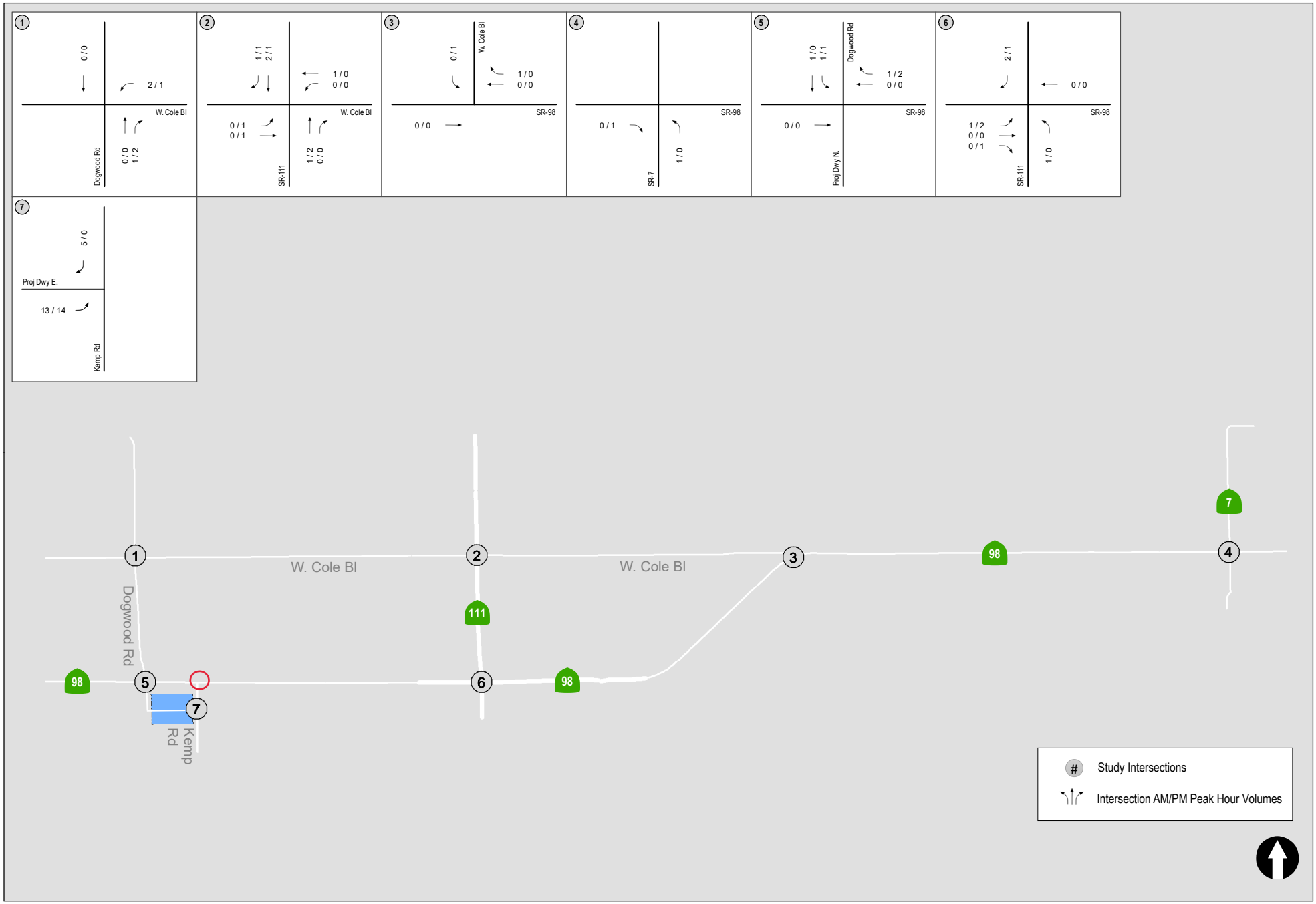

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Figure 7-4

Project Traffic Volumes

Employee / Miscellaneous

CHARGER LOGISTICS PROJECT

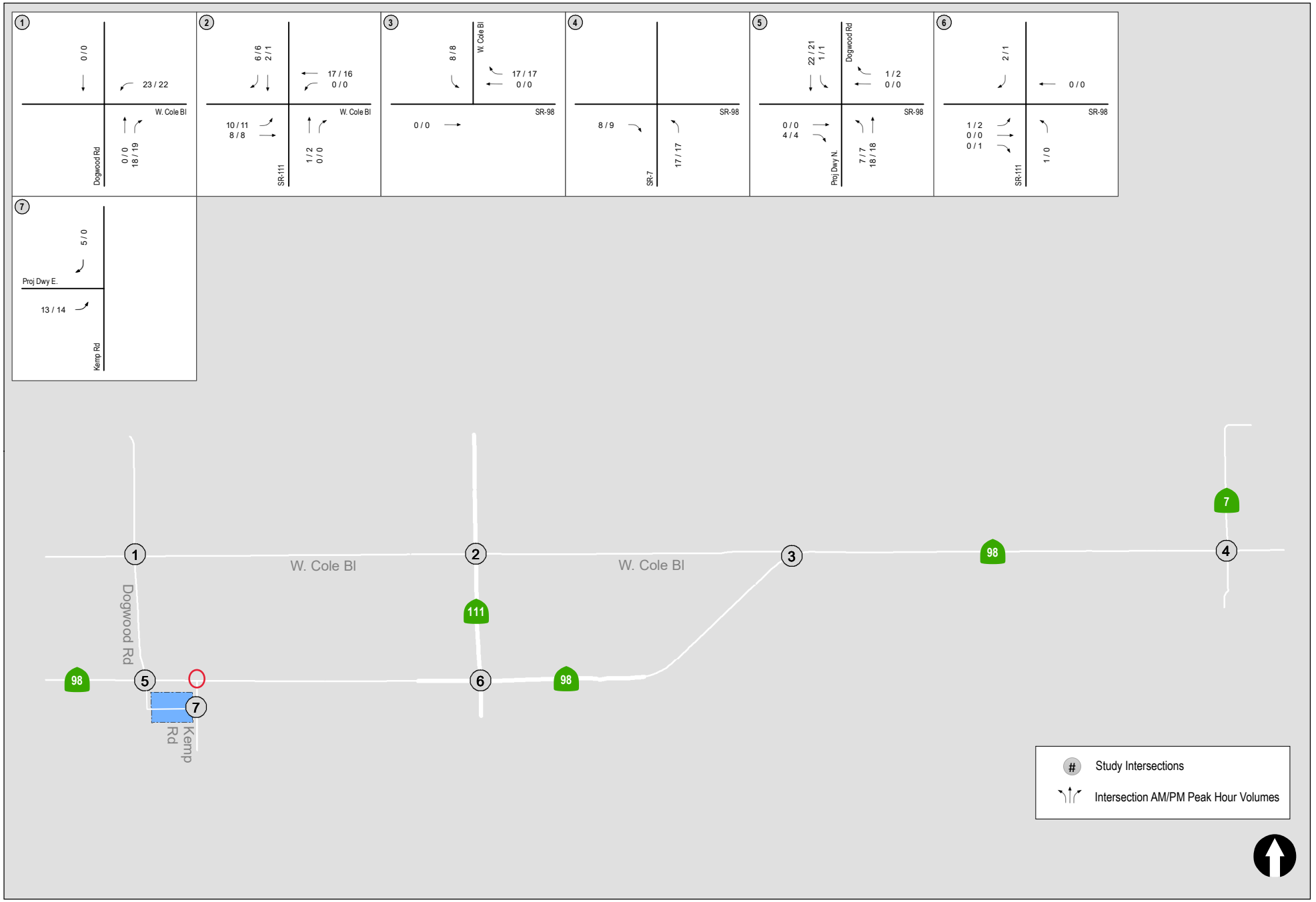

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Figure 7-5

Total Project Traffic Volumes

CHARGER LOGISTICS PROJECT

8.0 EXISTING + PROJECT ANALYSIS

8.1 Peak Hour Intersection Levels of Service

Table 8–1 summarizes the intersection operations throughout the project study area during the Opening Year of the project with the addition of Project traffic. This table shows that all of the intersections in the study area are calculated to continue to operate at LOS C or better during the AM and PM peak hours with the exception of the following intersection:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

The Project-related increase in the LOS delay for the above-listed intersections already operating at an unacceptable LOS is less than the threshold of 2.0 seconds. The Project is not calculated to result in a substantial effect to the study intersection and no improvements are required.

Figure 8-1 shows the Existing with Project traffic volumes.

Appendix C-D includes the Existing and Existing with Project intersection analysis worksheets.

Missing Impact Type column, to match other tables.

TABLE 8–1
EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ [c] Delay
			Delay [a]	LOS [b]	Delay [a]	LOS [b]	
1. Dogwood Road / Cole Boulevard	TWSC [d]	AM	14.5	B	14.6	B	0.1
		PM	11.0	B	15.1	C	4.1
2. SR 111 / Cole Boulevard	Signal	AM	59.9	E	60.3	E	0.4
		PM	60.5	E	61.5	E	1.0
3. SR 98 / Cole Boulevard	Signal	AM	15.6	B	16.0	B	0.4
		PM	15.5	B	15.6	B	0.1
4. SR 7 / SR 98	Signal	AM	25.9	C	26.5	C	0.6
		PM	29.3	C	29.5	C	0.2
5. SR 98 / Dogwood Road	Signal	AM	26.5	C	26.5	C	0.0
		PM	21.2	C	24.7	C	3.5
6. SR 111 / SR 98	Signal	AM	38.7	D	38.7	D	0.0
		PM	37.3	D	37.3	D	0.0
7. Kemp Road / East Project Driveway	OWSC [e]	AM	DNE [f]	DNE	8.5	A	8.5
		PM	DNE	DNE	8.5	A	8.5

Footnotes:
a. Delay per vehicle in seconds
b. LOS – Level of service
c. Δ denotes an increase in delay due to project.
d. TWSC – Two-Way STOP Controlled intersection.
e. OWSC – One-Way STOP Controlled intersection.
f. DNE – Does Not Exist
g. The recommended lane geometry that includes the project driveway (south leg) was assumed in the Existing + Project scenario

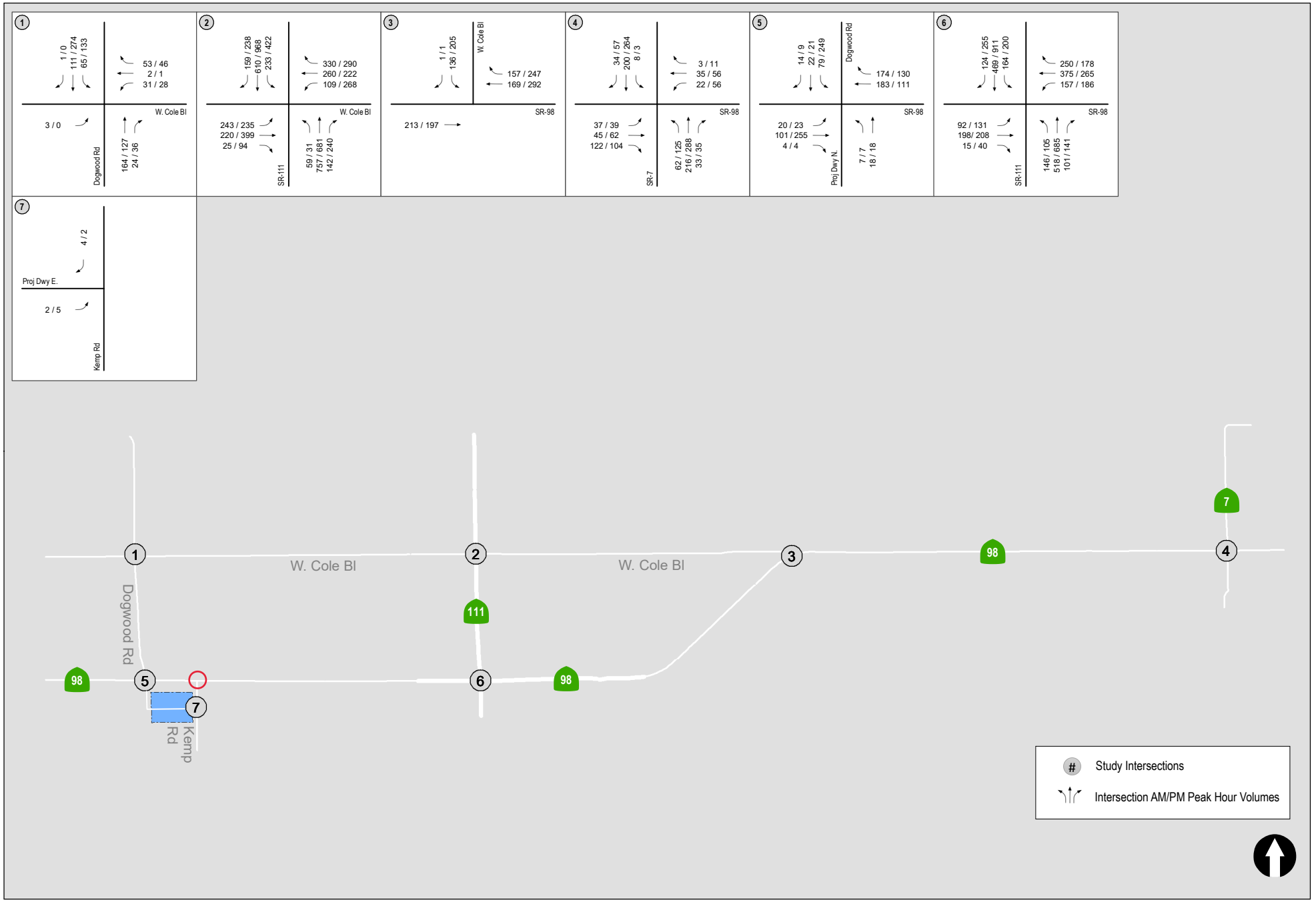

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Figure 8-1

Existing + Project Traffic Volumes

CHARGER LOGISTICS PROJECT

9.0 NEAR TERM ANALYSIS

9.1 Cumulative Traffic

To account for potential cumulative traffic increases in the project area, a 10% growth factor was applied to the existing traffic volumes at the study area intersections. This 10% growth would represent the amount of traffic that may utilize the street system in the project vicinity proposed from future near-by development projects planned in Imperial County and the City of Calexico.

9.2 Opening Year 2024 without Project (Existing + Cumulative) Analysis

9.2.1 *Intersection Operations*

Table 9–1 summarizes the intersection operations throughout the project study area during the Opening Year of the project. This table shows that all of the intersections in the study area are calculated to continue to operate at LOS C or better during the AM and PM peak hours with the exception of the following intersections:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

9.3 Opening Year 2024 with Project (Existing + Cumulative + Project) Analysis

9.3.1 *Intersection Operations*

Table 9–1 summarizes the intersection operations throughout the project study area during the Opening Year of the project and the addition of Project traffic. This table shows that all of the intersections in the study area are calculated to continue to operate at LOS C or better during the AM and PM peak hours with the exception of the following intersections:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

The Project-related increase in the LOS delay for the above-listed intersection already operating at an unacceptable LOS is less than the threshold of 2.0 seconds. The Project is not calculated to result in a substantial effect to the study intersection and no improvements are required.

Figure 9-1 shows the Cumulative traffic volumes. ***Figure 9-2*** shows the Opening Year without Project traffic volumes. ***Figure 9-3*** shows the Opening Year with Project traffic volumes.

Appendix E-F includes the Opening Year and Opening Year with Project intersection analysis worksheets.

TABLE 9–1
OPENING YEAR INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Opening Year Operations		Opening Year + Project Operations		Δ [c] Delay	Impact Type
			Delay [a]	LOS [b]	Delay	LOS		
1. Dogwood Road / Cole Boulevard	TWSC [d]	AM	15.4	C	15.6	C	0.2	None
		PM	11.6	B	16.4	C	4.8	None
2. SR 111 / Cole Boulevard	Signal	AM	70.9	E	71.8	E	0.9	None
		PM	71.5	E	72.8	E	1.3	None
3. SR 98 / Cole Boulevard	Signal	AM	15.8	B	16.2	B	0.4	None
		PM	15.8	B	15.9	B	0.1	None
4. SR 7 / SR 98	Signal	AM	26.4	C	26.9	C	0.5	None
		PM	29.5	C	29.9	C	0.4	None
5. SR 98 / Dogwood Road [g]	Signal	AM	27.9	C	27.9	C	0.0	None
		PM	21.9	C	26.0	C	4.1	None
6. SR 111 / SR 98	Signal	AM	39.9	D	40.0	D	0.1	None
		PM	39.7	D	39.8	D	0.1	None
7. Kemp Road / East Project Driveway	OWSC [e]	AM	DNE [f]	DNE	8.5	A	8.5	None
		PM	DNE	DNE	8.5	A	8.5	None

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay due to project.
d. TWSC – Two-Way STOP Controlled intersection.
e. OWSC – One-Way STOP Controlled intersection.
f. DNE = Does Not Exist
g. The recommended lane geometry that includes the project driveway (south leg) was assumed in the Opening Year + Project scenario

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

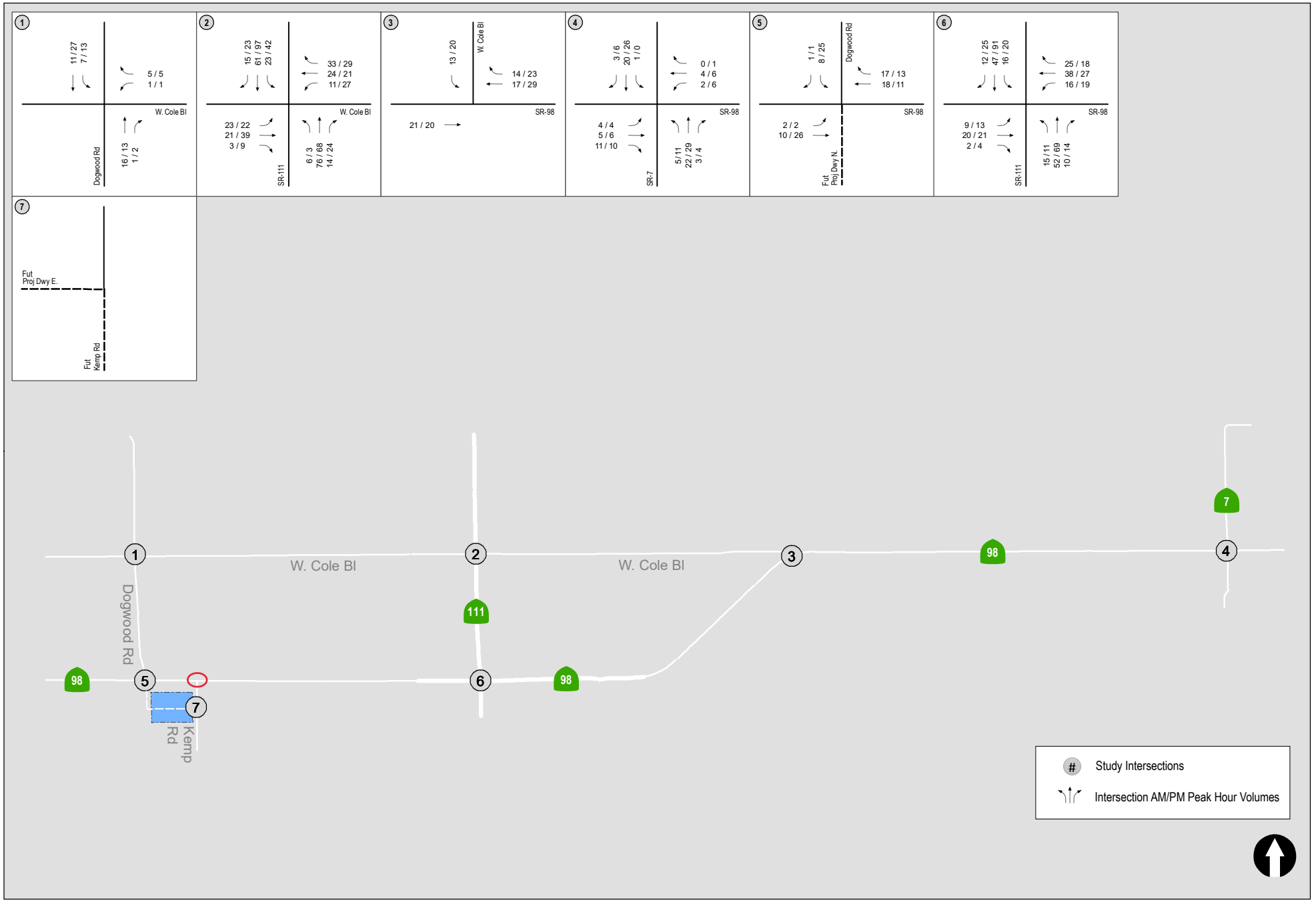

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Figure 9-1

Cumulative Traffic Volumes

CHARGER LOGISTICS PROJECT

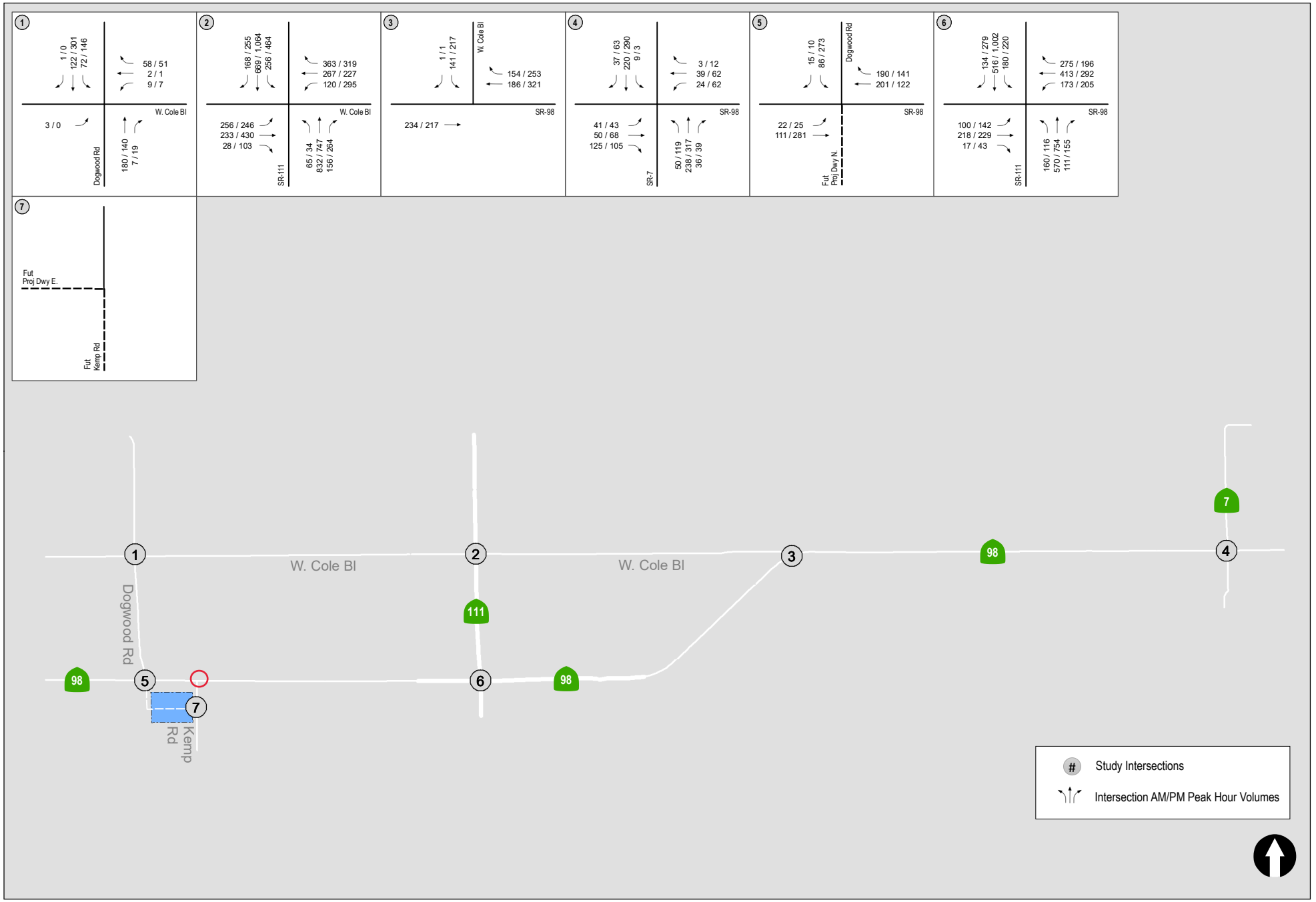

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Figure 9-2

Opening Year without Project (Existing + Cumulative) Traffic Volumes

CHARGER LOGISTICS PROJECT

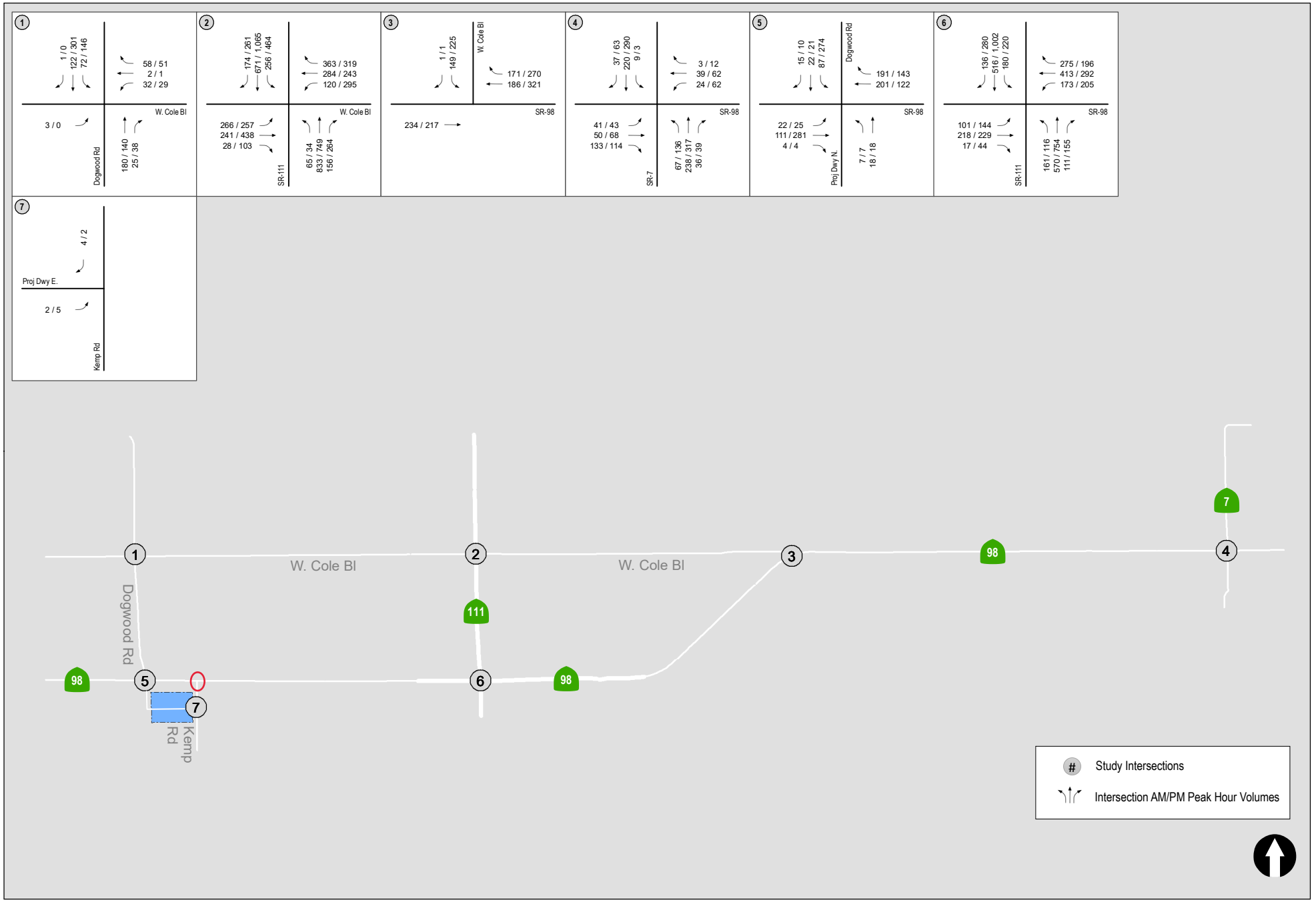

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Figure 9-3

Opening Year + Project (Existing + Cumulative + Project) Traffic Volumes

10.0 HORIZON YEAR 2050 ANALYSIS

10.1 Horizon Year Traffic

To calculate the Horizon Year 2050 traffic volumes, the *Imperial County Circulation and Scenic Highways Element*, January 2008, (see ***Appendix G***) and historical volumes were reviewed.

The *Imperial County Circulation and Scenic Highways Element* includes a 2050 forecast in which traffic volumes are calculated by applying a 0.5%, 1.0%, or 2.0% annual growth factor to Year 2025 forecasted volumes.

Historical volumes from Caltrans Census Data, as well as LLG in-house were reviewed.

A comparison was done of in-house 2018 and 2022 traffic volumes, as well as Caltrans Census Data 2018 and 2022 traffic volumes. The comparison showed that there has been a decrease in traffic between 2018 and 2022 (see ***Appendix H***).

To be conservative, LLG calculated Year Horizon Year 2050 traffic volumes by applying a 0.5% annual growth factor to existing volumes. By applying a 0.5% annual growth factor, LLG is incorporating the same methodology as the *Imperial County Circulation and Scenic Highways Element*, as well as calculating a plausible traffic volume based on historical data.

10.2 Horizon Year 2050 without Project Analysis

10.2.1 *Intersection Operations*

Table 10–1 summarizes the intersection operations throughout the project study area during the Horizon Year of the project. This table shows that all of the intersections in the study area are calculated to continue to operate at LOS C or better during the AM and PM peak hours with the exception of the following intersections:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

10.3 Horizon Year 2050 with Project Analysis

10.3.1 *Intersection Operations*

Table 10–1 summarizes the intersection operations throughout the project study area during the Horizon Year of the project and the addition of Project traffic. This table shows that all of the intersections in the study area are calculated to continue to operate at LOS C or better during the AM and PM peak hours with the exception of the following intersections:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

The Project-related increase in the LOS delay for the above-listed intersections operating at an unacceptable LOS is less than the threshold of 2.0 seconds. The Project is not calculated to result in a substantial effect to the study intersection and no improvements are required.

Figure 10-1 shows the Horizon Year traffic volumes. ***Figure 10-2*** shows the Horizon Year with Project traffic volumes.

Appendix I-J includes the Opening Year and Opening Year with Project intersection analysis worksheets.

TABLE 10–1
HORIZON YEAR 2050 INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Horizon Year Operations		Horizon Year + Project Operations		Δ [c] Delay	Impact Type
			Delay [a]	LOS [b]	Delay	LOS		
1. Dogwood Road / Cole Boulevard	TWSC [d]	AM	16.0	C	16.3	C	0.3	None
		PM	24.6	C	25.0	C	0.4	None
2. SR 111 / Cole Boulevard	Signal	AM	78.1	E	79.3	E	1.2	None
		PM	78.5	E	80.1	F	1.6	None
3. SR 98 / Cole Boulevard	Signal	AM	15.8	B	16.2	B	0.4	None
		PM	15.9	B	16.0	B	0.1	None
4. SR 7 / SR 98	Signal	AM	26.9	C	27.4	C	0.5	None
		PM	28.1	C	28.5	C	0.4	None
5. SR 98 / Dogwood Road [g]	Signal	AM	28.4	C	28.4	C	0.0	None
		PM	22.4	C	27.2	C	4.8	None
6. SR 111 / SR 98	Signal	AM	40.7	D	40.7	D	0.0	None
		PM	41.0	D	41.1	D	0.1	None
7. Kemp Road / East Project Driveway	OWSC [e]	AM	0.0	A	8.5	A	8.5	None
		PM	0.0	A	8.5	A	8.5	None

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay due to project.
d. TWSC – Two-Way STOP Controlled intersection.
e. OWSC – One-Way STOP Controlled intersection.
f. DNE = Does Not Exist
g. The recommended lane geometry that includes the project driveway (south leg) was assumed in the Opening Year + Project scenario

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

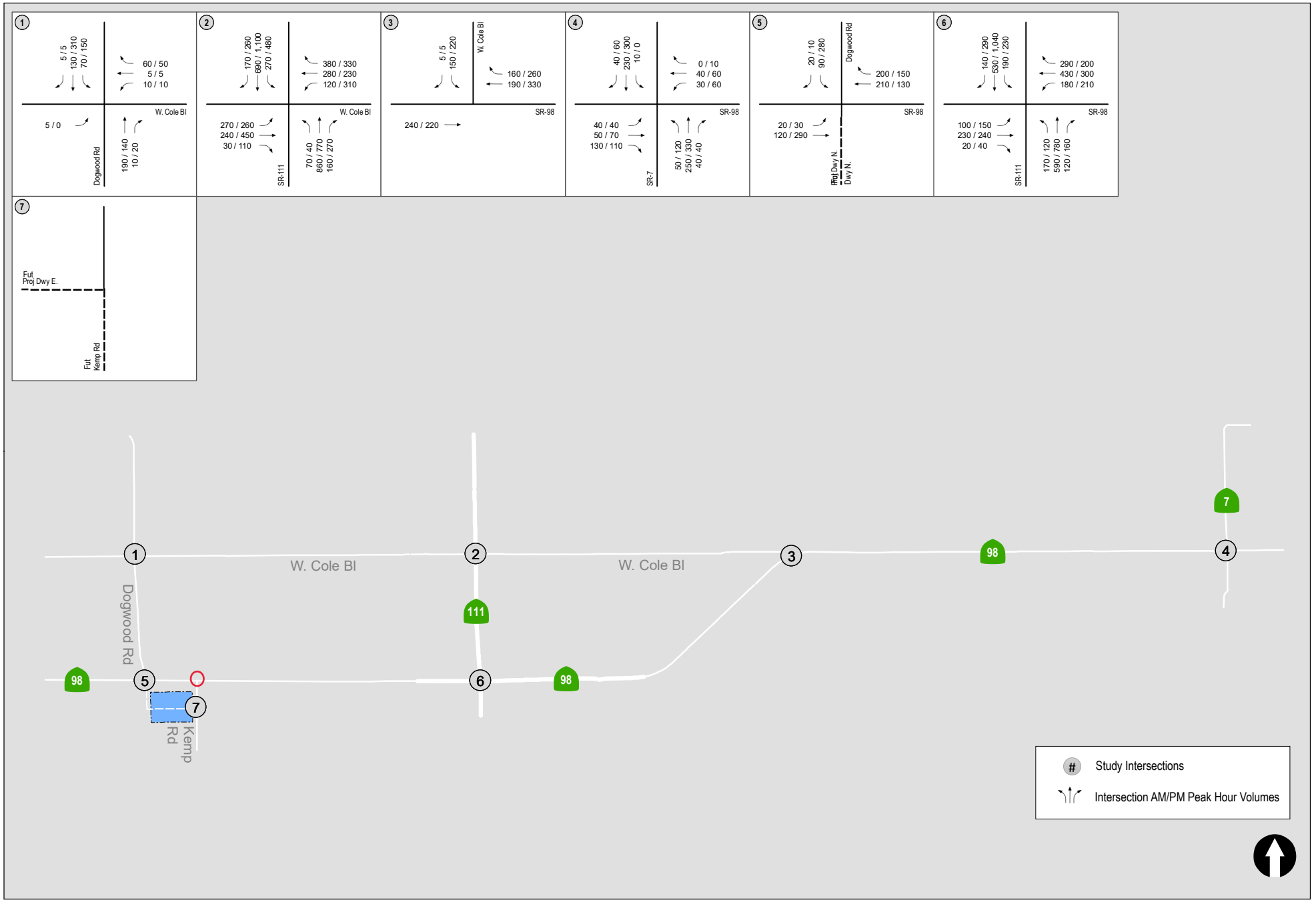

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Figure 10-1

Horizon Year 2050 Without Project Traffic Volumes

CHARGER LOGISTICS PROJECT

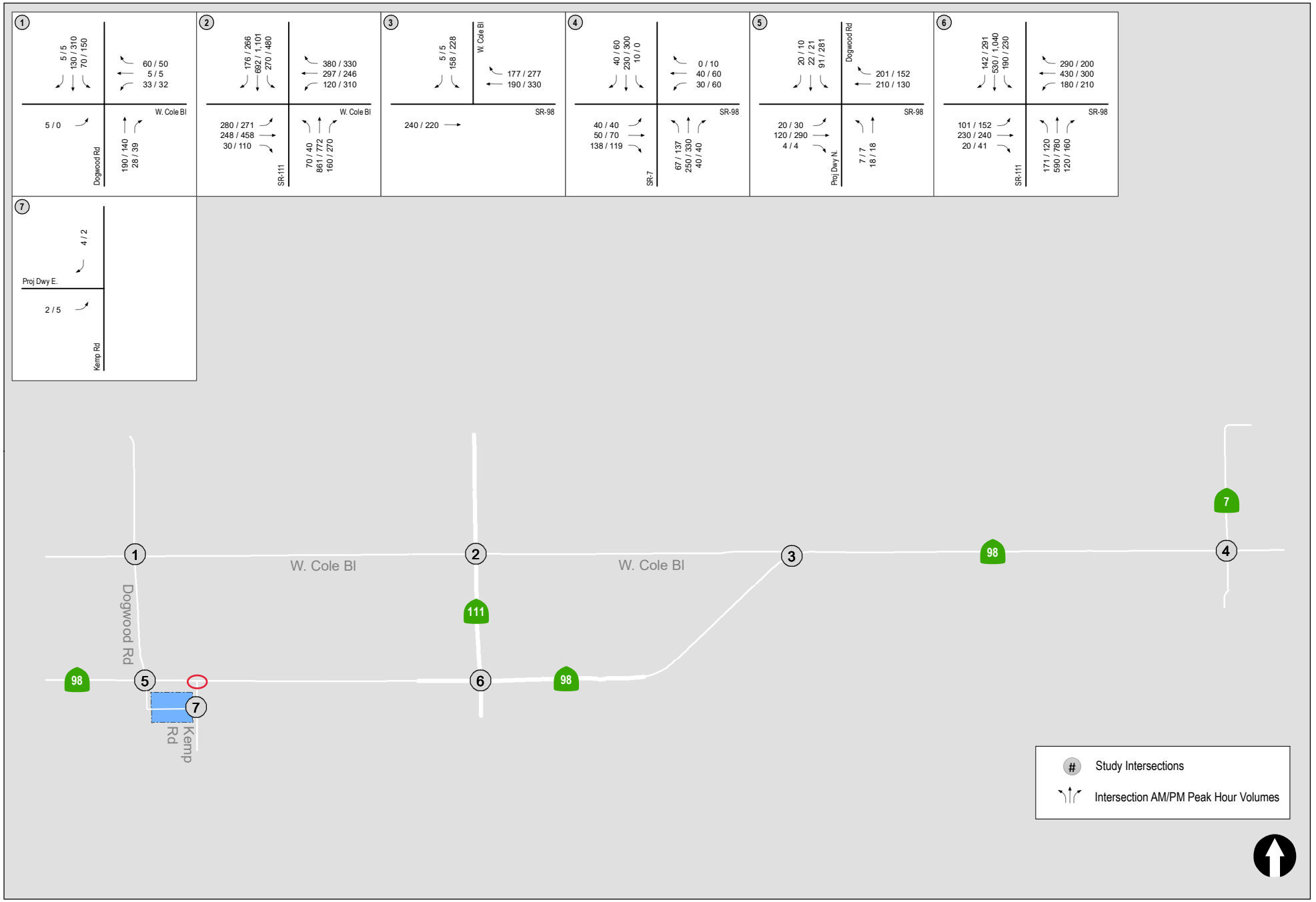

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Figure 10-2

Horizon Year 2050 + Project Traffic Volumes

CHARGER LOGISTICS PROJECT

11.0 SITE ACCESS

11.1 Site Access Assessment

As described in *Section 2.0*, there are two project driveways. Access to the site is provided via Kemp Road on the east side of the project site, and on the west side of the project site at Dogwood Road.

Trucks will be directed to only enter the site on the west side of the project site via Dogwood Road. Trucks will be prohibited to enter the site via Kemp Road. Employees approaching from the east will be directed to use the Kemp Road driveway, but some were assumed to use the Dogwood Road driveway for the analysis.

Reasoning to include Kemp Rd and SR-98 Intersection analysis

To facilitate employee traffic entering the site via SR-98 to Kemp Road, a westbound left-turn pocket should be provided on SR-98 at Kemp Road due to the high speeds along SR-98 (65 MPH).

Additionally, a westbound dedicated left-turn lane and a southbound dedicated left-turn lane should be provided at the SR-98 / Dogwood Road intersection, and the overall intersection lane configuration shown in ***Figure 13-1*** should be implemented.

It should be noted that the proposed left turn pockets along SR-98 will require widening of SR-98 to accommodate standard lanes and standard shoulders. Additionally, as stated in *Section 3.1*, a Class I Multi-Use Path is proposed along SR-98 from Dogwood Road to Eady Avenue. This active transportation improvement needs to be considered when providing the westbound left-turn pockets on SR-98 at Kemp Road and Dogwood Road such that project construction does not preclude, prevent, or affect the operations of a future bike path.

It is recommended that an Intersection Control Evaluation (ICE) study be prepared at both the SR-98 / Dogwood Road and SR-98 / Kemp Road intersections, consistent with Caltrans standards. The ICE will include the recommended design of the proposed improvements.

11.2 Queue Analysis at Access

A queue analysis was completed to evaluate the queue lengths at the SR-98 / Dogwood Road intersection with the implementation of the improvements described above. ***Table 11-1*** includes the queue analysis results.

an ICE will be required

Include queue analysis of Kemp Rd and SR-98 intersection proposed left turn pocket length. Left-turn queue storage should be adequate to not impact through traffic high speed movement.

The proposed Intersection Improvements/changes on SR-98 and Dogwood and change in lane configurations on SR-98 and Kemp Rd to add left-turn pockets will require applicant to do an Intersection Control Evaluation Analysis per Caltrans Traffic Operations Policy Directive (TOPD) 13-02, which will be surpassed by the upcoming ISOAP Evaluation.

City or County and Caltrans Multi-modal & Design branches need to coordinate with applicants design

Provide Synchro electronic Model to Caltrans so we may confirm model and queues.

TABLE 11–1
QUEUE ANALYSIS AT ACCESS

Intersection	Movement	Peak Hour	Existing Storage Length	Existing	Existing + Project	Near Term	Near Term + Project	Horizon Year	Horizon Year + Project
5. SR-98 / Dogwood Road	Southbound Left	AM	Shared	46’	46’	50’	50’	52’	52’
		PM		128’	137’	141’	153’	146’	158’
	Westbound Right	AM	350’	15’	47’	16’	49’	16’	50’
		PM		13’	33’	14'	40’	14’	44’
	Westbound Left	AM	-	-	10’	-	10’	-	10’
		PM		-	10’	-	10’	-	10’
	Northbound Left	AM	-	-	8’	-	8’	-	8’
		PM		-	8’	-	8’	-	8’
	Eastbound Left	AM	325’	24’	24’	25’	25’	24’	24’
		PM		26’	26’	28’	28’	32’	32’

General Notes:

1. “+Project” scenarios assume a 4-leg intersection at SR-98 / Dogwood Road

12.0 VEHICLE MILES TRAVELED (VMT)

12.1 Background

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. These changes include the elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The justification for this paradigm shift is that Auto Delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions. The VMT standard for evaluating transportation impacts under CEQA became mandatory statewide on July 1, 2020.

Vehicle Miles Traveled (VMT) is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT is a measure of the use and efficiency of the transportation network. VMT's are calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round trip) travel and is typically estimated on a weekday for the purpose of measuring potential transportation impacts.

12.2 Methodology

Imperial County has not yet formally developed guidelines or adopted significance criteria or technical methodologies for VMT analysis. Therefore, LLG utilized the Governor's Office of Planning and Research (OPR) guidelines from the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018 (included in ***Appendix I***), to develop technical methodologies for this Project.

The Project will generate trips from two distinct types of vehicles: heavy vehicles, which consist of the Project's feedstock and compost trucks, and employee passenger vehicles. Heavy vehicles and passenger vehicles are classified as different vehicle types in the OPR guidelines and are considered differently in regard to VMT analysis.

12.2.1 *Heavy Duty Vehicles*

Per OPR guidelines, "vehicle miles traveled" refers to the amount and distance of ***automobile*** travel attributable to a project. The OPR guidelines specifically state "The term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT)".

Additionally, the *Caltrans Transportation Analysis Framework*, 1st Edition (September 2020) (included in ***Appendix J***) defines Vehicle Miles Traveled as "The number of miles traveled by motor vehicles on roadways in a given area over a given time period". The *Caltrans Transportation Analysis Framework* continues to state, "VMT may be subdivided for reporting and analysis purposes into single occupant passenger vehicles (SOVs), high occupancy vehicles (HOV's), buses,

trains, light duty trucks, and heavy-duty trucks … For a CEQA compliant transportation impact analysis, automobile VMT (cars and light trucks) may be evaluated".

Per the OPR guidelines, heavy vehicles *may* be included in assessments but are not required to be included. Furthermore, per the *Caltrans Transportation Analysis Framework*, CEQA-compliant analyses are to evaluate automobile VMT (cars and light trucks).

Therefore, the VMT analysis does not include trips from heavy-duty trucks and the trips generated by the Project's heavy-duty trucks are excluded from VMT analysis.

12.2.2 *Employee / Miscellaneous Passenger Vehicles*

Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact. OPR contains a screening threshold for small projects which states that, "absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

The Project's employee / miscellaneous passenger vehicles are calculated to generate 50 ADT, as shown in *Table 7-1*. Therefore, the employee / miscellaneous component of the Project can be considered a "small project", assumed to cause a less-than significant transportation impact per OPR guidelines.

12.3 VMT Conclusions

The trips generated by the Project's heavy-duty trucks are excluded from VMT analysis. The employee / miscellaneous component of the Project can be considered a "small project", assumed to cause a less-than significant transportation impact per OPR guidelines.

13.0 CONCLUSIONS

The capacity analyses performed for the key roadway segments and unsignalized and signalized intersections indicate that ***no substantial effects would occur*** with the addition of the project.

13.1 Transportation LOS Analysis

All of the intersections in the study area are calculated to continue to operate at LOS C or better during the AM and PM peak hours with the exception of the following intersection:

- Intersection #2: SR-111 / Cole Blvd, LOS E during the AM & PM peak hours
- Intersection #6: SR-111 / SR-98, LOS D during the AM & PM peak hours

The Project-related increase in the LOS delay for the above-listed intersections which operate at an unacceptable LOS in the pre-project condition is less than the threshold of 2.0 seconds. The Project is not calculated to result in a substantial effect to these two intersections and no improvements are required.

13.2 VMT Analysis

The project does not create a significant VMT transportation impact, and no mitigation measures are required.

13.3 Access

The following access related improvements are recommended:

1. Provide a westbound left-turn lane on SR-98 at Kemp Road.
2. Provide the following geometrics of the SR-98 / Kemp Road intersection.
    a. Northbound
        i. Stop controlled shared left-right lane
    b. Eastbound
        i. Shared through-right lane
    c. Westbound:
        i. Exclusive left-turn lane
        ii. Excusive through lane
3. Pave Kemp Road along the project frontage.

Intersection not included in analysis, please include and update study

4. Prohibit trucks from utilizing SR-98 from the east to access the site. Trucks should be required to use Dogwood Road to ingress the site.

5. Prohibit trucks from using Kemp Road to access the site.

6. Provide the following geometrics at the SR-98 / Dogwood Road intersection. ***Figure 13-1*** illustrates the recommended improvements at the SR-98 / Dogwood Road intersection.

    a. Northbound

        i. Exclusive left-turn lane

        ii. Shared through-right lane

    b. Southbound

        i. Exclusive left-turn lane

        ii. Shared through-right lane

    c. Eastbound

        i. Exclusive left-turn lane

        ii. Shared through-right lane

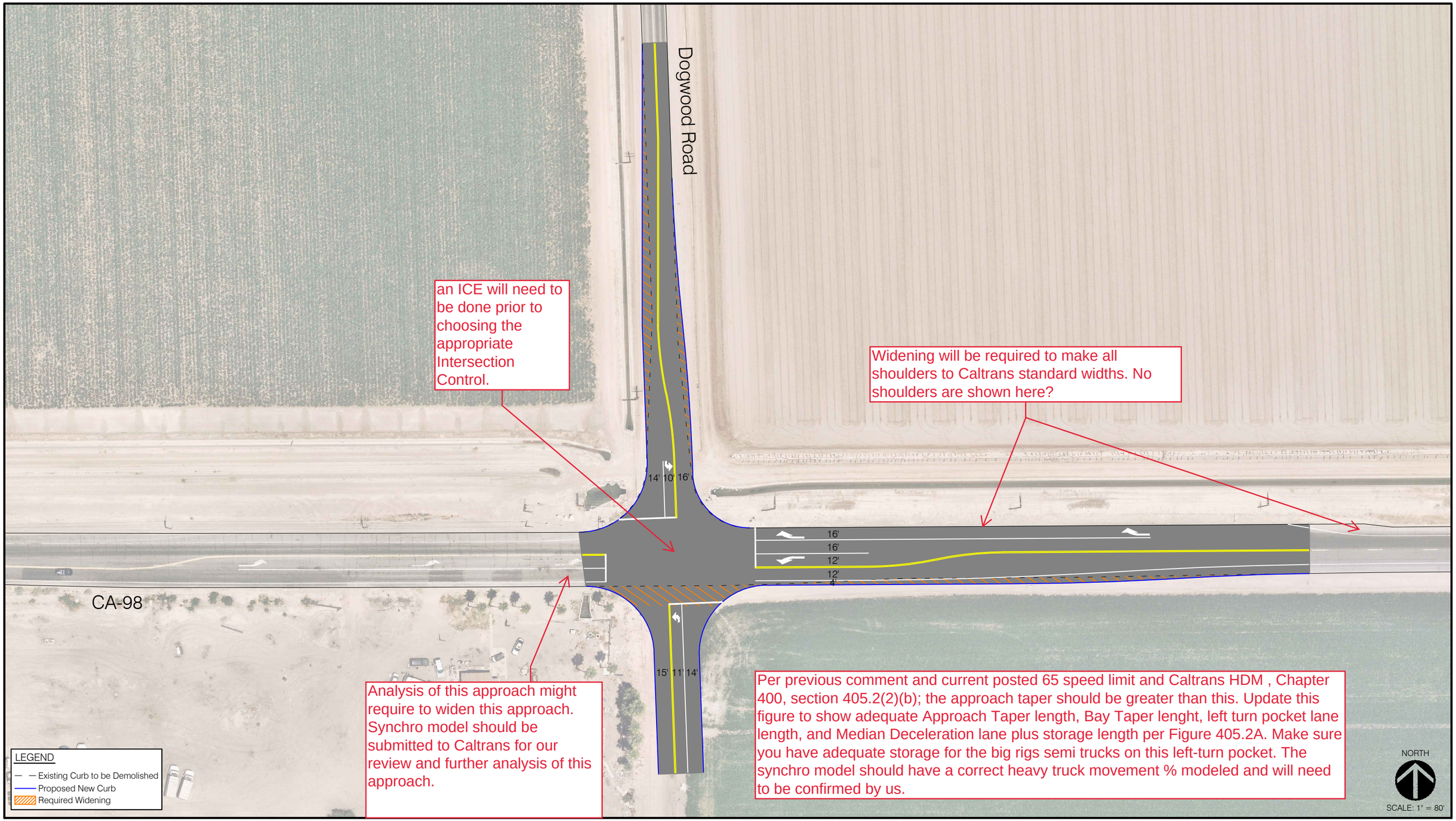
    d. Westbound

        i. Exclusive left-turn lane

        ii. Excusive through lane

        iii. Excusive right-turn lane

7. Prepare a Caltrans Intersection Control Evaluation (ICE) analysis at the SR-98 intersections at Dogwood Road and Kemp Road. The ICE will include the recommended design of the proposed improvements.



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LINSCOTT LAW & GREENSPAN engineers

CONCEPTUAL ONLY
NOT FOR CONSTRUCTION

Figure 13-1

Recommended Improvements at SR-98 & Dogwood Road

CHARGER LOGISTICS PROJECT