Appendix B

Traffic Study

Prepared by Darnell and Associates

TRAFFIC STUDY and APPENDICIES
A thru E

For

Calexico-SR111 Mixed Use Development

In the Calexico Area of Imperial County

Submitted To:

BRG Consulting, Inc.

Submitted By:

Darnell & Associates, Inc.

August 20, 2008
Original February 4, 2008

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

August 20, 2008

Erica Lathers
BRG Consulting, Inc.
304 Ivy Street
San Diego, CA. 92101

D&A Ref. No.: 060303

Subject: Revised Traffic Study for the proposed Mixed-Use Calexico-SR111 Development located on the South Side of Jasper Road between Dogwood and SR111 in the Calexico Area of Imperial County.

Dear Mr. Lathers:

In accordance with your authorization, Darnell & Associates, Inc. (D&A) has completed the following traffic study for the Calexico-SR111 mixed use development. The project is located on the south side of Jasper Road between Dogwood Road and SR111 in the Calexico area of Imperial County. The project site is planned to be annexed into the City of Calexico.

The traffic study analyzes the traffic impacts related to the proposed project on local roadways and intersections for existing, existing plus project, existing plus other projects, existing plus other projects plus the proposed project (near term cumulative), 2015 conditions, and 2035 conditions.

This iteration also includes alternative scenario analyses for a reduced casino as well as a land use change from office tech to industrial.

If you have any questions, please feel free to contact the office.

Sincerely,

DARNELL & ASSOCIATES, INC.

Bill E Darnell

Bill E Darnell, P.E.
Firm Principal
RCE 22338

REGISTERED PROFESSIONAL ENGINEER
BILL E. DARNELL
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Expires 9/30/09
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BED/bh
060303-Calexico111-08-18-08

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TRAFFIC STUDY

FOR

CALEXICO-SR111 MIXED USE DEVELOPMENT

IN THE
CALEXICO AREA OF IMPERIAL COUNTY

Submitted To:

BRG Consulting, Inc.
304 Ivy Street
San Diego, CA. 92101

Submitted By:

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1446 Front Street, Third Floor
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August 20, 2008
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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

APPENDIX A
- Segment Counts
- Intersection Counts
- County of Imperial Roadway Classifications
- City of Calexico Roadway Classifications

APPENDIX B
- Approved/Pending Project Data

APPENDIX C
- Existing Conditions Analysis Worksheets

APPENDIX D
- Existing + Project (Proposed Casino) Conditions Analysis Worksheets

APPENDIX E
- Existing + Project (Proposed Casino+Phase 1) Conditions Analysis Worksheets

APPENDIX F
- 2015 Conditions Analysis Worksheets

APPENDIX G
- 2015 + Project (Proposed Casino) Conditions Analysis Worksheets

APPENDIX H
- 2015 + Total Project (Proposed) Conditions Analysis Worksheets

APPENDIX I
- 2035 Conditions Analysis Worksheets

APPENDIX J
- 2035 + Proposed Project Conditions Analysis Worksheets

APPENDIX K
- Proposed Project Access Analysis Worksheets

APPENDIX L
- Proposed Project Mitigated Analysis Worksheets

APPENDIX M
- Existing + Project (Reduced Casino) Conditions Analysis Worksheets

APPENDIX N
- Existing + Project (Reduced Casino+Phase 1) Conditions Analysis Worksheets

APPENDIX O
- 2015 + Project (Reduced Casino) Conditions Analysis Worksheets

APPENDIX P
- 2015 + Total Project (Reduced Casino) Conditions Analysis Worksheets

APPENDIX Q

- Reduced Casino Project Access Analysis Worksheets

APPENDIX R

- Reduced Casino Project Mitigated Analysis Worksheets

APPENDIX S

- 2015 + Total Project (Industrial Density) Conditions Analysis Worksheets

APPENDIX T

- Industrial Density Project Access Analysis Worksheets

APPENDIX U

- Industrial Density Project Mitigated Analysis Worksheets

APPENDIX V

- Traffic Signal Warrant Worksheets

APPENDIX W

- Intersecting Lane Volume (ILV) Worksheets

EXECUTIVE SUMMARY

The Calexico-SR111 mixed use development is located on the south side of Jasper Road between Dogwood Road and SR-111 in the Calexico area of Imperial County. The project site is planned to be annexed into the City of Calexico. The proposed project consists of commercial density, restaurants, retail, office, casino, and hotel uses.

At buildout the project will generate approximately 75,308 average daily trips (ADT), 3,883 AM peak hour trips, and 7,082 PM peak hour trips. A portion of the trips would be captured internally or be commercial pass-by trips resulting in a total new trips of 59,285 ADT, 3,286 AM peak hour trips, and 6,071 PM peak hour trips being added to the external roadway network.

The Alternative 1 project density reduces the size of the casino footprint with all other land uses and phasing the same. With the reduced casino project, the total new daily trips to the area are approximately 57,397 ADT, 3,268 AM peak hour trips and 5,943 PM peak hour trips.

The Alternative 2 project density exchanges some office use and office tech use with industrial land use. The effect of this density change occurs in the final phase of the project and impacts the "total project" scenario analyses. With the industrial land use density alternative, the project's total new daily trips to the area are approximately 53,265 ADT with 2,405 AM peak hour trips and 5,294 evening peak hour trips.

All project scenarios generate significant traffic impacts and with the less intensive alternatives providing a reduced level of significance.

The reduced casino alternative does not result in direct impacts to off-site locations.

For all scenarios, mitigation is proposed at intersections and roadway segment locations where the project has direct and/or cumulative impacts.

This report addresses the following: Existing Conditions, Project Trip Generation, Existing Plus Project Conditions, Year 2015 Conditions, Future Conditions (Year 2035) on the Jasper Corridor, Traffic Impacts, and mitigation measures. .

SECTION I – INTRODUCTION

PROJECT DESCRIPTION

The proposed Calexico-SR111 mixed use development is located on the south side of Jasper Road between Dogwood Road and SR-111 in the Calexico area of Imperial County. The project site is intended to be annexed into the City of Calexico. The proposed project consists of commercial densities, including restaurants and retail, general office, casino and hotel uses, which are planned to be developed in phases. Alternative density scenarios are addressed later in this report.

A vicinity map is provided in Figure 1. The project's site plan is illustrated in Figure 2.

CONGESTION MANAGEMENT PROGRAM

Based on the approval of Proposition 111 in 1990, regulations require the preparation, implementation, and annual updating of a Congestion Management Program (CMP) in each of California's urbanized counties. One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies, project applicants, and traffic consultants through a transportation impact report usually conducted as part of the CEQA project review process. Authority for local land use decisions including project approvals and any required mitigation remains the responsibility of local jurisdictions.

The criteria for which a project is subject to the regulations as set forth in the CMP are determined by the trip generation potential for the project. Currently, the average daily traffic (ADT) threshold is 2,400 vehicles or 200 peak hour trips. The proposed project will generate approximately 59,285 new total daily trips (see Section III, Project Related Conditions) and is therefore subject to CMP guidelines for traffic impact studies.

SCENARIOS STUDIED

The traffic scenarios analyzed in this report are identified as follows:

Existing Conditions refers to that condition which exists on the ground today (Year 2006), including existing traffic counts and existing lane configurations at intersections and on roadway segments.

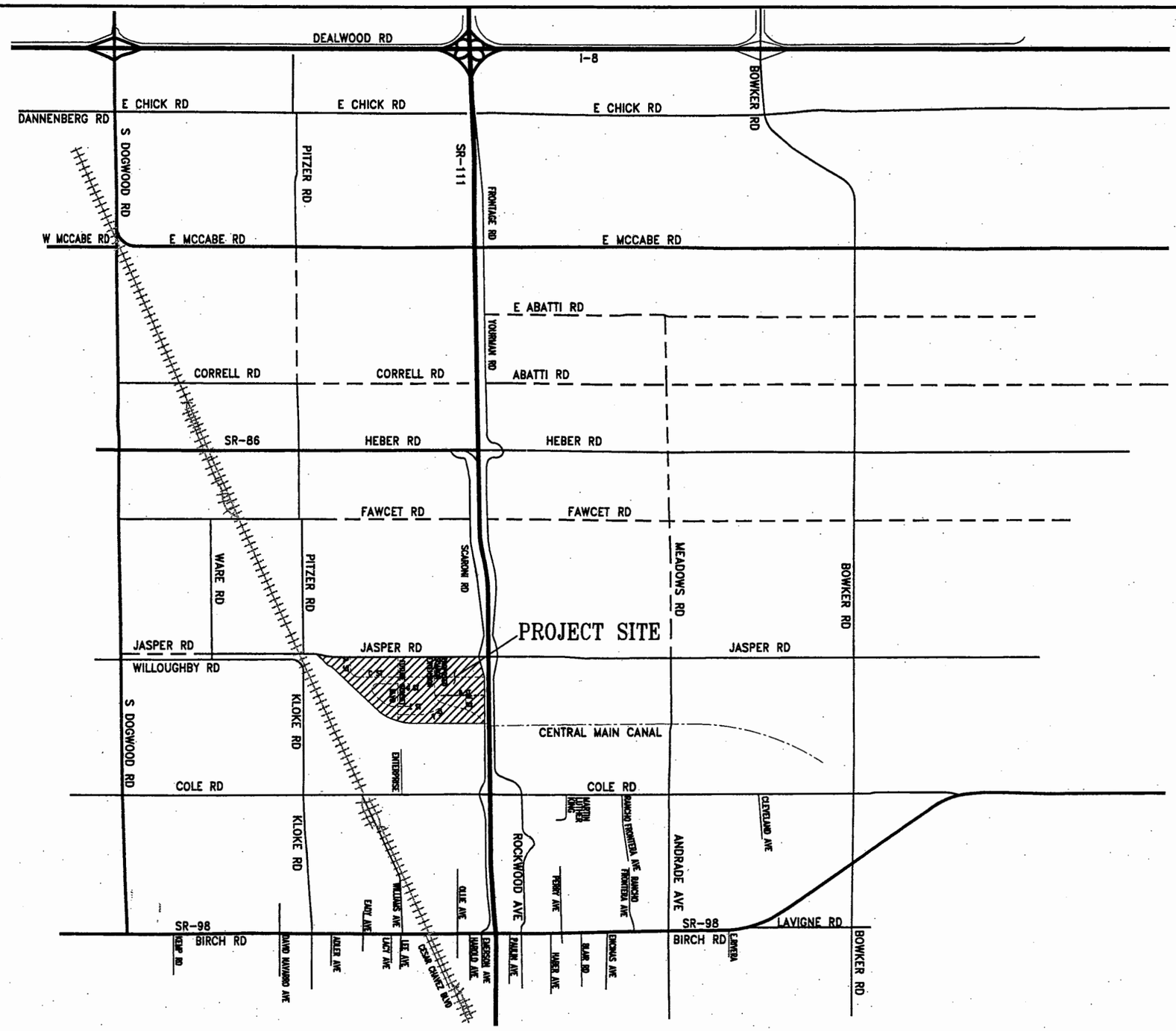
Existing Plus Project (Casino) Conditions refers to that condition which includes the Casino only phase of the project traffic added onto existing volumes.

Existing Plus Project (Casino+Phase 1) Conditions refers to that condition which includes the Casino and Phase 1 of the project traffic added onto existing volumes.

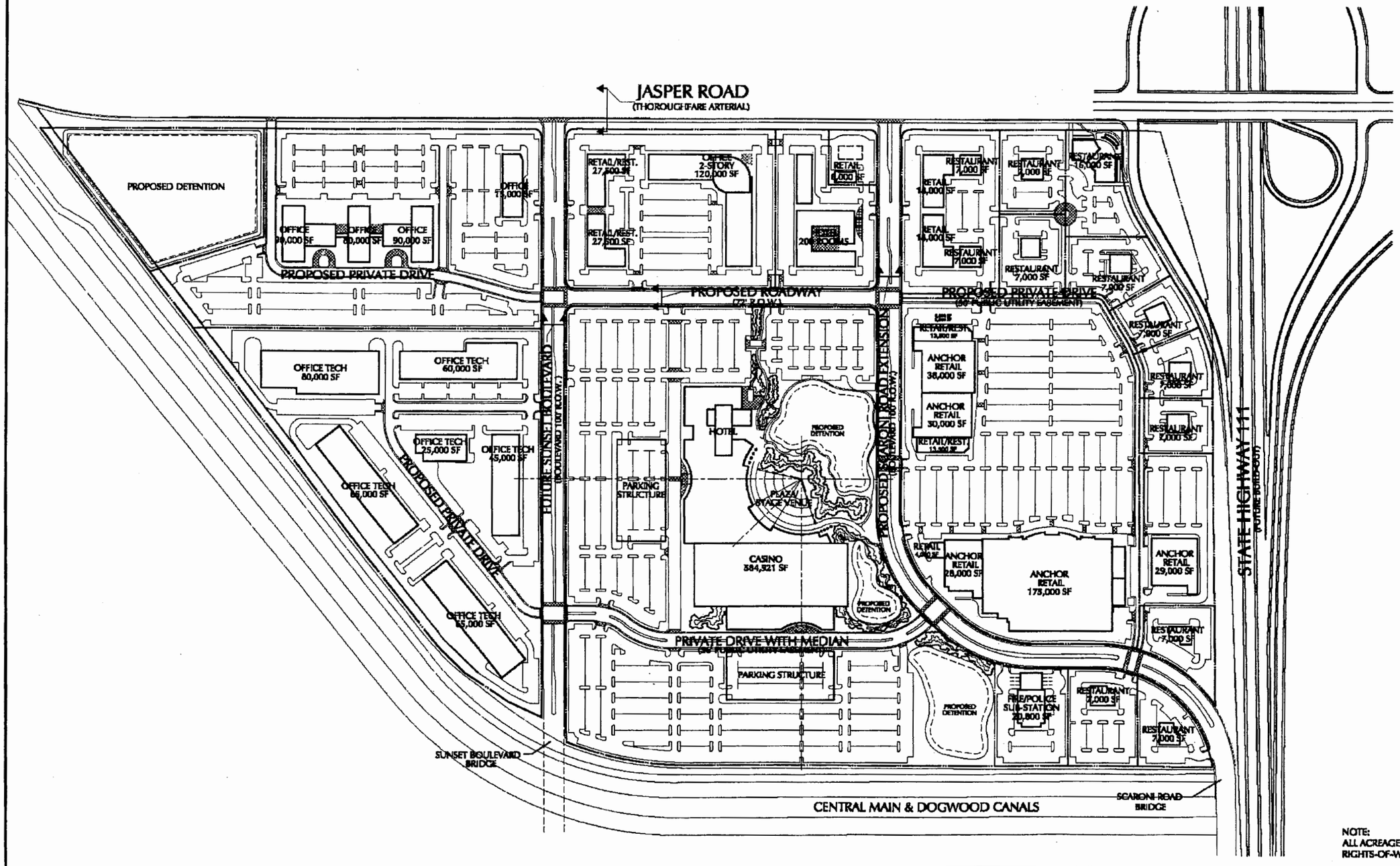
Year 2015 Conditions refers to that condition which will exist in the year 2015, including proposed improvements to the local intersections and roadway segments and a portion of development generated by other projects within the study area.

Year 2015 Plus Project (Casino) Conditions refers to that condition which includes the Casino only phase of project traffic added onto the Year 2015 forecasted traffic volumes.

Year 2015 Plus Total Project Conditions refers to that condition which includes the total project traffic added onto the Year 2015 forecasted traffic volumes.



Darnell & ASSOCIATES, INC.	FIGURE 1
060303DD.dwg 8-14-08 SN	VICINITY MAP



NOTE:
ALL ACREAGES ARE NET OF CANALS & RIGHTS-OF-WAY.

Darnell & ASSOCIATES, INC. 060303EE.dwg 8-20-08 JLL/SN/EA/SN	FIGURE 2 SITE MAP

Year 2035 Conditions refers to that condition which will exist in the year 2035 along the Jasper Corridor, including proposed improvements to the intersections and roadway segments.

Year 2035 Plus Project Conditions refers to that condition which includes the total project traffic added onto the Year 2035 forecasted traffic volumes.

LEVEL OF SERVICE

Level of Service (LOS) is a professional industry standard by which the operating conditions of a given roadway segment or intersection are measured. Level of Service is defined on a scale of A to F; where LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having forced flow with many stoppages and low operating speeds. Table 1 shows the average daily traffic volumes (ADT), average travel speeds, and delay ranges that are equivalent to each level of service.

The City of Calexico accepts LOS C at roadway segments and intersections. It should be noted that the City of Calexico will accept LOS D at roadway segments if the intersections along the segment operate at LOS D or better during the peak hours. The County of Imperial accepts LOS C at roadway segments and intersections.

Table 1 - Level of Service Ranges

LOS	Intersections		Roadway Segments		
			Daily		Peak Hour
	Signalized- Delay (Seconds/Vehicle)[1]	Unsignalized Delay (Seconds/Vehicle)[1]	City of Calexico	County of Imperial	Mutli-Lane Highways
			V/C	ADT[2]	Max Density (pc/mi/ln)
A	Less than or Equal to 10.0	Less than or Equal to 10.0	0.00-0.60	Less that 1,900	11
B	10.1 to 20.0	10.1 to 15.0	0.61-0.70	1,900 to 4,100	18
C	20.1 to 35.0	15.1 to 25.0	0.71-0.80	4,100 to 7,100	26
D	35.1 to 55.0	25.1 to 35.0	0.81-0.90	7,100 to 10,900	35
E	55.1 to 80.0	35.1 to 50.0	0.91-1.00	10,900 to 16,200	43
F	Greater Than 80.0	Greater Than 50.1	Greater than 1.00	Greater than 16,200	Highly Unstable & Variable Traffic Flow

[1]The delay ranges shown are based on the 2000 Highway Capacity Manual (HCM)

[2] The volume ranges are based on the County of Imperial thresholds for a Collector Street. Additional roadway segment classifications can be found in Appendix A.

LOS = Level of Service; pc/mi/ln=passenger car per mile per lane

ANALYSIS METHODOLOGY

The roadway segment daily LOS was determined by comparing the average daily traffic (ADT) volumes under all scenarios to the capacity of the roadway according to its roadway cross-section and classification. For the purpose of this report, the volume to capacity (V/C) ratio was utilized to calculate the LOS for the segments located in the City of Calexico and the ADTs were utilized for the segments located in the County of Imperial's jurisdiction. Excerpts from the City of Calexico General Plan and the County of Imperial LOS thresholds are included in Appendix A.

Synchro, version 6, was utilized to analyze the morning and afternoon peak hour conditions of the intersections in the project vicinity. The signalized intersection methodology defines LOS based on delay using variables such as lane configuration, traffic volumes, and signal timings. The unsignalized intersection methodology defines LOS based on the longest delay experienced by any single movement. Since the Synchro program calculates the average delay per vehicle, there may be instances where the Synchro analysis will show a reduction in delay with the addition of more traffic. This phenomenon occurs when the additional traffic is added to a movement that experiences a shorter amount of delay, thereby decreasing the intersections average delay per vehicle (i.e. a larger amount of vehicles will have to wait a shorter time while only a few vehicles have to wait an extended period of time).

It should be noted, however, that even if the addition of traffic results in a lower average intersection delay per vehicle, the total delay at the intersection will gradually increase as more traffic is added to the intersection. For the purposes of this report, no delay averages were reduced below the base condition so as to not reflect a negative delay with the addition of traffic. The measure of effectiveness utilized within this report is the average intersection delay, not the total intersection delay. The Synchro software is based on the 2000 HCM.

To comply with CalTrans' guidelines, the signalized intersections along state routes were also analyzed using the Intersecting Lane Vehicle (ILV) methodology. The ILV method determines the operating condition of an intersection based upon the number of intersecting vehicles that enter the intersection per lane during the hour (ILV/hr). Where less than 1200 ILV/hr represents stable flow, 1200 to 1500 ILV/hr represents unstable flow with considerable delays possible, and 1500 ILV/hr represents capacity, or stop-and-go operation with severe delay and heavy congestion.

REPORT ORGANIZATION

Following this section, Section II evaluates the existing roadway characteristics and traffic conditions surrounding the project area. Section III examines the project trip generation and distribution assumptions. Section IV analyzes the traffic for existing plus project (with Casino and with Casino plus Phase 1) development conditions. Section V analyzes the traffic for 2015 conditions with and without the proposed project (for Casino only and total project). Section VI analyzes the Jasper Corridor traffic for the 2035 conditions with and without the proposed project. Section VII addresses project access. Section VIII provides recommended mitigation measures for the proposed project.

Section IX provides analysis for the reduced casino alternative for all scenarios addressed above.

Section X provides analysis for the industrial development alternative for all scenarios which include the final phase of the project (i.e., Year 2015 Plus Total Project).

Section XI provides a summary of the report's findings and conclusions.

SECTION II - EXISTING CONDITIONS

This section of the traffic study is intended to assess the existing conditions of the roadways and intersections within the vicinity of the project to determine travel flow and/or delay difficulties, if any, that exist prior to adding the traffic generated by the proposed project. The existing conditions analysis establishes a base condition which is used to assess the other scenarios discussed in this report.

Darnell & Associates, Inc. (D&A) conducted a field review of the area surrounding the project. The existing roadway geometrics are illustrated in Figure 3. Intersection geometrics for the northern portion of the study area are shown on Figure 4, while the southern intersection geometrics are shown on Figure 5.

EXISTING ROADWAY CHARACTERISTICS

The key segments analyzed in the study area are identified below:

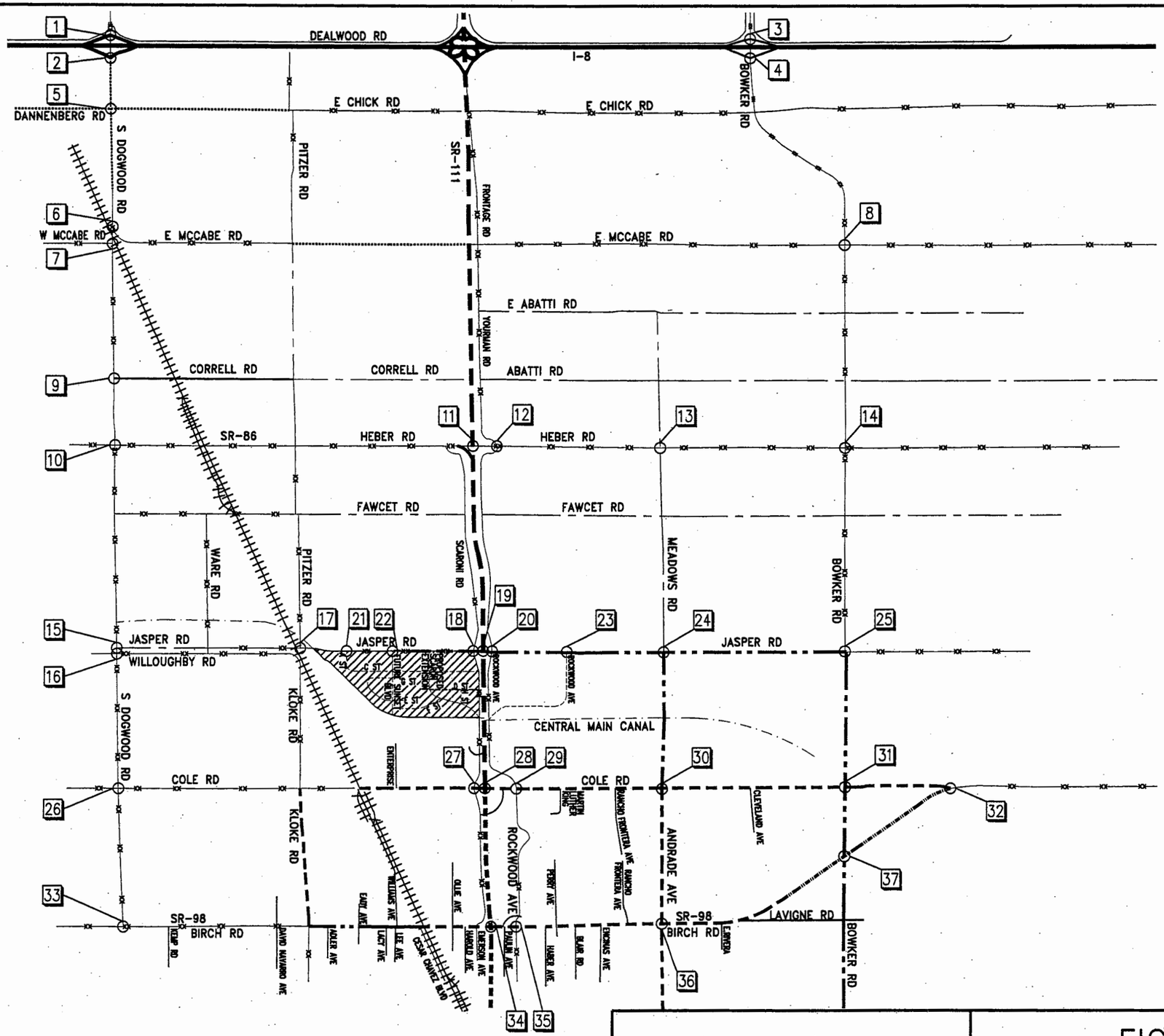
State Route 111 (SR-111) is a north/south four-lane circulation element roadway. North of Cole Road, SR-111 is a four lane divided roadway with limited access. The posted speed limit is 55 miles per hour (mph). The current cross-section is equivalent to that of an expressway. South of Cole Road, it is a four-lane roadway with a posted speed limit of 55 mph. The current cross-section is equivalent to that of a Highway, capacity of 56,300 average daily trips (ADT) at level of service (LOS) E.

Meadows Road is a north/south circulation element roadway. Currently, Meadows Road is an unimproved dirt road from Abatti Road to Cole Road. Between Cole Road and State Route 98, Meadows Road is currently constructed as a four-lane divided roadway. The current cross-section of this segment of Meadows Road is equivalent to that of a Primary Road with a capacity of 37,500 ADT at LOS E per the City of Calexico classifications. Per the County of Imperial Circulation Element, Meadows Road from Abatti Road to Fawcett Road has the ultimate classification of a Major Collector with a capacity of 34,200 ADT at LOS E.

Bowker Road is a north/south two lane undivided circulation element roadway. No bike lanes or bus stops are provided and curbside parking is prohibited. The posted speed limit is 55 mph. The current cross section for the segments north of Jasper Road is equivalent to that of a Collector, capacity of 16,200 ADT at LOS E. South of Jasper Road, the cross section is equivalent to that of a Secondary Road, Capacity of 17,500 at LOS E. In the County of Imperial Circulation Element, Bowker Road from Interstate 8 to State Route 98 has an ultimate classification of a Prime Arterial with a capacity of 57,000 ADT at LOS E.

Heber Road is an east/west two lane undivided circulation element roadway. No bike lanes or bus stops are provided, and there is no parking. The posted speed limit is 55 mph. The current cross section is equivalent to that of a Collector, capacity of 16,200 ADT at LOS E. In the County of Imperial Circulation Element, Heber Road has an ultimate classification of a Prime Arterial with a capacity of 57,000 ADT at LOS E.

Jasper Road is an east/west two lane undivided circulation element roadway. No bike lanes or bus stops are provided, and there is no parking. The posted speed limit is 55 mph. The current cross section is equivalent to that of a Secondary, capacity of 17,500 ADT at LOS E. In the County of Imperial Circulation Element, Jasper Road has an ultimate classification of an Expressway.



LEGEND

- RAILROAD TRACK
- FREEWAY (I-8)
- EXPRESS WAY
- HIGHWAY
- 4-LANE PRIMARY
- 4-LANE ARTERIAL
- 4-LANE COLLECTOR
- 2-LANE SECONDARY
- 2-LANE COLLECTOR
- DIRT ROAD
- FUTURE ROAD
- CANAL
- [#] - INTERSECTION ID NUMBER
- PROJECT SITE

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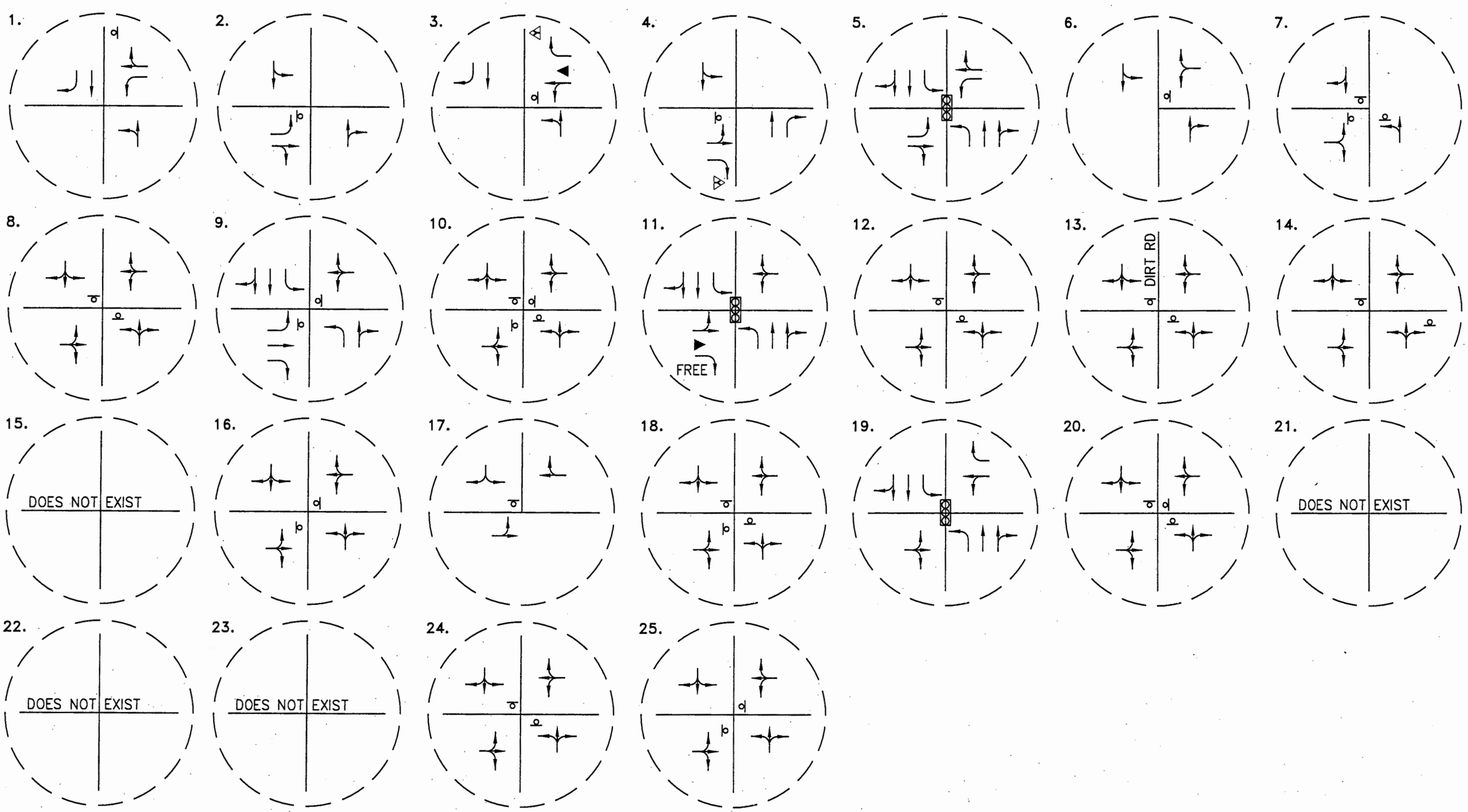
FIGURE 3

EXISTING CONDITIONS



LEGEND

- TRAVEL LANE
- STOP SIGN
- TRAFFIC SIGNAL
- YIELD SIGN

SEE FIGURE 3 FOR INTERSECTION LOCATION

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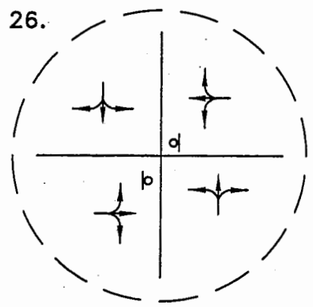
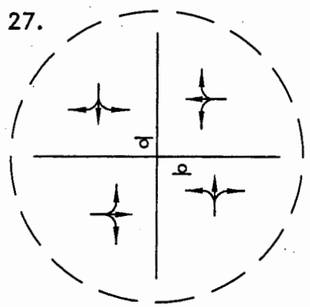
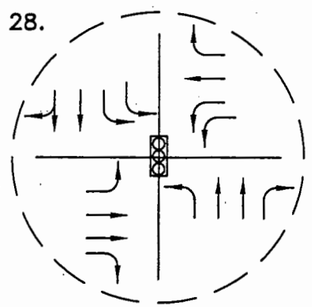
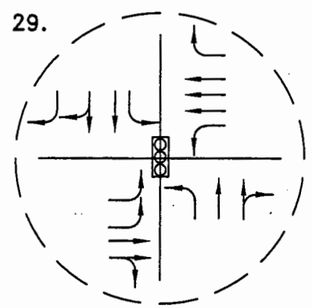
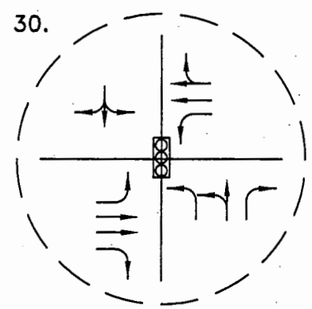
FIGURE 4
EXISTING INTERSECTION
CONDITIONS - NORTH

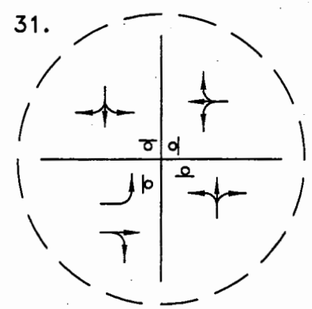


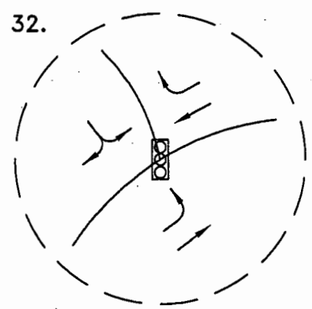


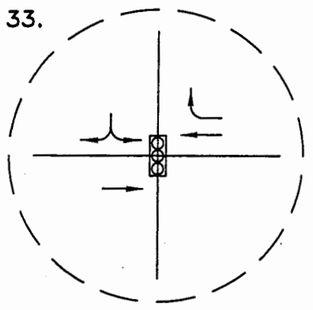


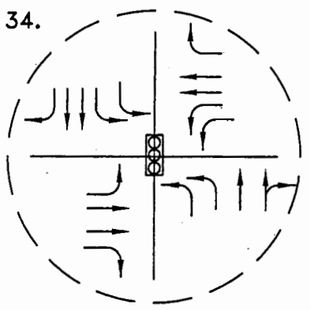


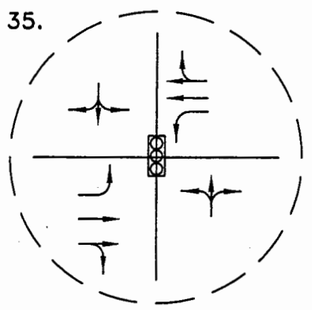


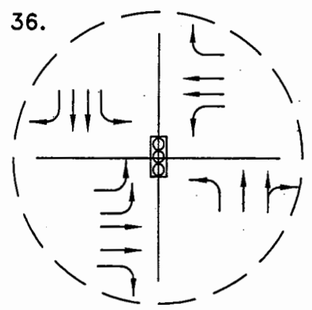


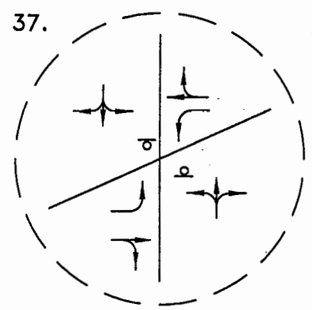












LEGEND

→ – TRAVEL LANE

– STOP SIGN

– TRAFFIC SIGNAL

SEE FIGURE 3 FOR INTERSECTION LOCATION

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FIGURE 5

EXISTING INTERSECTION CONDITIONS – SOUTH

State Route 98 (SR-98) is classified as a State Highway on the Imperial County Circulation Element. Within the City of Calexico city limits, SR-98 is an east-west facility which currently provides two lanes of travel in each direction west of Meadows Road and one lane of travel in each direction east of Meadows Road. The posted speed limit is 45 mph between Rockwood Avenue and Bowker Road, and 65 mph between Bowker Road and Barbara Worth Road. There are no bike lanes or bus stops provided and curbside parking is prohibited. The current cross section of SR-98 between SR-111 and Meadows Road is equivalent to that of a Primary Road, capacity of 37,500 ADT at level of service E per the City of Calexico classifications. The current cross section of SR-98 east of Meadows Road is equivalent to that of a Collector, capacity of 17,500 ADT at LOS E per the City of Calexico classifications.

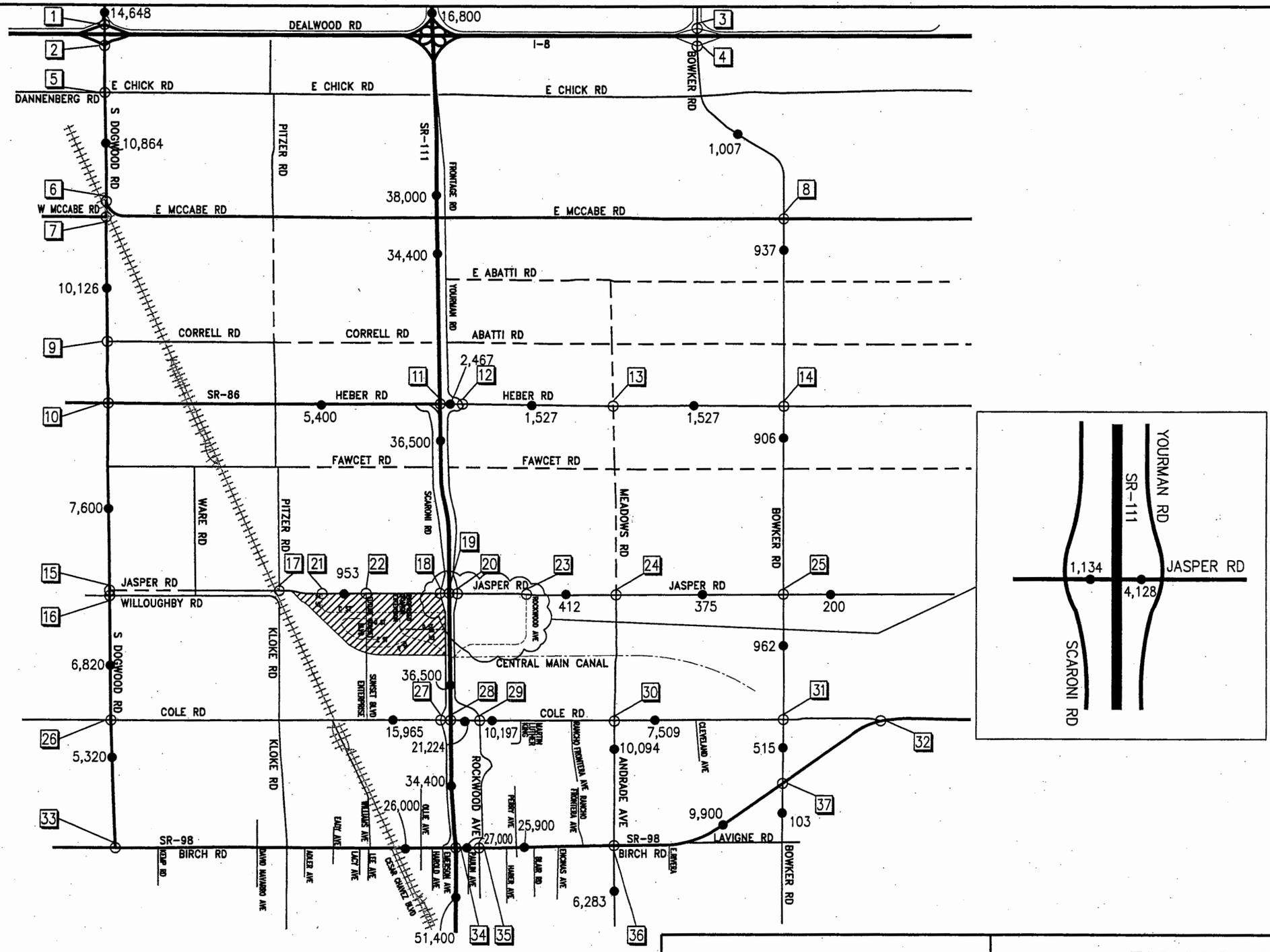
ROADWAY SEGMENT DAILY TRAFFIC

Traffic counts along SR-111 were obtained from CALTRANS from their 2005 counts. The remaining counts were collected in October 2005. It should be noted that new counts were collected at spot locations along Jasper Road east/west of SR-111 and at the intersection of Jasper/SR-111, as well as at Heber/SR-111. New counts (year 2008) reflected lower traffic volumes than those collected in 2005. As such, this report analyzes the older count data since it is higher and represents worst case traffic conditions. Figure 6 presents the existing conditions daily traffic volumes used in this analysis. Count Summaries are included in Appendix A.

KEY INTERSECTIONS

The key intersections analyzed in the study area are identified below:

- I-8 Westbound Ramp/Dogwood Road (two-way stop)
- I-8 Eastbound Ramp/Dogwood Road (two-way stop)
- I-8 Westbound Ramp/Bowker Road (two-way stop)
- I-8 Eastbound Ramp/Bowker Road (two-way stop)
- Dogwood Road/Chick/Dannenberg (signal)
- Dogwood Road/McCabe Road North (two-way stop)
- Dogwood Road/McCabe Road South (all-way stop)
- McCabe Road/Bowker Road (two-way stop)
- Dogwood Road/Abatti/Corell (two-way stop)
- Dogwood Road/Heber Road (all-way stop)
- SR-111/Heber Road (signal)
- Heber Road/Yourman Road (two-way stop)
- Heber Road/Bowker Road (two-way stop)
- Dogwood Road/Willoughby Road (two-way stop)
- Jasper Road/Pitzer Road (two-way stop)
- Jasper Road/Scaroni Avenue (all-way stop)
- Jasper Road/SR-111 (signal)
- Jasper Road/Yourman (two-way stop)
- Jasper Road/Meadows Road (two-way stop)
- Jasper Road/Bowker Road (two-way stop)
- Dogwood Road/Cole Road (two-way stop)
- Cole Road/Scaroni Avenue (two-way stop)
- SR-111/Cole Road (signal)
- Cole Road/Yourman (signal)
- Cole Road/Meadows Road (signal)



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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FIGURE 6

EXISTING DAILY TRAFFIC VOLUMES

- Cole Road/Bowker Road (all-way stop)
- SR-98/Cole Road (signal)
- SR-98/Dogwood Road (signal)
- SR-98/SR-111 (signal)
- SR-98/Rockwood Avenue (signal)
- SR-98/Meadows Road (signal)
- SR-98/Bowker Road (two-way stop)

INTERSECTION TRAFFIC COUNTS

The SR-111/SR-98 intersection was counted in June 2006, the Cole Road/Meadows Road and SR-98/Meadows Road intersection were counted in May 2006, all remaining intersections turn counts were collected in October 2005. As described above, new count data (year 2008) reflected lower volumes than 2005-06 data and the higher traffic volumes were utilized to represent worst-case traffic conditions. Figure 7 shows the intersection volumes for the northern study area, and Figure 8 shows the intersection volumes for the southern study area. Count summaries are included in Appendix A.

EXISTING LEVEL OF SERVICE CONDITIONS

Daily Roadway Segments

The existing roadway segment daily levels of service are summarized in Table 2. As can be seen in Table 2, the following roadway segments report deficiencies:

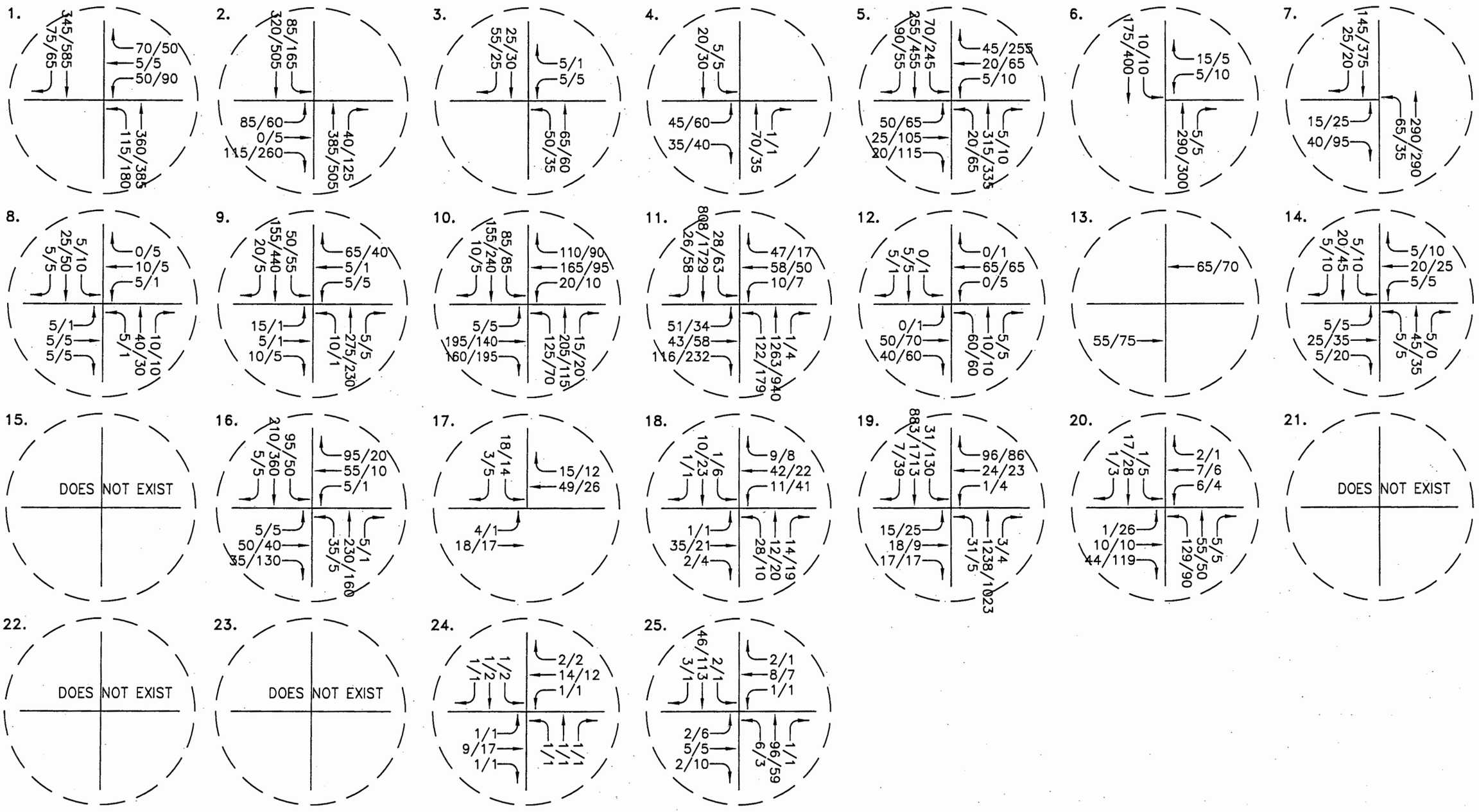
Dogwood Road: north if Interstate 8 (LOS E)
SR-111: south of SR-98 (LOS D)
Cole Road: Enterprise to SR-111 (LOS E)

Intersections

The level of service analysis at intersections is summarized in Table 3. As shown on Table 3, the following intersections report existing deficiencies:

I-8 Westbound/Dogwood (LOS F)
I-8 Eastbound/Dogwood (LOS E)
Dogwood Road/Heber Road (LOS D)
Cole Road/Scaroni Avenue (LOS F)
SR-111/Cole Road (LOS D)
SR-98/SR-111 (LOS D)

Per CalTrans requirements, ILV analysis was also performed for the signalized intersections along SR-111. Table 4 summarizes the ILV analysis. Under existing conditions all intersections operate at stable flow conditions or better.



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 6 FOR INTERSECTION LOCATION.

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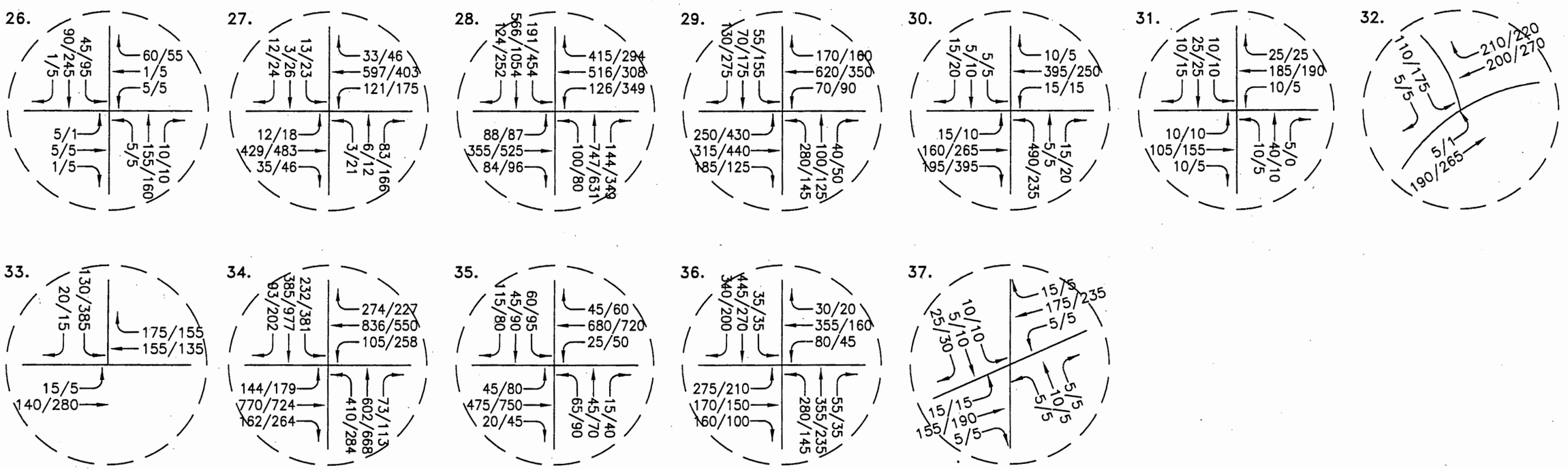
FIGURE 7

EXISTING INTERSECTION TRAFFIC VOLUMES – NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 6 FOR INTERSECTION LOCATION

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FIGURE 8

EXISTING INTERSECTION TRAFFIC VOLUMES – SOUTH

Table 2 - Existing Roadway Segment Level of Service				
Roadway Segment	Max Cap	Existing Condition		
		ADT	V/C	LOS
Dogwood Road:				
north of I-8	16,200	14,648	0.904	E
I-8 to McCabe	16,200	10,864	0.671	B
McCabe to SR-86	16,200	10,126	0.625	B
SR-86 to Jasper	16,200	7,600	0.469	A
Jasper to Cole	16,200	6,820	0.421	A
Cole to SR-98	16,200	5,320	0.328	A
SR-111:				
north of I-8	56,300	16,800	0.298	A
I-8 to McCabe	56,300	38,000	0.675	B
McCabe to Heber	56,300	34,400	0.611	B
Heber to Jasper	56,300	36,500	0.648	B
Jasper to Cole	56,300	36,500	0.648	B
Cole to SR-98	56,300	34,400	0.611	B
South of SR-98	60,000	51,400	0.857	D
Bowker Road:				
I-8 to McCabe	16,200	1,007	0.062	A
McCabe to Heber	16,200	937	0.058	A
Heber to Jasper	16,200	906	0.056	A
Jasper to Cole	16,200	962	0.059	A
Cole to SR-98	17,500	515	0.029	A
South of SR-98	17,500	103	0.006	A
Meadows Road:				
Cole to SR-98	17,500	10,094	0.577	A
South of SR-98	17,500	6,283	0.359	A
SR-86/Heber Road:				
Pitzer to SR-111	16,200	5,400	0.333	C
SR-111 to Yourman	16,200	2,467	0.152	B
Yourman to Meadows	16,200	1,527	0.094	A
Meadows to Bowker	16,200	1,527	0.094	A
Jasper Road:				
Scaroni to SR-111	17,500	1,134	0.065	A
SR-111 to Yourman	17,500	4,128	0.236	A
Yourman to Meadows	17,500	412	0.024	A
Meadows to Bowker	17,500	375	0.021	A
Cole Road:				
Enterprise to SR-111	17,500	15,965	0.912	E
SR-111 to Yourman	37,500	21,224	0.566	A
Yourman to Meadows	37,500	10,197	0.272	A
Meadows to Bowker	37,500	7,509	0.200	A
State Route 98:				
Kloke to SR-111	37,500	26,000	0.693	B
SR-111 to Rockwood	37,500	27,000	0.720	C
Rockwood to Andrade	37,500	25,900	0.691	B
Andrade to Bowker	17,500	9,900	0.566	A

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 3 - Existing Conditions Intersection Operation					
Intersection	Crit Mvmt	Existing Conditions			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
I-8 Westbound/Dogwood (TWSC)	**WB**	**19.5**	**C**	**130.3**	**F**
I-8 Eastbound/Dogwood (TWSC)	**EB**	**20.7**	**C**	**43.6**	**E**
I-8 Westbound/Bowker (TWSC)	WB	9.5	A	9.7	A
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A
Dogwood/Chick (Signal)	Int.	3.5	A	6.9	A
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B
Dogwood/McCabe South (AWSC)	EB	8.2	A	9.5	A
	NB	11.0	B	12.1	B
	SB	8.7	A	13.5	B
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A
	SB	9.3	A	9.4	A
Dogwood/Abatti (TWSC)	EB	14.5	B	12.7	B
	WB	11.6	B	11.0	B
Dogwood/Heber (AWSC)	**EB**	**33.4**	**D**	**18.1**	**C**
	WB	**25.3**	**D**	**13.3**	**B**
	NB	**34.8**	**D**	**14.2**	**B**
	SB	**22.8**	**C**	**19.6**	**C**
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B
	SB	9.3	A	10.1	B
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B
	SB	9.6	A	10.1	B
Dogwood/Willoughby (TWSC)	EB	18.0	C	15.4	C
	WB	16.8	C	12.0	B
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A
Jasper/Scaroni (AWSC)	EB	7.3	A	7.2	A
	WB	7.4	A	7.6	A
	NB	7.4	A	7.3	A
	SB	7.3	A	7.4	A
Jasper/SR-111 (Signal)	Int.	14.0	B	20.1	C
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B
	SB	9.5	A	10.4	B
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A
	SB	8.8	A	8.9	A
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A
	WB	10.1	B	10.3	B
Dogwood/Cole (TWSC)	EB	12.1	B	13.2	B
	WB	9.8	A	10.7	B
Cole/Scaroni (TWSC)	**NB**	**22.5**	**C**	**121.1**	**F**
	SB	**114.1**	**F**	**343.8**	**F**
SR-111/Cole (Signal)	**Int.**	**38.2**	**D**	**42.9**	**D**
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A
	WB	9.2	A	9.1	A
	NB	8.3	A	8.1	A
	SB	8.1	A	8.2	A
SR-98/Cole (Signal)	Int.	6.3	B	7.3	A
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A
SR-98/SR-111 (Signal)	**Int.**	**32.0**	**C**	**38.6**	**D**
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B
	SB	10.6	B	11.5	B

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Delay and LOS calculated using SYNCHRO (with HCS value)

Table 4 - Summary of Existing Intersection Operation Caltrans Intersecting Lane Volumes (ILV)		
Intersection	**Existing AM Peak ILV**	**Existing PM Peak ILV**
SR-111/Heber	870	1305
SR-111/Jasper	748	1092
SR-111/Cole	1078	1363
SR-111/SR-98	1105	1221
SR-98/Cole	330	451
SR-98/Dogwood	480	840
SR-98/Rockwood	628	743
SR-98/Meadows/Andrade	936	550
ILV=Intersecting Lane Volumes (Caltrans Methodology) ILV Value = less than 1200 (Free Flow) ILV Value = 1200-1500 (Acceptable Flow) ILV Value = exceeds 1500 (Deficient Flow)		

SECTION III - PROJECT RELATED CONDITIONS

TRIP GENERATION

The trip generation potential for the project is based on daily and peak hour trip generation rates obtained from the *(Not So) Brief Guide of Traffic Generators for the San Diego Region* published by the San Diego Association of Governments (SANDAG) in April 2002. Utilizing the SANDAG rates and the characteristics of the proposed project, estimates of daily and peak hour traffic volumes generated by the project can be calculated. The project phasing for analysis scenarios in this report are summarized as follows:

Casino Phase

The casino space includes a 93,880 square foot gaming facility and internal casino related assembly space, retail and restaurant services, as well as a 200-room hotel. For the purposes of trip generation, the casino and ancillary uses are considered part of the 100 trips per 1,000 square feet of gaming space. The hotel was added as a separate land use to account for the potential of hotel users which would not utilize the casino, retail, or restaurant uses within the facility.

Phase 1

Phase 1 considers the near term development of approximately 356,000 square feet of retail space (not part of the casino facility), and approximately 100,000 square feet of quality restaurant use (not part of the casino facility).

Total Project (All Phases)

The total project includes the following densities:

Casino - 93,880 square feet
Casino Hotel - 200 rooms
Hotel - 200 rooms
Retail - 411,000 square feet
Restaurant with Drive Through - 10,000 square feet
Quality Restaurant - 100,000 square feet
Office - 395,000 square feet
Office Tech - 340,000 square feet

Under the existing conditions scenario, the casino is analyzed as a separate phase. Additional analysis for the existing conditions assumes the casino plus phase 1.

Under the near term cumulative conditions (year 2015), analysis considers the casino as a separate phase. Additional analysis was conducted with the total project (all phases) to demonstrate the worst case development scenario (full buildout of the project by year 2015).

Table 5 summarizes the trip generation rates and volumes for the proposed project for the Casino with hotel usage, which demonstrates the total volume of traffic to occur on site. Table 6 summarizes the trip generation potential for the casino phase plus phase 1 (total project) and shows the total traffic which is expected to occur on site. Table 7 summarizes the total project trip generation (all phases).

Table 5 - Trip Generation Summary (Proposed Casino Only)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Phase A	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%

Casino (with Hotel) Trip Generation

Phase	Land Use	Density	Unit	Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Phase A	Casino	93.88	KSF	9,388	94	84	9	636	371	265
	Hotel	200	rooms	1,600	80	48	32	112	45	67
	PHASE A TOTAL			**10,988**	**174**	**132**	**41**	**748**	**416**	**332**
TOTALS CASINO PHASE				**10,988**	**174**	**132**	**41**	**748**	**416**	**332**

Table 6 - Trip Generation Summary (Casino + Phase I)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Phase I	Retail	80	4%	60%	40%	10%	50%	50%
	Restaurant - Quality	100	1%	60%	40%	8%	70%	30%
Phase A	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%

Casino Plus Phase I Trip Generation

Phase	Land Use	Density	Unit	Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Phase I	Retail	356	KSF	28,480	1,139	684	456	2,848	1,424	1,424
	Restaurant - Quality	100	KSF	10,000	100	60	40	800	560	240
	PHASE I TOTAL			**38,480**	**1,239**	**744**	**496**	**3,648**	**1,984**	**1,664**
Phase A	Casino	93.88	KSF	9,388	94	84	9	636	371	265
	Hotel	200	rooms	1,600	80	48	32	112	45	67
	PHASE A TOTAL			**10,988**	**174**	**132**	**41**	**748**	**416**	**332**
TOTALS PHASE I+A				**49,468**	**1,413**	**876**	**537**	**4,396**	**2,400**	**1,996**

Table 7 - Trip Generation Summary (Total Proposed Project)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project	Retail	80	4%	60%	40%	10%	50%	50%
	Restaurant w/Drive Thru	650	7%	50%	50%	7%	50%	50%
	Restaurant - Quality	100	1%	60%	40%	8%	70%	30%
	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%
	Hotel	8	5%	60%	40%	7%	40%	60%
	Office	20	14%	90%	10%	13%	20%	80%
	Office Tech	16	12%	80%	20%	12%	20%	80%

Total Primary Trip Generation

Phase	Land Use	Density	Unit	Primary Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project	Retail	411.00	ksf	32,880	1,315	789	526	3,288	1,644	1,644
	Restaurant w/Drive Thru	10.00	ksf	6,500	455	228	228	455	228	228
	Restaurant - Quality	100.00	ksf	10,000	100	60	40	800	560	240
	Casino	93.88	ksf	9,388	94	84	9	636	371	265
	Hotel (Casino)	200.00	rooms	1,600	80	48	32	112	45	67
	Hotel	200.00	rooms	1,600	80	48	32	112	45	67
	Office	395.00	ksf	7,900	1,106	995	111	1,027	205	822
	Office Tech	340.00	ksf	5,440	653	522	131	653	131	522
TOTAL ON-SITE TRAFFIC				**75,308**	**3,883**	**2,775**	**1,108**	**7,082**	**3,228**	**3,854**

Since the proposed project is a mixed use project,. a portion of the traffic generated by the project can be divided into internal and external trips. An internal trips is a relationship between uses where a user may visit a restaurant and retail shop while staying at the hotel. The internal trip component helps reduce the amount of "double counting" of traffic which would occur if all land uses were considered as separate entities with no relationship to each other.

The resulting "net new" project trips (external trips on the circulation system roadways) are summarized in Table 8. External traffic reductions for each land use are shown on Table 8. The new project trips are the result of development of the proposed project. The total new trips added to the external roadway network under project buildout conditions is 59,285 daily ADT, 3,286 AM peak hour trips, and 6,071 PM peak hour trips.

NEAR TERM TRIP DISTRIBUTION/TRIP ASSIGNMENT

The trip distribution percentages for the project were based on the local and regional destinations for the trip purposes; i.e. the availability of shopping, schools, and employment. The trip distribution percentages are illustrated in Figure 9. It should be noted that with development of the Casino Only phase, the project traffic destined for southern destinations will utilize Scaroni Road and State Route 111 as the Sunset Road extension is not required with the Casino phase.

The traffic generated by the Casino-only (with hotel) portion project was assigned to the roadways and intersections based on the trip distribution percentages shown in Figure 9. The project related daily traffic volumes for the Casino phase is shown on Figure 10. The intersection peak hour volumes for the Casino phase are shown on Figure 11 for the northern study area and Figure 12 for the southern study area.

The project related daily traffic volumes for the Casino phase plus Phase 1 are shown on Figure 13. The intersection peak hour volumes for the Casino phase plus Phase 1 are shown on Figure 14 for the northern study area and Figure 15 for the southern study area.

With buildout of the project (assumed for the year 2015 condition), all project phases traffic is assigned to the roadway network as shown on Figure 16 (for daily traffic), Figure 17 (intersections on the north) and Figure 18 (intersections on the south).

YEAR 2035 TRIP DISTRIBUTION/TRIP ASSIGNMENT

Due to the changes in the roadway network, the project traffic distribution would change under future year 2035 conditions. Figure 19 illustrates the future trip distribution. Utilizing the trip distribution illustrated in Figure 19, the project trips were assigned to the roadway network. Figure 20 illustrates the future project daily traffic volumes on the future roadway network. Figure 21 depicts the peak hourly future intersection traffic volumes for the total project. The impacts associated with the addition of project traffic are discussed in later sections to this report.

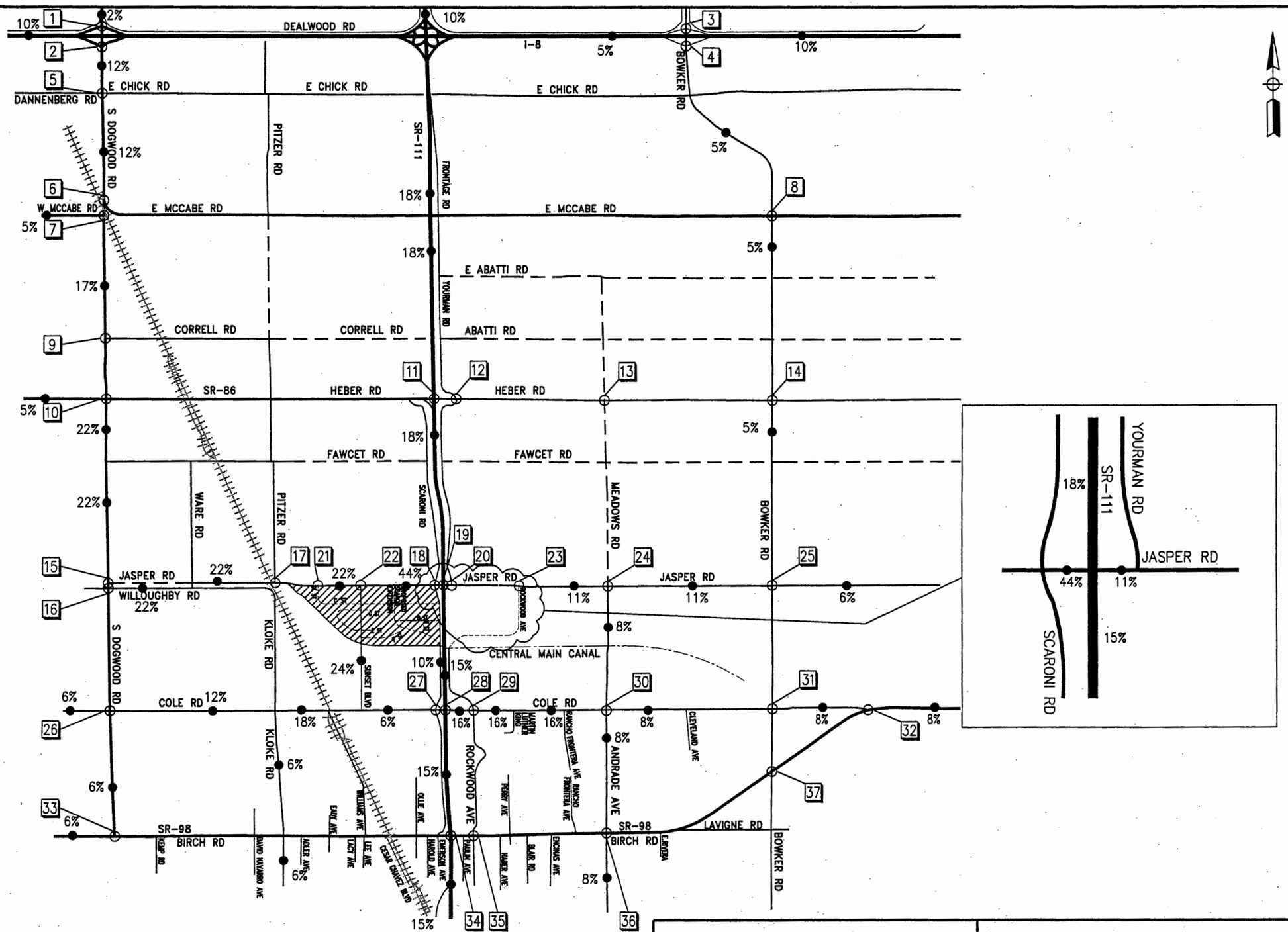
Table 8 - Trip Generation Summary (Total Proposed Project) - With Internal/External Reductions Applied

Phase	Land Use	External Traffic (a)	Trip Generation Rates						
			Daily	AM Peak Hour			PM Peak Hour		
				% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project	Retail	78%	80	4%	60%	40%	10%	50%	50%
	Restaurant w/Drive Thru	51%	650	7%	50%	50%	7%	50%	50%
	Restaurant - Quality	51%	100	1%	60%	40%	8%	70%	30%
	Casino	100%	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	58%	8	5%	60%	40%	7%	40%	60%
	Hotel	98%	8	5%	60%	40%	7%	40%	60%
	Office	100%	20	14%	90%	10%	13%	20%	80%
	Office Tech	100%	16	12%	80%	20%	12%	20%	80%

Total "Net New" Trip Generation

Phase	Land Use	Density	Unit	Net New Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project	Retail	411.00	ksf	25,646	1,026	616	410	2,302	1,151	1,151
	Restaurant w/Drive Thru	10.00	ksf	3,315	232	116	116	751	376	376
	Restaurant - Quality	100.00	ksf	5,100	51	31	20	528	370	158
	Casino	93.88	ksf	9,388	94	84	9	636	371	265
	Hotel (Casino)	200.00	rooms	928	46	28	19	65	26	39
	Hotel	200.00	rooms	1,568	78	47	31	110	44	66
	Office	395.00	ksf	7,900	1,106	995	111	1,027	205	822
	Office Tech	340.00	ksf	5,440	653	522	131	653	131	522
TOTAL "NET NEW" TRAFFIC				**59,285**	**3,286**	**2,439**	**847**	**6,071**	**2,673**	**3,398**

(a) External traffic based on pass-by rates



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● WW% – DISTRIBUTION PERCENTAGE
- PROJECT SITE

* DISTRIBUTION FOR EXISTING + PROJECT & NEAR TERM CUMULATIVE (YEAR 2010)

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FIGURE 9

NEAR TERM PROJECT DISTRIBUTION

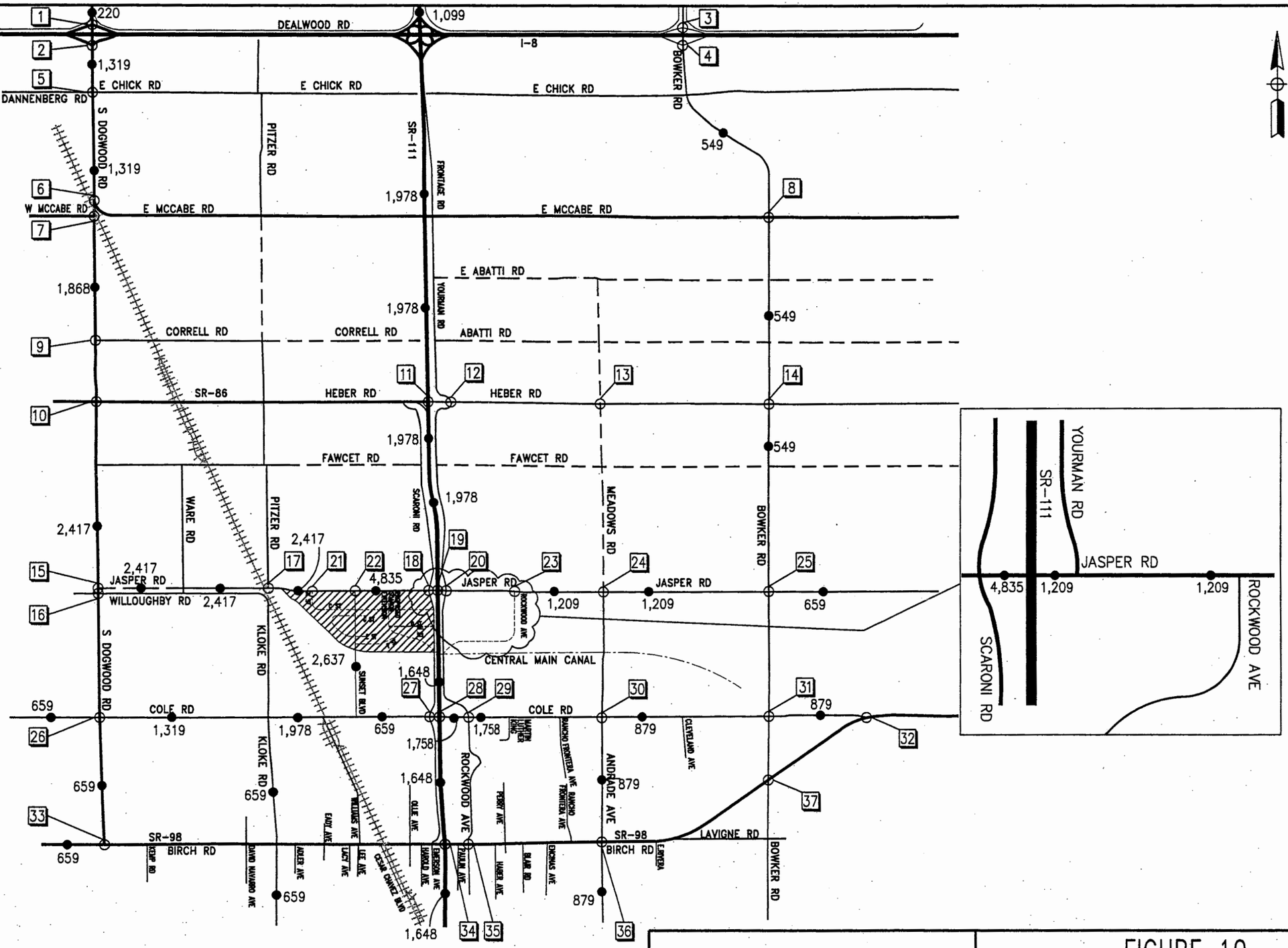

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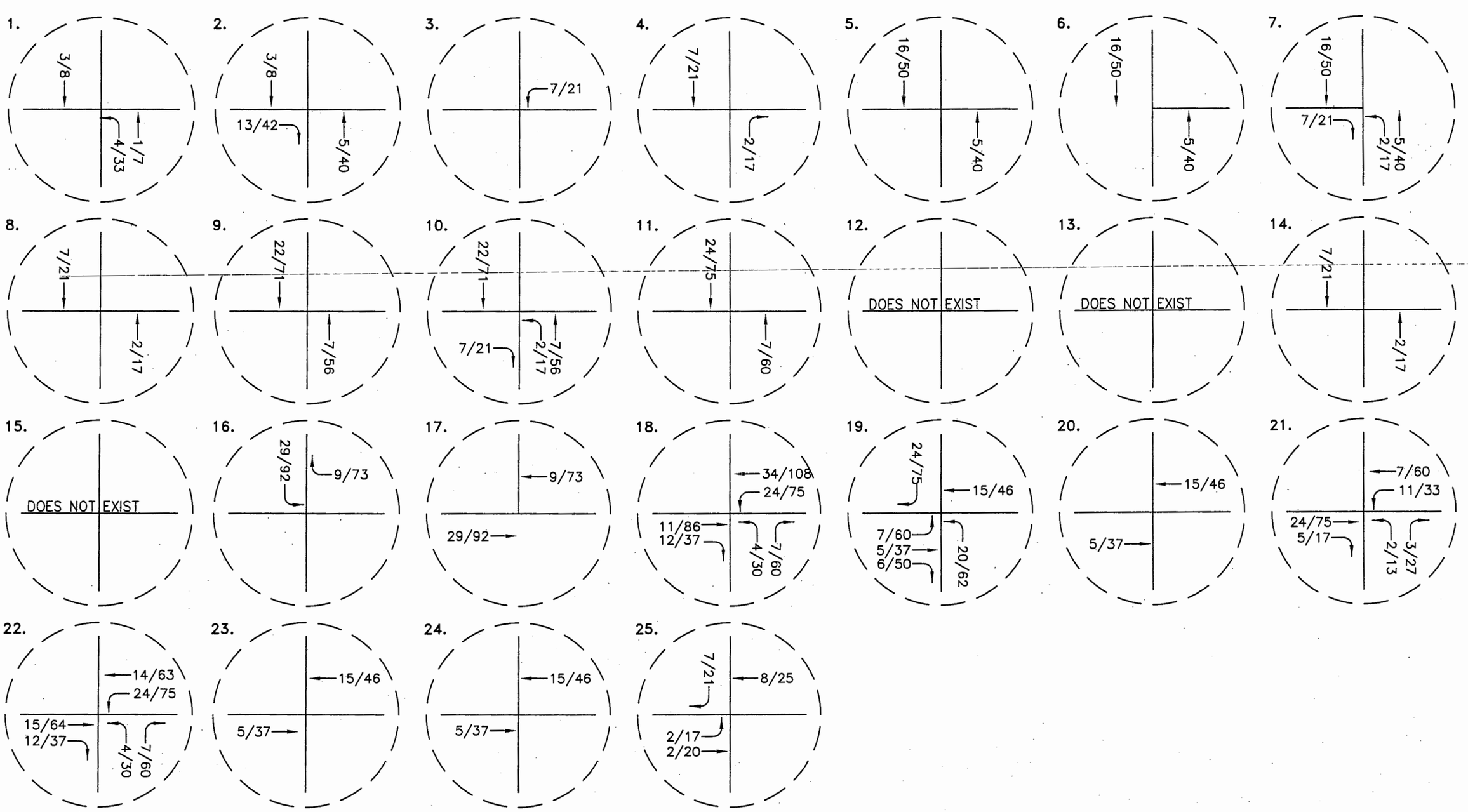
FIGURE 10
PROPOSED CASINO
PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 10 FOR INTERSECTION LOCATION

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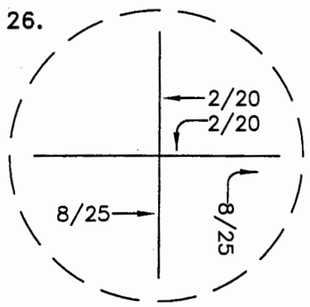
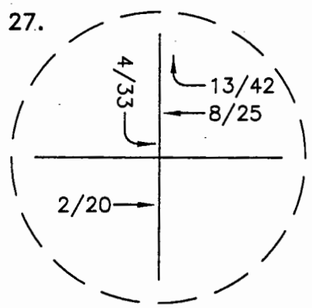
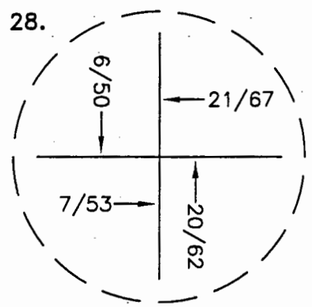
FIGURE 11

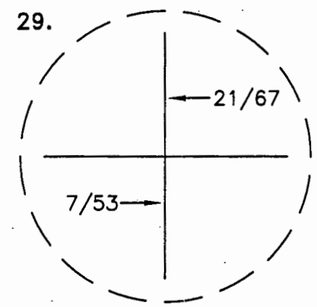
PROPOSED CASINO PROJECT

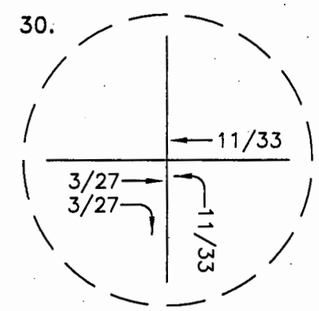
INTERSECTION TRAFFIC VOLUMES-NORTH

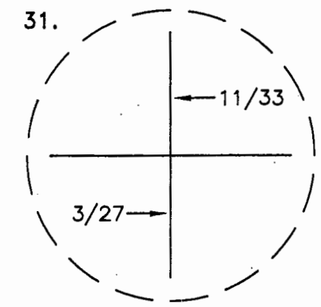


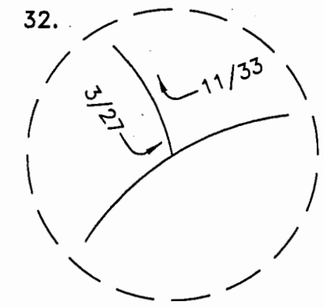


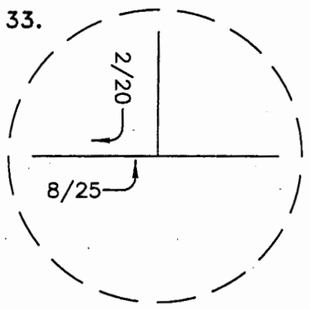


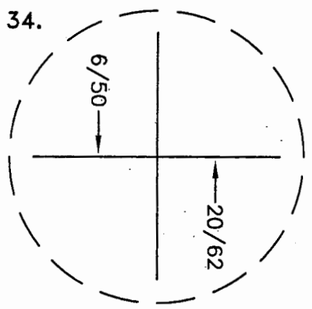


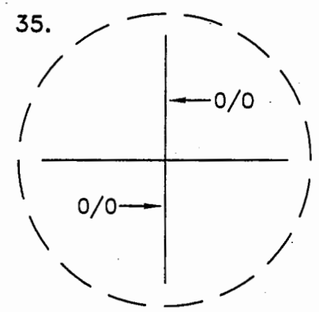


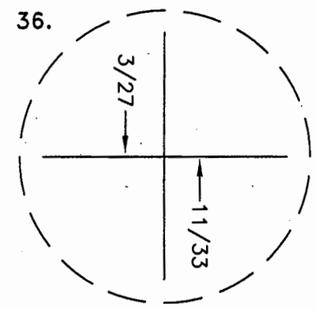


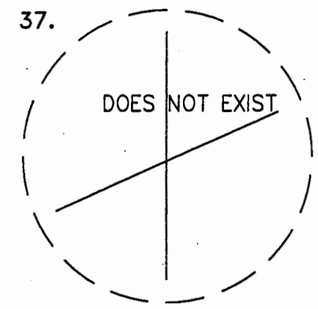












LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 10 FOR INTERSECTION LOCATION.

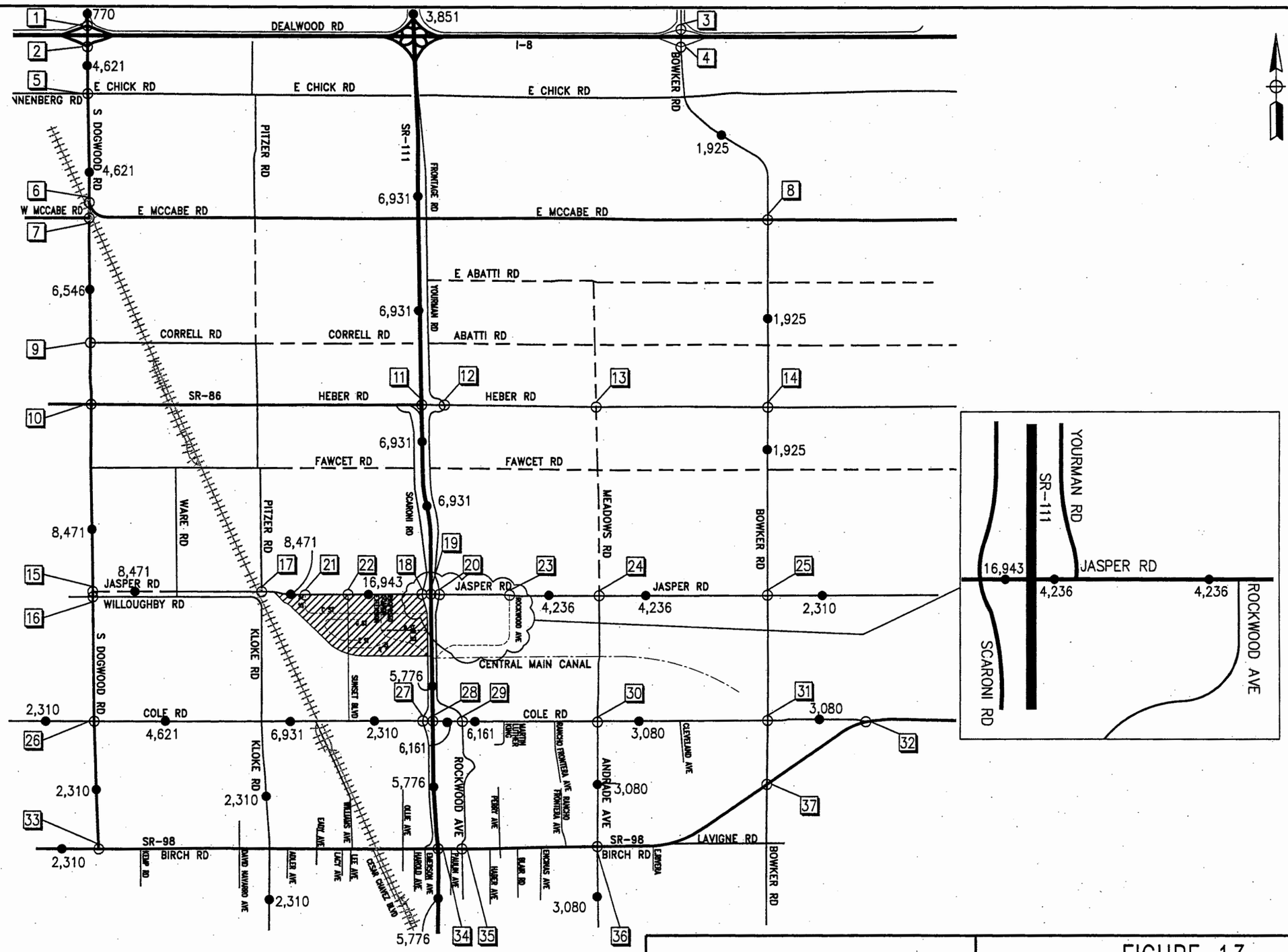
Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 12

PROPOSED CASINO PROJECT

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

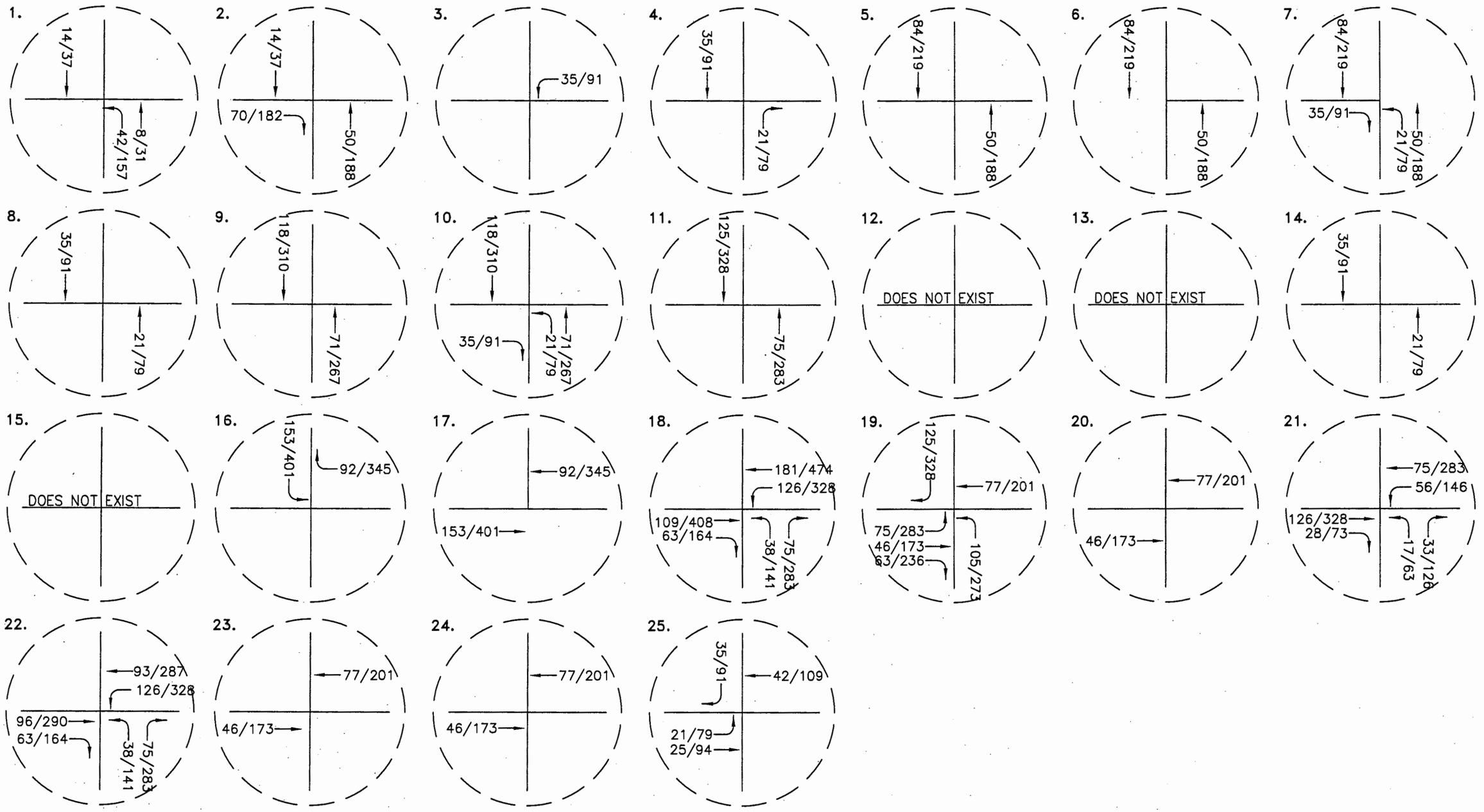
- DIRT ROAD
- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 13

PROPOSED CASINO + PHASE 1 PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 10 FOR INTERSECTION LOCATION

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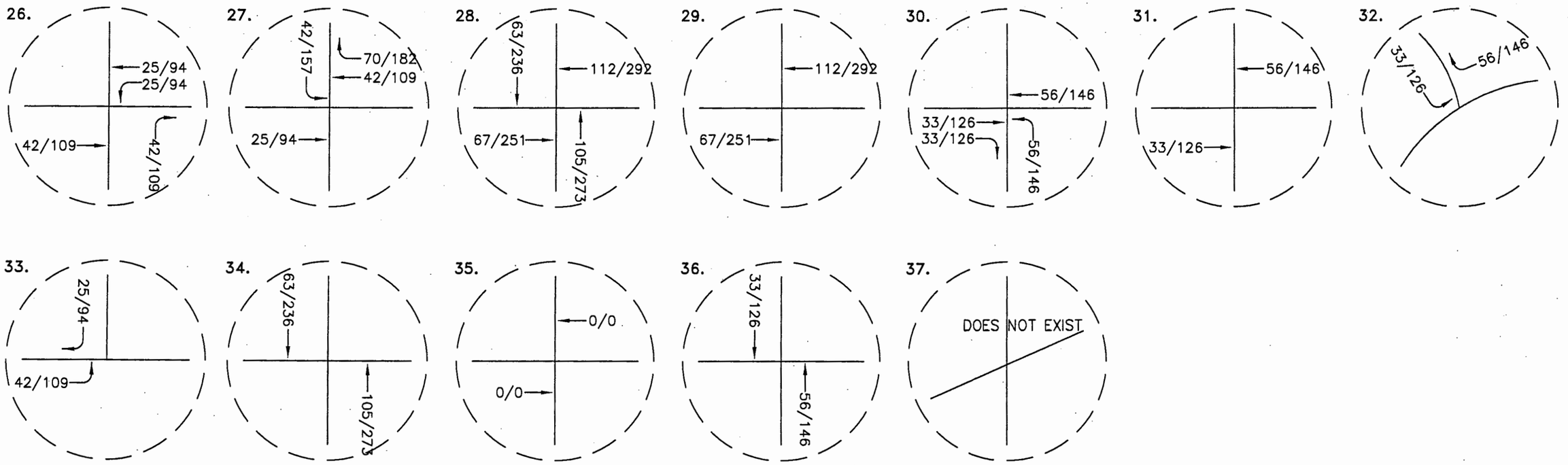
FIGURE 14

PROPOSED CASINO + PHASE 1 PROJECT

INTERSECTION TRAFFIC VOLUMES-NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 10 FOR INTERSECTION LOCATION.

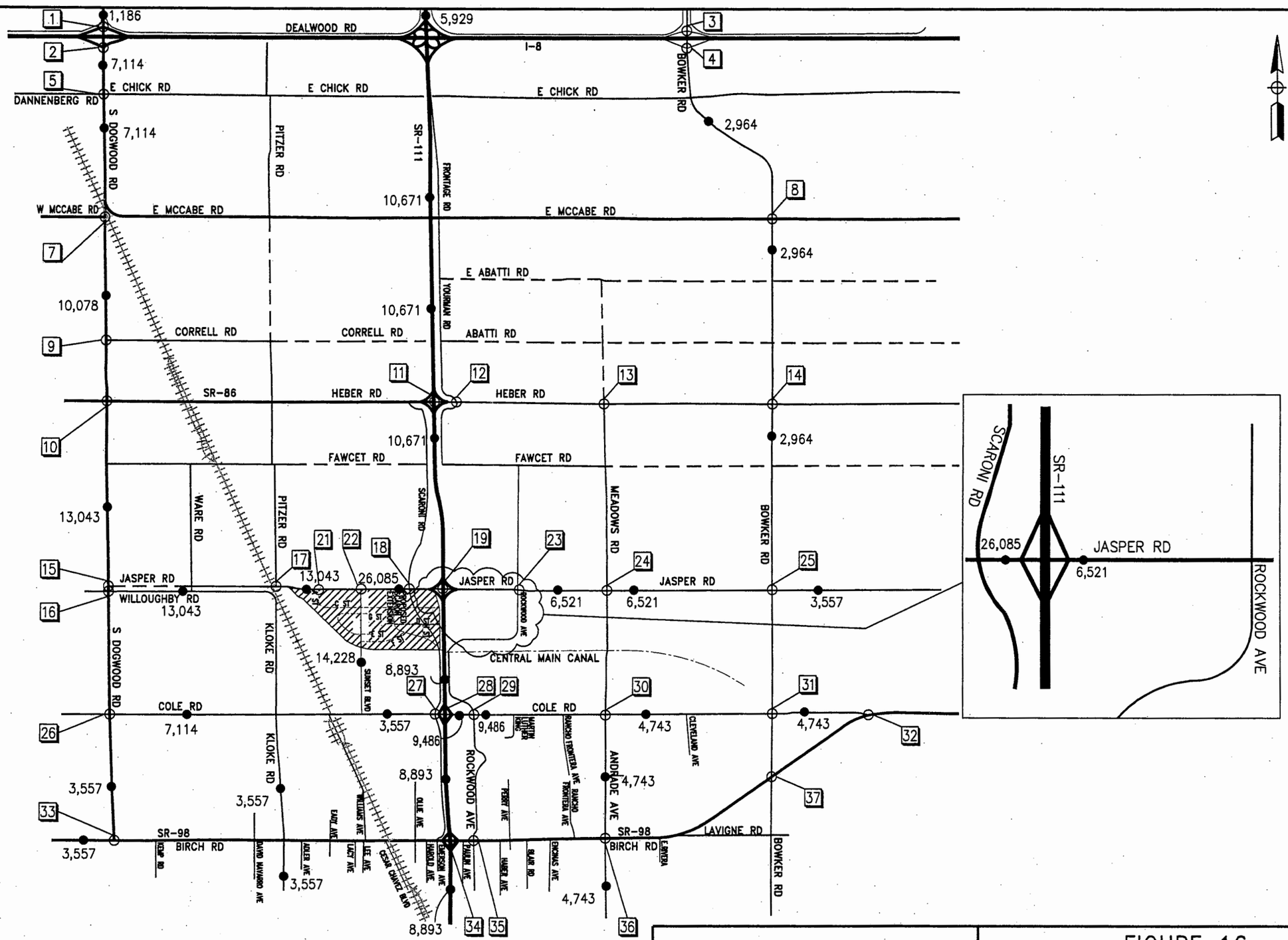
Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 15

PROPOSED CASINO + PHASE 1 PROJECT

INTERSECTION TRAFFIC VOLUMES–SOUTH



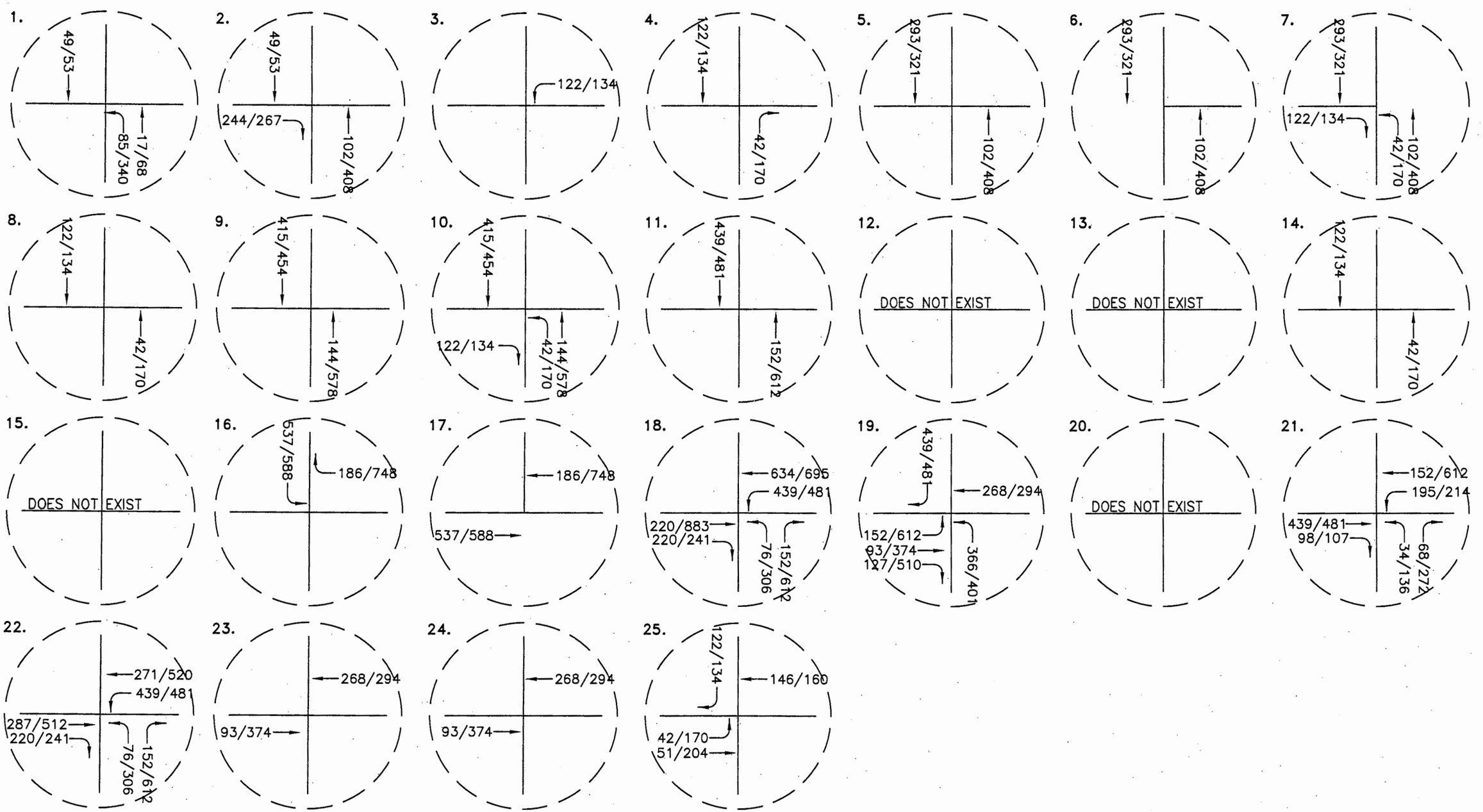
LEGEND

- DIRT ROAD
- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 16
2015 (ALL PHASES) PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

SEE FIGURE 13 FOR INTERSECTION LOCATION.

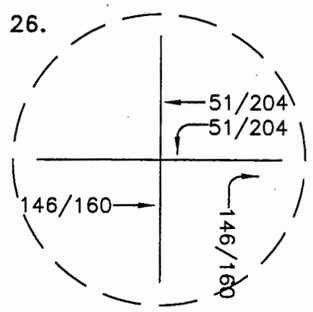
Darnell & ASSOCIATES, INC.

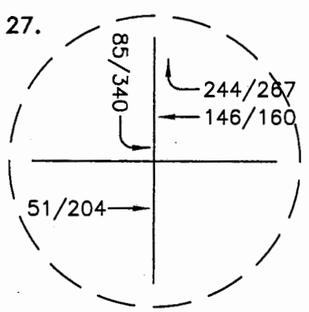
060303DD.dwg 8-14-08 SN

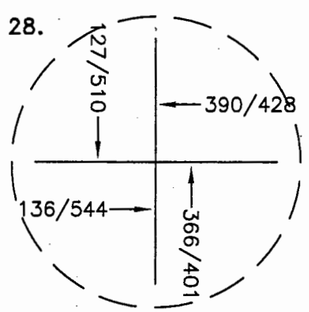
FIGURE 17

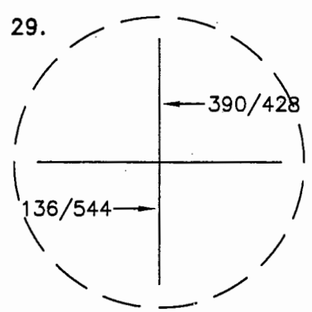
2015 (ALL PHASES) PROJECT

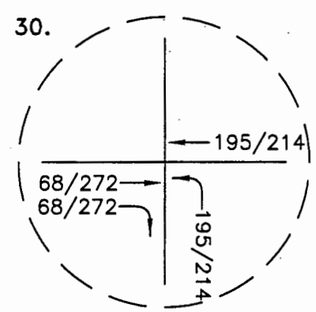
INTERSECTION TRAFFIC VOLUMES-NORTH

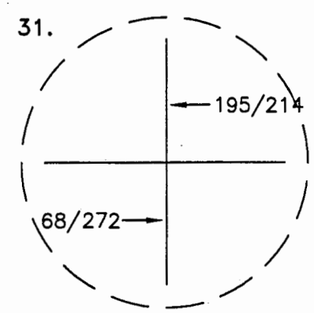


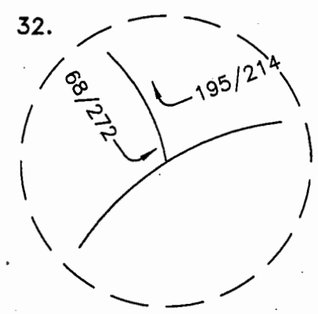


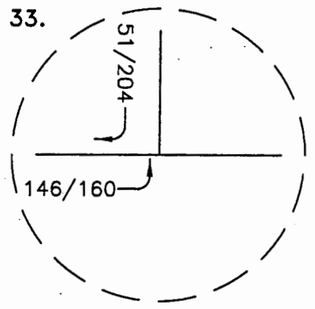


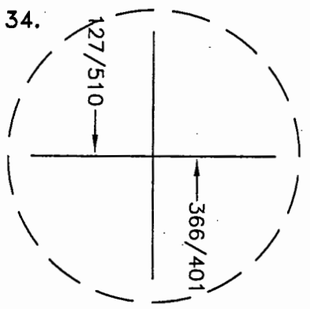


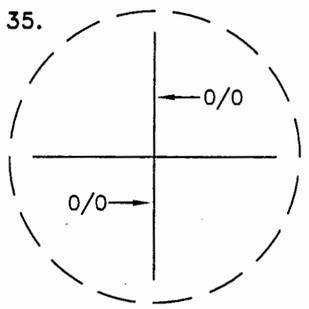


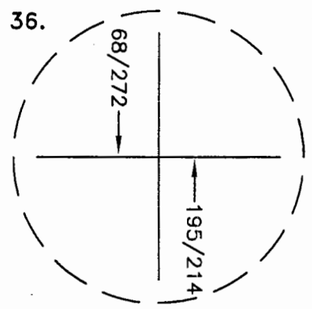


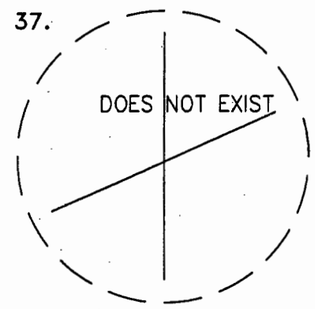












LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

SEE FIGURE 13 FOR INTERSECTION LOCATION.

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060303DD.dwg 8-14-08 SN

FIGURE 18

2015 (ALL PHASES) PROJECT

INTERSECTION TRAFFIC VOLUMES-SOUTH

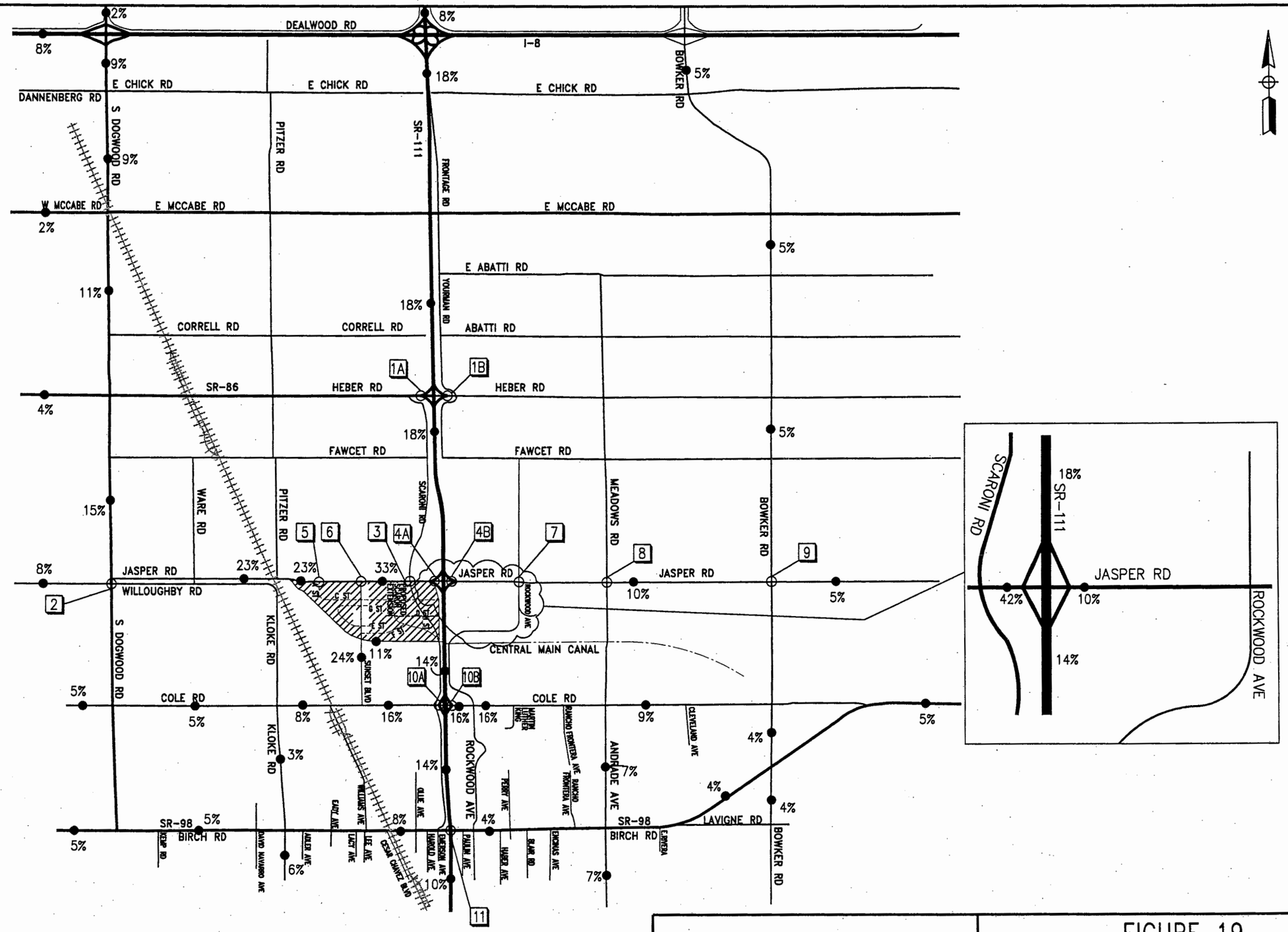

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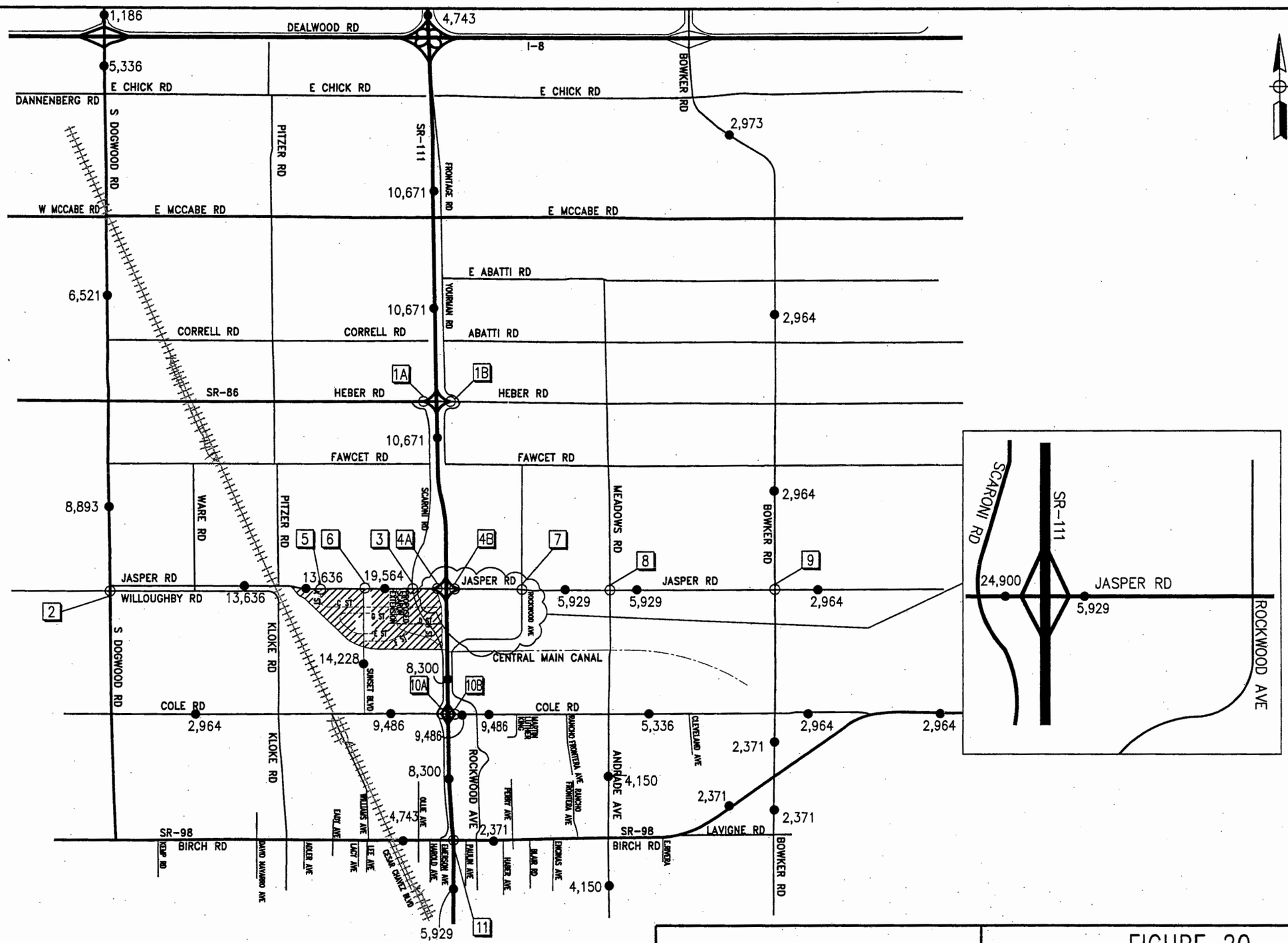
FIGURE 19
2035 PROJECT
DISTRIBUTION



LEGEND

[#] – INTERSECTION ID NUMBER

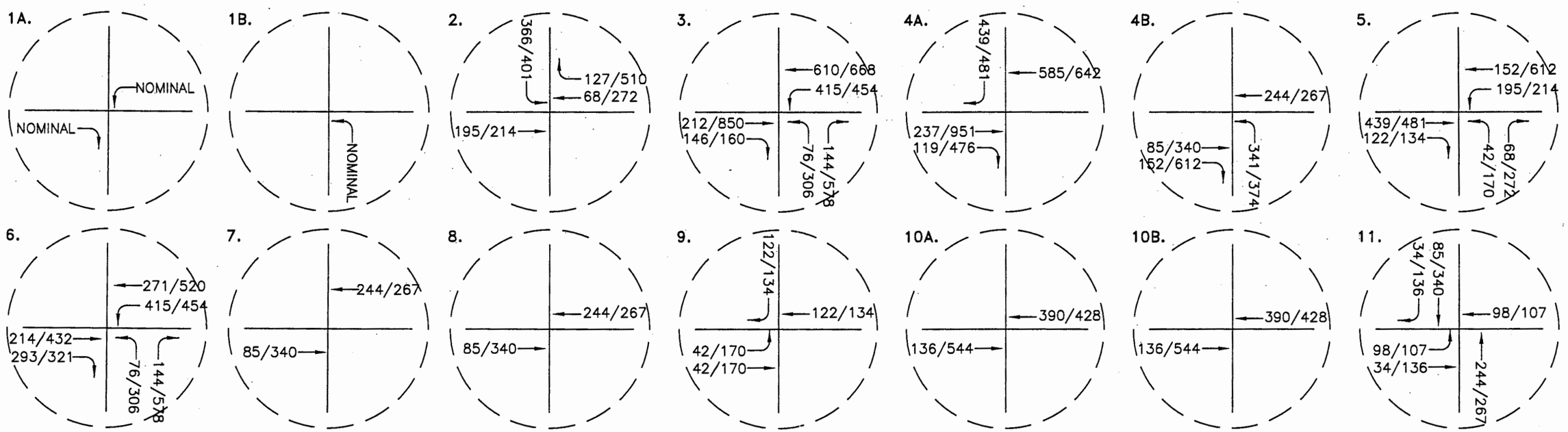
● Z,ZZZ – AVERAGE DAILY TRAFFIC

▨ – PROJECT SITE

Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 20
2035 PROPOSED PROJECT
DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 16 FOR INTERSECTION LOCATION

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060303DD.dwg 8-14-08 SN

FIGURE 21

2035 PROPOSED PROJECT INTERSECTION TRAFFIC VOLUMES

SECTION IV – NEAR TERM IMPACTS

LEVELS OF SIGNIFICANCE STANDARDS

Roadway Segments

City of Calexico

Based on the City of Calexico criteria, if the project worsens the street segment level of service (LOS) from LOS C or better to LOS D or worse, the project is considered to be significant. The only exception is if the street segment is operating at LOS D with the project traffic added and all of the intersections along the street segment operate at LOS D or better during peak periods, then the project is not considered to be significant. If the street segment LOS worsens from LOS C to LOS D, E or F, the impact is considered significant and direct. If the street segment LOS is already LOS D, E or LOS F without project traffic, the impact is considered to be cumulative.

County of Imperial

The County of Imperial requires that all roadways operate at LOS C or better. If the level of service drops below LOS C, mitigation by the project is required by the project on a fair-share basis.

Intersections

City of Calexico

Based on the City of Calexico criteria, if the project traffic worsens the level of service at the study intersection from LOS C or better to LOS D or worse, the impact is considered to be significant. If the intersection LOS is already LOS D or worse the impact is considered to be cumulative.

County of Imperial

The County of Imperial requires that all intersections operate at LOS C or better. If the level of service drops below LOS C, mitigation by the project is required by the project on a fair-share basis.

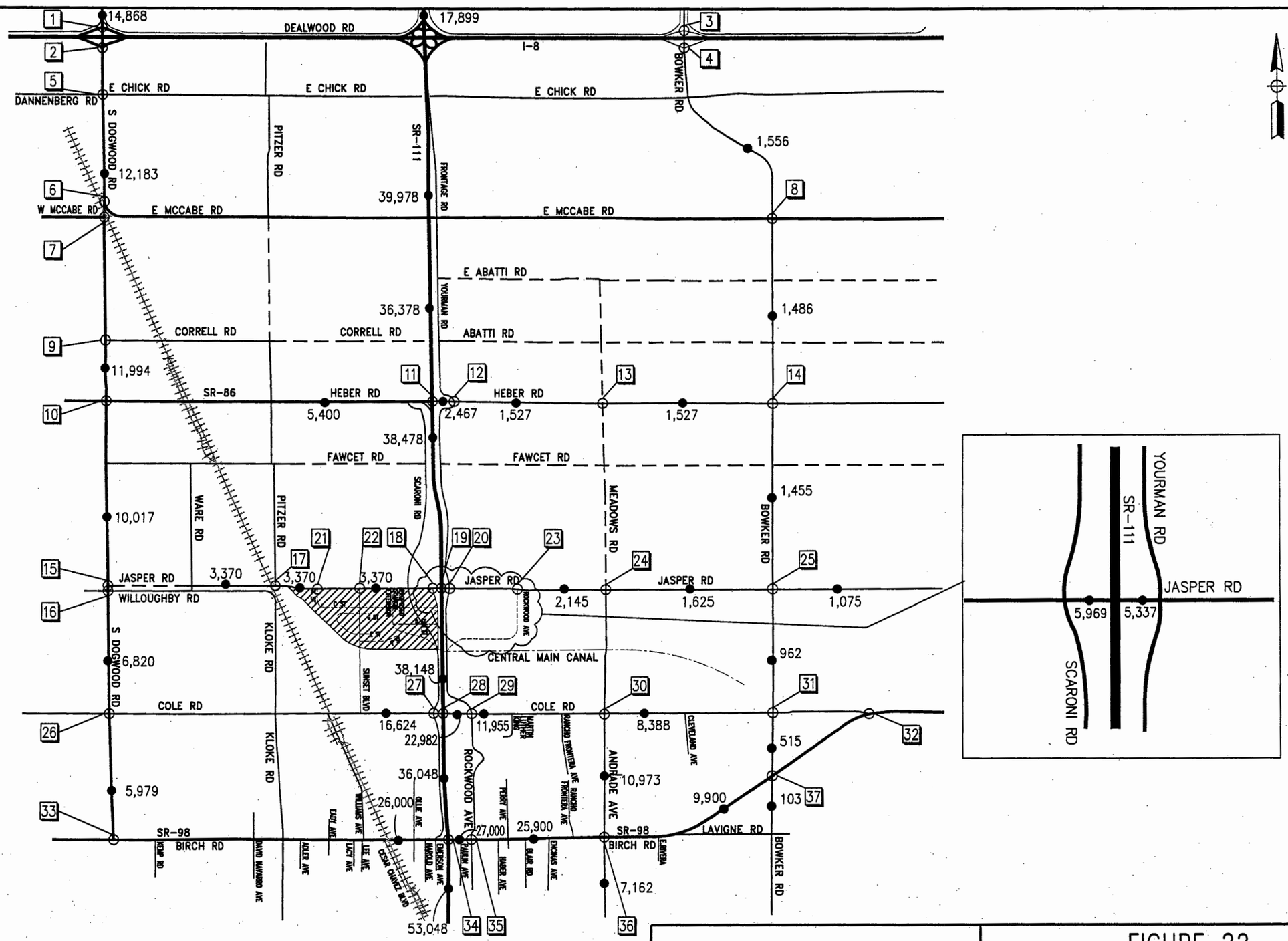
EXISTING PLUS PROJECT (PROPOSED CASINO ONLY) CONDITIONS

The proposed Casino project traffic which was assumed to occur in the near term was added to the existing traffic volumes. The daily traffic volumes for the existing plus proposed Casino condition are shown on Figure 22. The intersection peak hour volumes for this condition are shown on Figure 23 for the northerly study area and Figure 24 for the southerly study area.

Existing Plus Project (Casino Only) Roadway Segments

The roadway segments were analyzed with the project traffic (Casino only) added to existing traffic volumes. The roadway segments daily levels of service are summarized in Table 9. As shown on Table 9, the following segments demonstrate deficiencies with the addition of project traffic:

Dogwood Road: north of I-8
SR-111: south of SR-98
Cole Road: Enterprise to SR-111



LEGEND

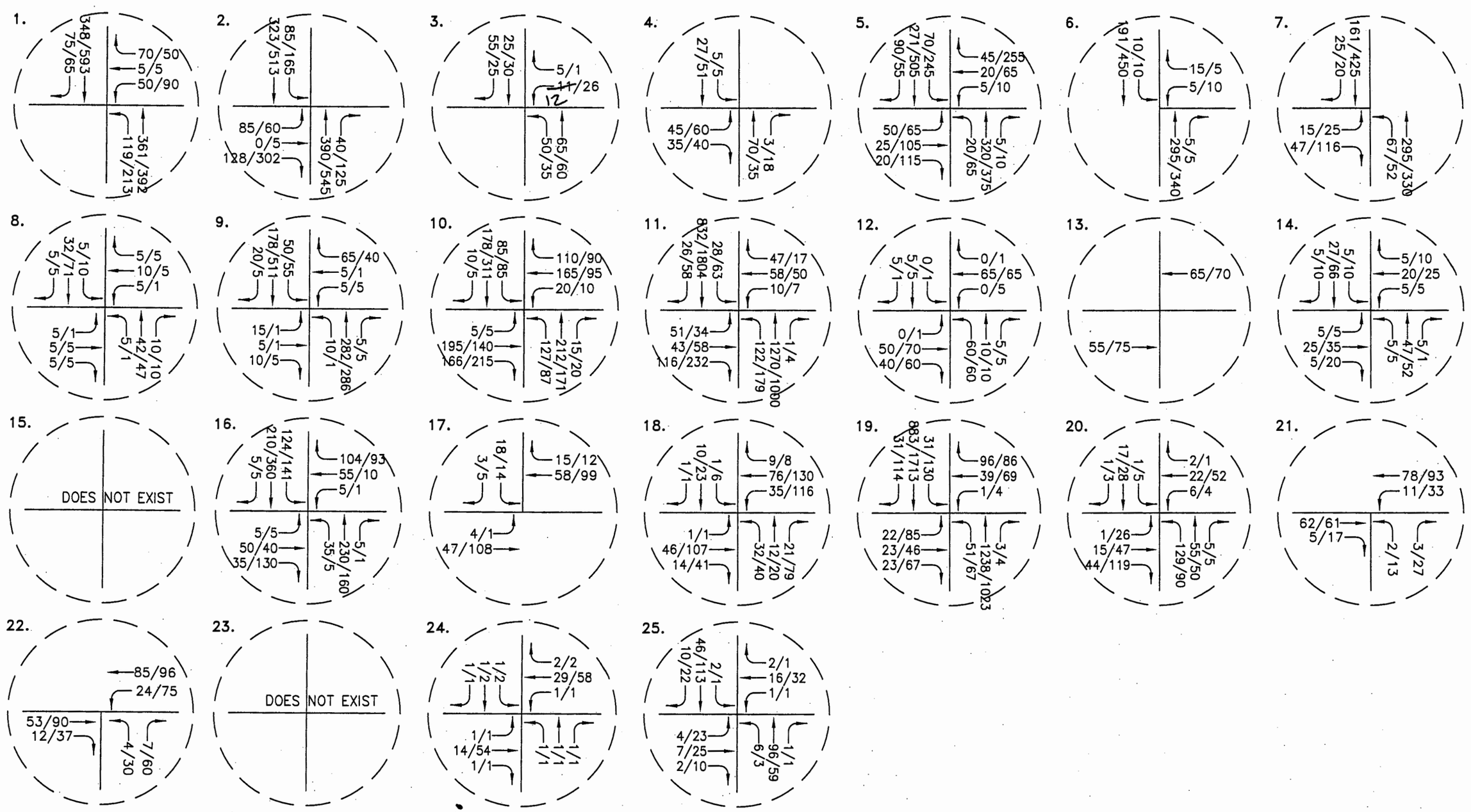
- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 22

EXISTING + PROJECT (CASINO)
DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 19 FOR INTERSECTION LOCATION

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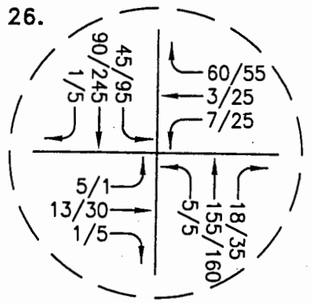
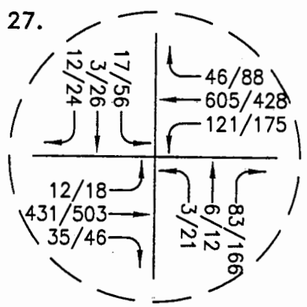
060303DD.dwg 8-14-08 SN

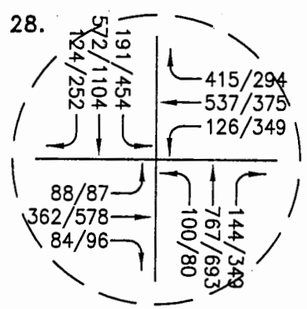
FIGURE 23

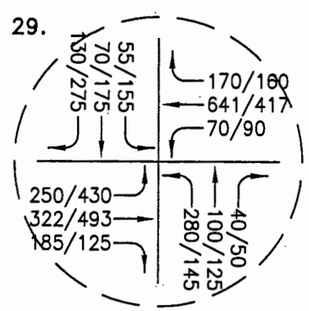
EXISTING + PROJECT (CASINO)

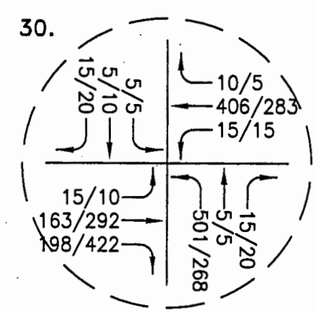
INTERSECTION TRAFFIC VOLUMES–NORTH

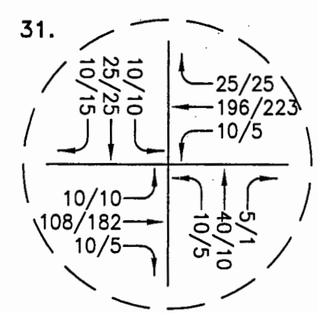


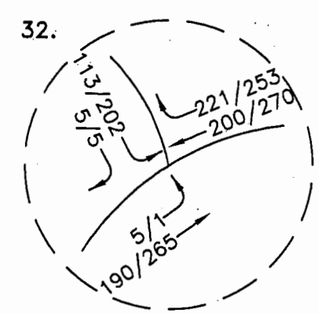


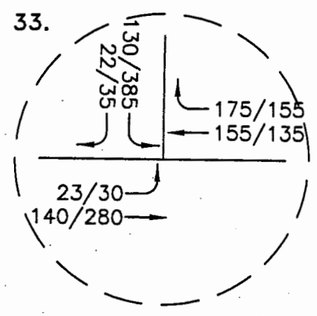


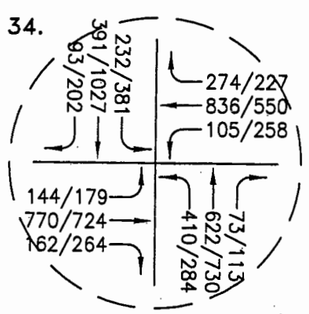


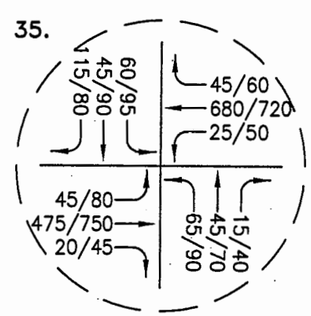


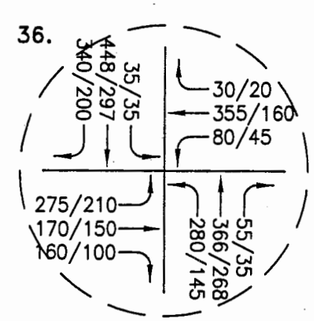


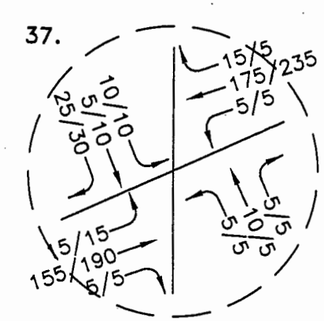












LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 19 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 24

EXISTING+PROJECT (CASINO)

INTERSECTION TRAFFIC VOLUMES-SOUTH

Table 9 - Existing Plus Project (Casino Only) Roadway Segment Level of Service

Roadway Segment	Max Cap	Existing			Existing + Project (Casino)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	**16,200**	**14,648**	**0.904**	**E**	**220**	**14,868**	**0.918**	**0.014**	**E**	**Cuml**
I-8 to McCabe	16,200	10,864	0.671	B	1,319	12,183	0.752	0.081	C	None
McCabe to SR-86	16,200	10,126	0.625	B	1,868	11,994	0.740	0.115	C	None
SR-86 to Jasper	16,200	7,600	0.469	A	2,417	10,017	0.618	0.149	B	None
Jasper to Cole	16,200	6,820	0.421	A	0	6,820	0.421	0.000	A	None
Cole to SR-98	16,200	5,320	0.328	A	659	5,979	0.369	0.041	A	None
SR-111:										
north of I-8	56,300	16,800	0.298	A	1,099	17,899	0.318	0.020	A	None
I-8 to McCabe	56,300	38,000	0.675	B	1,978	39,978	0.710	0.035	C	None
McCabe to Heber	56,300	34,400	0.611	B	1,978	36,378	0.646	0.035	B	None
Heber to Jasper	56,300	36,500	0.648	B	1,978	38,478	0.683	0.035	B	None
Jasper to Cole	56,300	36,500	0.648	B	1,648	38,148	0.678	0.029	B	None
Cole to SR-98	56,300	34,400	0.611	B	1,648	36,048	0.640	0.029	B	None
South of SR-98	**60,000**	**51,400**	**0.857**	**D**	**1,648**	**53,048**	**0.884**	**0.027**	**D**	**Cuml**
Bowker Road:										
I-8 to McCabe	16,200	1,007	0.062	A	549	1,556	0.096	0.034	A	None
McCabe to Heber	16,200	937	0.058	A	549	1,486	0.092	0.034	A	None
Heber to Jasper	16,200	906	0.056	A	549	1,455	0.090	0.034	A	None
Jasper to Cole	16,200	962	0.059	A	0	962	0.059	0.000	A	None
Cole to SR-98	17,500	515	0.029	A	0	515	0.029	0.000	A	None
South of SR-98	17,500	103	0.006	A	0	103	0.006	0.000	A	None
Meadows Road:										
Cole to SR-98	17,500	10,094	0.577	A	879	10,973	0.627	0.050	B	None
South of SR-98	17,500	6,283	0.359	A	879	7,162	0.409	0.050	A	None
Jasper Road:										
Scaroni to SR-111	17,500	1,134	0.065	A	4,835	5,969	0.341	0.276	A	None
SR-111 to Yourman	17,500	4,128	0.236	A	1,209	5,337	0.305	0.069	A	None
Yourman to Meadows	17,500	412	0.024	A	1,209	1,621	0.093	0.069	A	None
Meadows to Bowker	17,500	375	0.021	A	1,209	1,584	0.091	0.069	A	None
Cole Road:										
Enterprise to SR-111	**17,500**	**15,965**	**0.912**	**E**	**659**	**16,624**	**0.950**	**0.038**	**E**	**Cuml**
SR-111 to Yourman	37,500	21,224	0.566	A	1,758	22,982	0.613	0.047	B	None
Yourman to Meadows	37,500	10,197	0.272	A	1,758	11,955	0.319	0.047	A	None
Meadows to Bowker	37,500	7,509	0.200	A	879	8,388	0.224	0.023	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Existing Plus Project (Casino) Intersection Operation

Intersection operation for the existing plus project condition is summarized on Table 10. As shown on Table 10, the following intersections report deficiencies:

I-8 Westbound/Dogwood Road
I-8 Eastbound/Dogwood Road
Dogwood Road/Heber Road
Jasper Road/SR-111
Cole Road/Scaroni Avenue
SR-111/Cole Road
SR-98/SR-111

Existing Plus Project (Casino) - (ILV) Intersection Operation

CalTrans ILV analysis for the existing plus project condition is summarized on Table 11. As shown on Table 11, all interchanges operate at less than 1,500 ILV, which is considered acceptable.

EXISTING PLUS PROJECT (PROPOSED CASINO+PHASE 1) CONDITIONS

The Casino and Phase 1 project traffic was added to the existing traffic volumes. The daily traffic volumes for the existing plus project (Casino+Phase 1) condition are shown on Figure 25. The intersection peak hour volumes for this condition are shown on Figure 26 for the northerly study area and Figure 27 for the southerly study area.

Existing Plus Project (Proposed Casino+Phase 1) Roadway Segments

The roadway segments were analyzed with the project traffic (Proposed Casino+Phase 1) added to existing traffic volumes. The roadway segments daily levels of service are summarized in Table 12. As shown on Table 12, the following segments demonstrate deficiencies with the addition of project traffic:

Dogwood Road: north of I-8
Dogwood Road: I-8 to McCabe
Dogwood Road: McCabe to Heber
Dogwood Road: SR-86 (Heber) to Jasper
SR-111: south of SR-98
Jasper Road: Scaroni to SR-111
Cole Road: Enterprise to SR-111

Existing Plus Project (Proposed Casino+Phase 1) Intersection Operation

Intersection operation for the existing plus project condition is summarized on Table 13. As shown on Table 13, the following intersections report deficiencies:

I-8 Westbound/Dogwood Road
I-8 Eastbound/Dogwood Road
Dogwood/McCabe
Dogwood Road/Heber Road
Dogwood/Willoughby (realign to Jasper)
Jasper Road/Scaroni Road

Table 10 - Existing+Project (Casino Only) Intersection Operation

Intersection	Crit.	Existing Conditions				Existing+Project (Casino Only)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (TWSC)	WB	**19.5**	**C**	**130.3**	**F**	**19.8**	**C**	**0.3**	**189.6**	**F**	**59.3**	**Cuml**
I-8 Eastbound/Dogwood (TWSC)	EB	**20.7**	**C**	**43.6**	**E**	**20.7**	**C**	**0.0**	**49.8**	**E**	**6.2**	**Cuml**
I-8 Westbound/Bowker (TWSC)	WB	9.5	A	9.7	A	9.7	A	0.2	9.9	A	0.2	None
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A	9.2	A	0.1	9.3	A	0.2	None
Dogwood/Chick (Signal)	Int.	3.5	A	6.9	A	3.5	A	0.0	7.0	A	0.1	None
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B	10.8	B	0.1	14.9	B	1.2	None
Dogwood/McCabe South (AWSC)	EB	8.2	A	9.5	A	8.3	A	0.1	10.4	B	0.9	None
	NB	11.0	B	12.1	B	11.3	B	0.3	14.8	B	2.7	
	SB	8.7	A	13.5	B	8.9	A	0.2	16.9	C	3.4	
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A	9.4	A	0.0	9.3	A	0.1	None
	SB	9.3	A	9.4	A	9.4	A	0.1	9.6	A	0.2	
Dogwood/Abatti (TWSC)	EB	14.5	B	12.7	B	15.0	C	0.5	13.9	B	1.2	None
	WB	11.6	B	11.0	B	11.7	B	0.1	11.8	B	0.8	
Dogwood/Heber (AWSC)	EB	**33.4**	**D**	**18.1**	**C**	**42.2**	**E**	**8.8**	**29.1**	**D**	**11.0**	**Cuml**
	WB	**25.3**	**D**	**13.3**	**B**	**29.5**	**D**	**4.2**	**17.0**	**C**	**3.7**	
	NB	**34.8**	**D**	**14.2**	**B**	**44.4**	**E**	**9.6**	**22.6**	**C**	**8.4**	
	SB	**22.8**	**C**	**19.6**	**C**	**28.5**	**D**	**5.7**	**40.9**	**E**	**21.3**	
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C	12.9	B	0.0	29.5	C	2.6	None
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B	9.9	A	0.0	10.3	B	0.0	None
	SB	9.3	A	10.1	B	9.3	A	0.0	10.1	B	0.0	
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B	9.9	A	0.1	10.3	B	0.2	None
	SB	9.6	A	10.1	B	9.7	A	0.1	10.4	B	0.3	
Dogwood/Willoughby (TWSC)	EB	18.0	C	15.4	C	19.9	C	1.9	18.6	C	3.2	None
	WB	16.8	C	12.0	B	18.2	C	1.4	12.0	B	0.0	
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A	9.2	A	0.2	9.6	A	0.8	None
Jasper/Scaroni (AWSC)	EB	7.3	A	7.2	A	7.5	A	0.2	8.7	A	1.5	None
	WB	7.4	A	7.6	A	8.0	A	0.6	10.2	B	2.6	
	NB	7.4	A	7.3	A	7.7	A	0.3	8.9	A	1.6	
	SB	7.3	A	7.4	A	7.5	A	0.2	8.5	A	1.1	
Jasper/SR-111 (Signal)	Int.	14.0	B	20.1	C	**15.9**	**B**	**1.9**	**38.8**	**D**	**18.7**	**Direct**
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B	10.5	B	0.2	12.1	B	1.1	None
	SB	9.5	A	10.4	B	9.7	A	0.2	11.2	B	0.8	
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A	8.9	A	0.1	9.1	A	0.3	None
	SB	8.8	A	8.9	A	8.9	A	0.1	9.2	A	0.3	
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A	10.1	B	0.2	10.9	B	1.1	None
	WB	10.1	B	10.3	B	10.3	B	0.2	10.9	B	0.6	
Dogwood/Cole (TWSC)	EB	12.1	B	13.2	B	12.3	B	0.2	16.2	C	3.0	None
	WB	9.8	A	10.7	B	10.0	B	0.2	14.9	B	4.2	
Cole/Scaroni (TWSC)	NB	**22.5**	**C**	**121.1**	**F**	**23.6**	**C**	**1.1**	**237.2**	**F**	**116.1**	**Cuml**
	SB	**114.1**	**F**	**343.8**	**F**	**169.1**	**F**	**55.0**	*	**F**	*	
SR-111/Cole (Signal)	Int.	**38.2**	**D**	**42.9**	**D**	**39.1**	**D**	**0.9**	**42.5**	**D**	**-0.4**	**Cuml**
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C	33.4	C	0.2	32.8	C	0.3	None
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B	24.6	C	0.2	15.2	B	0.5	None
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A	7.8	A	0.1	8.5	A	0.4	None
	WB	9.2	A	9.1	A	9.4	A	0.2	9.6	A	0.5	
	NB	8.3	A	8.1	A	8.3	A	0.0	8.3	A	0.2	
	SB	8.1	A	8.2	A	8.2	A	0.1	8.3	A	0.1	
SR-98/Cole (Signal)	Int.	6.3	B	7.3	A	6.3	A	0.0	7.5	A	0.2	None
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A	6.8	A	0.1	11.5	B	1.8	None
SR-98/SR-111 (Signal)	Int.	**32.0**	**C**	**38.6**	**D**	**32.3**	**C**	**0.3**	**39.9**	**D**	**1.3**	**Cuml**
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B	11.5	B	0.0	17.6	B	0.0	None
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B	26.7	C	0.0	17.4	B	0.2	None
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B	11.6	B	0.0	12.2	B	0.0	None
	SB	10.6	B	11.5	B	10.6	B	0.0	11.5	B	0.0	

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 11 - Summary of Existing Plus Casino Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	Existing Condition		Existing + Proposed Casino			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111/Heber	870	1305	874	4	1342	37
SR-111/Jasper	748	1092	768	20	1242	150
SR-111/Cole	1078	1363	1109	31	1455	92
SR-111/SR-98	1105	1221	1115	10	1246	25
SR-98/Cole	330	451	344	14	478	27
SR-98/Dogwood	480	840	490	10	885	45
SR-98/Rockwood	628	743	628	0	743	0
SR-98/Meadows/Andrade	936	550	936	0	550	0

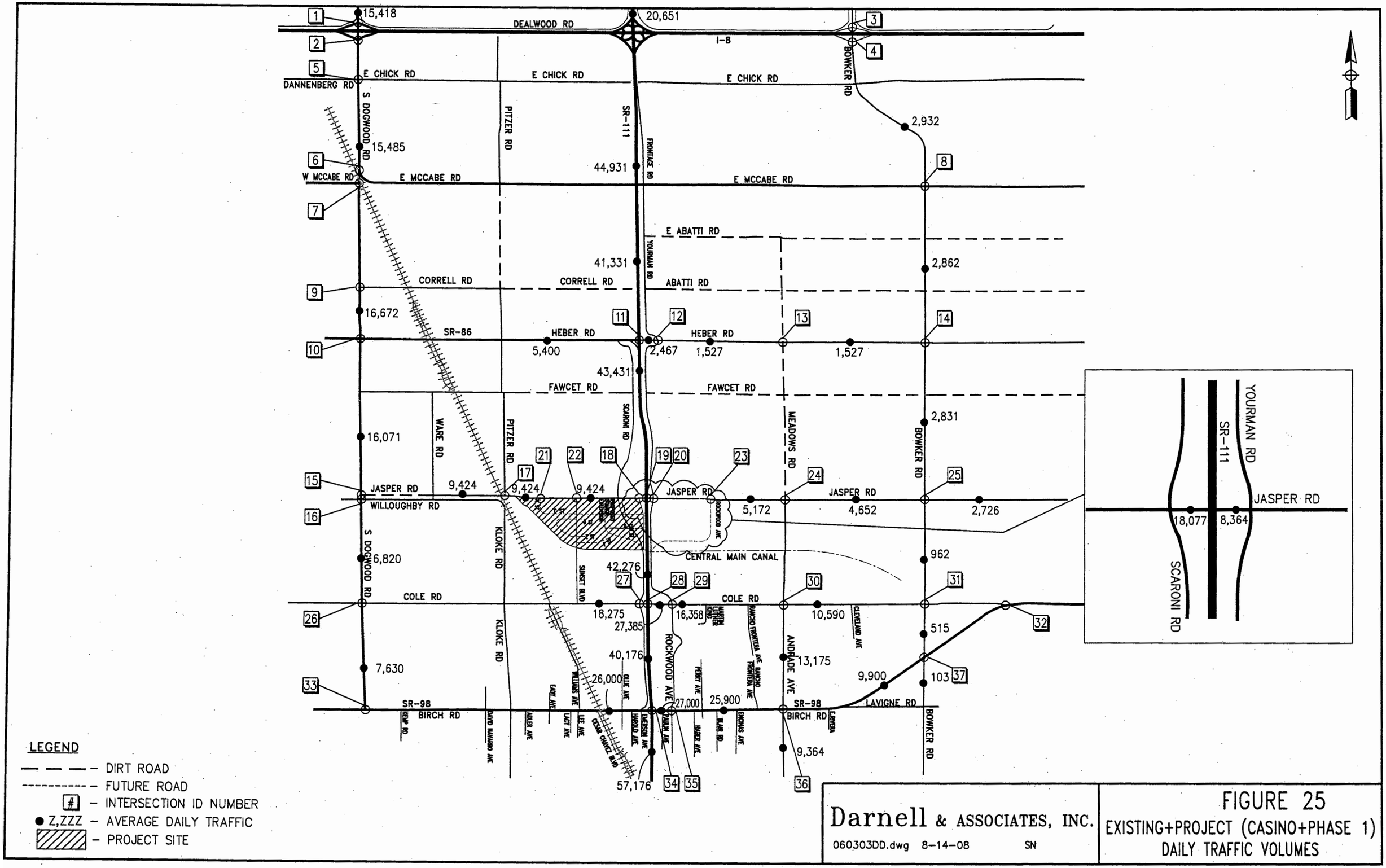
ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

Jasper Road/SR-111
Dogwood Road/Cole Road
Cole Road/Scaroni Avenue
SR-111/Cole Road
SR-98/SR-111

Existing Plus Project (Casino+Phase 1) - (ILV) Intersection Operation

CalTrans ILV analysis for the existing plus project condition is summarized on Table 14. As shown on Table 14, the following intersections demonstrate deficiencies based on Caltrans criteria:

SR-111/Jasper Road
SR-111/Cole Road



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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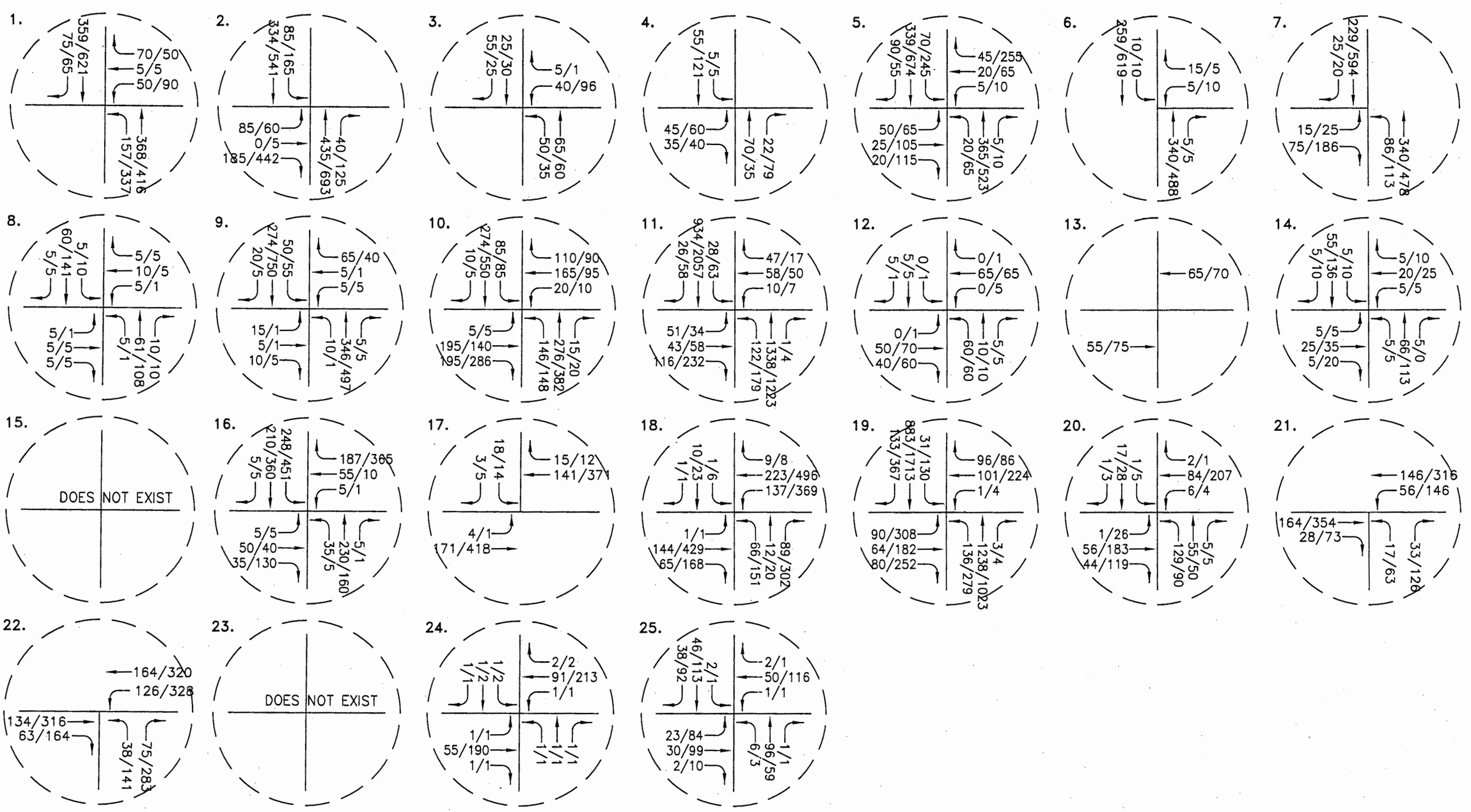
FIGURE 25

EXISTING+PROJECT (CASINO+PHASE 1)
DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 19 FOR INTERSECTION LOCATION

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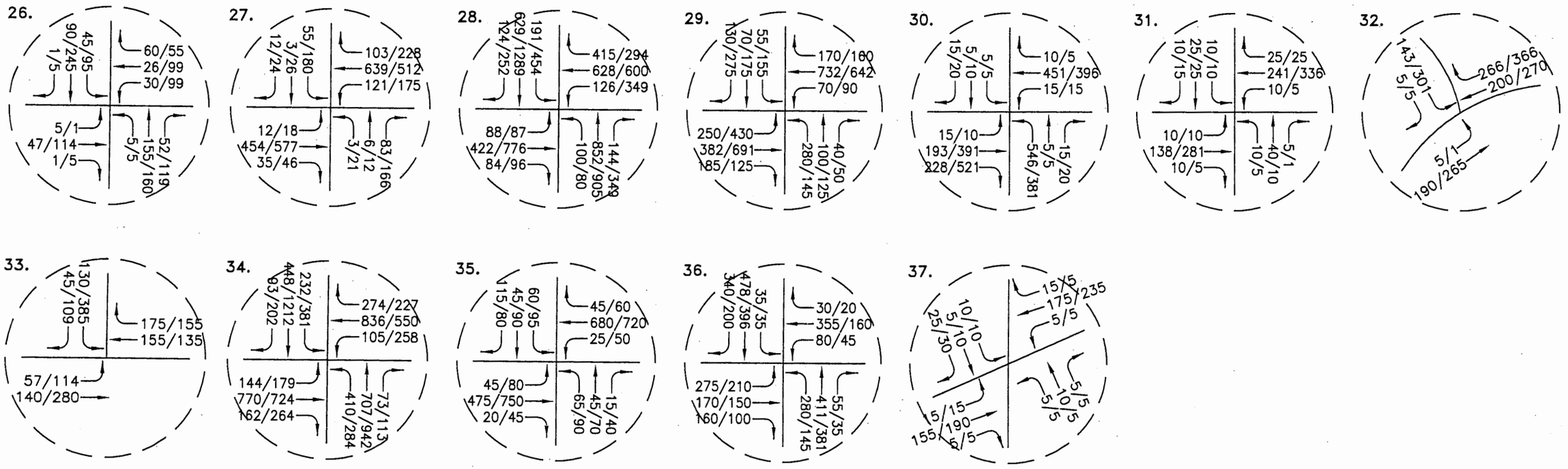
FIGURE 26

EXISTING+PROJECT (CASINO+PHASE 1)
INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 19 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

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FIGURE 27

EXISTING+PROJECT (CASINO+PHASE 1)
INTERSECTION TRAFFIC VOLUMES-SOUTH

Table 12 - Existing Plus Project (Casino+Phase 1) Roadway Segment Level of Service

Roadway Segment	Max Cap	Existing			Existing + Project (Casino+Phase 1)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	**16,200**	**14,648**	**0.904**	**E**	**770**	**15,418**	**0.952**	**0.048**	**E**	**Cuml**
I-8 to McCabe	**16,200**	**10,864**	**0.671**	**B**	**4,621**	**15,485**	**0.956**	**0.285**	**E**	**Direct**
McCabe to SR-86	**16,200**	**10,126**	**0.625**	**B**	**6,546**	**16,672**	**1.029**	**0.404**	**F**	**Direct**
SR-86 to Jasper	**16,200**	**7,600**	**0.469**	**A**	**8,471**	**16,071**	**0.992**	**0.523**	**E**	**Direct**
Jasper to Cole	16,200	6,820	0.421	A	0	6,820	0.421	0.000	A	None
Cole to SR-98	16,200	5,320	0.328	A	2,310	7,630	0.471	0.143	A	None
SR-111:										
north of I-8	56,300	16,800	0.298	A	3,851	20,651	0.367	0.068	A	None
I-8 to McCabe	56,300	38,000	0.675	B	6,931	44,931	0.798	0.123	C	None
McCabe to Heber	56,300	34,400	0.611	B	6,931	41,331	0.734	0.123	C	None
Heber to Jasper	56,300	36,500	0.648	B	6,931	43,431	0.771	0.123	C	None
Jasper to Cole	56,300	36,500	0.648	B	5,776	42,276	0.751	0.103	C	None
Cole to SR-98	56,300	34,400	0.611	B	5,776	40,176	0.714	0.103	C	None
South of SR-98	**60,000**	**51,400**	**0.857**	**D**	**5,776**	**57,176**	**0.953**	**0.096**	**E**	**Cuml**
Bowker Road:										
I-8 to McCabe	16,200	1,007	0.062	A	1,925	2,932	0.181	0.119	A	None
McCabe to Heber	16,200	937	0.058	A	1,925	2,862	0.177	0.119	A	None
Heber to Jasper	16,200	906	0.056	A	1,925	2,831	0.175	0.119	A	None
Jasper to Cole	16,200	962	0.059	A	0	962	0.059	0.000	A	None
Cole to SR-98	17,500	515	0.029	A	0	515	0.029	0.000	A	None
South of SR-98	17,500	103	0.006	A	0	103	0.006	0.000	A	None
Meadows Road:										
Cole to SR-98	17,500	10,094	0.577	A	3,080	13,174	0.753	0.176	C	None
South of SR-98	17,500	6,283	0.359	A	3,080	9,363	0.535	0.176	A	None
Jasper Road:										
Scaroni to SR-111	**17,500**	**936**	**0.053**	**A**	**16,943**	**17,879**	**1.022**	**0.968**	**F**	**Direct**
SR-111 to Yourman	17,500	412	0.024	A	4,236	4,648	0.266	0.242	A	None
Yourman to Meadows	17,500	412	0.024	A	4,236	4,648	0.266	0.242	A	None
Meadows to Bowker	17,500	375	0.021	A	4,236	4,611	0.263	0.242	A	None
Cole Road:										
Enterprise to SR-111	**17,500**	**15,965**	**0.912**	**E**	**2,310**	**18,275**	**1.044**	**0.132**	**F**	**Cuml**
SR-111 to Yourman	37,500	21,224	0.566	A	6,161	27,385	0.730	0.164	C	None
Yourman to Meadows	37,500	10,197	0.272	A	6,161	16,358	0.436	0.164	A	None
Meadows to Bowker	37,500	7,509	0.200	A	3,080	10,589	0.282	0.082	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 13 - Existing+Project (Proposed Casino+Phase 1) Intersection Operation

Intersection	Crit.	Existing Conditions				Existing+Project (Proposed Casino+Phase 1)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (TWSC)	**WB**	**19.5**	**C**	**130.3**	**F**	**23.4**	**C**	**3.9**	**602.9**	**F**	**472.6**	**Cuml**
I-8 Eastbound/Dogwood (TWSC)	**EB**	**20.7**	**C**	**43.6**	**E**	**21.0**	**C**	**0.3**	**110.2**	**F**	**66.6**	**Cuml**
I-8 Westbound/Bowker (TWSC)	WB	9.5	A	9.7	A	10.2	B	0.7	10.5	B	0.8	None
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A	9.4	A	0.3	9.8	A	0.7	None
Dogwood/Chick (Signal)	Int.	3.5	A	6.9	A	3.5	A	0.0	8.6	A	1.7	None
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B	11.4	B	0.7	19.6	C	5.9	None
Dogwood/McCabe South (AWSC)	**EB**	8.2	A	9.5	A	**9.0**	**A**	**0.8**	**14.1**	**B**	**4.6**	**Direct**
	NB	11.0	B	12.1	B	**13.8**	**B**	**2.8**	**65.0**	**F**	**52.9**	
	SB	8.7	A	13.5	B	**10.2**	**B**	**1.5**	**73.0**	**F**	**59.5**	
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A	9.6	A	0.2	9.8	A	0.6	None
	SB	9.3	A	9.4	A	9.6	A	0.3	10.2	B	0.8	
Dogwood/Abatti (TWSC)	EB	14.5	B	12.7	B	18.4	C	3.9	21.4	C	8.7	None
	WB	11.6	B	11.0	B	12.8	B	1.2	16.0	C	5.0	
Dogwood/Heber (AWSC)	**EB**	**33.4**	**D**	**18.1**	**C**	**91.7**	**F**	**58.3**	**84.0**	**F**	**65.9**	**Cuml**
	WB	**25.3**	**D**	**13.3**	**B**	**45.5**	**E**	**20.2**	**23.1**	**C**	**9.8**	
	NB	**34.8**	**D**	**14.2**	**B**	**147.2**	**F**	**112.4**	**220.1**	**F**	**205.9**	
	SB	**22.8**	**C**	**19.6**	**C**	**83.4**	**F**	**60.6**	**317.4**	**F**	**297.8**	
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C	13.4	B	0.5	29.8	C	2.9	None
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B	9.9	A	0.0	10.3	B	0.0	None
	SB	9.3	A	10.1	B	9.3	A	0.0	10.1	B	0.0	
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B	10.1	B	0.3	11.0	B	0.9	None
	SB	9.6	A	10.1	B	10.0	A	0.4	11.4	B	1.3	
Dogwood/Willoughby (TWSC)	**EB**	18.0	C	15.4	C	**37.1**	**E**	**19.1**	**168.0**	**F**	**152.6**	**Direct**
	WB	16.8	C	12.0	B	**31.3**	**D**	**14.5**	**21.2**	**C**	**9.2**	
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A	10.6	B	1.6	15.2	C	6.4	None
Jasper/Scaroni (AWSC)	**EB**	7.3	A	7.2	A	**9.9**	**A**	**2.6**	**160.9**	**F**	**153.7**	**Direct**
	WB	7.4	A	7.6	A	**13.3**	**B**	**5.9**	**442.3**	**F**	**434.7**	
	NB	7.4	A	7.3	A	**10.1**	**B**	**2.7**	**63.0**	**F**	**55.7**	
	SB	7.3	A	7.4	A	**8.9**	**A**	**1.6**	**13.5**	**B**	**6.1**	
Jasper/SR-111 (Signal)	**Int.**	14.0	B	20.1	C	**34.9**	**C**	**20.9**	**300.4**	**F**	**280.3**	**Direct**
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B	11.8	B	1.5	18.9	C	7.9	None
	SB	9.5	A	10.4	B	10.4	B	0.9	14.7	B	4.3	
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A	9.4	A	0.6	11.2	B	2.4	None
	SB	8.8	A	8.9	A	9.4	A	0.6	11.6	B	2.7	
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A	11.1	B	1.2	16.5	C	6.7	None
	WB	10.1	B	10.3	B	11.1	B	1.0	13.4	B	3.1	
Dogwood/Cole (TWSC)	**EB**	12.1	B	13.2	B	**13.3**	**B**	**1.2**	**25.8**	**D**	**12.6**	**Direct**
	WB	9.8	A	10.7	B	**12.2**	**B**	**2.4**	**85.9**	**F**	**75.2**	
Cole/Scaroni (TWSC)	**NB**	**22.5**	**C**	**121.1**	**F**	**34.3**	**D**	**11.8**	*	**F**	*	**Cuml**
	SB	**114.1**	**F**	**343.8**	**F**	*	**F**	*	*	**F**	*	
SR-111/Cole (Signal)	**Int.**	**38.2**	**D**	**42.9**	**D**	**41.5**	**D**	**3.3**	**80.3**	**F**	**37.4**	**Cuml**
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C	34.7	C	1.5	34.2	C	1.7	None
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B	24.6	C	0.2	16.7	B	2.0	None
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A	8.2	A	0.5	10.6	B	2.5	None
	WB	9.2	A	9.1	A	10.1	B	0.9	12.2	B	3.1	
	NB	8.3	A	8.1	A	8.6	A	0.3	8.9	A	0.8	
	SB	8.1	A	8.2	A	8.4	A	0.3	9.0	A	0.8	
SR-98/Cole (Signal)	Int.	6.3	B	7.3	A	6.4	A	0.1	8.2	A	0.9	None
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A	8.5	A	1.8	16.1	B	6.4	None
SR-98/SR-111 (Signal)	**Int.**	**32.0**	**C**	**38.6**	**D**	**33.8**	**C**	**1.8**	**44.0**	**D**	**5.4**	**Cuml**
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B	11.5	B	0.0	17.6	B	0.0	None
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B	27.0	C	0.3	18.3	B	1.1	None
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B	11.6	B	0.0	12.2	B	0.0	None
	SB	10.6	B	11.5	B	10.6	B	0.0	11.5	B	0.0	

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 14 - Summary of Existing Plus Proposed Casino+Phase 1 Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	**Existing Condition**		**Existing + Proposed Casino+Phase 1**			
	AM Peak ILV	**PM Peak ILV**	**AM Peak ILV**	**AM Incr. ILV**	**PM Peak ILV**	**PM Incr. ILV**
SR-111/Heber	870	1305	908	38	1469	164
SR-111/Jasper	748	1092	991	243	**2061**	969
SR-111/Cole	1078	1363	1242	164	**1773**	410
SR-111/SR-98	1105	1221	1157	52	1338	117
SR-98/Cole	330	451	419	89	673	222
SR-98/Dogwood	480	840	547	67	1043	203
SR-98/Rockwood	628	743	628	0	743	0
SR-98/Meadows/Andrade	936	550	936	0	558	8

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

SECTION V - YEAR 2015 IMPACTS

YEAR 2015 ROADWAY NETWORK

For the near term cumulative condition the circulation infrastructure was evaluated and updated based on the cumulative projects contributions to the year 2015. All Jasper Corridor and vicinity cumulative projects were included in the year 2015 traffic volumes and roadway network, including improvements to off-site locations as needed based on traffic densities for each development.

Table 15 summarizes the projects which were included in the Year 2015 condition with associated project development assumptions.

Roadway system improvements were identified and improved as shown on Figure 28 based on circulation system needs and construction of the cumulative projects. (For instance, those projects which develop on either side of Jasper Road are required to construct Jasper Road along their frontages with fair share contributions to off-site circulation needs, as well as install project access intersection configurations and/or traffic controls.) Figure 29 shows the assumed lane geometrics for the year 2015 for the northern portion of the study area and Figure 30 shows the southern portion.

Note that all projects (including Calexico/111) are conditioned to pay traffic fees, signalization fees, and participate in mitigation to meet the City's circulation system need (fair share discussed later in the report). Therefore, these intersection and roadway segment improvements are the result of development improvements, including improvements to existing and planned deficiencies, as well as construction of the City's General Plan Circulation Element.

YEAR 2015 TRAFFIC VOLUMES

To obtain the 2015 traffic volumes, the traffic generated from the approved/pending projects densities (shown on Table 15) in the Calexico area that was assumed to occur by the Year 2015 was added onto the base traffic volumes. The daily traffic volumes for the Year 2015 condition are shown in Figure 31. Figure 32 shows the Year 2015 intersection volumes for the northerly study area, and Figure 33 shows the northerly study area.

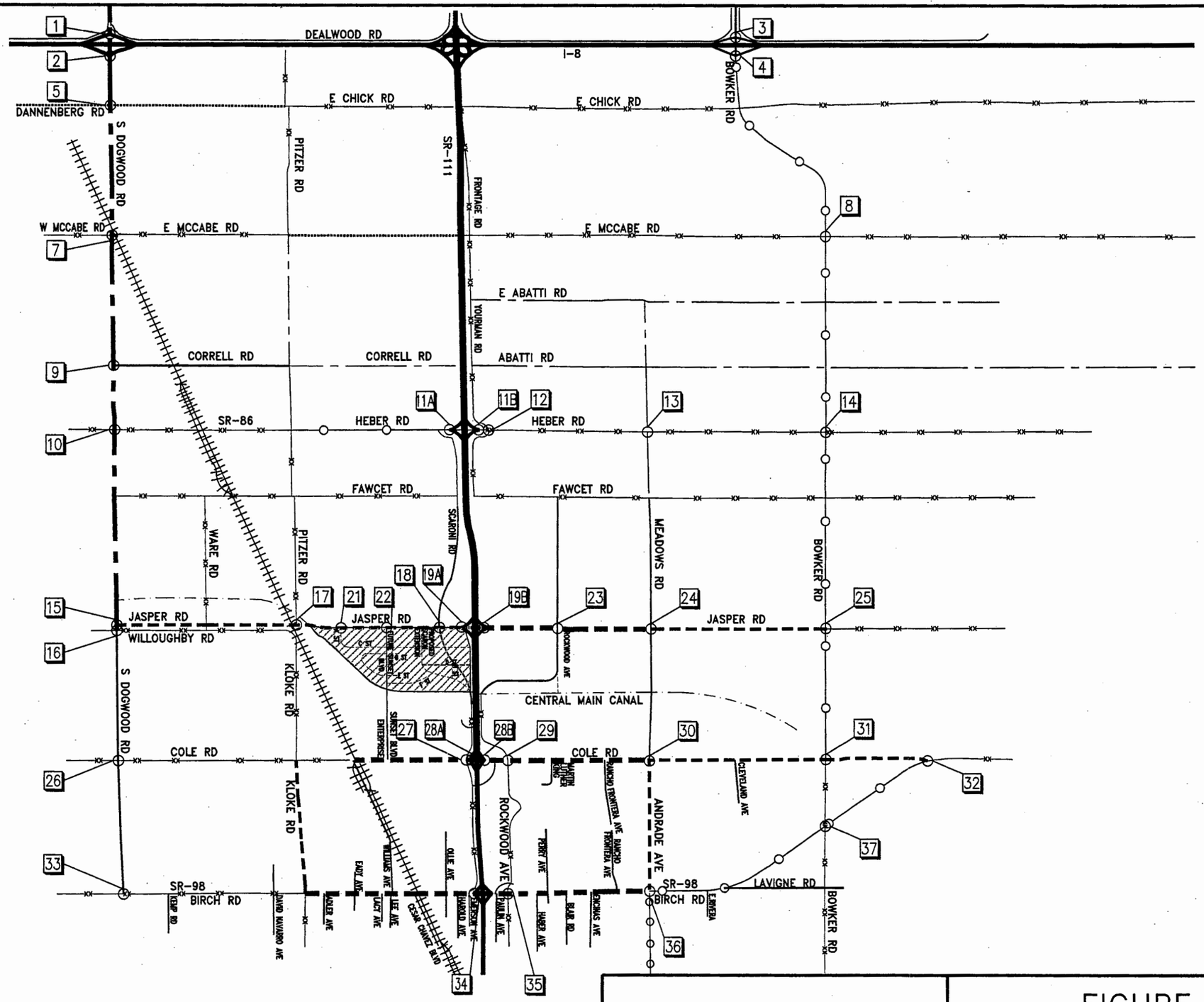
YEAR 2015 WITH PROJECT CONDITIONS

The Year 2015 condition was analyzed using two separate project scenarios. The initial assessment is based on development of the casino facility (with hotel). The second analysis assumes buildout of the entire project (all phases) set upon the year 2015 base condition.

Project (Casino phase) traffic was added to the Year 2015. Figure 34 illustrates the Year 2015 plus project (casino) daily traffic volumes. Figure 35 shows the intersection volumes for this condition on the northern study area, and Figure 36 for the southern study area.

Total project traffic (all phases) was added to the Year 2015. Figure 37 illustrates the Year 2015 plus total project daily traffic volumes. Figure 38 shows the intersection volumes for this condition on the northern study area, and Figure 39 for the southern study area.

Table 15 - Cumulative Project Densities (Year 2015)				
Project Description	Estimated Percent Occupied	Density		Land Use
Venezia	50%	125	Dus	Single Family
Estrella	50%	200	Dus	Single Family
		122	Dus	Multi Family
		6.75	Acres	Elementary School
		2.65	Acres	Park
Rancho Diamante	50%	1131	Dus	Single Family
		586	Dus	Condos
		370	Dus	4-Plex
		26.6	Acres	Park
		31.31	Acres	School
		12.9	Acres	Commercial
Esmerelda	50%	146	Dus	Single Family
		0.7	Acres	Fire Department
Mega Park	100% Commercial; 50% Other Uses	411.385	ksf	Commercial
		1.35	ksf	Car Dealership
		209	ksf	Office
		65.34	ksf	Medical Office
		95.9	room	Retail
Citrus Grove	50%	79	Dus	Single Family
Los Lagos	50%	560	Dus	Single Family
		388	Dus	Apartments
		12.5	Acres	Commercial
		12.9	Acres	Elementary School
Las Ventanas	50% Residential/ 100% Commercial	520	Dus	Single Family
		6.6	Acres	Elementary School
		29	Acres	Commercial
Linda Plaza	50%	13.65	ksf	Office
		5.21	ksf	Retail
		1.5	ksf	Fast Food
Palazzo	50%	419	Dus	Single Family
		150	Dus	Multi Family
		47	Dus	Duplex
Santa Fe	50%	355	Dus	Single Family
		218	Dus	Apartments
		6.44	Acres	Commercial
		6.75	Acres	Elementary School
Dus=dwelling units; ksf=1000 square feet				



LEGEND

- RAILROAD TRACK
- 6 LANE HIGHWAY
- EXPRESS WAY
- HIGHWAY
- MINOR ARTERAL
- 4-LANE MAJOR
- 4-LANE PRIMARY
- 4-LANE ARTERIAL
- 4-LANE COLLECTOR
- 2-LANE SECONDARY
- 2-LANE COLLECTOR
- DIRT ROAD
- FUTURE ROAD
- CANAL
- [#] - INTERSECTION ID NUMBER
- PROJECT SITE

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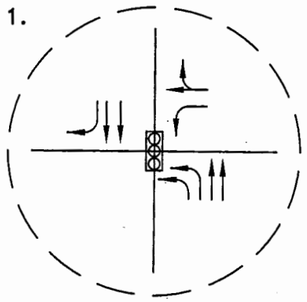
FIGURE 28

2015 CONDITIONS

1.



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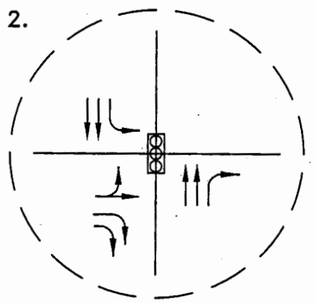

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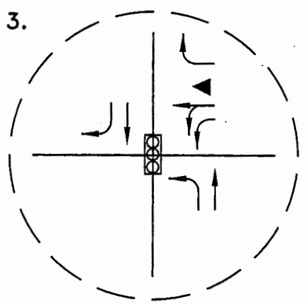

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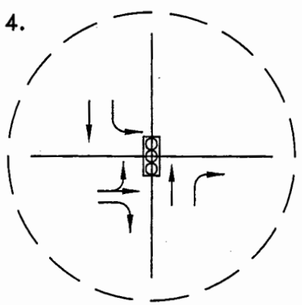

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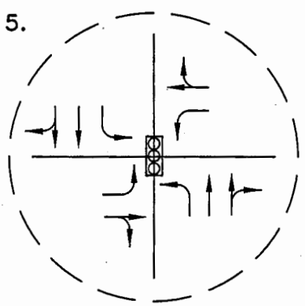

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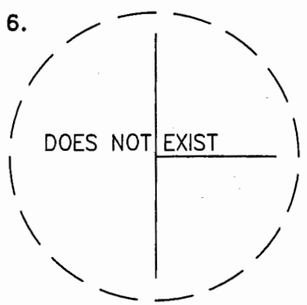

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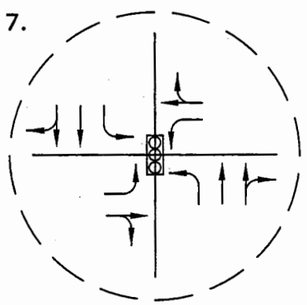

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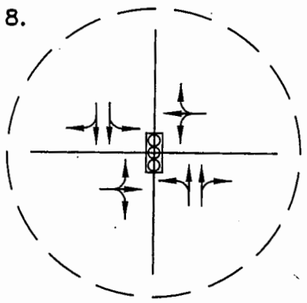

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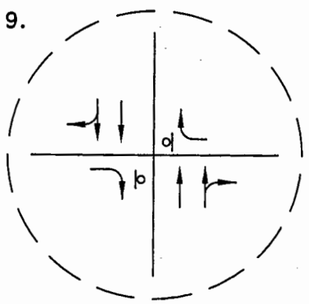

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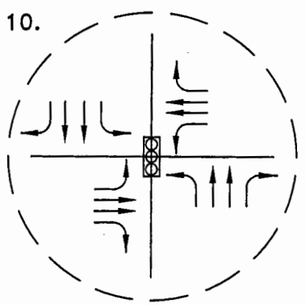

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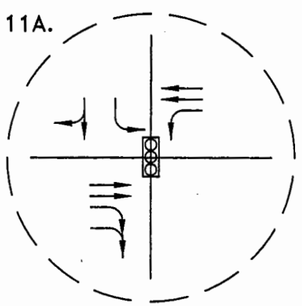

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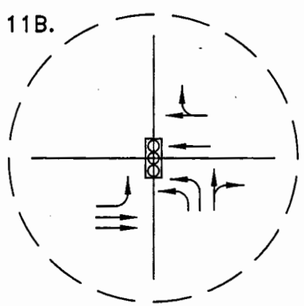

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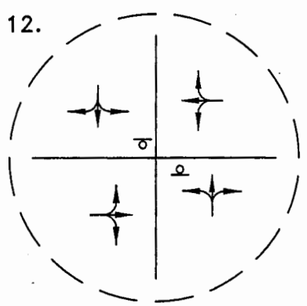

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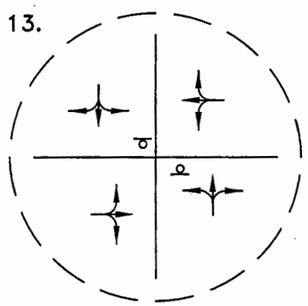

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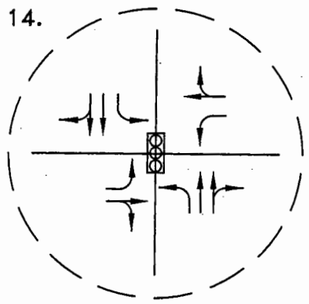

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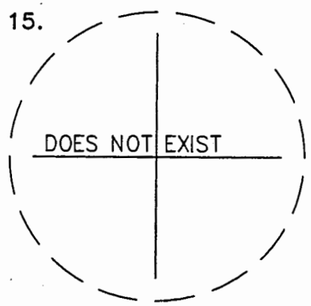

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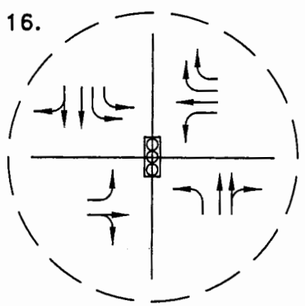

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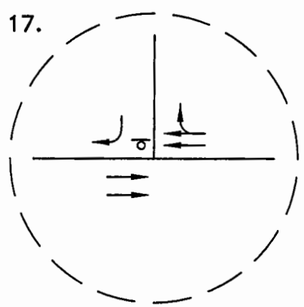

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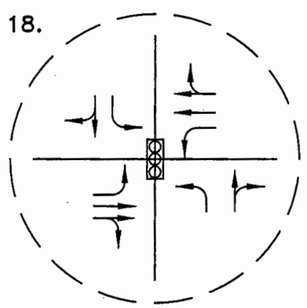

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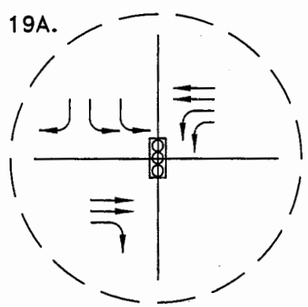

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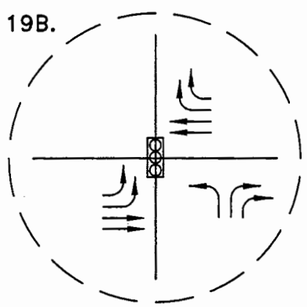

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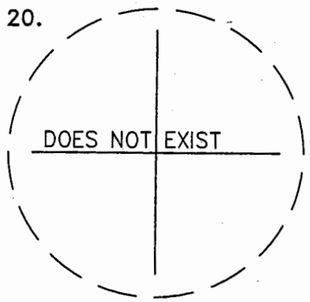

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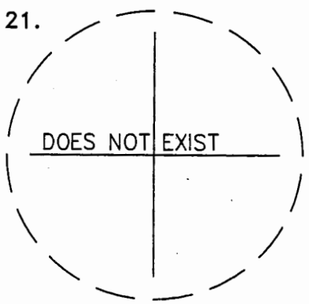

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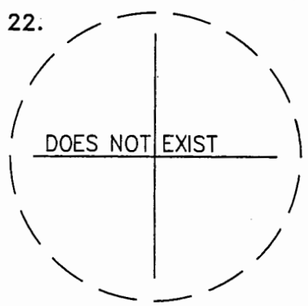

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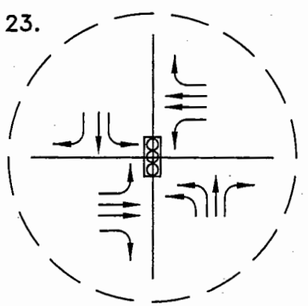

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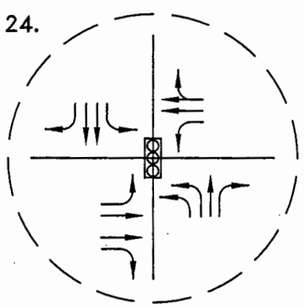

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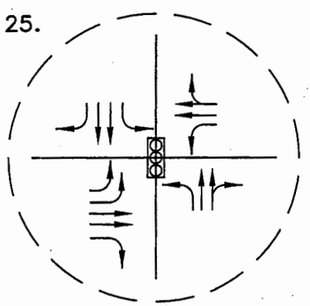

LEGEND

- TRAVEL LANE
- STOP SIGN
- TRAFFIC SIGNAL
- YIELD SIGN

SEE FIGURE 32 FOR INTERSECTION LOCATION

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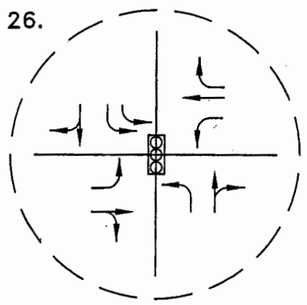
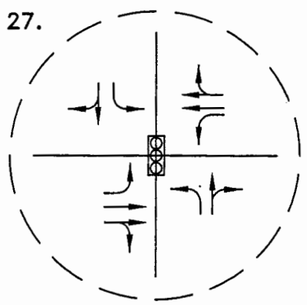
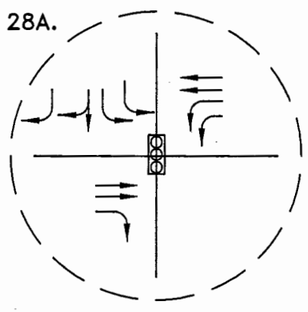
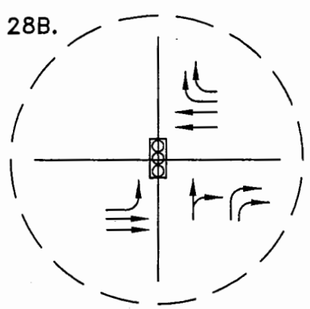
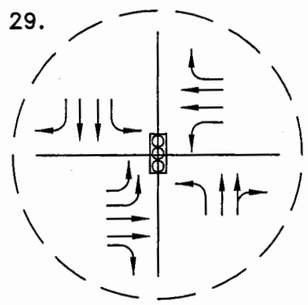
FIGURE 29
2015 INTERSECTION
CONDITIONS - NORTH

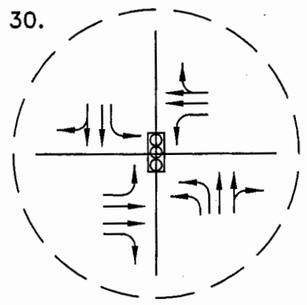


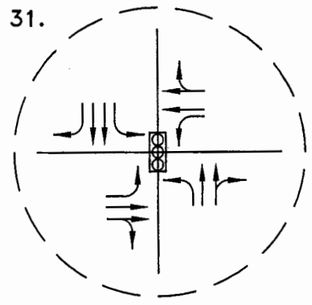


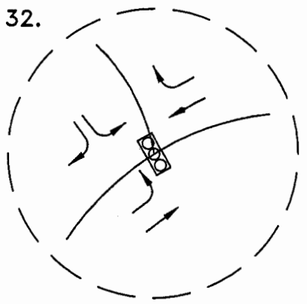


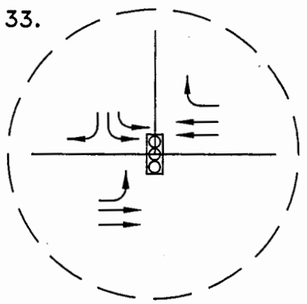


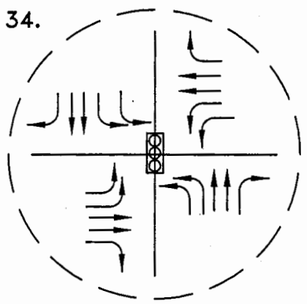


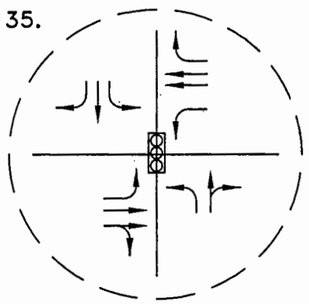


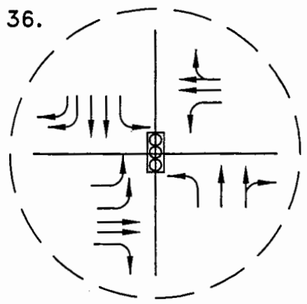


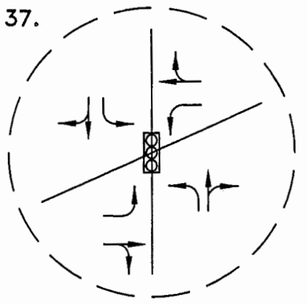












LEGEND

→ – TRAVEL LANE

– STOP SIGN

– TRAFFIC SIGNAL

SEE FIGURE 32 FOR INTERSECTION LOCATION

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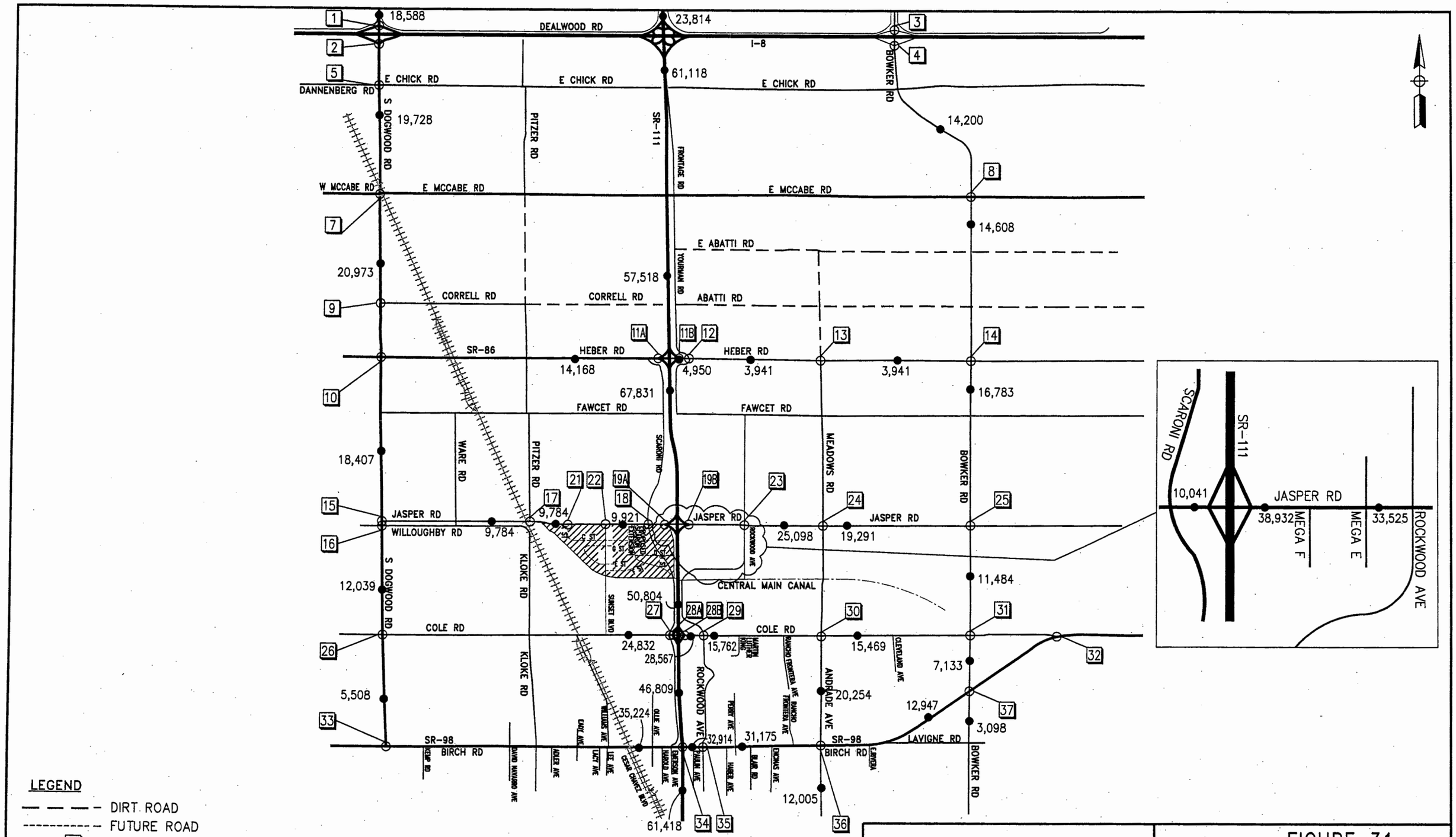
FIGURE 30

2015 INTERSECTION CONDITIONS – SOUTH



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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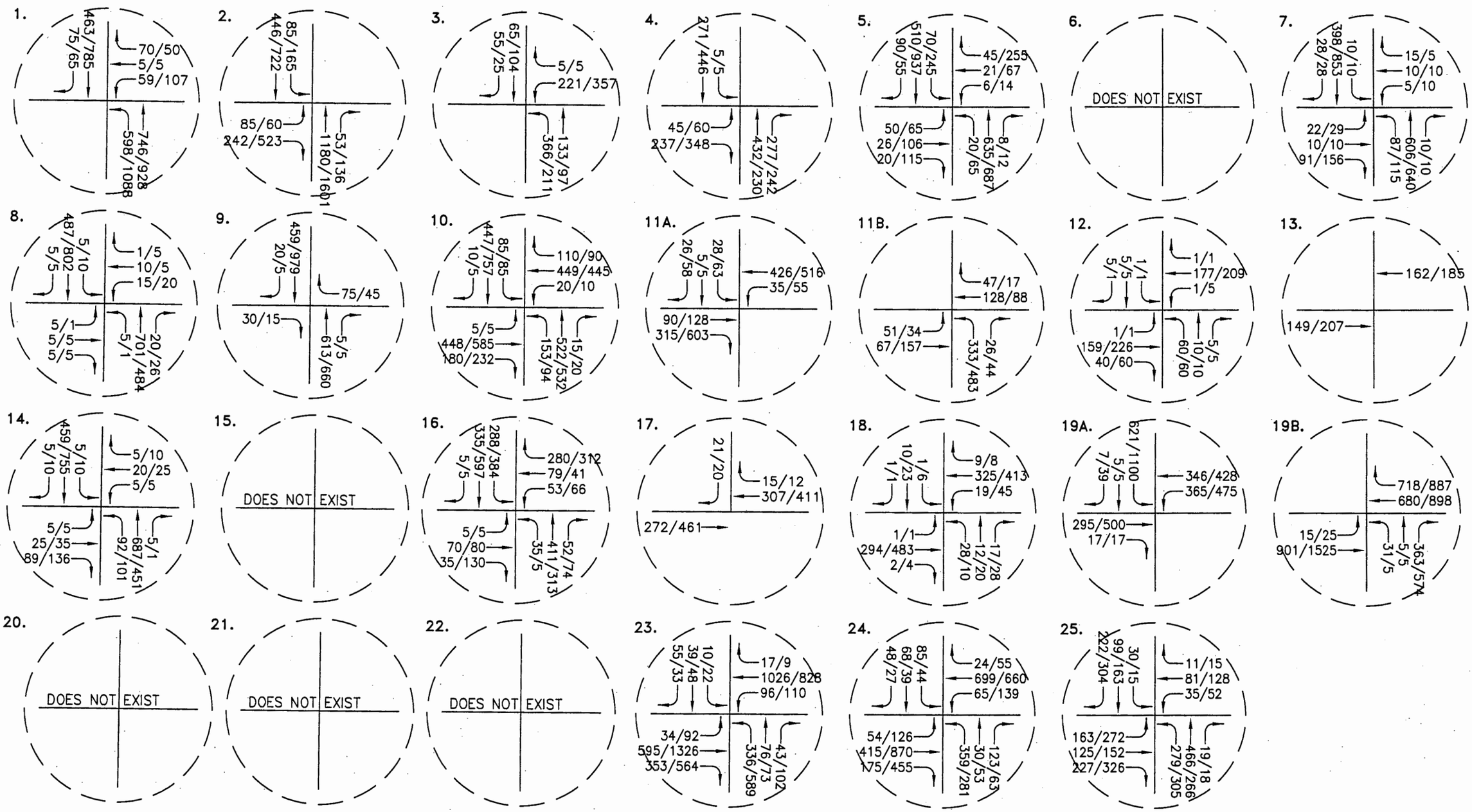
060303DD.dwg 8-14-08 SN

FIGURE 31
2015 W/O PROJECT
DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 35 FOR INTERSECTION LOCATION

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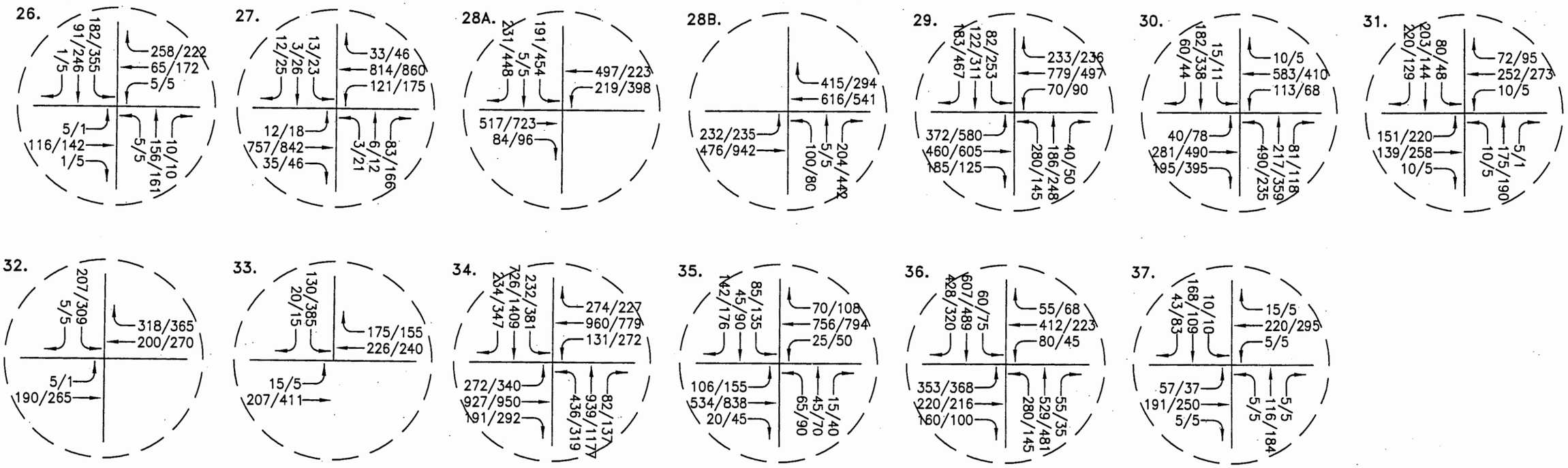
FIGURE 32

2015 W/O PROJECT

INTERSECTION TRAFFIC VOLUMES-NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 35 FOR INTERSECTION LOCATION

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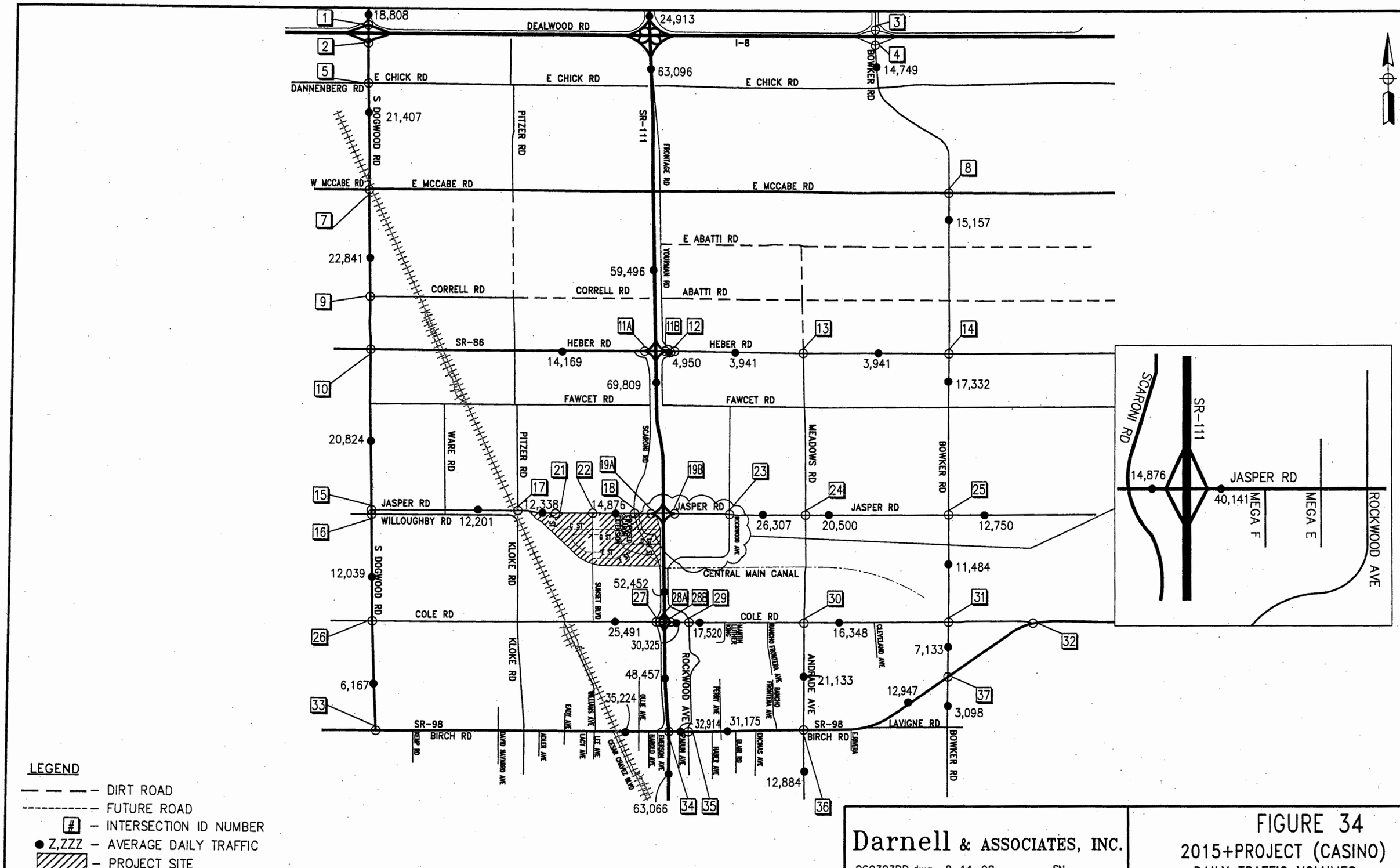
FIGURE 33

2015 W/O PROJECT

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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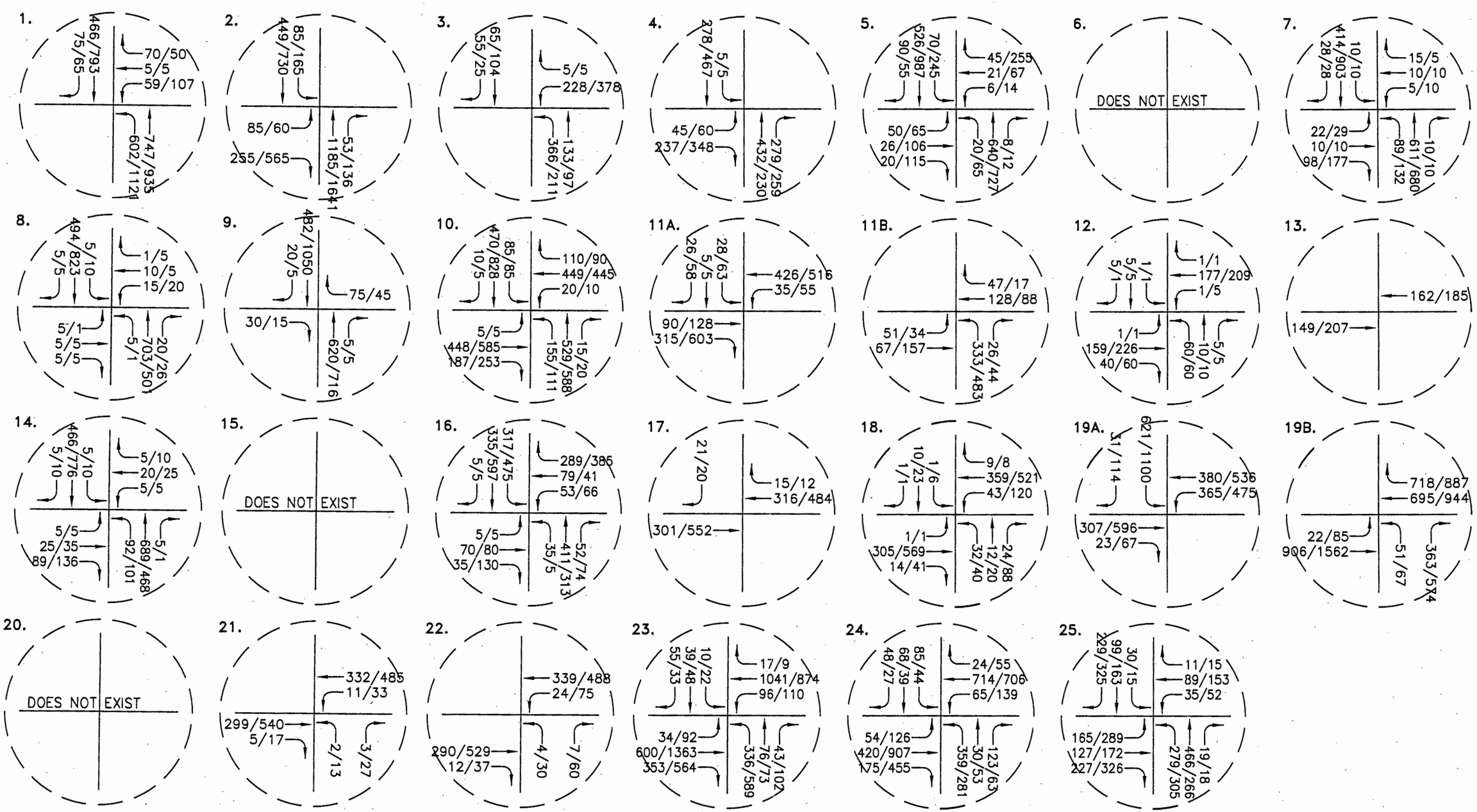
FIGURE 34

2015+PROJECT (CASINO)

DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 38 FOR INTERSECTION LOCATION

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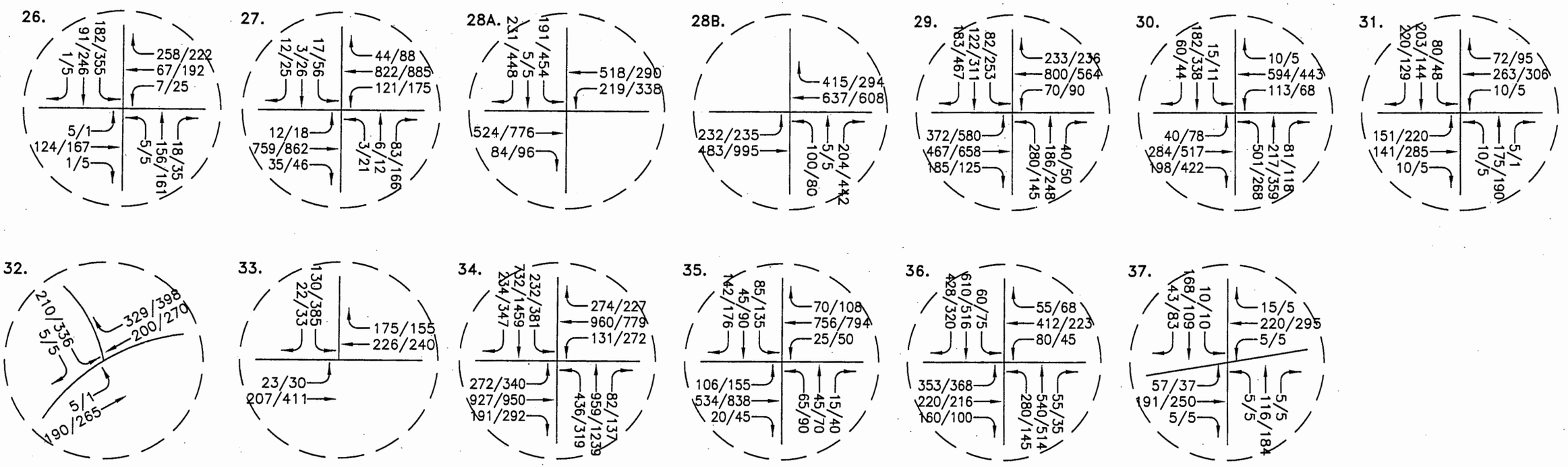
FIGURE 35

2015+PROJECT (CASINO)

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 38 FOR INTERSECTION LOCATION

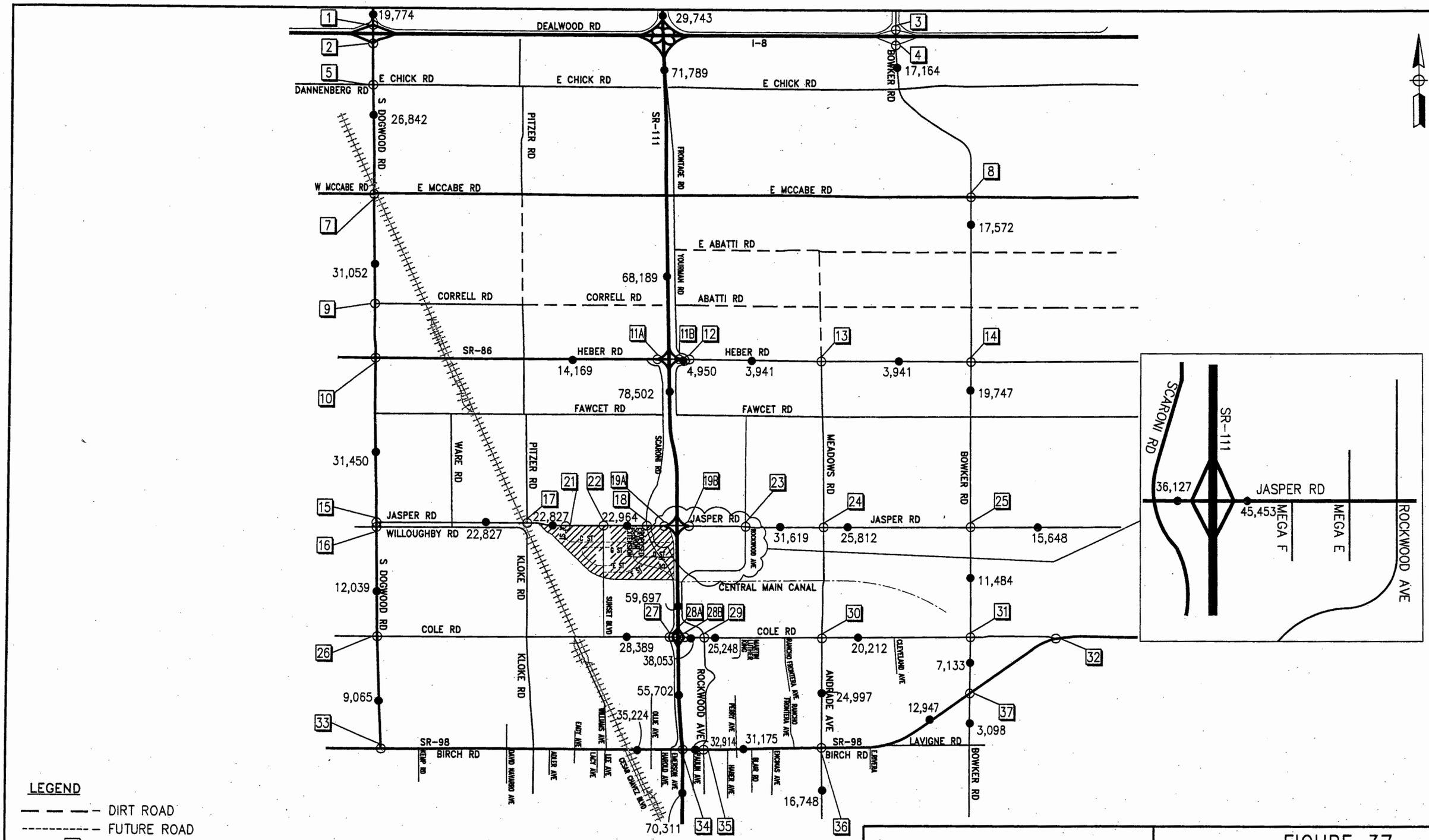
Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 36

2015+PROJECT (CASINO)

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

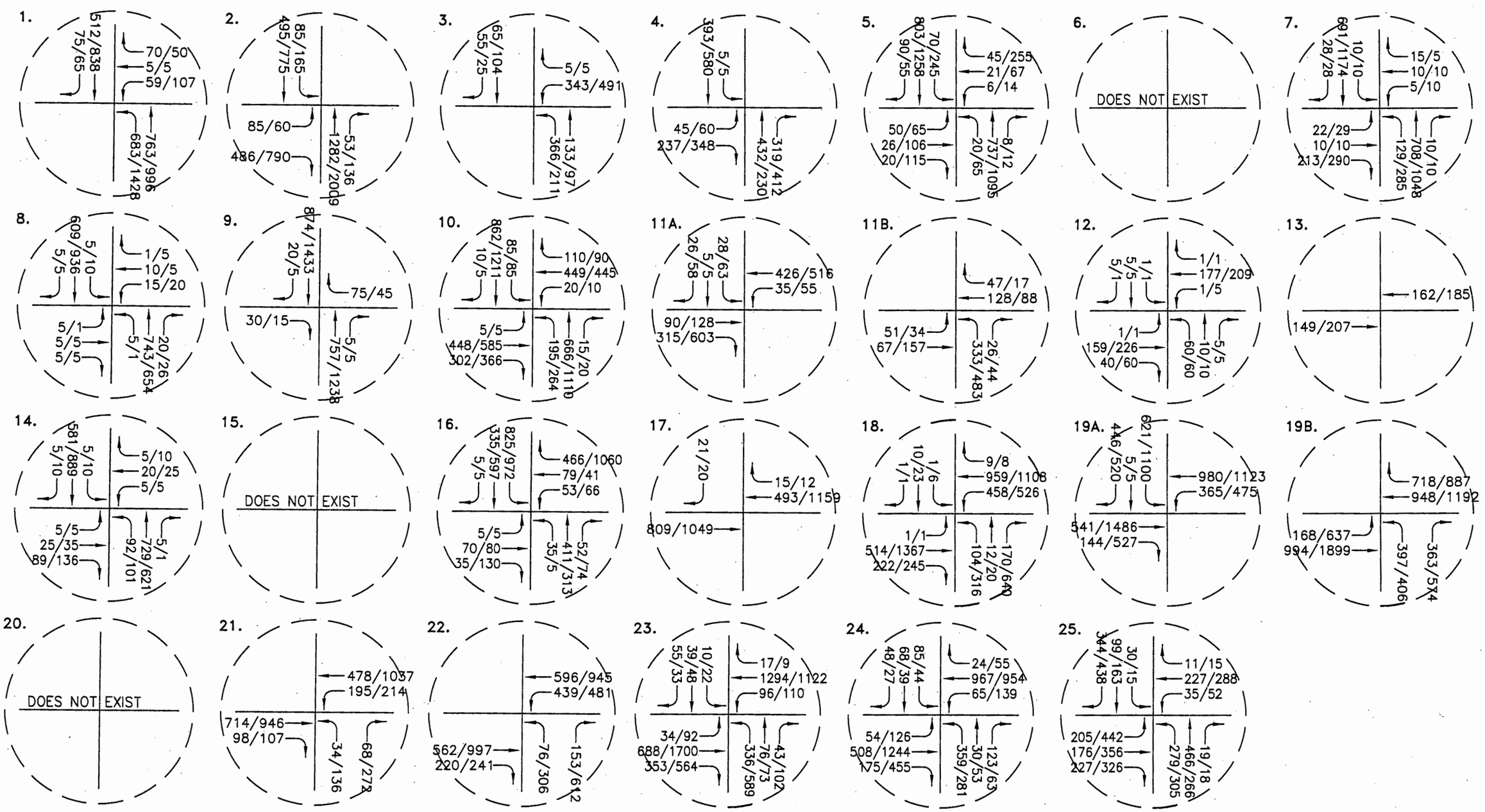
Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 37

2015+PROJECT (ALL PHASES)

DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 38 FOR INTERSECTION LOCATION

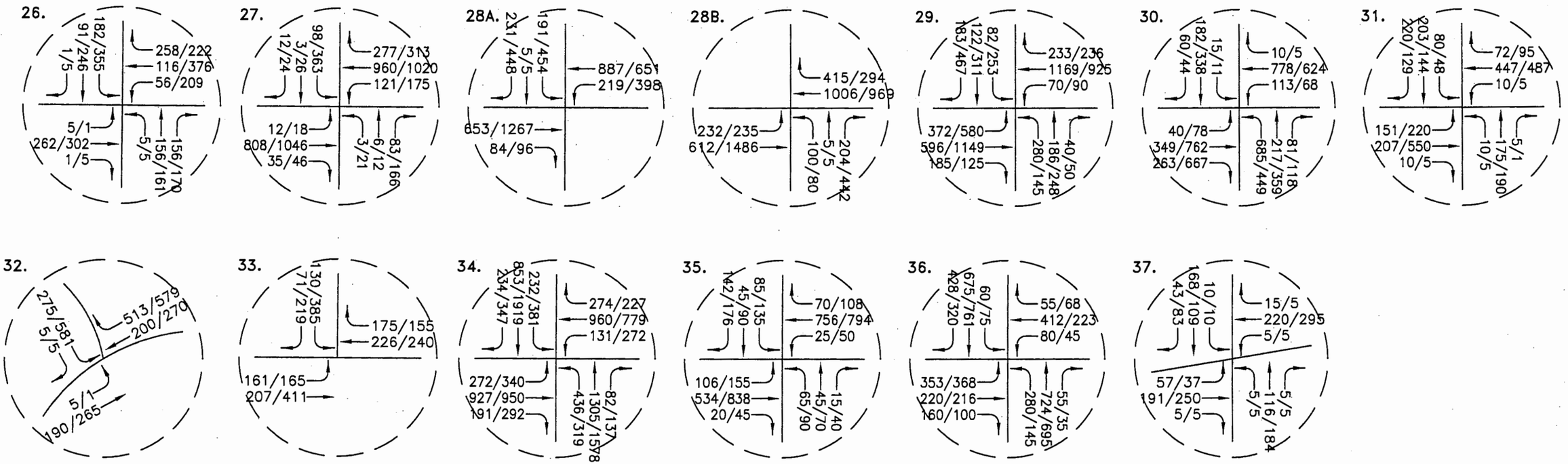
Darnell & ASSOCIATES, INC.

060303DD.dwg 8-14-08 SN

FIGURE 38

2015+PROJECT (ALL PHASES)

INTERSECTION TRAFFIC VOLUMES-NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 38 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

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FIGURE 39

2015+PROJECT (ALL PHASES)

INTERSECTION TRAFFIC VOLUMES-SOUTH

Year 2015 (With Casino) Roadway Segment Operation

The roadway segments were analyzed under Year 2015 conditions with and without the proposed project (Casino). The roadway segments daily levels of service are summarized in Table 16. As shown in Table 16, no additional impacts are identified with development of the Casino phase beyond those improvements assumed for this project condition.

Year 2015 (With Casino) Intersection Operation

Intersection operation for the Year 2015 condition is summarized in Table 17. For the year 2015, diamond interchanges are assumed along SR-111 at Heber Road, Jasper Road, and Cole Road, as a result of cumulative traffic volumes. The following intersection reports deficiencies for the Year 2015 condition with the Casino phase:

Jasper/Rockwood
Cole/Yourman
SR-98/SR-111

Year 2015 (With Casino) CalTrans (ILV) Intersection Operation

CalTrans intersection operation methodology on SR-111 interchange locations is summarized on Table 18. As shown on Table 18, the following intersection exceeds CalTrans capacity for the Year 2015 condition:

State Route-111/State Route-98 - (greater than 1,500 conflicting vehicles)

Year 2015 (With Total Project) Roadway Segment Operation

The roadway segments were analyzed under Year 2015 conditions with and without the proposed total project (all phases). The roadway segments daily levels of service are summarized in Table 19. As shown in Table 19, the following roadways demonstrate deficiencies:

Dogwood: McCabe to SR-86
Dogwood: SR-86 to Jasper
Jasper Road: Scaroni to SR-111
Jasper Road: SR-111 to Rockwood

Year 2015 (With Total Project) Intersection Operation

Intersection operation for the Year 2015 condition with the total project is summarized in Table 20. The following intersections report deficiencies for the Year 2015 condition with the total project:

Jasper Road/Scaroni Road
State Route 111 South/Jasper Road
State Route 111 North/Jasper Road
Jasper Road/Rockwood Avenue
Cole Road/Scaroni Road
Cole Road/Yourman (Rockwood)
State Route-98/State Route-111

Table 16 - Year 2015 Plus Proposed Casino Roadway Segment Level of Service										
Roadway Segment	Max Cap	Year 2015			Year 2015+Casino Only					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	34,200	18,588	0.544	B	220	18,808	0.550	0.006	B	None
I-8 to McCabe	37,000	19,728	0.533	B	1,319	21,047	0.569	0.036	A	None
McCabe to SR-86	37,000	20,973	0.567	B	1,868	22,841	0.617	0.050	B	None
SR-86 to Jasper	37,000	18,407	0.497	A	2,417	20,824	0.563	0.065	A	None
Jasper to Cole	34,200	12,039	0.352	A	0	12,039	0.352	0.000	A	None
Cole to SR-98	34,200	5,508	0.161	A	659	6,167	0.180	0.019	A	None
SR-111:										
north of I-8	56,300	23,814	0.423	A	1,099	24,913	0.443	0.020	A	None
I-8 to McCabe	90,000	61,118	0.679	B	1,978	63,096	0.701	0.022	C	None
McCabe to Heber	90,000	57,518	0.639	B	1,978	59,496	0.661	0.022	B	None
Heber to Jasper	105,000	67,831	0.646	B	1,978	69,809	0.665	0.019	B	None
Jasper to Cole	90,000	50,804	0.564	A	1,648	52,452	0.583	0.018	A	None
Cole to SR-98	90,000	46,809	0.520	A	1,648	48,457	0.538	0.018	A	None
South of SR-98	90,000	61,418	0.682	B	1,648	63,066	0.701	0.018	C	None
Bowker Road:										
I-8 to McCabe	25,000	14,200	0.568	A	549	14,749	0.590	0.022	A	None
McCabe to Heber	25,000	14,608	0.584	A	549	15,157	0.606	0.022	B	None
Heber to Jasper	25,000	16,783	0.671	B	549	17,332	0.693	0.022	B	None
Jasper to Cole	25,000	11,484	0.459	A	0	11,484	0.459	0.000	A	None
Cole to SR-98	17,500	7,133	0.408	A	0	7,133	0.408	0.000	A	None
South of SR-98	17,500	3,098	0.177	A	0	3,098	0.177	0.000	A	None
Meadows Road:										
Cole to SR-98	37,500	20,254	0.540	A	879	21,133	0.564	0.023	A	None
South of SR-98	25,000	12,005	0.480	A	879	12,884	0.515	0.035	A	None
Jasper Road:										
Scaroni to SR-111	37,500	10,041	0.268	A	4,835	14,876	0.397	0.129	A	None
SR-111 to Yourman	56,300	38,932	0.692	B	1,209	40,141	0.713	0.021	C	None
Yourman to Meadows	56,300	25,098	0.446	A	1,209	26,307	0.467	0.021	A	None
Meadows to Bowker	37,500	19,291	0.514	A	1,209	20,500	0.547	0.032	A	None
Cole Road:										
Enterprise to SR-111	56,300	24,832	0.441	A	659	25,491	0.453	0.012	A	None
SR-111 to Yourman	56,300	28,567	0.507	A	1,758	30,325	0.539	0.031	A	None
Yourman to Meadows	37,500	15,762	0.420	A	1,758	17,520	0.467	0.047	A	None
Meadows to Bowker	37,500	15,469	0.413	A	879	16,348	0.436	0.023	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
Capacity includes previous mitigation; V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 17 - Year 2015 Plus Proposed Casino Only Intersection Operation												
Intersection	Crit.	Year 2015				Year 2015+Proposed Casino Only						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (Signal)	Int.	3.2	A	27.8	C	3.2	A	0.0	27.9	C	0.1	None
I-8 Eastbound/Dogwood (Signal)	Int.	10.4	B	15.2	B	10.4	B	0.0	16.5	B	1.3	None
I-8 Westbound/Bowker (Signal)	Int.	12.0	B	18.2	B	12.3	B	0.3	18.6	B	0.4	None
I-8 Eastbound/Bowker (Signal)	Int.	5.3	A	8.1	A	5.3	A	0.0	8.7	A	0.6	None
Dogwood/Chick (Signal)	Int.	12.8	B	22.1	C	12.8	B	0.0	22.4	C	0.3	None
Dogwood/McCabe (Signal)	Int.	9.2	A	10.5	B	9.2	A	0.0	11.4	B	0.9	None
McCabe/Bowker (Signal)	Int.	1.6	A	2.3	A	1.6	A	0.0	2.3	A	0.0	None
Dogwood/Abatti (TWSC)	EB	10.1	B	12.6	B	10.2	B	0.1	13.1	B	0.5	None
	WB	11.2	B	11.1	B	11.3	B	0.1	11.4	B	0.3	
Dogwood/Heber (Signal)	Int.	18.3	B	18.4	B	18.6	B	0.3	19.2	B	0.8	None
SR-111 South/Heber (Signal)	Int.	19.7	B	17.7	B	19.7	B	0.0	17.7	B	0.0	None
SR-111North/Heber (Signal)	Int.	12.8	B	13.5	B	12.8	B	0.0	13.5	B	0.0	None
Heber/Yourman (TWSC)	NB	12.3	B	14.1	B	12.3	B	0.0	14.1	B	0.0	None
	SB	10.7	B	12.7	B	10.7	B	0.0	12.7	B	0.0	
Heber/Bowker (Signal)	Int.	4.8	A	6.4	A	4.8	A	0.0	6.8	A	0.4	None
Dogwood/Willoughby/Jasper (Sig)	Int.	16.4	B	15.7	B	16.6	B	0.2	15.9	B	0.2	None
Jasper/Pitzer (TWSC)	SB	9.4	A	9.8	A	9.4	A	0.0	10.1	B	0.3	None
Jasper/Scaroni (Signal)	EB	31.3	C	25.7	C	31.3	C	0.0	25.7	C	0.0	None
SR-111 South/Jasper (Signal)	Int.	18.1	B	23.7	C	18.1	B	0.0	23.7	C	0.0	None
SR-111 North/Jasper (Signal)	Int.	20.4	C	19.9	B	20.4	C	0.0	20.1	C	0.2	None
Jasper/Rockwood (Signal)	**Int.**	**21.5**	**C**	**41.3**	**D**	**21.5**	**C**	**0.0**	**44.0**	**D**	**2.7**	**Cuml**
Jasper/Meadows (Signal)	Int.	28.6	C	25.7	C	28.6	C	0.0	25.7	C	0.0	None
Jasper/Bowker (Signal)	Int.	21.3	C	23.8	C	21.6	C	0.3	24.3	C	0.5	None
Dogwood/Cole (Signal)	Int.	12.2	B	14.3	B	12.5	B	0.3	16.6	B	2.3	None
Cole/Scaroni (Signal)	Int.	23.1	C	25.3	C	23.1	C	0.0	25.3	C	0.0	None
SR-111 South/Cole (Signal)	Int.	13.1	B	18.9	B	13.1	B	0.0	19.1	B	0.2	None
SR-111 North/Cole (Signal)	Int.	8.7	A	15.3	B	8.7	A	0.0	15.3	B	0.0	None
Cole/Yourman (Signal)	**Int.**	**40.0**	**D**	**37.6**	**D**	**40.1**	**D**	**0.1**	**37.7**	**D**	**0.1**	**Cuml**
Cole/Meadows (Signal)	Int.	25.4	C	24.0	C	25.5	C	0.1	24.0	C	0.0	None
Cole/Bowker (Signal)	Int.	22.9	C	24.9	C	23.1	C	0.2	25.3	C	0.4	None
SR-98/Cole (Signal)	Int.	5.5	A	7.0	A	5.5	A	0.0	7.2	A	0.2	None
SR-98/Dogwood (Signal)	Int.	6.0	A	7.3	A	6.1	A	0.1	7.5	A	0.2	None
SR-98/SR-111 (Signal)	**Int.**	**38.8**	**D**	**68.1**	**E**	**39.1**	**D**	**0.3**	**73.0**	**E**	**4.9**	**Cuml**
SR-98/Rockwood (Signal)	Int.	16.8	C	22.0	C	16.8	B	0.0	22.0	C	0.0	None
SR-98/Meadows (Signal)	Int.	28.9	B	22.1	C	29.0	C	0.1	22.4	C	0.3	None
SR-98/Bowker (Signal)	Int.	14.7	B	14.3	B	14.7	B	0.0	14.3	B	0.0	None

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop; *=exceeds maximum delay
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 18 - Summary of Year 2015 Plus Proposed Casino Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	Year 2015		Year 2015+Proposed Casino			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111 South/Heber	279	420	279	0	420	0
SR-111 North/Heber	306	355	306	0	355	0
SR-111 South/Jasper	669	991	686	17	1044	53
SR-111 North/Jasper	641	1063	646	5	1111	48
SR-111 South/Cole	487	788	490	3	814	26
SR-111 North/Cole	645	927	656	11	954	27
SR-111/SR-98	1304	**1541**	1314	10	**1566**	25
SR-98/Cole	530	675	544	14	735	60
SR-98/Dogwood	255	404	263	8	429	25
SR-98/Rockwood	711	908	711	0	908	0
SR-98/Meadows/Andrade	995	733	996	1	750	17

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

Year 2015 (With Total Project) CalTrans (ILV) Intersection Operation

CalTrans intersection operation methodology on SR-111 interchange locations is summarized on Table 21. As shown on Table 21, the following intersection exceeds capacity for the total project condition:

State Route-111 Southbound/Jasper Road (greater than 1,500 conflicting vehicles)
State Route-111 Northbound/Jasper Road (greater than 1,500 conflicting vehicles)
State Route-111/State Route-98 - (greater than 1,500 conflicting vehicles)

Table 19 - Year 2015 Plus Total Project (Proposed) Roadway Segment Level of Service

Roadway Segment	Max Cap	Year 2015			Year 2015+Casino Only					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	34,200	18,588	0.544	B	1,186	19,774	0.578	0.035	B	None
I-8 to McCabe	37,000	19,728	0.533	B	7,114	26,842	0.725	0.192	C	None
McCabe to SR-86	**37,000**	**20,973**	**0.567**	**B**	**10,078**	**31,051**	**0.839**	**0.272**	**D**	**Cuml**
SR-86 to Jasper	**37,000**	**18,407**	**0.497**	**A**	**13,043**	**31,450**	**0.850**	**0.353**	**D**	**Cuml**
Jasper to Cole	34,200	12,039	0.352	A	0	12,039	0.352	0.000	A	None
Cole to SR-98	34,200	5,508	0.161	A	3,557	9,065	0.265	0.104	A	None
SR-111:										
north of I-8	56,300	23,814	0.423	A	5,929	29,743	0.528	0.105	A	None
I-8 to McCabe	90,000	61,118	0.679	B	10,671	71,789	0.798	0.119	C	None
McCabe to Heber	90,000	57,518	0.639	B	10,671	68,189	0.758	0.119	C	None
Heber to Jasper	105,000	67,831	0.646	B	10,671	78,502	0.748	0.102	C	None
Jasper to Cole	90,000	50,804	0.564	A	8,893	59,697	0.663	0.099	B	None
Cole to SR-98	90,000	46,809	0.520	A	8,993	55,802	0.620	0.100	B	None
South of SR-98	90,000	61,418	0.682	B	8,893	70,311	0.781	0.099	C	None
Bowker Road:										
I-8 to McCabe	25,000	14,200	0.568	A	2,964	17,164	0.687	0.119	B	None
McCabe to Heber	25,000	14,608	0.584	A	2,964	17,572	0.703	0.119	C	None
Heber to Jasper	25,000	16,783	0.671	B	2,964	19,747	0.790	0.119	C	None
Jasper to Cole	25,000	11,484	0.459	A	0	11,484	0.459	0.000	A	None
Cole to SR-98	17,500	7,133	0.408	A	0	7,133	0.408	0.000	A	None
South of SR-98	17,500	3,098	0.177	A	0	3,098	0.177	0.000	A	None
Meadows Road:										
Cole to SR-98	37,500	20,254	0.540	A	4,743	24,997	0.667	0.126	B	None
South of SR-98	25,000	12,005	0.480	A	4,743	16,748	0.670	0.190	B	None
Jasper Road:										
Scaroni to SR-111	**37,500**	**10,041**	**0.268**	**A**	**26,085**	**36,126**	**0.963**	**0.696**	**E**	**Cuml**
SR-111 to Yourman	**56,300**	**38,932**	**0.692**	**B**	**6,521**	**45,453**	**0.807**	**0.116**	**D**	**Cuml**
Yourman to Meadows	56,300	25,098	0.446	A	6,521	31,619	0.562	0.116	A	None
Meadows to Bowker	37,500	19,291	0.514	A	6,521	25,812	0.688	0.174	B	None
Cole Road:										
Enterprise to SR-111	56,300	24,832	0.441	A	3,557	28,389	0.504	0.063	A	None
SR-111 to Yourman	56,300	28,567	0.507	A	9,486	38,053	0.676	0.168	B	None
Yourman to Meadows	37,500	15,762	0.420	A	9,486	25,248	0.673	0.253	B	None
Meadows to Bowker	37,500	15,469	0.413	A	4,743	20,212	0.539	0.126	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
Capacity includes previous mitigation; V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 20 - Year 2015 Plus Proposed Project (All Phases) Intersection Operation												
Intersection	Crit.	Year 2015				Year 2015+All Phases						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (Signal)	Int.	3.2	A	27.8	C	4.1	A	0.9	30.0	C	2.2	None
I-8 Eastbound/Dogwood (Signal)	Int.	10.4	B	15.2	B	10.4	B	0.0	31.5	C	16.3	None
I-8 Westbound/Bowker (Signal)	Int.	12.0	B	18.2	B	15.3	B	3.3	20.5	C	2.3	None
I-8 Eastbound/Bowker (Signal)	Int.	5.3	A	8.1	A	5.6	A	0.3	13.4	B	5.3	None
Dogwood/Chick (Signal)	Int.	12.8	B	22.1	C	13.7	B	0.9	30.5	C	8.4	None
Dogwood/McCabe (Signal)	Int.	9.2	A	10.5	B	12.7	B	3.5	18.5	B	8.0	None
McCabe/Bowker (Signal)	Int.	1.6	A	2.3	A	1.6	A	0.0	2.3	A	0.0	None
Dogwood/Abatti (TWSC)	EB	10.1	B	12.6	B	12.3	B	2.2	16.2	C	3.6	None
	WB	11.2	B	11.1	B	12.1	B	0.9	15.4	C	4.3	
Dogwood/Heber (Signal)	Int.	18.3	B	18.4	B	21.5	C	3.2	28.6	C	10.2	None
SR-111 South/Heber (Signal)	Int.	19.7	B	17.7	B	19.7	B	0.0	17.7	B	0.0	None
SR-111North/Heber (Signal)	Int.	12.8	B	13.5	B	12.8	B	0.0	13.5	B	0.0	None
Heber/Yourman (TWSC)	NB	12.3	B	14.1	B	12.3	B	0.0	14.1	B	0.0	None
	SB	10.7	B	12.7	B	10.7	B	0.0	12.7	B	0.0	
Heber/Bowker (Signal)	Int.	4.8	A	6.4	A	4.8	A	0.0	8.1	A	1.7	None
Dogwood/Willoughby/Jasper (Sig)	Int.	16.4	B	15.7	B	20.9	C	4.5	22.4	C	6.7	None
Jasper/Pitzer (TWSC)	SB	9.4	A	9.8	A	10.2	B	0.8	14.0	B	4.2	None
Jasper/Scaroni (Signal)	**EB**	31.3	C	34.0	C	**31.3**	**C**	**0.0**	**191.5**	**F**	**157.5**	**Cuml**
SR-111 South/Jasper (Signal)	**Int.**	18.1	B	23.7	C	**22.1**	**C**	**4.0**	**111.7**	**F**	**88.0**	**Cuml**
SR-111 North/Jasper (Signal)	**Int.**	20.4	C	19.9	B	**20.5**	**C**	**0.1**	**156.0**	**F**	**136.1**	**Cuml**
Jasper/Rockwood (Signal)	**Int.**	**21.5**	**C**	**41.3**	**D**	**22.5**	**C**	**1.0**	**84.0**	**F**	**42.7**	**Cuml**
Jasper/Meadows (Signal)	Int.	28.6	C	25.7	C	28.7	C	0.1	25.9	C	0.2	None
Jasper/Bowker (Signal)	Int.	21.3	C	23.8	C	25.1	C	3.8	33.1	C	9.3	None
Dogwood/Cole (Signal)	Int.	12.2	B	14.3	B	19.3	B	7.1	30.2	C	15.9	None
Cole/Scaroni (Signal)	**Int.**	23.1	C	25.3	C	**23.1**	**C**	**0.0**	**66.5**	**E**	**41.2**	**Cuml**
SR-111 South/Cole (Signal)	Int.	13.1	B	18.9	B	13.1	B	0.0	22.1	C	3.2	None
SR-111 North/Cole (Signal)	Int.	8.7	A	15.3	B	8.7	A	0.0	15.3	B	0.0	None
Cole/Yourman (Signal)	**Int.**	**40.0**	**D**	**37.6**	**D**	**47.1**	**D**	**7.1**	**42.3**	**D**	**4.7**	**Cuml**
Cole/Meadows (Signal)	Int.	25.4	C	24.0	C	28.1	C	2.7	27.1	C	3.1	None
Cole/Bowker (Signal)	Int.	22.9	C	24.9	C	25.3	C	2.4	25.7	C	0.8	None
SR-98/Cole (Signal)	Int.	5.5	A	7.0	A	5.7	A	0.2	10.3	B	3.3	None
SR-98/Dogwood (Signal)	Int.	6.0	A	7.3	A	9.1	A	3.1	10.2	B	2.9	None
SR-98/SR-111 (Signal)	**Int.**	**38.8**	**D**	**68.1**	**E**	**54.8**	**D**	**16.0**	**133.4**	**F**	**65.3**	**Cuml**
SR-98/Rockwood (Signal)	Int.	16.8	C	22.0	C	16.8	B	0.0	22.0	C	0.0	None
SR-98/Meadows (Signal)	Int.	28.9	B	22.1	C	30.3	C	1.4	25.8	C	3.7	None
SR-98/Bowker (Signal)	Int.	14.7	B	14.3	B	14.7	B	0.0	14.3	B	0.0	None

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop; *=exceeds maximum delay
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 21 - Summary of Year 2015 Plus Proposed Project Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	**Year 2015**		**Year 2015+Proposed Project**			
	AM Peak ILV	**PM Peak ILV**	**AM Peak ILV**	**AM Incr. ILV**	**PM Peak ILV**	**PM Incr. ILV**
SR-111 South/Heber	279	420	279	0	420	0
SR-111 North/Heber	306	355	306	0	355	0
SR-111 South/Jasper	669	991	1119	450	**1501**	510
SR-111 North/Jasper	641	1063	978	337	**1675**	612
SR-111 South/Cole	487	788	672	185	1060	272
SR-111 North/Cole	645	927	840	195	1199	272
SR-111/SR-98	1304	**1541**	1487	183	**1796**	255
SR-98/Cole	530	675	793	263	1161	486
SR-98/Dogwood	255	404	407	152	590	186
SR-98/Rockwood	711	908	711	0	908	0
SR-98/Meadows/Andrade	995	733	1081	86	856	123

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

SECTION VI - YEAR 2035 IMPACTS

YEAR 2035 ROADWAY NETWORK

Under Year 2035 conditions, all roadways were assumed to be constructed to their ultimate classification. SR-111 between Interstate 8 and Cole Road will have restricted access with diamond interchanges (on-off ramps) located at McCabe Road, Heber Road, Jasper Road, and Cole Road. No interchange is proposed at SR-98/SR-111.

YEAR 2035 TRAFFIC VOLUMES

To obtain the Year 2035 daily traffic volumes, a CalTrans model was obtained for daily traffic volumes on circulation element roadways. These volumes were compared to manual modeling which generated traffic from the buildout of the various projects in the Calexico. Adjustments were made to through traffic volumes based on the CalTrans model.

Using project development within the Jasper Corridor, a model was developed from Dogwood Road to Bowker Road including all the project access points along this corridor. This model generated traffic from buildout of the known projects which would contribute traffic to these intersections. Jasper Road was ultimately assumed to be six lanes with a clover-leaf interchange at SR-111 due to the high volumes within the corridor.

Turning volumes at off-site locations (those intersections which are included under the short term conditions) have not been developed by any jurisdiction or governing agency. To estimate off-site traffic volumes for 25 year projections without a calibrated and tested model becomes speculative and would not provide defendable results in which to condition projects. The cost to develop such modeling should not be the burden of a single developer and is outside the scope of this traffic study.

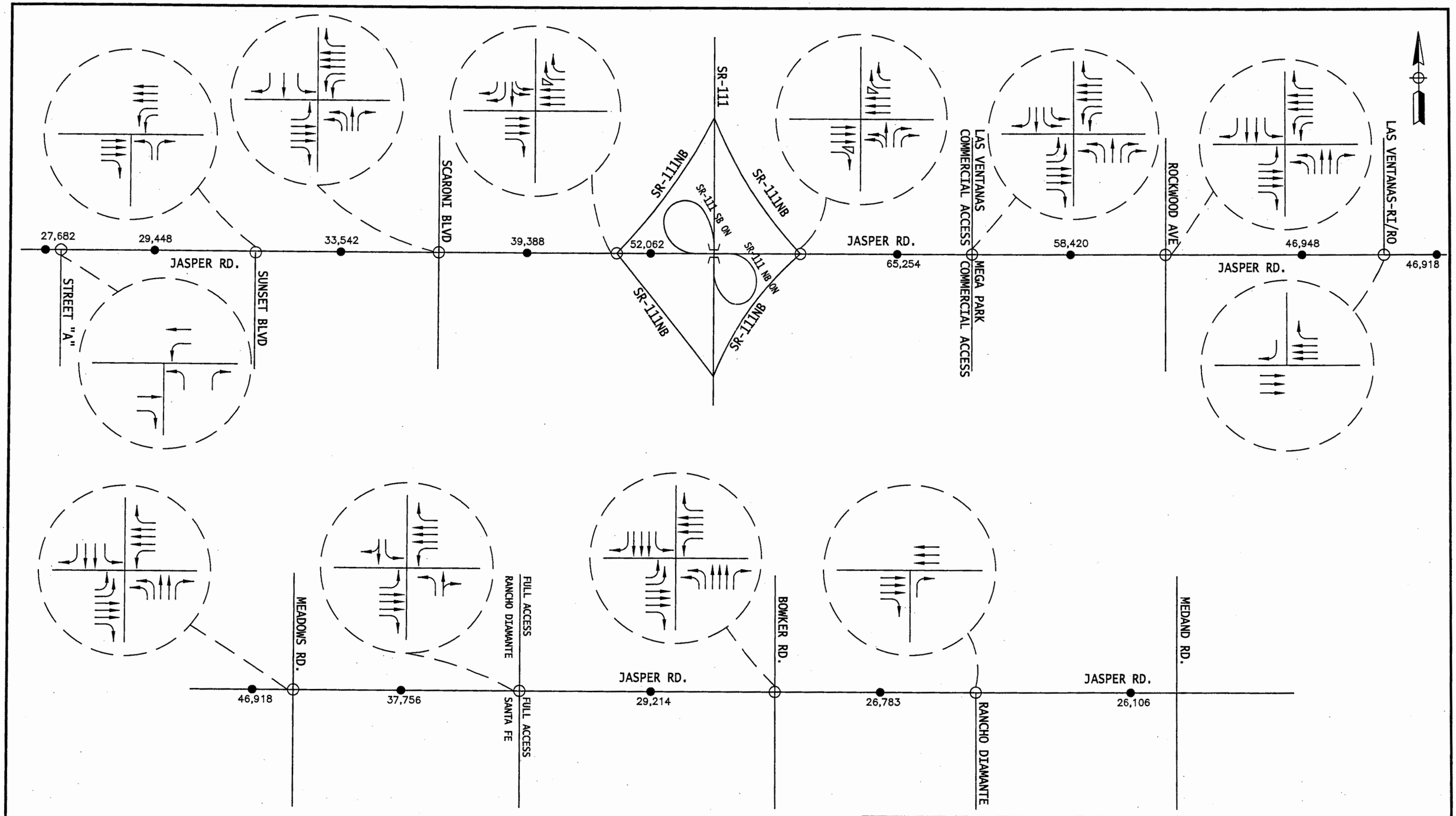
Until such time that the County of Imperial, CalTrans, the City of Calexico, and adjacent jurisdictions generate a working future traffic model which include feasible turning movements at intersections for 25-year projections, these off-site intersections are not included in this year 2035 traffic analysis.

It is noted, however, that this project (and other developing projects in the County) remain conditioned to participate in fair share contributions to roadway, intersection, and traffic signal improvements based on their traffic generations to ultimately construct the City's General Plan Circulation Element and to provide the infrastructure in which to accommodate future traffic.

This traffic study provides its best estimate of year 2035 turning volumes along the Jasper Corridor.

Figure 40 illustrates the 2035 intersection configuration for the Jasper Corridor as well as the projected daily traffic volumes (with all projects).

Figure 41 shows the Jasper Corridor intersection volumes without the Calexico/111 project. Figure 42 shows the Jasper Corridor intersection volumes with all projects.



LEGEND

—→— DIRECTION OF TRAVEL

XXX – AVERAGE DAILY TRAFFIC

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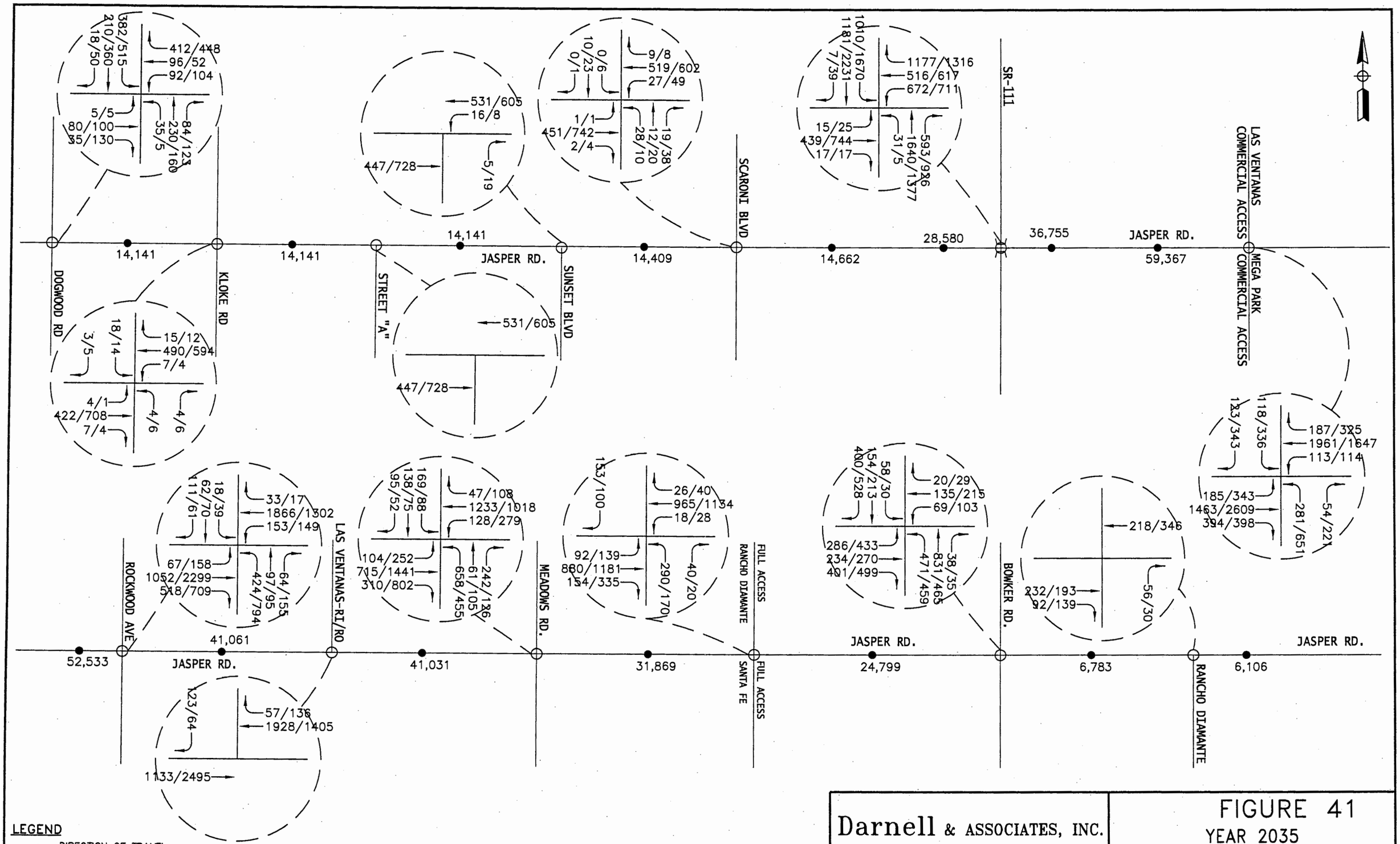
060303DD.dwg 8-18-08 SN

FIGURE 40

YEAR 2035 + ALL PROJECTS
(CONFIGURATIONS AND 24-HR DAILYS)



LEGEND

—→ – DIRECTION OF TRAVEL

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

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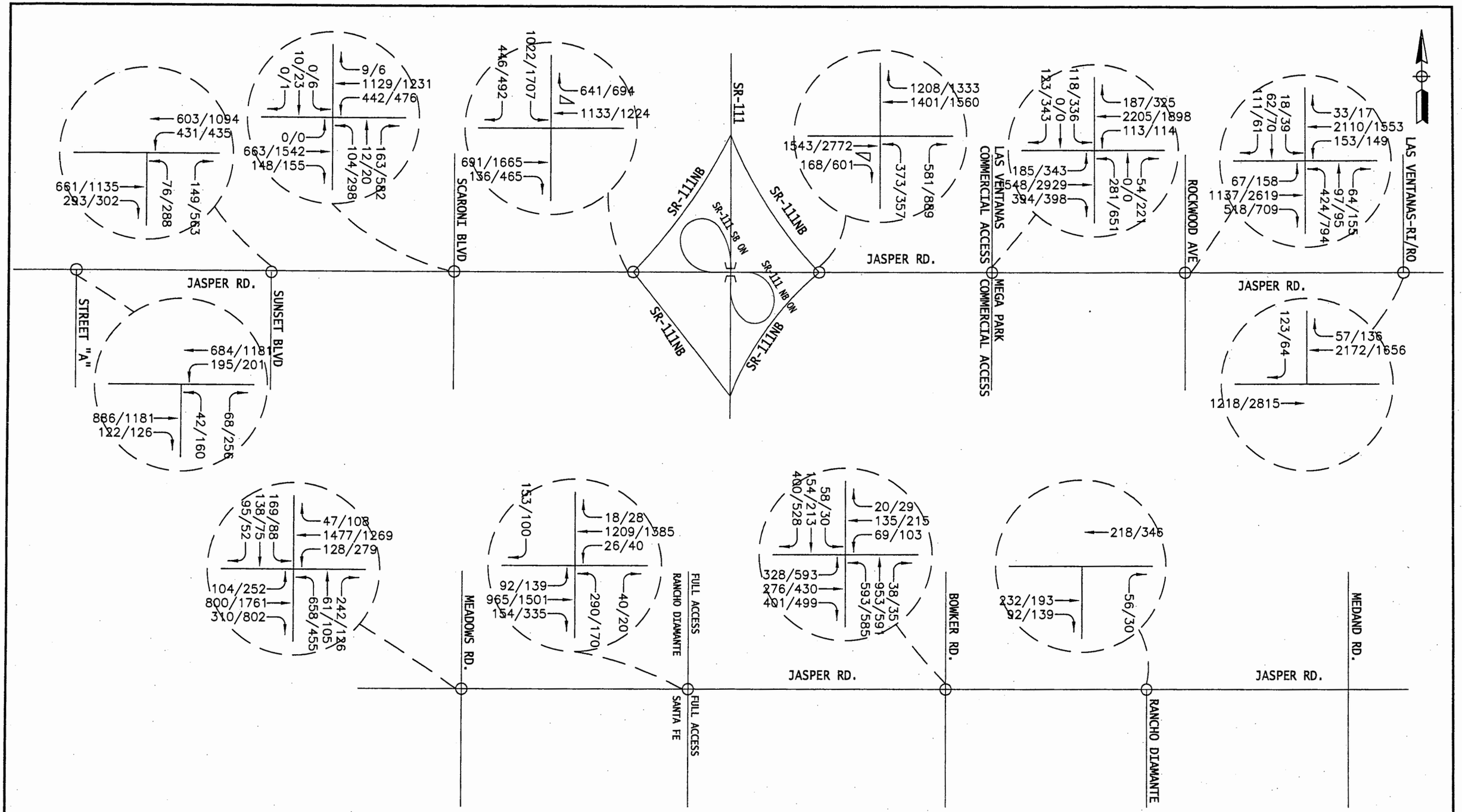
FIGURE 41

YEAR 2035

(WITHOUT PROJECT)



LEGEND

—→ – DIRECTION OF TRAVEL
XX/YY – AM/PM PEAK HOUR TURN VOLUMES

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FIGURE 42

YEAR 2035 + ALL PROJECTS
(INTERSECTION TURN VOLUMES)

Year 2035 Roadway Segments

The roadway segments were analyzed under Year 2035 conditions with and without the proposed project. The roadway segments daily levels of service are summarized in Table 22.

As shown in Table 22, all roadway segments operate efficiently with General Plan Circulation Element improvements.

Year 2035 Intersection Operation

Intersection operation for the Year 2035 condition is summarized on Table 23. As shown on Table 23, all intersections operate at LOS D or better. It is noted that the City of Calexico has a goal of LOS C for intersection operation, however, in the future wherein all development is constructed in urbanized and central areas, LOS D may be the best possible level of service. These locations are fully built-out within their ultimate rights-of-way.

The following intersections report LOS D conditions:

SR-111 South/Jasper Road
SR-111 North/Jasper Road
Jasper/Mega Park/Las Ventanas
Jasper Road/Rockwood Avenue

Table 22 - Year 2035 Plus Project Roadway Segment Level of Service

Roadway Segment	Max Cap	Year 2035 (No Project)			Year 2035 (With Project)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	57,000	35,214	0.618	B	1,186	36,400	0.639	0.021	B	None
I-8 to McCabe	90,000	57,564	0.640	B	5,336	62,900	0.699	0.059	B	None
McCabe to SR-86	90,000	35,779	0.398	A	6,521	42,300	0.470	0.072	A	None
SR-86 to Jasper	57,000	24,407	0.428	A	8,893	33,300	0.584	0.156	A	None
Jasper to Cole	57,000	35,500	0.623	B	0	35,500	0.623	0.000	B	None
Cole to SR-98	57,000	39,200	0.688	B	0	39,200	0.688	0.000	B	None
SR-111:										
north of I-8	90,000	38,057	0.423	A	4,743	42,800	0.476	0.053	A	None
I-8 to McCabe	140,000	82,929	0.592	A	10,671	93,600	0.669	0.076	B	None
McCabe to Heber	140,000	91,429	0.653	B	10,671	102,100	0.729	0.076	C	None
Heber to Jasper	140,000	80,329	0.574	A	10,671	91,000	0.650	0.076	B	None
Jasper to Cole	140,000	62,700	0.448	A	8,300	71,000	0.507	0.059	A	None
Cole to SR-98	105,000	70,400	0.670	B	8,300	78,700	0.750	0.079	C	None
South of SR-98	105,000	59,971	0.571	A	5,929	65,900	0.628	0.056	B	None
Bowker Road:										
north of I-8	37,000	5,040	0.136	A	0	5,040	0.136	0.000	A	None
I-8 to McCabe	57,000	13,836	0.243	A	2,964	16,800	0.295	0.052	A	None
McCabe to Heber	57,000	20,036	0.352	A	2,964	23,000	0.404	0.052	A	None
Heber to Jasper	56,250	32,236	0.573	A	2,964	35,200	0.626	0.053	B	None
Jasper to Cole	56,250	35,500	0.631	B	0	35,500	0.631	0.000	B	None
Cole to SR-98	56,250	33,529	0.596	A	2,371	35,900	0.638	0.042	B	None
South of SR-98	25,000	14,029	0.561	A	2,371	16,400	0.656	0.095	B	None
Meadows Road:										
Cole to SR-98	60,000	42,050	0.701	C	4,150	46,200	0.770	0.069	C	None
South of SR-98	37,500	14,270	0.381	A	4,150	18,420	0.491	0.111	A	None
Jasper Road:										
Scaroni to SR-111	56,300	14,488	0.257	A	24,900	39,388	0.700	0.442	C	None
SR-111 to Rockwood	90,000	59,325	0.659	B	5,929	65,254	0.725	0.066	C	None
Rockwood to Meadows	90,000	41,019	0.456	A	5,929	46,948	0.522	0.066	A	None
Meadows to Bowker	56,300	31,827	0.565	A	5,929	37,756	0.671	0.105	B	None
Cole Road:										
Enterprise to SR-111	90,000	40,514	0.450	A	9,486	50,000	0.556	0.105	A	None
SR-111 to Yourman	90,000	20,514	0.228	A	9,486	30,000	0.333	0.105	A	None
Yourman to Meadows	90,000	17,314	0.192	A	9,486	26,800	0.298	0.105	A	None
Meadows to Bowker	56,300	9,964	0.177	A	5,336	15,300	0.272	0.095	A	None
State Route 98:										
Kloke to SR-111	60,000	35,097	0.585	A	4,743	39,840	0.664	0.079	B	None
SR-111 to Rockwood	60,000	44,729	0.745	C	2,371	47,100	0.785	0.040	C	None
Rockwood to Andrade	60,000	43,719	0.729	C	2,371	46,090	0.768	0.040	C	None
Andrade to Bowker	60,000	42,529	0.709	C	2,371	44,900	0.748	0.040	C	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 23 - Year 2035 Intersection Operation

Intersection	Crit.	Year 2035				Year 2035+Calexico/111 (Total Project)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
Jasper/Dogwood	Int.	21.2	C	19.3	B	27.5	C	6.3	25.5	C	6.2	None
Jasper/Street "A" (Calexico/111)	Int.	0.0	A	0.0	A	8.9	A	8.9	17.0	B	17.0	None
Jasper/Sunset	Int.	4.7	A	16.4	B	10.7	B	6.0	19.6	B	3.2	None
Jasper/Scaroni	Int.	14.1	B	9.6	A	22.5	C	8.4	19.3	B	9.7	None
Jasper/SR-111 SB (Clover)	Int.	14.6	B	35.6	D	14.8	B	0.2	39.7	D	4.1	Future
Jasper/SR-111 NB (Clover)	Int.	8.2	A	26.5	C	9.2	A	1.0	44.3	D	17.8	Future
Jasper/Mega Pk/Las Ventanas	Int.	14.4	B	43.3	D	16.8	B	2.4	54.1	D	10.8	Future
Jasper/Rockwood	Int.	21.5	C	37.0	D	23.2	C	1.7	39.6	D	2.6	Future
Jasper/Las Ventanas (RI/RO)	SB	10.4	B	9.9	A	10.4	B	0.0	9.9	A	0.0	None
Jasper/Meadows	Int.	20.1	C	26.3	C	20.1	C	0.0	30.1	C	3.8	None
Jasper/Rancho Diamante	Int.	17.3	B	21.0	C	17.9	B	0.6	21.0	C	0.0	None
Jasper/Bowker	Int.	24.8	C	19.4	B	25.7	C	0.9	22.8	C	3.4	None

Delay is measured in seconds per vehicle; LOS=level of service; (RI/RO)=right in/right out

Sig.=signal; Int.=intersection;

Delay and LOS calculated using SYNCHRO (with HCS value)

SECTION VII - PROJECT ACCESS

The project proposes three driveway access points on Jasper Road west of SR-111. The realignment of Scaroni Avenue to the west will form the most easterly access to the project. A second major access on Jasper Road is proposed west of the Scaroni Avenue alignment and is currently labeled "Sunset" on the project site plan. The third driveway to Jasper is located west of the future Sunset Road and is labeled Street "A" on the current site plan.

The project access at the realignment of Scaroni Avenue at Jasper Road is analyzed in the above impact sections for all project conditions. This intersection requires a traffic signal, with dual northbound left turn lanes, dual northbound right turn lanes, dual westbound left lanes and an exclusive eastbound right turn lane within Jasper Road (assuming Jasper Road with six through lanes).

The project driveways are shown on Figure 43 identified as follows with configurations and controls based on the capacity analysis:

Jasper Road/Street "A" - ultimately requires a traffic signal with a single egress lane and a westbound left turn lane.

Jasper Road/Sunset Road - assumes a traffic signal, two northbound lanes, dual westbound left lanes, an exclusive eastbound right turn lane within Jasper Road (as a 6-lane roadway).

Additionally, the project is required to construct Sunset Boulevard south to Cole Road, which will create an intersection which ultimately requires a traffic signal, and an eastbound left turn lane. (Note that the Sunset Road extension is not required with the Casino phase of the project.)

ACCESS OPERATION

Existing Plus Casino Access

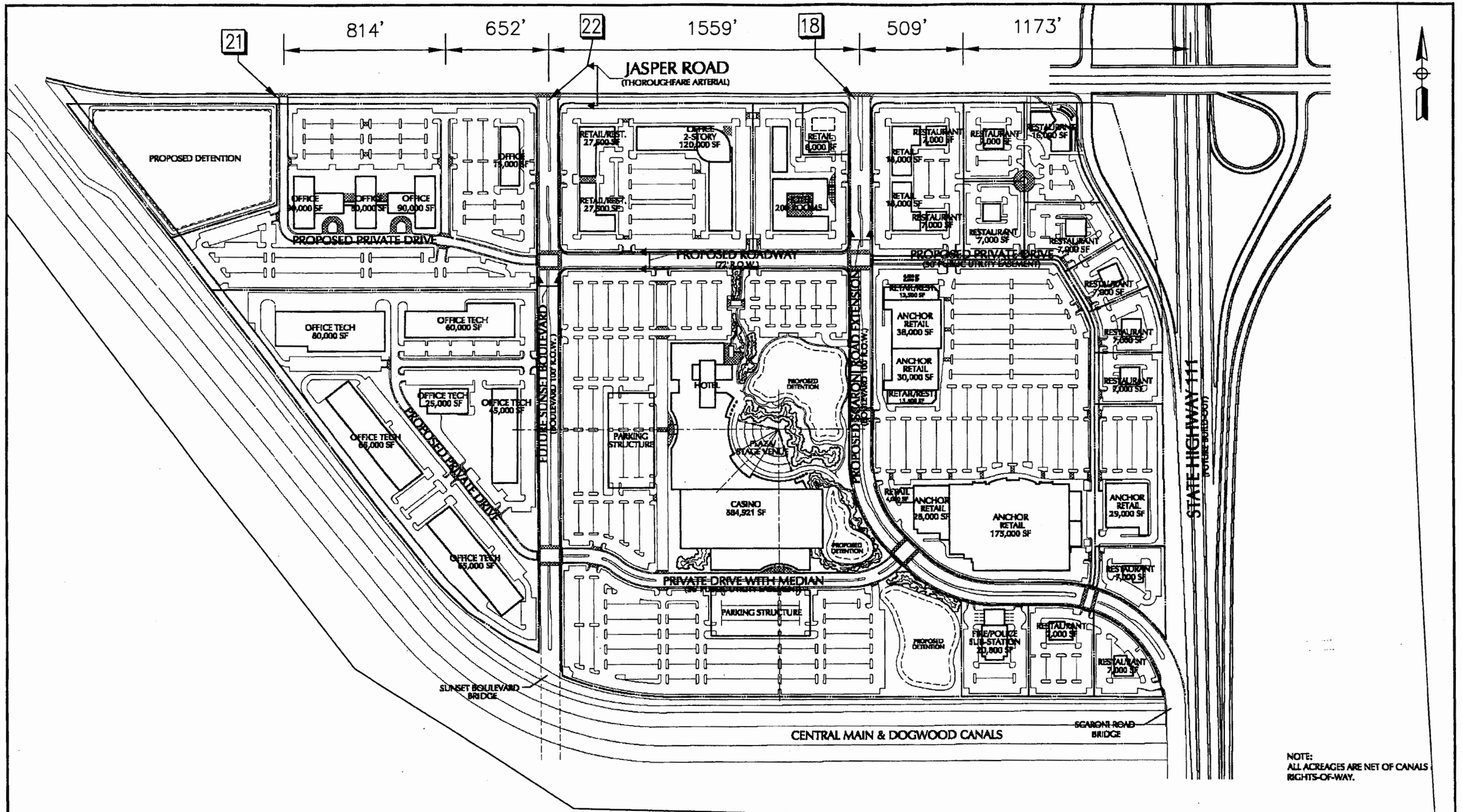
Project access operation for the existing plus casino condition is shown on Table 24. For this condition, the Street "A", Sunset Boulevard, and Cole/Sunset intersections can operate effectively with stop control on the minor leg (project side) with no additional turn lanes.

Existing Plus Casino+Phase 1 Access

This condition assumes four-lanes on Jasper Road. Project access operation for the existing plus project (casino plus phase 1) condition is shown on Table 25. For this condition, the Street "A", Sunset Boulevard, and Cole/Sunset intersections can operate effectively with stop control on the minor leg (project side). Westbound left turn lanes are required on Jasper Road at both driveways. An eastbound left turn lane is required at Cole/Sunset.

Year 2015 Plus Casino Project Access

Project access operation for the Year 2015 condition with Casino only traffic is shown on Table 26. The Jasper Road driveways operate effectively with stop control on egress with four lanes on Jasper. The intersection of Cole/Sunset will require a traffic signal.



NOTE:
ALL ACREAGES ARE NET OF CANALS RIGHTS-OF-WAY.

LEGEND

XX INTERSECTION ID #

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FIGURE 43

PROJECT ACCESS LOCATION

Table 24 - Existing+Project (Casino) Access Operation					
Intersection	Critical Movement	Existing+Project (Casino)			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (stop sign)	NB	9.0	A	9.3	A
Jasper/Sunset (stop sign)	NB	9.1	A	10.3	B
Cole/Sunset (stop sign)	n/a	n/a	n/a	n/a	n/a
Delay is measured in seconds per vehicle; LOS=level of service; NB=northbound; Int=Intersection; n/a = not applicable Delay and LOS calculated using SYNCHRO (with HCS value)					

Table 25 - Existing+Project (Casino+Phase 1) Access Operation					
Intersection	Critical Movement	Existing+Project (Casino+Phase 1)			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (signal)	Int.	31.8	C	24.8	C
Jasper/Sunset (signal)	Int.	31.7	C	30.8	C
Cole/Sunset (signal)	Int.	21.2	C	34.1	C
Delay is measured in seconds per vehicle; LOS=level of service; NB=northbound; Int=Intersection Delay and LOS calculated using SYNCHRO (with HCS value)					

Table 26 - Year 2015+Casino Access Operation					
Intersection	Critical Movement	Year 2015+Casino Only			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (stop control)	NB	10.6	B	14.0	B
Jasper/Sunset (stop control)	NB	11.8	B	22.7	C
Cole/Sunset (signal)	Int.	15.4	B	8.2	A
Delay is measured in seconds per vehicle; LOS=level of service; NB=northbound; Int=Intersection; Delay and LOS calculated using SYNCHRO (with HCS value)					

Year 2015 Plus Total Project Access

Project access operation for the Year 2015 condition with Casino only traffic is shown on Table 27. The Jasper Road driveways operate effectively with traffic signal control with four lanes on Jasper. The intersection of Cole/Sunset also requires a traffic signal. Left turn lanes in Jasper and Cole Road are required with two egress lanes (project side) at all driveways).

Table 27 - Year 2015+Total Project Access Operation					
Intersection	Critical Movement	Year 2015+Project			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (signal)	Int.	24.9	C	24.8	C
Jasper/Sunset (signal)	Int.	31.9	C	29.5	C
Cole/Sunset (signal)	Int.	21.0	C	33.4	C
Delay is measured in seconds per vehicle; LOS=level of service; EB=eastbound; NB=northbound; SB=southbound; etc; Int=Intersection; TWSC=Two-way stop control Delay and LOS calculated using SYNCHRO (with HCS value)					

SECTION VIII - PROPOSED PROJECT MITIGATION

Existing Plus Project (Proposed Casino) Roadway Segment

Dogwood Road: north of I-8 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards a four-lane collector.

SR-111: south of SR-98 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards an expressway. However, expressway standards are not identified as the ultimate classification of this section of SR-111. Alternative mitigation such as contribution to signal interconnect is feasible to provide better circulation through these deficient segments.

Cole Road: Enterprise to SR-111 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards 4-lane major standards.

In addition, although not directly analyzed in the traffic study, circulation improvements within roadway segments are required of the project by the City of Calexico.

The project must participate in "fair-share" widening of the bridge crossing on Bowker Road over the Central Main Canal and the All American Canal.

The project must participate in "fair-share" widening of the bridge crossing on Cole Road over the Central Main Canal.

The project must participate in "fair-share" cost of widening the SR-98 from Kloke Road to Cole Road.

The project will participate in "fair-share" cost of widening Cole Road from Dogwood to SR-111 as a six lane arterial with a landscaped median.

The project will participate on a fair share basis to fund the development and implementation of a Traffic Mitigation Monitoring Program (TMMP) to monitor the operating levels of service for SR-98, SR-111, Jasper Road, Cole Road and Bowker Road as well as each of the cumulatively impacted intersections that serve the project.

The project will participate in a "fair share" to fund the development and implementation of a Master Computer Monitoring System at City Hall for synchronizing and monitoring traffic signals and progressive traffic flow on SR-98, SR-111, Jasper Road, Cole Road and Bowker Road.

Table 28 summarizes the level of service results with mitigation in place for existing plus Casino condition. As shown in Table 28, all roadway segments operate acceptably.

Existing Plus Casino Intersections

I-8 Westbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

Table 28 - Existing Plus Project (Casino Only) Mitigated Roadway Segment Level of Service					
Roadway Segment	Mitigation	LOS E Cap.	Casino Only		
			ADT	V/C	LOS
Dogwood: North of I-8	Fair Share to Major Collector	34,200	14,868	0.435	B
SR-111: South of SR-98	Fair Share to Expressway	90,000	53,048	0.589	A
Cole: Enterprise/111	Fair Share to Major	25,000	16,624	0.665	B
LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio Maximum LOS E Capacity per County of Imperial/City of Calexico					

I-8 Eastbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/ construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

Dogwood Road/Heber Road - requires a traffic signal. The project has a cumulative impact at this location and is required to pay its fair share of this improvement.

Jasper Road/SR-111 - requires an eastbound left turn lane. The project has a direct impact at this location and is required to construct this improvement.

Cole Road/Scaroni Avenue - requires a traffic signal. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-111/Cole Road - requires a southbound right. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-98/SR-111 - requires a southbound through lane. The project is part of the cumulative need for this improvement and will pay its fair share.

Table 29 summarizes the results of the intersection operation with the above improvements in place. As shown on Table 29, all mitigated intersections operate at acceptable levels of service.

Table 29 - Existing Plus Project Mitigated Intersection Operation					
Intersection	Mitigation	Existing+Project			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
I-8 Westbound/Dogwood	Fair Share to Signal	5.1	A	11.1	B
I-8 Eastbound/Dogwood	Fair Share to Signal	5.7	A	11	B
Dogwood/Heber	Fair Share to Signal	10.7	B	9.7	A
Jasper/SR-111	Construct Eastbound Left	14.9	B	31.2	C
Cole/Scaroni	Fair Share to Signal	12.4	B	28.7	C
SR-111/Cole	Fair Share to Southbound Right	32.6	C	34.6	C
SR-98/SR-111	Fair Share to Southbound Through	32.1	C	33.4	C
Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; Delay and LOS calculated using SYNCHRO (with HCS value)					

Existing Plus Project (Casino+Phase 1) Roadway Segment

Dogwood Road: north of I-8 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards a four-lane collector.

Dogwood Road: I-8 to McCabe - the project has a direct impact and requires construction of a four lane major roadway.

Dogwood Road: McCabe to Heber - the project has a direct impact and requires construction of a four lane major roadway.

Dogwood Road: Heber to Jasper - the project has a direct impact and requires construction of a four lane major roadway.

SR-111: south of SR-98 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards an expressway. However, expressway standards are not identified as the ultimate classification of this section of SR-111. Alternative mitigation such as contribution to signal interconnect is feasible to provide better circulation through these deficient segments.

Jasper Road - Scaroni to SR-111 - the project has a direct impact at this location which requires construction of a four lane major roadway.

Cole Road: Enterprise to SR-111 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards 4-lane major standards.

Table 30 summarizes the level of service results with mitigation in place for existing plus Casino condition. As shown in Table 30, all roadway segments operate acceptably.

Table 30 - Existing Plus Project (Casino+Phase 1) Mitigated Roadway Segment Level of Service

Roadway Segment	Mitigation	LOS E Cap.	Casino+Phase 1		
			ADT	V/C	LOS
Dogwood: North of I-8	Fair Share to Major Collector	34,200	15,418	0.451	B
Dogwood: I-8 to McCabe	Construct 4-Major	25,000	15,485	0.619	B
Dogwood: McCabe to SR-86	Construct 4-Major	25,000	16,672	0.667	B
Dogwood: SR-86 to Jasper	Construct 4-Major	25,000	16,071	0.643	B
SR-111: South of SR-98	Fair Share to 6-Lane Expressway	90,000	57,176	0.635	B
Jasper: Scaroni to SR-111	Construct 4-Major	25,000	17,879	0.715	C
Cole: Enterprise/111	Fair Share to 4-Major	25,000	18,275	0.731	C

LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio
Maximum LOS E Capacity per County of Imperial/City of Calexico

Existing Plus Casino+Phase 1 Intersections

I-8 Westbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/ construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

I-8 Eastbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/ construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

Dogwood/McCabe (North/South) - the project has a direct impact at this location and requires realignment of McCabe at Dogwood and a traffic signal.

Dogwood Road/Heber Road - requires a traffic signal. The project has a cumulative impact at this location and is required to pay their fair share of this improvement.

Dogwood Road/Willoughby - requires a traffic signal and realignment onto the Jasper Road alignment, as well as a southbound left turn lane. The project is required to construct this improvement.

Jasper Road/Scaroni - requires a traffic signal and westbound left/northbound right. This intersection is realigned with the development of the project.

Jasper Road/SR-111 - requires additional traffic lanes, including east/west through lanes, left turn lanes, a northbound left turn lane, and southbound right turn lane. The project has a direct impact at this location and is required to construct this improvement.

Dogwood Road/Cole Road - requires a traffic signal. The project has a direct impact and is required to construct this improvement.

Cole Road/Scaroni Avenue - requires a traffic signal and westbound left/westbound right turn lanes. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-111/Cole Road - requires a southbound right and east/west through lanes. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-98/SR-111 - requires a southbound/northbound through lane. The project is part of the cumulative need for this improvement and will pay its fair share.

Table 31 summarizes the results of the intersection operation with the above improvements in place. As shown on Table 31, all mitigated intersections operate at acceptable levels of service. Figures 44 and 45 show a graphical representation of the project's mitigation at intersections.

Table 31 - Existing Plus Project (Proposed Casino+Phase 1) Mitigated Intersection					
Intersection	Mitigation	Existing+Proposed Casino+Phase 1			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
I-8 Westbound/Dogwood	Fair Share to Signal	5.4	A	34.5	C
I-8 Eastbound/Dogwood	Fair Share to Signal	5.6	A	18.4	B
Dogwood/McCabe South	Align intersections + Signal	4.8	A	7.4	A
Dogwood/Heber	Fair Share to Signal	13.9	B	21.3	B
Dogwood/Willoughby	Construct Signal+Southbound Left	13.7	B	11.5	B
Jasper/Scaroni	Construct Signal+Westbound Left+Northbound Right	29.4	C	18.7	B
Jasper/SR-111	Construct EBL(2)+EBT(2)+EBR(1)+WBL(1) WBT(2)+NBL(2)+SBR(1)	24.4	C	34	C
Dogwood/Cole	Construct Signal	4.7	A	9	A
Cole/Scaroni	Fair Share to Signal, WBL+WBR	21.3	A	18	B
SR-111/Cole	Fair Share to EBT+WBT+SBR	33.5	C	34.5	C
SR-98/SR-111	Fair Share to NBT+SBT	30	C	34.8	C
Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc Delay and LOS calculated using SYNCHRO (with HCS value)					

Year 2015 (Plus Casino) Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

With the Casino phase of the project, no additional improvements are identified.

Year 2015 (Plus Casino) Intersections

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

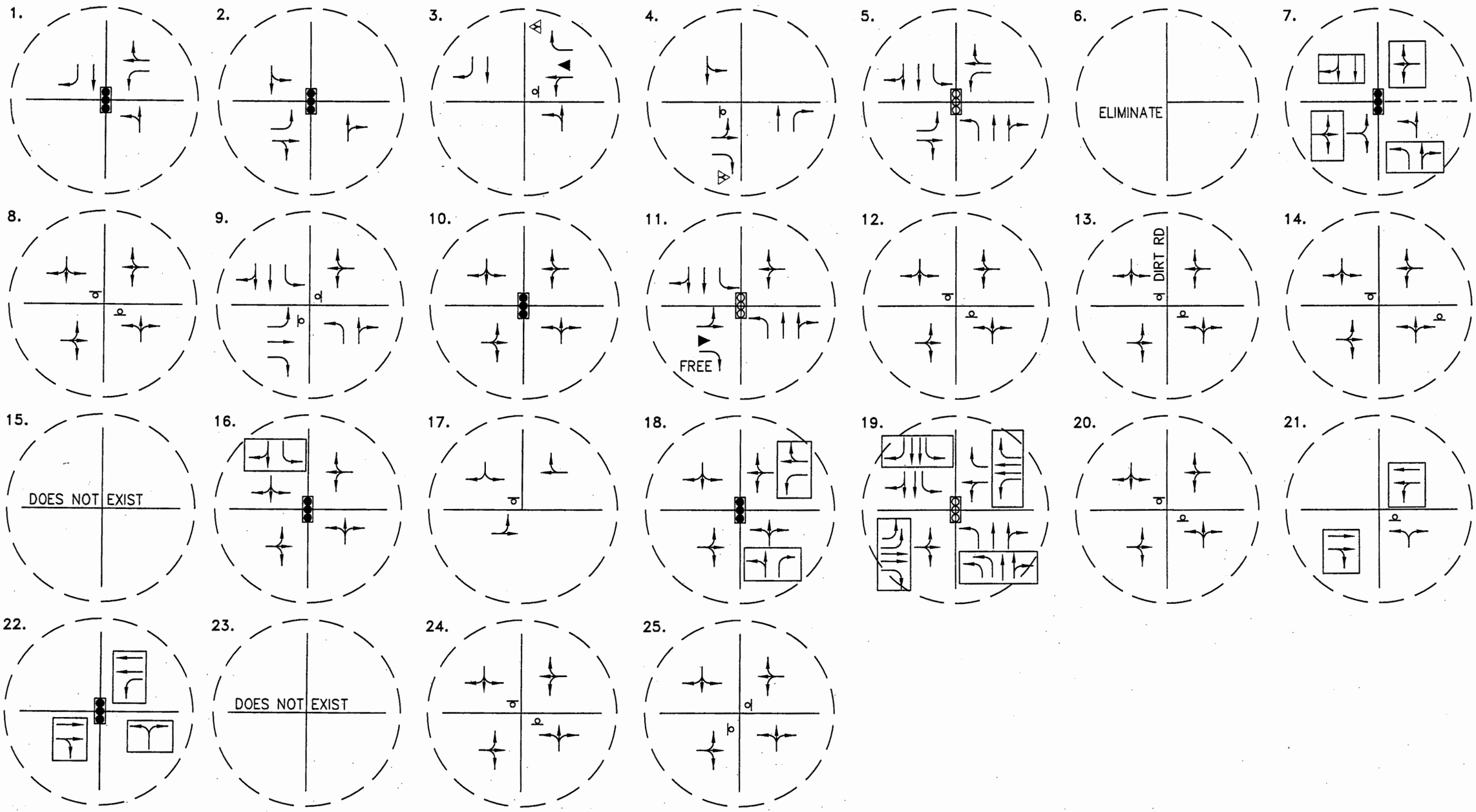
With Casino development, the following intersections report deficiencies:

Jasper/Rockwood - requires an eastbound through lane. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

Cole/Yourman (Rockwood) - requires a southbound left (dual). The project is part of the cumulative need for improvements and will pay its fair share.

SR-98/SR111 - requires north/south through lanes and east/west through lanes. The project is part of the cumulative need for improvements and will pay its fair share.

Table 32 summarizes the intersection operation with improvements in place.



LEGEND

- EXISTING TRAVEL LANE
- EXISTING STOP SIGN
- EXISTING TRAFFIC SIGNAL
- YIELD SIGN
- MITIGATED TRAVEL LANE
- INSTALL STOP SIGN
- CONSTRUCT TRAFFIC SIGNAL

SEE FIGURE 19 FOR INTERSECTION LOCATION

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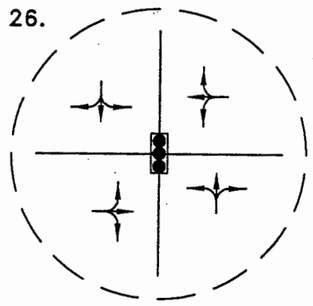
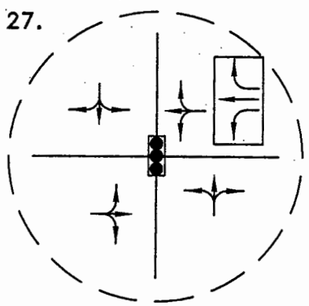
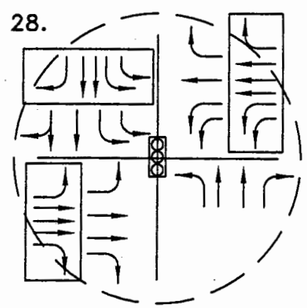
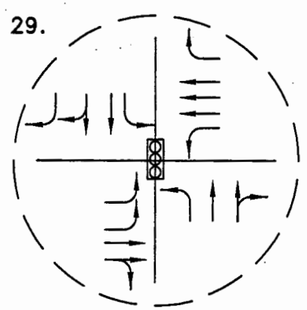
FIGURE 44

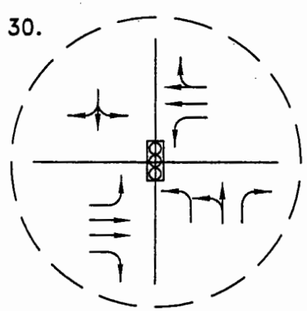
EXISTING + PROJECT (CASINO+PHASE 1)
INTERSECTION MITIGATION - NORTH

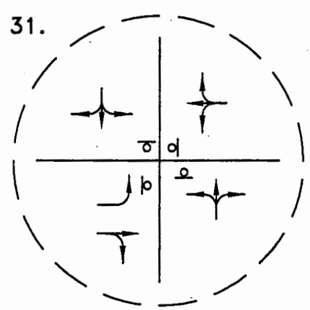


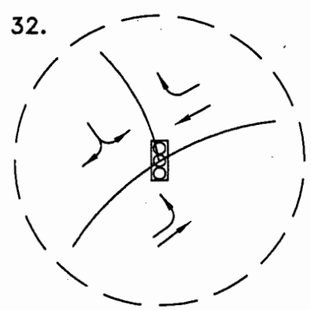


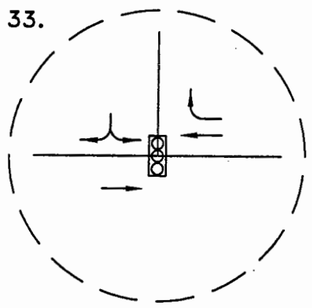


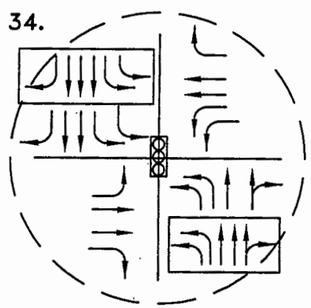


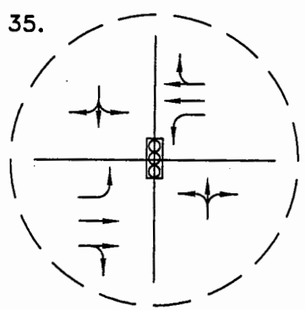


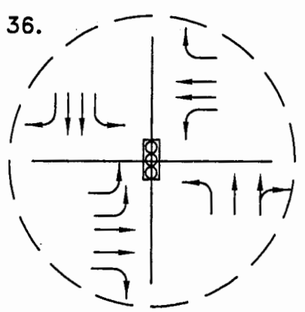


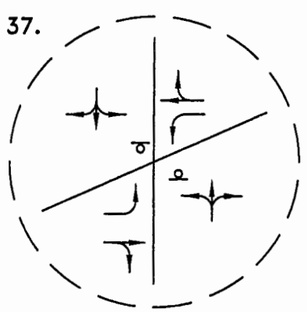












LEGEND

- EXISTING TRAVEL LANE
- MITIGATED TRAVEL LANE
- d – EXISTING STOP SIGN
- EXISTING TRAFFIC SIGNAL
- CONSTRUCT TRAFFIC SIGNAL
- YIELD SIGN

SEE FIGURE 19 FOR INTERSECTION LOCATION

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FIGURE 45

EXISTING + PROJECT (CASINO+PHASE 1) INTERSECTION MITIGATION - SOUTH

Table 32 - Year 2015 Plus Proposed Casino Mitigated Intersection Operation					
Intersection	Mitigation	Year 2015+Proposed Casino			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Rockwood	Fair Share to Eastbound Through	20.9	C	28.1	C
Cole/Yourman	Fair Share to Southbound Left (2)	32.9	C	32.9	C
SR-98/SR-111	Fair Share to NBT/SBT/EBT/WBT	28.3	C	34.5	C
Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc Delay and LOS calculated using SYNCHRO (with HCS value)					

Year 2015 (Plus Total Project) Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

With total buildout of the project, the following deficiencies are identified.

Dogwood Road: McCabe to SR-86 - requires fair share contribution to a Primary facility.

Dogwood Road: SR-86 to Jasper Road - requires fair share contribution to a Primary facility.

Jasper Road: Scaroni to SR-111 - requires fair share contribution to a 4-lane divided highway (ultimately 6 lanes).

Jasper Road: SR-111 to Rockwood - requires fair share contribution to a 4-lane divided highway (ultimately 6 lanes).

Table 33 summarizes the results of the roadway segment operation with improvements in place. As shown in Table 33, the Jasper Road segments approach LOS D capacity and the six-lane arterial is ultimately required to provide LOS C.

Table 33 - Year 2015 Mitigated Roadway Segment Level of Service					
Roadway Segment	Mitigation	LOS E Cap.	Year 2015+Project		
			ADT	V/C	LOS
Dogwood: McCabe to SR-86	Fair Share to Primary	57,000	31,051	0.545	A
Dogwood: SR-86 to Jasper	Fair Share to Primary	57,000	31,450	0.552	A
Jasper: Scaroni to SR-111	Fair Share to 4-Highway	56,300	36,126	0.642	B
Jasper SR-111 to Yourman	Fair Share to 4-Highway	56,300	45,453	0.807	D
LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio Maximum LOS E Capacity per County of Imperial/City of Calexico					

Year 2015 (Plus Total Project) Intersections

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

With total project development, the following intersections report deficiencies:

Jasper/Scaroni - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

SR-111 North/Jasper - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share. Note the interim diamond interchange is approaching the capacity needs for the "clover leaf" design with buildout of Jasper Corridor projects.

SR-111 South/Jasper - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share. Note the interim diamond interchange is approaching the capacity needs for the "clover leaf" design with buildout of Jasper Corridor projects.

Jasper/Rockwood - requires an eastbound/westbound through lane. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

Cole/Scaroni - requires additional travel lanes. Ultimately this intersection, due to spacing requirements, may have restricted turn movements. As such, the project may be required to participate in fair share contributions to establishing a median within Cole Road to eliminate left turns.

Cole/Yourman (Rockwood) - requires additional travel lanes. The project is part of the cumulative need for improvements and will pay its fair share.

SR-98/SR111 - requires additional travel lanes. The project is part of the cumulative need for improvements and will pay its fair share.

Table 34 summarizes the intersection operation with improvements in place. As shown on Table 34, LOS D is demonstrated at the SR-111/Jasper ramps and the "clover leaf" interchange may be required based on buildout of surrounding projects. Additionally, the intersection of SR-98/SR-111 also demonstrates LOS D, however, no grade separated interchange is planned. The project may be required to pay a fair share contribution to establishing a signal interconnect program to facilitate traffic flow in this area.

Year 2035 Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

The Jasper Road corridor also requires a six-lane configuration from Dogwood to east of Bowker Road. The project will be required to participate in this ultimate mitigation based on their fair share.

Table 34 - Year 2015+Proposed Project Mitigated Intersection Operation					
Intersection	Mitigation	Year 2015+Proposed Project			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Scaroni	Fair Share to EBT+EBR+WBL+WBT+NBL+NBR	25.8	C	32.1	C
SR-111 South/Jasper	Fair Share to EBT+EBR+WBT	18.2	B	45.2	D
SR-111 North/Jasper	Fair Share to EBT+WBT+NBL	21.6	C	33.5	C
Jasper/Rockwood	Fair Share to EBT+WBT	22.5	C	32.8	C
Cole/Scaroni	Fair Share to EBT+WBT	22.5	C	27.6	C
Cole/Yourman	Fair Share to EBT+WBT+SBR	32.7	C	34.5	C
SR-98/SR-111	Fair Share to EBT+WBT+NBT+SBT	33.7	C	42.3	D
Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc Delay and LOS calculated using SYNCHRO (with HCS value)					

Additionally, with construction of Sunset Road south to Cole Road, the project is responsible for their fair share of necessary improvements including potential bridge widening on Sunset, as well as the Scaroni Road crossing.

Year 2035 Intersections

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

Interchange improvements at Jasper/SR-111 to include a "clover-leaf" design is required to facilitate traffic in this congested area. The project has a cumulative impact and will be required to pay their fair share of this improvement.

The intersection of SR-111/SR-98 continues to demonstrate deficiencies. This intersection is not planned to ultimately provide grade-separation and will remain "at-grade." As such, this intersection may continue to be congested. Alternate mitigation is suggested to provide signal coordination through the corridor to assist in optimizing traffic flow through congested areas.

TRAFFIC SIGNAL WARRANTS

A summary of the traffic signal warrant analysis at intersections is provided in Table 35. As shown on Table 35, all deficient unsignalized intersections which require signals for acceptable operation meet minimum warrants (with at least 80%) satisfied.

Table 35 - Summary of Traffic Signal Warrants						
Location	**Condition**	**Minimum Vehicular**	**Interruption of Traffic**	**Combination**	**AM Peak**	**PM Peak**
I-8 Westbound/Dogwood	Cuml	Yes	Yes	Yes	Yes	Yes
I-8 Eastbound/Dogwood	Cuml	Yes	Yes	Yes	Yes	Yes
I-8 Westbound/Bowker	Cuml	Yes	Yes	Yes	80%	Yes
I-8 Eastbound/Bowker	Cuml	80%	Yes	Yes	Yes	Yes
Dogwood/McCabe	Cuml	Yes	Yes	Yes	Yes	Yes
McCabe/Bowker	Cuml	Yes	Yes	Yes	80%	Yes
Dogwood/Heber	Cuml	Yes	Yes	Yes	Yes	Yes
Heber/Bowker	Cuml	Yes	Yes	Yes	Yes	Yes
Dogwood/Willoughby	Cuml	Yes	Yes	Yes	Yes	Yes
Jasper/Meadows	Cuml	Yes	Yes	Yes	Yes	Yes
Jasper/Bowker	Cuml	Yes	Yes	Yes	Yes	Yes
Dogwood/Cole	Cuml	Yes	Yes	Yes	Yes	Yes
Cole/Bowker	Cuml	Yes	Yes	Yes	Yes	Yes
SR-98/Bowker	Cuml	Yes	Yes	Yes	Yes	Yes
Yes=Warrant Satisfied; No=Warrant Not Satisfied; 80%=Warrant 80% Satisfied Cuml=existing+project+other projects (year 2010)						

FAIR SHARE SUMMARY

The City of Calexico has developed a fair share cost system summary to be applied to the major projects within the Jasper Corridor to generate funding for roadway segments, traffic signals and intersection improvements, and the Jasper Corridor interchanges. Table A summarizes the roadway segment fair share. Table B summarizes the traffic signal improvement costs. Table C summarizes the future interchange at Jasper Road fair share.

Table A - Fair-Share Street Segment Improvement Cost Contribution Percentages			
Street Segment	Calexico/111 Daily Buildout Project Trips	Daily Project Trips Plus Cumulative Traffic From Other Projects	Improvement Fair-Share Cost Contribution
Jasper, S.R. 111 to R/R	19,322	29,448	66%
Jasper, R/R to Dogwood	13,674	27,682	49%
Jasper, S.R. 111 to Meadows	5,945	65,254	9%
Jasper, Meadows to Bowker	5,945	37,756	16%
Jasper, E/O Bowker	2,973	26,783	11%
Meadows, Jasper to Cole	0	18,325	0%
Bowker, Heber to I-8*	2,973	28,774	10%
Bowker, Heber to Jasper*	2,973	31,436	9%
Bowker, Jasper to Cole	0	36,850	0%
Bowker, Cole to S.R. 98	2,378	16,293	15%
Cole, S.R. 111 to Meadows	9,512	19,876	48%
Cole, Meadows to Bowker	5,351	26,369	20%
Cole, Bowker to S.R. 98	4,756	17,458	27%
Cole, Dogwood to Kloke	2,973	17,444	17%
Cole, Kloke to S.R. 111	2,973	24,119	12%
Kloke, Cole to S.R. 98	1,785	5,518	32%
S.R. 98, Dogwood to D. Navaro	4,756	17,748	27%
S.R. 98, D. Navaro to Kloke	4,756	21,600	22%
S.R. 98, Kloke to S.R. 111	4,756	27,373	17%
S.R. 98, S.R. 111 to Meadows	2,378	20,367	12%
S.R. 98, Meadows to Bowker	2,378	16,410	14%
Heber, W/O S.R. 111*	0	10,084	0%
Heber, S.R. 111 to Bowker*	0	3,643	0%
S.R. 111, Jasper to I-8*	10,701	40,876	26%
S.R. 111, Jasper to Cole	5,945	34,162	17%
S.R. 111, Cole to S.R. 98	5,945	31,676	19%
Calexico/SR111 - compiled 1-20-08			

Updated information for this table is provided in the EIR.

Table B- Fair-Share Traffic Signal Improvement Cost Based on Project Daily Trips For Mitigating City-Wide Circulation Element Roadway Intersections	
Number of New Signalized Intersections: 15	
Number of Modified Signalized Intersections: 13	
Total New Signal Cost: 15 new signals x $300,000 =	$4,500,000.00
Total Modified Signal Cost: 13 modified signals x $250,000 =	$3,250,000.00
Traffic Synchronization & Monitoring System Cost =	$600,000.00
Total Traffic Signal Mitigation Improvement Cost =	$8,350,000.00
Total Project Daily Trips = 260,032 Trips	
Traffic Signal Mitigation Improvement Cost Per Project Daily Trip: $8,350,000/260,032 trips = $32.11 per daily trip (*)	
(*) This cost is based on Year 2007 construction value subject to a 5% yearly escalation adjustment	

Project	Total Project Daily Trips	Fair-Share Traffic Signal Mitigation Improvement Cost
Calexico S.R. 111(Casino)	58,872	$1,890,380.00
Mega Park	46,508	$1,493,372.00
Los Lagos	25,886	$776,630.00
Estrella	6,123	$196,610.00
Santa Fe	20,272	$550,934.00
Esmeralda	2,952	$94,789.00
Rancho Diamante	45,101	$1,448,193.00
Las Ventanas	24,144	$775,264.00
Linda Plaza	2,615	$83,968.00
Riverview	3,969	$123,606.00
Palazzo	15,900	$510,549.00
Towncenter Industrial Park	5,514	$177,055.00
Remington	2,176	$69,871.00
(compiled 01-18-08)	**Total Trips = 260,032**	**Total Cost = $8,191,221.00**

Updated information for this table is provided in the EIR.

Table C - Fair-Share Improvement Cost Contribution Percentages for Future Freeway Interchange at S.R. 111 and Jasper Road Intersection			
Development	**Proposed Site Usage**	**Project A.M. + P.M. Peak Hour Project Trips**	**Fair-Share Contribution (% of Total A.M. + P.M. Peak Hour Project Trips)**
Santa Fe	709 D.U. of Single-Family Housing, 436 D.U. of Condominiums, 13.50 Acres of Elementary School, 12.88 Acres of Commercial	892	6.25%
Las Ventanas	1,040 D.U. of Single-Family Housing, 13.08 Acres of Elementary School, 29.00 Acres of Commercial	1,723	12.06%
Rancho Diamante	2,262 D.U. of Single-Family Housing, 1,911 D.U. of Multi-Family Housing, 61.61 Acres of Elementary School, 53 Acres of Park, 25.72 Acres of Commercial	1,776	12.43%
Esmeralda	291 D.U. of Single-Family Housing, 1.41 Acres of Fire Station	188	1.32%
Estrella	391 D.U. of Single-Family Housing, 244 D.U. of Multi-Family Housing, 13.44 Acres of Elementary School, 5.3 Acres of Park	547	3.83%
Mega Park	404.845 ksf Commercial; 42.689 Car Dealer 418.372 ksf Office; 130.680 ksf Medical; 191.795 sq ft Specialty Retail	3,029	21.21%
Palazzo	1,324 D.U. of Multi-Family Housing, 5.81 Acres of Commercial	1,574	11.02%
Riverview	340 D.U. of Multi-Family Housing, 4 acres of Commercial	642	4.49%
Los Lagos	1,119 D.U. of Single-Family Housing, 776 D.U. of Multi-Family Housing, 25.7 Acres of Elementary School, 24.9 Acres of Commercial	130	0.91%
Calexico-S.R. 111 (Casino)	584,000 S.F. of Commercial, 400 Room Hotels, 140,000 S.F. of Casino 735,000 S.F. of Office 10,416 sf Commercial 3,000 sf Restaurant	3,782	26.48%
Total		**14,283**	**100%**
(compiled 01-18-08)			

Updated information for this table is provided in the EIR.

SECTION IX - REDUCED CASINO ALTERNATIVE

PROJECT DESCRIPTION

A reduced project alternative is considered for development and analyzed as part of this traffic study. The "reduced casino" alternative proposes to construct a 75,000 square foot gaming area with associated retail, restaurants, and hotel, with additional phases and densities to remain the same as detailed previously in this report as the "proposed project." Development of a reduced casino during the initial phase (existing plus casino and existing plus casino plus phase 1) and cumulative phase (year 2015 plus casino and year 2015 plus total project) will generate less traffic than the proposed project and is analyzed throughout all scenarios.

TRIP GENERATION

The trip generation potential for the project is based on daily and peak hour trip generation rates obtained from the *(Not So) Brief Guide of Traffic Generators for the San Diego Region* published by the San Diego Association of Governments (SANDAG) in April 2002. Utilizing the SANDAG rates and the characteristics of the proposed project, estimates of daily and peak hour traffic volumes generated by the project can be calculated. The project phasing for analysis scenarios in this report are summarized as follows:

Reduced Casino Phase

The casino space includes a 75,000 square foot gaming facility and internal casino related assembly space, retail and restaurant services, as well as a 200-room hotel. For the purposes of trip generation, the casino and ancillary uses are considered part of the 100 trips per 1,000 square feet of gaming space. The hotel was added as a separate land use to account for the potential of hotel users which would not utilize the casino, retail, or restaurant uses within the facility.

Phase 1

Phase 1 considers the near term development of approximately 356,000 square feet of retail space (not part of the casino facility), and approximately 100,000 square feet of quality restaurant use (not part of the casino facility).

Total Project (All Phases)

The total project includes the following densities:

Casino - 75,000 square feet
Casino Hotel - 200 rooms
Hotel - 200 rooms
Retail - 411,000 square feet
Restaurant with Drive Through - 10,000 square feet
Quality Restaurant - 100,000 square feet
Office - 395,000 square feet
Office Tech - 340,000 square feet

Under the existing conditions scenario, the reduced casino is analyzed as a separate phase. Additional analysis for the existing conditions assumes the reduced casino plus phase 1.

Under the near term cumulative conditions (year 2015), analysis considers the reduced casino as a separate phase. Additional analysis was conducted with the total project (all phases) to demonstrate the worst case development scenario (full buildout of the project by year 2015).

Table 36 summarizes the trip generation rates and volumes for the proposed project for the Casino with hotel usage, which demonstrates the total volume of traffic to occur on site. Table 37 summarizes the trip generation potential for the reduced casino phase plus phase 1 (total project) and shows the total traffic which is expected to occur on site. Table 38 summarizes the total project trip generation (all phases).

Since the proposed project is a mixed use project,. a portion of the traffic generated by the project can be divided into internal and external trips. An internal trips is a relationship between uses where a user may visit a restaurant and retail shop while staying at the hotel. The internal trip component helps reduce the amount of "double counting" of traffic which would occur if all land uses were considered as separate entities with no relationship to each other.

The resulting "net new" project trips (external trips on the circulation system roadways) are summarized in Table 39. External traffic reductions for each land use are shown on Table 39. The new project trips are the result of development of the proposed project. The total new trips added to the external roadway network under project buildout conditions is 57,397 daily ADT, 3,268 AM peak hour trips, and 5,943 PM peak hour trips.

NEAR TERM TRIP DISTRIBUTION/TRIP ASSIGNMENT

The trip distribution percentages assumed the same as the "proposed project" (refer to Figure 9 above).

The traffic generated by the reduced Casino-only (with hotel) portion project was assigned to the roadways and intersections based on the established trip distribution percentages. The project related daily traffic volumes for the reduced Casino phase is shown on Figure 46. The intersection peak hour volumes for the Casino phase are shown on Figure 46 for the northern study area and Figure 48 for the southern study area.

The project related daily traffic volumes for the reduced Casino phase plus Phase 1 are shown on Figure 49. The intersection peak hour volumes for the Casino phase plus Phase 1 are shown on Figure 50 for the northern study area and Figure 51 for the southern study area.

With buildout of the project (assumed for the year 2015 condition), all project phases traffic is assigned to the roadway network as shown on Figure 52 (for daily traffic), Figure 53 (intersections on the north) and Figure 54 (intersections on the south).

YEAR 2035 TRIP DISTRIBUTION/TRIP ASSIGNMENT

Due to the changes in the roadway network, the project traffic distribution would change under future year 2035 conditions. The same assumptions for the distribution of the "proposed project" was used for the reduced casino project (refer to Figure 19 for the future trip distribution).

Figure 55 illustrates the future project daily traffic volumes on the future roadway network. Figure 56 depicts the peak hourly future intersection traffic volumes for the total project (with reduced casino).

Table 36 - Trip Generation Summary (Reduced Casino Only)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Phase A	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%

Reduced Casino (with Hotel) Trip Generation

Phase	Land Use	Density	Unit	Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Phase A	Casino	75	KSF	7,500	75	68	8	508	296	212
	Hotel	200	rooms	1,600	80	48	32	112	45	67
	PHASE A TOTAL			**9,100**	**155**	**116**	**40**	**620**	**341**	**279**
TOTALS CASINO PHASE				**9,100**	**155**	**116**	**40**	**620**	**341**	**279**

Table 37 - Trip Generation Summary (Reduced Casino + Phase I)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Phase I	Retail	80	4%	60%	40%	10%	50%	50%
	Restaurant - Quality	100	1%	60%	40%	8%	70%	30%
Phase A	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%

Reduced Casino Plus Phase I Trip Generation

Phase	Land Use	Density	Unit	Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Phase I	Retail	356	KSF	28,480	1,139	684	456	2,848	1,424	1,424
	Restaurant - Quality	100	KSF	10,000	100	60	40	800	560	240
	PHASE I TOTAL			**38,480**	**1,239**	**744**	**496**	**3,648**	**1,984**	**1,664**
Phase A	Casino	75	KSF	7,500	75	68	8	508	296	212
	Hotel	200	rooms	1,600	80	48	32	112	45	67
	PHASE A TOTAL			**9,100**	**155**	**116**	**40**	**620**	**341**	**279**
TOTALS PHASE I+A				**47,580**	**1,394**	**859**	**535**	**4,268**	**2,325**	**1,943**

Table 38 - Trip Generation Summary (Total Reduced Casino Project)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project	Retail	80	4%	60%	40%	10%	50%	50%
	Restaurant w/Drive Thru	650	7%	50%	50%	7%	50%	50%
	Restaurant - Quality	100	1%	60%	40%	8%	70%	30%
	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%
	Hotel	8	5%	60%	40%	7%	40%	60%
	Office	20	14%	90%	10%	13%	20%	80%
	Office Tech	16	12%	80%	20%	12%	20%	80%

Total Primary Trip Generation

Phase	Land Use	Density	Unit	Primary Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project	Retail	411.00	ksf	32,880	1,315	789	526	3,288	1,644	1,644
	Restaurant w/Drive Thru	10.00	ksf	6,500	455	228	228	455	228	228
	Restaurant - Quality	100.00	ksf	10,000	100	60	40	800	560	240
	Casino	75.00	ksf	7,500	75	68	8	508	296	212
	Hotel (Casino)	200.00	rooms	1,600	80	48	32	112	45	67
	Hotel	200.00	rooms	1,600	80	48	32	112	45	67
	Office	395.00	ksf	7,900	1,106	995	111	1,027	205	822
	Office Tech	340.00	ksf	5,440	653	522	131	653	131	522
TOTAL ON-SITE TRAFFIC				**73,420**	**3,864**	**2,758**	**1,106**	**6,955**	**3,153**	**3,801**

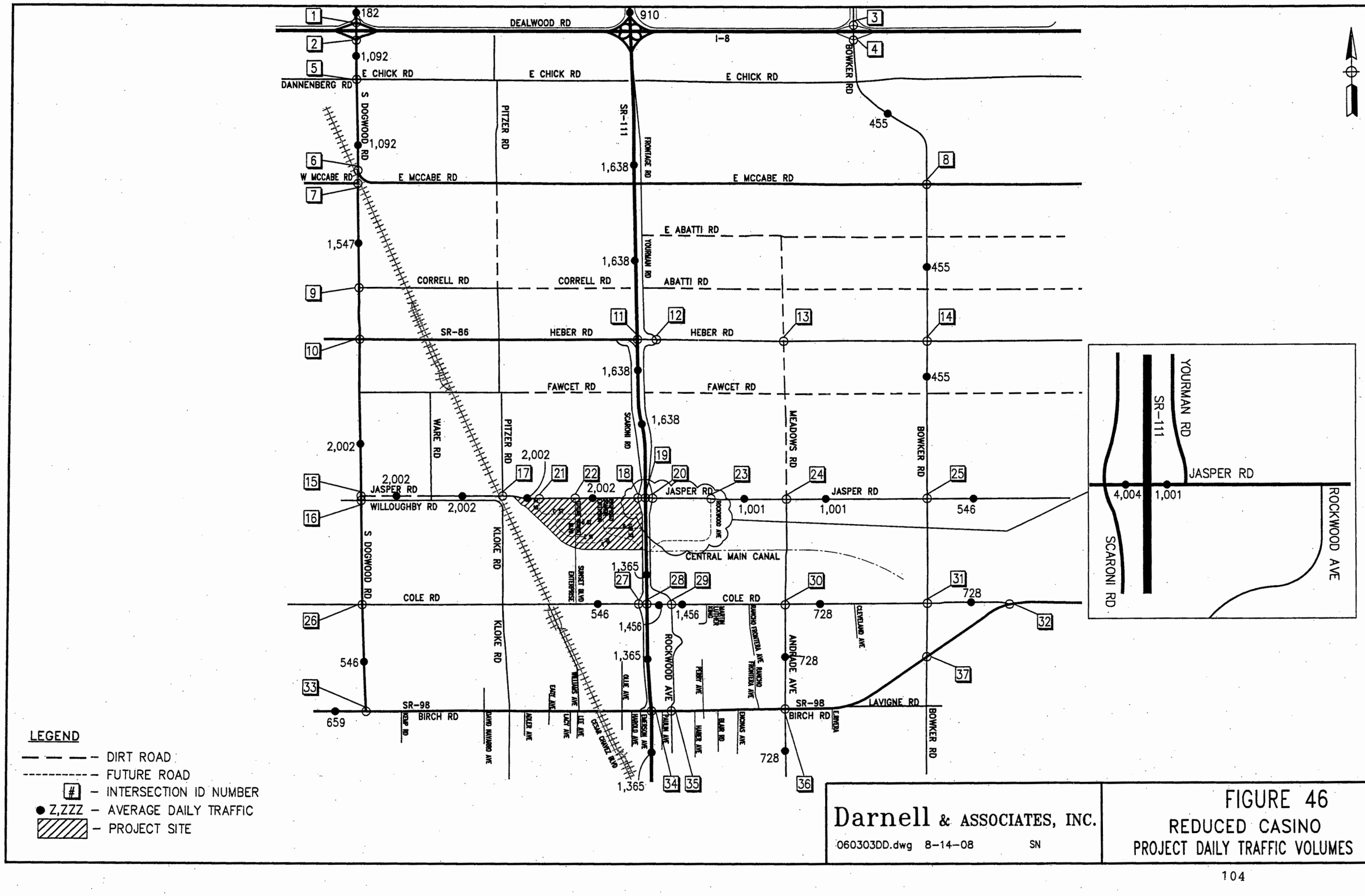
Table 39 - Trip Generation Summary (Total Reduced Casino Project) - With Internal/External Applied

Phase	Land Use	External Traffic (a)	Trip Generation Rates						
			Daily	AM Peak Hour			PM Peak Hour		
				% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project	Retail	78%	80	4%	60%	40%	10%	50%	50%
	Restaurant w/Drive Thru	51%	650	7%	50%	50%	7%	50%	50%
	Restaurant - Quality	51%	100	1%	60%	40%	8%	70%	30%
	Casino	100%	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	58%	8	5%	60%	40%	7%	40%	60%
	Hotel	98%	8	5%	60%	40%	7%	40%	60%
	Office	100%	20	14%	90%	10%	13%	20%	80%
	Office Tech	100%	16	12%	80%	20%	12%	20%	80%

Total "Net New" Trip Generation

Phase	Land Use	Density	Unit	Net New Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project	Retail	411.00	ksf	25,646	1,026	616	410	2,302	1,151	1,151
	Restaurant w/Drive Thru	10.00	ksf	3,315	232	116	116	751	376	376
	Restaurant - Quality	100.00	ksf	5,100	51	31	20	528	370	158
	Casino	75.00	ksf	7,500	75	68	8	508	296	212
	Hotel (Casino)	200.00	rooms	928	46	28	19	65	26	39
	Hotel	200.00	rooms	1,568	78	47	31	110	44	66
	Office	395.00	ksf	7,900	1,106	995	111	1,027	205	822
	Office Tech	340.00	ksf	5,440	653	522	131	653	131	522
TOTAL "NET NEW" TRAFFIC				**57,397**	**3,268**	**2,422**	**845**	**5,943**	**2,598**	**3,345**

(a) External traffic based on pass-by rates



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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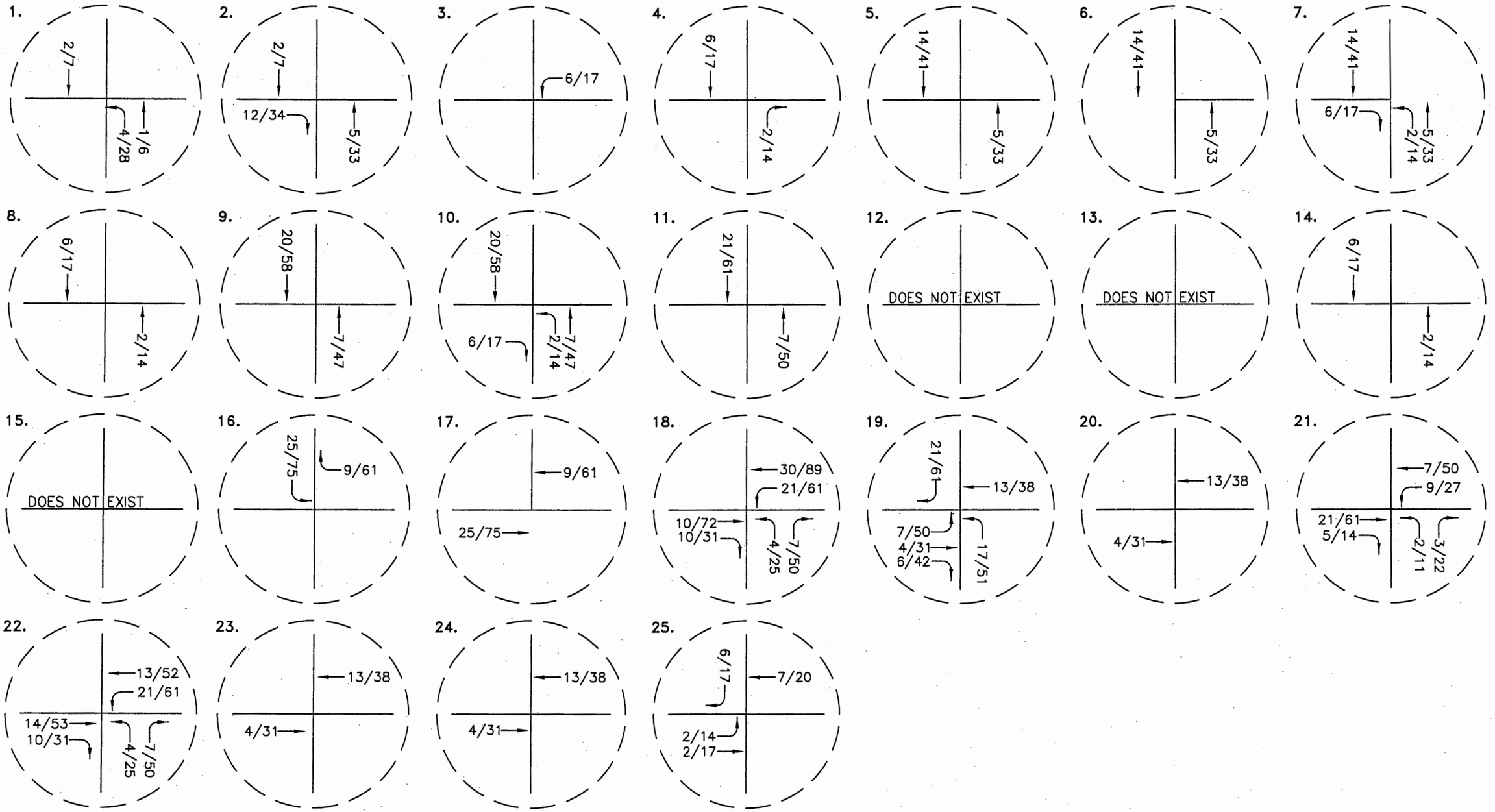
FIGURE 46
REDUCED CASINO PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 46 FOR INTERSECTION LOCATION

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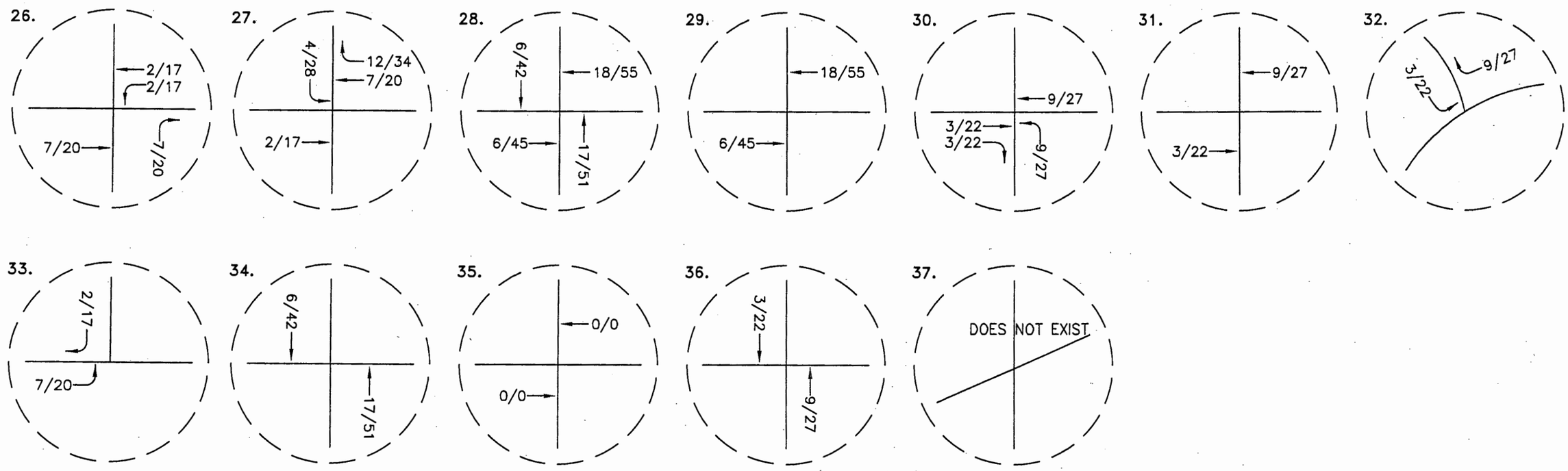
FIGURE 47

REDUCED CASINO PROJECT

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 46 FOR INTERSECTION LOCATION.

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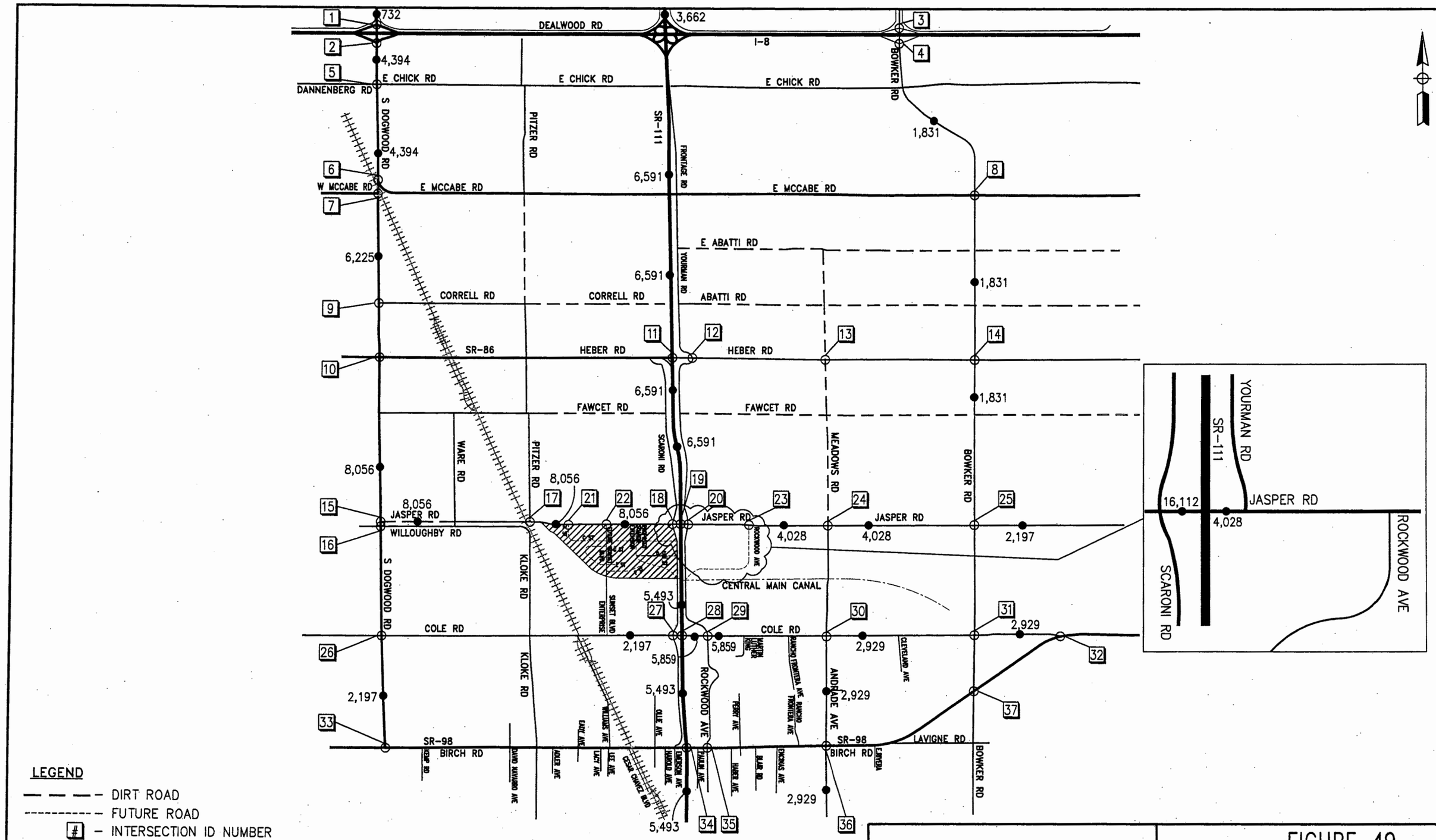
FIGURE 48

REDUCED CASINO PROJECT

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

- — — — DIRT ROAD
- ---------- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- ▨ – PROJECT SITE

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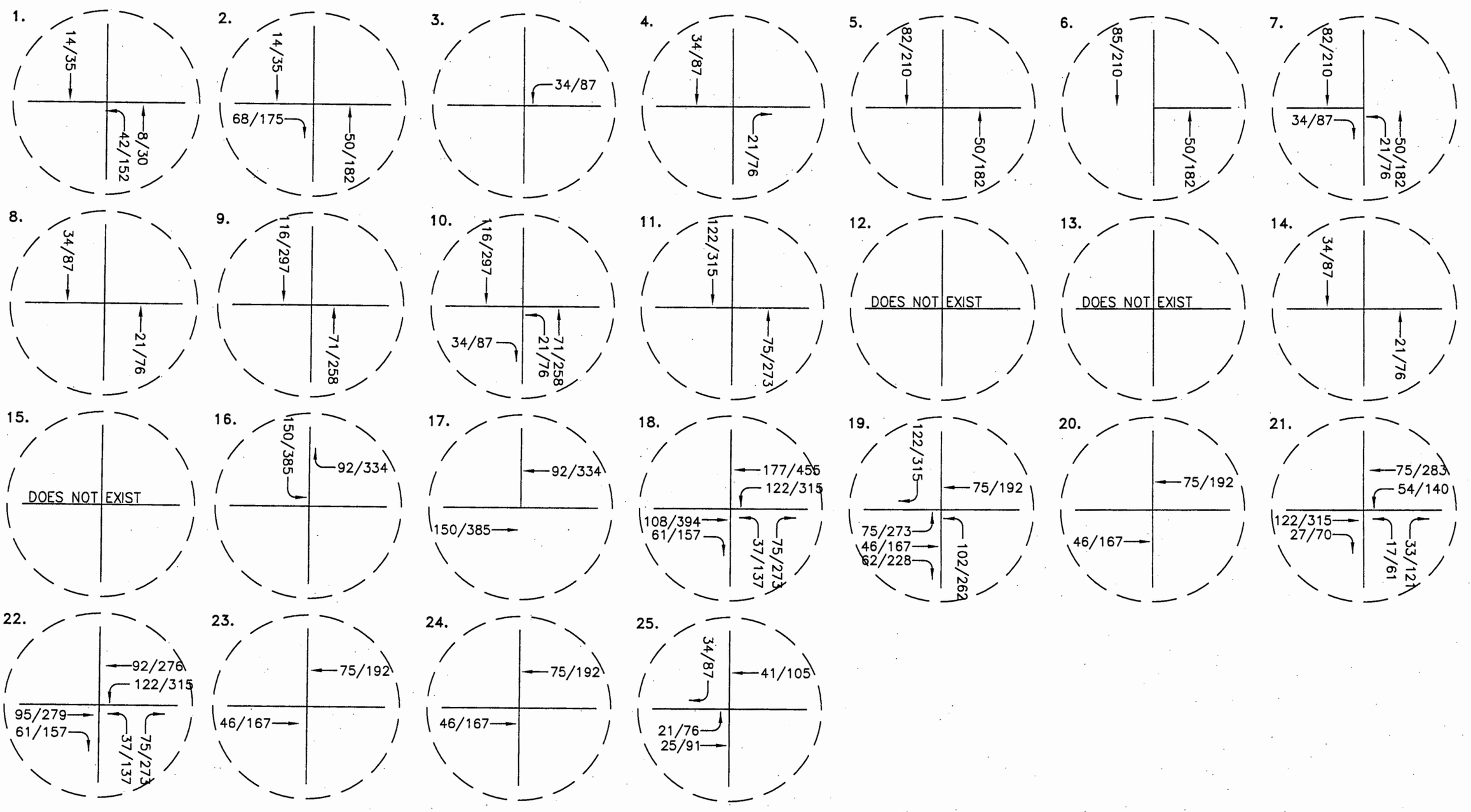
FIGURE 49

REDUCED CASINO + PHASE 1
PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 49 FOR INTERSECTION LOCATION

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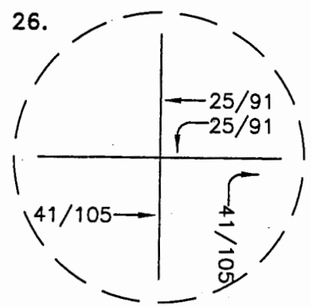
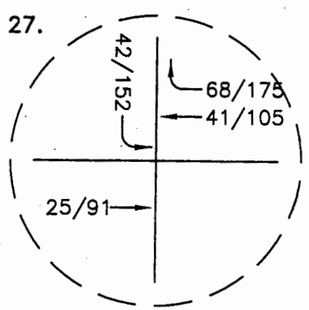
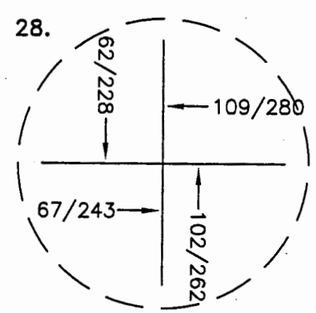
FIGURE 50

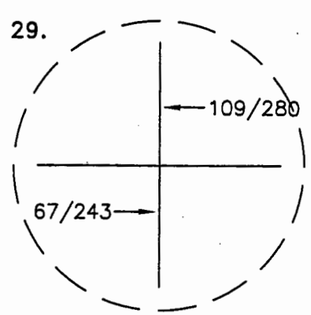
REDUCED CASINO + PHASE 1 PROJECT

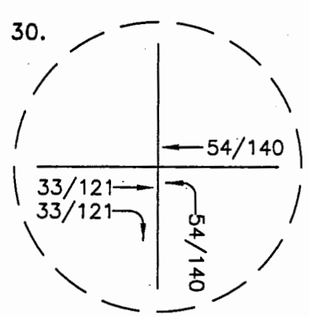
INTERSECTION TRAFFIC VOLUMES–NORTH

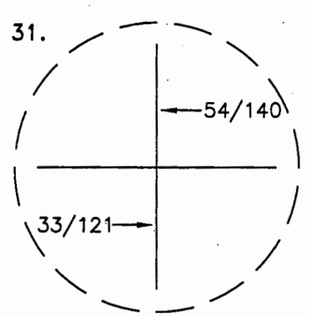


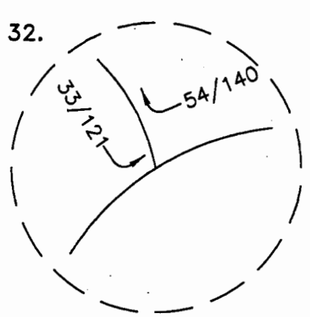


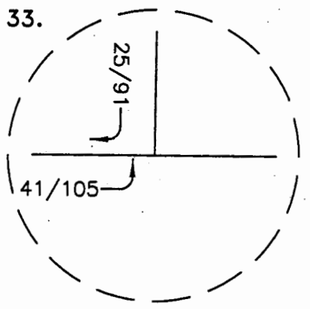


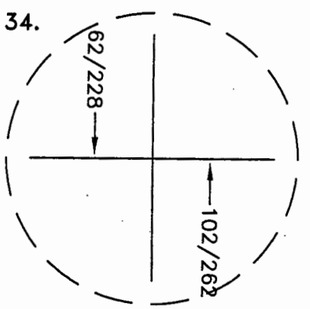


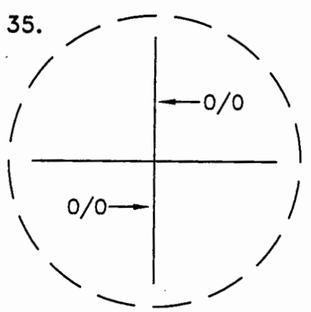


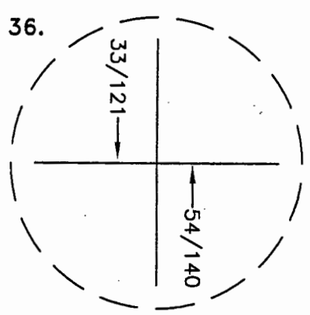


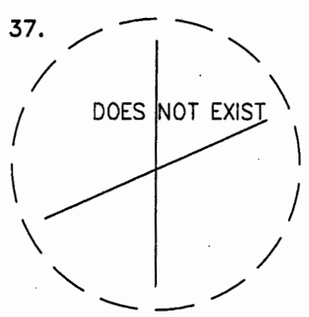












LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 49 FOR INTERSECTION LOCATION.

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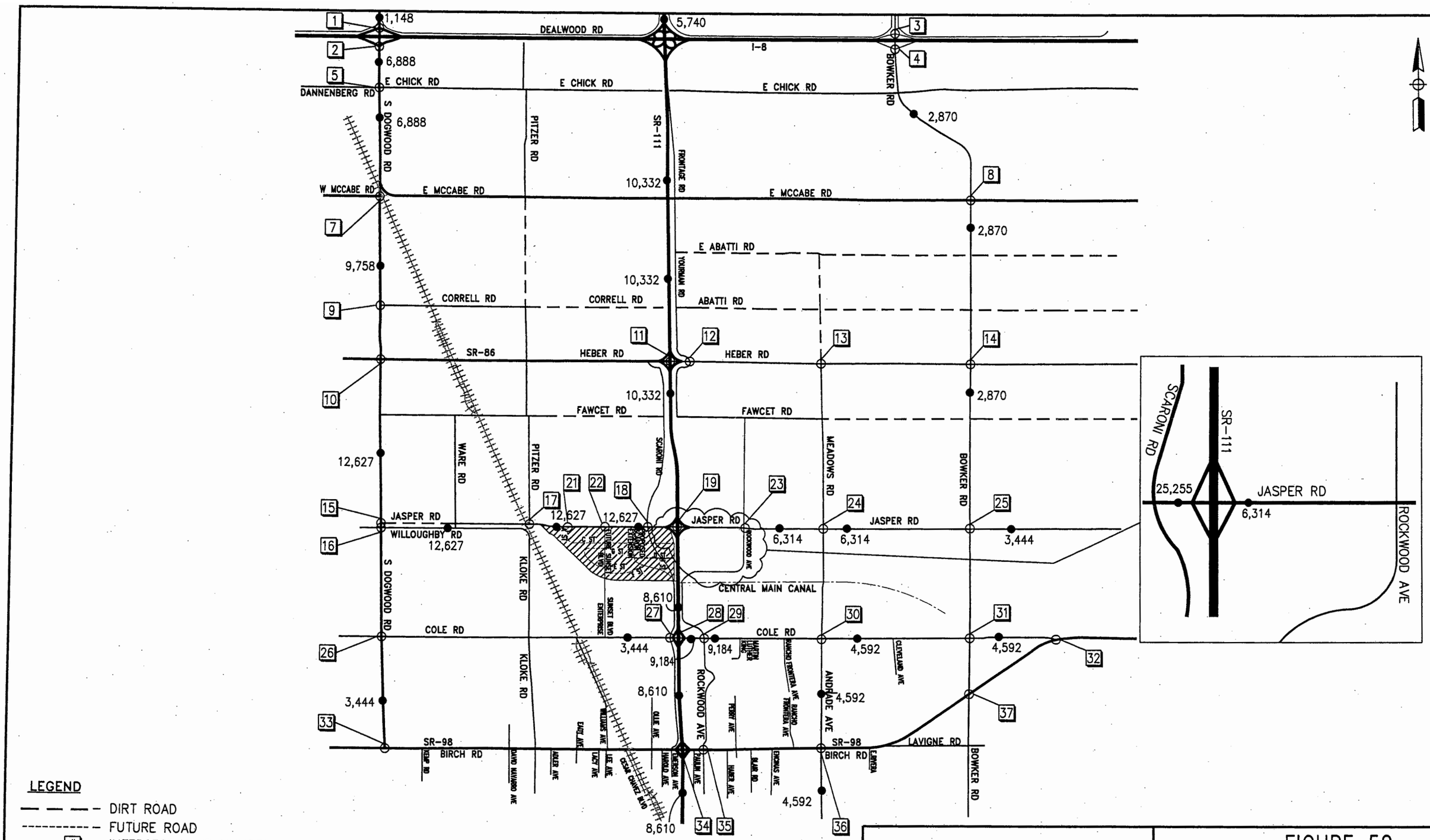
FIGURE 51

REDUCED CASINO + PHASE 1 PROJECT

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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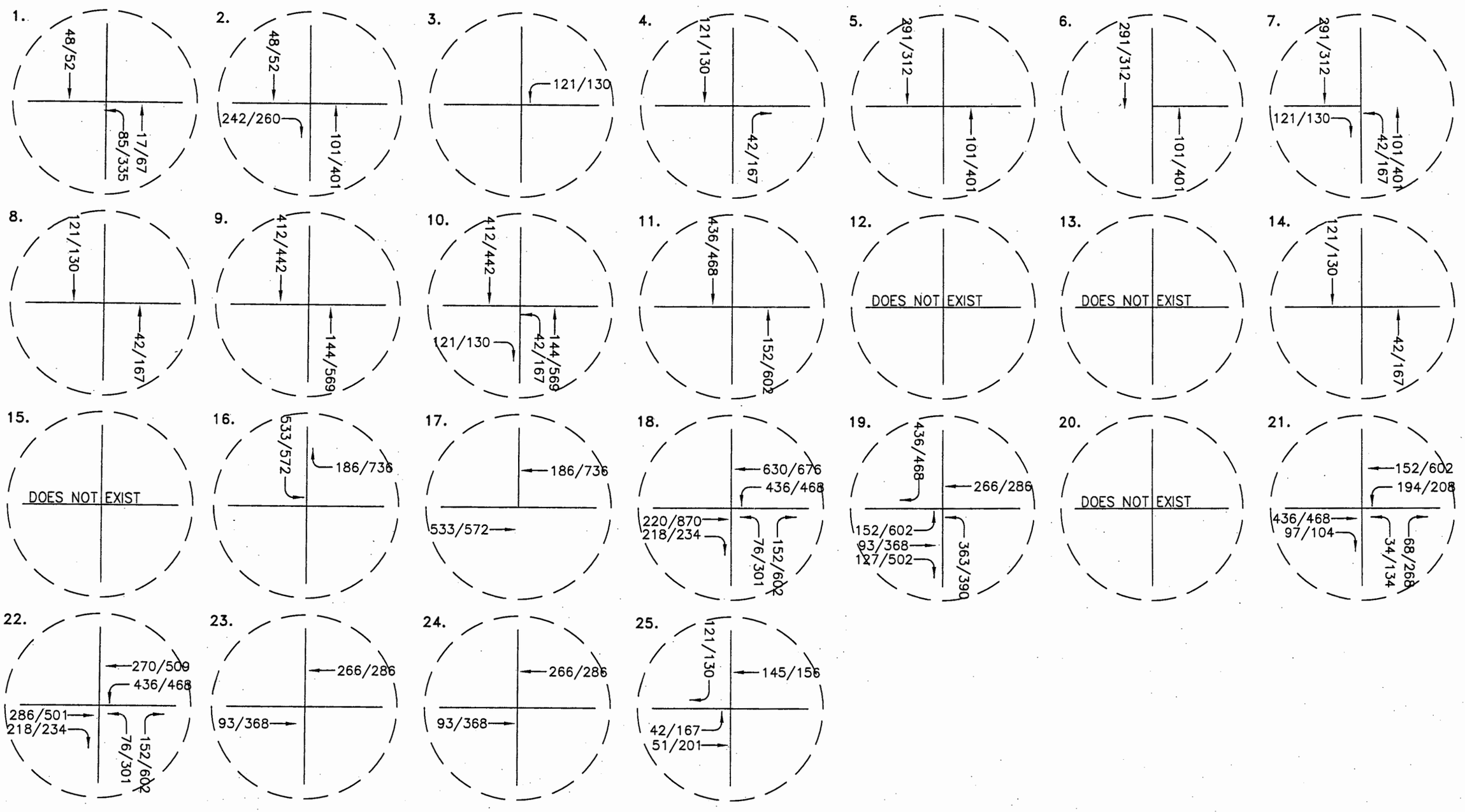
FIGURE 52

REDUCED CASINO + TOTAL PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

SEE FIGURE 52 FOR INTERSECTION LOCATION.

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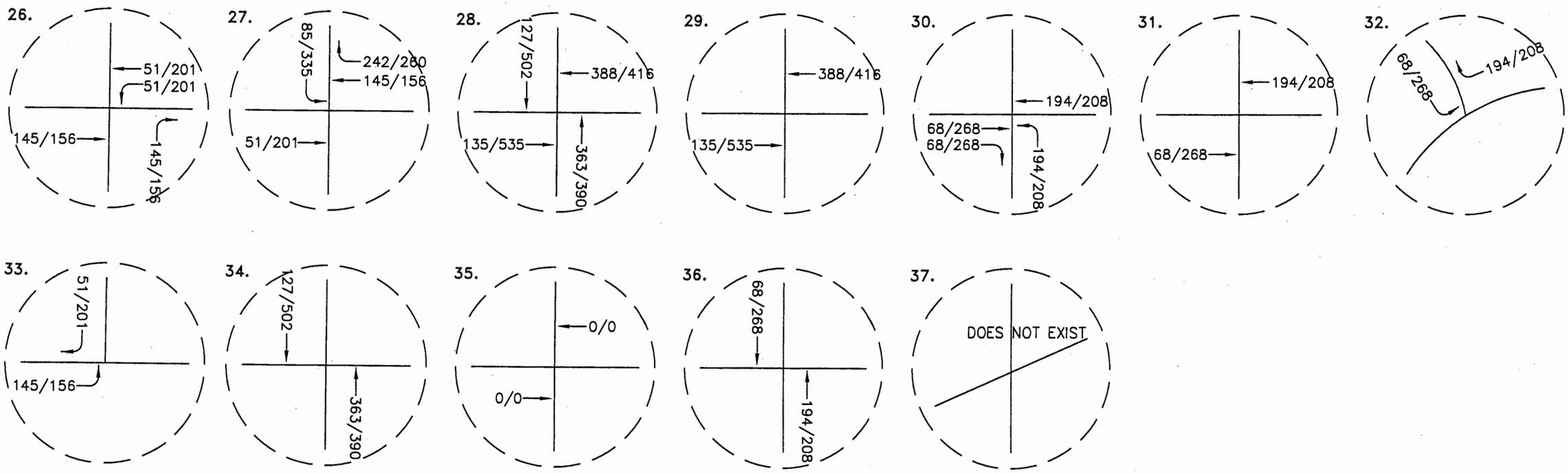
FIGURE 53

REDUCED CASINO PLUS TOTAL PROJECT

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

SEE FIGURE 52 FOR INTERSECTION LOCATION.

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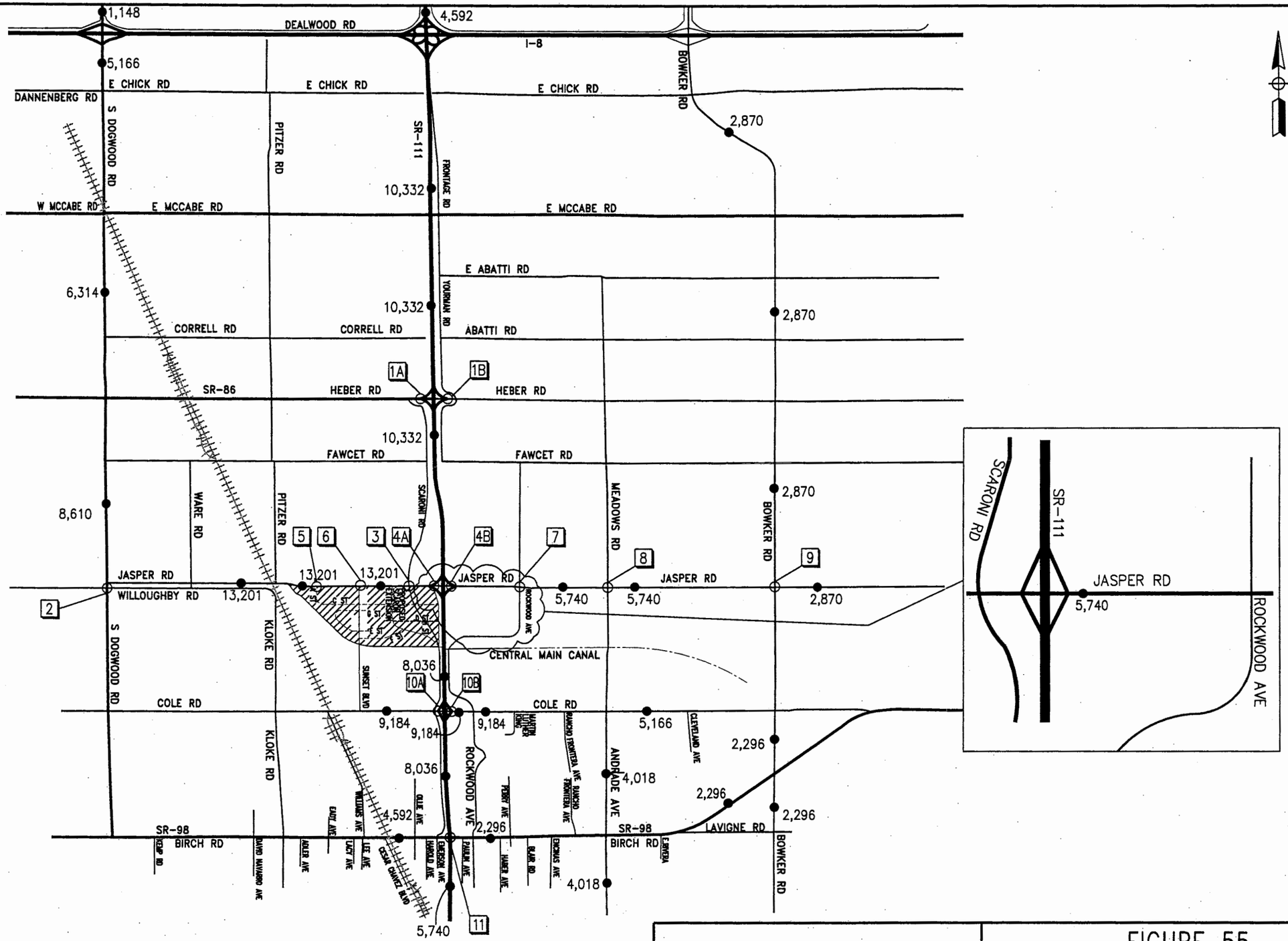
060303DD.dwg 8-15-08 SN

FIGURE 54

REDUCED CASINO + TOTAL PROJECT INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

[#] – INTERSECTION ID NUMBER

● Z,ZZZ – AVERAGE DAILY TRAFFIC

▨ – PROJECT SITE

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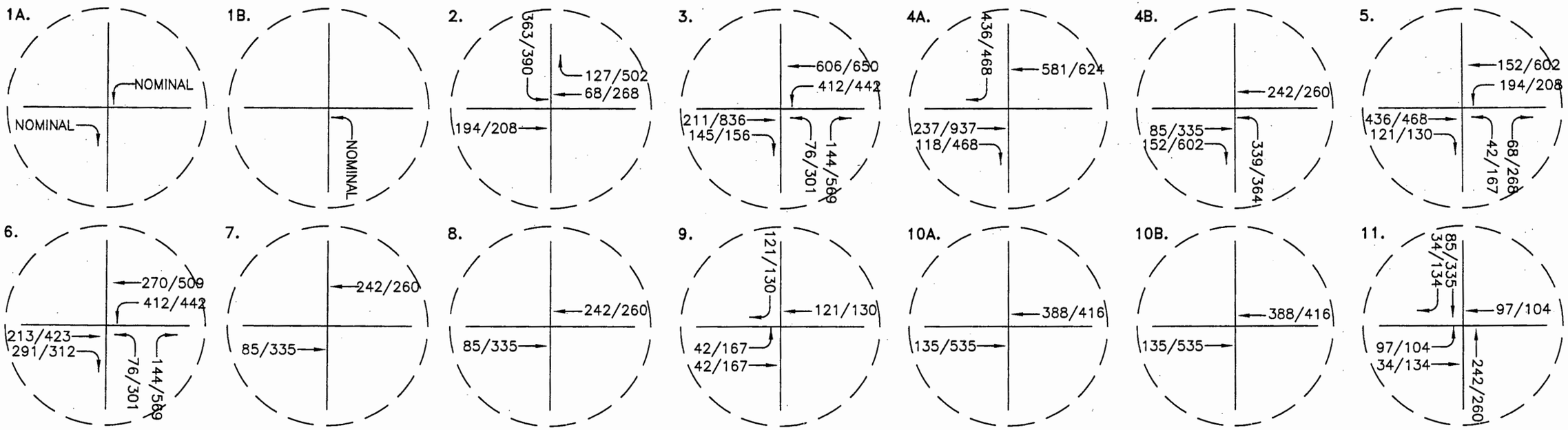
060303DD1.dwg 8-18-08 CDJ/SN

FIGURE 55

2035 (BUILDOUT) REDUCED CASINO DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 55 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

060303DD1.dwg 8-18-08 CDJ

FIGURE 56

2035 (REDUCED CASINO) PROJECT INTERSECTION TRAFFIC VOLUMES

NEAR TERM IMPACTS (REDUCED CASINO)

The impacts below summarize the reduced casino condition on the existing roadway configuration with existing base traffic conditions.

EXISTING PLUS PROJECT (REDUCED CASINO ONLY) CONDITIONS

The reduced Casino project traffic which was assumed to occur in the near term was added to the existing traffic volumes. The daily traffic volumes for the existing plus reduced Casino condition are shown on Figure 57. The intersection peak hour volumes for this condition are shown on Figure 58 for the northerly study area and Figure 59 for the southerly study area.

Existing Plus Project (Reduced Casino Only) Roadway Segments

The roadway segments were analyzed with the project traffic (reduced Casino only) added to existing traffic volumes. The roadway segments daily levels of service are summarized in Table 40. As shown on Table 40, the following segments demonstrate deficiencies with the addition of project traffic:

Dogwood Road: north of I-8
SR-111: south of SR-98
Cole Road: Enterprise to SR-111

Existing Plus Project (Reduced Casino) Intersection Operation

Intersection operation for the existing plus project condition is summarized on Table 41. As shown on Table 10, the following intersections report deficiencies:

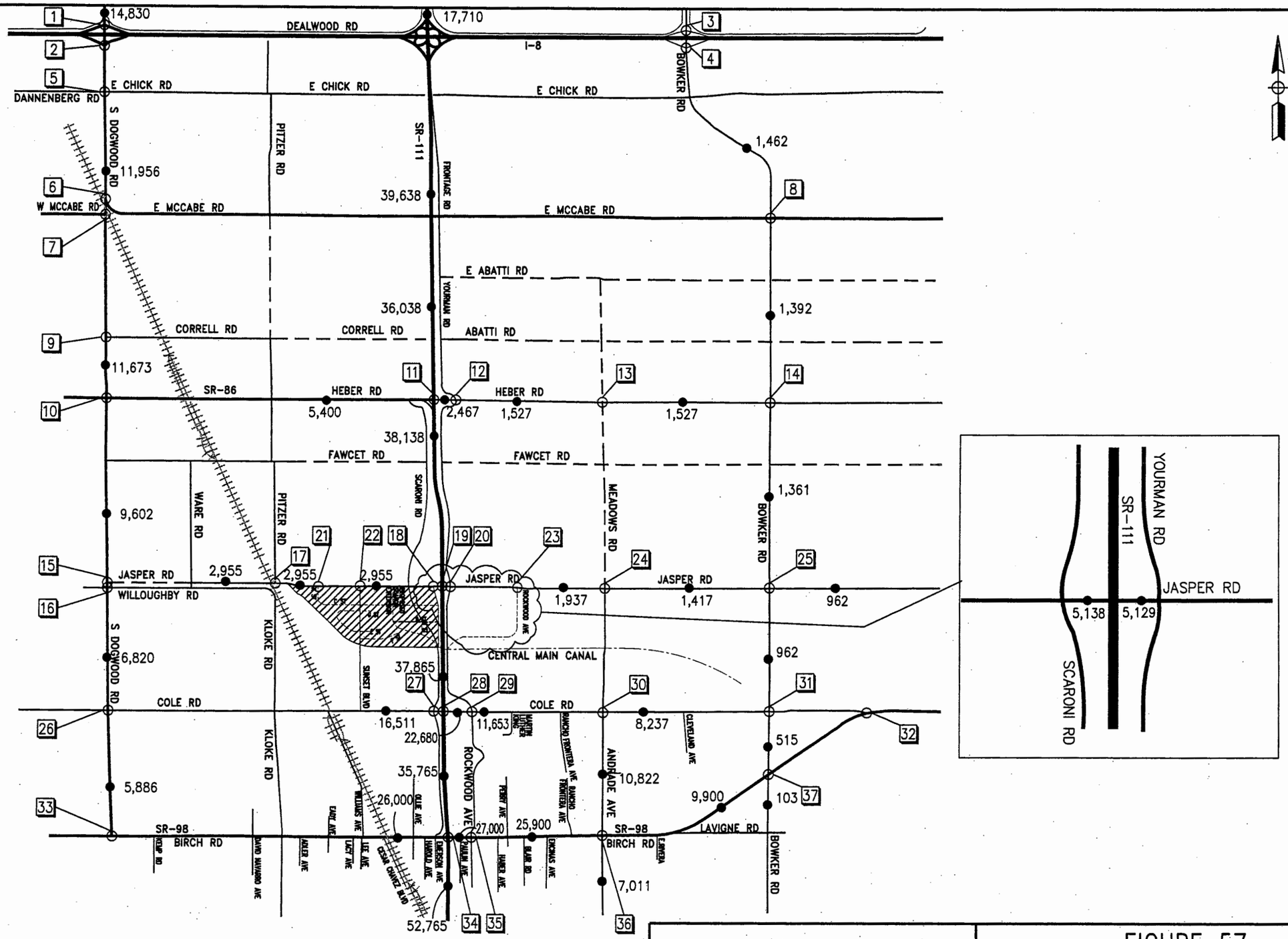
I-8 Westbound/Dogwood Road
I-8 Eastbound/Dogwood Road
Dogwood Road/Heber Road
Cole Road/Scaroni Avenue
SR-111/Cole Road
SR-98/SR-111

Existing Plus Project (Reduced Casino) - (ILV) Intersection Operation

CalTrans ILV analysis for the existing plus project condition is summarized on Table 42. As shown on Table 42, all interchanges operate at less than 1,500 ILV, which is considered acceptable.

EXISTING PLUS PROJECT (REDUCED CASINO+PHASE 1) CONDITIONS

The reduced Casino and Phase 1 project traffic was added to the existing traffic volumes. The daily traffic volumes for the existing plus project (reduced Casino+Phase 1) condition are shown on Figure 60. The intersection peak hour volumes for this condition are shown on Figure 61 for the northerly study area and Figure 62 for the southerly study area.



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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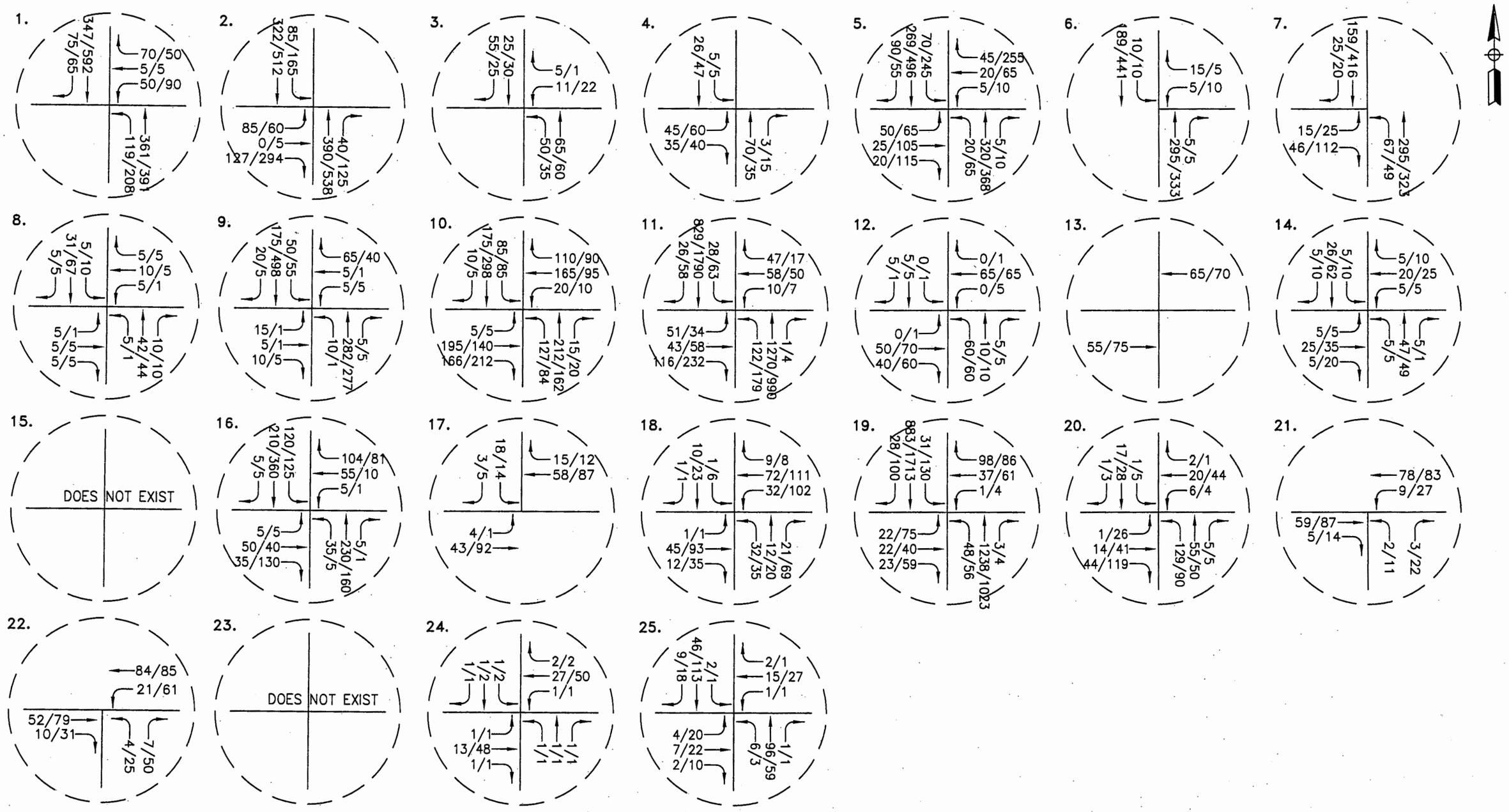
FIGURE 57

EXISTING+(REDUCED CASINO)
DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 57 FOR INTERSECTION LOCATION

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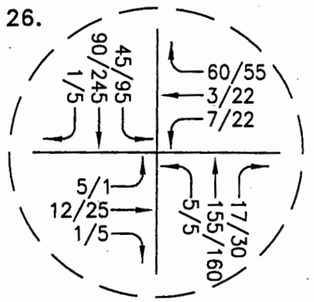
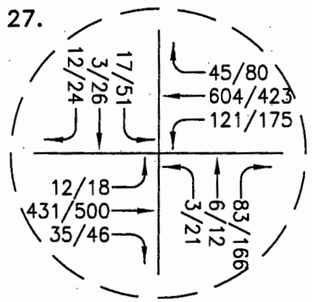
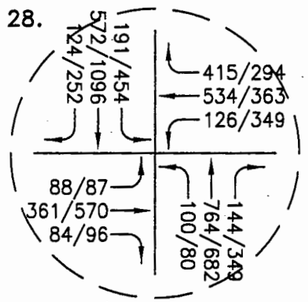
FIGURE 58

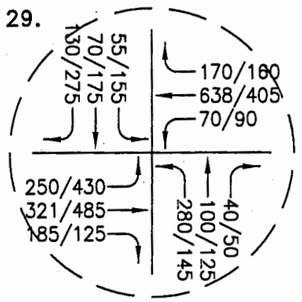
EXISTING+(REDUCED CASINO)

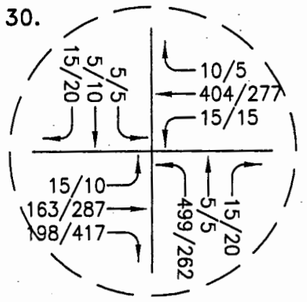
INTERSECTION TRAFFIC VOLUMES–NORTH

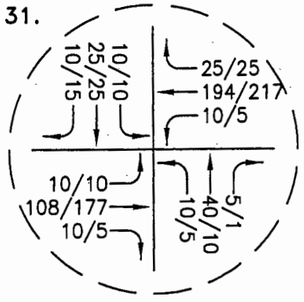


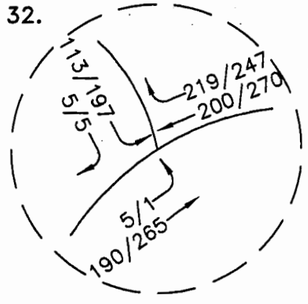


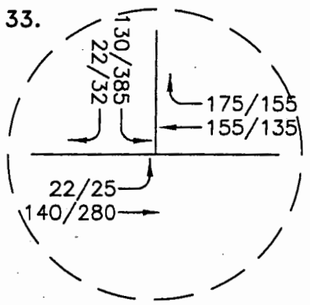


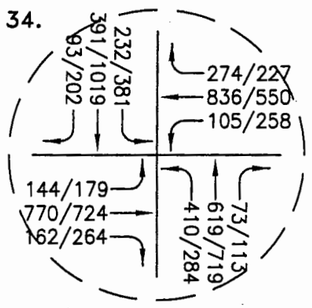


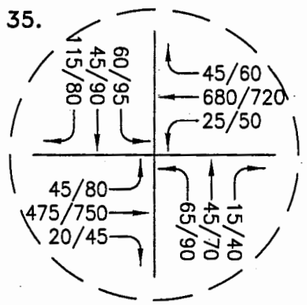


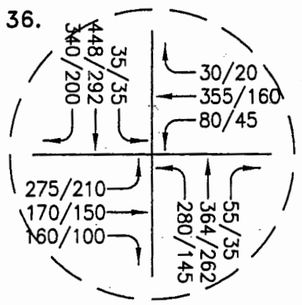


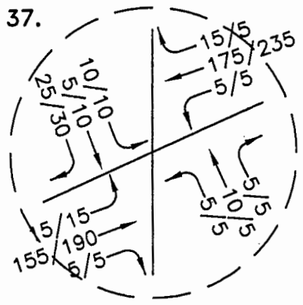












LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 57 FOR INTERSECTION LOCATION

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FIGURE 59

EXISTING+(REDUCED CASINO)

INTERSECTION TRAFFIC VOLUMES–SOUTH

Table 40 - Existing Plus Reduced Casino Only Roadway Segment Level of Service

Roadway Segment	Max Cap	Existing			Existing + Project (Reduced Casino)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	**16,200**	**14,648**	**0.904**	**E**	**182**	**14,830**	**0.915**	**0.011**	**E**	**Cuml**
I-8 to McCabe	16,200	10,864	0.671	B	1,092	11,956	0.738	0.067	C	None
McCabe to SR-86	16,200	10,126	0.625	B	1,547	11,673	0.721	0.095	C	None
SR-86 to Jasper	16,200	7,600	0.469	A	2,002	9,602	0.593	0.124	B	None
Jasper to Cole	16,200	6,820	0.421	A	0	6,820	0.421	0.000	A	None
Cole to SR-98	16,200	5,320	0.328	A	546	5,866	0.362	0.034	A	None
SR-111:										
north of I-8	56,300	16,800	0.298	A	910	17,710	0.315	0.016	A	None
I-8 to McCabe	56,300	38,000	0.675	B	1,638	39,638	0.704	0.029	C	None
McCabe to Heber	56,300	34,400	0.611	B	1,638	36,038	0.640	0.029	B	None
Heber to Jasper	56,300	36,500	0.648	B	1,638	38,138	0.677	0.029	B	None
Jasper to Cole	56,300	36,500	0.648	B	1,365	37,865	0.673	0.024	B	None
Cole to SR-98	56,300	34,400	0.611	B	1,365	35,765	0.635	0.024	B	None
South of SR-98	**60,000**	**51,400**	**0.857**	**D**	**1,365**	**52,765**	**0.879**	**0.023**	**D**	**Cuml**
Bowker Road:										
I-8 to McCabe	16,200	1,007	0.062	A	455	1,462	0.090	0.028	A	None
McCabe to Heber	16,200	937	0.058	A	455	1,392	0.086	0.028	A	None
Heber to Jasper	16,200	906	0.056	A	455	1,361	0.084	0.028	A	None
Jasper to Cole	16,200	962	0.059	A	0	962	0.059	0.000	A	None
Cole to SR-98	17,500	515	0.029	A	0	515	0.029	0.000	A	None
South of SR-98	17,500	103	0.006	A	0	103	0.006	0.000	A	None
Meadows Road:										
Cole to SR-98	17,500	10,094	0.577	A	728	10,822	0.618	0.042	B	None
South of SR-98	17,500	6,283	0.359	A	728	7,011	0.401	0.042	A	None
Jasper Road:										
Scaroni to SR-111	17,500	1,134	0.065	A	4,004	5,138	0.294	0.229	A	None
SR-111 to Yourman	17,500	4,128	0.236	A	1,001	5,129	0.293	0.057	A	None
Yourman to Meadows	17,500	412	0.024	A	1,001	1,413	0.081	0.057	A	None
Meadows to Bowker	17,500	375	0.021	A	1,001	1,376	0.079	0.057	A	None
Cole Road:										
Enterprise to SR-111	**17,500**	**15,965**	**0.912**	**E**	**546**	**16,511**	**0.943**	**0.031**	**E**	**Cuml**
SR-111 to Yourman	37,500	21,224	0.566	A	1,456	22,680	0.605	0.039	B	None
Yourman to Meadows	37,500	10,197	0.272	A	1,456	11,653	0.311	0.039	A	None
Meadows to Bowker	37,500	7,509	0.200	A	728	8,237	0.220	0.019	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 41 - Existing+Reduced Casino Only Intersection Operation

Intersection	Crit.	Existing Conditions				Existing+Reduced Casino Only						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (TWSC)	WB	**19.5**	**C**	**130.3**	**F**	**19.8**	**C**	**0.3**	**179.6**	**F**	**49.3**	**Cuml**
I-8 Eastbound/Dogwood (TWSC)	EB	**20.7**	**C**	**43.6**	**E**	**20.7**	**C**	**0.0**	**48.6**	**E**	**5.0**	**Cuml**
I-8 Westbound/Bowker (TWSC)	WB	9.5	A	9.7	A	9.7	A	0.2	9.8	A	0.1	None
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A	9.1	A	0.0	9.2	A	0.1	None
Dogwood/Chick (Signal)	Int.	3.5	A	6.9	A	3.5	A	0.0	7.0	A	0.1	None
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B	10.8	B	0.1	14.6	B	0.9	None
Dogwood/McCabe South (AWSC)	EB	8.2	A	9.5	A	8.3	A	0.1	10.2	B	0.7	None
	NB	11.0	B	12.1	B	11.3	B	0.3	14.2	B	2.1	
	SB	8.7	A	13.5	B	8.9	A	0.2	16.2	C	2.7	
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A	9.4	A	0.0	9.3	A	0.1	None
	SB	9.3	A	9.4	A	9.4	A	0.1	9.5	A	0.1	
Dogwood/Abatti (TWSC)	EB	14.5	B	12.7	B	15.0	C	0.5	13.8	B	1.1	None
	WB	11.6	B	11.0	B	11.7	B	0.1	11.7	B	0.7	
Dogwood/Heber (AWSC)	EB	**33.4**	**D**	**18.1**	**C**	**41.5**	**E**	**8.1**	**26.0**	**D**	**7.9**	**Cuml**
	WB	**25.3**	**D**	**13.3**	**B**	**29.1**	**D**	**3.8**	**16.1**	**C**	**2.8**	
	NB	**34.8**	**D**	**14.2**	**B**	**43.7**	**E**	**8.9**	**20.3**	**C**	**6.1**	
	SB	**22.8**	**C**	**19.6**	**C**	**27.8**	**D**	**5.0**	**34.0**	**D**	**14.4**	
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C	12.9	B	0.0	28.9	C	2.0	None
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B	9.9	A	0.0	10.3	B	0.0	None
	SB	9.3	A	10.1	B	9.3	A	0.0	10.1	B	0.0	
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B	9.9	A	0.1	10.2	B	0.1	None
	SB	9.6	A	10.1	B	9.6	A	0.0	10.3	B	0.2	
Dogwood/Willoughby (TWSC)	EB	18.0	C	15.4	C	19.6	C	1.6	17.9	C	2.5	None
	WB	16.8	C	12.0	B	18.0	C	1.2	12.0	B	0.0	
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A	9.2	A	0.2	9.5	A	0.7	None
Jasper/Scaroni (AWSC)	EB	7.3	A	7.2	A	7.5	A	0.2	8.4	A	1.2	None
	WB	7.4	A	7.6	A	7.9	A	0.5	9.6	B	2.0	
	NB	7.4	A	7.3	A	7.7	A	0.3	8.5	A	1.2	
	SB	7.3	A	7.4	A	7.5	A	0.2	8.3	A	0.9	
Jasper/SR-111 (Signal)	Int.	14.0	B	20.1	C	15.7	B	1.7	34.0	C	13.9	None
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B	10.5	B	0.2	11.9	B	0.9	None
	SB	9.5	A	10.4	B	9.6	A	0.1	11.0	B	0.6	
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A	8.8	A	0.0	9.1	A	0.3	None
	SB	8.8	A	8.9	A	8.9	A	0.1	9.3	A	0.4	
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A	10.0	B	0.1	10.7	B	0.9	None
	WB	10.1	B	10.3	B	10.3	B	0.2	10.8	B	0.5	
Dogwood/Cole (TWSC)	EB	12.1	B	13.2	B	12.2	B	0.1	15.8	C	2.6	None
	WB	9.8	A	10.7	B	10.0	B	0.2	14.2	B	3.5	
Cole/Scaroni (TWSC)	NB	**22.5**	**C**	**121.1**	**F**	**23.5**	**C**	**1.0**	**209.4**	**F**	**88.3**	**Cuml**
	SB	**114.1**	**F**	**343.8**	**F**	**166.1**	**F**	**52.0**	*	**F**	*	
SR-111/Cole (Signal)	Int.	**38.2**	**D**	**42.9**	**D**	**38.9**	**D**	**0.7**	**42.9**	**D**	**0.0**	**Cuml**
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C	33.4	C	0.2	32.7	C	0.2	None
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B	24.5	C	0.1	15.1	B	0.4	None
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A	7.8	A	0.1	8.4	A	0.3	None
	WB	9.2	A	9.1	A	9.4	A	0.2	9.5	A	0.4	
	NB	8.3	A	8.1	A	8.3	A	0.0	8.3	A	0.2	
	SB	8.1	A	8.2	A	8.2	A	0.1	8.3	A	0.1	
SR-98/Cole (Signal)	Int.	6.3	B	7.3	A	6.3	A	0.0	7.4	A	0.1	None
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A	6.8	A	0.1	10.4	B	0.7	None
SR-98/SR-111 (Signal)	Int.	**32.0**	**C**	**38.6**	**D**	**32.3**	**C**	**0.3**	**39.6**	**D**	**1.0**	**Cuml**
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B	11.5	B	0.0	17.6	B	0.0	None
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B	26.8	C	0.1	17.4	B	0.2	None
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B	11.6	B	0.0	12.2	B	0.0	None
	SB	10.6	B	11.5	B	10.6	B	0.0	11.5	B	0.0	

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 42 - Summary of Existing Plus Reduced Casino Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	Existing Condition		Existing + Reduced Casino			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111/Heber	870	1305	874	4	1335	30
SR-111/Jasper	748	1092	767	19	1211	119
SR-111/Cole	1078	1363	1104	26	1439	76
SR-111/SR-98	1105	1221	1113	8	1242	21
SR-98/Cole	330	451	342	12	473	22
SR-98/Dogwood	480	840	489	9	877	37
SR-98/Rockwood	628	743	628	0	743	0
SR-98/Meadows/Andrade	936	550	936	0	550	0

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

Existing Plus Project (Reduced Casino+Phase 1) Roadway Segments

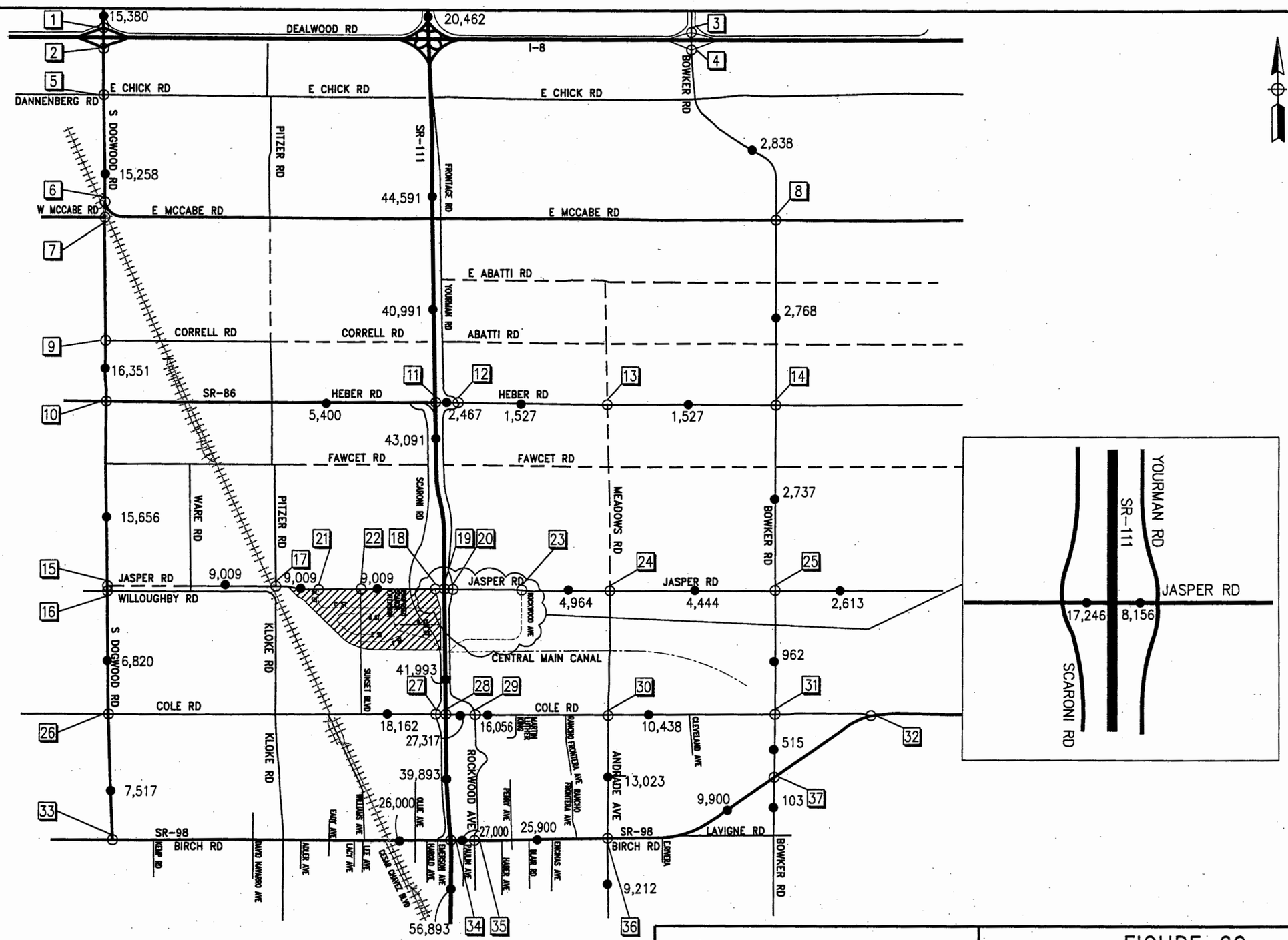
The roadway segments were analyzed with the project traffic (Reduced Casino+Phase 1) added to existing traffic volumes. The roadway segments daily levels of service are summarized in Table 43. As shown on Table 43, the following segments demonstrate deficiencies with the addition of project traffic:

Dogwood Road: north of I-8
Dogwood Road: I-8 to McCabe
Dogwood Road: McCabe to Heber
Dogwood Road: SR-86 (Heber) to Jasper
SR-111: south of SR-98
Jasper Road: Scaroni to SR-111
Cole Road: Enterprise to SR-111

Existing Plus Project (Reduced Casino+Phase 1) Intersection Operation

Intersection operation for the existing plus project condition is summarized on Table 44. As shown on Table 44, the following intersections report deficiencies:

I-8 Westbound/Dogwood Road
I-8 Eastbound/Dogwood Road
Dogwood/McCabe
Dogwood Road/Heber Road
Dogwood/Willoughby (realign to Jasper)
Jasper Road/Scaroni Road
Jasper Road/SR-111



LEGEND

- DIRT ROAD
- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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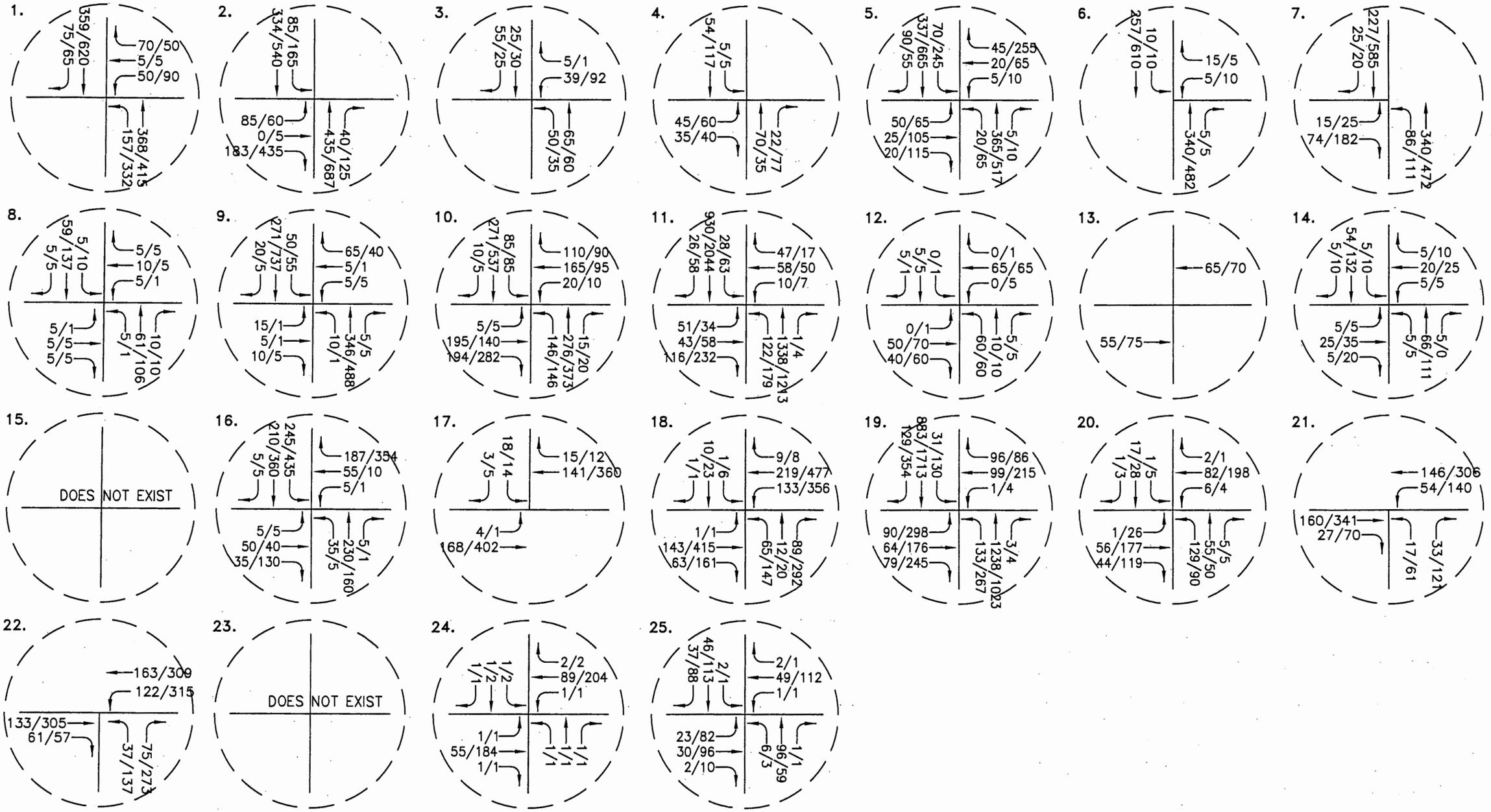
FIGURE 60

EXISTING+(REDUCED CASINO+PHASE 1)
DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 60 FOR INTERSECTION LOCATION

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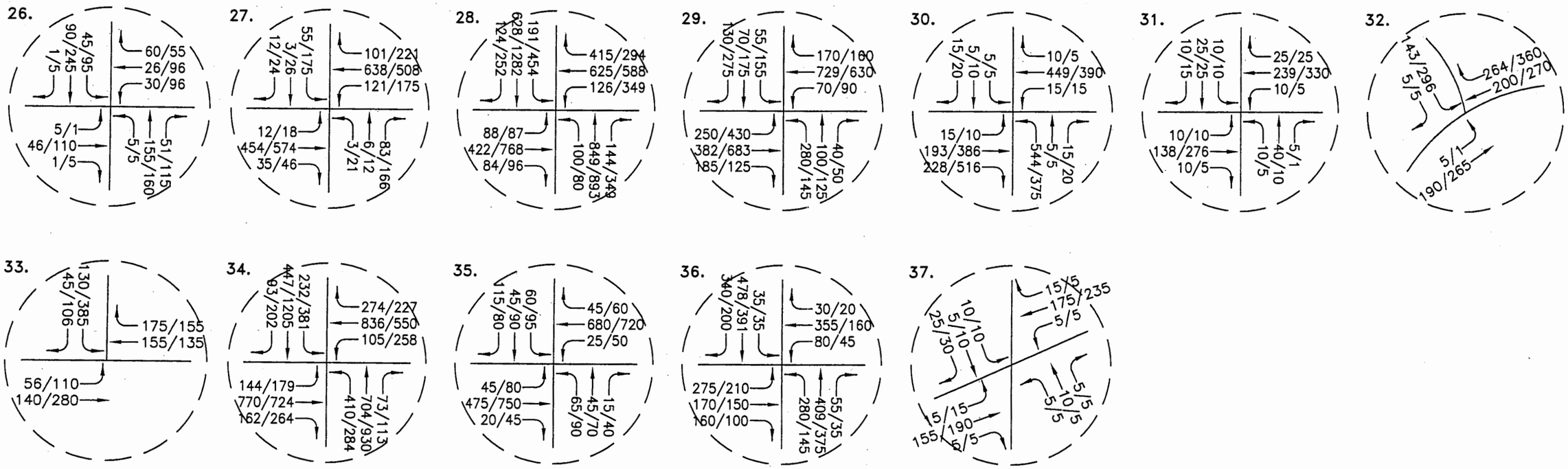
FIGURE 61

EXISTING+REDUCED CASINO+PHASE 1

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 60 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

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FIGURE 62

EXISTING+ REDUCED CASINO+PHASE 1

INTERSECTION TRAFFIC VOLUMES–SOUTH

Table 43 - Existing Plus Reduced Casino+Phase 1 Roadway Segment Level of Service

Roadway Segment	Max Cap	Existing			Existing + Project (Reduced Casino+Phase 1)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	**16,200**	**14,648**	**0.904**	**E**	**732**	**15,380**	**0.949**	**0.045**	**E**	**Cuml**
I-8 to McCabe	**16,200**	**10,864**	**0.671**	**B**	**4,394**	**15,258**	**0.942**	**0.271**	**E**	**Direct**
McCabe to SR-86	**16,200**	**10,126**	**0.625**	**B**	**6,225**	**16,351**	**1.009**	**0.384**	**F**	**Direct**
SR-86 to Jasper	**16,200**	**7,600**	**0.469**	**A**	**8,056**	**15,656**	**0.966**	**0.497**	**E**	**Direct**
Jasper to Cole	16,200	6,820	0.421	A	0	6,820	0.421	0.000	A	None
Cole to SR-98	16,200	5,320	0.328	A	2,197	7,517	0.464	0.136	A	None
SR-111:										
north of I-8	56,300	16,800	0.298	A	3,662	20,462	0.363	0.065	A	None
I-8 to McCabe	56,300	38,000	0.675	B	6,591	44,591	0.792	0.117	C	None
McCabe to Heber	56,300	34,400	0.611	B	6,591	40,991	0.728	0.117	C	None
Heber to Jasper	56,300	36,500	0.648	B	6,591	43,091	0.765	0.117	C	None
Jasper to Cole	56,300	36,500	0.648	B	5,493	41,993	0.746	0.098	C	None
Cole to SR-98	56,300	34,400	0.611	B	5,493	39,893	0.709	0.098	C	None
South of SR-98	**60,000**	**51,400**	**0.857**	**D**	**5,493**	**56,893**	**0.948**	**0.092**	**E**	**Cuml**
Bowker Road:										
I-8 to McCabe	16,200	1,007	0.062	A	1,831	2,838	0.175	0.113	A	None
McCabe to Heber	16,200	937	0.058	A	1,831	2,768	0.171	0.113	A	None
Heber to Jasper	16,200	906	0.056	A	1,831	2,737	0.169	0.113	A	None
Jasper to Cole	16,200	962	0.059	A	0	962	0.059	0.000	A	None
Cole to SR-98	17,500	515	0.029	A	0	515	0.029	0.000	A	None
South of SR-98	17,500	103	0.006	A	0	103	0.006	0.000	A	None
Meadows Road:										
Cole to SR-98	17,500	10,094	0.577	A	2,929	13,023	0.744	0.167	C	None
South of SR-98	17,500	6,283	0.359	A	2,929	9,212	0.526	0.167	A	None
Jasper Road:										
Scaroni to SR-111	**17,500**	**936**	**0.053**	**A**	**16,112**	**17,048**	**0.974**	**0.921**	**F**	**Direct**
SR-111 to Yourman	17,500	412	0.024	A	4,028	4,440	0.254	0.230	A	None
Yourman to Meadows	17,500	412	0.024	A	4,028	4,440	0.254	0.230	A	None
Meadows to Bowker	17,500	375	0.021	A	4,028	4,403	0.252	0.230	A	None
Cole Road:										
Enterprise to SR-111	**17,500**	**15,965**	**0.912**	**E**	**2,197**	**18,162**	**1.038**	**0.126**	**F**	**Cuml**
SR-111 to Yourman	37,500	21,224	0.566	A	5,859	27,083	0.722	0.156	C	None
Yourman to Meadows	37,500	10,197	0.272	A	5,859	16,056	0.428	0.156	A	None
Meadows to Bowker	37,500	7,509	0.200	A	2,929	10,438	0.278	0.078	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 44 - Existing+Project (Reduced Casino+Phase 1) Intersection Operation

Intersection	Crit.	Existing Conditions				Existing+Project (Reduced Casino+Phase 1)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (TWSC)	**WB**	**19.5**	**C**	**130.3**	**F**	**23.4**	**C**	**3.9**	**578.7**	**F**	**448.4**	**Cuml**
I-8 Eastbound/Dogwood (TWSC)	**EB**	**20.7**	**C**	**43.6**	**E**	**21.0**	**C**	**0.3**	**105.3**	**F**	**61.7**	**Cuml**
I-8 Westbound/Bowker (TWSC)	WB	9.5	A	9.7	A	10.2	B	0.7	10.0	A	0.3	None
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A	9.4	A	0.3	9.8	A	0.7	None
Dogwood/Chick (Signal)	Int.	3.5	A	6.9	A	3.5	A	0.0	8.4	A	1.5	None
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B	11.4	B	0.7	20.2	C	6.5	None
Dogwood/McCabe South (AWSC)	**EB**	8.2	A	9.5	A	**8.9**	**A**	**0.7**	**13.9**	**B**	**4.4**	**Direct**
	NB	11.0	B	12.1	B	**13.8**	**B**	**2.8**	**61.0**	**F**	**48.9**	
	SB	8.7	A	13.5	B	**10.2**	**B**	**1.5**	**68.0**	**F**	**54.5**	
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A	9.6	A	0.2	9.8	A	0.6	None
	SB	9.3	A	9.4	A	9.6	A	0.3	10.1	B	0.7	
Dogwood/Abatti (TWSC)	EB	14.5	B	12.7	B	18.3	C	3.8	20.8	C	8.1	None
	WB	11.6	B	11.0	B	12.8	B	1.2	15.8	C	4.8	
Dogwood/Heber (AWSC)	**EB**	**33.4**	**D**	**18.1**	**C**	**90.7**	**F**	**57.3**	**81.2**	**F**	**63.1**	**Cuml**
	WB	**25.3**	**D**	**13.3**	**B**	**45.5**	**E**	**20.2**	**23.1**	**C**	**9.8**	
	NB	**34.8**	**D**	**14.2**	**B**	**146.9**	**F**	**112.1**	**208.4**	**F**	**194.2**	
	SB	**22.8**	**C**	**19.6**	**C**	**80.9**	**F**	**58.1**	**303.1**	**F**	**283.5**	
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C	13.4	B	0.5	29.9	D	3.0	None
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B	9.9	A	0.0	10.3	B	0.0	None
	SB	9.3	A	10.1	B	9.3	A	0.0	10.1	B	0.0	
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B	10.1	B	0.3	10.9	B	0.8	None
	SB	9.6	A	10.1	B	10.0	A	0.4	11.3	B	1.2	
Dogwood/Willoughby (TWSC)	**EB**	18.0	C	15.4	**C**	**36.5**	**E**	**18.5**	**138.9**	**F**	**123.5**	**Direct**
	WB	16.8	C	12.0	B	**30.7**	**D**	**13.9**	**19.8**	**C**	**7.8**	
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A	10.6	B	1.6	14.9	B	6.1	None
Jasper/Scaroni (AWSC)	**EB**	7.3	A	7.2	A	**9.8**	**A**	**2.5**	**138.2**	**F**	**131.0**	**Direct**
	WB	7.4	A	7.6	A	**13.0**	**B**	**5.6**	**402.8**	**F**	**395.2**	
	NB	7.4	A	7.3	A	**10.0**	**B**	**2.6**	**56.2**	**F**	**48.9**	
	SB	7.3	A	7.4	A	**8.9**	**A**	**1.6**	**13.4**	**B**	**6.0**	
Jasper/SR-111 (Signal)	**Int.**	14.0	B	20.1	**C**	**34.4**	**C**	**20.4**	**288.9**	**F**	**268.8**	**Direct**
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B	11.8	B	1.5	19.2	C	8.2	None
	SB	9.5	A	10.4	B	10.4	B	0.9	15.0	B	4.6	
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A	9.4	A	0.6	11.0	B	2.2	None
	SB	8.8	A	8.9	A	9.4	A	0.6	11.4	B	2.5	
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A	11.1	B	1.2	16.1	C	6.3	None
	WB	10.1	B	10.3	B	11.1	B	1.0	13.2	B	2.9	
Dogwood/Cole (TWSC)	**EB**	12.1	B	13.2	B	**13.2**	**B**	**1.1**	**25.1**	**D**	**11.9**	**Direct**
	WB	9.8	A	10.7	B	**12.1**	**B**	**2.3**	**75.1**	**F**	**64.4**	
Cole/Scaroni (TWSC)	**NB**	**22.5**	**C**	**121.1**	**F**	**33.8**	**D**	**11.3**	*	**F**	*	**Cuml**
	SB	**114.1**	**F**	**343.8**	**F**	*	**F**	*	*	**F**	*	
SR-111/Cole (Signal)	**Int.**	**38.2**	**D**	**42.9**	**D**	**41.4**	**D**	**3.2**	**73.1**	**E**	**30.2**	**Cuml**
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C	34.7	C	1.5	34.1	C	1.6	None
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B	24.6	C	0.2	16.6	B	1.9	None
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A	8.2	A	0.5	10.4	B	2.3	None
	WB	9.2	A	9.1	A	10.1	B	0.9	12.0	B	2.9	
	NB	8.3	A	8.1	A	8.5	A	0.2	8.9	A	0.8	
	SB	8.1	A	8.2	A	8.4	A	0.3	8.9	A	0.7	
SR-98/Cole (Signal)	Int.	6.3	B	7.3	A	6.4	A	0.1	8.2	A	0.9	None
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A	8.4	A	1.7	16.3	B	6.6	None
SR-98/SR-111 (Signal)	**Int.**	**32.0**	**C**	**38.6**	**D**	**33.8**	**C**	**1.8**	**46.8**	**D**	**8.2**	**Cuml**
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B	11.5	B	0.0	17.6	B	0.0	None
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B	26.7	C	0.0	18.2	B	1.0	None
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B	11.6	B	0.0	12.2	B	0.0	None
	SB	10.6	B	11.5	B	10.6	B	0.0	11.5	B	0.0	

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Dogwood Road/Cole Road
Cole Road/Scaroni Avenue
SR-111/Cole Road
SR-98/SR-111

Existing Plus Project (Casino+Phase 1) - (ILV) Intersection Operation

CalTrans ILV analysis for the existing plus project condition is summarized on Table 45. As shown on Table 45, the following intersections demonstrate deficiencies based on Caltrans criteria:

SR-111/Jasper Road
SR-111/Cole Road

Table 45 - Summary of Existing Plus Reduced Casino+Phase 1 Intersection Operation Caltrans Intersecting Lane Volumes (ILV)

Intersection	Existing Condition		Existing + Reduced Casino+Phase 1			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111/Heber	870	1305	908	38	1462	157
SR-111/Jasper	748	1092	987	239	**2020**	928
SR-111/Cole	1078	1363	1238	160	**1757**	394
SR-111/SR-98	1105	1221	1156	51	1335	114
SR-98/Cole	330	451	417	87	662	211
SR-98/Dogwood	480	840	546	66	1036	196
SR-98/Rockwood	628	743	628	0	743	0
SR-98/Meadows/Andrade	936	550	936	0	555	5

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

YEAR 2015 IMPACTS (REDUCED CASINO)

The following analysis of the Year 2015 condition for the reduced casino alternative assumes the same base condition and configurations as reported previously in this report for the "proposed project" including the same intensity of cumulative projects' traffic contributions.

YEAR 2015 WITH PROJECT CONDITIONS

The Year 2015 condition was analyzed using two separate project scenarios. The initial assessment is based on development of the reduced casino facility (with hotel). The second analysis assumes buildout of the entire project (all phases with reduced hotel) set upon the year 2015 base condition.

Project (reduced Casino phase) traffic was added to the base Year 2015. Figure 63 illustrates the Year 2015 plus project (reduced casino) daily traffic volumes. Figure 64 shows the intersection volumes for this condition on the northern study area, and Figure 65 for the southern study area.

Total project traffic (all phases) was added to the base Year 2015. Figure 66 illustrates the Year 2015 plus total project daily traffic volumes. Figure 67 shows the intersection volumes for this condition on the northern study area, and Figure 68 for the southern study area.

Year 2015 (With Reduced Casino) Roadway Segment Operation

The roadway segments were analyzed under Year 2015 conditions with and without the project (reduced Casino). The roadway segments daily levels of service are summarized in Table 46. As shown in Table 46, no additional impacts are identified with development of the Casino phase beyond those improvements assumed for this project condition.

Year 2015 (With Reduced Casino) Intersection Operation

Intersection operation for the Year 2015 condition is summarized in Table 47. For the year 2015, diamond interchanges are assumed along SR-111 at Heber Road, Jasper Road, and Cole Road, as a result of cumulative traffic volumes. The following intersection reports deficiencies for the Year 2015 condition with the Casino phase:

Jasper/Rockwood
Cole/Yourman
SR-98/SR-111

Year 2015 (With Reduced Casino) CalTrans (ILV) Intersection Operation

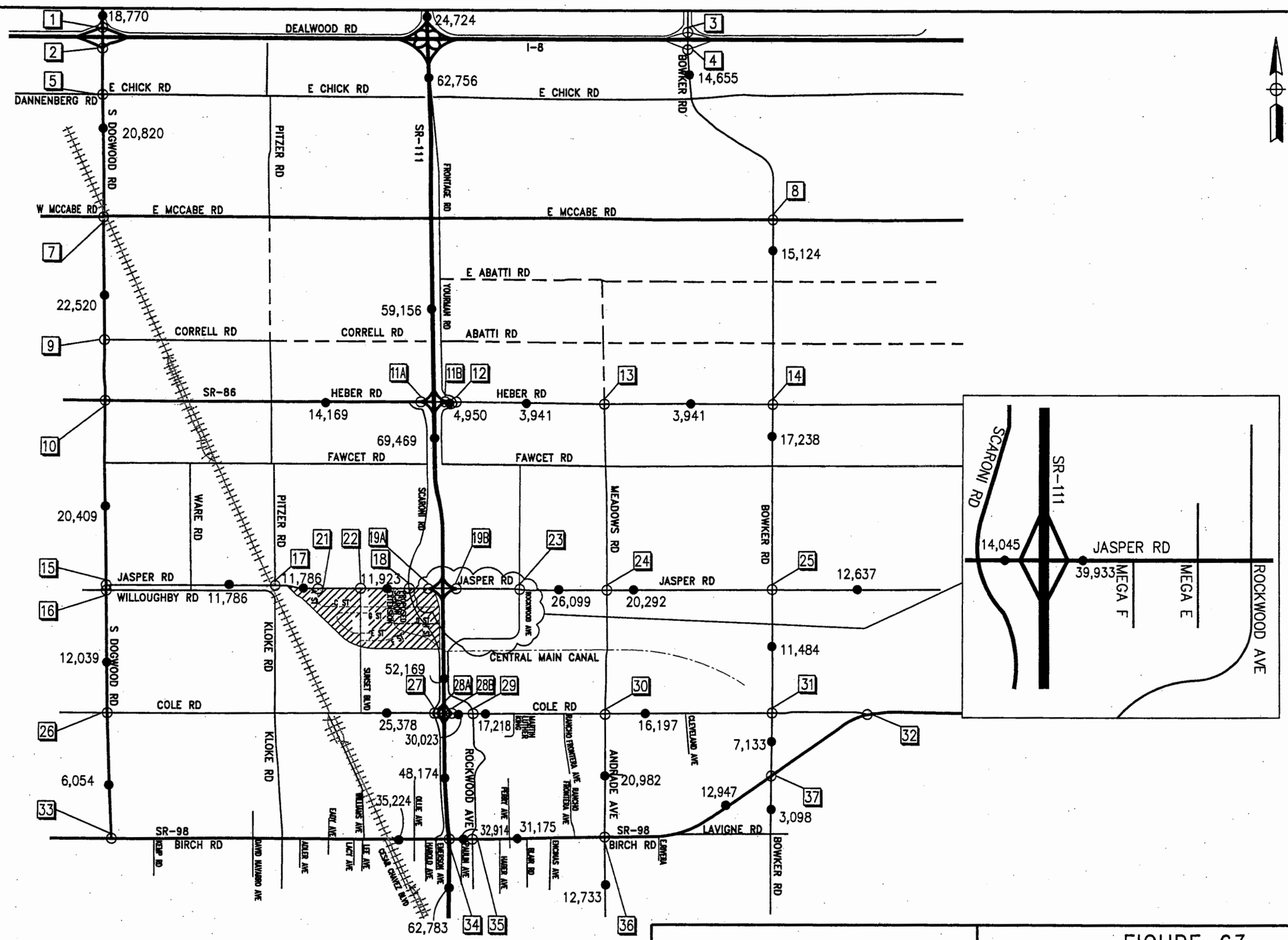
CalTrans intersection operation methodology on SR-111 interchange locations is summarized on Table 48. As shown on Table 48, the following intersection exceeds CalTrans capacity for the Year 2015 condition:

State Route-111/State Route-98 - (greater than 1,500 conflicting vehicles)

Year 2015 (With Total Project Reduced Casino) Roadway Segment Operation

The roadway segments were analyzed under Year 2015 conditions with and without the total project (all phases with reduced casino). The roadway segments daily levels of service are summarized in Table 49. As shown in Table 49, the following roadways demonstrate deficiencies:

Dogwood: McCabe to SR-86
Dogwood: SR-86 to Jasper
Jasper Road: Scaroni to SR-111
Jasper Road: SR-111 to Rockwood



LEGEND

- DIRT ROAD
- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

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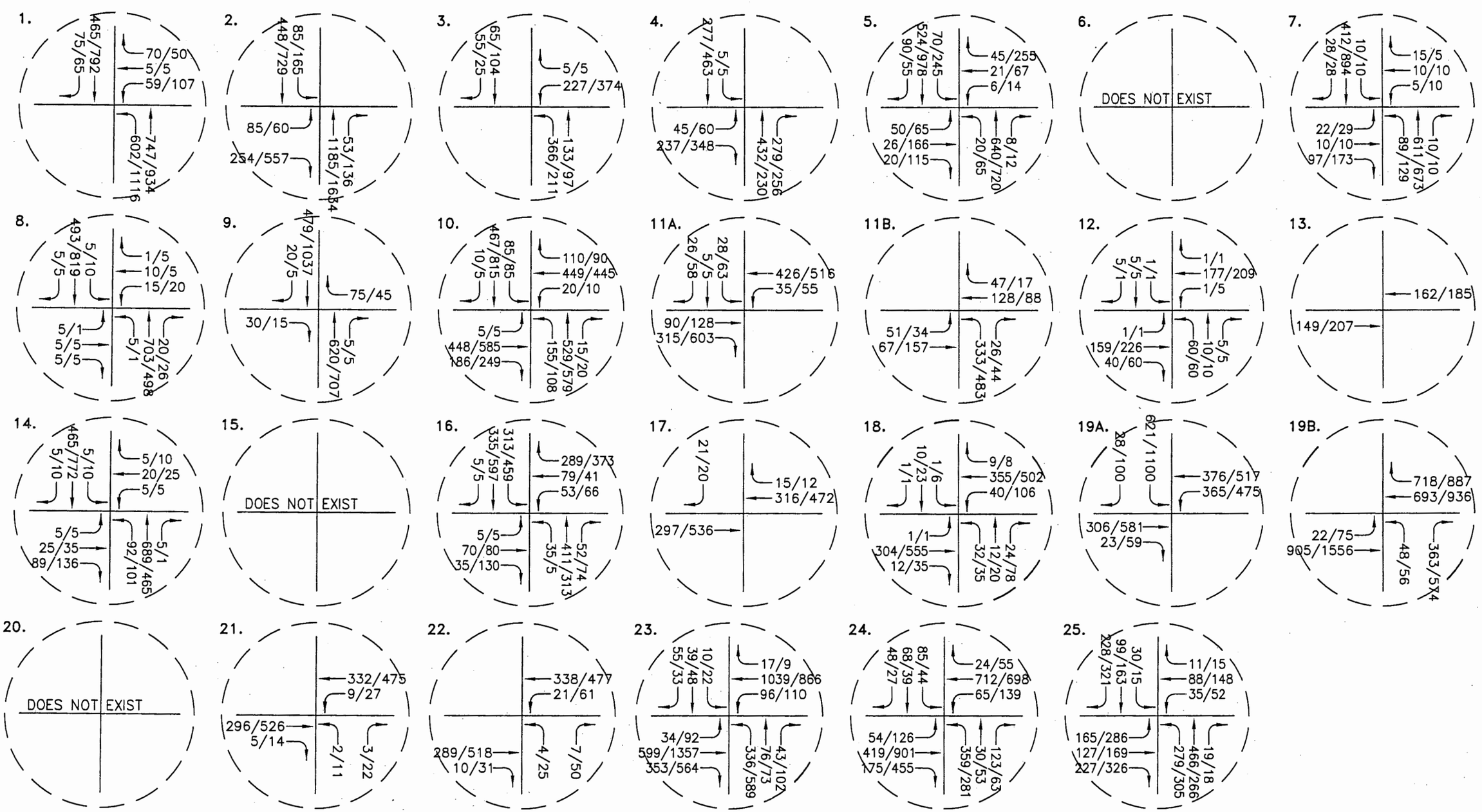
FIGURE 63
2015+REDUCED CASINO DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 60 FOR INTERSECTION LOCATION

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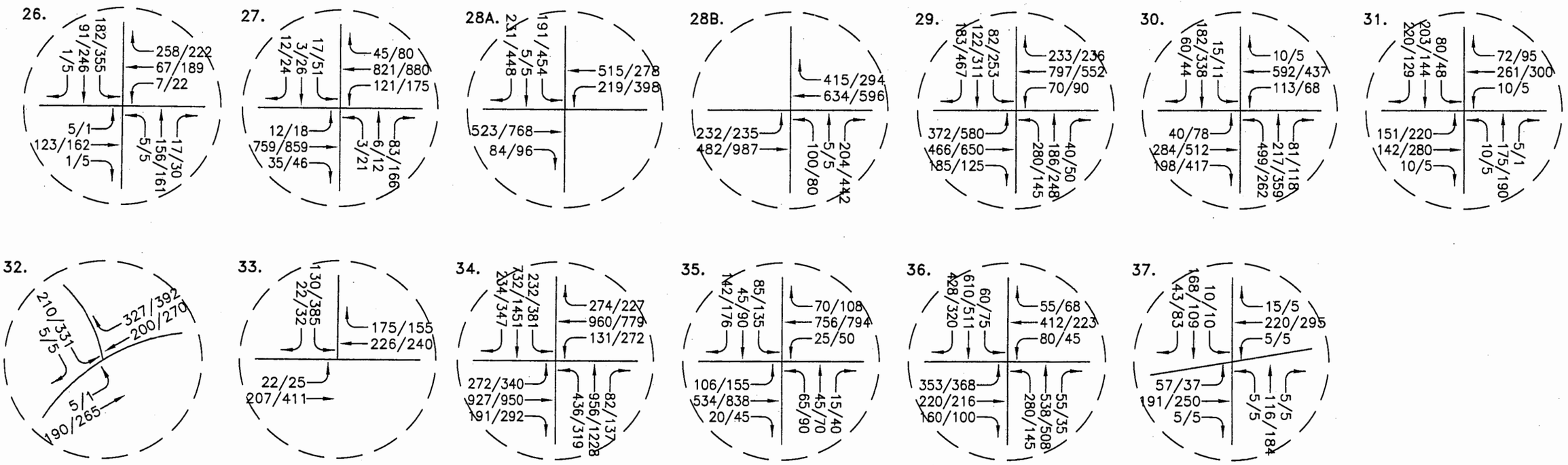
FIGURE 64

2015+REDUCED CASINO

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 65 FOR INTERSECTION LOCATION

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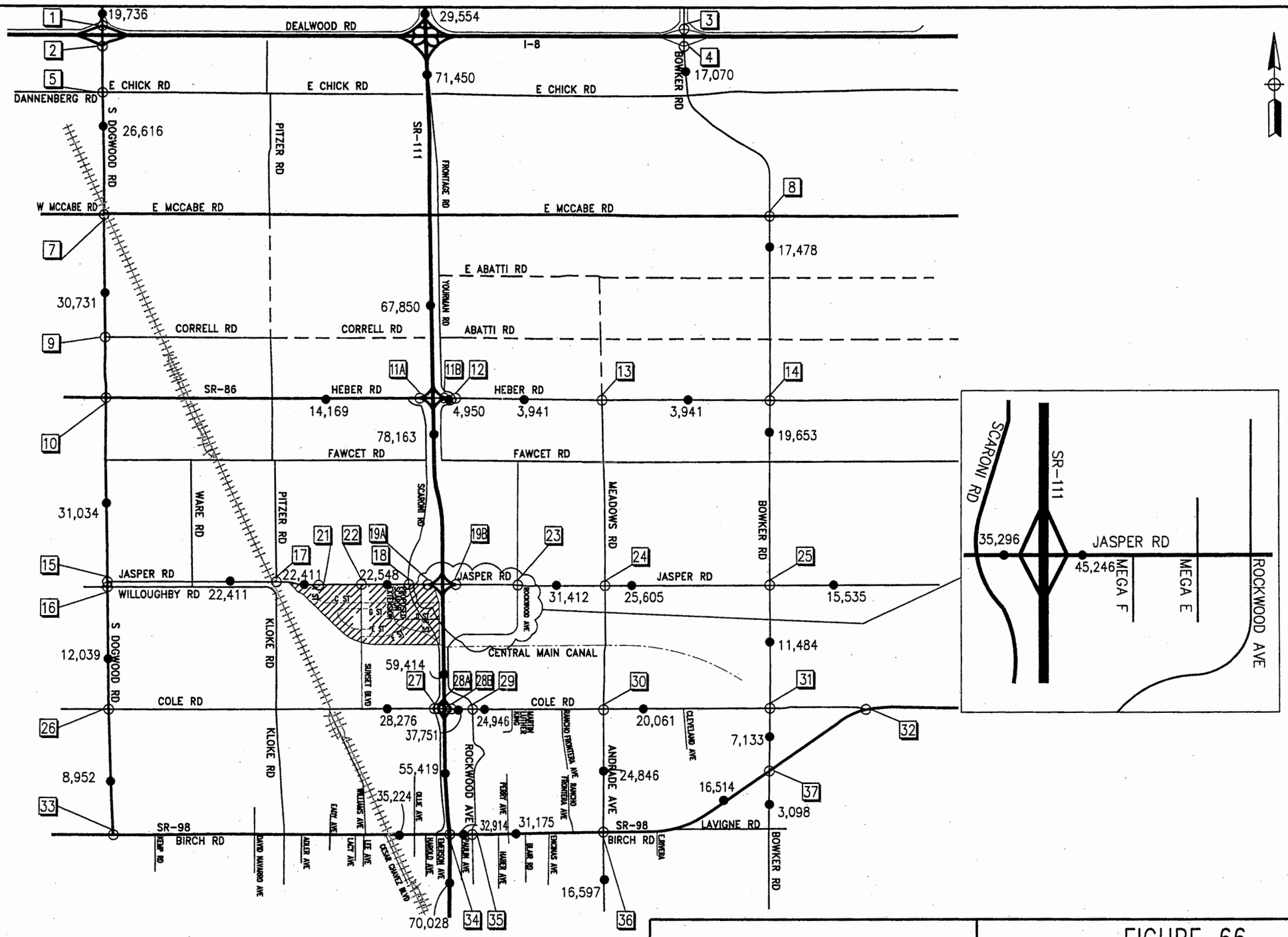
FIGURE 65

2015+REDUCED CASINO

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

- — — — DIRT ROAD
- ---------- FUTURE ROAD
- [#] – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- ▨ – PROJECT SITE

Darnell & ASSOCIATES, INC.

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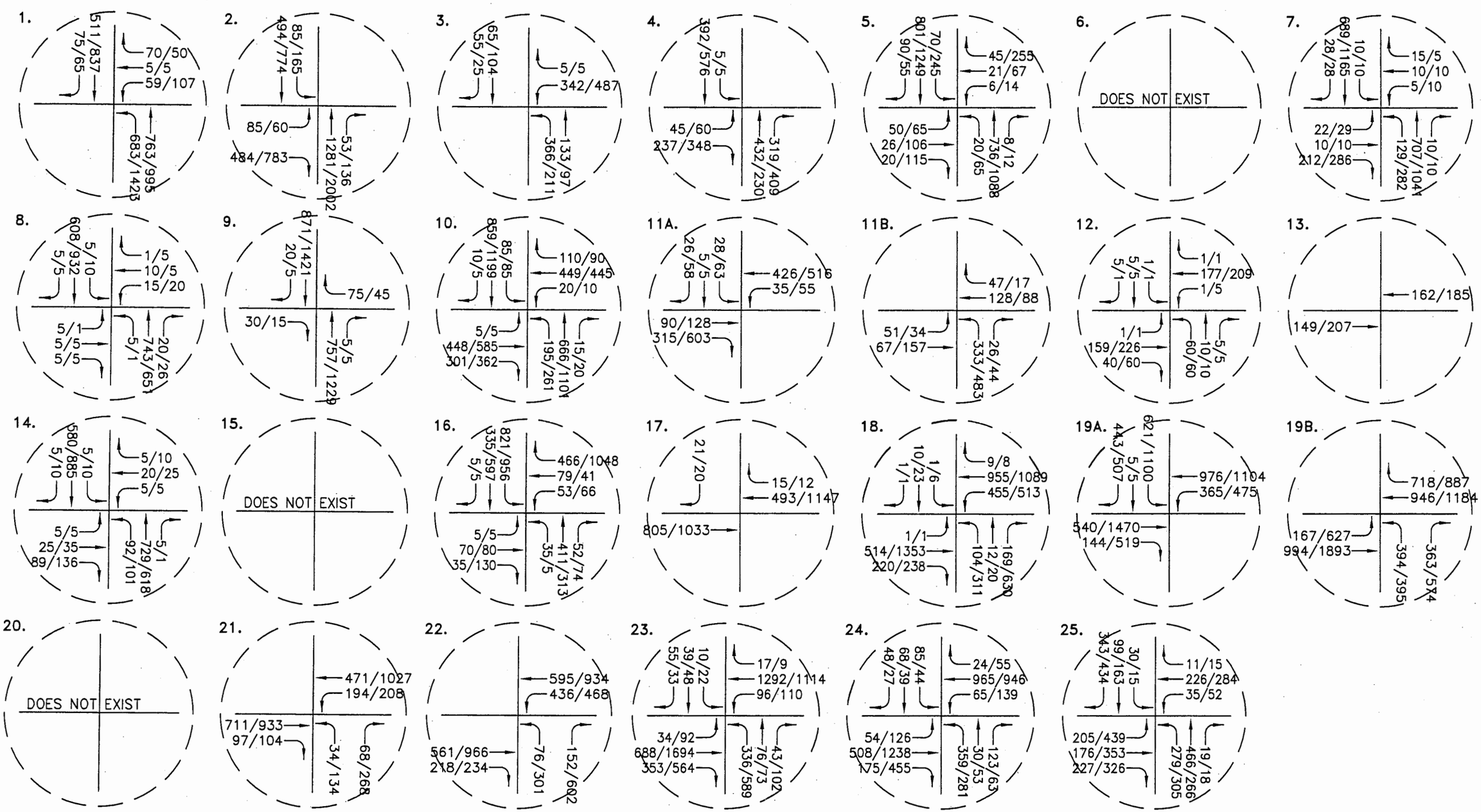
FIGURE 66

2015+PROJECT (REDUCED CASINO) DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 66 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

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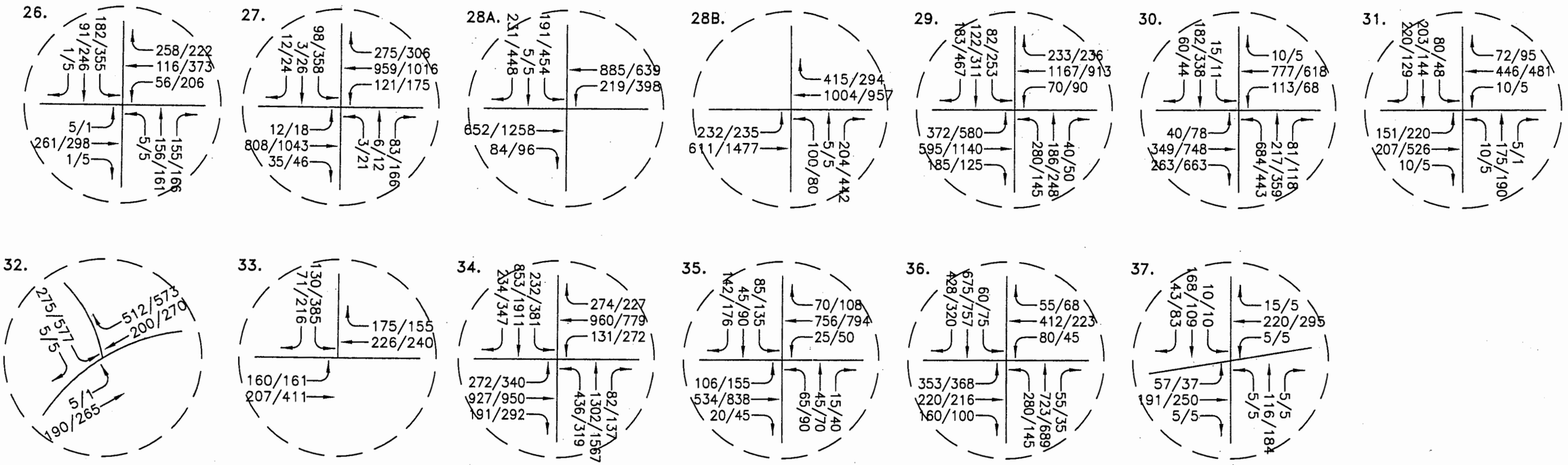
FIGURE 67

2015+PROJECT (REDUCED CASINO)

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 66 FOR INTERSECTION LOCATION

Darnell & ASSOCIATES, INC.

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FIGURE 68

2015+PROJECT (REDUCED CASINO)

INTERSECTION TRAFFIC VOLUMES-SOUTH

Table 46 - Year 2015 Plus Reduced Casino Roadway Segment Level of Service

Roadway Segment	Max Cap	Year 2015			Year 2015+Reduced Casino Only					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	34,200	18,588	0.544	B	182	18,770	0.549	0.005	B	None
I-8 to McCabe	37,000	19,728	0.533	B	1,092	20,820	0.563	0.030	A	None
McCabe to SR-86	37,000	20,973	0.567	B	1,547	22,520	0.609	0.042	B	None
SR-86 to Jasper	37,000	18,407	0.497	A	2,002	20,409	0.552	0.054	A	None
Jasper to Cole	34,200	12,039	0.352	A	0	12,039	0.352	0.000	A	None
Cole to SR-98	34,200	5,508	0.161	A	546	6,054	0.177	0.016	A	None
SR-111:										
north of I-8	56,300	23,814	0.423	A	910	24,724	0.439	0.016	A	None
I-8 to McCabe	90,000	61,118	0.679	B	1,638	62,756	0.697	0.018	B	None
McCabe to Heber	90,000	57,518	0.639	B	1,638	59,156	0.657	0.018	B	None
Heber to Jasper	105,000	67,831	0.646	B	1,638	69,469	0.662	0.016	B	None
Jasper to Cole	90,000	50,804	0.564	A	1,365	52,169	0.580	0.015	A	None
Cole to SR-98	90,000	46,809	0.520	A	1,365	48,174	0.535	0.015	A	None
South of SR-98	90,000	61,418	0.682	B	1,365	62,783	0.698	0.015	B	None
Bowker Road:										
I-8 to McCabe	25,000	14,200	0.568	A	455	14,655	0.586	0.018	A	None
McCabe to Heber	25,000	14,608	0.584	A	455	15,063	0.603	0.018	B	None
Heber to Jasper	25,000	16,783	0.671	B	455	17,238	0.690	0.018	B	None
Jasper to Cole	25,000	11,484	0.459	A	0	11,484	0.459	0.000	A	None
Cole to SR-98	17,500	7,133	0.408	A	0	7,133	0.408	0.000	A	None
South of SR-98	17,500	3,098	0.177	A	0	3,098	0.177	0.000	A	None
Meadows Road:										
Cole to SR-98	37,500	20,254	0.540	A	728	20,982	0.560	0.019	A	None
South of SR-98	25,000	12,005	0.480	A	728	12,733	0.509	0.029	A	None
Jasper Road:										
Scaroni to SR-111	37,500	10,041	0.268	A	4,004	14,045	0.375	0.107	A	None
SR-111 to Yourman	56,300	38,932	0.692	B	1,001	39,933	0.709	0.018	C	None
Yourman to Meadows	56,300	25,098	0.446	A	1,001	26,099	0.464	0.018	A	None
Meadows to Bowker	37,500	19,291	0.514	A	1,001	20,292	0.541	0.027	A	None
Cole Road:										
Enterprise to SR-111	56,300	24,832	0.441	A	546	25,378	0.451	0.010	A	None
SR-111 to Yourman	56,300	28,567	0.507	A	1,456	30,023	0.533	0.026	A	None
Yourman to Meadows	37,500	15,762	0.420	A	1,456	17,218	0.459	0.039	A	None
Meadows to Bowker	37,500	15,469	0.413	A	728	16,197	0.432	0.019	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
Capacity includes previous mitigation; V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 47 - Year 2015 Plus Reduced Casino Only Intersection Operation												
Intersection	Crit.	Year 2015				Year 2015+Reduced Casino Only						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (Signal)	Int.	3.2	A	27.8	C	3.2	A	0.0	28.0	C	0.2	None
I-8 Eastbound/Dogwood (Signal)	Int.	10.4	B	15.2	B	10.4	B	0.0	16.2	B	1.0	None
I-8 Westbound/Bowker (Signal)	Int.	12.0	B	18.2	B	12.2	B	0.2	18.5	B	0.3	None
I-8 Eastbound/Bowker (Signal)	Int.	5.3	A	8.1	A	5.3	A	0.0	8.6	A	0.5	None
Dogwood/Chick (Signal)	Int.	12.8	B	22.1	C	12.8	B	0.0	22.3	C	0.2	None
Dogwood/McCabe (Signal)	Int.	9.2	A	10.5	B	9.2	A	0.0	11.3	B	0.8	None
McCabe/Bowker (Signal)	Int.	1.6	A	2.3	A	1.6	A	0.0	2.3	A	0.0	None
Dogwood/Abatti (TWSC)	EB	10.1	B	12.6	B	10.2	B	0.1	13.0	B	0.4	None
	WB	11.2	B	11.1	B	11.3	B	0.1	11.4	B	0.3	
Dogwood/Heber (Signal)	Int.	18.3	B	18.4	B	18.5	B	0.2	19.0	B	0.6	None
SR-111 South/Heber (Signal)	Int.	19.7	B	17.7	B	19.7	B	0.0	17.7	B	0.0	None
SR-111North/Heber (Signal)	Int.	12.8	B	13.5	B	12.8	B	0.0	13.5	B	0.0	None
Heber/Yourman (TWSC)	NB	12.3	B	14.1	B	12.3	B	0.0	14.1	B	0.0	None
	SB	10.7	B	12.7	B	10.7	B	0.0	12.7	B	0.0	
Heber/Bowker (Signal)	Int.	4.8	A	6.4	A	4.8	A	0.0	6.8	A	0.4	None
Dogwood/Willoughby/Jasper (Sig)	Int.	16.4	B	15.7	B	16.6	B	0.2	15.9	B	0.2	None
Jasper/Pitzer (TWSC)	SB	9.4	A	9.8	A	9.4	A	0.0	10.0	B	0.2	None
Jasper/Scaroni (Signal)	EB	31.3	C	25.7	C	31.3	C	0.0	26.3	C	0.6	None
SR-111 South/Jasper (Signal)	Int.	18.1	B	23.7	C	18.1	B	0.0	23.7	C	0.0	None
SR-111 North/Jasper (Signal)	Int.	20.4	C	19.9	B	20.4	C	0.0	19.9	C	0.0	None
Jasper/Rockwood (Signal)	**Int.**	**21.5**	**C**	**41.3**	**D**	**21.5**	**C**	**0.0**	**43.5**	**D**	**2.2**	**Cuml**
Jasper/Meadows (Signal)	Int.	28.6	C	25.7	C	28.6	C	0.0	25.7	C	0.0	None
Jasper/Bowker (Signal)	Int.	21.3	C	23.8	C	21.5	C	0.2	24.2	C	0.4	None
Dogwood/Cole (Signal)	Int.	12.2	B	14.3	B	12.5	B	0.3	16.4	B	2.1	None
Cole/Scaroni (Signal)	Int.	23.1	C	25.3	C	23.1	C	0.0	25.3	C	0.0	None
SR-111 South/Cole (Signal)	Int.	13.1	B	18.9	B	13.1	B	0.0	19.1	B	0.2	None
SR-111 North/Cole (Signal)	Int.	8.7	A	15.3	B	8.7	A	0.0	15.3	B	0.0	None
Cole/Yourman (Signal)	**Int.**	**40.0**	**D**	**37.6**	**D**	**40.1**	**D**	**0.1**	**37.6**	**D**	**0.0**	**Cuml**
Cole/Meadows (Signal)	Int.	25.4	C	24.0	C	25.5	C	0.1	24.0	C	0.0	None
Cole/Bowker (Signal)	Int.	22.9	C	24.9	C	23.0	C	0.1	25.2	C	0.3	None
SR-98/Cole (Signal)	Int.	5.5	A	7.0	A	5.5	A	0.0	7.1	A	0.1	None
SR-98/Dogwood (Signal)	Int.	6.0	A	7.3	A	6.1	A	0.1	7.5	A	0.2	None
SR-98/SR-111 (Signal)	**Int.**	**38.8**	**D**	**68.1**	**E**	**39.1**	**D**	**0.3**	**72.1**	**E**	**4.0**	**Cuml**
SR-98/Rockwood (Signal)	Int.	16.8	C	22.0	C	16.8	B	0.0	22.0	C	0.0	None
SR-98/Meadows (Signal)	Int.	28.9	B	22.1	C	29.0	C	0.1	22.3	C	0.2	None
SR-98/Bowker (Signal)	Int.	14.7	B	14.3	B	14.7	B	0.0	14.3	B	0.0	None

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop; *=exceeds maximum delay
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 48 - Summary of Year 2015 Plus Reduced Casino Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	Year 2015		Year 2015+Reduced Casino			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111 South/Heber	279	420	279	0	420	0
SR-111 North/Heber	306	355	306	0	355	0
SR-111 South/Jasper	669	991	684	15	1037	46
SR-111 North/Jasper	641	1063	646	5	1103	40
SR-111 South/Cole	487	788	487	0	810	22
SR-111 North/Cole	645	927	654	9	950	23
SR-111/SR-98	1304	**1541**	1312	8	**1562**	21
SR-98/Cole	530	675	542	12	724	49
SR-98/Dogwood	255	404	262	7	424	20
SR-98/Rockwood	711	908	711	0	908	0
SR-98/Meadows/Andrade	995	733	996	1	747	14

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

Year 2015 (With Total Project Reduced Casino) Intersection Operation

Intersection operation for the Year 2015 condition with the total project is summarized in Table 50. The following intersections report deficiencies for the Year 2015 condition with the total project:

Jasper Road/Scaroni Road
State Route 111 South/Jasper Road
State Route 111 North/Jasper Road
Jasper Road/Rockwood Avenue
Cole Road/Scaroni Road
Cole Road/Yourman (Rockwood)
State Route-98/State Route-111

Year 2015 (With Total Project Reduced Casino) CalTrans (ILV) Intersection Operation

CalTrans intersection operation methodology on SR-111 interchange locations is summarized on Table 51. As shown on Table 51, the following intersection exceeds capacity for the total project condition:

State Route-111 Northbound/Jasper Road (greater than 1,500 conflicting vehicles)
State Route-111/State Route-98 - (greater than 1,500 conflicting vehicles)

Table 49 - Year 2015 Plus Total Project (Reduced Casino) Roadway Segment

Roadway Segment	Max Cap	Year 2015			Year 2015+Total Project (Reduced Casino)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	34,200	18,588	0.544	B	1,148	19,736	0.577	0.034	B	None
I-8 to McCabe	37,000	19,728	0.533	B	6,888	26,616	0.719	0.186	C	None
McCabe to SR-86	**37,000**	**20,973**	**0.567**	**B**	**9,758**	**30,731**	**0.831**	**0.264**	**D**	**Cuml**
SR-86 to Jasper	**37,000**	**18,407**	**0.497**	**A**	**12,627**	**31,034**	**0.839**	**0.341**	**D**	**Cuml**
Jasper to Cole	34,200	12,039	0.352	A	0	12,039	0.352	0.000	A	None
Cole to SR-98	34,200	5,508	0.161	A	3,444	8,952	0.262	0.101	A	None
SR-111:										
north of I-8	56,300	23,814	0.423	A	5,740	29,554	0.525	0.102	A	None
I-8 to McCabe	90,000	61,118	0.679	B	10,332	71,450	0.794	0.115	C	None
McCabe to Heber	90,000	57,518	0.639	B	10,332	67,850	0.754	0.115	C	None
Heber to Jasper	105,000	67,831	0.646	B	10,332	78,163	0.744	0.098	C	None
Jasper to Cole	90,000	50,804	0.564	A	8,610	59,414	0.660	0.096	B	None
Cole to SR-98	90,000	46,809	0.520	A	8,610	55,419	0.616	0.096	B	None
South of SR-98	90,000	61,418	0.682	B	8,610	70,028	0.778	0.096	C	None
Bowker Road:										
I-8 to McCabe	25,000	14,200	0.568	A	2,870	17,070	0.683	0.115	B	None
McCabe to Heber	25,000	14,608	0.584	A	2,870	17,478	0.699	0.115	B	None
Heber to Jasper	25,000	16,783	0.671	B	2,870	19,653	0.786	0.115	C	None
Jasper to Cole	25,000	11,484	0.459	A	0	11,484	0.459	0.000	A	None
Cole to SR-98	17,500	7,133	0.408	A	0	7,133	0.408	0.000	A	None
South of SR-98	17,500	3,098	0.177	A	0	3,098	0.177	0.000	A	None
Meadows Road:										
Cole to SR-98	37,500	20,254	0.540	A	4,592	24,846	0.663	0.122	B	None
South of SR-98	25,000	12,005	0.480	A	4,592	16,597	0.664	0.184	B	None
Jasper Road:										
Scaroni to SR-111	**37,500**	**10,041**	**0.268**	**A**	**25,255**	**35,296**	**0.941**	**0.673**	**E**	**Cuml**
SR-111 to Yourman	**56,300**	**38,932**	**0.692**	**B**	**6,314**	**45,246**	**0.804**	**0.112**	**D**	**Cuml**
Yourman to Meadows	56,300	25,098	0.446	A	6,314	31,412	0.558	0.112	A	None
Meadows to Bowker	37,500	19,291	0.514	A	6,314	25,605	0.683	0.168	B	None
Cole Road:										
Enterprise to SR-111	56,300	24,832	0.441	A	3,444	28,276	0.502	0.061	A	None
SR-111 to Yourman	56,300	28,567	0.507	A	9,184	37,751	0.671	0.163	B	None
Yourman to Meadows	37,500	15,762	0.420	A	9,184	24,946	0.665	0.245	B	None
Meadows to Bowker	37,500	15,469	0.413	A	4,592	20,061	0.535	0.122	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
Capacity includes previous mitigation; V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 50 - Year 2015 Plus Reduced Casino Project (All Phases) Intersection Operation

Intersection	Crit.	Year 2015				Year 2015+All Phases (Reduced Casino)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (Signal)	Int.	3.2	A	27.8	C	4.0	A	0.8	29.7	C	1.9	None
I-8 Eastbound/Dogwood (Signal)	Int.	10.4	B	15.2	B	10.4	B	0.0	30.1	C	14.9	None
I-8 Westbound/Bowker (Signal)	Int.	12.0	B	18.2	B	15.3	B	3.3	20.4	C	2.2	None
I-8 Eastbound/Bowker (Signal)	Int.	5.3	A	8.1	A	5.6	A	0.3	13.3	B	5.2	None
Dogwood/Chick (Signal)	Int.	12.8	B	22.1	C	13.7	B	0.9	30.1	C	8.0	None
Dogwood/McCabe (Signal)	Int.	9.2	A	10.5	B	12.4	B	3.2	18.2	B	7.7	None
McCabe/Bowker (Signal)	Int.	1.6	A	2.3	A	1.6	A	0.0	2.4	A	0.1	None
Dogwood/Abatti (TWSC)	EB	10.1	B	12.6	B	12.3	B	2.2	16.1	C	3.5	None
	WB	11.2	B	11.1	B	12.1	B	0.9	15.3	C	4.2	
Dogwood/Heber (Signal)	Int.	18.3	B	18.4	B	21.4	C	3.1	28.2	C	9.8	None
SR-111 South/Heber (Signal)	Int.	19.7	B	17.7	B	19.7	B	0.0	17.7	B	0.0	None
SR-111North/Heber (Signal)	Int.	12.8	B	13.5	B	12.8	B	0.0	13.5	B	0.0	None
Heber/Yourman (TWSC)	NB	12.3	B	14.1	B	12.3	B	0.0	14.1	B	0.0	None
	SB	10.7	B	12.7	B	10.7	B	0.0	12.7	B	0.0	
Heber/Bowker (Signal)	Int.	4.8	A	6.4	A	4.8	A	0.0	8.1	A	1.7	None
Dogwood/Willoughby/Jasper (Sig)	Int.	16.4	B	15.7	B	20.8	C	4.4	21.4	C	5.7	None
Jasper/Pitzer (TWSC)	SB	9.4	A	9.8	A	10.2	B	0.8	13.9	B	4.1	None
Jasper/Scaroni (Signal)	**EB**	31.3	C	34.0	C	**31.3**	**C**	**0.0**	**203.4**	**F**	**169.4**	**Cuml**
SR-111 South/Jasper (Signal)	**Int.**	18.1	B	23.7	C	**22.2**	**C**	**4.1**	**108.4**	**F**	**84.7**	**Cuml**
SR-111 North/Jasper (Signal)	**Int.**	20.4	C	19.9	B	**20.5**	**C**	**0.1**	**147.2**	**F**	**127.3**	**Cuml**
Jasper/Rockwood (Signal)	**Int.**	**21.5**	**C**	**41.3**	**D**	**22.5**	**C**	**1.0**	**83.1**	**F**	**41.8**	**Cuml**
Jasper/Meadows (Signal)	Int.	28.6	C	25.7	C	28.7	C	0.1	25.8	C	0.1	None
Jasper/Bowker (Signal)	Int.	21.3	C	23.8	C	25.1	C	3.8	32.6	C	8.8	None
Dogwood/Cole (Signal)	Int.	12.2	B	14.3	B	19.3	B	7.1	29.8	C	15.5	None
Cole/Scaroni (Signal)	**Int.**	23.1	C	25.3	C	**23.1**	**C**	**0.0**	**62.9**	**E**	**37.6**	**Cuml**
SR-111 South/Cole (Signal)	Int.	13.1	B	18.9	B	13.1	B	0.0	22.0	C	3.1	None
SR-111 North/Cole (Signal)	Int.	8.7	A	15.3	B	8.7	A	0.0	15.3	B	0.0	None
Cole/Yourman (Signal)	**Int.**	**40.0**	**D**	**37.6**	**D**	**46.9**	**D**	**6.9**	**41.8**	**D**	**4.2**	**Cuml**
Cole/Meadows (Signal)	Int.	25.4	C	24.0	C	28.0	C	2.6	26.9	C	2.9	None
Cole/Bowker (Signal)	Int.	22.9	C	24.9	C	25.3	C	2.4	25.8	C	0.9	None
SR-98/Cole (Signal)	Int.	5.5	A	7.0	A	5.8	A	0.3	10.2	B	3.2	None
SR-98/Dogwood (Signal)	Int.	6.0	A	7.3	A	9.1	A	3.1	10.2	B	2.9	None
SR-98/SR-111 (Signal)	**Int.**	**38.8**	**D**	**68.1**	**E**	**54.7**	**D**	**15.9**	**131.7**	**F**	**63.6**	**Cuml**
SR-98/Rockwood (Signal)	Int.	16.8	C	22.0	C	16.8	B	0.0	22.0	C	0.0	None
SR-98/Meadows (Signal)	Int.	28.9	B	22.1	C	30.3	C	1.4	25.7	C	3.6	None
SR-98/Bowker (Signal)	Int.	14.7	B	14.3	B	14.7	B	0.0	14.3	B	0.0	None

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop; *=exceeds maximum delay
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Table 51 - Summary of Year 2015 Plus Reduced Casino Total Project Intersection Operation Caltrans Intersecting Lane Volumes (ILV)						
Intersection	Year 2015		Year 2015+Reduced Casino Total Project			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111 South/Heber	279	420	279	0	420	0
SR-111 North/Heber	306	355	306	0	355	0
SR-111 South/Jasper	669	991	1114	445	1481	490
SR-111 North/Jasper	641	1063	975	334	**1656**	593
SR-111 South/Cole	487	788	671	184	1055	267
SR-111 North/Cole	645	927	839	194	1195	268
SR-111/SR-98	1304	**1541**	1485	181	**1792**	251
SR-98/Cole	530	675	792	262	1151	476
SR-98/Dogwood	255	404	406	151	583	179
SR-98/Rockwood	711	908	711	0	908	0
SR-98/Meadows/Andrade	995	733	1080	85	854	121

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

YEAR 2035 ROADWAY NETWORK

For the year 2035 daily traffic analysis, all base assumptions are the same as described above for the "proposed project" scenario.

Year 2035 Roadway Segments (With Reduced Casino)

The roadway segments were analyzed under Year 2035 conditions with and without the reduced casino project. The roadway segments daily levels of service are summarized in Table 52.

As shown in Table 52, all roadway segments operate efficiently with General Plan Circulation Element improvements.

Table 52 - Year 2035 Plus Project (Reduced Casino) Roadway Segment Level of Service										
Roadway Segment	Max Cap	Year 2035 (No Project)			Year 2035 (With Reduced Casino Project)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	57,000	35,252	0.618	B	1,148	36,400	0.639	0.020	B	None
I-8 to McCabe	90,000	57,734	0.641	B	5,166	62,900	0.699	0.057	B	None
McCabe to SR-86	90,000	35,986	0.400	A	6,314	42,300	0.470	0.070	A	None
SR-86 to Jasper	57,000	24,690	0.433	A	8,610	33,300	0.584	0.151	A	None
Jasper to Cole	57,000	35,500	0.623	B	0	35,500	0.623	0.000	B	None
Cole to SR-98	57,000	39,200	0.688	B	0	39,200	0.688	0.000	B	None
SR-111:										
north of I-8	90,000	38,208	0.425	A	4,592	42,800	0.476	0.051	A	None
I-8 to McCabe	140,000	83,268	0.595	A	10,332	93,600	0.669	0.074	B	None
McCabe to Heber	140,000	91,768	0.655	B	10,332	102,100	0.729	0.074	C	None
Heber to Jasper	140,000	80,668	0.576	A	10,332	91,000	0.650	0.074	B	None
Jasper to Cole	140,000	62,964	0.450	A	8,036	71,000	0.507	0.057	A	None
Cole to SR-98	105,000	70,664	0.673	B	8,036	78,700	0.750	0.077	C	None
South of SR-98	105,000	60,160	0.573	A	5,740	65,900	0.628	0.055	B	None
Bowker Road:										
north of I-8	37,000	5,040	0.136	A	0	5,040	0.136	0.000	A	None
I-8 to McCabe	57,000	13,930	0.244	A	2,870	16,800	0.295	0.050	A	None
McCabe to Heber	57,000	20,130	0.353	A	2,870	23,000	0.404	0.050	A	None
Heber to Jasper	56,250	32,330	0.575	A	2,870	35,200	0.626	0.051	B	None
Jasper to Cole	56,250	33,204	0.590	B	2,296	35,500	0.631	0.041	B	None
Cole to SR-98	56,250	33,604	0.597	A	2,296	35,900	0.638	0.041	B	None
South of SR-98	25,000	14,104	0.564	A	2,296	16,400	0.656	0.092	B	None
Meadows Road:										
Cole to SR-98	60,000	42,182	0.703	C	4,018	46,200	0.770	0.067	C	None
South of SR-98	37,500	14,402	0.384	A	4,018	18,420	0.491	0.107	A	None
Jasper Road:										
Scaroni to SR-111	56,300	15,281	0.271	A	24,107	39,388	0.700	0.428	C	None
SR-111 to Rockwood	90,000	59,514	0.661	B	5,740	65,254	0.725	0.064	C	None
Rockwood to Meadows	90,000	41,208	0.458	A	5,740	46,948	0.522	0.064	A	None
Meadows to Bowker	56,300	32,016	0.569	A	5,740	37,756	0.671	0.102	B	None
Cole Road:										
Enterprise to SR-111	90,000	40,816	0.454	A	9,184	50,000	0.556	0.102	A	None
SR-111 to Yourman	90,000	20,816	0.231	A	9,184	30,000	0.333	0.102	A	None
Yourman to Meadows	90,000	17,616	0.196	A	9,184	26,800	0.298	0.102	A	None
Meadows to Bowker	56,300	10,184	0.181	A	5,116	15,300	0.272	0.091	A	None
State Route 98:										
Kloke to SR-111	60,000	35,248	0.587	A	4,592	39,840	0.664	0.077	B	None
SR-111 to Rockwood	60,000	44,804	0.747	C	2,296	47,100	0.785	0.038	C	None
Rockwood to Andrade	60,000	43,794	0.730	C	2,296	46,090	0.768	0.038	C	None
Andrade to Bowker	60,000	42,604	0.710	C	2,296	44,900	0.748	0.038	C	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

REDUCED CASINO PROJECT ACCESS

The project proposes three driveway access points on Jasper Road west of SR-111. The realignment of Scaroni Avenue to the west will form the most easterly access to the project. A second major access on Jasper Road is proposed west of the Scaroni Avenue alignment and is currently labeled "Sunset" on the project site plan. The third driveway to Jasper is located west of the future Sunset Road and is labeled Street "A" on the current site plan.

The project access at the realignment of Scaroni Avenue at Jasper Road is analyzed in the above impact sections for all project conditions. This intersection requires a traffic signal, with dual northbound left turn lanes, dual northbound right turn lanes, dual westbound left lanes and an exclusive eastbound right turn lane within Jasper Road (assuming Jasper Road with six through lanes).

Jasper Road/Street "A" - ultimately requires a traffic signal with a single egress lane and a westbound left turn lane.

Jasper Road/Sunset Road - assumes a traffic signal, two northbound lanes, dual westbound left lanes, an exclusive eastbound right turn lane within Jasper Road (as a 6-lane roadway).

Additionally, the project is required to construct Sunset Boulevard south to Cole Road, which will create an intersection which ultimately requires a traffic signal, and an eastbound left turn lane. (Note that the Sunset Road extension is not required with the Casino phase of the project.)

REDUCED CASINO ACCESS OPERATION

Existing Plus Reduced Casino Access

Project access operation for the existing plus casino condition is shown on Table 53. For this condition, the Street "A", Sunset Boulevard, and Cole/Sunset intersections can operate effectively with stop control on the minor leg (project side) with no additional turn lanes.

Existing Plus Reduced Casino+Phase 1 Access

This condition assumes four-lanes on Jasper Road. Project access operation for the existing plus project (reduced casino plus phase 1) condition is shown on Table 54. For this condition, the Street "A", Sunset Boulevard, and Cole/Sunset intersections can operate effectively with stop control on the minor leg (project side). Westbound left turn lanes are required on Jasper Road at both driveways. An eastbound left turn lane is required at Cole/Sunset.

Year 2015 Plus Reduced Casino Project Access

Project access operation for the Year 2015 condition with reduced Casino only traffic is shown on Table 55. The Jasper Road driveways operate effectively with stop control on egress with four lanes on Jasper. The intersection of Cole/Sunset will require a traffic signal.

Year 2015 Plus Total Project (Reduced Casino) Access

Project access operation for the Year 2015 condition with Casino only traffic is shown on Table 56. The Jasper Road driveways operate effectively with traffic signal control with four lanes on Jasper. The intersection of Cole/Sunset also requires a traffic signal. Left turn lanes in Jasper and Cole Road are required with two egress lanes (project side) at all driveways).

Table 53 - Existing+Project (Reduced Casino) Access Operation					
Intersection	Critical Movement	Existing+Project (Casino)			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (stop sign)	NB	9.0	A	9.4	A
Jasper/Sunset (stop sign)	NB	9.0	A	9.9	A
Cole/Sunset (stop sign)	n/a	n/a	n/a	n/a	n/a
Delay is measured in seconds per vehicle; LOS=level of service; NB=northbound; Int=Intersection; n/a= not applicable Delay and LOS calculated using SYNCHRO (with HCS value)					

Table 54 - Existing+Project (Reduced Casino+Phase 1) Access Operation					
Intersection	Critical Movement	Existing+Project (Casino+Phase 1)			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (signal)	Int.	31.7	C	25.1	C
Jasper/Sunset (signal)	Int.	24.8	C	29.8	C
Cole/Sunset (signal)	Int.	21.2	C	32.1	C
Delay is measured in seconds per vehicle; LOS=level of service; NB=northbound; Int=Intersection Delay and LOS calculated using SYNCHRO (with HCS value)					

Table 55 - Year 2015+Reduced Casino Access Operation					
Intersection	Critical Movement	Year 2015+Casino Only			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (stop control)	NB	10.6	B	13.5	B
Jasper/Sunset (stop control)	NB	11.8	B	20.0	C
Cole/Sunset (signal)	Int.	15.7	B	7.9	A
Delay is measured in seconds per vehicle; LOS=level of service; NB=northbound; Int=Intersection; Delay and LOS calculated using SYNCHRO (with HCS value)					

Table 56 - Year 2015+Total Project (Reduced Casino) Access Operation					
Intersection	Critical Movement	Year 2015+Project			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (signal)	Int.	25.0	C	23.6	C
Jasper/Sunset (signal)	Int.	31.9	C	27.9	C
Cole/Sunset (signal)	Int.	21.0	C	32.4	C
Delay is measured in seconds per vehicle; LOS=level of service; EB=eastbound; NB=northbound; SB=southbound; etc; Int=Intersection; TWSC=Two-way stop control Delay and LOS calculated using SYNCHRO (with HCS value)					

REDUCED CASINO PROJECT MITIGATION

Existing Plus Project (Reduced Casino) Roadway Segment

Dogwood Road: north of I-8 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards a four-lane collector.

SR-111: south of SR-98 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards an expressway. However, expressway standards are not identified as the ultimate classification of this section of SR-111. Alternative mitigation such as contribution to signal interconnect is feasible to provide better circulation through these deficient segments.

Cole Road: Enterprise to SR-111 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards 4-lane major standards.

In addition, although not directly analyzed in the traffic study, circulation improvements within roadway segments are required of the project by the City of Calexico.

The project must participate in "fair-share" widening of the bridge crossing on Bowker Road over the Central Main Canal and the All American Canal.

The project must participate in "fair-share" widening of the bridge crossing on Cole Road over the Central Main Canal.

The project must participate in "fair-share" cost of widening the SR-98 from Kloke Road to Cole Road.

The project will participate in "fair-share" cost of widening Cole Road from Dogwood to SR-111 as a six lane arterial with a landscaped median.

The project will participate on a fair share basis to fund the development and implementation of a Traffic Mitigation Monitoring Program (TMMP) to monitor the operating levels of service for SR-98, SR-111, Jasper Road, Cole Road and Bowker Road as well as each of the cumulatively impacted intersections that serve the project.

The project will participate in a "fair share" to fund the development and implementation of a Master Computer Monitoring System at City Hall for synchronizing and monitoring traffic signals and progressive traffic flow on SR-98, SR-111, Jasper Road, Cole Road and Bowker Road.

Table 57 summarizes the level of service results with mitigation in place for existing plus Casino condition. As shown in Table 57, all roadway segments operate acceptably.

Table 57 - Existing Plus Reduced Casino Only Mitigated Roadway Segment Level of Service

Roadway Segment	Mitigation	LOS E Cap.	Casino Only		
			ADT	V/C	LOS
Dogwood: North of I-8	Fair Share to Major Collector	34,200	14,830	0.434	B
SR-111: South of SR-98	Fair Share to Expressway	90,000	52,765	0.586	A
Cole: Enterprise/111	Fair Share to Major	25,000	16,511	0.660	B

LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio
Maximum LOS E Capacity per County of Imperial/City of Calexico

Existing Plus Reduced Casino Intersections

I-8 Westbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

I-8 Eastbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/ construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

Dogwood Road/Heber Road - requires a traffic signal. The project has a cumulative impact at this location and is required to pay its fair share of this improvement.

Cole Road/Scaroni Avenue - requires a traffic signal. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-111/Cole Road - requires a southbound right. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-98/SR-111 - requires a southbound through lane. The project is part of the cumulative need for this improvement and will pay its fair share.

Table 58 summarizes the results of the intersection operation with the above improvements in place. As shown on Table 58, all mitigated intersections operate at acceptable levels of service.

Table 58 - Existing Plus Reduced Casino Mitigated Intersection					
Intersection	Mitigation	Existing+Reduced Casino			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
I-8 Westbound/Dogwood	Fair Share to Signal	4.9	A	9.8	A
I-8 Eastbound/Dogwood	Fair Share to Signal	5.7	A	10.7	B
Dogwood/Heber	Fair Share to Signal	10.7	B	9.5	A
Cole/Scaroni	Fair Share to Signal	22.9	C	25.1	C
SR-111/Cole	Fair Share to Southbound Right	32.1	C	34.1	C
SR-98/SR-111	Fair Share to Southbound Through	32	C	33.3	C
Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; Delay and LOS calculated using SYNCHRO (with HCS value)					

Existing Plus Project (Reduced Casino+Phase 1) Roadway Segment

Dogwood Road: north of I-8 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards a four-lane collector.

Dogwood Road: I-8 to McCabe - the project has a direct impact and requires construction of a four lane major roadway.

Dogwood Road: McCabe to Heber - the project has a direct impact and requires construction of a four lane major roadway.

Dogwood Road: Heber to Jasper - the project has a direct impact and requires construction of a four lane major roadway.

SR-111: south of SR-98 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards an expressway. However, expressway standards are not identified as the ultimate classification of this section of SR-111. Alternative mitigation such as contribution to signal interconnect is feasible to provide better circulation through these deficient segments.

Jasper Road - Scaroni to SR-111 - the project has a direct impact at this location which requires construction of a four lane major roadway.

Cole Road: Enterprise to SR-111 - project has a cumulative impact at this location which has an existing deficiency, and is required to contribute fair share towards 4-lane major standards.

Table 59 summarizes the level of service results with mitigation in place for existing plus Casino condition. As shown in Table 59, all roadway segments operate acceptably.

Table 59 - Existing Plus Reduced Casino+Phase 1 Mitigated Roadway Segment Level of Service					
Roadway Segment	Mitigation	LOS E Cap.	Reduced Casino+Phase 1		
			ADT	V/C	LOS
Dogwood: North of I-8	Fair Share to Major Collector	34,200	15,380	0.450	B
Dogwood: I-8 to McCabe	Construct 4-Major	25,000	15,258	0.610	B
Dogwood: McCabe to SR-86	Construct 4-Major	25,000	16,351	0.654	B
Dogwood: SR-86 to Jasper	Construct 4-Major	25,000	15,656	0.626	B
SR-111: South of SR-98	Fair Share to 6-Lane Expressway	90,000	56,893	0.632	B
Jasper: Scaroni to SR-111	Construct 4-Major	25,000	17,048	0.682	B
Cole: Enterprise/111	Fair Share to 4-Major	25,000	18,162	0.726	C
LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio Maximum LOS E Capacity per County of Imperial/City of Calexico					

Existing Plus Reduced Casino+Phase 1 Intersections

I-8 Westbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/ construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

I-8 Eastbound/Dogwood Road - requires a traffic signal. This improvement is currently under design/ construction by Caltrans including lane improvements with an expected completion date of Spring 2009.

Dogwood/McCabe (North/South) - the project has a direct impact at this location and requires realignment of McCabe at Dogwood and a traffic signal.

Dogwood Road/Heber Road - requires a traffic signal. The project has a cumulative impact at this location and is required to pay their fair share of this improvement.

Dogwood Road/Willoughby - requires a traffic signal and realignment onto the Jasper Road alignment, as well as a southbound left turn lane. The project is required to construct this improvement.

Jasper Road/Scaroni - requires a traffic signal and westbound left/northbound right. This intersection is realigned with the development of the project.

Jasper Road/SR-111 - requires additional traffic lanes, including east/west through lanes, left turn lanes, a northbound left turn lane, and southbound right turn lane. The project has a direct impact at this location and is required to construct this improvement.

Dogwood Road/Cole Road - requires a traffic signal. The project has a direct impact and is required to construct this improvement.

Cole Road/Scaroni Avenue - requires a traffic signal and westbound left/westbound right turn lanes. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-111/Cole Road - requires a southbound right and east/west through lanes. The project is part of the cumulative need for this improvement and will pay its fair share.

SR-98/SR-111 - requires a southbound/northbound through lane. The project is part of the cumulative need for this improvement and will pay its fair share.

Table 60 summarizes the results of the intersection operation with the above improvements in place. As shown on Table 60, all mitigated intersections operate at acceptable levels of service.

Table 60 - Existing Plus Project (Reduced Casino+Phase 1) Mitigated Intersection

Intersection	Mitigation	Existing+Reduced Casino+Phase 1			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
I-8 Westbound/Dogwood	Fair Share to Signal	5.4	A	31.3	C
I-8 Eastbound/Dogwood	Fair Share to Signal	5.6	A	17.5	B
Dogwood/McCabe South	Align intersections + Signal	4.7	A	7.3	A
Dogwood/Heber	Fair Share to Signal	13.8	B	17.5	B
Dogwood/Willoughby	Construct Signal+Southbound Left	13.7	B	6.2	B
Jasper/Scaroni	Construct Signal+Westbound Left+Northbound Right	23.8	C	18.4	B
Jasper/SR-111	Construct EBL(2)+EBT(2)+EBR(1)+WBL(1) WBT(2)+NBL(2)+SBR(1)	23.8	C	31.7	C
Dogwood/Cole	Construct Signal	4.7	A	8.8	A
Cole/Scaroni	Fair Share to Signal, WBL+WBR	21.4	A	23.5	B
SR-111/Cole	Fair Share to EBT+WBT+SBR	33.3	C	30.9	C
SR-98/SR-111	Fair Share to NBT+SBT	30	C	32.9	C

Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc
Delay and LOS calculated using SYNCHRO (with HCS value)

Year 2015 (Plus Reduced Casino) Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

With the reduced Casino phase of the project, no additional improvements are identified.

Year 2015 (Plus Reduced Casino) Intersections

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes to construct off-site circulation element needs.

With reduced Casino development, the following intersections report deficiencies:

Jasper/Rockwood - requires an eastbound through lane. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

Cole/Yourman (Rockwood) - requires a southbound left (dual). The project is part of the cumulative need for improvements and will pay its fair share.

SR-98/SR111 - requires north/south through lanes and east/west through lanes. The project is part of the cumulative need for improvements and will pay its fair share.

Table 61 summarizes the intersection operation with improvements in place.

Table 61 - Year 2015 Plus Reduced Casino Mitigated Intersection Operation					
Intersection	Mitigation	Year 2015+Reduced Casino			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Rockwood	Fair Share to Eastbound Through	20.9	C	27.9	C
Cole/Yourman	Fair Share to Southbound Left (2)	32.8	C	32.8	C
SR-98/SR-111	Fair Share to NBT/SBT/EBT/WBT	28.3	C	34.5	C
Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc Delay and LOS calculated using SYNCHRO (with HCS value)					

Year 2015 (Plus Total Project Reduced Casino) Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes to construct off-site circulation element needs.

With total buildout of the project, the following deficiencies are identified.

Dogwood Road: McCabe to SR-86 - requires fair share contribution to a Primary facility.

Dogwood Road: SR-86 to Jasper Road - requires fair share contribution to a Primary facility.

Jasper Road: Scaroni to SR-111 - requires fair share contribution to a 4-lane divided highway (ultimately 6 lanes).

Jasper Road: SR-111 to Rockwood - requires fair share contribution to a 4-lane divided highway (ultimately 6 lanes).

Table 62 summarizes the results of the roadway segment operation with improvements in place. As shown in Table 62, the Jasper Road segments approach LOS D capacity and the six-lane arterial is ultimately required to provide LOS C.

Table 62 - Year 2015 (Total Project) Mitigated Roadway Segment Level of Service					
Roadway Segment	Mitigation	LOS E Cap.	Year 2015+Project		
			ADT	V/C	LOS
Dogwood: McCabe to SR-86	Fair Share to Primary	57,000	30,731	0.539	A
Dogwood: SR-86 to Jasper	Fair Share to Primary	57,000	31,034	0.544	A
Jasper: Scaroni to SR-111	Fair Share to 4-Highway	56,300	35,296	0.627	B
Jasper SR-111 to Yourman	Fair Share to 4-Highway	56,300	45,246	0.804	D
LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio Maximum LOS E Capacity per County of Imperial/City of Calexico					

Year 2015 (Plus Total Project Reduced Casino) Intersections

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes to construct off-site circulation element needs.

With total project development, the following intersections report deficiencies:

Jasper/Scaroni - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

SR-111 North/Jasper - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share. Note the interim diamond interchange is approaching the capacity needs for the "clover leaf" design with buildout of Jasper Corridor projects.

SR-111 South/Jasper - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share. Note the interim diamond interchange is approaching the capacity needs for the "clover leaf" design with buildout of Jasper Corridor projects.

Jasper/Rockwood - requires an eastbound/westbound through lane. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

Cole/Scaroni - requires additional travel lanes. Ultimately this intersection, due to spacing requirements, may have restricted turn movements. As such, the project may be required to participate in fair share contributions to establishing a median within Cole Road to eliminate left turns.

Cole/Yourman (Rockwood) - requires additional travel lanes. The project is part of the cumulative need for improvements and will pay its fair share.

SR-98/SR111 - requires additional travel lanes. The project is part of the cumulative need for improvements and will pay its fair share.

Table 63 summarizes the intersection operation with improvements in place. The intersection of SR-98/SR-111 demonstrates LOS D, however, no grade separated interchange is planned. The project may be required to pay a fair share contribution to establishing a signal interconnect program to facilitate traffic flow in this area.

Year 2035 Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

The Jasper Road corridor also requires a six-lane configuration from Dogwood to east of Bowker Road. The project will be required to participate in this ultimate mitigation based on their fair share.

Additionally, with construction of Sunset Road south to Cole Road, the project is responsible for their fair share of necessary improvements including potential bridge widening on Sunset, as well as the Scaroni Road crossing.

Table 63 - Year 2015+Total Project (Reduced Casino) Mitigated Intersection

Intersection	Mitigation	Year 2015+Project (Reduced Casino)			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Scaroni	Fair Share to EBT+EBR+WBL+WBT+NBL+NBR	27.5	C	31.9	C
SR-111 South/Jasper	Fair Share to EBT+EBR+WBT	18.2	B	30.6	C
SR-111 North/Jasper	Fair Share to EBT+WBT+NBL	19.0	B	33.7	C
Jasper/Rockwood	Fair Share to EBT+WBT	22.5	C	32.7	C
Cole/Scaroni	Fair Share to EBT+WBT	23.5	C	27.2	C
Cole/Yourman	Fair Share to EBT+WBT+SBR	32.8	C	34.5	C
SR-98/SR-111	Fair Share to EBT+WBT+NBT+SBT	33.7	C	41.8	D

Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound;
SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc
Delay and LOS calculated using SYNCHRO (with HCS value)

SECTION X - INDUSTRIAL DEVELOPMENT ALTERNATIVE

PROJECT DESCRIPTION

A reduced project alternative is considered for development and analyzed as part of this traffic study. The "industrial development" alternative proposes to construct 615,000 square feet of industrial park to replace the office tech land use density as well as a portion of the office development identified as the "proposed project" above. Development of an industrial park would occur during the final phases of the project and would not change the findings and conclusions of the proposed project for the existing plus casino, existing plus casino plus phase 1, and year 2015 plus casino scenarios analyzed above.

As such, the industrial development scenario impacts only the year 2015 plus total project and year 2035 scenarios. This development density will generate fewer trips than the proposed project at project buildout.

TRIP GENERATION

The trip generation potential for the project is based on daily and peak hour trip generation rates obtained from the *(Not So) Brief Guide of Traffic Generators for the San Diego Region* published by the San Diego Association of Governments (SANDAG) in April 2002. Utilizing the SANDAG rates and the characteristics of the proposed project, estimates of daily and peak hour traffic volumes generated by the project can be calculated. Since this alternative only effects the project at buildout, the final phase is summarized below:

Total Project (All Phases)

The total project includes the following densities:

Casino - 93,880 square feet
Casino Hotel - 200 rooms
Hotel - 200 rooms
Retail - 411,000 square feet
Restaurant with Drive Through - 10,000 square feet
Quality Restaurant - 100,000 square feet
Office - 120,000 square feet
Office Tech - 615,000 square feet

Table 64 summarizes the trip generation rates and volumes for the industrial development alternative.

Since the proposed project is a mixed use project,. a portion of the traffic generated by the project can be divided into internal and external trips. The resulting "net new" project trips (external trips on the circulation system roadways) are summarized in Table 65.

The total new trips added to the external roadway network under project buildout conditions with industrial development is 53,265 daily ADT, 2,405 AM peak hour trips, and 5,294 PM peak hour trips.

Table 64 - Trip Generation Summary (Total Project - Industrial Density)

Phase	Land Use	Trip Generation Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project	Retail	80	4%	60%	40%	10%	50%	50%
	Restaurant w/Drive Thru	650	7%	50%	50%	7%	50%	50%
	Restaurant - Quality	100	1%	60%	40%	8%	70%	30%
	Casino	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	8	5%	60%	40%	7%	40%	60%
	Hotel	8	5%	60%	40%	7%	40%	60%
	Office	20	14%	90%	10%	13%	20%	80%
	Industrial Park	8	11%	90%	10%	12%	20%	80%

Total Primary Trip Generation

Phase	Land Use	Density	Unit	Primary Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project	Retail	411.00	ksf	32,880	1,315	789	526	3,288	1,644	1,644
	Restaurant w/Drive Thru	10.00	ksf	6,500	455	228	228	455	228	228
	Restaurant - Quality	100.00	ksf	10,000	100	60	40	800	560	240
	Casino	93.88	ksf	9,388	94	84	9	636	371	265
	Hotel (Casino)	200.00	rooms	1,600	80	48	32	112	45	67
	Hotel	200.00	rooms	1,600	80	48	32	112	45	67
	Office	120.00	ksf	2,400	336	302	34	312	62	250
	Industrial Park	615.00	ksf	4,920	541	487	54	590	118	472
TOTAL ON-SITE TRAFFIC				**69,288**	**3,001**	**2,047**	**955**	**6,305**	**3,072**	**3,233**

Table 65 - Trip Generation Summary (Total Project - Industrial Density) - With Internal/External Applied

Phase	Land Use	External Traffic (a)	Trip Generation Rates						
			Daily	AM Peak Hour			PM Peak Hour		
				% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project	Retail	78%	80	4%	60%	40%	10%	50%	50%
	Restaurant w/Drive Thru	51%	650	7%	50%	50%	7%	50%	50%
	Restaurant - Quality	51%	100	1%	60%	40%	8%	70%	30%
	Casino	100%	100	1%	90%	10%	6.77	3.95	2.82
	Hotel (Casino)	58%	8	5%	60%	40%	7%	40%	60%
	Hotel	98%	8	5%	60%	40%	7%	40%	60%
	Office	100%	20	14%	90%	10%	13%	20%	80%
	Industrial Park	100%	8	11%	90%	10%	12%	20%	80%

Total Net New Trip Generation

Phase	Land Use	Density	Unit	Net New Trip Generation Calculations						
				Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project	Retail	411.00	ksf	25,646	1,026	616	410	2,302	1,151	1,151
	Restaurant w/Drive Thru	10.00	ksf	3,315	232	116	116	751	376	376
	Restaurant - Quality	100.00	ksf	5,100	51	31	20	528	370	158
	Casino	93.88	ksf	9,388	94	84	9	636	371	265
	Hotel (Casino)	200.00	rooms	928	46	28	19	65	26	39
	Hotel	200.00	rooms	1,568	78	47	31	110	44	66
	Office	120.00	ksf	2,400	336	302	34	312	62	250
	Industrial Park	615.00	ksf	4,920	541	487	54	590	118	472
TOTAL NET NEW TRAFFIC				**53,265**	**2,405**	**1,711**	**694**	**5,294**	**2,517**	**2,776**

(a) External traffic based on pass-by rates

NEAR TERM TRIP DISTRIBUTION/TRIP ASSIGNMENT

The trip distribution percentages assumed the same as the "proposed project" (refer to Figure 9 above).

The traffic generated by the industrial development project was assigned to the roadways and intersections based on the established trip distribution percentages. The project related daily traffic volumes for the industrial development project is shown on Figure 69. The intersection peak hour volumes for the industrial development project are shown on Figure 70 for the northern study area and Figure 71 for the southern study area.

YEAR 2035 TRIP DISTRIBUTION/TRIP ASSIGNMENT

Due to the changes in the roadway network, the project traffic distribution would change under future year 2035 conditions. The same assumptions for the distribution of the "proposed project" was used for the reduced casino project (refer to Figure 19 for the future trip distribution).

Figure 72 illustrates the future project daily traffic volumes on the future roadway network. Figure 73 depicts the peak hourly future intersection traffic volumes for the total project (with reduced casino).

The industrial project was added to the year 2015 base condition. Year 2015 plus industrial project daily traffic is shown on Figure 74. Peak hour intersection volumes for north intersections are shown on Figure 75 and Figure 76 for southern intersections.

YEAR 2015 IMPACTS

The impacts associated with the industrial project density are analyzed in the year 2015 scenario. All previous phases of project development have the same findings and conclusions as the "proposed project."

Year 2015 (With Total Industrial Project) Roadway Segment Operation

The roadway segments were analyzed under Year 2015 conditions with and without the total project (all phases with industrial). The roadway segments daily levels of service are summarized in Table 66. As shown in Table 66, the following roadways demonstrate deficiencies:

Dogwood: McCabe to SR-86
Dogwood: SR-86 to Jasper
Jasper Road: Scaroni to SR-111

Year 2015 (With Total Industrial Project) Intersection Operation

Intersection operation for the Year 2015 condition with the total project is summarized in Table 67. The following intersections report deficiencies for the Year 2015 condition with the total project:

Jasper Road/Scaroni Road
State Route 111 South/Jasper Road
State Route 111 North/Jasper Road
Jasper Road/Rockwood Avenue
Cole Road/Scaroni Road
Cole Road/Yourman (Rockwood)
State Route-98/State Route-111

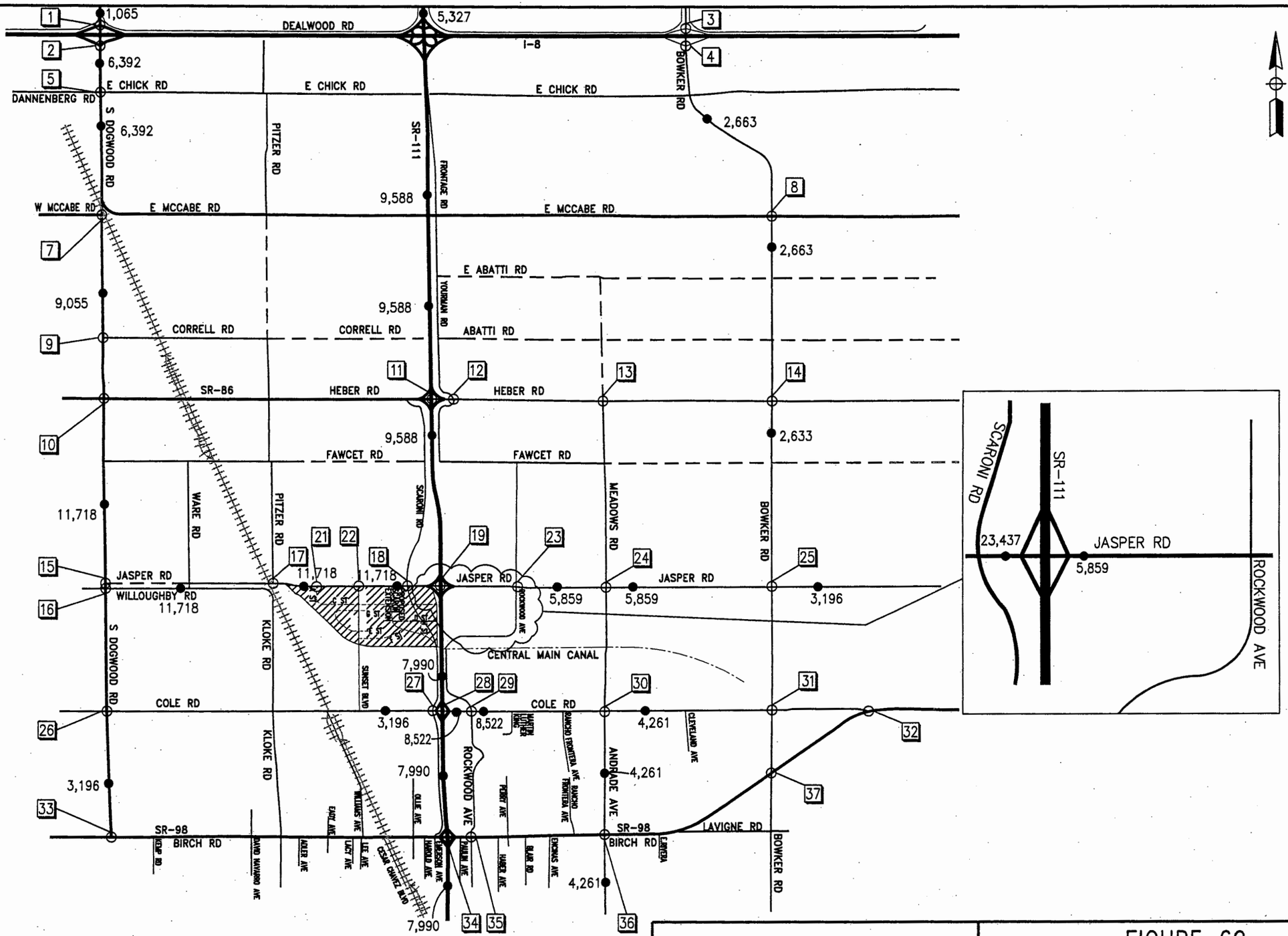

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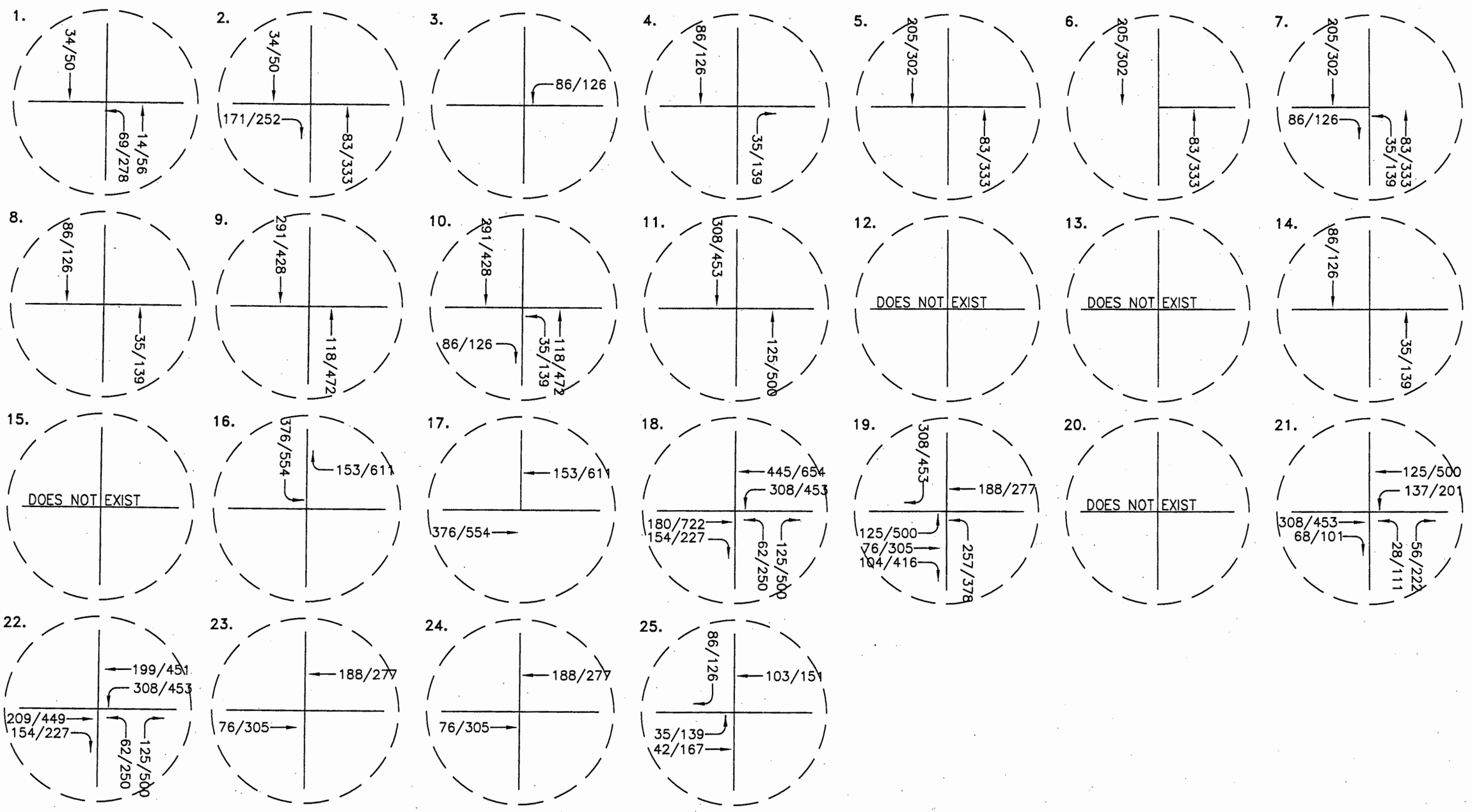
FIGURE 69

2015 (WITH INDUSTRIAL) PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

SEE FIGURE 69 FOR INTERSECTION LOCATION.

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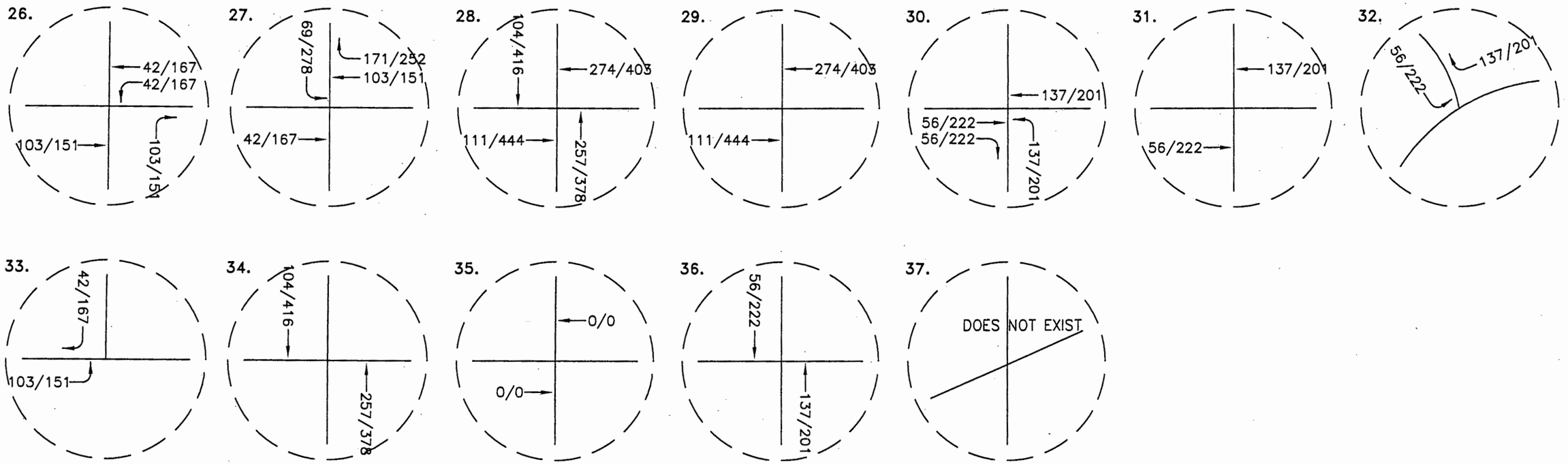
FIGURE 70

2015 (WITH INDUSTRIAL) PROJECT

INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

SEE FIGURE 71 FOR INTERSECTION LOCATION.

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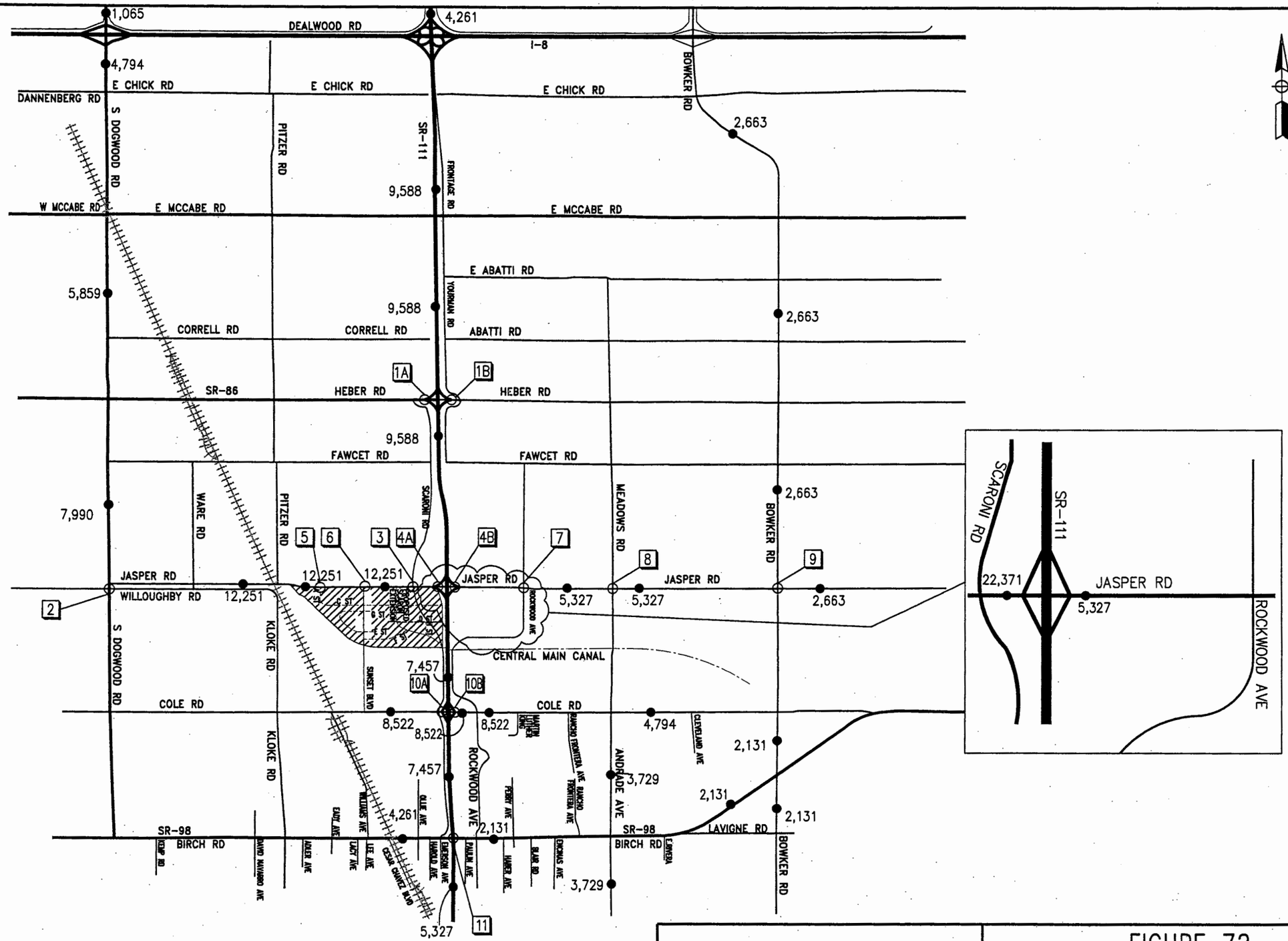
FIGURE 71

2015 (WITH INDUSTRIAL) PROJECT

INTERSECTION TRAFFIC VOLUMES-SOUTH



LEGEND

[#] – INTERSECTION ID NUMBER

● Z,ZZZ – AVERAGE DAILY TRAFFIC

▨ – PROJECT SITE

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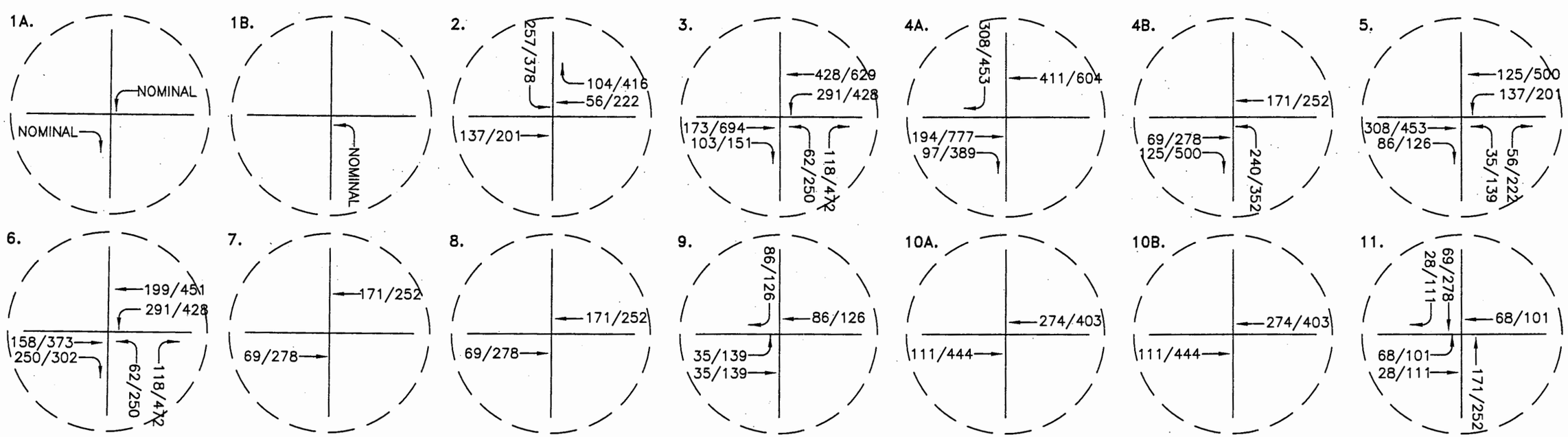
FIGURE 72
2035 (INDUSTRIAL) PROJECT DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 72 FOR INTERSECTION LOCATION

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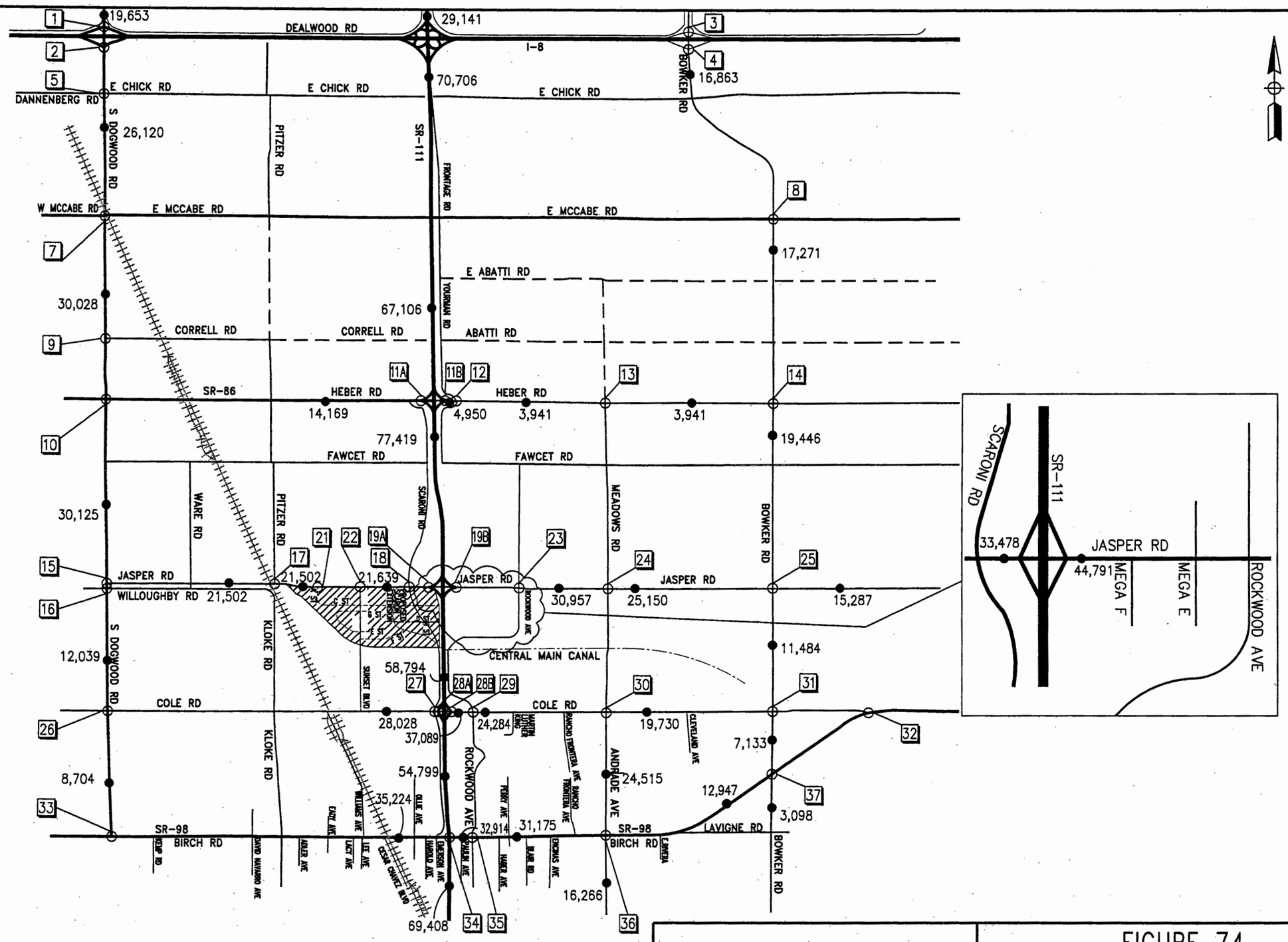
FIGURE 73

2035 (INDUSTRIAL) PROJECT INTERSECTION TRAFFIC VOLUMES



LEGEND

- — — — DIRT ROAD
- ---------- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- ● Z,ZZZ – AVERAGE DAILY TRAFFIC
- ▨ – PROJECT SITE

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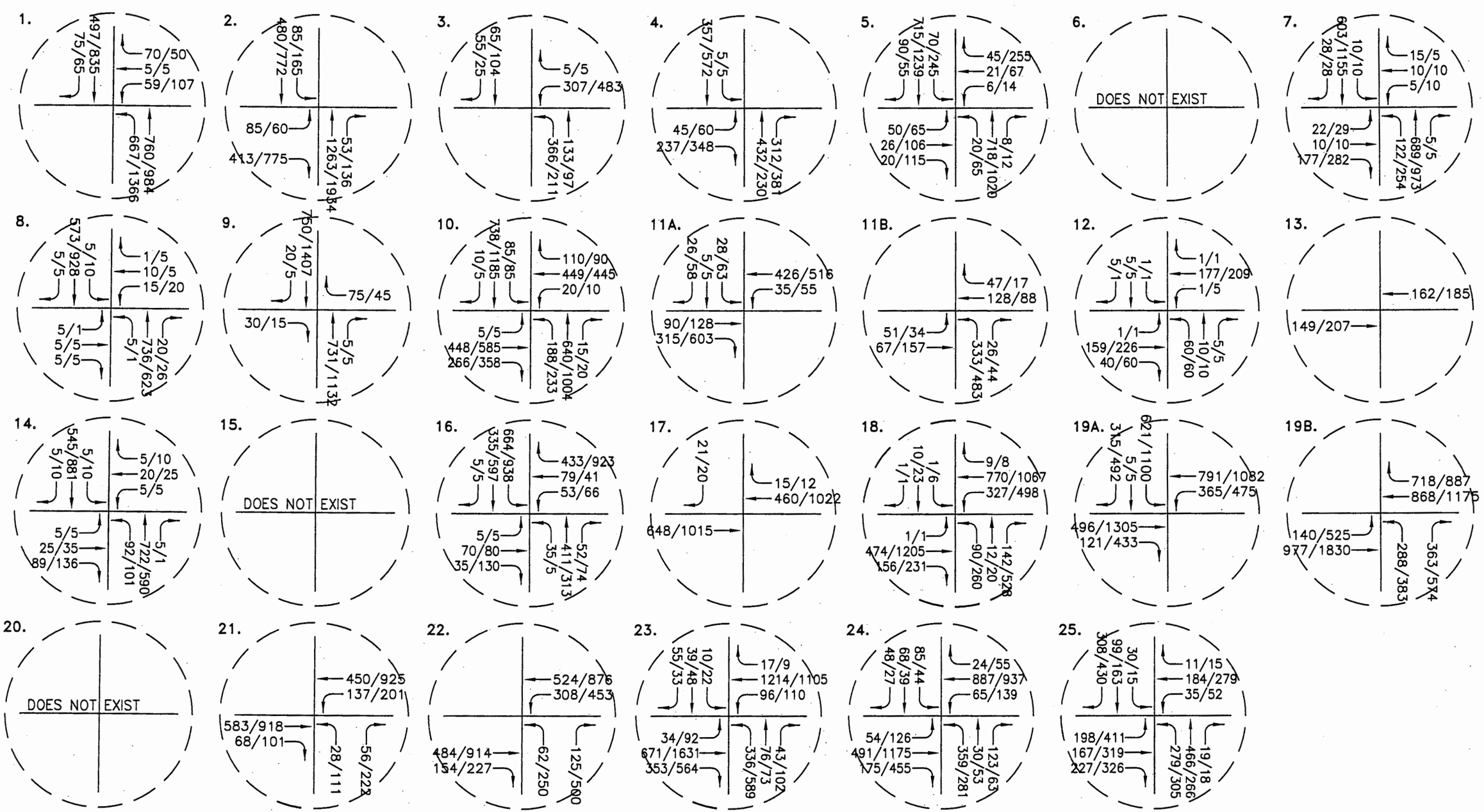
FIGURE 74

2015+PROJECT (INDUSTRIAL) DAILY TRAFFIC VOLUMES



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 74 FOR INTERSECTION LOCATION

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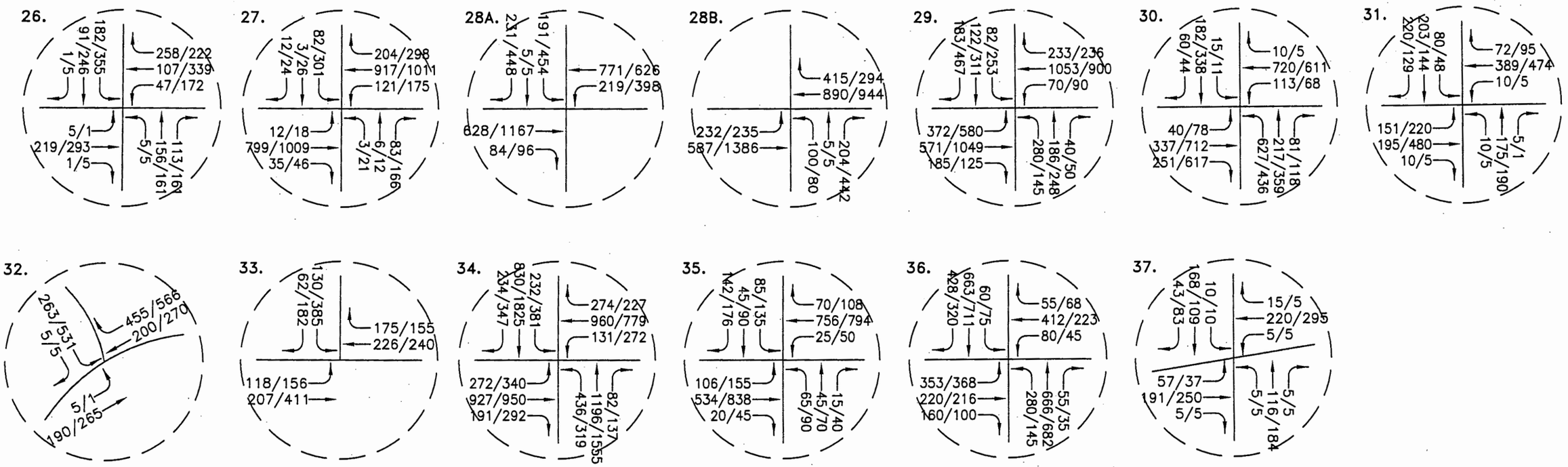
FIGURE 75

2015+PROJECT (INDUSTRIAL) INTERSECTION TRAFFIC VOLUMES–NORTH



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

SEE FIGURE 74 FOR INTERSECTION LOCATION

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FIGURE 76

2015+PROJECT (INDUSTRIAL)

INTERSECTION TRAFFIC VOLUMES-SOUTH

Table 66 - Year 2015 Plus Total Project (Industrial) Roadway Segment Level of Service

Roadway Segment	Max Cap	Year 2015			Year 2015+Total Project (Industrial)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	34,200	18,588	0.544	B	1,065	19,653	0.575	0.031	B	None
I-8 to McCabe	37,000	19,728	0.533	B	6,392	26,120	0.706	0.173	C	None
McCabe to SR-86	**37,000**	**20,973**	**0.567**	**B**	**9,055**	**30,028**	**0.812**	**0.245**	**D**	**Cuml**
SR-86 to Jasper	**37,000**	**18,407**	**0.497**	**A**	**11,718**	**30,125**	**0.814**	**0.317**	**D**	**Cuml**
Jasper to Cole	34,200	12,039	0.352	A	0	12,039	0.352	0.000	A	None
Cole to SR-98	34,200	5,508	0.161	A	3,196	8,704	0.255	0.093	A	None
SR-111:										
north of I-8	56,300	23,814	0.423	A	5,327	29,141	0.518	0.095	A	None
I-8 to McCabe	90,000	61,118	0.679	B	9,588	70,706	0.786	0.107	C	None
McCabe to Heber	90,000	57,518	0.639	B	9,588	67,106	0.746	0.107	C	None
Heber to Jasper	105,000	67,831	0.646	B	9,588	77,419	0.737	0.091	C	None
Jasper to Cole	90,000	50,804	0.564	A	7,990	58,794	0.653	0.089	B	None
Cole to SR-98	90,000	46,809	0.520	A	7,990	54,799	0.609	0.089	B	None
South of SR-98	90,000	61,418	0.682	B	7,990	69,408	0.771	0.089	C	None
Bowker Road:										
I-8 to McCabe	25,000	14,200	0.568	A	2,663	16,863	0.675	0.107	B	None
McCabe to Heber	25,000	14,608	0.584	A	2,663	17,271	0.691	0.107	B	None
Heber to Jasper	25,000	16,783	0.671	B	2,663	19,446	0.778	0.107	C	None
Jasper to Cole	25,000	11,484	0.459	A	0	11,484	0.459	0.000	A	None
Cole to SR-98	17,500	7,133	0.408	A	0	7,133	0.408	0.000	A	None
South of SR-98	17,500	3,098	0.177	A	0	3,098	0.177	0.000	A	None
Meadows Road:										
Cole to SR-98	37,500	20,254	0.540	A	4,261	24,515	0.654	0.114	B	None
South of SR-98	25,000	12,005	0.480	A	4,261	16,266	0.651	0.170	B	None
Jasper Road:										
Scaroni to SR-111	**37,500**	**10,041**	**0.268**	**A**	**23,437**	**33,478**	**0.893**	**0.625**	**D**	**Cuml**
SR-111 to Yourman	56,300	38,932	0.692	B	5,859	44,791	0.796	0.104	C	None
Yourman to Meadows	56,300	25,098	0.446	A	5,859	30,957	0.550	0.104	A	None
Meadows to Bowker	37,500	19,291	0.514	A	5,859	25,150	0.671	0.156	B	None
Cole Road:										
Enterprise to SR-111	56,300	24,832	0.441	A	3,196	28,028	0.498	0.057	A	None
SR-111 to Yourman	56,300	28,567	0.507	A	8,522	37,089	0.659	0.151	B	None
Yourman to Meadows	37,500	15,762	0.420	A	8,522	24,284	0.648	0.227	B	None
Meadows to Bowker	37,500	15,469	0.413	A	4,261	19,730	0.526	0.114	A	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
Capacity includes previous mitigation; V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

Table 67 - Year 2015 Plus Industrial Project (All Phases) Intersection Operation												
Intersection	Crit.	Year 2015				Year 2015+All Phases (Industrial)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/Dogwood (Signal)	Int.	3.2	A	27.8	C	3.8	A	0.6	27.8	C	0.0	None
I-8 Eastbound/Dogwood (Signal)	Int.	10.4	B	15.2	B	10.4	B	0.0	26.9	C	11.7	None
I-8 Westbound/Bowker (Signal)	Int.	12.0	B	18.2	B	14.5	B	2.5	20.3	C	2.1	None
I-8 Eastbound/Bowker (Signal)	Int.	5.3	A	8.1	A	5.5	A	0.2	13.2	B	5.1	None
Dogwood/Chick (Signal)	Int.	12.8	B	22.1	C	12.8	B	0.0	27.0	C	4.9	None
Dogwood/McCabe (Signal)	Int.	9.2	A	10.5	B	10.6	B	1.4	17.1	B	6.6	None
McCabe/Bowker (Signal)	Int.	1.6	A	2.3	A	1.6	A	0.0	2.3	A	0.0	None
Dogwood/Abatti (TWSC)	EB	10.1	B	12.6	B	11.5	B	1.4	16.0	C	3.4	None
	WB	11.2	B	11.1	B	11.9	B	0.7	14.4	B	3.3	
Dogwood/Heber (Signal)	Int.	18.3	B	18.4	B	20.4	C	2.1	26.6	C	8.2	None
SR-111 South/Heber (Signal)	Int.	19.7	B	17.7	B	19.7	B	0.0	17.7	B	0.0	None
SR-111North/Heber (Signal)	Int.	12.8	B	13.5	B	12.8	B	0.0	13.5	B	0.0	None
Heber/Yourman (TWSC)	NB	12.3	B	14.1	B	12.3	B	0.0	14.1	B	0.0	None
	SB	10.7	B	12.7	B	10.7	B	0.0	12.7	B	0.0	
Heber/Bowker (Signal)	Int.	4.8	A	6.4	A	4.8	A	0.0	8.0	A	1.6	None
Dogwood/Willoughby/Jasper (Sig)	Int.	16.4	B	15.7	B	18.7	B	2.3	20.4	C	4.7	None
Jasper/Pitzer (TWSC)	SB	9.4	A	9.8	A	10.0	B	0.6	13.0	B	3.2	None
Jasper/Scaroni (Signal)	**EB**	31.3	C	34.0	C	**31.3**	**C**	**0.0**	**158.5**	**F**	**124.5**	**Cuml**
SR-111 South/Jasper (Signal)	**Int.**	18.1	B	23.7	C	**20.8**	**C**	**2.7**	**80.9**	**F**	**57.2**	**Cuml**
SR-111 North/Jasper (Signal)	**Int.**	20.4	C	19.9	B	**20.4**	**C**	**0.0**	**101.2**	**F**	**81.3**	**Cuml**
Jasper/Rockwood (Signal)	**Int.**	**21.5**	**C**	**41.3**	**D**	**22.0**	**C**	**0.5**	**74.5**	**F**	**33.2**	**Cuml**
Jasper/Meadows (Signal)	Int.	28.6	C	25.7	C	28.6	C	0.0	25.7	C	0.0	None
Jasper/Bowker (Signal)	Int.	21.3	C	23.8	C	23.7	C	2.4	31.5	C	7.7	None
Dogwood/Cole (Signal)	Int.	12.2	B	14.3	B	17.7	B	5.5	28.0	C	13.7	None
Cole/Scaroni (Signal)	**Int.**	23.1	C	25.3	C	**23.1**	**C**	**0.0**	**40.5**	**D**	**15.2**	**Cuml**
SR-111 South/Cole (Signal)	Int.	13.1	B	18.9	B	13.1	B	0.0	22.8	C	3.9	None
SR-111 North/Cole (Signal)	Int.	8.7	A	15.3	B	8.7	A	0.0	15.3	B	0.0	None
Cole/Yourman (Signal)	**Int.**	**40.0**	**D**	**37.6**	**D**	**41.2**	**D**	**1.2**	**40.8**	**D**	**3.2**	**Cuml**
Cole/Meadows (Signal)	Int.	25.4	C	24.0	C	26.9	C	1.5	26.3	C	2.3	None
Cole/Bowker (Signal)	Int.	22.9	C	24.9	C	24.8	C	1.9	25.9	C	1.0	None
SR-98/Cole (Signal)	Int.	5.5	A	7.0	A	5.7	A	0.2	9.5	A	2.5	None
SR-98/Dogwood (Signal)	Int.	6.0	A	7.3	A	8.4	A	2.4	10.3	B	3.0	None
SR-98/SR-111 (Signal)	**Int.**	**38.8**	**D**	**68.1**	**E**	**50.2**	**D**	**11.4**	**122.4**	**F**	**54.3**	**Cuml**
SR-98/Rockwood (Signal)	Int.	16.8	C	22.0	C	16.8	B	0.0	22.0	C	0.0	None
SR-98/Meadows (Signal)	Int.	28.9	B	22.1	C	30.0	C	1.1	25.1	C	3.0	None
SR-98/Bowker (Signal)	Int.	14.7	B	14.3	B	14.7	B	0.0	14.3	B	0.0	None

Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop; *=exceeds maximum delay
Sig.=signal; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound
Cuml=cumulative impact; Direct=direct impact; Delay and LOS calculated using SYNCHRO (with HCS value)

Year 2015 (With Total Industrial Project) CalTrans (ILV) Intersection Operation

CalTrans intersection operation methodology on SR-111 interchange locations is summarized on Table 68. As shown on Table 68, the following intersection exceeds capacity for the total project condition:

State Route-111 Northbound/Jasper Road (greater than 1,500 conflicting vehicles)
State Route-111/State Route-98 - (greater than 1,500 conflicting vehicles)

Table 68 - Summary of Year 2015 Plus Industrial Project Intersection Operation
Caltrans Intersecting Lane Volumes (ILV)

Intersection	Year 2015		Year 2015+Industrial Project			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111 South/Heber	279	420	279	0	420	0
SR-111 North/Heber	306	355	306	0	355	0
SR-111 South/Jasper	669	991	894	225	1399	408
SR-111 North/Jasper	641	1063	847	206	**1561**	498
SR-111 South/Cole	487	788	614	127	1010	222
SR-111 North/Cole	645	927	782	137	1149	222
SR-111/SR-98	1304	**1541**	1432	128	**1749**	208
SR-98/Cole	530	675	723	193	1098	423
SR-98/Dogwood	255	404	358	103	555	151
SR-98/Rockwood	711	908	711	0	908	0
SR-98/Meadows/Andrade	995	733	1052	57	834	101

ILV=Intersecting Lane Volumes (Caltrans Methodology)
ILV Value = less than 1200 (Free Flow)
ILV Value = 1200-1500 (Acceptable Flow)
ILV Value = exceeds 1500 (Deficient Flow)
AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM peak hour increase in ILV value due to project

YEAR 2035 ROADWAY NETWORK

For the year 2035 daily traffic analysis, all base assumptions are the same as described above for the "proposed project" scenario.

Year 2035 Roadway Segments (With Industrial Project)

The roadway segments were analyzed under Year 2035 conditions with and without the industrial project. The roadway segments daily levels of service are summarized in Table 69.

As shown in Table 69, all roadway segments operate efficiently with General Plan Circulation Element improvements.

Table 69 - Year 2035 Plus Project (With Industrial) Roadway Segment Level of Service

Roadway Segment	Max Cap	Year 2035 (No Project)			Year 2035 (With Project)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Incr. in V/C	LOS	Impact
Dogwood Road:										
north of I-8	57,000	35,335	0.620	B	1,065	36,400	0.639	0.019	B	None
I-8 to McCabe	90,000	58,106	0.646	B	4,794	62,900	0.699	0.053	B	None
McCabe to SR-86	90,000	36,441	0.405	A	5,859	42,300	0.470	0.065	A	None
SR-86 to Jasper	57,000	25,310	0.444	A	7,990	33,300	0.584	0.140	A	None
Jasper to Cole	57,000	35,500	0.623	B	0	35,500	0.623	0.000	B	None
Cole to SR-98	57,000	39,200	0.688	B	0	39,200	0.688	0.000	B	None
SR-111:										
north of I-8	90,000	38,539	0.428	A	4,261	42,800	0.476	0.047	A	None
I-8 to McCabe	140,000	84,012	0.600	A	9,588	93,600	0.669	0.068	B	None
McCabe to Heber	140,000	92,512	0.661	B	9,588	102,100	0.729	0.068	C	None
Heber to Jasper	140,000	81,412	0.582	A	9,588	91,000	0.650	0.068	B	None
Jasper to Cole	140,000	63,543	0.454	A	7,457	71,000	0.507	0.053	A	None
Cole to SR-98	105,000	71,243	0.679	B	7,457	78,700	0.750	0.071	C	None
South of SR-98	105,000	60,573	0.577	A	5,327	65,900	0.628	0.051	B	None
Bowker Road:										
north of I-8	37,000	5,040	0.136	A	0	5,040	0.136	0.000	A	None
I-8 to McCabe	57,000	14,137	0.248	A	2,663	16,800	0.295	0.047	A	None
McCabe to Heber	57,000	20,337	0.357	A	2,663	23,000	0.404	0.047	A	None
Heber to Jasper	56,250	32,537	0.578	A	2,663	35,200	0.626	0.047	B	None
Jasper to Cole	56,250	35,500	0.631	B	0	35,500	0.631	0.000	B	None
Cole to SR-98	56,250	33,769	0.600	A	2,131	35,900	0.638	0.038	B	None
South of SR-98	25,000	14,269	0.571	A	2,131	16,400	0.656	0.085	B	None
Meadows Road:										
Cole to SR-98	60,000	42,471	0.708	C	3,729	46,200	0.770	0.062	C	None
South of SR-98	37,500	14,691	0.392	A	3,729	18,420	0.491	0.099	A	None
Jasper Road:										
Scaroni to SR-111	56,300	17,017	0.302	A	22,371	39,388	0.700	0.397	C	None
SR-111 to Rockwood	90,000	59,927	0.666	B	5,327	65,254	0.725	0.059	C	None
Rockwood to Meadows	90,000	41,621	0.462	A	5,327	46,948	0.522	0.059	A	None
Meadows to Bowker	56,300	32,429	0.576	A	5,327	37,756	0.671	0.095	B	None
Cole Road:										
Enterprise to SR-111	90,000	41,478	0.461	A	8,522	50,000	0.556	0.095	A	None
SR-111 to Yourman	90,000	21,478	0.239	A	8,522	30,000	0.333	0.095	A	None
Yourman to Meadows	90,000	18,278	0.203	A	8,522	26,800	0.298	0.095	A	None
Meadows to Bowker	56,300	10,506	0.187	A	4,794	15,300	0.272	0.085	A	None
State Route 98:										
Kloke to SR-111	60,000	35,579	0.593	A	4,261	39,840	0.664	0.071	B	None
SR-111 to Rockwood	60,000	44,969	0.749	C	2,131	47,100	0.785	0.036	C	None
Rockwood to Andrade	60,000	43,959	0.733	C	2,131	46,090	0.768	0.036	C	None
Andrade to Bowker	60,000	42,769	0.713	C	2,131	44,900	0.748	0.036	C	None

LOS=level of service; ADT=Average daily traffic; Δ V/C=change in V/C ratio
V/C = volume to capacity ratio; Sign? = Significant (Yes or No)
Note: number rounding may occur in spreadsheet background

INDUSTRIAL DEVELOPMENT PROJECT ACCESS

The project proposes three driveway access points on Jasper Road west of SR-111. The realignment of Scaroni Avenue to the west will form the most easterly access to the project. A second major access on Jasper Road is proposed west of the Scaroni Avenue alignment and is currently labeled "Sunset" on the project site plan. The third driveway to Jasper is located west of the future Sunset Road and is labeled Street "A" on the current site plan.

The project access at the realignment of Scaroni Avenue at Jasper Road is analyzed in the above impact sections for all project conditions. This intersection requires a traffic signal, with dual northbound left turn lanes, dual northbound right turn lanes, dual westbound left lanes and an exclusive eastbound right turn lane within Jasper Road (assuming Jasper Road with six through lanes).

Jasper Road/Street "A" - ultimately requires a traffic signal with a single egress lane and a westbound left turn lane.

Jasper Road/Sunset Road - assumes a traffic signal, two northbound lanes, dual westbound left lanes, an exclusive eastbound right turn lane within Jasper Road (as a 6-lane roadway).

Additionally, the project is required to construct Sunset Boulevard south to Cole Road, which will create an intersection which ultimately requires a traffic signal, and an eastbound left turn lane.

INDUSTRIAL DEVELOPMENT ACCESS OPERATION

Year 2015 Plus Total Project (Industrial Development) Access

Project access operation for the Year 2015 condition with Casino only traffic is shown on Table 70. The Jasper Road driveways operate effectively with traffic signal control with four lanes on Jasper. The intersection of Cole/Sunset also requires a traffic signal. Left turn lanes in Jasper and Cole Road are required with two egress lanes (project side) at all driveways).

Table 70 - Year 2015+Total Industrial Project Access Operation

Intersection	Critical Movement	Year 2015+Industrial Project			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Project "A" (signal)	Int.	29.7	C	22.0	C
Jasper/Sunset (signal)	Int.	34.1	C	23.8	C
Cole/Sunset (signal)	Int.	21.0	C	25.6	C

Delay is measured in seconds per vehicle; LOS=level of service; EB=eastbound; NB=northbound; SB=southbound; etc; Int=Intersection; TWSC=Two-way stop control

Delay and LOS calculated using SYNCHRO (with HCS value)

INDUSTRIAL DEVELOPMENT PROJECT MITIGATION

Note that with this alternative scenario, all mitigation for the "proposed project" under existing plus casino, existing plus casino plus phase 1, and year 2015 plus casino is unchanged. The industrial development project impacts only the near term cumulative for the year 2015 plus total project condition.

Year 2015 (Plus Total Industrial Project) Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes to construct off-site circulation element needs.

With total buildout of the project, the following deficiencies are identified.

Dogwood Road: McCabe to SR-86 - requires fair share contribution to a Primary facility.

Dogwood Road: SR-86 to Jasper Road - requires fair share contribution to a Primary facility.

Jasper Road: Scaroni to SR-111 - requires fair share contribution to a 4-lane divided highway (ultimately 6 lanes).

Table 71 summarizes the results of the roadway segment operation with improvements in place.

Table 71 - Year 2015 Mitigated Roadway Segment Level of Service

Roadway Segment	Mitigation	LOS E Cap.	Year 2015+Project (Industrial)		
			ADT	V/C	LOS
Dogwood: McCabe to SR-86	Fair Share to Primary	57,000	30,028	0.527	A
Dogwood: SR-86 to Jasper	Fair Share to Primary	57,000	30,125	0.529	A
Jasper: Scaroni to SR-111	Fair Share to 4-Highway	56,300	33,478	0.595	B

LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio
Maximum LOS E Capacity per County of Imperial/City of Calexico

Year 2015 (Plus Total Project with Industrial Reduced Casino) Intersections

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes to construct off-site circulation element needs.

With total project development, the following intersections report deficiencies:

Jasper/Scaroni - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

SR-111 North/Jasper - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share. Note the interim diamond interchange is approaching the capacity needs for the "clover leaf" design with buildout of Jasper Corridor projects.

SR-111 South/Jasper - requires additional travel lanes. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share. Note the interim diamond interchange is approaching the capacity needs for the "clover leaf" design with buildout of Jasper Corridor projects.

Jasper/Rockwood - requires an eastbound/westbound through lane. The project is part of the cumulative need for Jasper Corridor improvements and will pay its fair share.

Cole/Scaroni - requires additional travel lanes. Ultimately this intersection, due to spacing requirements, may have restricted turn movements. As such, the project may be required to participate in fair share contributions to establishing a median within Cole Road to eliminate left turns.

Cole/Yourman (Rockwood) - requires additional travel lanes. The project is part of the cumulative need for improvements and will pay its fair share.

SR-98/SR111 - requires additional travel lanes. The project is part of the cumulative need for improvements and will pay its fair share.

Table 72 summarizes the intersection operation with improvements in place. The intersection of SR-98/SR-111 demonstrates LOS D, however, no grade separated interchange is planned. The project may be required to pay a fair share contribution to establishing a signal interconnect program to facilitate traffic flow in this area.

Table 72 - Year 2015+Industrial Project Mitigated Intersection Operation

Intersection	Mitigation	Year 2015+Industrial Project			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Jasper/Scaroni	Fair Share to EBT+EBR+WBL+WBT+NBL+NBR	24.1	C	25.2	C
SR-111 South/Jasper	Fair Share to EBT+EBR+WBT	20.3	B	37.8	D
SR-111 North/Jasper	Fair Share to EBT+WBT+NBL	22.3	C	29.9	C
Jasper/Rockwood	Fair Share to EBT+WBT	23.9	C	31.6	C
Cole/Scaroni	Fair Share to EBT+WBT	26.1	C	24.6	C
Cole/Yourman	Fair Share to EBT+WBT+SBR	31.4	C	34.4	C
SR-98/SR-111	Fair Share to EBT+WBT+NBT+SBT	32.6	C	40.2	D

Delay is measured in seconds per vehicle; LOS=level of service; WB=westbound; NB=northbound; SBT=southbound through; NBT=northbound through; SBL=southbound left; EBR=eastbound right; etc
Delay and LOS calculated using SYNCHRO (with HCS value)

Year 2035 with Industrial Roadway Segments

The project is required to participate in fair-share contributions to roadway and intersection improvements based on their traffic volumes (fair share is calculated in subsequent sections) to construct off-site circulation element needs.

The Jasper Road corridor also requires a six-lane configuration from Dogwood to east of Bowker Road. The project will be required to participate in this ultimate mitigation based on their fair share.

Additionally, with construction of Sunset Road south to Cole Road, the project is responsible for their fair share of necessary improvements including potential bridge widening on Sunset, as well as the Scaroni Road crossing.

SECTION XI - SUMMARY OF FINDINGS AND CONCLUSIONS

The Calexico-SR111 mixed use development is located on the south side of Jasper Road between Dogwood Road and SR-111 in the Calexico area of Imperial County. The project site is planned to be annexed into the City of Calexico. The proposed project consists of commercial density, restaurants, retail, office, casino, and hotel uses.

At buildout the project will generate approximately 75,308 average daily trips (ADT), 3,883 AM peak hour trips, and 7,082 PM peak hour trips. A portion of the trips would be captured internally or be commercial pass-by trips resulting in a total new trips of 59,285 ADT, 3,286 AM peak hour trips, and 6,071 PM peak hour trips being added to the external roadway network.

The Alternative 1 project density reduces the size of the casino footprint with all other land uses and phasing the same. With the reduced casino project, the total new daily trips to the area are approximately 57,397 ADT, 3,268 AM peak hour trips and 5,943 PM peak hour trips.

The Alternative 2 project density exchanges some office use and office tech use with industrial land use. The effect of this density change occurs in the final phase of the project at impacts the "total project" scenario analyses. With the industrial land use density alternative, the project's total new daily trips to the area are approximately 53,265 ADT with 2,405 AM peak hour trips and 5,294 evening peak hour trips.

The project has significant direct and cumulative impacts on the existing circulation roadway network and intersections for the existing plus project condition. Improvements are recommended to fully mitigate project impacts.

The project has cumulative impacts on the existing circulation roadway network and intersections for the Year 2015 condition. Improvements are recommended to mitigate project impacts. Some roadway links and intersections continue to report deficiencies; however, the levels of service are improved over the pre-project conditions.

The project has future impacts on the existing circulation roadway network and intersections for the Year 2035 condition. Improvements are recommended to mitigate project impacts, where available. However many locations are fully built out and continue to demonstrate deficiencies.

It is recommended that a monitoring program be conducted as development occurs to track traffic growth in the area based on land use intensities. The City may consider overriding conditions to accept the deficient future levels of service. Additionally, the City is compiling a Jasper Corridor Fee Program. The project will be required to contribute to this program.

Project access points were analyzed for all conditions. Recommendations for traffic control and configurations are recommended to allow adequate levels of service at access points.

The reduced casino alternative generates fewer traffic volumes for the existing plus project condition and eliminates the direct impact at the Jasper/SR-111 intersection which is improved over the "proposed project" condition. This alternative continues to have significant cumulative impacts and will pay their fair share to mitigate impacted locations.

The industrial development alternative effects only the near term cumulative scenario and demonstrates lessened traffic intensity and better delay at most study area locations. This project will have significant cumulative impacts and will pay their fair share to mitigate impacted locations.