

MEMORANDUM

From: Frederik Venter, Kimley-Horn and Associates
To: Criseldo Mina and Rippon Bhatia, City of Tracy
Date: November 7, 2016
Re: **Redbridge Gate Closure Study, Tracy, California**

The purpose of this memorandum is to evaluate potential traffic impact scenarios for limiting access to and from the Redbridge development in the City of Tracy. The memorandum also assesses the consistency of the installation of gates with the City of Tracy General Plan, the City Sustainable Action Plan, and the City Transportation Master Plan.

Background

The Redbridge development is an existing housing development located in Tracy, California. Redbridge is bordered by Lammers Road to the west, the Stringer project to the north, the canal, West Schulte Road and the railroad tracks to the south. To the east it is bordered by the Madison Park neighborhood. Redbridge connects to Madison Park via Blackstone Drive, but the road is gated and only pedestrian access is accommodated at George Kelly Elementary School. No Redbridge residents have been observed using the gate. Pedestrians use it primarily to gain access to the school. Redbridge proposed to install a gate at the entrance off Lammers Road on Redbridge Road. **Figure 1** indicates the existing gate location and second gate location.

This study analyzed the potential traffic impact of the gate closures using the City TMP Travel Demand Model, Synchro Software, and 2010 HCM technical procedures. The following scenarios were evaluated during the school season 2016:

- Existing Conditions with One Gate (existing gate at George Kelly Elementary school)
- Existing Conditions with Two Gates (existing gate at George Kelly Elementary school and the other at Lammers Road/Redbridge Road)
- Existing Condition without any Gates
- Existing Plus Approved City Project Conditions with One Gate
- Existing Plus Approved City Project Conditions with Two Gates
- Existing Plus Approved City Project Conditions without any Gates

Additionally, the study location will be evaluated while school is out of session for the summer 2016 in the following scenarios:

- Existing Conditions with One Gate (existing gate at George Kelly Elementary school)
- Existing Conditions with Two Gates (existing gate at George Kelly Elementary school and the other at Lammers Road/Redbridge Road)
- Existing Condition without any Gates
- Existing Plus Approved City Project Conditions with One Gate
- Existing Plus Approved City Project Conditions with Two Gates
- Existing Plus Approved City Project Conditions without any Gates

City Policies Pertaining to the Study

City of Tracy General Plan

The General Plan Circulation Element identifies the location and extent of existing and planned circulation and transportation facilities, consistent with the existing and planned land uses described in the Land Use Element. Relevant objectives and policies related to the proposed gates and its effect on vehicle and people circulation are listed below.

Objective CIR-1.1: Implement a hierarchical street system in which each street serves a specific, primary function and is sensitive to the context of the land uses served.

P1. The City should develop context-based street designs that allow for variations based on the expected function and location of the facility, and the surrounding land use context. These context-sensitive designs should have the following aims:

- ◆ Create aesthetically attractive streetscapes.
- ◆ Enhance multi-modal transportation by increasing mobility and improving safety for autos, trucks, transit, pedestrians and bicyclists.

P2. The City shall preserve rights-of-way needed for future roadway and freeway interchange improvements through dedication or acquisition as adjacent properties develop or redevelop.

P3. The City shall continue to apply traffic mitigation fee programs to fund transportation infrastructure, based on a fair share of facility use.

Objective CIR-1.2: Provide a high level of street connectivity.

P1. The City shall ensure that the street system results in a high level of connectivity, especially between residences and common local destinations, such as schools, Village Centers, retail areas and parks. The standard

for roadway (vehicular) connectivity is defined as appropriate spacing of arterials and collectors and local roads as detailed above in Section B of this Element “Roadway Classifications and Standards.”

P2. The City shall implement a connected street pattern with multiple route options for vehicles, bikes and pedestrians.

P3. New development shall be designed to provide vehicular, bicycle and pedestrian connections with adjacent developments.

P4. The City should develop residential street alignments and designs that provide connectivity while discouraging high speed cut-through traffic.

P5. New development shall be designed with a grid or modified grid pattern to facilitate traffic flows and to provide multiple connections to arterial streets.

Objective CIR-1.3 Adopt and enforce LOS standards that provide a high level of mobility and accessibility, for all modes, for residents and workers.

P1. To the extent feasible, the City shall strive for LOS D on all streets and intersections, with the LOS standard for each facility to be defined in the Transportation Master Plan in accordance with the opportunities and constraints identified through the traffic projections and analysis performed for that Plan. The following exceptions to the LOS D standard may be allowed:

- ◆ LOS E or lower shall be allowed on streets and at intersections within one-quarter (1/4) mile of any freeway. This lower standard is intended to discourage inter-regional traffic from using Tracy streets.
- ◆ LOS E or lower shall be allowed in the Downtown and Bowtie area of Tracy, in order to create a pedestrian-friendly urban design character and densities necessary to support transit, bicycling and walking.

P2. The City may allow individual locations to fall below the City’s LOS standards in instances where the construction of physical improvements would be infeasible, prohibitively expensive, significantly impact adjacent properties or the environment, or have a significant adverse effect on the character of the community, including pedestrian mobility, crossing times, and comfort/convenience.

P6. For project-specific development approvals, the LOS at major street intersections shall be determined based on the direct estimation of peak-hour conditions and should reflect the average condition prevailing throughout the peak hour of a typical weekday for all traffic using the intersection.

P7. Traffic studies for new developments within the City may be prepared if necessary and appropriate to determine the impacts of the projects traffic on the transportation system.

Objective CIR-1.5 Protect residential areas from through traffic and high travel speeds by facilitating free flow of traffic on major streets.

P1. Use of local residential streets by non-local and commercial traffic shall be discouraged. The City may consider techniques such as route signs and route maps. This policy should not restrict the ability of local vehicle

and non-motorized transportation to utilize residential collectors as an effort to encourage higher levels of roadway connectivity.

P2. The City shall coordinate the timing of traffic signals on arterials to facilitate traffic movement.

Objective CIR-1.6 Maximize traffic safety for automobile, transit, bicycle users, and pedestrians.

P1. The City shall design streets using context-sensitive design principles that enhance safety for all modes of travel.

P2. New development shall implement traffic calming measures where necessary so long as connectivity is not diminished.

Objective CIR-3.1 Achieve a comprehensive system of citywide bikeways and pedestrian facilities.

P1. The City shall incorporate appropriate bicycle and pedestrian facilities on all roadways constructed by the City, Class I to the extent feasible.

P2. To the extent possible, the city shall separate vehicular from bicycle and pedestrian traffic on higher-speed and higher-volume roadways using off-street bicycle and pedestrian facilities.

P3. The City may separate bicycle from pedestrian users on high usage bicycle and pedestrian paths

P4. The City's bicycle and pedestrian system shall have a high level of connectivity, especially between residences and common local destinations, such as schools, shopping, and parks. A higher level of bicycle and pedestrian connectivity is defined as a shorter or similar distance to common destinations for bicycles and pedestrians compared to distances for vehicles.

P5. The City shall establish a ½-mile walkability standard for residents to access goods, services, and recreational facilities.

P6. New development shall include pedestrian and bicycle facilities internal to the development and that connect to city-wide facilities, such as parks, schools and recreational corridors, as well as adjacent development and other services.

Objective CIR-4.1 Promote public transit as an alternative to the automobile.

P1. The City shall promote efficient and affordable public transportation that serves all users.

P3. The City shall continue to operate the Tracer fixed-route and paratransit transit service and expand service to new residential and non-residential areas if funding for additional service is available and is warranted by ridership demand.

P4. The City shall seek funding from regional and State and federal agencies to fund additional transit service expansions and improvements.

P5. The City shall require development to provide for transit and transit-related increased modal opportunities, such as adequate street widths and curb radii, bus turnouts, bus shelters, park-and-ride lots and multi-modal transit centers through the development and environmental review processes, if appropriate.

P6. The City shall encourage efforts for additional regional transit service, including expansion of the existing commuter bus service, and new commuter rail serve from Tracy to other areas in the region.

Objective CIR-421

P2. The City shall preserve the necessary rights-of-way by continuing the implementation of current arterial street standards and ensuring the preservation of existing rail corridors to facilitate the development of an expanded transit program in the future.

P4. The City shall develop a fully integrated multi-modal transportation system that considers access to employment, education, shops, medical services and that facilitates participation in social and recreational opportunities.

P6. The City shall pursue economical, long term solutions to transportation problems by encouraging community designs which encourage transit use and walking, bicycling, and other non-motorized forms of transportation.

Objective CC-2.2 Provide Connections that reinforce the role and function of the Building Blocks of the City, which is under Community Character Element Goal CC-2 A high level of connectivity within the City of Tracy found on page 3-17 of the General Plan.

P1. New development projects shall not be gated communities or constructed with walls surrounding individual projects (i.e. single developer or builder). Gated communities and walls should only be allowed on a case by case basis and will generally be considered only for projects such as “estate” developments where the minimum lot size is at least 1-acre or in housing with specialized clientele such as senior citizens.

City of Tracy Sustainability Action Plan

The City’s Sustainability Action Plan (SAP) responds to recent state legislation on climate change and greenhouse gas reduction, and integration of transportation and land use planning. The SAP includes policies and programs designed to reduce greenhouse gas emissions generated by a range of activities, including transportation. The transportation targets include:

- ◆ Target #A: 20 percent increase in the percentage of non-City employees who participate in travel demand management programs from 2006 baseline levels
- ◆ Target #5b: 20 percent increase in the percentage of City employees who participate in travel demand management programs from 2006 baseline levels
- ◆ Target #6a: 20 percent reduction in the community vehicle miles travelled (VMT) per capita from current (2006) levels
- ◆ Target #6b: 20 percent reduction in the municipal VMT from 2006 baseline levels

The SAP presents 21 sustainability measures within the Transportation and Land Use category, which have quantifiable effects, based on available research, on greenhouse gas production – mostly through VMT reduction, including the following measures:

- ◆ Measure T-2: Reduced parking requirements.
- ◆ Measure T-3: Support for bicycling.
- ◆ Measure T-4: Support for transit.
- ◆ Measure T-5: Smart growth, urban design, and planning.
- ◆ Measure T-13: Reduce commute trips.
- ◆ Measure T-14: Parking cash-out for employees.
- ◆ Measure T-16: Transit passes for residents and employees of new developments.

City of Tracy Roadway and Transportation Master Plan

The purpose of the TMP is to implement the transportation policies of the General Plan. The TMP identifies roadway improvements required at the citywide level to support the long-range buildout of the City. Roadway improvements identified include, but are not limited to alignments, cross-sections, roadway and intersection design, and access controls for expressways, arterials, collectors, and industrial streets. In addition, the TMP allocates widths for bike lanes, sidewalks, landscaped setbacks, and median widths. As development takes place, project-specific traffic analyses are utilized to determine the degree of roadway improvements required, as TMP roadway improvements are generally a subset of the ultimate roadway network required to support the buildout of the General Plan.

Consistency Findings

The installation of a new gate and the existing gate increase Vehicle Mile Traveled (VMT), Vehicle hours Traveled (VHT) and Green House Gas (GHG) emissions. The road closures eliminate connectivity for communities and discourages non-automotive activity such as cycling and walking. In addition:

- It limits the ability of transit services to connect through neighborhoods, increase transit ridership and reduce private vehicle travel. Transit service cannot be efficiently provided in cul de sac communities. Ridership will be low, requiring increased transit subsidies. Walking distances to bus stops will be long and circuitous, and bus headways too big.
- The location of the gates limits access and travel time for both the High School and the Elementary School.
- It limits walkability for pedestrians and discourages cyclists to be more active.
- It limits the ability of children to walk and bicycle to school and does not promote healthy lifestyles.
- It increases emergency services response times and may, as the City builds out, require additional Fire Stations to be constructed to maintain acceptable response times.

- The goals set by the SAP will be more difficult to attain with the installation of gates.

The gates result in travel patterns and traffic operational and environmental impacts which are inconsistent with current City General Plan policies.

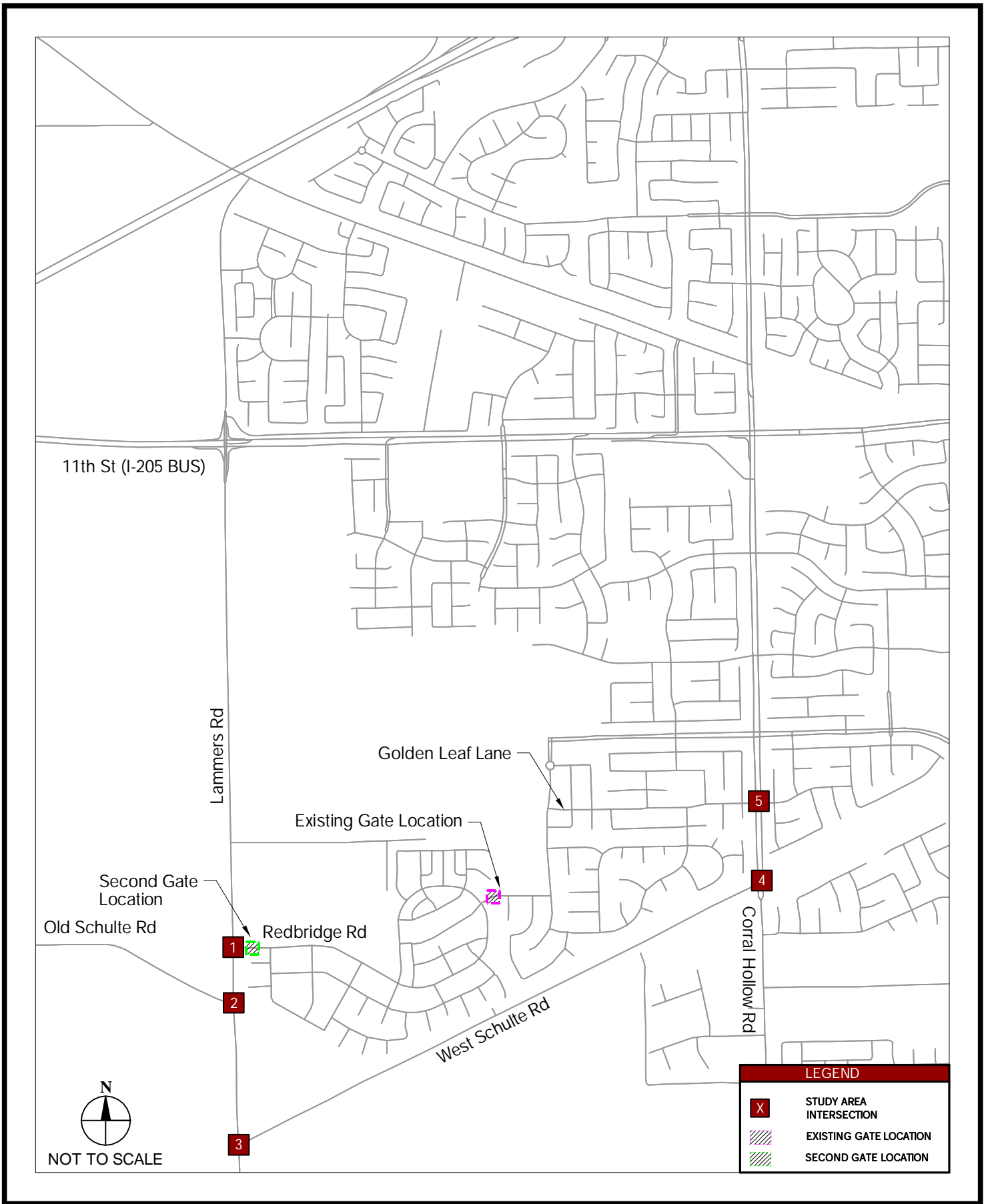


FIGURE 1
SITE LOCATION AND STUDY AREA

Existing Conditions

Existing Intersection and Roadway Network

To determine potential impacts related to the existing and proposed gate conditions, existing intersection and roadway segments were selected for analysis based on potential impacts from trips being diverted with closing and/or opening gates at the respective locations. Intersections were analyzed for weekday AM and PM peak periods, which are the peak periods during which most trips occur on the City road network. No school afternoon peaks were evaluated. **Figure 2** indicates the location and roadway geometry of the existing study intersections.

Weekday intersection turning movement volumes for the five study intersection were collected in August 2016. Data was collected during the AM and PM peak periods of 7:00-9:00 AM and 4:00-6:00 PM, respectively. Counts were collected August 9th in order to gather counts while George Kelly Elementary School was not in session and collected again in August 17th when school was in session. The gate just west of George Kelly Elementary School is an existing control, and is represented in the existing conditions. Intersection volume data sheets for all traffic counts are provided in **Appendix A**.

Commuters who travel to the east and west from Redbridge and Madison Park are currently using 11th Street and West Schulte Road instead of Blackstone Drive through the development because of the gate at the school. If this gate was removed, traffic conditions would change along study roadways. As future development occurs in the City, New Schulte Road will connect Lammers Road to Corral Hollow Road and some existing traffic could be diverted from 11th Street and West Schulte Road to New Schulte Road because it will provide a shorter connection to Lammers Road.

The following intersections would be impacted by removing the existing gate and were subsequently selected for analysis.

Study Intersections

- 1. Redbridge Road/ Lammers Road** is a one-way stop controlled T-intersection with no marked crosswalks. It has one shared right and through lane in the northbound direction; one 440-foot left turn bay and one through lane in the southbound direction; and one shared left and right turn lane in the westbound direction. The westbound shared lane is wide (20 feet) and acts as a de facto left and right lane.
- 2. Old Schulte Road/ Lammers Road** is an all-way stop controlled T-intersection with no marked crosswalks. It has one shared left and through lane in the northbound direction, one shared through and right lane in the southbound direction and one shared left and right turn lane in the eastbound direction.
- 3. West Schulte Road/ Lammers Road** is a one-way stop controlled T-intersection with no marked crosswalks. It has one shared right and through lane in the northbound

direction, one shared through and left lane in the southbound direction and one shared left and right turn lane in the westbound direction.

4. **West Schulte Road/ Corral Hollow Road** is a one-way stop controlled T-intersection with no marked crosswalks. It has one through lane in the northbound direction, one through and one 690-foot right pocket in the southbound direction and one right turn lane only in the eastbound direction. The southbound right-turn lane would become a through lane in the future as the road is further widened to the south. It currently provides for right-in-right-out movement only. Some vehicles make U-turns at the ends of the median because of the restricted left turns.
5. **Golden Leaf Lane/ Corral Hollow Road** is a side street stop controlled intersection with marked crosswalks in the north-south direction. It has one left turn bay (130-foot turn bay in the southbound direction and 245-foot turn bay in the northbound direction), one through lane and one shared through and right turn lane in the southbound and northbound direction. In the east and westbound direction, the approaches have one shared through, left and right lane.

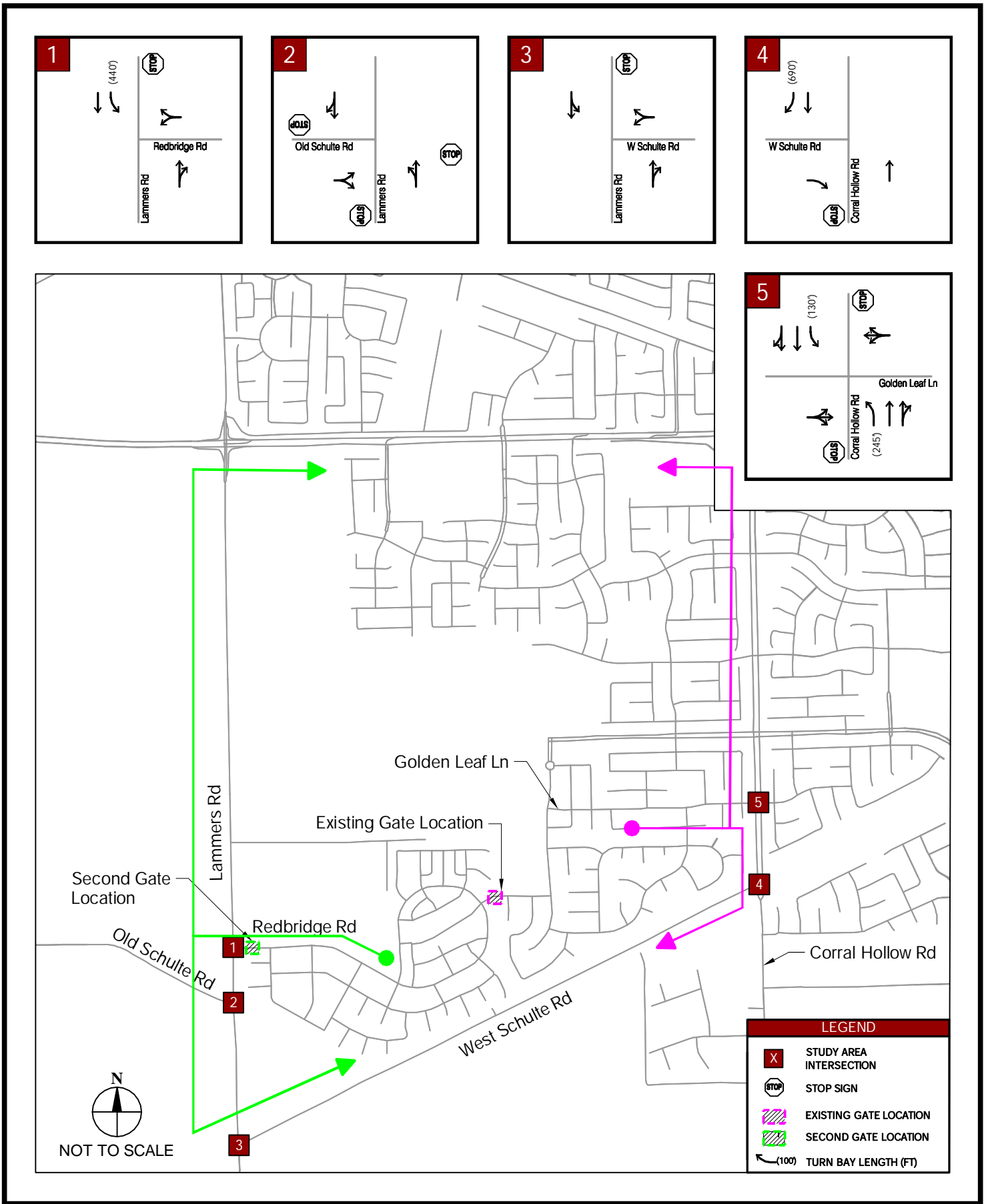


FIGURE 2
 EXISTING CONDITIONS
 LANE GEOMETRY AND TRAFFIC CONTROL

Local Roadways

The following local roadways provide access to the site:

- **Lammers Road** is a major arterial roadway originating one mile south of Valpico Road on the western boundary of the existing developed area of the City of Tracy. The City recently constructed a six-lane facility between the south end of John Kimball High School and 11th Street. The remainder of the street to the south is a two-lane undivided facility. The posted speed limit within the City is 45 miles per hour. Lammers Road is designated within the City of Tracy Roadway Master Plan (TMP) as an urban expressway and future freeway connection between I-205 and I-580.
- **Old Schulte Road** is a discontinuous roadway extending from Mountain House Parkway to Lammers Road and then from just south of Redbridge to Corral Hollow Road. It distributes traffic from the residential areas of Tracy to the industrial areas in Cordes Ranch. The posted speed limit on Old Schulte Road is 45 miles per hour and 55 miles per hour west of Lammers Road.
- **Redbridge Road** is a two-lane collector roadway within the Redbridge development. The posted speed limit is 25 miles per hour.
- **Corral Hollow Road** is a multi-lane arterial roadway extending from north of the City limits at the intersection of S Lammers Road to far south of the City limits. Throughout the City of Tracy from northern City limits to just south of the intersection of West Schulte Road, Corral Hollow Road is a four-lane divided roadway. From just south of the intersection with West Schulte Road, Corral Hollow Road becomes a two-lane undivided roadway. Corral Hollow Road has been identified as a future six-lane parkway.
- **Golden Leaf Lane** is a two lane road which provides access for the residents of the Madison Park Residential development to the City from Corral Hollow Road.

Existing Bicycle and Pedestrian Network

Bicycles

Class I, II and III bikeway facilities that exist near Redbridge are discussed below: **Class I** facilities are paved bicycle paths that are physically separated from the vehicular travel lane. A Class I decomposed granite path exists alongside Redbridge Road beginning at Lammers Road and extending east and terminates at Belmont Lane. Sidewalks distribute pedestrian traffic to the east, north, and south in the neighborhoods. A Class I facility (east and west side) also exists on Lammers Road in front of Kimball High School extending from the school's south boundary to the north. Once Stringer develops, the bike and pedestrian connectivity will be established from Kimball High School to Redbridge Road. The connection from Lammers Road to the school and the connection northwards along Lammers Road can then provide opportunities to children from the Stringer and Bright developments to bike and walk to school and reduce vehicle trips that would otherwise occur.

Class II facilities, which are striped bike lanes along the street, are generally found along the western portion of the existing urbanized area of the City. There are Class II bike lanes along

portions of Corral Hollow Road. Class II bicycle facilities are also provided on Blackstone Drive at the school and along Mabel Josephine Drive in Madison Park.

Class III bicycle facilities are bike routes denoted by signs that are shared with vehicles along the roadway. Class III bicycle facilities are located mainly in the Central Tracy area. A map of the existing City of Tracy bicycle network can be found in Figure 4.13-8, *Existing Bikeway Map* in the City of Tracy TMP.

Pedestrians

Existing pedestrian facilities in the study area include sidewalks along both sides of Redbridge Road, which serves the residential community located east of the Lammers Road. Sidewalks also exist along Corral Hollow Road from Krohn Road to West Schulte Road. Sidewalks are located along most of the roads within the Redbridge and Madison Park areas.

Existing Transit Network

The City's public transit system includes both bus and rail passenger components. The bus and rail system provides local and regional connectivity to residents of the City of Tracy.

Local Fixed-Route Service (TRACER)

The route nearest the project site Route D. There is are several stops which are located along Schulte Road, Corral Hollow Road, Golden Leaf Lane, and Carol Ann Drive. Route D is a commuter route, which provides service only on weekdays when school is in session. TRACER does not operate on Sundays and holidays. This route runs along 11th Street, Holly Drive, Tracy Boulevard, Corral Hollow Road, Sycamore Parkway, and Central Avenue. Major destinations served along these routes include the library, elementary, middle and high schools in the City of Tracy, and the Tracy Sports Complex. It operates two services during the AM peak hour and four in the afternoon. Tracy Unified School District also operates school buses where were observed picking up students in the Redbridge community. The current gate at the school limits school buses from shorter access to Lammers Road. Transit trip may contribute to some reduction in private vehicle trips.

Trip Generation

Project trips were calculated based on the existing number of housing units in both the Redbridge Development and the Madison Park Development. The project trips are calculated based on the City of Tracy's Trip Generation Rates from the City of Tracy Transportation Master Plan (November, 2012) and from traffic counts. **Table 1** compares the AM and PM peak hour trip generation for the existing housing developments.

As indicated in the table, the Redbridge development generates 272 AM peak hour trips and 265 PM peak hour trips in comparison to the neighboring Madison Park development which generates 358 AM peak hour trips and 683 PM peak hour trips.

Table 1. Redbridge and Madison Park Trip Generation (City of Tracy)

Land Uses	Project Size	AM PEAK HOUR			PM PEAK HOUR				
		Total Peak Hour	IN	/	OUT	Total Peak Hour	IN	/	OUT
Trip Generation Rates¹									
Low Density Residential		0.55	25%	/	75%	1.05	63%	/	37%
Trips Generated									
Madison Park Development <i>Low Density Residential</i>	650 DUs	358	90	/	268	683	430	/	253
Trips Counted²									
Redbridge Development <i>Low Density Residential</i>	439 DUs	272	68	/	204	265	152	/	113
Total Trips		630	158	/	472	948	582	/	366

Notes:

1. Trip Generation Rates developed for the City of Tracy travel demand model as cited in the City of Tracy Transportation Master Plan (November, 2012) were used in this study.
Source: Kimley-Horn and Associates, Inc., 2015
2. Trips were taken from Traffic Counts taken on August 17, 2016, where the AM Peak Hour was 7:20 AM – 8:20 AM and PM Peak Hour was 4:40 PM – 5:40 PM.

Traffic Flows

Both Redbridge and Madison Park are fully developed and no additional traffic are expected to be generated by these neighborhoods, and removing the existing gate would result in traffic rerouting based on their ultimate origins and destinations to the east and the west.

The City of Tracy Travel Demand Model was used to determine the reassignment of trips if the gate was open. This model was developed and calibrated using City of Tracy travel characteristics and travel behavior.

The following scenarios were evaluated:

- Existing gate conditions
- Existing gate plus a second gate at Lammers Road conditions
- Removal of the existing gate conditions

Cars were counted by Kimley-Horn to determine the vehicles who would enter Redbridge to drop their kids off for school only. **Appendix B** shows the data gathered. A total of four vehicles were recorded to enter the development and drop off students at the existing gate just west of the school during the school AM peak. These cars entered the Redbridge development from Lammers Road and exited the development at Lammers Road shortly after.

Traffic flow is assessed by using Levels of Service methodology, which measures the level of congestion at an intersection for the peak hours studied. A level of service (LOS) analysis was completed to determine the changes in traffic conditions for the scenarios below. Analysis was conducted during the AM and PM peak hour at the study intersections indicated in **Figures 3 through 14**, which is the busiest time for traffic flow on the City road network. These exhibits show the peak hour turning movement volumes at the study intersections. The analysis uses the methodologies set forth by the *Highway Capacity Manual (HCM) 2010*. The analysis was conducted using the Synchro 9 software program. **Table 2 through 5** indicate the results of the analysis for the various gate scenarios. **Appendix C** shows the Synchro analysis outputs. The City of Tracy has established LOS D as the minimum acceptable LOS for overall intersection operations at the study intersections.

To determine the trips that would reroute if no gates were provided, traffic that travels east and west into or outside of the City along West Schulte and 11th Street, were calculated from the City Travel Demand Model. These trips were then sent through the individual neighborhoods instead, which represents a shorter route to the east and the west. Traffic that would divert through the Redbridge neighborhood to and from Madison Park and through Madison Park to and from Redbridge is estimated to be at maximum between 16% in the peak hours, or about 35- trips. The model actually estimates that some diversions could be as low as zero percent.

In addition to existing conditions, an analysis for recently approved land development projects were also conducted. The following projects would add volumes to the study intersections:

- Tracy Hills
- Cordes Ranch
- Stringer
- Dobler
- Aspire
- Grant Line Apartments
- Kagehiro
- Ellis

With Existing Gate

Under this scenario, there is an existing gate located east of the intersection of Redbridge Road and Handstand Way. This gate prevents vehicular access by residents wanting to go west or east via Redbridge road to either Corral Hollow Road or Lammers Road. The existing gate is open to pedestrians during the school year during school hours. Parents from Redbridge and some outside of the Redbridge area drop school children off just west of the gate on the Redbridge side.

With the Existing Gate and a Second Gate at Lammers Road

Under this scenario, the existing gate located just east of the intersection of Redbridge Road and Handstand Way conditions are analyzed. In addition, a second gate is assumed to be located at the entrance of the Redbridge development off Lammers Road. Both gates will enclose the Redbridge development and prevent access through the Redbridge development for the public altogether and only residents will have access. Current traffic that uses the Redbridge development to drop children off from outside of the development will be blocked from doing so. These cars will then have to drive around to Madison Park to drop the children off.

With no Gates Conditions

Under this scenario it is assumed that there are no gates at all and traffic can move freely between the Redbridge and Madison Park neighborhoods and avoid diverting to West Schulte Road or 11th Street under current conditions. The City Travel Demand Model was used to determine how traffic would reroute to evaluate this scenario as discussed above.

Traffic Operations With and Without School Traffic

Existing Conditions – School Out of Session

The study intersections while school is out of session all operate at acceptable conditions in both peak hours for existing conditions. These results represent the scenario with only one gate, located just west of the school.

The installation of a second gate at Lammers Road would not change traffic and the operations would continue to yield the same results when compared to a single gate scenario during the summer when school is not in session.

The removal of the gate at the school has a negligible effect on delay or level of service since it is estimated that low volumes of traffic would divert through the neighborhoods.

Existing Plus Approved Project Conditions – School Out of Session

In Existing Plus Approved Project Scenarios several intersections would have deteriorated operating in either or both of the peak hours. This is due to the addition of development traffic.

The following improvements will alleviate congestion to acceptable levels of service when installed:

- Installation of a signal at Lammers Road/Redbridge Road
- Partial median closure at Corral Hollow Road/Golden Leaf Lane
- Signalization and the installation of a separate northbound left turn lane and a separate eastbound right turn lane at Lammers Road /Old Schulte Road (this is an interim improvement), Ultimately, Lammers Road will be a six lane Expressway with a signal.
- Signalization of West Schulte Road at Lammers Road
- Signalization of West Schulte Road at Corral Hollow Road

Existing Conditions – School In of Session

When school is in session during existing conditions, the effect of adding a second gate only affects the AM peak hour slightly. This is due to the overlap of school start time with the AM peak hour. School time ends prior to the PM peak hour and students are picked up at staggered times based on individual schedules. Only intersection number five operates at below acceptable levels in the AM peak hour, while school is in session due to long wait times for cars entering Corral Hollow Road from Golden Leaf Lane.

The addition of a second gate has a minor effect on delay and no change in overall level of service at the study intersections. Intersection number five would continue to operate at a deficient LOS.

The removal of all gates has minor effects on delay and no change in overall intersection level of service. Intersection number five has a slight increase in overall delay between the scenarios of 0.5 seconds per vehicle.

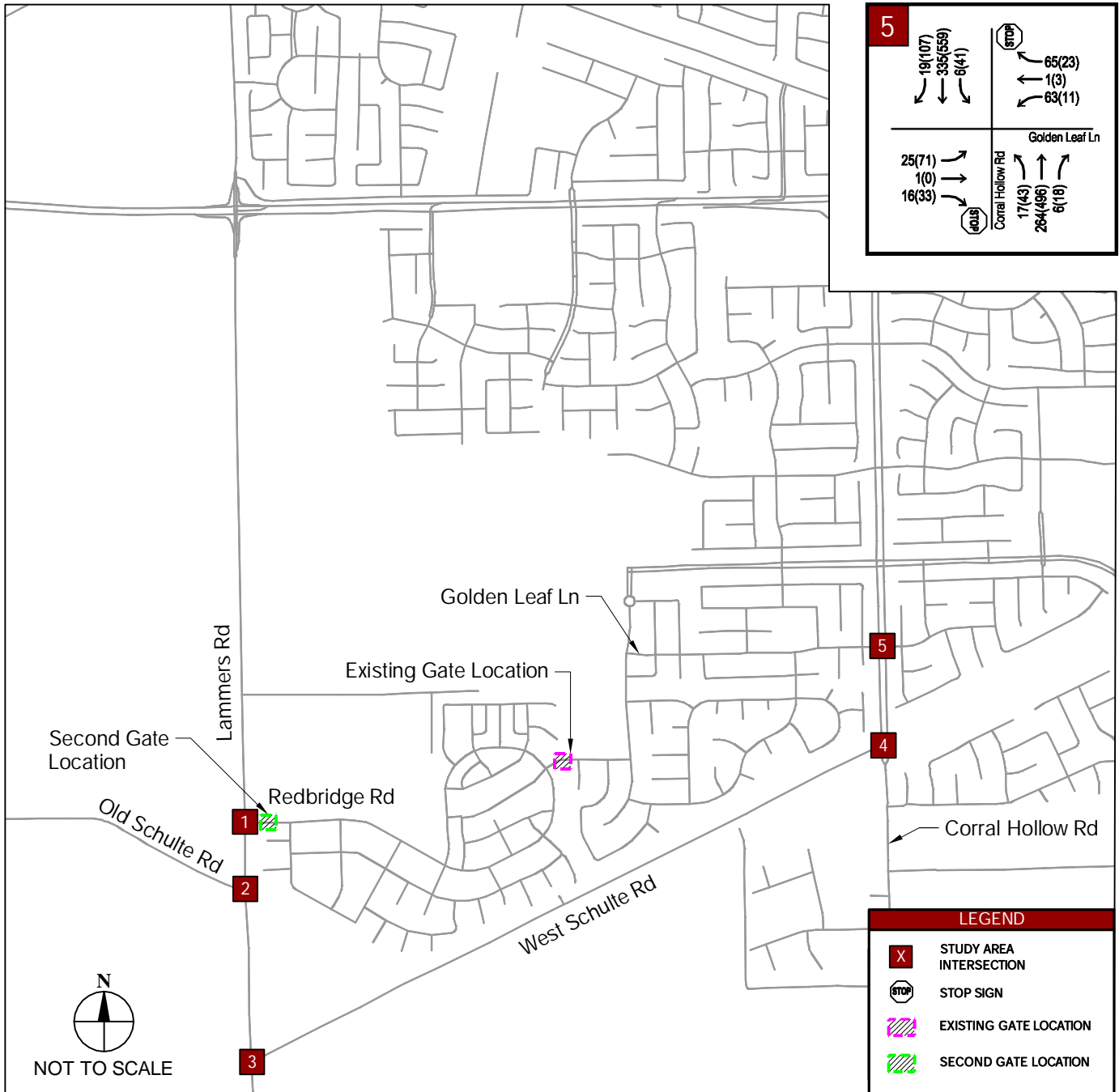
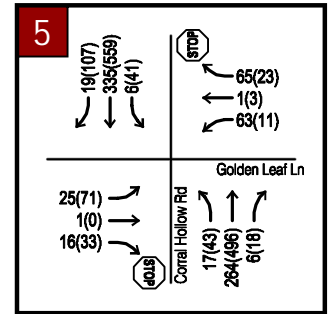
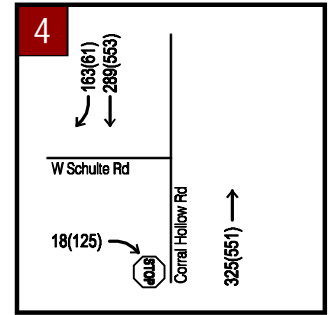
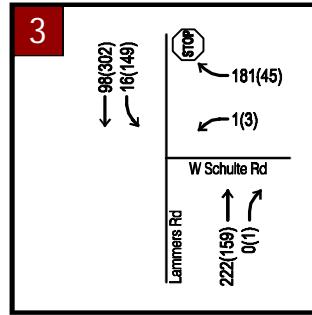
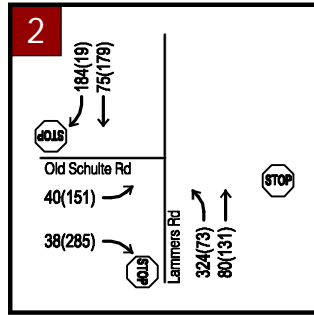
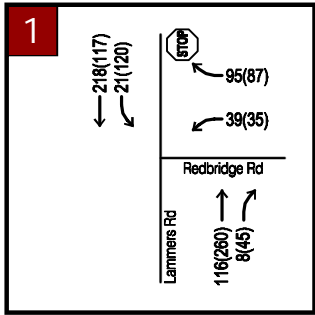
Existing Plus Approved Projects Conditions – School In of Session

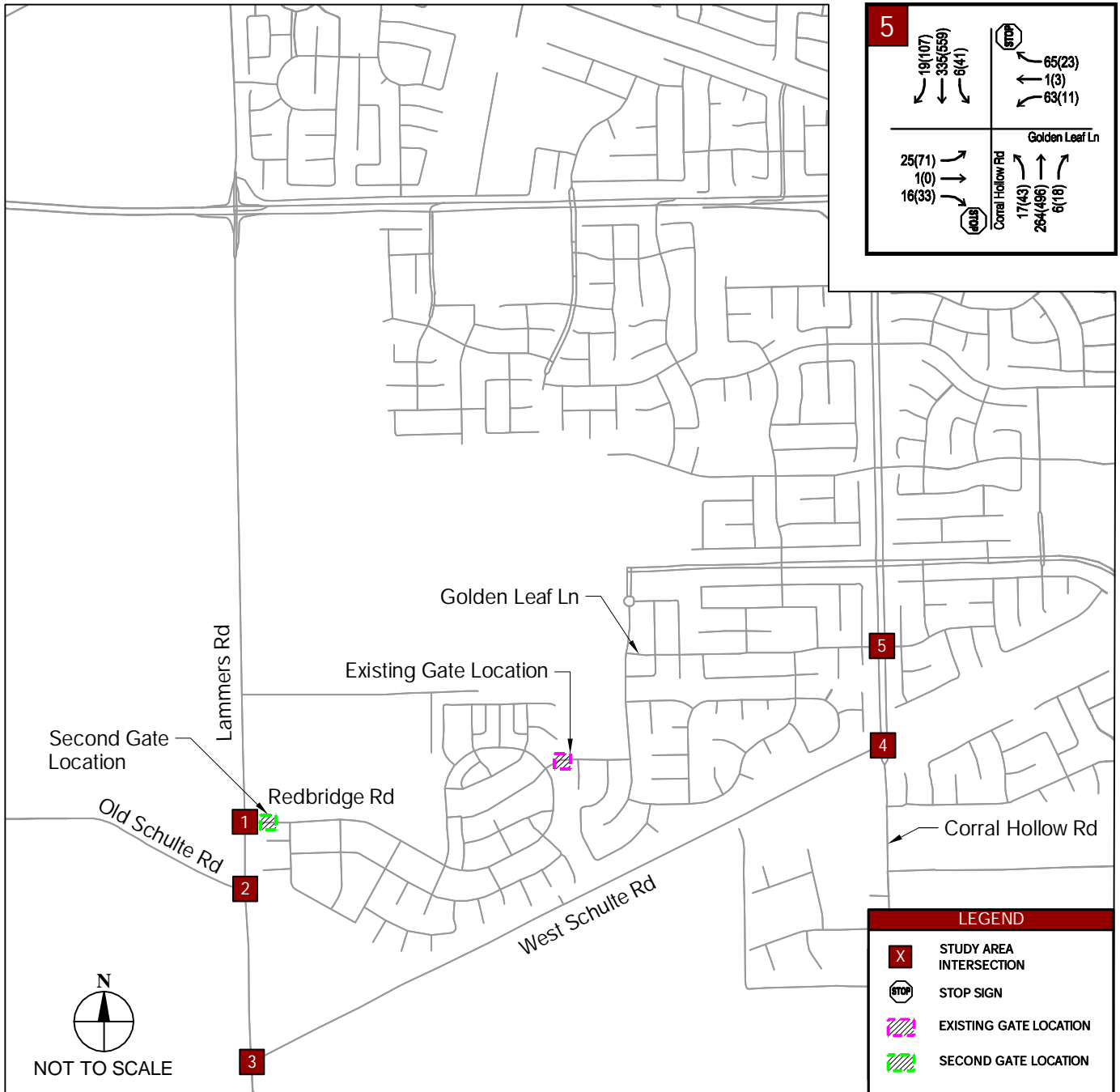
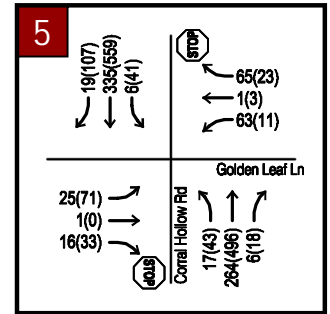
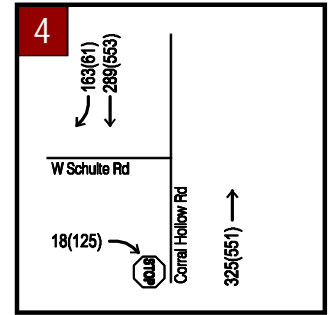
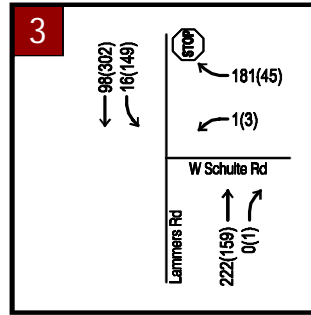
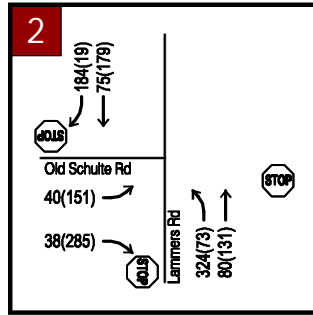
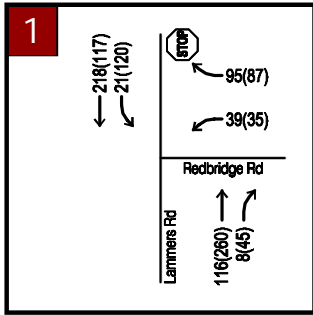
Similar to the existing conditions, while school is in session, the effect of adding a second gate only affects the AM peak hour.

The addition of a second gate has a greater effect on delay than previous scenarios but does not change in overall level of service at the study intersections. Intersection number three has an increase of 10 seconds per vehicle in overall intersection delay due to the increase in southbound left turns from the rerouting of trips to Golden Leaf Lane and Intersection number five has an increase in 20 seconds of delay.

Similar to existing summer conditions, the following recommended improvements will alleviate the congestion at the deficient intersections.

- Installation of a signal at Lammers Road/Redbridge Road
- Partial median closure at Corral Hollow Road/Golden Leaf Lane
- Signalization and the installation of a separate northbound left turn lane and a separate eastbound right turn lane at Lammers Road /Old Schulte Road (this is an interim improvement), Ultimately, Lammers Road will be a six lane Expressway with a signal.
- Signalization of West Schulte Road at Lammers Road





LEGEND	
	STUDY AREA INTERSECTION
	STOP SIGN
	EXISTING GATE LOCATION
	SECOND GATE LOCATION

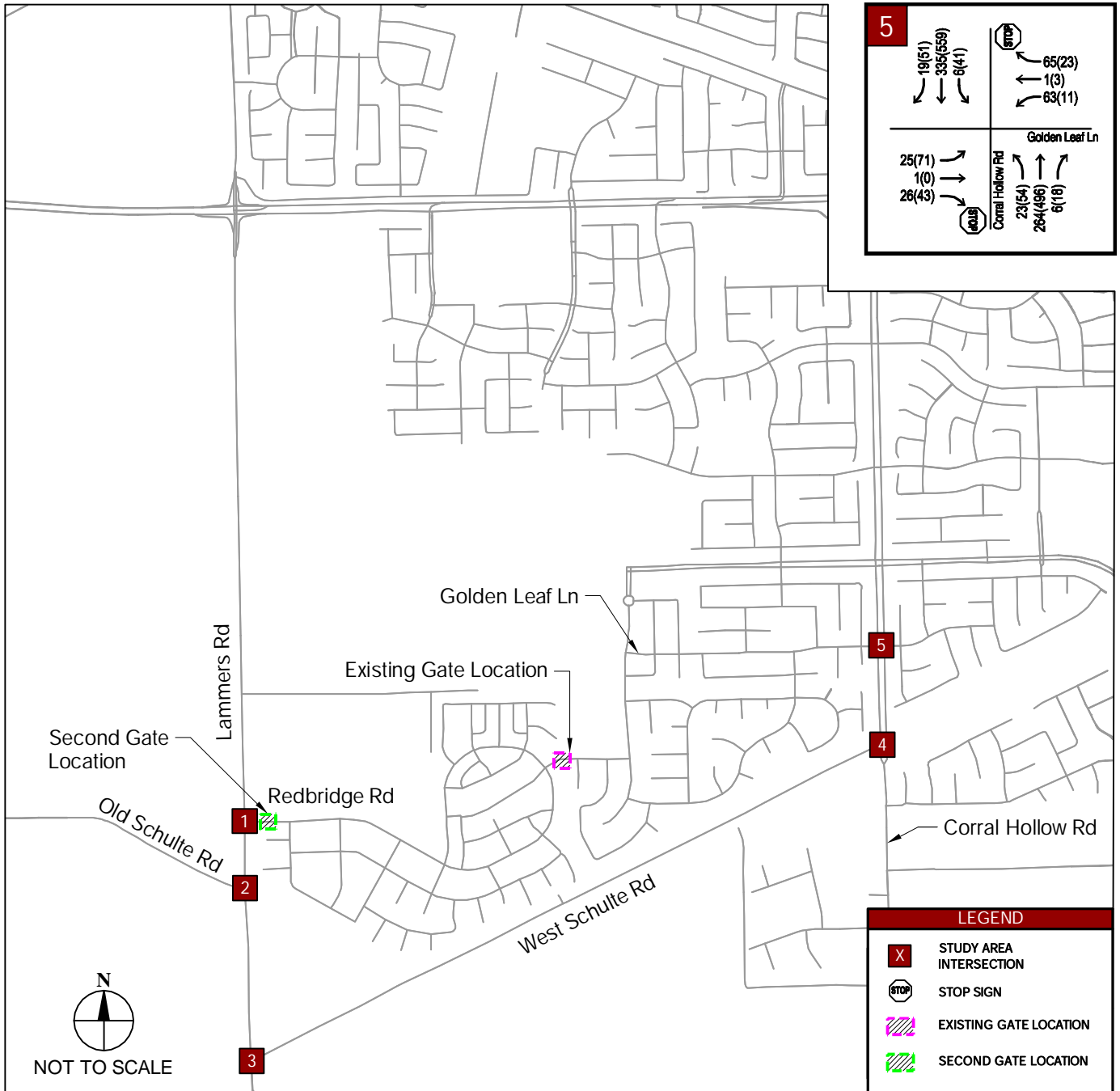
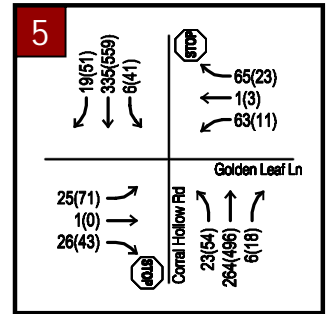
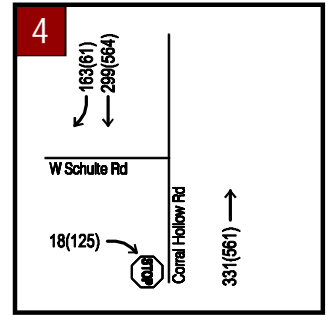
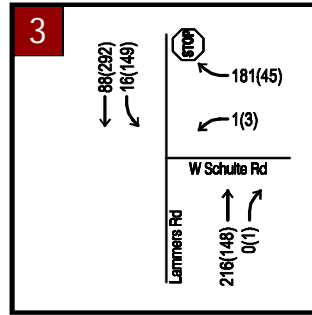
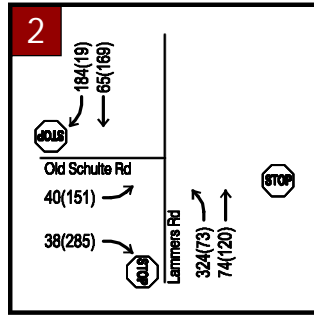
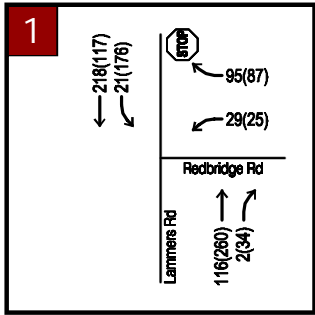


FIGURE 5
EXISTING CONDITIONS WITHOUT GATES
SCHOOL OUT OF SESSION VOLUMES

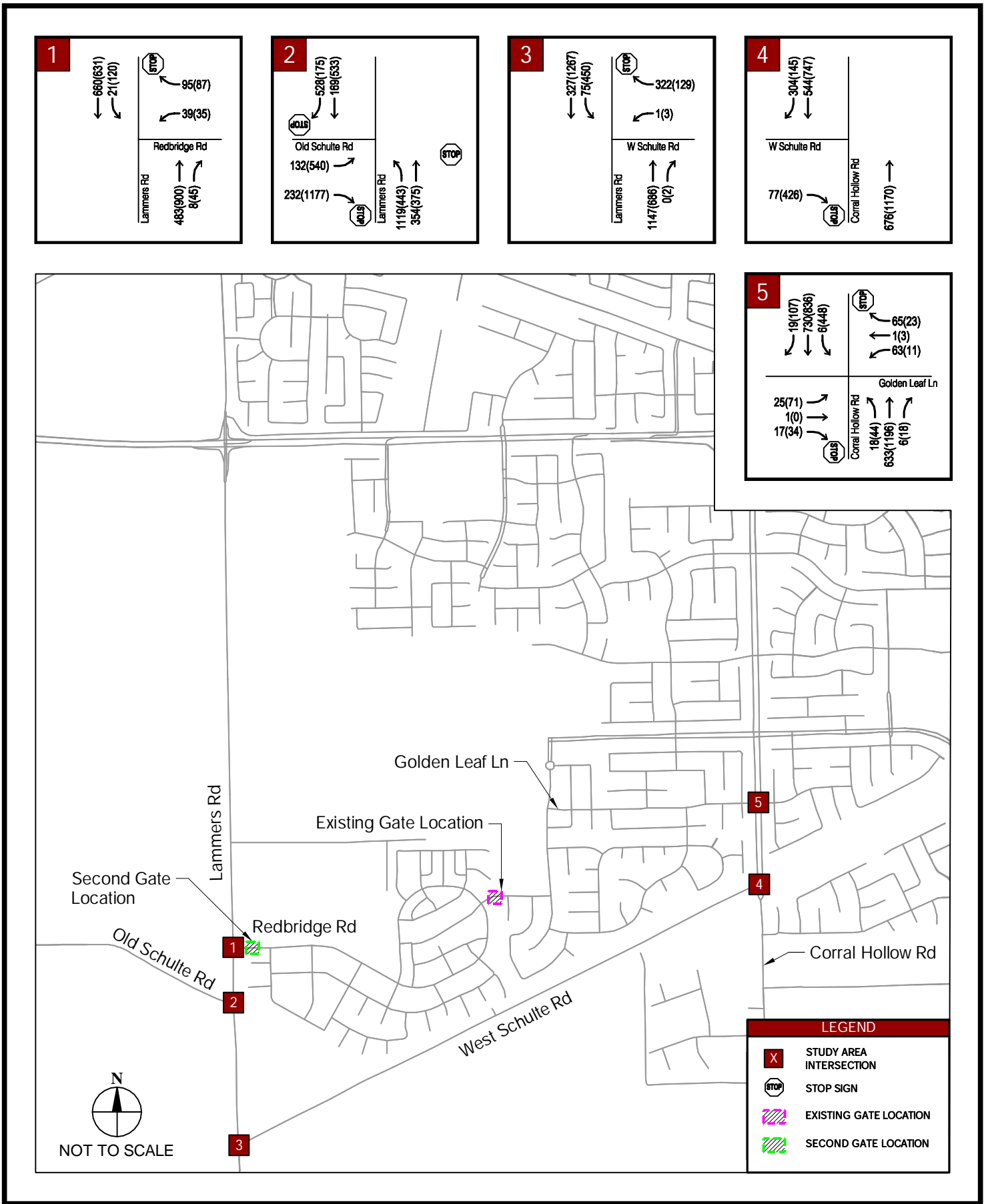


FIGURE 6

Kimley»Horn EXISTING + APPROVED PROJ. CONDITIONS WITH ONE GATE SCHOOL OUT OF SESSION - VOLUMES

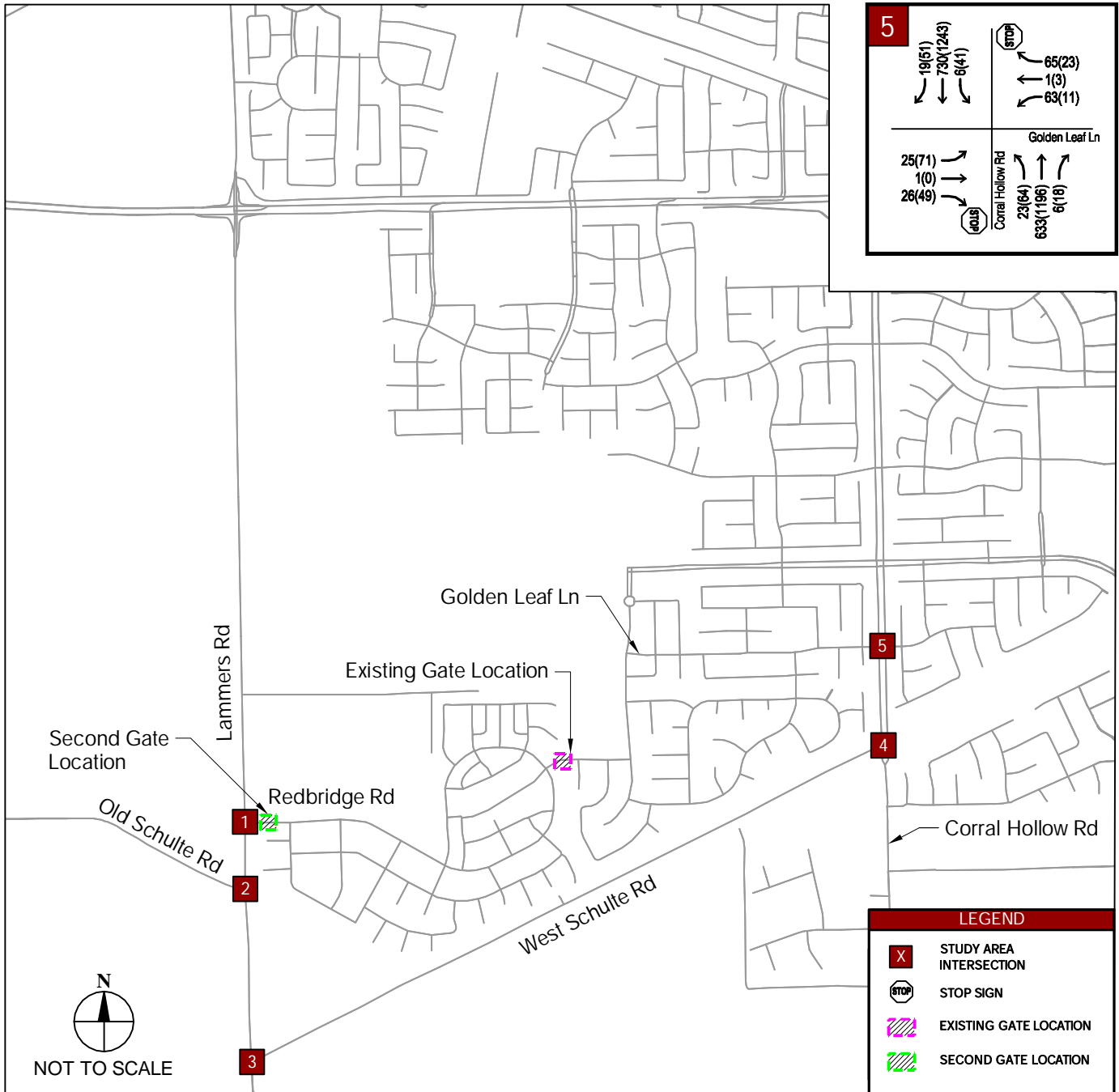
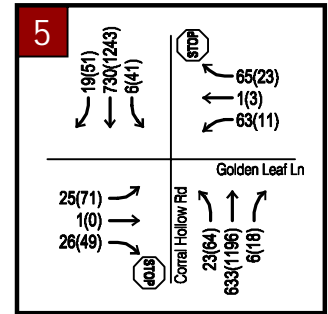
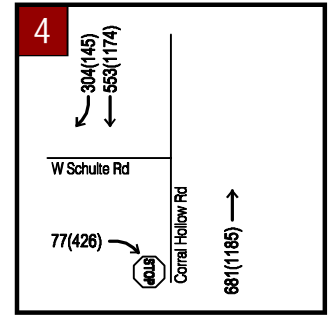
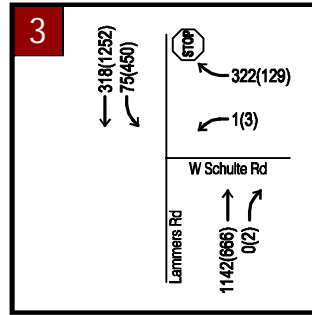
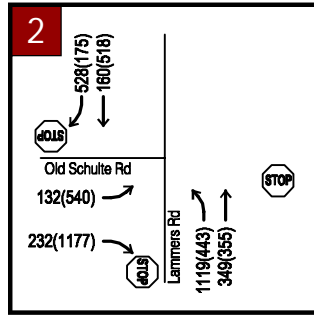
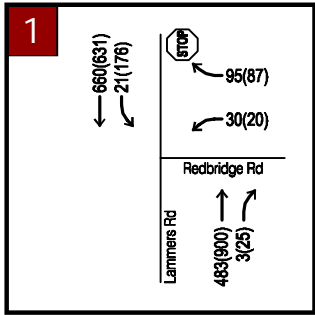
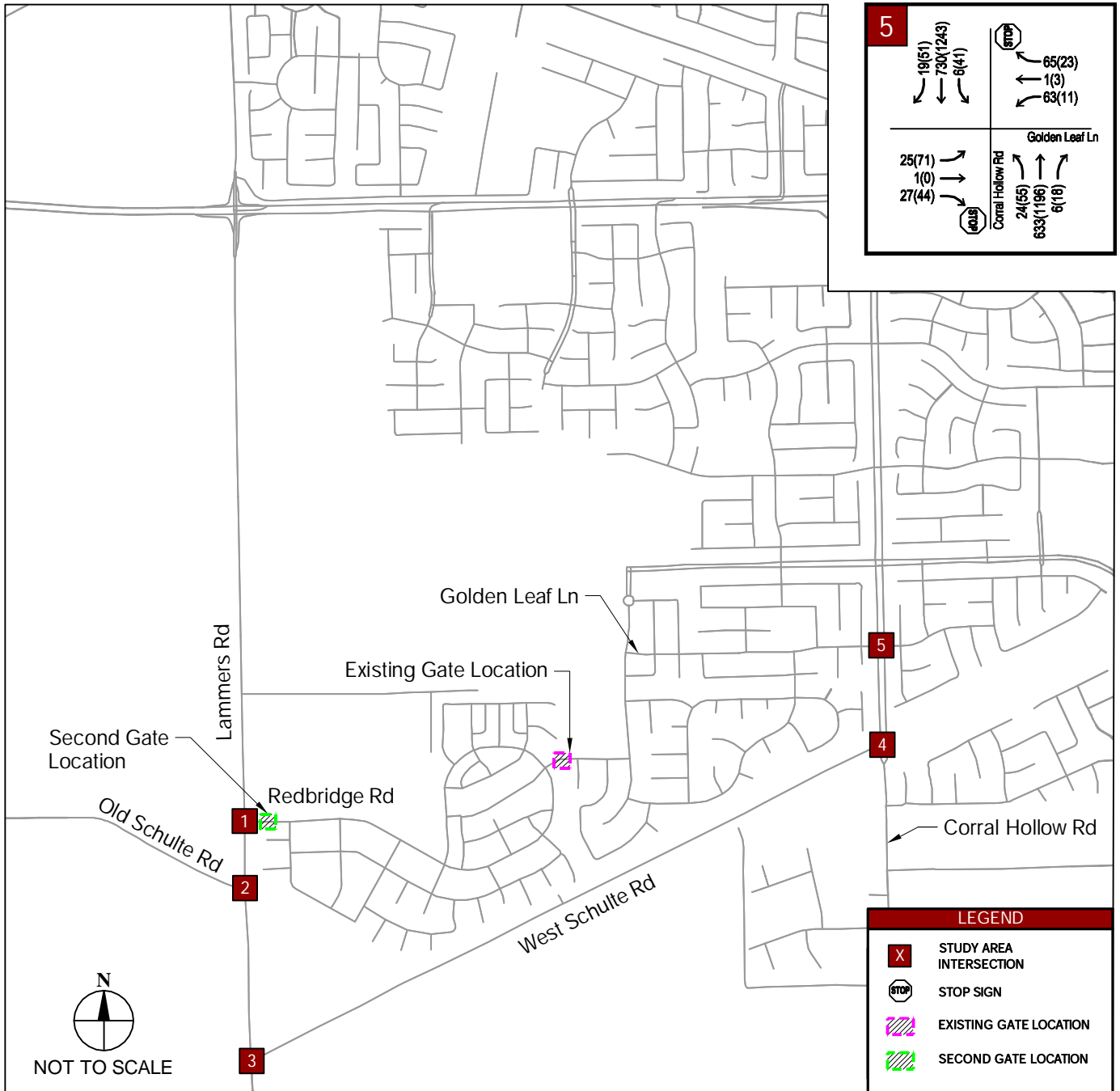
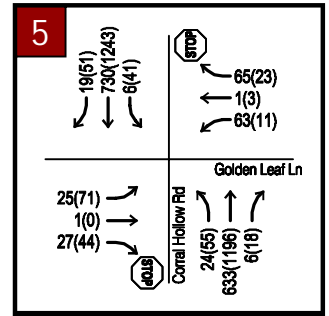
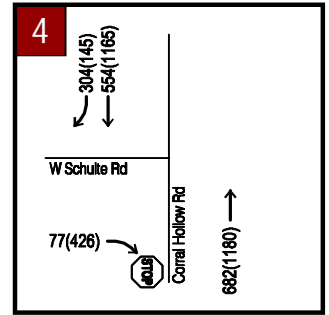
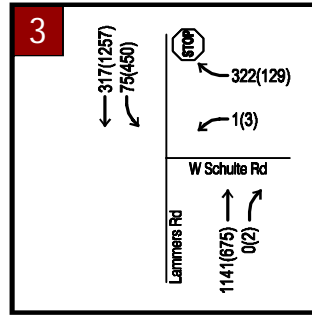
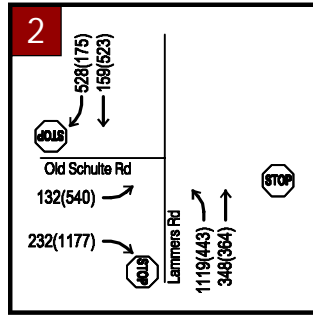
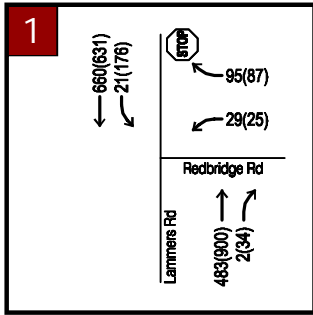
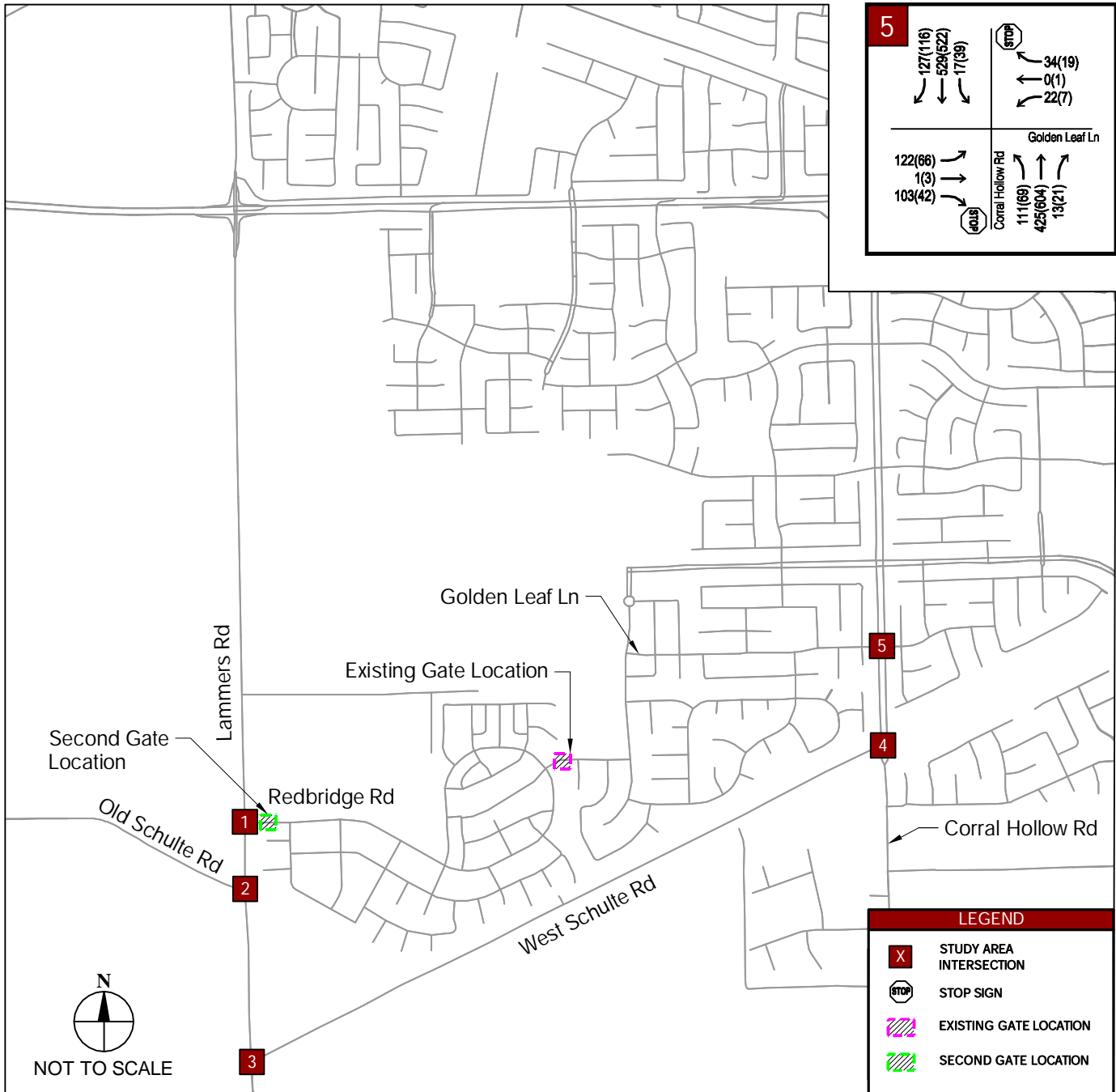
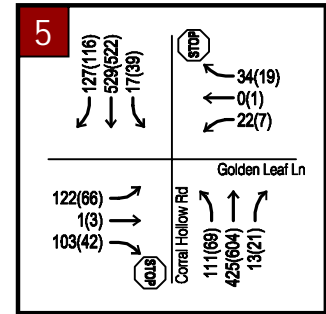
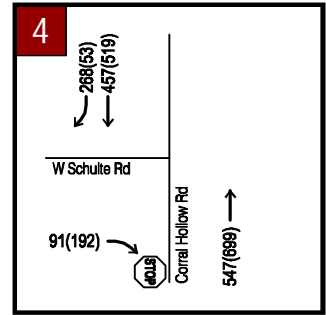
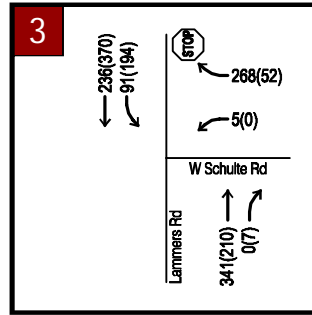
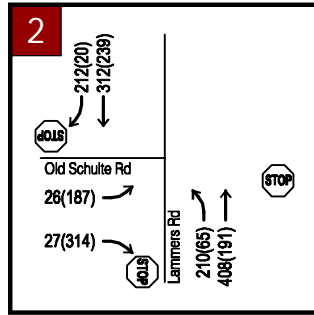
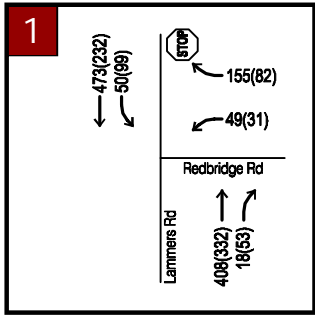
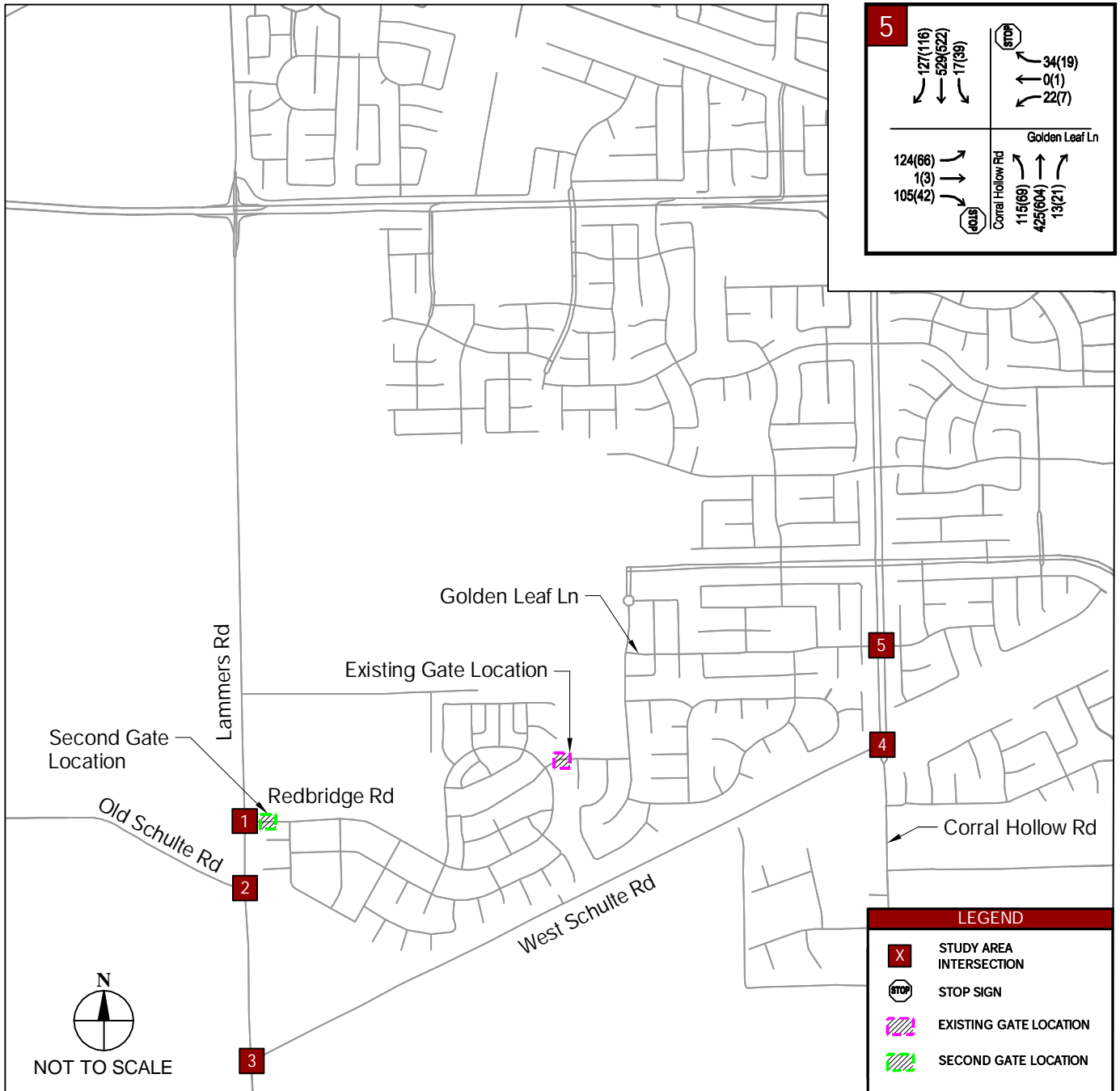
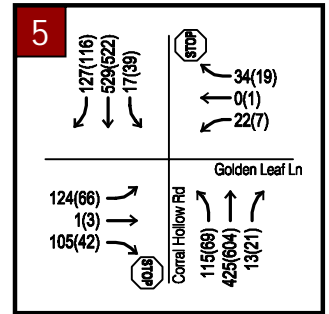
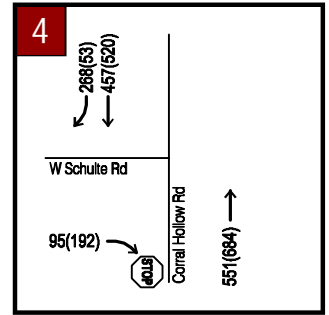
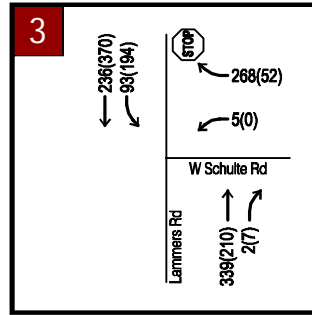
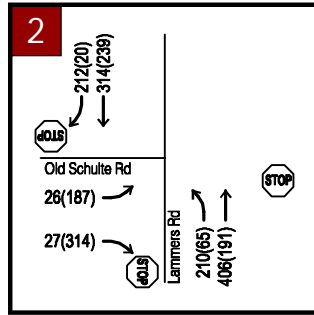
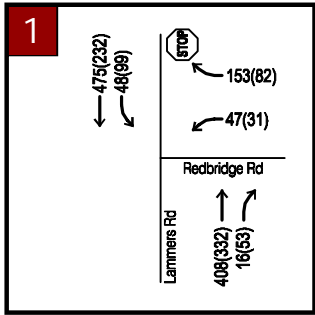
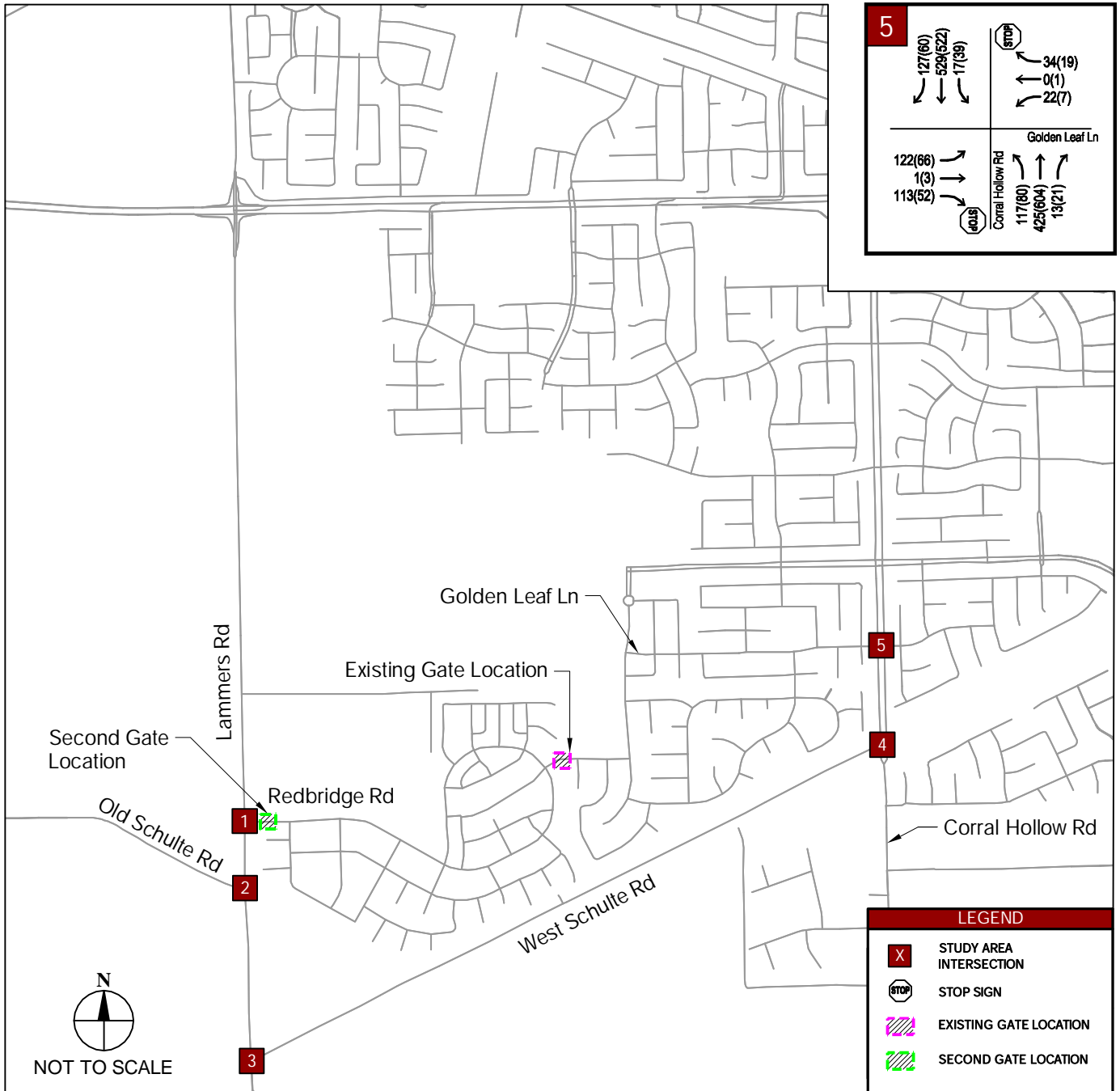
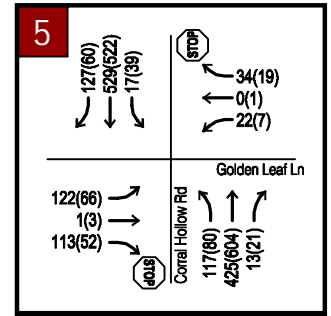
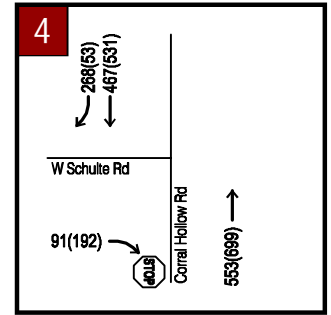
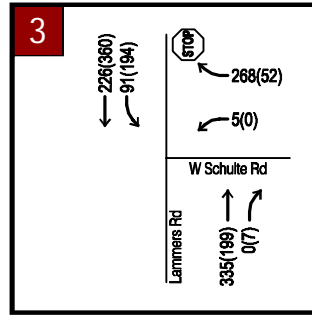
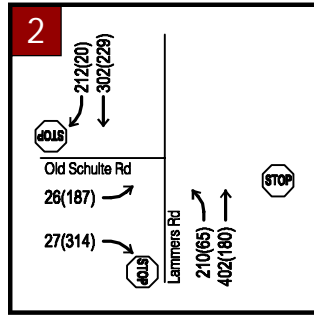
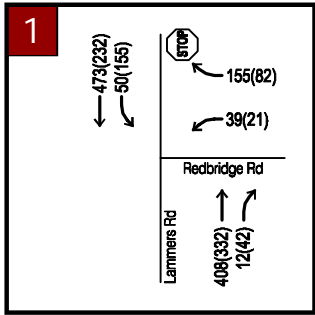


FIGURE 7

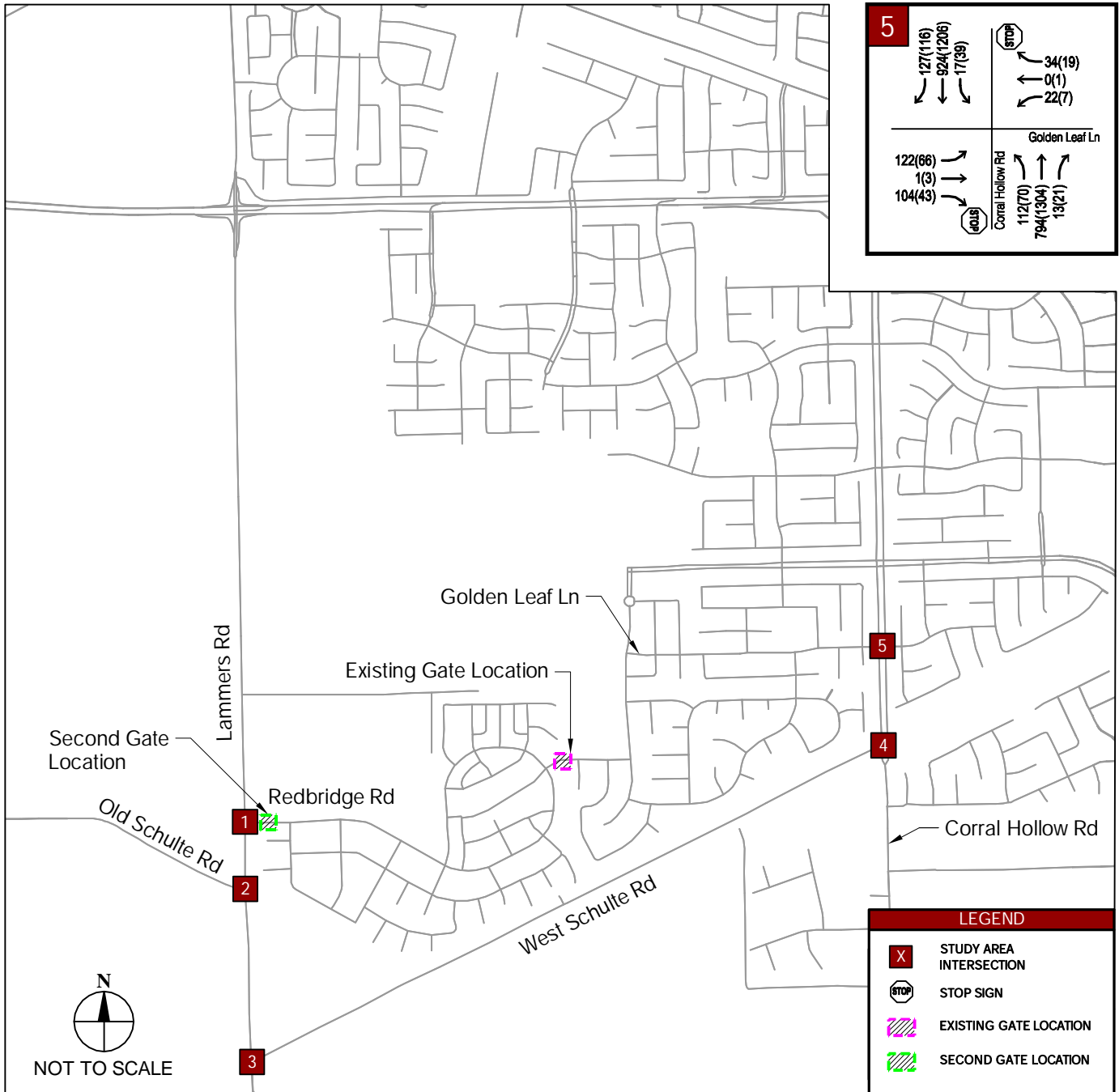
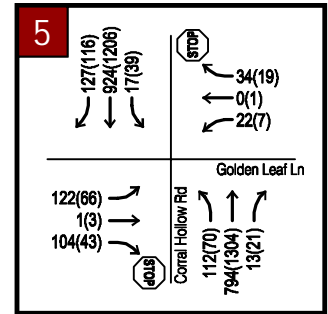
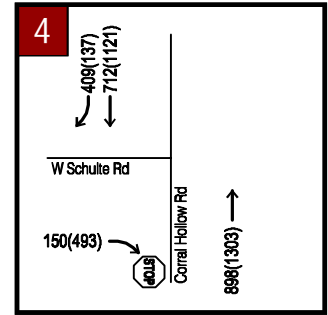
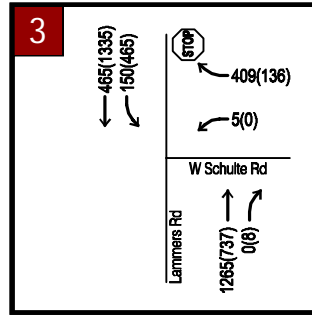
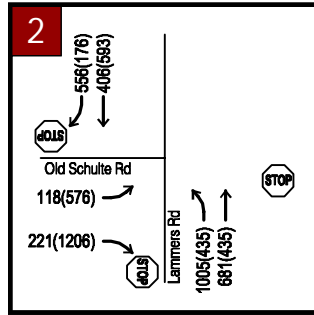
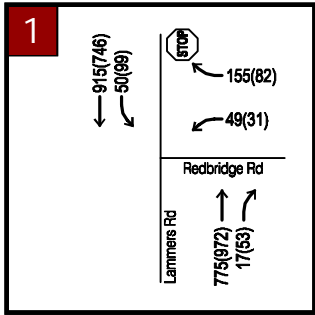


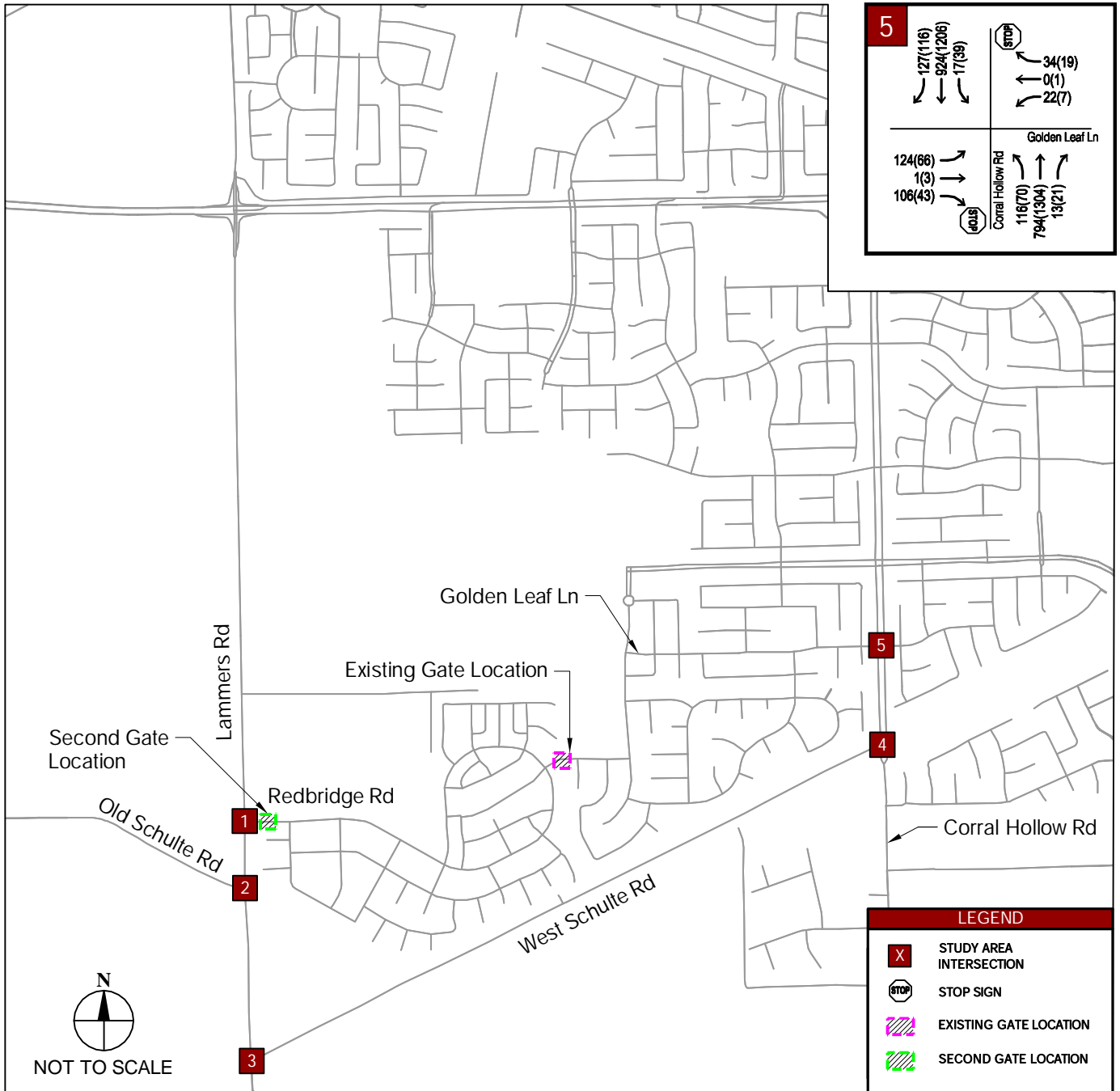
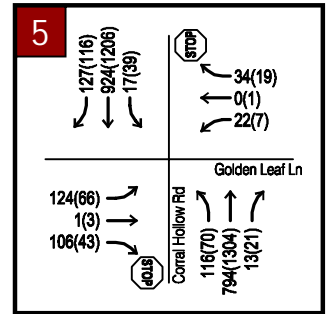
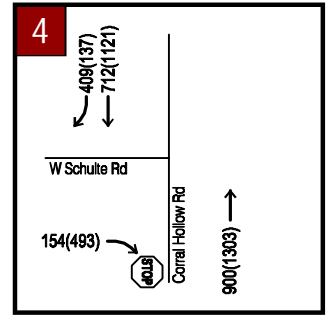
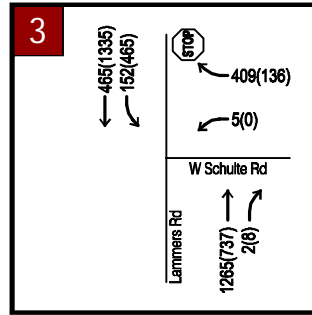
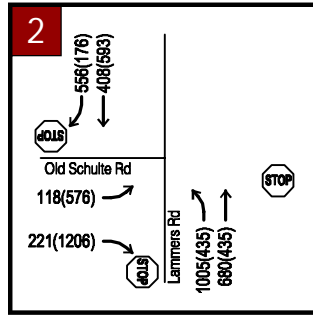
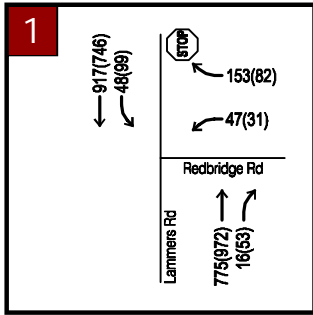






LEGEND	
	STUDY AREA INTERSECTION
	STOP SIGN
	EXISTING GATE LOCATION
	SECOND GATE LOCATION





Kimley»Horn EXISTING + APPROVED PROJ. CONDITIONS WITH TWO GATES
SCHOOL IN SESSION - VOLUMES

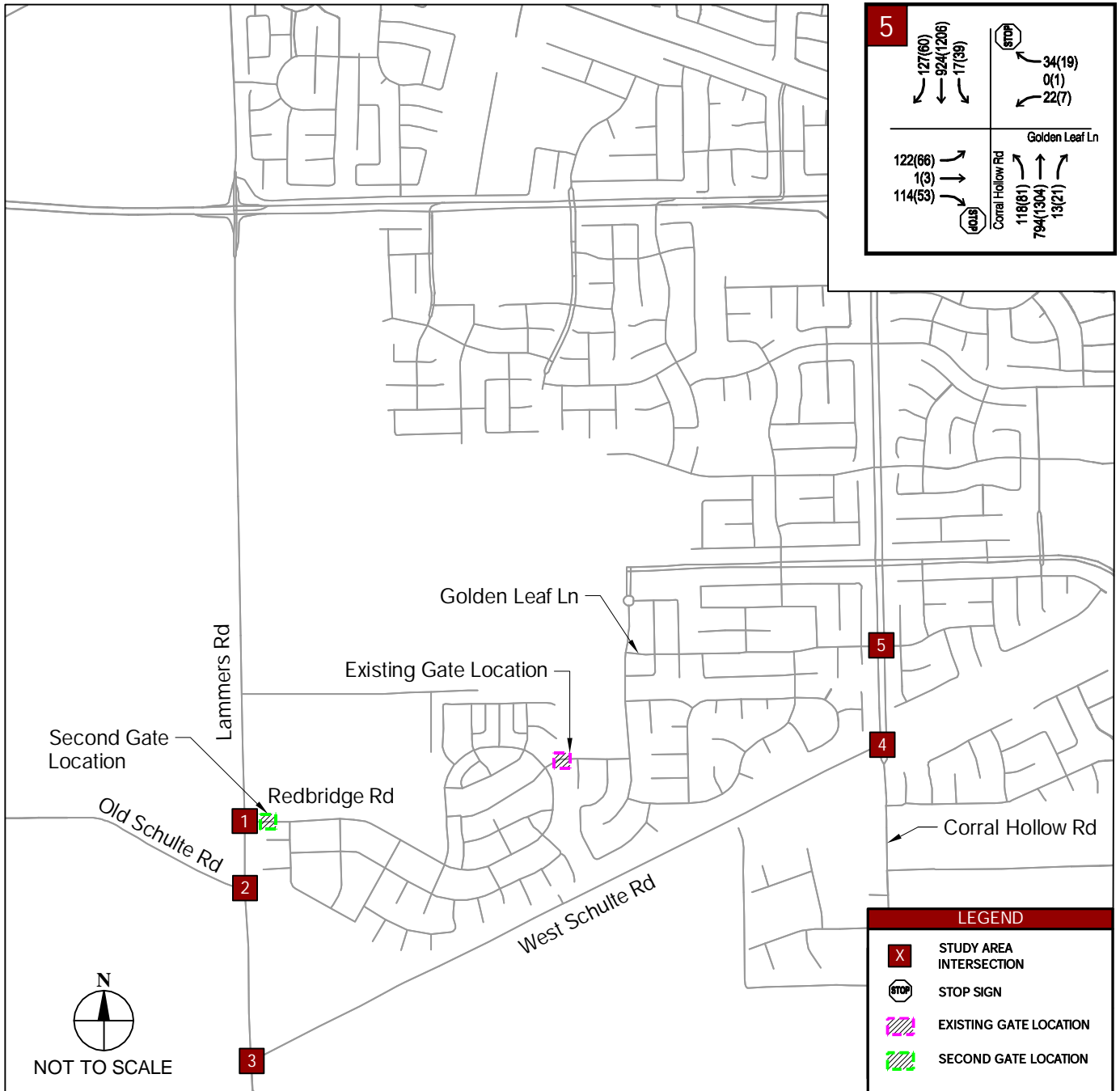
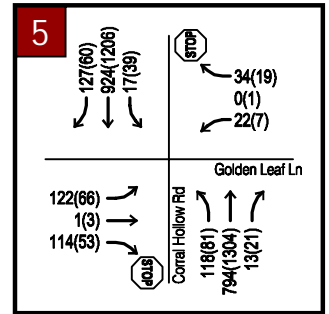
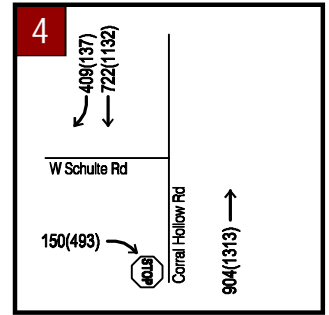
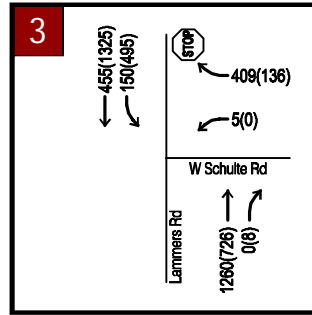
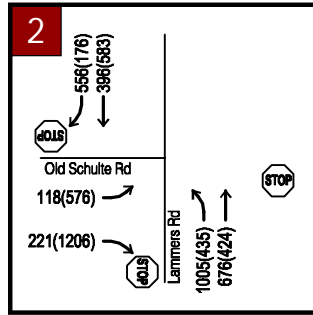
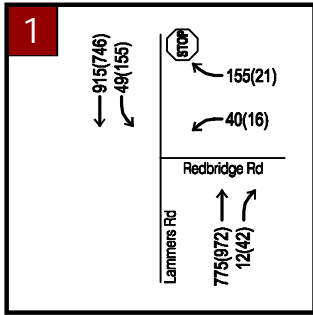


Table 2. Intersection LOS Analysis – Existing Conditions with Gates and without Gates (School Out of Session) *

#	Intersection	Control Type	Existing Conditions with One Gate						Existing Conditions with Two Gates						Existing Conditions without Gates					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS
1.	Lammers Road/ Redbridge Road	SSSC <i>Worst Approach</i>	Overall	3.1	A	Overall	4.0	A	Overall	3.1	A	Overall	4.0	A	Overall	2.9	A	Overall	4.4	A
			<i>WB</i>	10.2	<i>B</i>	<i>WB</i>	13.3	<i>B</i>	<i>WB</i>	10.2	<i>B</i>	<i>WB</i>	13.3	<i>B</i>	<i>WB</i>	10.0	<i>B</i>	<i>WB</i>	13.6	<i>B</i>
2.	Old Schulte Road/ Lammers Road	AWSC	Overall	14.9	B	Overall	13.2	B	Overall	14.9	B	Overall	13.2	B	Overall	14.5	B	Overall	12.9	B
3.	Lammers Road/ West Schulte Road	SSSC <i>Worst Approach</i>	Overall	4.2	A	Overall	2.5	A	Overall	4.2	A	Overall	2.5	A	Overall	4.3	A	Overall	2.6	A
			<i>WB</i>	11.2	<i>B</i>	<i>WB</i>	10.0	<i>B</i>	<i>WB</i>	11.2	<i>B</i>	<i>WB</i>	10.0	<i>B</i>	<i>WB</i>	11.1	<i>B</i>	<i>WB</i>	9.9	<i>A</i>
4.	West Schulte Road/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	0.2	A	Overall	1.5	A	Overall	0.2	A	Overall	1.5	A	Overall	0.2	A	Overall	1.4	A
			<i>EB</i>	10.2	<i>B</i>	<i>EB</i>	15.0	<i>C</i>	<i>EB</i>	10.2	<i>B</i>	<i>EB</i>	15.0	<i>C</i>	<i>EB</i>	10.3	<i>B</i>	<i>EB</i>	15.2	<i>C</i>
5.	Golden Leaf Lane/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	3.2	A	Overall	3.8	A	Overall	3.2	A	Overall	3.8	A	Overall	3.4	A	Overall	4.2	A
			<i>EB</i>	14.4	<i>B</i>	<i>EB</i>	38.5	<i>E</i>	<i>EB</i>	14.4	<i>B</i>	<i>EB</i>	38.5	<i>E</i>	<i>WB</i>	14.6	<i>B</i>	<i>EB</i>	37.3	<i>E</i>

Notes:

- 1 Analysis performed using HCM 2010 methodologies.
- 2 Delay indicated in seconds/vehicle.
- 3 Overall level of service (LOS) standard for the City is D.
- 4 Intersections that fall below City standard are shown in bold.

Table 3. Intersection LOS Analysis – Existing Plus Approved Projects with Gates and without Gates (School Out of Session) *

#	Intersection	Control Type	Existing Conditions with One Gate						Existing Conditions with Two Gates						Existing Conditions without Gates					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS
1.	Lammers Road/ Redbridge Road	SSSC <i>Worst Approach</i>	Overall	2.6	A	Overall	10.7	B	Overall	2.6	A	Overall	10.7	B	Overall	2.1	A	Overall	10	A
			<i>WB</i>	23.8	<i>C</i>	<i>WB</i>	>145	<i>F</i>	<i>WB</i>	23.8	<i>C</i>	<i>WB</i>	>145	<i>F</i>	<i>WB</i>	20.7	<i>C</i>	<i>WB</i>	>142	<i>F</i>
2.	Old Schulte Road/ Lammers Road	AWSC	Overall	62	F	Overall	65	F	Overall	62	F	Overall	65	F	Overall	62	F	Overall	65	F
3.	Lammers Road/ West Schulte Road	SSSC <i>Worst Approach</i>	Overall	79	F	Overall	5	A	Overall	79	F	Overall	5	A	Overall	79	F	Overall	4.9	A
			<i>WB</i>	>450	F	<i>WB</i>	43.9	<i>E</i>	<i>WB</i>	>450	F	<i>WB</i>	43.9	<i>E</i>	<i>WB</i>	>445	F	<i>WB</i>	43.1	<i>E</i>
4.	West Schulte Road/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	0.7	A	Overall	27.6	D	Overall	0.7	A	Overall	27.6	D	Overall	0.7	A	Overall	94	F
			<i>EB</i>	14	<i>B</i>	<i>EB</i>	>160	<i>F</i>	<i>EB</i>	14	<i>B</i>	<i>EB</i>	>160	<i>F</i>	<i>EB</i>	14.2	<i>B</i>	<i>EB</i>	>640	<i>F</i>
5.	Golden Leaf Lane/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	5.6	A	Overall	53.5	F	Overall	5.6	A	Overall	53.5	F	Overall	6.2	A	Overall	70	F
			<i>WB</i>	53.9	F	<i>WB</i>	>1 hr	<i>F</i>	<i>WB</i>	53.9	F	<i>WB</i>	>1 hr	<i>F</i>	<i>WB</i>	59	F	<i>EB</i>	>25min	<i>F</i>

Notes:

- 1 Analysis performed using HCM 2010 methodologies.
- 2 Delay indicated in seconds/vehicle.
- 3 Overall level of service (LOS) standard for the City is D.
- 4 Intersections that fall below City standard are shown in bold.
- * Table is Native 11" x 17". Please print as 11"x17" for readability

Table 4. Intersection LOS Analysis – Existing Conditions with Gates and without Gates (School in Session) *

#	Intersection	Control Type	Existing Conditions with One Gate						Existing Conditions with Two Gates						Existing Conditions without Gates					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS
1.	Lammers Road/ Redbridge Road	SSSC <i>Worst Approach</i>	Overall	3.6	A	Overall	2.8	A	Overall	3.5	A	Overall	2.8	A	Overall	3.3	A	Overall	3.2	A
			<i>WB</i>	18.5	C	<i>WB</i>	13.2	B	<i>WB</i>	18.1	C	<i>WB</i>	13.2	B	<i>WB</i>	17.3	C	<i>WB</i>	13.3	B
2.	Old Schulte Road/ Lammers Road	AWSC	Overall	32	D	Overall	17	C	Overall	31.9	D	Overall	17	C	Overall	30.3	D	Overall	16.6	C
3.	Lammers Road/ West Schulte Road	SSSC <i>Worst Approach</i>	Overall	5.6	A	Overall	2.5	A	Overall	5.6	A	Overall	2.5	A	Overall	5.7	A	Overall	2.6	A
			<i>WB</i>	16.6	C	<i>WB</i>	9.8	B	<i>WB</i>	16.6	C	<i>WB</i>	9.8	B	<i>WB</i>	16.4	C	<i>WB</i>	9.7	A
4.	West Schulte Road/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	0.9	A	Overall	2.3	A	Overall	0.9	A	Overall	2.3	A	Overall	0.9	A	Overall	2.8	A
			<i>EB</i>	13.4	B	<i>EB</i>	17.0	C	<i>EB</i>	13.5	B	<i>EB</i>	17.0	B	<i>EB</i>	13.6	B	<i>EB</i>	17.4	C
5.	Golden Leaf Lane/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	51.3	F	Overall	5.8	A	Overall	56.4	F	Overall	5.8	A	Overall	56.8	F	Overall	6.3	A
			<i>EB</i>	>320	F	<i>EB</i>	65	F	<i>EB</i>	>355	F	<i>EB</i>	65	F	<i>EB</i>	>350	F	<i>EB</i>	63	F

Notes:

- 1 Analysis performed using HCM 2010 methodologies.
- 2 Delay indicated in seconds/vehicle.
- 3 Overall level of service (LOS) standard for the City is D.
- 4 Intersections that fall below City standard are shown in bold.

Table 5. Intersection LOS Analysis – Existing Plus Approved Projects with Gates and without Gates (School in Session) *

#	Intersection	Control Type	Existing Conditions with One Gate						Existing Conditions with Two Gates						Existing Conditions without Gates					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS	Movement	Delay	LOS
1.	Lammers Road/ Redbridge Road	SSSC <i>Worst Approach</i>	Overall	11.3	B	Overall	4.4	A	Overall	10.4	B	Overall	4.4	A	Overall	8.2	A	Overall	2.7	A
			<i>WB</i>	105	F	<i>WB</i>	67	F	<i>WB</i>	100	F	<i>WB</i>	67	F	<i>WB</i>	79	F	<i>WB</i>	87	E
2.	Old Schulte Road/ Lammers Road	AWSC	Overall	58.8	F	Overall	65	F	Overall	58.8	F	Overall	65	F	Overall	58.7	F	Overall	65	F
3.	Lammers Road/ West Schulte Road	SSSC <i>Worst Approach</i>	Overall	>220	F	Overall	3.8	A	Overall	>230	F	Overall	3.8	A	Overall	>225	F	Overall	4	A
			<i>WB</i>	>20min	F	<i>WB</i>	19.8	C	<i>WB</i>	>20min	F	<i>WB</i>	19.8	C	<i>WB</i>	>20min	F	<i>WB</i>	19.5	C
4.	West Schulte Road/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	1.7	A	Overall	116	F	Overall	1.8	A	Overall	116	F	Overall	1.7	A	Overall	119	F
			<i>EB</i>	24.8	C	<i>EB</i>	>720	F	<i>EB</i>	25.3	D	<i>EB</i>	>720	F	<i>EB</i>	25.3	D	<i>EB</i>	>740	F
5.	Golden Leaf Lane/ Corral Hollow Road	SSSC <i>Worst Approach</i>	Overall	>200	F	Overall	65	F	Overall	>220	F	Overall	65	F	Overall	>230	F	Overall	70	F
			<i>EB</i>	>40min	F	<i>EB</i>	>25min	F	<i>EB</i>	>40min	F	<i>EB</i>	>25min	F	<i>EB</i>	>35min	F	<i>EB</i>	>25min	F

Notes:

- 1 Analysis performed using HCM 2010 methodologies.
 - 2 Delay indicated in seconds/vehicle.
 - 3 Overall level of service (LOS) standard for the City is D.
 - 4 Intersections that fall below City standard are shown in bold.
- * Table is Native 11" x 17". Please print as 11"x17" for readability

Pedestrian Access Assessment

Currently pedestrians can enter the Redbridge development from the west and exit via the pedestrian gate at the east to cross through the development at all times. While school is in session, a pedestrian gate is left unlocked during school hours. Pedestrians, both resident and non-Redbridge resident may enter and exit in either direction. A second proposed gate could limit pedestrian access if there is no pedestrian gate like the one provided at the existing gate. Redbridge is a preferred pedestrian route because it provides sidewalks and is a residential community with lower traffic volumes, and lower speeds than the alternate route which would be Corral Hollow Road, to West Schulte Road, to Lammers Road. The extension of West Schulte will likely lower the number of pedestrians entering and exiting Redbridge, as pedestrians will have access to an alternate route with sidewalks.

Conclusions

The current gate results in, and will continue to result in increased automotive trips being made within the City for the purpose of dropping kids off at school. Shopping, eating out, running errands, and going to work. The installation of a second gate will continue to result in increased travel on a Citywide basis, both for Redbridge residents and Madison Park residents.

The provision of an additional gate at the front entrance of the Redbridge Development will have a minor effect on intersection circulation and level of service for vehicles at Intersections 1, 2, and 3. There are more significant effects on Intersection 4 and 5, especially intersection 5 which experienced an increase in delay between 5-20 seconds per vehicle in overall intersection delay during the AM peak period.

The removal of both gates has minor effects on operations at Intersections 1, 2, and 3. There are more significant effects on Intersection 4 and 5.

In the Existing Plus Approved Project scenarios, Intersection 4 has a significant increase in delay in the PM peak hour. Intersection 5 experiences significant increases in delay in both the AM and PM peak hour.

Regarding pedestrian access, an additional gate may lower pedestrian access particularly if a pedestrian gate is not provided; much like the Gate located at Redbridge Road near George Kelly Elementary School. Additionally, access for guests, emergency vehicles, and school buses should be considered if a second gate is added as this will impact response times, and access for visitors.

As residential development occurs to the north of Redbridge and Madison Park, it will be important to maintain access for children to walk to George Kelly Elementary school through Redbridge, otherwise these trips would have to be done in an automobile instead. And as the children in Madison Park gets older, pedestrian and bicycle access to Kimball High School will be equally important and eliminate private vehicle traffic.

The existing gate and proposed gate are inconsistent with the City of Tracy General Plan, The Sustainable Action Plan, and the City Transportation Master Plan Goals for the following reasons:

- It creates a cul-de-sac environment, which results in longer trip lengths, increases VMT, VHT and GHG.
- It limits the ability of transit services to connect through neighborhoods, increase transit ridership and reduce private vehicle travel. Transit service cannot be efficiently provided in cul de sac communities. Ridership will be low, requiring increased transit subsidies. Walking distances to bus stops will be long and circuitous, and bus headways too big.
- The location of the gates limits access and increases travel time for both the High School and the Elementary School.
- It limits walkability for pedestrians and discourages cyclists to be more active.
- It increases emergency services response times and may, as the City builds out, require additional Fire Stations to be constructed to maintain acceptable response times.
- The goals set by the SAP will be more difficult to attain with the installation of gates.
- The gates result in travel patterns and traffic operational and environmental impacts which are inconsistent with current City General Plan policies.

APPENDIX A:

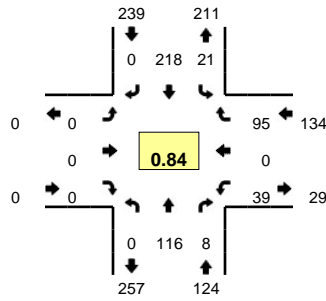
Traffic Counts

School Out of Session

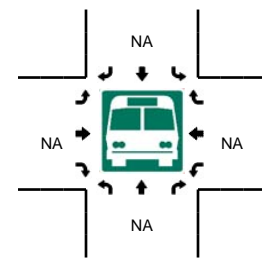
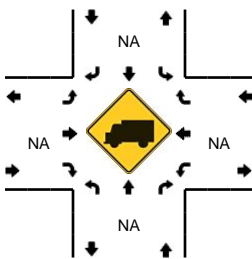
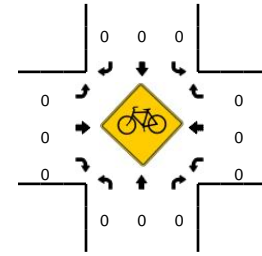
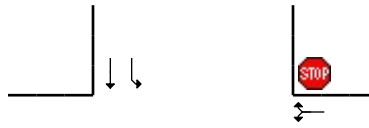
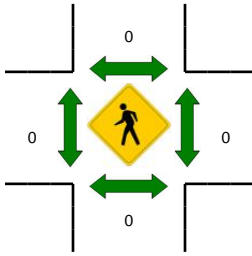
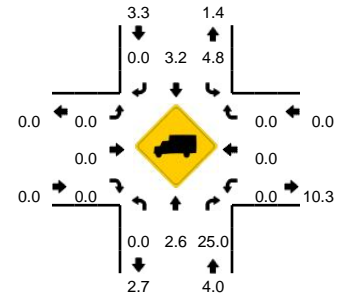
August 3, 2016

LOCATION: S Lammers Rd -- Redbridge Rd
CITY/STATE: Tracy, CA

QC JOB #: 13867501
DATE: Wed, Aug 03 2016



Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

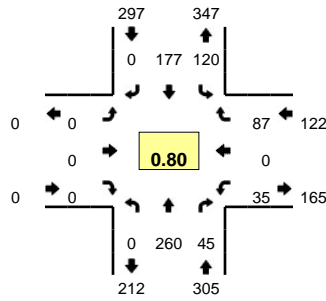


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Redbridge Rd (Eastbound)				Redbridge Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	11	2	0	2	24	0	0	0	0	0	0	5	0	2	0	46	
7:05 AM	0	11	0	0	2	30	0	0	0	0	0	0	3	0	4	0	50	
7:10 AM	0	15	0	0	0	31	0	0	0	0	0	0	4	0	2	0	52	
7:15 AM	0	9	1	0	0	23	0	0	0	0	0	0	3	0	9	0	45	
7:20 AM	0	3	0	0	0	16	0	0	0	0	0	0	5	0	9	0	33	
7:25 AM	0	10	0	0	2	20	0	0	0	0	0	0	5	0	12	0	49	
7:30 AM	0	8	0	0	1	14	0	0	0	0	0	0	4	0	8	0	35	
7:35 AM	0	11	2	0	2	16	0	0	0	0	0	0	4	0	12	0	47	
7:40 AM	0	11	2	0	2	10	0	0	0	0	0	0	4	0	13	0	42	
7:45 AM	0	10	0	0	1	13	0	0	0	0	0	0	1	0	9	0	34	
7:50 AM	0	14	1	0	6	12	0	0	0	0	0	0	0	0	6	0	39	
7:55 AM	0	3	0	0	3	9	0	0	0	0	0	0	1	0	9	0	25	497
8:00 AM	0	8	1	0	0	13	0	0	0	0	0	0	1	0	4	0	27	478
8:05 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	429
8:10 AM	0	9	0	0	6	10	0	0	0	0	0	0	3	0	10	0	38	415
8:15 AM	0	5	2	0	4	7	0	0	0	0	0	0	2	0	5	0	25	395
8:20 AM	0	6	1	0	1	7	0	0	0	0	0	0	5	0	5	0	25	387
8:25 AM	0	13	0	0	2	5	0	0	0	0	0	0	2	0	8	0	30	368
8:30 AM	0	17	0	0	3	3	0	0	0	0	0	0	1	0	6	0	30	363
8:35 AM	0	2	1	0	5	8	0	0	0	0	0	0	2	0	5	0	23	339
8:40 AM	0	2	0	0	2	9	0	0	0	0	0	0	4	0	4	0	21	318
8:45 AM	0	9	1	0	5	5	0	0	0	0	0	0	1	0	10	0	31	315
8:50 AM	0	14	2	0	9	8	0	0	0	0	0	0	2	0	8	0	43	319
8:55 AM	0	7	1	0	5	9	0	0	0	0	0	0	0	0	4	0	26	320
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	0	148	8	0	16	340	0	0	0	0	0	0	48	0	32	0	592	
Heavy Trucks	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

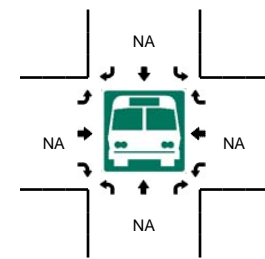
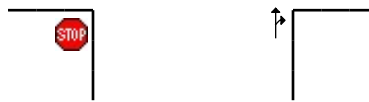
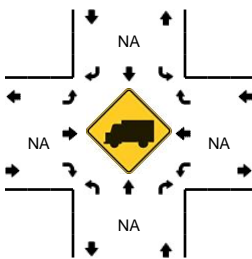
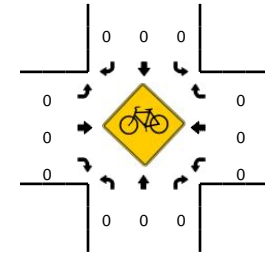
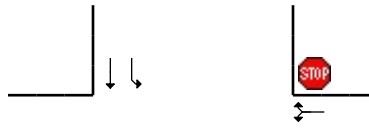
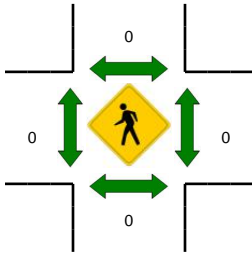
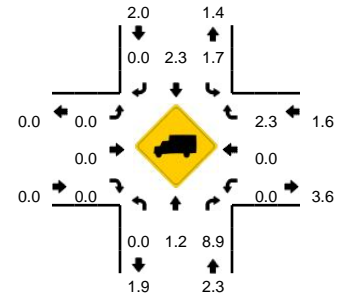
Comments:

LOCATION: S Lammers Rd -- Redbridge Rd
CITY/STATE: Tracy, CA

QC JOB #: 13867502
DATE: Wed, Aug 03 2016



Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

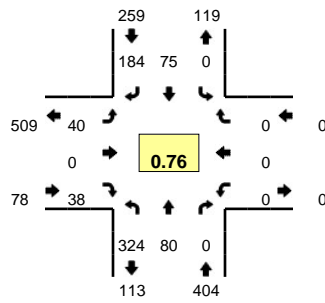


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Redbridge Rd (Eastbound)				Redbridge Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	13	5	0	6	14	0	0	0	0	0	0	1	0	2	0	41	
4:05 PM	0	22	1	0	8	12	0	0	0	0	0	0	2	0	6	0	51	
4:10 PM	0	18	5	0	8	18	0	0	0	0	0	0	1	0	2	0	52	
4:15 PM	0	13	4	0	3	14	0	0	0	0	0	0	1	0	5	0	40	
4:20 PM	0	10	3	0	8	12	0	0	0	0	0	0	0	0	6	0	39	
4:25 PM	0	22	3	0	5	19	0	0	0	0	0	0	1	0	2	0	52	
4:30 PM	0	22	4	0	12	14	0	0	0	0	0	0	1	0	7	0	60	
4:35 PM	0	18	3	0	9	17	0	0	0	0	0	0	1	0	11	0	59	
4:40 PM	0	24	2	0	9	17	0	0	0	0	0	0	2	0	6	0	60	
4:45 PM	0	16	3	0	3	12	0	0	0	0	0	0	1	0	3	0	38	
4:50 PM	0	25	1	0	12	14	0	0	0	0	0	0	2	0	4	0	58	
4:55 PM	0	17	3	0	11	14	0	0	0	0	0	0	4	0	6	0	55	605
5:00 PM	0	19	5	0	7	12	0	0	0	0	0	0	3	0	6	0	52	616
5:05 PM	0	23	5	0	7	11	0	0	0	0	0	0	1	0	7	0	54	619
5:10 PM	0	19	4	0	16	15	0	0	0	0	0	0	6	0	6	0	66	633
5:15 PM	0	20	3	0	8	9	0	0	0	0	0	0	3	0	2	0	45	638
5:20 PM	0	16	5	0	14	14	0	0	0	0	0	0	5	0	17	0	71	670
5:25 PM	0	15	0	0	12	11	0	0	0	0	0	0	3	0	9	0	50	668
5:30 PM	0	18	0	0	9	14	0	0	0	0	0	0	1	0	1	0	43	651
5:35 PM	0	27	7	0	8	15	0	0	0	0	0	0	5	0	6	0	68	660
5:40 PM	0	14	0	0	9	20	0	0	0	0	0	0	0	0	6	0	49	649
5:45 PM	0	37	7	0	11	18	0	0	0	0	0	0	4	0	7	0	84	695
5:50 PM	0	23	5	0	8	19	0	0	0	0	0	0	1	0	11	0	67	704
5:55 PM	0	29	4	0	11	19	0	0	0	0	0	0	3	0	9	0	75	724
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	356	64	0	120	224	0	0	0	0	0	0	32	0	108	0	904	
Heavy Trucks	0	0	4	0	0	8	0	0	0	0	0	0	0	0	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

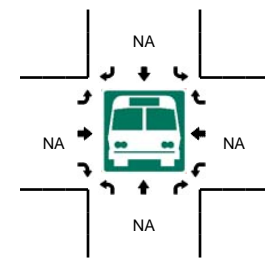
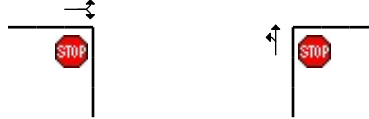
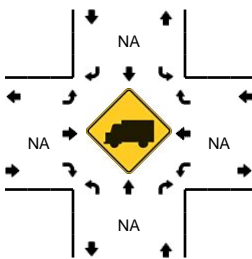
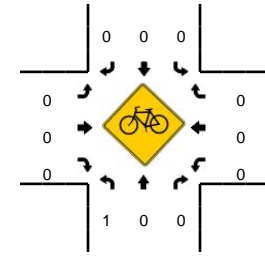
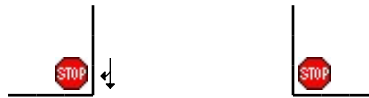
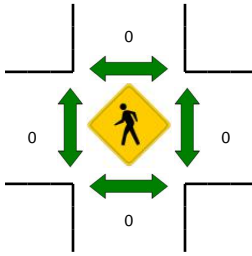
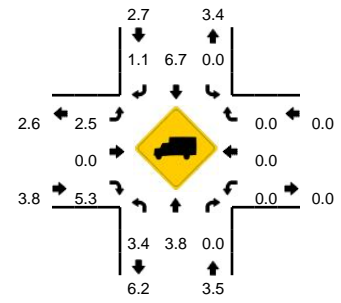
Comments:

LOCATION: S Lammers Rd -- Old Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13867503
DATE: Wed, Aug 03 2016



Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM



5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Old Schulte Rd (Eastbound)				Old Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	37	8	0	0	0	8	25	0	3	0	3	0	0	0	0	0	84	
7:05 AM	32	2	0	0	0	7	24	0	9	0	4	0	0	0	0	0	78	
7:10 AM	35	4	0	0	0	8	27	0	8	0	1	0	0	0	0	0	83	
7:15 AM	25	7	0	0	0	7	14	0	2	0	5	0	0	0	0	0	60	
7:20 AM	20	2	0	0	0	6	18	0	1	0	2	0	0	0	0	0	49	
7:25 AM	28	5	0	0	0	4	20	0	6	0	3	0	0	0	0	0	66	
7:30 AM	30	8	0	0	0	6	14	0	1	0	3	1	0	0	0	0	63	
7:35 AM	29	8	0	0	0	6	14	0	1	0	5	0	0	0	0	0	63	
7:40 AM	21	10	0	0	0	4	10	0	3	0	5	0	0	0	0	0	53	
7:45 AM	18	9	0	0	0	9	7	0	4	0	5	0	0	0	0	0	52	
7:50 AM	26	13	0	0	0	4	6	0	0	0	0	0	0	0	0	0	49	
7:55 AM	23	4	0	0	0	6	5	0	1	0	2	0	0	0	0	0	41	741
8:00 AM	12	6	0	1	0	4	8	0	0	0	2	0	0	0	0	0	33	690
8:05 AM	11	9	0	0	0	5	4	0	0	0	2	0	0	0	0	0	31	643
8:10 AM	20	8	0	0	0	7	6	0	0	0	3	0	0	0	0	0	44	604
8:15 AM	10	5	0	0	0	5	4	0	1	0	5	0	0	0	0	0	30	574
8:20 AM	17	10	0	0	0	4	8	0	0	0	2	0	0	0	0	0	41	566
8:25 AM	10	12	0	0	0	4	3	0	0	0	2	0	0	0	0	0	31	531
8:30 AM	8	15	0	0	0	2	3	0	2	0	2	0	0	0	0	0	32	500
8:35 AM	19	3	0	0	0	9	3	0	0	0	6	0	0	0	0	0	40	477
8:40 AM	12	5	0	0	0	7	5	0	1	0	2	0	0	0	0	0	32	456
8:45 AM	11	7	0	0	0	5	1	0	1	0	2	0	0	0	0	0	27	431
8:50 AM	8	13	0	0	0	5	6	0	2	0	3	0	0	0	0	0	37	419
8:55 AM	11	8	0	0	0	6	3	0	1	0	1	0	0	0	0	0	30	408
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	416	56	0	0	0	92	304	0	80	0	32	0	0	0	0	0	980	
Heavy Trucks	20	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	32	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

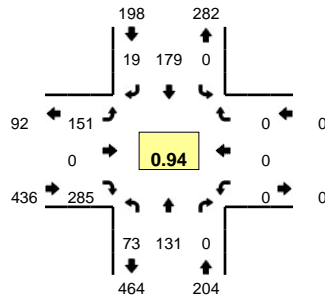
Comments:

Type of peak hour being reported: Intersection Peak

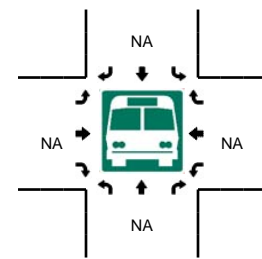
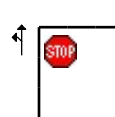
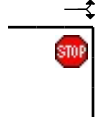
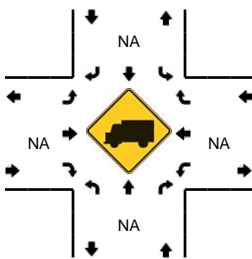
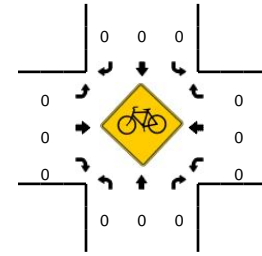
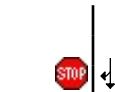
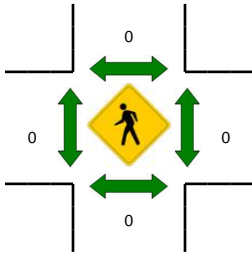
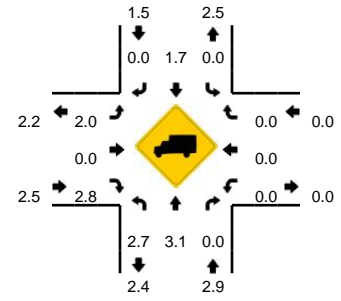
Method for determining peak hour: Total Entering Volume

LOCATION: S Lammers Rd -- Old Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13867504
DATE: Wed, Aug 03 2016



Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

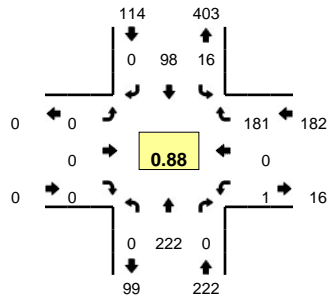


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Old Schulte Rd (Eastbound)				Old Schulte Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
4:00 PM	6	12	0	0	0	13	0	0	8	0	9	0	0	0	0	0	48		
4:05 PM	2	14	0	0	0	14	2	0	9	0	15	0	0	0	0	0	56		
4:10 PM	5	10	0	0	0	14	3	0	14	0	23	0	0	0	0	0	69		
4:15 PM	2	11	0	0	0	13	2	0	3	0	10	0	0	0	0	0	41		
4:20 PM	3	5	0	0	0	10	2	0	7	0	14	0	0	0	0	0	41		
4:25 PM	5	19	0	0	0	20	1	0	9	0	23	0	0	0	0	0	77		
4:30 PM	4	11	0	0	0	11	2	0	15	0	15	0	0	0	0	0	58		
4:35 PM	5	7	0	0	0	15	4	0	14	0	36	0	0	0	0	0	81		
4:40 PM	6	9	0	0	0	17	1	0	16	0	21	0	0	0	0	0	70		
4:45 PM	10	9	0	0	0	14	0	0	12	0	28	0	0	0	0	0	73		
4:50 PM	2	12	0	0	0	14	1	0	12	0	36	0	0	0	0	0	77		
4:55 PM	5	11	0	0	0	14	2	0	9	0	27	0	0	0	0	0	68	759	
5:00 PM	4	14	0	0	0	13	2	0	16	0	20	0	0	0	0	0	69	780	
5:05 PM	6	9	0	0	0	14	1	0	13	0	25	0	0	0	0	0	68	792	
5:10 PM	6	11	0	0	0	19	1	0	15	0	19	0	0	0	0	0	71	794	
5:15 PM	9	10	0	0	0	11	1	0	13	0	20	0	0	0	0	0	64	817	
5:20 PM	11	9	0	0	0	17	3	0	7	0	15	0	0	0	0	0	62	838	
5:25 PM	6	12	0	0	0	12	1	0	3	0	8	0	0	0	0	0	42	803	
5:30 PM	7	13	0	0	0	13	3	0	12	0	12	0	0	0	0	0	60	805	
5:35 PM	4	14	0	0	0	16	2	0	12	0	14	0	0	0	0	0	62	786	
5:40 PM	3	17	0	0	0	17	3	0	3	0	7	0	0	0	0	0	50	766	
5:45 PM	10	27	0	0	0	20	2	0	15	0	17	0	0	0	0	0	91	784	
5:50 PM	2	16	0	0	0	19	2	0	14	0	17	0	0	0	0	0	70	777	
5:55 PM	6	15	0	0	0	16	3	0	13	0	29	0	0	0	0	0	82	791	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	84	100	0	0	0	184	20	0	168	0	340	0	0	0	0	0	896		
Heavy Trucks	0	4	0	0	0	4	0	0	0	0	12	0	0	0	0	0	20		
Pedestrians		0				0					0						0		
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0		
Railroad																			
Stopped Buses																			

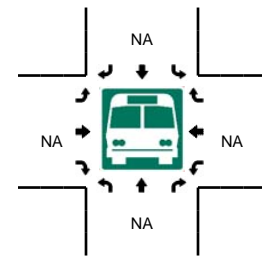
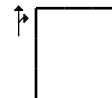
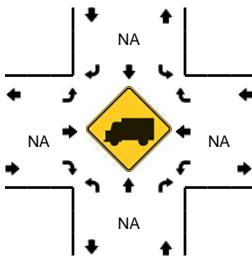
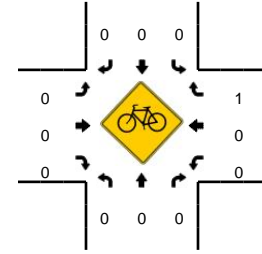
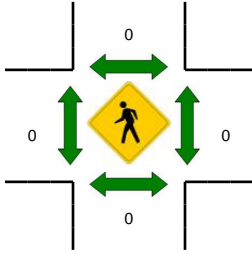
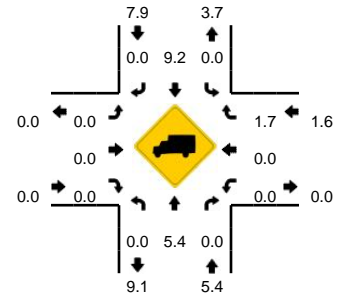
Comments:

LOCATION: S Lammers Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13867509
DATE: Wed, Aug 03 2016



Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

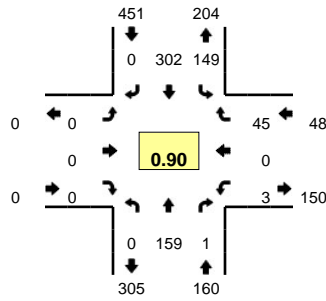


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	24	0	0	1	11	0	0	0	0	0	0	0	0	19	0	55	
7:05 AM	0	15	0	0	2	10	0	0	0	0	0	0	0	0	20	0	47	
7:10 AM	0	16	0	0	1	6	0	0	0	0	0	0	0	0	22	0	45	
7:15 AM	0	17	0	0	2	14	0	0	0	0	0	0	0	0	14	0	47	
7:20 AM	0	14	0	0	0	4	0	0	0	0	0	0	0	0	9	0	27	
7:25 AM	0	17	0	0	0	11	0	0	0	0	0	0	1	0	15	0	44	
7:30 AM	0	18	0	0	0	7	0	0	0	0	0	0	0	0	20	0	45	
7:35 AM	0	22	0	0	5	7	0	0	0	0	0	0	0	0	16	0	50	
7:40 AM	0	16	0	0	2	4	0	0	0	0	0	0	0	0	16	0	38	
7:45 AM	0	20	0	0	1	10	0	0	0	0	0	0	0	0	8	0	39	
7:50 AM	0	29	0	0	1	8	0	0	0	0	0	0	0	0	10	0	48	
7:55 AM	0	14	0	0	1	6	0	0	0	0	0	0	0	0	12	0	33	518
8:00 AM	0	12	0	0	1	7	0	0	0	0	0	0	0	0	7	0	27	490
8:05 AM	0	14	0	0	0	6	0	0	0	0	0	0	0	0	7	0	27	470
8:10 AM	0	20	0	0	1	9	0	0	0	0	0	0	0	0	7	0	37	462
8:15 AM	0	11	0	0	1	8	0	0	0	0	0	0	0	0	5	0	25	440
8:20 AM	0	20	1	0	1	7	0	0	0	0	0	0	0	0	5	0	34	447
8:25 AM	0	18	0	0	0	7	0	0	0	0	0	0	0	0	6	0	31	434
8:30 AM	0	22	0	0	0	3	0	0	0	0	0	0	0	0	1	0	26	415
8:35 AM	0	16	0	0	5	10	0	0	0	0	0	0	0	0	3	0	34	399
8:40 AM	0	18	0	0	4	6	0	0	0	0	0	0	0	0	0	0	28	389
8:45 AM	0	15	0	0	1	6	0	0	0	0	0	0	0	0	4	0	26	376
8:50 AM	0	17	0	0	0	8	0	0	0	0	0	0	0	0	4	0	29	357
8:55 AM	0	15	0	0	0	6	0	0	0	0	0	0	0	0	4	0	25	349
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	220	0	0	16	108	0	0	0	0	0	0	0	0	244	0	588	
Heavy Trucks	0	16	0	0	0	12	0	0	0	0	0	0	0	0	4	0	32	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

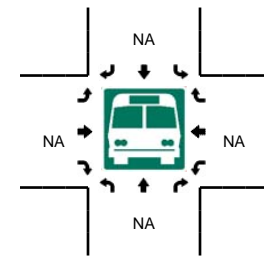
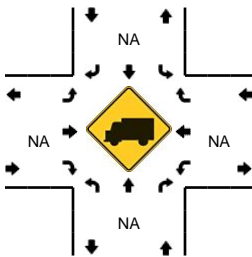
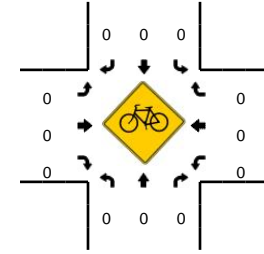
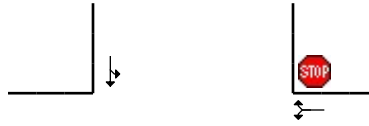
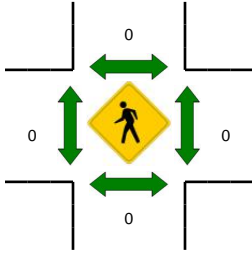
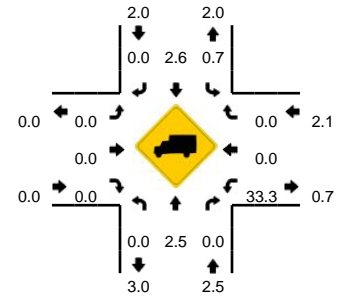
Comments:

LOCATION: S Lammers Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13867510
DATE: Wed, Aug 03 2016



Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

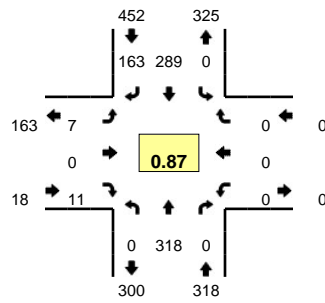


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
4:00 PM	0	12	0	0	2	22	0	0	0	0	0	0	0	0	0	4	0	40	
4:05 PM	0	15	0	0	5	16	0	0	0	0	0	0	0	0	0	2	0	38	
4:10 PM	0	11	0	0	13	26	0	0	0	0	0	0	0	0	0	4	0	54	
4:15 PM	0	12	0	0	10	18	0	0	0	0	0	0	0	0	0	0	0	40	
4:20 PM	0	8	0	0	9	17	0	0	0	0	0	0	0	0	0	1	0	35	
4:25 PM	0	20	0	0	12	22	0	0	0	0	0	0	1	0	3	0	0	58	
4:30 PM	0	12	0	0	9	22	0	0	0	0	0	0	0	0	4	0	0	47	
4:35 PM	0	8	0	0	7	40	0	0	0	0	0	0	0	0	3	0	0	58	
4:40 PM	0	15	0	0	20	21	0	0	0	0	0	0	1	0	1	0	0	58	
4:45 PM	0	10	0	0	11	29	0	0	0	0	0	0	0	0	8	0	0	58	
4:50 PM	0	15	1	0	16	30	0	0	0	0	0	0	0	0	0	0	0	62	
4:55 PM	0	14	0	0	20	27	0	0	0	0	0	0	0	0	2	0	0	63	611
5:00 PM	0	13	0	0	9	13	0	0	0	0	0	0	1	0	4	0	0	40	611
5:05 PM	0	11	0	0	18	23	0	0	0	0	0	0	0	0	4	0	0	56	629
5:10 PM	0	13	0	0	15	29	0	0	0	0	0	0	0	0	4	0	0	61	636
5:15 PM	0	13	0	0	6	21	0	0	0	0	0	0	0	0	6	0	0	46	642
5:20 PM	0	15	0	0	6	25	0	0	0	0	0	0	0	0	6	0	0	52	659
5:25 PM	0	17	0	0	11	17	0	0	0	0	0	0	0	0	2	0	0	47	648
5:30 PM	0	11	0	0	5	14	0	0	0	0	0	0	0	0	8	0	0	38	639
5:35 PM	0	16	0	0	16	21	0	0	0	0	0	0	0	0	3	0	0	56	637
5:40 PM	0	15	0	0	8	14	0	0	0	0	0	0	0	0	4	0	0	41	620
5:45 PM	0	28	0	0	8	23	0	0	0	0	0	0	0	0	9	0	0	68	630
5:50 PM	0	12	0	0	10	23	0	0	0	0	0	0	0	0	5	0	0	50	618
5:55 PM	0	19	0	0	18	32	0	0	0	0	0	0	0	0	3	0	0	72	627
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	0	156	4	0	188	344	0	0	0	0	0	0	0	0	40	0	0	732	
Heavy Trucks	0	4	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																			
Stopped Buses																			

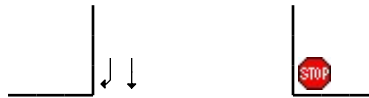
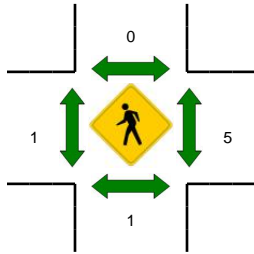
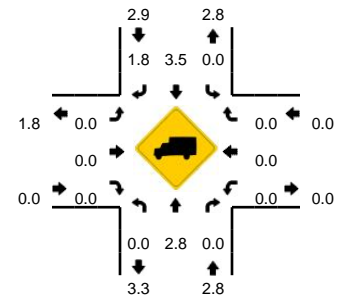
Comments:

LOCATION: Corral Hollow Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

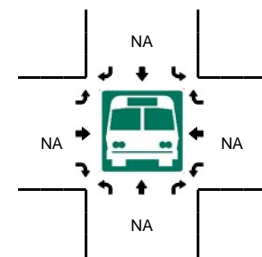
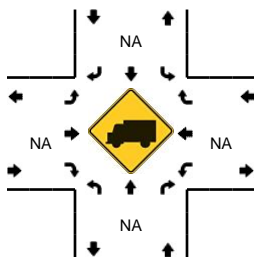
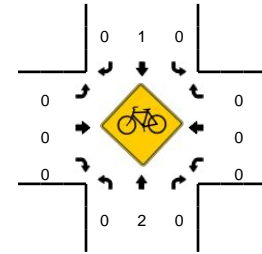
QC JOB #: 13867505
DATE: Wed, Aug 03 2016



Peak-Hour: 7:05 AM -- 8:05 AM
Peak 15-Min: 7:25 AM -- 7:40 AM



NOTE: EBR is reported as EBL & EBR to note how many cars make a Right followed by a U-turn south of the Intersection, NB U-turns south of the intersection are reported as NBL

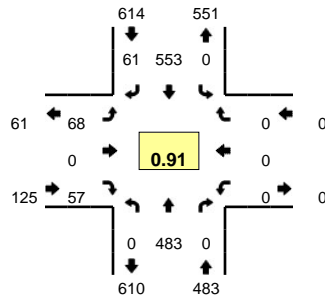


5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	17	0	0	0	27	15	0	1	0	0	0	0	0	0	0	60		
7:05 AM	0	30	0	0	0	23	21	0	1	0	1	0	0	0	0	0	76		
7:10 AM	0	18	0	0	0	21	19	0	0	0	0	0	0	0	0	0	58		
7:15 AM	0	16	0	0	0	34	9	0	1	0	2	0	0	0	0	0	62		
7:20 AM	0	19	0	0	0	29	21	0	0	0	1	0	0	0	0	0	70		
7:25 AM	0	33	0	0	0	26	14	0	1	0	0	0	0	0	0	0	74		
7:30 AM	0	30	0	0	0	30	19	0	0	0	0	0	0	0	0	0	79		
7:35 AM	0	38	0	0	0	18	14	0	3	0	1	0	0	0	0	0	74		
7:40 AM	0	23	0	0	0	25	10	0	1	0	2	0	0	0	0	0	61		
7:45 AM	0	21	0	0	0	16	12	0	0	0	0	0	0	0	0	0	49		
7:50 AM	0	34	0	0	0	22	11	0	0	0	1	0	0	0	0	0	68		
7:55 AM	0	24	0	0	0	24	6	0	0	0	1	0	0	0	0	0	55	786	
8:00 AM	0	32	0	0	0	21	7	0	0	0	2	0	0	0	0	0	62	788	
8:05 AM	0	29	0	0	0	13	9	0	0	0	0	0	0	0	0	0	51	763	
8:10 AM	0	28	0	0	0	15	5	0	0	0	0	0	0	0	0	0	48	753	
8:15 AM	0	24	0	0	0	23	6	0	2	0	1	0	0	0	0	0	56	747	
8:20 AM	0	35	0	0	0	18	6	0	1	0	1	0	0	0	0	0	61	738	
8:25 AM	0	18	0	0	0	19	5	0	0	0	0	0	0	0	0	0	42	706	
8:30 AM	0	29	0	0	0	21	1	0	1	0	0	0	0	0	0	0	52	679	
8:35 AM	0	33	0	0	0	15	2	0	2	0	2	0	0	0	0	0	54	659	
8:40 AM	0	26	0	0	0	18	2	0	5	0	1	0	0	0	0	0	52	650	
8:45 AM	0	26	0	0	0	14	3	0	0	0	0	0	0	0	0	0	43	644	
8:50 AM	0	42	0	0	0	32	5	0	1	0	0	0	0	0	0	0	80	656	
8:55 AM	0	27	0	0	0	24	3	0	0	0	0	0	0	0	0	0	54	655	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	0	404	0	0	0	296	188	0	16	0	4	0	0	0	0	0	908		
Heavy Trucks	0	16	0	0	0	12	8	0	0	0	0	0	0	0	0	0	36		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8		
Bicycles	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2		
Railroad																			
Stopped Buses																			

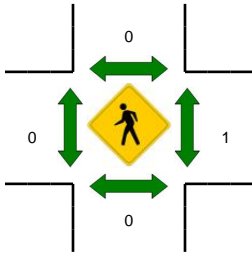
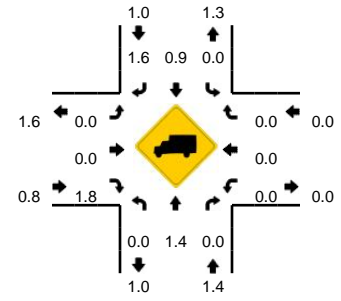
Comments:

LOCATION: Corral Hollow Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

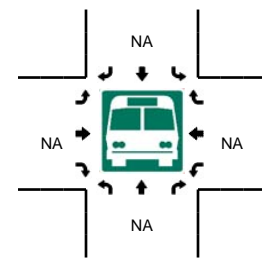
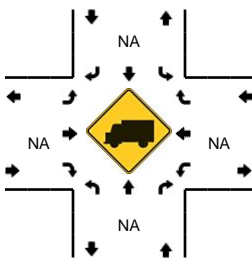
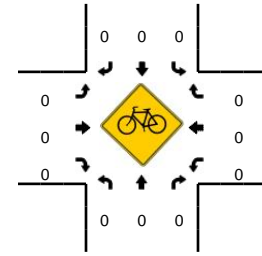
QC JOB #: 13867506
DATE: Wed, Aug 03 2016



Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM



NOTE: EBR is reported as EBL & EBR to note how many cars make a Right followed by a U-turn south of the Intersection, NB U-turns south of the intersection are reported as NBL

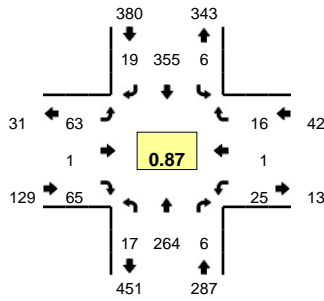


5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	39	0	0	0	48	4	0	3	0	5	0	0	0	0	0	99	
4:05 PM	0	36	0	0	0	38	3	0	3	0	2	0	0	0	0	0	82	
4:10 PM	0	29	0	0	0	39	2	0	6	0	4	0	0	0	0	0	80	
4:15 PM	0	31	0	0	0	46	0	0	5	0	6	0	0	0	0	0	88	
4:20 PM	0	39	0	0	0	39	3	0	4	0	4	0	0	0	0	0	89	
4:25 PM	0	35	0	0	0	29	4	0	5	0	7	0	0	0	0	0	80	
4:30 PM	0	41	0	0	0	37	3	0	5	0	7	0	0	0	0	0	93	
4:35 PM	0	28	0	0	0	37	4	0	3	0	5	0	0	0	0	0	77	
4:40 PM	0	44	0	0	0	62	2	0	6	0	10	0	0	0	0	0	124	
4:45 PM	0	36	0	0	0	25	7	0	14	0	1	0	0	0	0	0	83	
4:50 PM	0	36	0	0	0	65	0	0	7	0	2	0	0	0	0	0	110	
4:55 PM	0	42	0	0	0	38	5	0	16	0	7	0	0	0	0	0	108	1113
5:00 PM	0	34	0	0	0	48	3	0	5	0	6	0	0	0	0	0	96	1110
5:05 PM	0	40	0	0	0	50	6	0	10	0	5	0	0	0	0	0	111	1139
5:10 PM	0	36	0	0	0	41	2	0	7	0	6	0	0	0	0	0	92	1151
5:15 PM	0	30	0	0	0	52	10	0	5	0	5	0	0	0	0	0	102	1165
5:20 PM	0	48	0	0	0	31	2	0	1	0	4	0	0	0	0	0	86	1162
5:25 PM	0	43	0	0	0	47	6	0	6	0	4	0	0	0	0	0	106	1188
5:30 PM	0	46	0	0	0	56	7	0	4	0	2	0	0	0	0	0	115	1210
5:35 PM	0	35	0	0	0	38	1	0	11	0	3	0	0	0	0	0	88	1221
5:40 PM	0	36	0	0	0	39	8	0	2	0	7	0	0	0	0	0	92	1189
5:45 PM	0	47	0	0	0	45	8	0	4	0	4	0	0	0	0	0	108	1214
5:50 PM	0	44	0	0	0	55	1	0	6	0	5	0	0	0	0	0	111	1215
5:55 PM	0	44	0	0	0	51	7	0	7	0	6	0	0	0	0	0	115	1222
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	540	0	0	0	604	64	0	68	0	60	0	0	0	0	0	1336	
Heavy Trucks	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	8	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

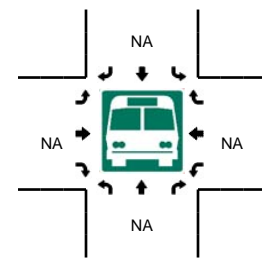
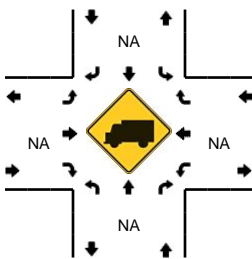
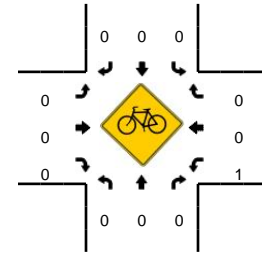
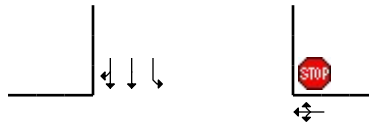
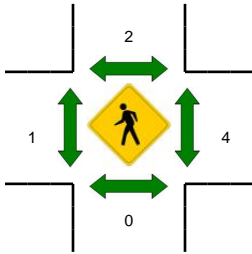
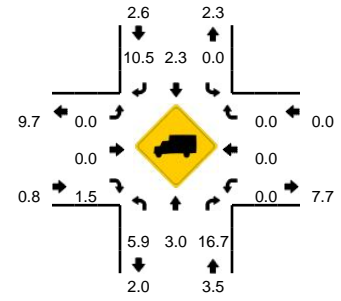
Comments:

LOCATION: Corral Hollow Rd -- Golden Leaf Ln
CITY/STATE: Tracy, CA

QC JOB #: 13867507
DATE: Wed, Aug 03 2016



Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:25 AM -- 7:40 AM

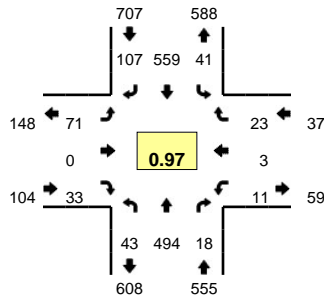


5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				Golden Leaf Ln (Eastbound)				Golden Leaf Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	13	2	0	0	32	1	0	4	0	10	0	3	0	2	0	67	
7:05 AM	2	15	0	3	1	27	2	0	9	1	6	0	4	0	2	0	72	
7:10 AM	2	17	0	0	1	30	1	0	2	0	5	0	3	0	2	0	63	
7:15 AM	2	18	1	0	0	33	0	0	4	0	6	0	2	0	2	0	68	
7:20 AM	0	15	0	0	0	37	1	0	7	0	10	0	1	0	2	0	73	
7:25 AM	1	29	2	0	0	35	3	0	4	0	5	0	2	0	0	0	81	
7:30 AM	1	23	0	0	0	40	0	0	6	0	8	0	0	0	3	0	81	
7:35 AM	0	36	0	1	1	21	4	0	7	0	2	0	4	0	2	0	78	
7:40 AM	1	24	0	0	1	22	3	0	5	0	4	0	3	0	1	0	64	
7:45 AM	0	17	0	0	1	26	1	0	6	0	2	0	1	0	0	0	54	
7:50 AM	0	34	0	2	1	26	2	0	6	0	3	0	1	0	0	0	75	
7:55 AM	2	23	1	0	0	26	1	0	3	0	4	0	1	1	0	0	62	838
8:00 AM	0	22	2	0	0	28	0	0	5	0	0	0	2	0	1	0	60	831
8:05 AM	3	24	0	1	2	20	1	0	4	1	1	0	1	0	2	0	60	819
8:10 AM	0	27	0	0	1	18	2	0	1	0	1	0	1	0	1	0	52	808
8:15 AM	2	28	0	0	0	26	2	0	6	0	3	0	0	0	2	0	69	809
8:20 AM	0	30	1	0	0	17	1	0	11	0	4	0	2	0	1	0	67	803
8:25 AM	1	22	0	1	0	22	4	0	7	0	1	0	1	0	0	0	59	781
8:30 AM	3	25	0	0	0	12	0	1	4	0	2	0	2	0	2	0	51	751
8:35 AM	2	25	0	0	2	21	2	1	3	0	2	0	0	0	3	0	61	734
8:40 AM	1	34	1	1	1	14	4	0	8	1	1	0	0	0	3	0	69	739
8:45 AM	4	22	0	0	0	14	4	0	5	1	2	0	1	0	1	0	54	739
8:50 AM	1	37	0	1	1	30	4	0	9	0	5	0	2	0	1	0	91	755
8:55 AM	2	28	1	1	5	21	3	0	12	0	4	0	0	0	1	0	78	771
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	352	8	4	4	384	28	0	68	0	60	0	24	0	20	0	960	
Heavy Trucks	4	16	0		0	12	0		0	0	0		0	0	0		32	
Pedestrians		0				0				0				4			4	
Bicycles		0				0				0				1			1	
Railroad																		
Stopped Buses																		

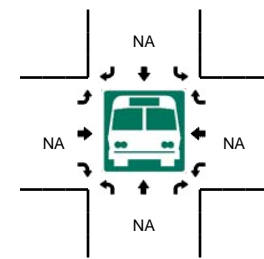
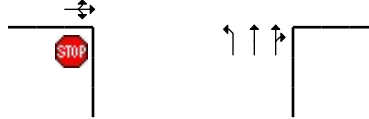
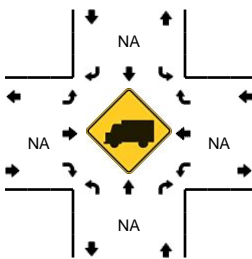
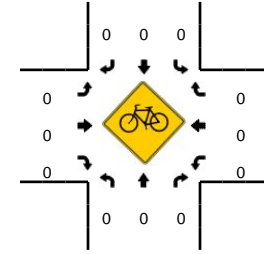
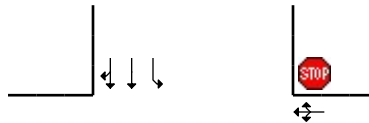
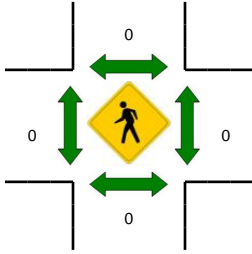
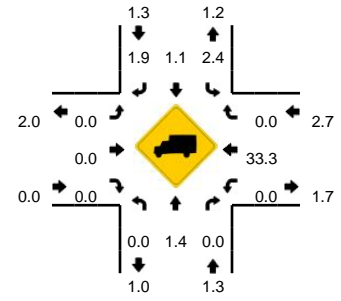
Comments:

LOCATION: Corral Hollow Rd -- Golden Leaf Ln
CITY/STATE: Tracy, CA

QC JOB #: 13867508
DATE: Wed, Aug 03 2016



Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM



5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				Golden Leaf Ln (Eastbound)				Golden Leaf Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	5	34	1	0	3	51	10	0	8	0	0	0	1	0	2	0	115	
4:05 PM	1	38	0	0	5	37	9	0	5	1	0	0	1	0	4	0	101	
4:10 PM	3	28	1	0	4	32	8	1	5	0	0	0	0	0	1	0	83	
4:15 PM	3	36	2	0	4	56	12	0	3	0	2	0	0	0	1	0	119	
4:20 PM	5	38	1	0	2	33	10	0	4	0	0	0	3	0	4	0	100	
4:25 PM	2	36	2	0	1	32	11	0	4	0	0	0	0	0	1	0	89	
4:30 PM	1	43	2	0	7	40	6	0	3	0	2	0	1	0	0	0	105	
4:35 PM	2	26	1	0	7	38	5	0	3	0	1	0	3	1	1	0	88	
4:40 PM	2	41	0	0	4	57	5	0	2	0	0	0	0	0	0	0	111	
4:45 PM	6	44	2	1	1	35	8	0	7	0	2	0	0	0	1	0	107	
4:50 PM	3	35	1	0	6	54	8	0	6	0	0	0	0	0	1	0	114	
4:55 PM	6	48	3	0	2	43	9	0	4	0	4	0	0	0	2	0	121	1253
5:00 PM	3	43	1	1	1	43	9	0	3	0	5	0	1	0	1	0	111	1249
5:05 PM	4	46	1	1	5	48	5	0	3	0	0	0	2	0	3	0	118	1266
5:10 PM	1	39	0	0	6	51	10	0	7	0	0	0	0	2	2	0	118	1301
5:15 PM	0	32	1	0	2	50	3	0	10	0	2	0	1	0	0	0	101	1283
5:20 PM	5	45	1	1	1	34	12	0	3	0	3	0	0	0	3	0	108	1291
5:25 PM	6	43	1	0	2	49	10	0	7	0	2	0	0	0	2	0	122	1324
5:30 PM	7	36	0	0	7	48	11	0	9	0	4	0	2	0	1	0	125	1344
5:35 PM	3	35	5	0	3	44	9	0	5	0	5	0	0	1	3	0	113	1369
5:40 PM	0	42	2	0	6	40	11	0	13	0	3	0	3	0	4	0	124	1382
5:45 PM	1	41	2	2	4	45	9	0	4	0	5	0	1	0	3	0	117	1392
5:50 PM	4	51	3	0	3	41	3	0	1	0	4	0	1	0	1	0	112	1390
5:55 PM	4	41	1	0	1	66	15	0	6	0	0	0	0	0	0	0	134	1403
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	36	532	24	8	32	608	108	0	44	0	36	0	8	0	16	0	1452	
Heavy Trucks	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

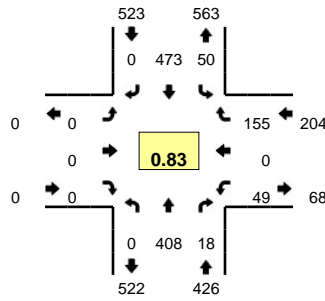
Comments:

School In Session

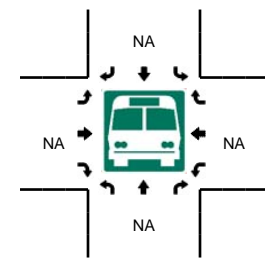
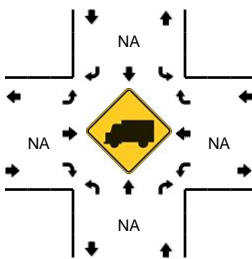
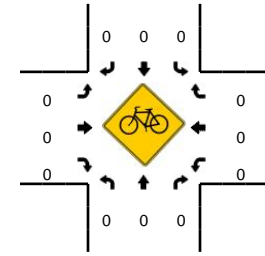
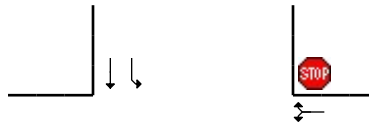
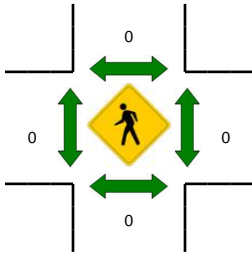
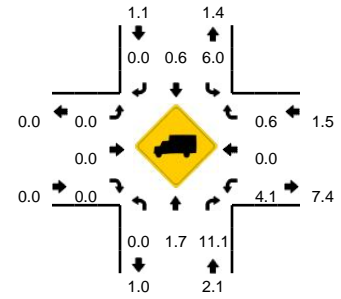
August 17, 2016

LOCATION: S Lammers Rd -- Redbridge Rd
CITY/STATE: Tracy, CA

QC JOB #: 13877001
DATE: Wed, Aug 17 2016



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

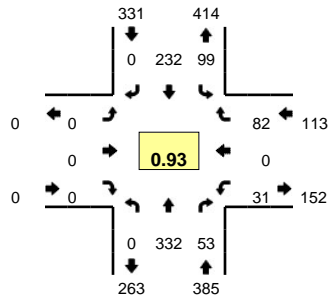


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Redbridge Rd (Eastbound)				Redbridge Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	11	1	0	5	24	0	0	0	0	0	0	4	0	5	0	50	
7:05 AM	0	28	1	0	2	28	0	0	0	0	0	0	4	0	6	0	69	
7:10 AM	0	22	2	0	3	23	0	0	0	0	0	0	4	0	7	0	61	
7:15 AM	0	15	1	0	2	25	0	0	0	0	0	0	5	0	6	0	54	
7:20 AM	0	10	2	0	1	34	0	0	0	0	0	0	4	0	12	0	63	
7:25 AM	0	13	1	0	2	23	0	0	0	0	0	0	9	0	11	0	59	
7:30 AM	0	28	2	0	3	38	0	0	0	0	0	0	5	0	12	0	88	
7:35 AM	0	39	3	0	0	28	0	0	0	0	0	0	4	0	17	0	91	
7:40 AM	0	47	0	0	1	37	0	0	0	0	0	0	5	0	15	0	105	
7:45 AM	0	41	1	0	3	48	0	0	0	0	0	0	3	0	18	0	114	
7:50 AM	0	53	0	0	5	44	0	0	0	0	0	0	2	0	14	0	118	
7:55 AM	0	44	2	0	8	40	0	0	0	0	0	0	6	0	8	0	108	980
8:00 AM	0	47	0	0	6	46	0	0	0	0	0	0	4	0	18	0	121	1051
8:05 AM	0	51	3	0	6	37	0	0	0	0	0	0	3	0	16	0	116	1098
8:10 AM	0	31	3	0	5	48	0	0	0	0	0	0	1	0	10	0	98	1135
8:15 AM	0	4	1	0	10	50	0	0	0	0	0	0	3	0	4	0	72	1153
8:20 AM	0	9	2	0	5	11	0	0	0	0	0	0	2	0	5	0	34	1124
8:25 AM	0	6	0	0	8	4	0	0	0	0	0	0	3	0	4	0	25	1090
8:30 AM	0	3	1	0	5	13	0	0	0	0	0	0	3	0	7	0	32	1034
8:35 AM	0	11	1	0	0	5	0	0	0	0	0	0	1	0	5	0	23	966
8:40 AM	0	8	3	0	1	14	0	0	0	0	0	0	3	0	7	0	36	897
8:45 AM	0	8	0	0	2	2	0	0	0	0	0	0	2	0	2	0	16	799
8:50 AM	0	10	2	0	4	8	0	0	0	0	0	0	3	0	7	0	34	715
8:55 AM	0	12	5	0	9	5	0	0	0	0	0	0	3	0	4	0	38	645
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	576	8	0	76	520	0	0	0	0	0	0	48	0	160	0	1388	
Heavy Trucks	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

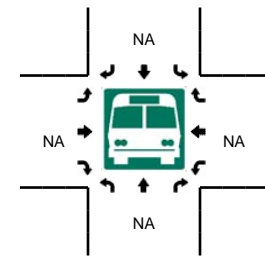
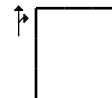
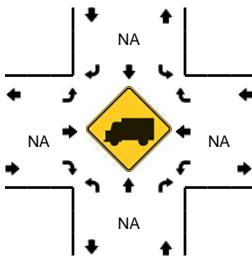
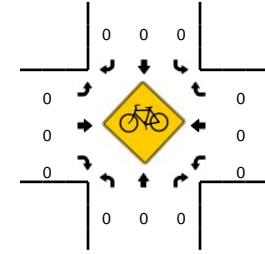
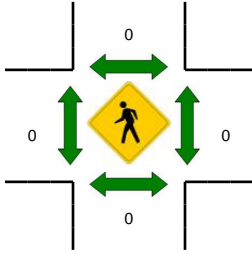
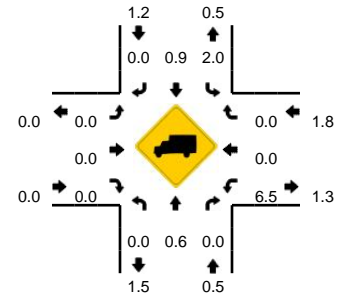
Comments:

LOCATION: S Lammers Rd -- Redbridge Rd
CITY/STATE: Tracy, CA

QC JOB #: 13877002
DATE: Wed, Aug 17 2016



Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

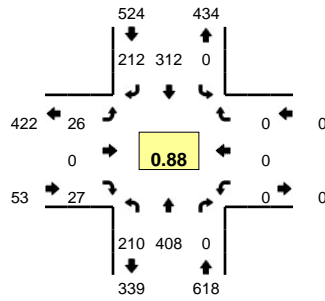


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Redbridge Rd (Eastbound)				Redbridge Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	21	5	0	4	15	0	0	0	0	0	0	1	0	6	0	52	
4:05 PM	0	21	2	0	8	7	0	0	0	0	0	0	3	0	6	0	47	
4:10 PM	0	21	4	0	8	17	0	0	0	0	0	0	0	0	2	0	52	
4:15 PM	0	24	6	0	8	20	0	0	0	0	0	0	0	0	4	0	62	
4:20 PM	0	18	5	0	7	21	0	0	0	0	0	0	2	0	2	0	55	
4:25 PM	0	14	2	0	11	19	0	0	0	0	0	0	3	0	5	0	54	
4:30 PM	0	19	5	0	17	11	0	0	0	0	0	0	1	0	3	0	56	
4:35 PM	0	29	2	0	9	20	0	0	0	0	0	0	2	0	7	0	69	
4:40 PM	0	37	2	0	10	22	0	0	0	0	0	0	0	0	8	0	79	
4:45 PM	0	27	3	0	5	12	0	0	0	0	0	0	3	0	3	0	53	
4:50 PM	0	20	4	0	4	27	0	0	0	0	0	0	6	0	8	0	69	
4:55 PM	0	25	3	0	9	13	0	0	0	0	0	0	1	0	8	0	59	707
5:00 PM	0	22	2	0	15	16	0	0	0	0	0	0	2	0	3	0	60	715
5:05 PM	0	27	9	0	9	13	0	0	0	0	0	0	6	0	6	0	70	738
5:10 PM	0	30	8	0	11	18	0	0	0	0	0	0	2	0	9	0	78	764
5:15 PM	0	31	4	0	12	16	0	0	0	0	0	0	4	0	7	0	74	776
5:20 PM	0	31	1	0	4	23	0	0	0	0	0	0	0	0	11	0	70	791
5:25 PM	0	19	8	0	7	26	0	0	0	0	0	0	3	0	4	0	67	804
5:30 PM	0	31	3	0	8	22	0	0	0	0	0	0	1	0	6	0	71	819
5:35 PM	0	32	6	0	5	24	0	0	0	0	0	0	3	0	9	0	79	829
5:40 PM	0	14	6	0	12	23	0	0	0	0	0	0	3	0	5	0	63	813
5:45 PM	0	29	4	0	11	15	0	0	0	0	0	0	2	0	7	0	68	828
5:50 PM	0	18	1	0	11	17	0	0	0	0	0	0	2	0	9	0	58	817
5:55 PM	0	17	6	0	8	23	0	0	0	0	0	0	3	0	7	0	64	822
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	352	84	0	128	188	0	0	0	0	0	0	48	0	88	0	888	
Heavy Trucks	0	8	0	0	4	0	0	0	0	0	0	0	8	0	0	0	20	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

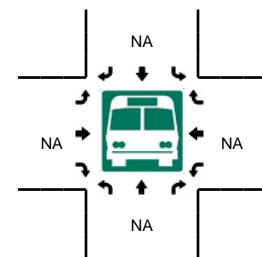
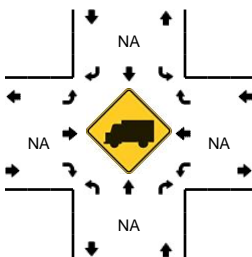
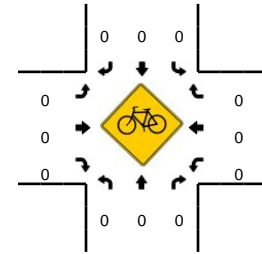
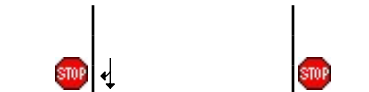
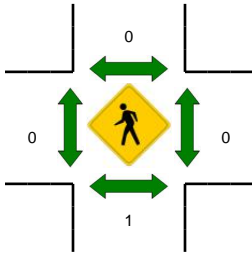
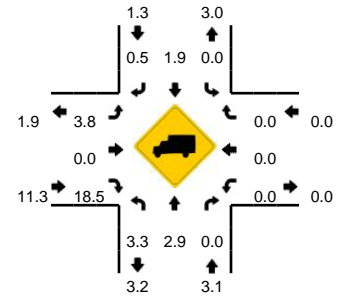
Comments:

LOCATION: S Lammers Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13877003
DATE: Wed, Aug 17 2016



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:50 AM -- 8:05 AM



5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	27	8	0	0	0	6	25	0	5	0	1	0	0	0	0	0	72	
7:05 AM	22	15	0	0	0	16	17	0	16	0	2	0	0	0	0	0	88	
7:10 AM	30	16	0	0	0	11	14	0	7	0	6	0	0	0	0	0	84	
7:15 AM	25	10	0	0	0	14	15	0	4	0	2	0	0	0	0	0	70	
7:20 AM	30	8	0	0	0	14	26	0	3	0	3	0	0	0	0	0	84	
7:25 AM	18	16	0	0	0	11	21	0	4	0	4	0	0	0	0	0	74	
7:30 AM	27	26	0	0	0	11	29	0	3	0	3	0	0	0	0	0	99	
7:35 AM	21	45	0	0	0	14	20	0	2	0	2	0	0	0	0	0	104	
7:40 AM	13	46	0	0	0	23	21	0	2	0	2	0	0	0	0	0	107	
7:45 AM	13	42	0	0	0	27	21	0	3	0	2	0	0	0	0	0	108	
7:50 AM	15	46	0	0	0	24	24	0	2	0	1	0	0	0	0	0	112	
7:55 AM	15	46	0	0	0	36	10	0	3	0	2	0	0	0	0	0	112	1114
8:00 AM	9	49	0	0	0	43	10	0	2	0	2	0	0	0	0	0	115	1157
8:05 AM	12	53	0	0	0	28	12	0	1	0	0	0	0	0	0	0	106	1175
8:10 AM	25	25	0	0	0	41	10	0	0	0	2	0	0	0	0	0	103	1194
8:15 AM	12	6	0	0	0	40	8	0	1	0	4	0	0	0	0	0	71	1195
8:20 AM	9	10	0	0	0	8	5	0	0	0	1	0	0	0	0	0	33	1144
8:25 AM	15	6	0	0	0	2	4	0	0	0	1	0	0	0	0	0	28	1098
8:30 AM	12	4	0	0	0	7	9	0	0	0	1	0	0	0	0	0	33	1032
8:35 AM	14	10	0	0	0	5	3	0	2	0	1	0	0	0	0	0	35	963
8:40 AM	9	11	0	0	0	10	4	0	1	0	3	0	0	0	0	0	38	894
8:45 AM	7	8	0	0	0	5	2	0	2	0	2	0	0	0	0	0	26	812
8:50 AM	11	14	0	0	0	7	3	0	0	0	1	0	0	0	0	0	36	736
8:55 AM	12	12	0	0	0	6	1	0	3	0	2	0	0	0	0	0	36	660
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	156	564	0	0	0	412	176	0	28	0	20	0	0	0	0	0	1356	
Heavy Trucks	8	4	0	0	0	0	0	0	0	0	8	0	0	0	0	0	20	
Pedestrians		0				0					0						0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																	0	
Stopped Buses																	0	

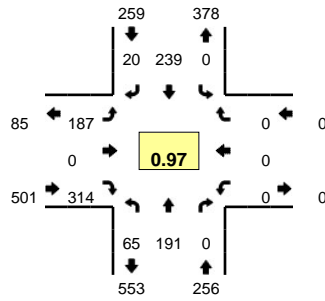
Comments:

Type of peak hour being reported: Intersection Peak

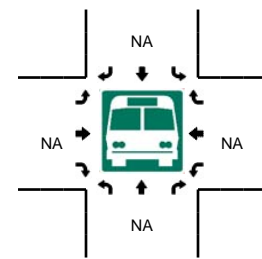
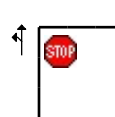
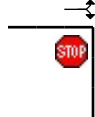
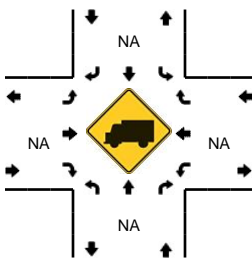
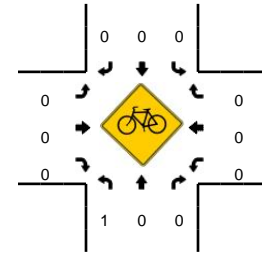
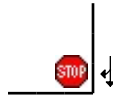
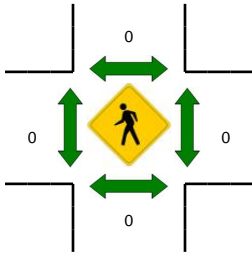
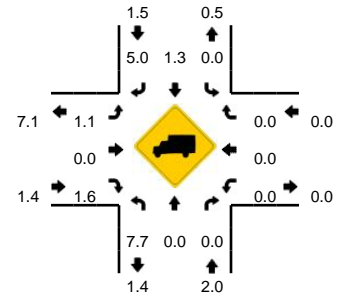
Method for determining peak hour: Total Entering Volume

LOCATION: S Lammers Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13877004
DATE: Wed, Aug 17 2016



Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 4:40 PM -- 4:55 PM

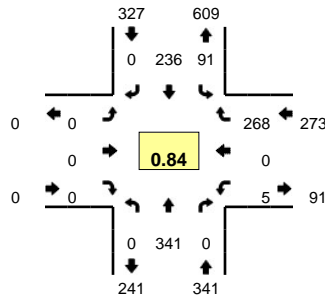


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	20	0	0	0	15	0	0	5	0	13	0	0	0	0	0	57	
4:05 PM	6	9	0	0	0	9	2	0	15	0	15	0	0	0	0	0	56	
4:10 PM	5	18	0	0	0	17	2	0	7	0	20	0	0	0	0	0	69	
4:15 PM	4	17	0	0	0	17	4	0	13	0	28	0	0	0	0	0	83	
4:20 PM	4	10	0	0	0	22	1	0	11	0	17	0	0	0	0	0	65	
4:25 PM	7	7	0	0	0	16	5	0	11	0	26	0	0	0	0	0	72	
4:30 PM	7	12	0	0	0	12	2	0	16	0	22	0	0	0	0	0	71	
4:35 PM	2	12	0	0	0	19	2	0	21	0	25	0	0	0	0	0	81	
4:40 PM	4	15	0	0	0	19	2	0	20	0	32	0	0	0	0	0	92	
4:45 PM	5	12	0	0	0	13	2	0	14	0	37	0	0	0	0	0	83	
4:50 PM	4	9	0	0	0	26	6	0	15	0	27	0	0	0	0	0	87	
4:55 PM	3	18	0	0	0	12	3	0	16	0	21	0	0	0	0	0	73	889
5:00 PM	7	11	0	0	0	16	1	0	14	0	33	0	0	0	0	0	82	914
5:05 PM	7	16	0	0	0	21	0	0	19	0	24	0	0	0	0	0	87	945
5:10 PM	7	19	0	0	0	18	1	0	17	0	23	0	0	0	0	0	85	961
5:15 PM	8	16	0	0	0	20	1	0	16	0	21	0	0	0	0	0	82	960
5:20 PM	5	21	0	0	0	24	0	0	15	0	19	0	0	0	0	0	84	979
5:25 PM	6	13	0	0	0	27	2	0	11	0	23	0	0	0	0	0	82	989
5:30 PM	5	21	0	0	0	18	1	0	16	0	31	0	0	0	0	0	92	1010
5:35 PM	4	20	0	0	0	25	1	0	14	0	23	0	0	0	0	0	87	1016
5:40 PM	6	11	0	0	0	25	3	0	9	0	15	0	0	0	0	0	69	993
5:45 PM	4	15	0	0	0	17	2	0	18	0	32	0	0	0	0	0	88	998
5:50 PM	6	7	0	0	0	19	0	0	14	0	24	0	0	0	0	0	70	981
5:55 PM	3	13	0	0	0	21	2	0	12	0	33	0	0	0	0	0	84	992
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	52	144	0	0	0	232	40	0	196	0	384	0	0	0	0	0	1048	
Heavy Trucks	0	0	0	0	0	4	0	0	0	0	8	0	0	0	0	0	12	
Pedestrians		0				0					0						0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

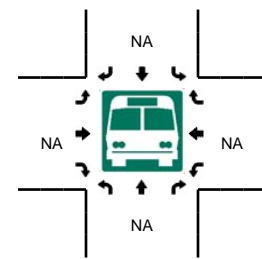
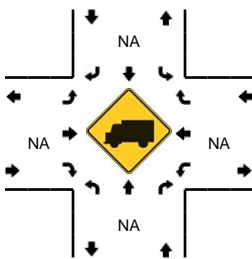
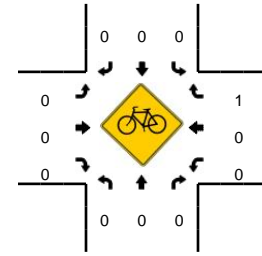
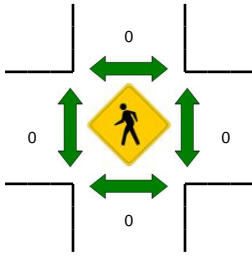
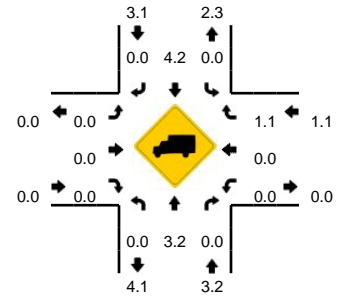
Comments:

LOCATION: S Lammers Rd -- Old Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13877009
DATE: Wed, Aug 17 2016



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

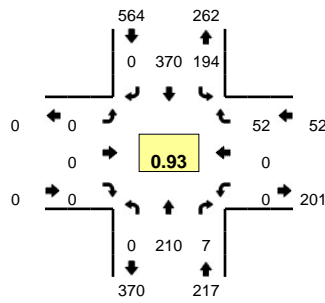


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Old Schulte Rd (Eastbound)				Old Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	18	0	0	0	4	0	0	0	0	0	0	0	0	15	0	37	
7:05 AM	0	21	0	0	5	14	0	0	0	0	0	0	0	0	16	0	56	
7:10 AM	0	27	0	0	2	13	0	0	0	0	0	0	0	0	24	0	66	
7:15 AM	0	15	0	0	6	12	0	0	0	0	0	0	0	0	13	0	46	
7:20 AM	0	23	0	0	0	18	0	0	0	0	0	0	0	0	15	0	56	
7:25 AM	0	20	0	0	4	11	0	0	0	0	0	0	0	0	16	0	51	
7:30 AM	0	31	0	0	3	10	0	0	0	0	0	0	0	0	29	0	73	
7:35 AM	0	44	0	0	1	15	0	0	0	0	0	0	1	0	36	0	97	
7:40 AM	0	34	0	0	8	13	0	0	0	0	0	0	2	0	38	0	95	
7:45 AM	0	30	0	0	9	22	0	0	0	0	0	0	0	0	27	0	88	
7:50 AM	0	31	0	0	3	21	0	0	0	0	0	0	1	0	28	0	84	
7:55 AM	0	27	0	0	13	23	0	0	0	0	0	0	1	0	29	0	93	842
8:00 AM	0	35	0	0	10	31	0	0	0	0	0	0	0	0	24	0	100	905
8:05 AM	0	38	0	0	10	20	0	0	0	0	0	0	0	0	11	0	79	928
8:10 AM	0	17	0	0	17	23	0	0	0	0	0	0	0	0	9	0	66	928
8:15 AM	0	11	0	0	13	29	0	0	0	0	0	0	0	0	6	0	59	941
8:20 AM	0	10	0	0	5	13	0	0	0	0	0	0	0	0	7	0	35	920
8:25 AM	0	13	0	0	0	3	0	0	0	0	0	0	0	0	8	0	24	893
8:30 AM	0	12	0	0	1	7	0	0	0	0	0	0	0	0	2	0	22	842
8:35 AM	0	13	0	0	1	5	0	0	0	0	0	0	0	0	7	0	26	771
8:40 AM	0	16	0	0	1	12	0	0	0	0	0	0	0	0	4	0	33	709
8:45 AM	0	12	0	0	0	5	0	0	0	0	0	0	0	0	4	0	21	642
8:50 AM	0	18	0	0	2	7	0	0	0	0	0	0	0	0	4	0	31	589
8:55 AM	0	21	1	0	2	5	0	0	0	0	0	0	0	0	6	0	35	531
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	432	0	0	72	200	0	0	0	0	0	0	12	0	404	0	1120	
Heavy Trucks	0	12	0	0	0	4	0	0	0	0	0	0	0	0	8	0	24	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Railroad																		
Stopped Buses																		

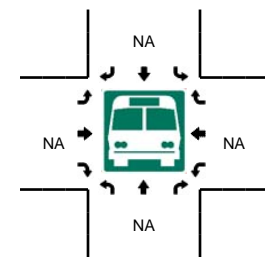
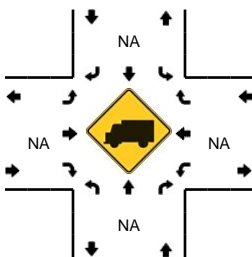
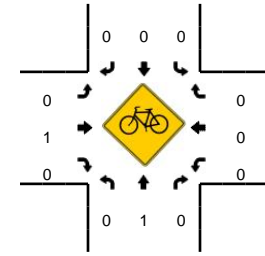
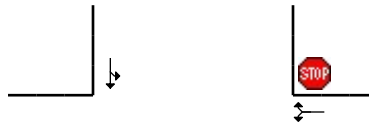
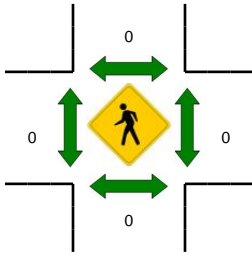
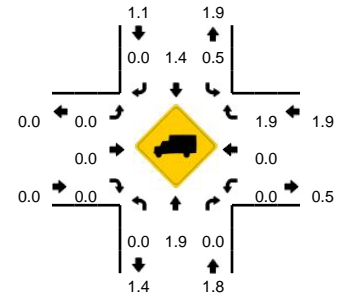
Comments:

LOCATION: S Lammers Rd -- Old Schulte Rd
CITY/STATE: Tracy, CA

QC JOB #: 13877010
DATE: Wed, Aug 17 2016



Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 5:25 PM -- 5:40 PM

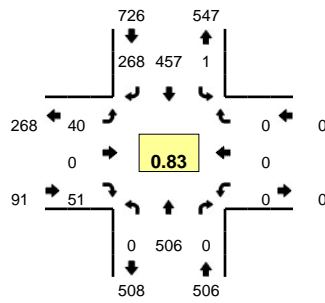


5-Min Count Period Beginning At	S Lammers Rd (Northbound)				S Lammers Rd (Southbound)				Old Schulte Rd (Eastbound)				Old Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	22	0	0	7	21	0	0	0	0	0	0	0	0	3	0	53	
4:05 PM	0	14	0	0	9	17	0	0	0	0	0	0	0	0	3	0	43	
4:10 PM	0	18	0	0	11	24	0	0	0	0	0	0	0	0	4	0	57	
4:15 PM	0	14	0	0	14	30	0	0	0	0	0	0	0	0	5	0	63	
4:20 PM	0	13	0	0	13	30	0	0	0	0	0	0	0	0	3	0	59	
4:25 PM	0	10	0	0	12	24	0	0	0	0	0	0	0	0	2	0	48	
4:30 PM	0	13	0	0	17	21	0	0	0	0	0	0	0	0	6	0	57	
4:35 PM	0	13	0	0	13	29	0	0	0	0	0	0	0	0	2	0	57	
4:40 PM	0	18	0	0	23	34	0	0	0	0	0	0	0	0	3	0	78	
4:45 PM	0	12	0	0	10	32	0	0	0	0	0	0	0	0	4	0	58	
4:50 PM	0	12	1	0	21	37	0	0	0	0	0	0	0	0	3	0	74	
4:55 PM	0	15	0	0	10	27	0	0	0	0	0	0	0	0	4	0	56	703
5:00 PM	0	15	0	0	14	34	0	0	0	0	0	0	0	0	5	0	68	718
5:05 PM	0	23	1	0	13	27	0	0	0	0	0	0	0	0	4	0	68	743
5:10 PM	0	20	3	0	17	30	0	0	0	0	0	0	0	0	5	0	75	761
5:15 PM	0	15	1	0	14	24	0	0	0	0	0	0	0	0	6	0	60	758
5:20 PM	0	23	1	0	17	27	0	0	0	0	0	0	0	0	5	0	73	772
5:25 PM	0	16	0	0	19	31	0	0	0	0	0	0	0	0	4	0	70	794
5:30 PM	0	22	0	0	16	30	0	0	0	0	0	0	0	0	5	0	73	810
5:35 PM	0	19	0	0	20	37	0	0	0	0	0	0	0	0	4	0	80	833
5:40 PM	0	14	0	0	9	28	0	0	0	0	0	0	0	0	3	0	54	809
5:45 PM	0	16	0	0	18	29	0	0	0	0	0	0	0	0	2	0	65	816
5:50 PM	0	11	0	0	15	25	0	0	0	0	0	0	0	0	4	0	55	797
5:55 PM	0	13	0	0	20	39	0	0	0	0	0	0	0	0	3	0	75	816
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	228	0	0	220	392	0	0	0	0	0	0	0	0	52	0	892	
Heavy Trucks	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

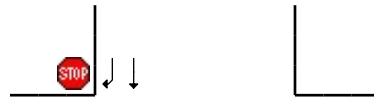
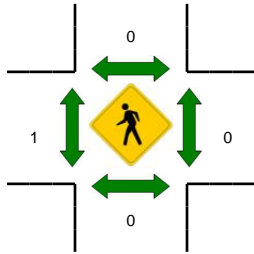
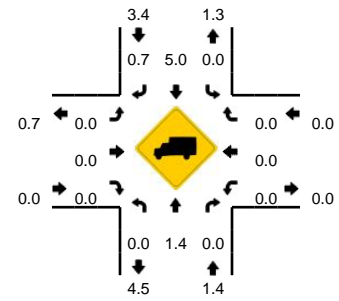
Comments:

LOCATION: Corral Hollow Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

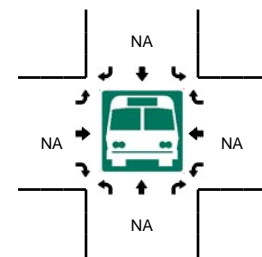
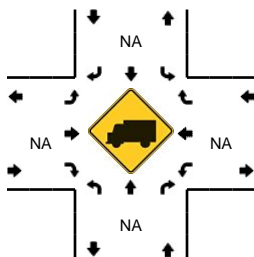
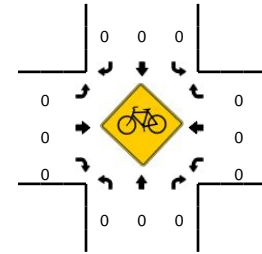
QC JOB #: 13877005
DATE: Wed, Aug 17 2016



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:35 AM -- 7:50 AM



NOTE: EBR is reported as EBL & EBR to note how many cars make a Right followed by a U-turn south of the Intersection, NB U-turns south of the intersection are reported as NBL

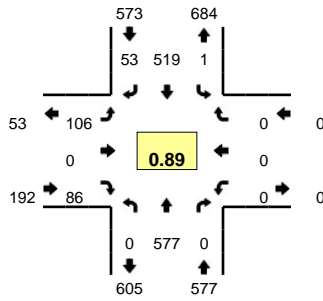


5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	24	0	0	0	47	14	0	2	0	0	0	0	0	0	0	87	
7:05 AM	0	22	0	0	0	19	21	0	0	0	2	0	0	0	0	0	64	
7:10 AM	0	20	0	0	0	37	23	0	2	0	2	0	0	0	0	0	84	
7:15 AM	0	21	0	0	0	27	10	0	5	0	2	0	0	0	0	0	65	
7:20 AM	0	30	0	0	0	47	14	0	1	0	1	0	0	0	0	0	93	
7:25 AM	0	38	0	0	0	25	20	0	3	0	1	0	0	0	0	0	87	
7:30 AM	0	35	0	0	0	35	32	0	1	0	1	0	0	0	0	0	104	
7:35 AM	0	46	0	0	0	33	45	0	2	0	0	0	0	0	0	0	126	
7:40 AM	0	54	0	0	0	43	34	0	2	0	2	0	0	0	0	0	135	
7:45 AM	0	55	0	0	0	40	34	0	6	0	3	0	0	0	0	0	138	
7:50 AM	0	48	0	0	0	43	29	0	2	0	4	0	0	0	0	0	126	
7:55 AM	0	44	0	0	0	37	20	0	4	0	7	0	0	0	0	0	112	1221
8:00 AM	0	56	0	0	0	44	15	1	5	0	7	0	0	0	0	0	128	1262
8:05 AM	0	32	0	0	0	52	11	0	5	0	3	0	0	0	0	0	103	1301
8:10 AM	0	41	0	0	0	27	6	0	4	0	12	0	0	0	0	0	90	1307
8:15 AM	0	27	0	0	0	31	8	0	5	0	10	0	0	0	0	0	81	1323
8:20 AM	0	44	0	0	0	20	9	0	4	0	6	0	0	0	0	0	83	1313
8:25 AM	0	30	0	0	0	19	5	0	0	0	1	0	0	0	0	0	55	1281
8:30 AM	0	42	0	0	0	17	5	0	2	0	0	0	0	0	0	0	66	1243
8:35 AM	0	30	0	0	0	32	7	0	0	0	0	0	0	0	0	0	69	1186
8:40 AM	0	32	0	0	0	32	3	0	1	0	2	0	0	0	0	0	70	1121
8:45 AM	0	23	0	0	0	22	5	0	0	0	0	0	0	0	0	0	50	1033
8:50 AM	0	28	0	0	0	26	6	0	1	0	1	0	0	0	0	0	62	969
8:55 AM	0	35	0	0	0	19	4	0	0	0	0	0	0	0	0	0	58	915
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	620	0	0	0	464	452	0	40	0	20	0	0	0	0	0	1596	
Heavy Trucks	0	4	0	0	0	24	0	0	0	0	0	0	0	0	0	0	28	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

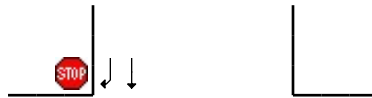
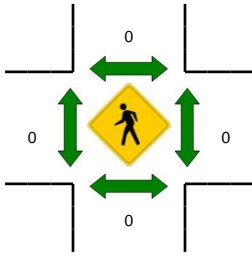
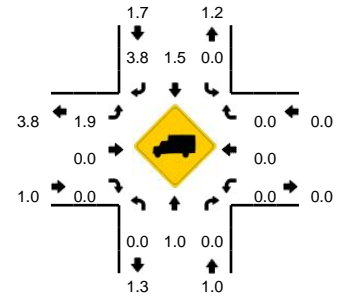
Comments:

LOCATION: Corral Hollow Rd -- W Schulte Rd
CITY/STATE: Tracy, CA

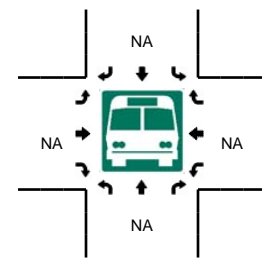
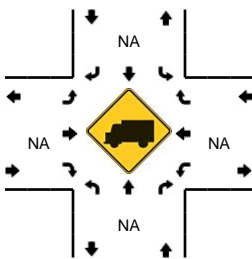
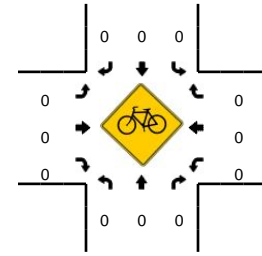
QC JOB #: 13877006
DATE: Wed, Aug 17 2016



Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:05 PM -- 5:20 PM



NOTE: EBR is reported as EBL & EBR to note how many cars make a Right followed by a U-turn south of the Intersection, NB U-turns south of the intersection are reported as NBL

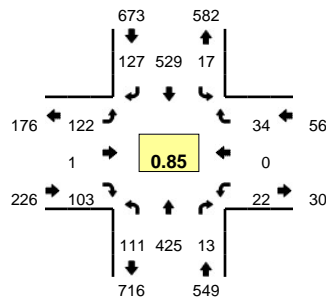


5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				W Schulte Rd (Eastbound)				W Schulte Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	43	0	0	0	41	4	0	4	0	5	0	0	0	0	0	97	
4:05 PM	0	27	0	0	0	36	4	0	4	0	6	0	0	0	0	0	77	
4:10 PM	0	34	0	0	0	26	4	0	2	0	7	0	0	0	0	0	73	
4:15 PM	0	37	0	0	0	40	4	0	6	0	7	0	0	0	0	0	94	
4:20 PM	0	41	0	0	0	54	4	0	6	0	6	0	0	0	0	0	111	
4:25 PM	0	28	0	0	0	33	4	1	6	0	7	0	0	0	0	0	79	
4:30 PM	1	37	0	0	0	43	4	0	7	0	15	0	0	0	0	0	107	
4:35 PM	0	46	0	0	0	44	3	0	8	0	3	0	0	0	0	0	104	
4:40 PM	0	32	0	0	0	38	1	0	12	0	8	0	0	0	0	0	91	
4:45 PM	1	33	0	0	0	46	4	0	5	0	5	0	0	0	0	0	94	
4:50 PM	0	40	0	0	0	53	3	0	15	0	7	0	0	0	0	0	118	
4:55 PM	0	35	0	0	0	48	6	0	8	0	7	0	0	0	0	0	104	1149
5:00 PM	0	48	0	0	0	31	7	1	9	0	6	0	0	0	0	0	102	1154
5:05 PM	0	62	0	0	0	58	3	0	5	0	9	0	0	0	0	0	137	1214
5:10 PM	0	44	0	0	0	46	5	0	9	0	10	0	0	0	0	0	114	1255
5:15 PM	0	55	0	0	0	46	9	0	14	0	4	0	0	0	0	0	128	1289
5:20 PM	0	24	0	0	0	41	1	0	8	0	9	0	0	0	0	0	83	1261
5:25 PM	0	47	0	0	0	36	6	0	8	0	4	0	0	0	0	0	101	1283
5:30 PM	0	48	0	0	0	24	4	0	7	0	11	0	0	0	0	0	94	1270
5:35 PM	0	46	0	0	0	50	3	0	13	0	5	0	0	0	0	0	117	1283
5:40 PM	0	66	0	0	0	39	2	0	8	0	3	0	0	0	0	0	118	1310
5:45 PM	0	53	0	0	0	48	3	0	11	0	4	0	0	0	0	0	119	1335
5:50 PM	0	42	0	0	0	43	7	0	7	0	8	0	0	0	0	0	107	1324
5:55 PM	0	42	0	0	0	57	3	0	7	0	13	0	0	0	0	0	122	1342
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	644	0	0	0	600	68	0	112	0	92	0	0	0	0	0	1516	
Heavy Trucks	0	8	0	0	0	12	0	0	0	0	0	0	0	0	0	0	20	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

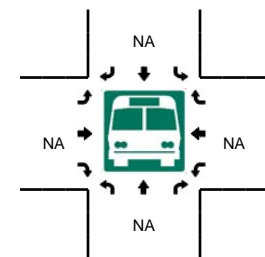
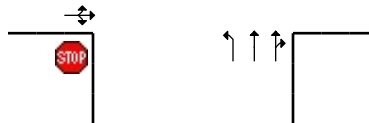
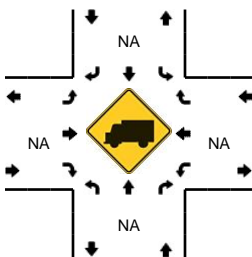
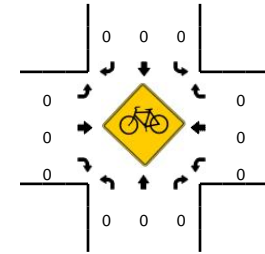
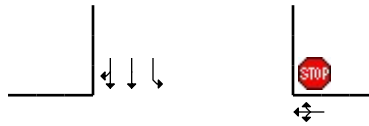
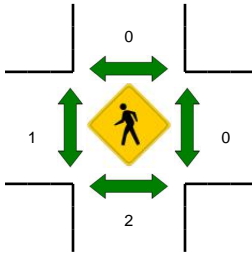
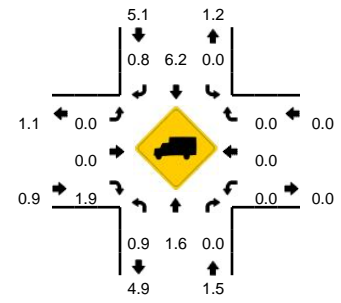
Comments:

LOCATION: Corral Hollow Rd -- Golden Leaf Ln
CITY/STATE: Tracy, CA

QC JOB #: 13877007
DATE: Wed, Aug 17 2016



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

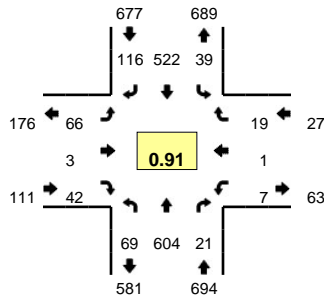


5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				Golden Leaf Ln (Eastbound)				Golden Leaf Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	18	1	3	0	48	3	0	7	0	6	0	2	0	3	0	93	
7:05 AM	3	15	1	4	1	25	1	0	1	0	10	0	1	0	3	0	65	
7:10 AM	3	15	0	4	1	46	5	0	4	0	5	0	4	0	0	0	87	
7:15 AM	4	22	0	1	0	26	2	0	3	0	5	0	2	0	0	0	65	
7:20 AM	1	27	0	2	2	51	0	0	9	0	4	0	1	0	3	0	100	
7:25 AM	2	38	1	1	0	35	1	1	6	0	4	0	2	0	4	0	95	
7:30 AM	1	24	1	8	0	49	2	0	6	0	11	0	2	0	5	0	109	
7:35 AM	4	30	0	12	1	48	3	0	10	0	12	0	2	0	2	0	124	
7:40 AM	4	47	0	7	1	61	9	0	12	1	7	0	2	0	5	0	156	
7:45 AM	8	39	2	6	2	49	8	0	8	0	9	0	5	0	4	0	140	
7:50 AM	6	42	1	10	1	50	8	0	13	0	11	0	3	0	3	0	148	
7:55 AM	5	38	1	8	2	39	19	0	10	0	14	0	0	0	2	0	138	1320
8:00 AM	4	49	1	4	0	44	26	0	7	0	13	0	4	0	2	0	154	1381
8:05 AM	7	27	2	1	4	50	28	0	11	0	6	0	0	0	2	0	138	1454
8:10 AM	2	42	2	2	1	26	16	0	20	0	4	0	0	0	2	0	117	1484
8:15 AM	5	22	2	1	2	27	7	0	10	0	8	0	1	0	0	0	85	1504
8:20 AM	5	44	1	0	0	25	7	0	6	0	2	0	1	0	3	0	94	1498
8:25 AM	3	27	0	0	1	24	3	0	6	0	2	0	0	0	2	0	68	1471
8:30 AM	1	43	1	1	1	26	4	0	13	0	4	0	1	0	0	0	95	1457
8:35 AM	0	29	0	0	1	26	0	0	13	0	3	0	0	0	2	0	74	1407
8:40 AM	1	27	0	1	0	32	1	0	7	1	2	0	0	0	1	0	73	1324
8:45 AM	1	25	0	2	0	24	3	0	10	0	2	0	3	0	1	0	71	1255
8:50 AM	1	24	0	0	0	22	2	0	6	0	5	0	0	0	1	0	61	1168
8:55 AM	0	37	1	0	0	22	1	0	6	1	0	0	2	0	1	0	71	1101
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	72	512	12	92	16	640	100	0	132	4	108	0	40	0	48	0	1776	
Heavy Trucks	0	8	0		0	40	4		0	0	0		0	0	0		52	
Pedestrians		4				0				0				0			4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

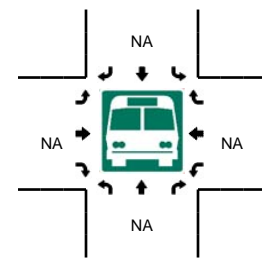
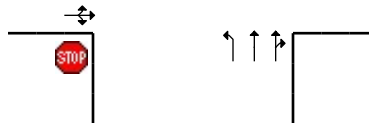
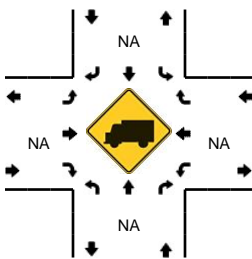
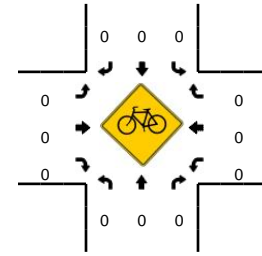
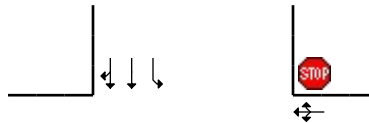
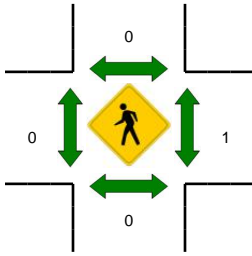
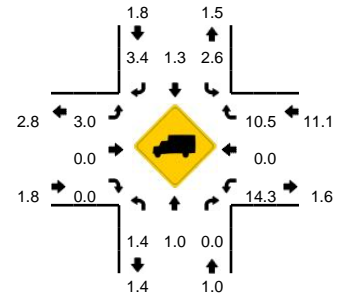
Comments:

LOCATION: Corral Hollow Rd -- Golden Leaf Ln
CITY/STATE: Tracy, CA

QC JOB #: 13877008
DATE: Wed, Aug 17 2016



Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:05 PM -- 5:20 PM



5-Min Count Period Beginning At	Corral Hollow Rd (Northbound)				Corral Hollow Rd (Southbound)				Golden Leaf Ln (Eastbound)				Golden Leaf Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	46	0	0	0	40	13	0	8	1	5	0	0	1	3	0	120	
4:05 PM	1	31	0	0	2	39	8	1	3	0	2	0	0	0	0	0	87	
4:10 PM	0	34	2	1	2	24	12	0	4	1	3	0	0	0	1	0	84	
4:15 PM	1	39	2	1	2	48	13	0	4	0	2	0	0	0	3	0	115	
4:20 PM	5	36	1	0	5	45	9	0	4	0	4	0	2	0	0	0	111	
4:25 PM	2	36	4	0	2	37	10	0	6	0	3	0	1	1	1	0	103	
4:30 PM	8	35	1	1	5	46	8	0	2	0	3	0	1	0	3	0	113	
4:35 PM	3	47	0	1	3	42	2	0	3	0	1	0	0	0	2	0	104	
4:40 PM	4	43	2	0	0	30	13	0	5	1	6	0	0	0	1	0	105	
4:45 PM	4	33	0	2	1	44	11	0	8	0	3	0	1	0	1	0	108	
4:50 PM	4	46	0	1	3	49	13	0	8	0	5	0	2	0	0	0	131	
4:55 PM	3	36	5	2	3	47	9	0	6	0	2	0	0	0	1	0	114	1295
5:00 PM	6	48	1	3	1	35	6	0	3	0	4	0	0	0	2	0	109	1284
5:05 PM	8	58	1	1	1	54	8	0	5	0	6	0	1	0	2	0	145	1342
5:10 PM	4	47	0	2	2	50	11	0	12	1	3	0	1	0	4	0	137	1395
5:15 PM	4	61	2	1	5	38	5	0	5	0	6	0	2	0	2	0	131	1411
5:20 PM	4	31	2	0	3	40	11	0	2	0	1	0	0	0	0	0	94	1394
5:25 PM	6	38	3	1	3	38	6	0	8	0	4	0	0	0	1	0	108	1399
5:30 PM	3	53	2	1	6	23	16	0	4	0	3	0	1	0	1	0	113	1399
5:35 PM	3	52	1	0	3	52	10	0	5	1	4	0	1	0	0	0	132	1427
5:40 PM	3	71	2	0	3	42	8	0	6	0	1	0	0	0	1	0	137	1459
5:45 PM	5	56	1	0	6	45	10	0	5	1	1	0	1	1	4	0	136	1487
5:50 PM	7	47	4	0	2	46	7	0	5	0	6	0	0	0	0	0	124	1480
5:55 PM	6	42	2	1	4	59	18	0	6	0	3	0	0	0	2	0	143	1509
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	64	664	12	16	32	568	96	0	88	4	60	0	16	0	32	0	1652	
Heavy Trucks	0	12	0	0	0	4	4	0	0	0	0	0	4	0	8	0	32	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

APPENDIX B:
License Plate Survey

Tracy - Redbridge Field Work - Existing Gate

Date: 8/23/2016 Staff: M. Garcia

Notes:

- 7:30 - first wave, single lane gate access if have key/remote need to consider emergency access if no weight sensor to open
- many kids walk and biking to school via Redbridge
- fire lane on north side of road and parking allowed on south
- parents idling in car until ready to let kids walk
- one car idled for > 15 minutes
- non-students also use gates for access to Lammers Road for recreation (group of 7 serious bicyclists) (2 other citizens used for recreation)
- There is a school bus in Redbridge for Tracy unified but why if George Kelly is right next door
- 7:50 - First Bell, 8:15 - Second Bell, 8:20 3rd Bell (Morning Announcement)
- crew of 7 serious bicyclists came through at 8:20
- all parents gone by 8:26
- may have had residents of Redbridge drop younger child off first then older high schooler as some license plates were found at existing gate before possibly reentering the complex

Pedestrian Counts	
7:30 AM	12
7:45 AM	19
8:00 AM	79
8:15 AM	2
8:30 AM	0

* Counts are School Age Kids only, approximately half walked with a parent or young non-middle school age sibling

1

Start Time	7:30 AM
Last 3 Digits of License Plate	Comment
1	717

Start Time	7:45 AM
Last 3 Digits of License Plate	Comment
1	237
2	182
3	111 <reenter at 8?
4	902
5	169

Start Time	8:00 AM
Last 3 Digits of License Plate	Comment
1	PAP
2	85
3	759
4	477 "DUBLIN"
5	682
6	110
7	998
8	925
9	T8D
10	31
11	402
12	549
13	926
14	892
15	810
16	834
17	752
18	*White mini-cooper (couldn't read)
19	Silver Jeep no plates

Start Time	8:15 AM
Last 3 Digits of License Plate	Comment
1	843 kid was late

Start Time	8:30 AM
Last 3 Digits of License Plate	Comment

Tracy - Redbridge Field Work - Front Entrance

Date: 8/23/2016

Staff: R. Ali

Start Time 7:30 AM

Last 3 Digits of License Plate	Comment
1	830 school bus
2	335
3	948
4	628
5	169
6	161
7	144
8	833
9	328
10	253
11	198
12	753
13	848

Start Time 7:45 AM

Last 3 Digits of License Plate	Comment
1	127
2	230
3	LJE
4	671
5	593
6	415
7	O39
8	487
9	250
10	301
11	643
12	130
13	182
14	900
15	WI4
16	759
17	367
18	987

Start Time 8:00 AM

Last 3 Digits of License Plate	Comment
1	178
2	EDA
3	389
4	N/A "DUBLIN"
5	923
6	235
7	48
8	EC7
9	402
10	898
11	689
12	343
13	959
14	111 <reenter?>
15	682
16	0B2
17	343

Start Time 8:15 AM

Last 3 Digits of License Plate	Comment
1	495
2	603
3	MWC
4	974
5	585
6	288
7	780
8	3B2
9	721
10	478
11	503
12	211
13	126
14	186
15	O68
16	O73
17	801
18	404
19	O96
20	911
21	N/A "TRACEY FORD"
22	239
23	381
24	556
25	902
26	387
27	284
28	734
29	O61
30	443
31	7X1
32	N/A "DUBLIN"
33	367
34	712
35	2X1
36	78

Start Time 8:30 AM

Last 3 Digits of License Plate	Comment
1	239
2	453
3	832
4	881
5	148
6	888
7	4L1

APPENDIX C

Synchro Analysis Sheets

Existing Conditions with One Gate

School Out of Session

AM Peak Hour

Intersection

Int Delay, s/veh 3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	39	95	116	8	21	218
Future Vol, veh/h	39	95	116	8	21	218
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	4	4	3	3
Mvmt Flow	46	113	138	10	25	260

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	453	143	0	0	148	0
Stage 1	143	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	568	910	-	-	1427	-
Stage 1	889	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	558	910	-	-	1427	-
Mov Cap-2 Maneuver	558	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	735	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	558	910	1427	-
HCM Lane V/C Ratio	-	-	0.083	0.124	0.018	-
HCM Control Delay (s)	-	-	12	9.5	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.4	0.1	-

Intersection									
Intersection Delay, s/veh	14.9								
Intersection LOS	B								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	40	38	0	324	80	0	75	184
Future Vol, veh/h	0	40	38	0	324	80	0	75	184
Peak Hour Factor	1.00	0.76	0.76	1.00	0.76	0.76	1.00	0.76	0.76
Heavy Vehicles, %	2	4	4	2	4	4	2	3	3
Mvmt Flow	0	53	50	0	426	105	0	99	242
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	9.9			18.5			10.7		
HCM LOS	A			C			B		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	80%	51%	0%						
Vol Thru, %	20%	0%	29%						
Vol Right, %	0%	49%	71%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	404	78	259						
LT Vol	324	40	0						
Through Vol	80	0	75						
RT Vol	0	38	184						
Lane Flow Rate	532	103	341						
Geometry Grp	1	1	1						
Degree of Util (X)	0.704	0.162	0.418						
Departure Headway (Hd)	4.77	5.675	4.418						
Convergence, Y/N	Yes	Yes	Yes						
Cap	755	626	811						
Service Time	2.826	3.766	2.475						
HCM Lane V/C Ratio	0.705	0.165	0.42						
HCM Control Delay	18.5	9.9	10.7						
HCM Lane LOS	C	A	B						
HCM 95th-tile Q	5.9	0.6	2.1						

Intersection

Int Delay, s/veh 4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	1	181	222	0	16	98
Future Vol, veh/h	1	181	222	0	16	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	6	6	8	8
Mvmt Flow	1	206	252	0	18	111

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	400	252	0
Stage 1	252	-	-
Stage 2	148	-	-
Critical Hdwy	6.42	6.22	4.18
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.272
Pot Cap-1 Maneuver	606	787	1279
Stage 1	790	-	-
Stage 2	880	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	597	787	1279
Mov Cap-2 Maneuver	597	-	-
Stage 1	790	-	-
Stage 2	867	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	786	1279
HCM Lane V/C Ratio	-	-	0.263	0.014
HCM Control Delay (s)	-	-	11.2	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/12/2016

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	18	0	0	0	0	325	0	0	289	163
Future Vol, veh/h	0	0	18	0	0	0	0	325	0	0	289	163
Conflicting Peds, #/hr	1	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	21	0	0	0	0	374	0	0	332	187

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	521	708	334	708	708	187	334	0	0	374	0	0
Stage 1	334	334	-	374	374	-	-	-	-	-	-	-
Stage 2	187	374	-	334	334	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.23	-	-
Pot Cap-1 Maneuver	456	362	712	339	362	830	1220	-	-	1174	-	-
Stage 1	684	647	-	624	621	-	-	-	-	-	-	-
Stage 2	803	621	-	684	647	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	455	361	711	329	361	830	1220	-	-	1174	-	-
Mov Cap-2 Maneuver	455	361	-	329	361	-	-	-	-	-	-	-
Stage 1	683	646	-	624	621	-	-	-	-	-	-	-
Stage 2	803	621	-	664	646	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1220	-	-	711	-	1174	-	-
HCM Lane V/C Ratio	-	-	-	0.029	-	-	-	-
HCM Control Delay (s)	0	-	-	10.2	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/12/2016

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	25	1	16	63	1	65	17	264	6	6	335	19
Future Vol, veh/h	25	1	16	63	1	65	17	264	6	6	335	19
Conflicting Peds, #/hr	3	0	1	4	0	6	1	0	4	6	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	0	0	0	4	4	4	3	3	3
Mvmt Flow	29	1	18	72	1	75	20	303	7	7	385	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	610	768	210	562	776	167	410	0	0	316	0	0
Stage 1	413	413	-	352	352	-	-	-	-	-	-	-
Stage 2	197	355	-	210	424	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.18	-	-	4.16	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.24	-	-	2.23	-	-
Pot Cap-1 Maneuver	381	332	799	414	331	854	1131	-	-	1234	-	-
Stage 1	590	595	-	643	635	-	-	-	-	-	-	-
Stage 2	789	631	-	778	590	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	337	321	794	392	320	844	1127	-	-	1228	-	-
Mov Cap-2 Maneuver	337	321	-	392	320	-	-	-	-	-	-	-
Stage 1	578	590	-	627	620	-	-	-	-	-	-	-
Stage 2	702	616	-	752	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.4	14.3	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1127	-	-	431	536	1228	-
HCM Lane V/C Ratio	0.017	-	-	0.112	0.277	0.006	-
HCM Control Delay (s)	8.3	-	-	14.4	14.3	7.9	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.1	0	-

Existing Conditions with Two Gates

School Out of Session

AM Peak Hour

Intersection

Int Delay, s/veh 3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	39	95	116	8	21	218
Future Vol, veh/h	39	95	116	8	21	218
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	4	4	3	3
Mvmt Flow	46	113	138	10	25	260

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	453	143	0	0	148	0
Stage 1	143	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	568	910	-	-	1427	-
Stage 1	889	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	558	910	-	-	1427	-
Mov Cap-2 Maneuver	558	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	735	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	558	910	1427	-
HCM Lane V/C Ratio	-	-	0.083	0.124	0.018	-
HCM Control Delay (s)	-	-	12	9.5	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.4	0.1	-

Intersection									
Intersection Delay, s/veh	14.9								
Intersection LOS	B								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	40	38	0	324	80	0	75	184
Future Vol, veh/h	0	40	38	0	324	80	0	75	184
Peak Hour Factor	1.00	0.76	0.76	1.00	0.76	0.76	1.00	0.76	0.76
Heavy Vehicles, %	2	4	4	2	4	4	2	3	3
Mvmt Flow	0	53	50	0	426	105	0	99	242
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	9.9			18.5			10.7		
HCM LOS	A			C			B		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	80%	51%	0%						
Vol Thru, %	20%	0%	29%						
Vol Right, %	0%	49%	71%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	404	78	259						
LT Vol	324	40	0						
Through Vol	80	0	75						
RT Vol	0	38	184						
Lane Flow Rate	532	103	341						
Geometry Grp	1	1	1						
Degree of Util (X)	0.704	0.162	0.418						
Departure Headway (Hd)	4.77	5.675	4.418						
Convergence, Y/N	Yes	Yes	Yes						
Cap	755	626	811						
Service Time	2.826	3.766	2.475						
HCM Lane V/C Ratio	0.705	0.165	0.42						
HCM Control Delay	18.5	9.9	10.7						
HCM Lane LOS	C	A	B						
HCM 95th-tile Q	5.9	0.6	2.1						

Intersection

Int Delay, s/veh 4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	1	181	222	0	16	98
Future Vol, veh/h	1	181	222	0	16	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	6	6	8	8
Mvmt Flow	1	206	252	0	18	111

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	400	252	0
Stage 1	252	-	-
Stage 2	148	-	-
Critical Hdwy	6.42	6.22	4.18
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.272
Pot Cap-1 Maneuver	606	787	1279
Stage 1	790	-	-
Stage 2	880	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	597	787	1279
Mov Cap-2 Maneuver	597	-	-
Stage 1	790	-	-
Stage 2	867	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	786	1279
HCM Lane V/C Ratio	-	-	0.263	0.014
HCM Control Delay (s)	-	-	11.2	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/12/2016

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	18	0	0	0	0	325	0	0	289	163
Future Vol, veh/h	0	0	18	0	0	0	0	325	0	0	289	163
Conflicting Peds, #/hr	1	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	21	0	0	0	0	374	0	0	332	187

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	521	708	334	708	708	187	334	0	0	374	0	0
Stage 1	334	334	-	374	374	-	-	-	-	-	-	-
Stage 2	187	374	-	334	334	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.23	-	-
Pot Cap-1 Maneuver	456	362	712	339	362	830	1220	-	-	1174	-	-
Stage 1	684	647	-	624	621	-	-	-	-	-	-	-
Stage 2	803	621	-	684	647	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	455	361	711	329	361	830	1220	-	-	1174	-	-
Mov Cap-2 Maneuver	455	361	-	329	361	-	-	-	-	-	-	-
Stage 1	683	646	-	624	621	-	-	-	-	-	-	-
Stage 2	803	621	-	664	646	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1220	-	-	711	-	1174	-	-
HCM Lane V/C Ratio	-	-	-	0.029	-	-	-	-
HCM Control Delay (s)	0	-	-	10.2	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/12/2016

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	25	1	16	63	1	65	17	264	6	6	335	19
Future Vol, veh/h	25	1	16	63	1	65	17	264	6	6	335	19
Conflicting Peds, #/hr	3	0	1	4	0	6	1	0	4	6	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	0	0	0	4	4	4	3	3	3
Mvmt Flow	29	1	18	72	1	75	20	303	7	7	385	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	610	768	210	562	776	167	410	0	0	316	0	0
Stage 1	413	413	-	352	352	-	-	-	-	-	-	-
Stage 2	197	355	-	210	424	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.18	-	-	4.16	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.24	-	-	2.23	-	-
Pot Cap-1 Maneuver	381	332	799	414	331	854	1131	-	-	1234	-	-
Stage 1	590	595	-	643	635	-	-	-	-	-	-	-
Stage 2	789	631	-	778	590	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	337	321	794	392	320	844	1127	-	-	1228	-	-
Mov Cap-2 Maneuver	337	321	-	392	320	-	-	-	-	-	-	-
Stage 1	578	590	-	627	620	-	-	-	-	-	-	-
Stage 2	702	616	-	752	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.4	14.3	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1127	-	-	431	536	1228	-
HCM Lane V/C Ratio	0.017	-	-	0.112	0.277	0.006	-
HCM Control Delay (s)	8.3	-	-	14.4	14.3	7.9	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.1	0	-

Existing Conditions without Gates

School Out of Session

AM Peak Hour

Intersection

Int Delay, s/veh 2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	29	95	116	2	21	218
Future Vol, veh/h	29	95	116	2	21	218
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	4	4	3	3
Mvmt Flow	35	113	138	2	25	260

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	449	139	0 0 140 0
Stage 1	139	-	- - - -
Stage 2	310	-	- - - -
Critical Hdwy	6.4	6.2	- - 4.13 -
Critical Hdwy Stg 1	5.4	-	- - - -
Critical Hdwy Stg 2	5.4	-	- - - -
Follow-up Hdwy	3.5	3.3	- - 2.227 -
Pot Cap-1 Maneuver	571	915	- - 1437 -
Stage 1	893	-	- - - -
Stage 2	748	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	561	915	- - 1437 -
Mov Cap-2 Maneuver	561	-	- - - -
Stage 1	893	-	- - - -
Stage 2	735	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	561	915	1437	-
HCM Lane V/C Ratio	-	-	0.062	0.124	0.017	-
HCM Control Delay (s)	-	-	11.8	9.5	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.4	0.1	-

Intersection									
Intersection Delay, s/veh	14.5								
Intersection LOS	B								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	40	38	0	324	74	0	65	184
Future Vol, veh/h	0	40	38	0	324	74	0	65	184
Peak Hour Factor	1.00	0.76	0.76	1.00	0.76	0.76	1.00	0.76	0.76
Heavy Vehicles, %	2	4	4	2	4	4	2	3	3
Mvmt Flow	0	53	50	0	426	97	0	86	242
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	9.8			17.9			10.4		
HCM LOS	A			C			B		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	81%	51%	0%						
Vol Thru, %	19%	0%	26%						
Vol Right, %	0%	49%	74%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	398	78	249						
LT Vol	324	40	0						
Through Vol	74	0	65						
RT Vol	0	38	184						
Lane Flow Rate	524	103	328						
Geometry Grp	1	1	1						
Degree of Util (X)	0.692	0.161	0.399						
Departure Headway (Hd)	4.755	5.631	4.388						
Convergence, Y/N	Yes	Yes	Yes						
Cap	754	631	816						
Service Time	2.809	3.718	2.445						
HCM Lane V/C Ratio	0.695	0.163	0.402						
HCM Control Delay	17.9	9.8	10.4						
HCM Lane LOS	C	A	B						
HCM 95th-tile Q	5.6	0.6	1.9						

Intersection

Int Delay, s/veh 4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	1	181	216	0	16	88
Future Vol, veh/h	1	181	216	0	16	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	6	6	8	8
Mvmt Flow	1	206	245	0	18	100

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	381	245	0
Stage 1	245	-	-
Stage 2	136	-	-
Critical Hdwy	6.42	6.22	4.18
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.272
Pot Cap-1 Maneuver	621	794	1287
Stage 1	796	-	-
Stage 2	890	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	612	794	1287
Mov Cap-2 Maneuver	612	-	-
Stage 1	796	-	-
Stage 2	877	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	793	1287
HCM Lane V/C Ratio	-	-	0.261	0.014
HCM Control Delay (s)	-	-	11.1	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1	0

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	18	0	0	0	0	331	0	0	299	163
Future Vol, veh/h	0	0	18	0	0	0	0	331	0	0	299	163
Conflicting Peds, #/hr	1	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	21	0	0	0	0	380	0	0	344	187

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	536	726	346	726	726	190	346	0	0	380	0	0
Stage 1	346	346	-	380	380	-	-	-	-	-	-	-
Stage 2	190	380	-	346	346	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.23	-	-
Pot Cap-1 Maneuver	445	354	702	329	354	826	1207	-	-	1168	-	-
Stage 1	674	639	-	619	617	-	-	-	-	-	-	-
Stage 2	799	617	-	674	639	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	444	353	701	319	353	826	1207	-	-	1168	-	-
Mov Cap-2 Maneuver	444	353	-	319	353	-	-	-	-	-	-	-
Stage 1	673	638	-	619	617	-	-	-	-	-	-	-
Stage 2	799	617	-	654	638	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1207	-	-	701	-	1168	-	-
HCM Lane V/C Ratio	-	-	-	0.03	-	-	-	-
HCM Control Delay (s)	0	-	-	10.3	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	25	1	26	63	1	65	23	264	6	6	335	19
Future Vol, veh/h	25	1	26	63	1	65	23	264	6	6	335	19
Conflicting Peds, #/hr	3	0	1	4	0	6	1	0	4	6	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	0	0	0	4	4	4	3	3	3
Mvmt Flow	29	1	30	72	1	75	26	303	7	7	385	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	624	782	210	576	790	167	410	0	0	316	0	0
Stage 1	413	413	-	366	366	-	-	-	-	-	-	-
Stage 2	211	369	-	210	424	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.18	-	-	4.16	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.24	-	-	2.23	-	-
Pot Cap-1 Maneuver	372	326	799	405	325	854	1131	-	-	1234	-	-
Stage 1	590	595	-	631	626	-	-	-	-	-	-	-
Stage 2	774	622	-	778	590	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	328	314	794	376	313	844	1127	-	-	1228	-	-
Mov Cap-2 Maneuver	328	314	-	376	313	-	-	-	-	-	-	-
Stage 1	574	590	-	612	607	-	-	-	-	-	-	-
Stage 2	684	604	-	741	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	14.6	0.6	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1127	-	-	464	521	1228	-	-
HCM Lane V/C Ratio	0.023	-	-	0.129	0.285	0.006	-	-
HCM Control Delay (s)	8.3	-	-	13.9	14.6	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.2	0	-	-

Existing Conditions with One Gate

School Out of Session

PM Peak Hour

Intersection

Int Delay, s/veh 4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	35	87	260	45	120	117
Future Vol, veh/h	35	87	260	45	120	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	109	325	56	150	146

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	799	353	0	0	381	0
Stage 1	353	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	355	691	-	-	1177	-
Stage 1	711	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	310	691	-	-	1177	-
Mov Cap-2 Maneuver	310	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	310	691	1177	-
HCM Lane V/C Ratio	-	-	0.141	0.157	0.127	-
HCM Control Delay (s)	-	-	18.5	11.2	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.6	0.4	-

Intersection									
Intersection Delay, s/veh	13.2								
Intersection LOS	B								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	151	285	0	73	131	0	179	19
Future Vol, veh/h	0	151	285	0	73	131	0	179	19
Peak Hour Factor	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94
Heavy Vehicles, %	2	3	3	2	3	3	2	2	2
Mvmt Flow	0	161	303	0	78	139	0	190	20
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	15			11.4			11		
HCM LOS	B			B			B		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	36%	35%	0%						
Vol Thru, %	64%	0%	90%						
Vol Right, %	0%	65%	10%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	204	436	198						
LT Vol	73	151	0						
Through Vol	131	0	179						
RT Vol	0	285	19						
Lane Flow Rate	217	464	211						
Geometry Grp	1	1	1						
Degree of Util (X)	0.335	0.608	0.318						
Departure Headway (Hd)	5.562	4.828	5.433						
Convergence, Y/N	Yes	Yes	Yes						
Cap	649	751	666						
Service Time	3.571	2.828	3.441						
HCM Lane V/C Ratio	0.334	0.618	0.317						
HCM Control Delay	11.4	15	11						
HCM Lane LOS	B	B	B						
HCM 95th-tile Q	1.5	4.2	1.4						

Intersection

Int Delay, s/veh 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	45	159	1	149	302
Future Vol, veh/h	3	45	159	1	149	302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	50	177	1	166	336

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	844	177	0
Stage 1	177	-	-
Stage 2	667	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	334	866	1398
Stage 1	854	-	-
Stage 2	510	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	285	866	1398
Mov Cap-2 Maneuver	285	-	-
Stage 1	854	-	-
Stage 2	436	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	768	1398
HCM Lane V/C Ratio	-	-	0.069	0.118
HCM Control Delay (s)	-	-	10	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0.4

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	125	0	0	0	0	551	0	0	553	61
Future Vol, veh/h	0	0	125	0	0	0	0	551	0	0	553	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	1	1	1
Mvmt Flow	0	0	137	0	0	0	0	605	0	0	608	67

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	911	1213	608	1213	1213	303	608	0	0	605	0	0
Stage 1	608	608	-	605	605	-	-	-	-	-	-	-
Stage 2	303	605	-	608	608	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.218	-	-	2.21	-	-
Pot Cap-1 Maneuver	243	182	497	150	183	699	970	-	-	976	-	-
Stage 1	484	487	-	456	491	-	-	-	-	-	-	-
Stage 2	685	488	-	486	489	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	243	182	497	109	183	699	970	-	-	976	-	-
Mov Cap-2 Maneuver	243	182	-	109	183	-	-	-	-	-	-	-
Stage 1	484	487	-	456	491	-	-	-	-	-	-	-
Stage 2	685	488	-	352	489	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	497	-	976	-	-
HCM Lane V/C Ratio	-	-	-	0.276	-	-	-	-
HCM Control Delay (s)	0	-	-	15	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	71	0	33	11	3	23	43	496	18	41	559	107
Future Vol, veh/h	71	0	33	11	3	23	43	496	18	41	559	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	2	2	2
Mvmt Flow	73	0	34	11	3	24	44	511	19	42	576	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1062	1335	343	982	1380	265	687	0	0	530	0	0
Stage 1	716	716	-	609	609	-	-	-	-	-	-	-
Stage 2	346	619	-	373	771	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	180	155	659	202	142	730	903	-	-	1033	-	-
Stage 1	392	437	-	446	481	-	-	-	-	-	-	-
Stage 2	649	483	-	617	405	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	160	141	659	179	130	730	903	-	-	1033	-	-
Mov Cap-2 Maneuver	160	141	-	179	130	-	-	-	-	-	-	-
Stage 1	373	419	-	424	458	-	-	-	-	-	-	-
Stage 2	593	459	-	561	389	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.5	17.8	0.7	0.5
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	903	-	-	211	319	1033	-
HCM Lane V/C Ratio	0.049	-	-	0.508	0.12	0.041	-
HCM Control Delay (s)	9.2	-	-	38.5	17.8	8.6	-
HCM Lane LOS	A	-	-	E	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.6	0.4	0.1	-

Existing Conditions with Two Gates

School Out of Session

PM Peak Hour

Intersection

Int Delay, s/veh 4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	35	87	260	45	120	117
Future Vol, veh/h	35	87	260	45	120	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	109	325	56	150	146

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	799	353	0	0	381	0
Stage 1	353	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	355	691	-	-	1177	-
Stage 1	711	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	310	691	-	-	1177	-
Mov Cap-2 Maneuver	310	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	310	691	1177	-
HCM Lane V/C Ratio	-	-	0.141	0.157	0.127	-
HCM Control Delay (s)	-	-	18.5	11.2	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.6	0.4	-

Intersection

Intersection Delay, s/veh	13.2
Intersection LOS	B

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	151	285	0	73	131	0	179	19
Future Vol, veh/h	0	151	285	0	73	131	0	179	19
Peak Hour Factor	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94
Heavy Vehicles, %	2	3	3	2	3	3	2	2	2
Mvmt Flow	0	161	303	0	78	139	0	190	20
Number of Lanes	0	1	0	0	0	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	15	11.4	11
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	36%	35%	0%
Vol Thru, %	64%	0%	90%
Vol Right, %	0%	65%	10%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	204	436	198
LT Vol	73	151	0
Through Vol	131	0	179
RT Vol	0	285	19
Lane Flow Rate	217	464	211
Geometry Grp	1	1	1
Degree of Util (X)	0.335	0.608	0.318
Departure Headway (Hd)	5.562	4.828	5.433
Convergence, Y/N	Yes	Yes	Yes
Cap	649	751	666
Service Time	3.571	2.828	3.441
HCM Lane V/C Ratio	0.334	0.618	0.317
HCM Control Delay	11.4	15	11
HCM Lane LOS	B	B	B
HCM 95th-tile Q	1.5	4.2	1.4

Intersection

Int Delay, s/veh 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	45	159	1	149	302
Future Vol, veh/h	3	45	159	1	149	302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	50	177	1	166	336

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	844	177	0
Stage 1	177	-	-
Stage 2	667	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	334	866	1398
Stage 1	854	-	-
Stage 2	510	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	285	866	1398
Mov Cap-2 Maneuver	285	-	-
Stage 1	854	-	-
Stage 2	436	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	768	1398
HCM Lane V/C Ratio	-	-	0.069	0.118
HCM Control Delay (s)	-	-	10	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0.4

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	125	0	0	0	0	551	0	0	553	61
Future Vol, veh/h	0	0	125	0	0	0	0	551	0	0	553	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	1	1	1
Mvmt Flow	0	0	137	0	0	0	0	605	0	0	608	67

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	911	1213	608	1213	1213	303	608	0	0	605	0	0
Stage 1	608	608	-	605	605	-	-	-	-	-	-	-
Stage 2	303	605	-	608	608	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.218	-	-	2.21	-	-
Pot Cap-1 Maneuver	243	182	497	150	183	699	970	-	-	976	-	-
Stage 1	484	487	-	456	491	-	-	-	-	-	-	-
Stage 2	685	488	-	486	489	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	243	182	497	109	183	699	970	-	-	976	-	-
Mov Cap-2 Maneuver	243	182	-	109	183	-	-	-	-	-	-	-
Stage 1	484	487	-	456	491	-	-	-	-	-	-	-
Stage 2	685	488	-	352	489	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	497	-	976	-	-
HCM Lane V/C Ratio	-	-	-	0.276	-	-	-	-
HCM Control Delay (s)	0	-	-	15	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	71	0	33	11	3	23	43	496	18	41	559	107
Future Vol, veh/h	71	0	33	11	3	23	43	496	18	41	559	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	2	2	2
Mvmt Flow	73	0	34	11	3	24	44	511	19	42	576	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1062	1335	343	982	1380	265	687	0	0	530	0	0
Stage 1	716	716	-	609	609	-	-	-	-	-	-	-
Stage 2	346	619	-	373	771	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	180	155	659	202	142	730	903	-	-	1033	-	-
Stage 1	392	437	-	446	481	-	-	-	-	-	-	-
Stage 2	649	483	-	617	405	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	160	141	659	179	130	730	903	-	-	1033	-	-
Mov Cap-2 Maneuver	160	141	-	179	130	-	-	-	-	-	-	-
Stage 1	373	419	-	424	458	-	-	-	-	-	-	-
Stage 2	593	459	-	561	389	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.5	17.8	0.7	0.5
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	903	-	-	211	319	1033	-
HCM Lane V/C Ratio	0.049	-	-	0.508	0.12	0.041	-
HCM Control Delay (s)	9.2	-	-	38.5	17.8	8.6	-
HCM Lane LOS	A	-	-	E	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.6	0.4	0.1	-

Existing Conditions without Gates

School Out of Session

PM Peak Hour

Intersection

Int Delay, s/veh 4.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	25	87	260	34	176	117
Future Vol, veh/h	25	87	260	34	176	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	109	325	43	220	146

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	932	346	0
Stage 1	346	-	-
Stage 2	586	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	296	697	1191
Stage 1	716	-	-
Stage 2	556	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	241	697	1191
Mov Cap-2 Maneuver	241	-	-
Stage 1	716	-	-
Stage 2	453	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	5.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	241	697	1191	-
HCM Lane V/C Ratio	-	-	0.13	0.156	0.185	-
HCM Control Delay (s)	-	-	22.2	11.1	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.6	0.7	-

Intersection									
Intersection Delay, s/veh	12.9								
Intersection LOS	B								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	151	285	0	73	120	0	169	19
Future Vol, veh/h	0	151	285	0	73	120	0	169	19
Peak Hour Factor	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94
Heavy Vehicles, %	2	3	3	2	3	3	2	2	2
Mvmt Flow	0	161	303	0	78	128	0	180	20
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	14.7			11.1			10.7		
HCM LOS	B			B			B		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	38%	35%	0%						
Vol Thru, %	62%	0%	90%						
Vol Right, %	0%	65%	10%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	193	436	188						
LT Vol	73	151	0						
Through Vol	120	0	169						
RT Vol	0	285	19						
Lane Flow Rate	205	464	200						
Geometry Grp	1	1	1						
Degree of Util (X)	0.316	0.601	0.3						
Departure Headway (Hd)	5.533	4.764	5.395						
Convergence, Y/N	Yes	Yes	Yes						
Cap	653	761	670						
Service Time	3.541	2.764	3.402						
HCM Lane V/C Ratio	0.314	0.61	0.299						
HCM Control Delay	11.1	14.7	10.7						
HCM Lane LOS	B	B	B						
HCM 95th-tile Q	1.4	4.1	1.3						

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	45	148	1	149	292
Future Vol, veh/h	3	45	148	1	149	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	50	164	1	166	324

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	821	165	0
Stage 1	165	-	-
Stage 2	656	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	344	879	1412
Stage 1	864	-	-
Stage 2	516	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	295	879	1412
Mov Cap-2 Maneuver	295	-	-
Stage 1	864	-	-
Stage 2	442	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	782	1412
HCM Lane V/C Ratio	-	-	0.068	0.117
HCM Control Delay (s)	-	-	9.9	7.9
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.4

HCM 2010 TWSC
4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	125	0	0	0	0	561	0	0	564	61
Future Vol, veh/h	0	0	125	0	0	0	0	561	0	0	564	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	1	1	1
Mvmt Flow	0	0	137	0	0	0	0	616	0	0	620	67

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	928	1236	620	1236	1236	308	620	0	0	616	0	0
Stage 1	620	620	-	616	616	-	-	-	-	-	-	-
Stage 2	308	616	-	620	620	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.218	-	-	2.21	-	-
Pot Cap-1 Maneuver	237	177	489	144	178	694	960	-	-	967	-	-
Stage 1	477	481	-	450	485	-	-	-	-	-	-	-
Stage 2	680	483	-	479	483	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	237	177	489	104	178	694	960	-	-	967	-	-
Mov Cap-2 Maneuver	237	177	-	104	178	-	-	-	-	-	-	-
Stage 1	477	481	-	450	485	-	-	-	-	-	-	-
Stage 2	680	483	-	344	483	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.2	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	960	-	-	489	-	967	-	-
HCM Lane V/C Ratio	-	-	-	0.281	-	-	-	-
HCM Control Delay (s)	0	-	-	15.2	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	-	0	-	-

HCM 2010 TWSC
5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	71	0	43	11	3	23	54	496	18	41	559	51
Future Vol, veh/h	71	0	43	11	3	23	54	496	18	41	559	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	2	2	2
Mvmt Flow	73	0	44	11	3	24	56	511	19	42	576	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1056	1328	314	1005	1345	265	629	0	0	530	0	0
Stage 1	687	687	-	632	632	-	-	-	-	-	-	-
Stage 2	369	641	-	373	713	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	182	157	688	194	149	730	949	-	-	1033	-	-
Stage 1	408	450	-	433	470	-	-	-	-	-	-	-
Stage 2	629	473	-	617	431	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	160	142	688	168	135	730	949	-	-	1033	-	-
Mov Cap-2 Maneuver	160	142	-	168	135	-	-	-	-	-	-	-
Stage 1	384	432	-	407	442	-	-	-	-	-	-	-
Stage 2	569	445	-	554	413	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.3	18.2	0.9	0.5
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	949	-	-	225	310	1033	-
HCM Lane V/C Ratio	0.059	-	-	0.522	0.123	0.041	-
HCM Control Delay (s)	9	-	-	37.3	18.2	8.6	-
HCM Lane LOS	A	-	-	E	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.7	0.4	0.1	-

Existing Conditions with One Gate

School In Session

AM Peak Hour

Intersection

Int Delay, s/veh 3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	49	155	408	18	50	473
Future Vol, veh/h	49	155	408	18	50	473
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	59	187	492	22	60	570

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1192	502	0
Stage 1	502	-	-
Stage 2	690	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	207	569	1058
Stage 1	608	-	-
Stage 2	498	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	195	569	1058
Mov Cap-2 Maneuver	195	-	-
Stage 1	608	-	-
Stage 2	470	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.5	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	195	569	1058	-
HCM Lane V/C Ratio	-	-	0.303	0.328	0.057	-
HCM Control Delay (s)	-	-	31.3	14.4	8.6	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.2	1.4	0.2	-

Intersection									
Intersection Delay, s/veh	32								
Intersection LOS	D								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	26	27	0	210	408	0	312	212
Future Vol, veh/h	0	26	27	0	210	408	0	312	212
Peak Hour Factor	1.00	0.88	0.88	1.00	0.88	0.88	1.00	0.88	0.88
Heavy Vehicles, %	2	11	11	2	3	3	2	1	1
Mvmt Flow	0	30	31	0	239	464	0	355	241
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	10.6			42.7			21.6		
HCM LOS	B			E			C		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	34%	49%	0%						
Vol Thru, %	66%	0%	60%						
Vol Right, %	0%	51%	40%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	618	53	524						
LT Vol	210	26	0						
Through Vol	408	0	312						
RT Vol	0	27	212						
Lane Flow Rate	702	60	595						
Geometry Grp	1	1	1						
Degree of Util (X)	0.944	0.113	0.769						
Departure Headway (Hd)	4.839	6.728	4.648						
Convergence, Y/N	Yes	Yes	Yes						
Cap	744	536	768						
Service Time	2.92	4.728	2.726						
HCM Lane V/C Ratio	0.944	0.112	0.775						
HCM Control Delay	42.7	10.6	21.6						
HCM Lane LOS	E	B	C						
HCM 95th-tile Q	13.7	0.4	7.5						

Intersection

Int Delay, s/veh 5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	5	268	341	0	91	236
Future Vol, veh/h	5	268	341	0	91	236
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	1	1	3	3	3	3
Mvmt Flow	6	319	406	0	108	281

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	904	406	0
Stage 1	406	-	-
Stage 2	498	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	309	647	1147
Stage 1	675	-	-
Stage 2	613	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	274	647	1147
Mov Cap-2 Maneuver	274	-	-
Stage 1	675	-	-
Stage 2	544	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	2.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	631	1147
HCM Lane V/C Ratio	-	-	0.515	0.094
HCM Control Delay (s)	-	-	16.6	8.5
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	3	0.3

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/11/2016

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	91	0	0	0	0	547	0	0	457	268
Future Vol, veh/h	0	0	91	0	0	0	0	547	0	0	457	268
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	3	3	3
Mvmt Flow	0	0	110	0	0	0	0	659	0	0	551	323

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	882	1211	553	1211	1211	330	552	0	0	659	0	0
Stage 1	552	552	-	659	659	-	-	-	-	-	-	-
Stage 2	330	659	-	552	552	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.12	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.23	-	-
Pot Cap-1 Maneuver	256	184	537	150	184	672	1018	-	-	918	-	-
Stage 1	522	518	-	424	464	-	-	-	-	-	-	-
Stage 2	663	464	-	522	518	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	256	184	536	119	184	672	1017	-	-	918	-	-
Mov Cap-2 Maneuver	256	184	-	119	184	-	-	-	-	-	-	-
Stage 1	522	518	-	424	464	-	-	-	-	-	-	-
Stage 2	663	464	-	415	518	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1017	-	-	536	-	918	-
HCM Lane V/C Ratio	-	-	-	0.205	-	-	-
HCM Control Delay (s)	0	-	-	13.4	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	-	0	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/11/2016

Intersection

Int Delay, s/veh 51.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	122	1	103	22	0	34	111	425	13	17	529	127
Future Vol, veh/h	122	1	103	22	0	34	111	425	13	17	529	127
Conflicting Peds, #/hr	1	0	3	2	0	0	3	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	5	5	5
Mvmt Flow	144	1	121	26	0	40	131	500	15	20	622	149

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1253	1518	392	1126	1586	261	775	0	0	517	0	0
Stage 1	740	740	-	771	771	-	-	-	-	-	-	-
Stage 2	513	778	-	355	815	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.14	-	-	4.2	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.22	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 130	119	610	162	109	744	837	-	-	1024	-	-
Stage 1	377	424	-	363	413	-	-	-	-	-	-	-
Stage 2	515	407	-	641	394	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 106	98	606	111	90	742	835	-	-	1023	-	-
Mov Cap-2 Maneuver	~ 106	98	-	111	90	-	-	-	-	-	-	-
Stage 1	317	414	-	305	347	-	-	-	-	-	-	-
Stage 2	410	342	-	500	385	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 329.2	26.9	2	0.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	170	229	1023	-
HCM Lane V/C Ratio	0.156	-	-	1.564	0.288	0.02	-
HCM Control Delay (s)	10.1	-	-	\$ 329.2	26.9	8.6	-
HCM Lane LOS	B	-	-	F	D	A	-
HCM 95th %tile Q(veh)	0.6	-	-	17.6	1.1	0.1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions with Two Gates

School In Session

AM Peak Hour

Intersection

Int Delay, s/veh 3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	47	153	408	16	48	475
Future Vol, veh/h	47	153	408	16	48	475
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	57	184	492	19	58	572

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1189	501	0
Stage 1	501	-	-
Stage 2	688	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	208	570	-
Stage 1	609	-	-
Stage 2	499	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	197	570	-
Mov Cap-2 Maneuver	197	-	-
Stage 1	609	-	-
Stage 2	472	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	197	570	1059	-
HCM Lane V/C Ratio	-	-	0.287	0.323	0.055	-
HCM Control Delay (s)	-	-	30.5	14.3	8.6	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	1.4	0.2	-

Intersection									
Intersection Delay, s/veh	31.9								
Intersection LOS	D								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	26	27	0	210	406	0	314	212
Future Vol, veh/h	0	26	27	0	210	406	0	314	212
Peak Hour Factor	1.00	0.88	0.88	1.00	0.88	0.88	1.00	0.88	0.88
Heavy Vehicles, %	2	11	11	2	3	3	2	1	1
Mvmt Flow	0	30	31	0	239	461	0	357	241
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	10.6			42.4			21.8		
HCM LOS	B			E			C		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	34%	49%	0%						
Vol Thru, %	66%	0%	60%						
Vol Right, %	0%	51%	40%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	616	53	526						
LT Vol	210	26	0						
Through Vol	406	0	314						
RT Vol	0	27	212						
Lane Flow Rate	700	60	598						
Geometry Grp	1	1	1						
Degree of Util (X)	0.942	0.113	0.772						
Departure Headway (Hd)	4.842	6.729	4.647						
Convergence, Y/N	Yes	Yes	Yes						
Cap	742	536	771						
Service Time	2.923	4.729	2.725						
HCM Lane V/C Ratio	0.943	0.112	0.776						
HCM Control Delay	42.4	10.6	21.8						
HCM Lane LOS	E	B	C						
HCM 95th-tile Q	13.6	0.4	7.5						

Intersection

Int Delay, s/veh 5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	5	268	339	2	93	236
Future Vol, veh/h	5	268	339	2	93	236
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	1	1	3	3	3	3
Mvmt Flow	6	319	404	2	111	281

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	907	405	0
Stage 1	405	-	-
Stage 2	502	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	307	648	1147
Stage 1	676	-	-
Stage 2	610	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	272	648	1147
Mov Cap-2 Maneuver	272	-	-
Stage 1	676	-	-
Stage 2	540	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	2.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	632	1147
HCM Lane V/C Ratio	-	-	0.514	0.097
HCM Control Delay (s)	-	-	16.6	8.5
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	2.9	0.3

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/7/2016

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	95	0	0	0	0	551	0	0	457	268
Future Vol, veh/h	0	0	95	0	0	0	0	551	0	0	457	268
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	3	3	3
Mvmt Flow	0	0	114	0	0	0	0	664	0	0	551	323

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	884	1216	553	1216	1216	332	552	0	0	664	0	0
Stage 1	552	552	-	664	664	-	-	-	-	-	-	-
Stage 2	332	664	-	552	552	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.12	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.23	-	-
Pot Cap-1 Maneuver	255	183	537	149	183	670	1018	-	-	914	-	-
Stage 1	522	518	-	421	461	-	-	-	-	-	-	-
Stage 2	661	461	-	522	518	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	255	183	536	117	183	670	1017	-	-	914	-	-
Mov Cap-2 Maneuver	255	183	-	117	183	-	-	-	-	-	-	-
Stage 1	522	518	-	421	461	-	-	-	-	-	-	-
Stage 2	661	461	-	410	518	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.5	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1017	-	-	536	-	914	-
HCM Lane V/C Ratio	-	-	-	0.214	-	-	-
HCM Control Delay (s)	0	-	-	13.5	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	-	0	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/7/2016

Intersection

Int Delay, s/veh 56.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	124	1	105	22	0	34	115	425	13	17	529	127
Future Vol, veh/h	124	1	105	22	0	34	115	425	13	17	529	127
Conflicting Peds, #/hr	1	0	3	2	0	0	3	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	5	5	5
Mvmt Flow	146	1	124	26	0	40	135	500	15	20	622	149

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1263	1528	392	1135	1595	261	775	0	0	517	0	0
Stage 1	740	740	-	780	780	-	-	-	-	-	-	-
Stage 2	523	788	-	355	815	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.14	-	-	4.2	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.22	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 127	117	610	160	108	744	837	-	-	1024	-	-
Stage 1	377	424	-	359	409	-	-	-	-	-	-	-
Stage 2	508	403	-	641	394	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 103	96	606	108	88	742	835	-	-	1023	-	-
Mov Cap-2 Maneuver	~ 103	96	-	108	88	-	-	-	-	-	-	-
Stage 1	315	414	-	300	342	-	-	-	-	-	-	-
Stage 2	403	337	-	498	385	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 358.2	27.6	2.1	0.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	166	224	1023	-
HCM Lane V/C Ratio	0.162	-	-	1.63	0.294	0.02	-
HCM Control Delay (s)	10.1	-	-	\$ 358.2	27.6	8.6	-
HCM Lane LOS	B	-	-	F	D	A	-
HCM 95th %tile Q(veh)	0.6	-	-	18.5	1.2	0.1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions without Gates

School In Session

AM Peak Hour

Intersection

Int Delay, s/veh 3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	39	155	408	12	50	473
Future Vol, veh/h	39	155	408	12	50	473
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	47	187	492	14	60	570

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1189	499	0 0 506 0
Stage 1	499	-	- - - -
Stage 2	690	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.11 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.209 -
Pot Cap-1 Maneuver	208	572	- - 1064 -
Stage 1	610	-	- - - -
Stage 2	498	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	196	572	- - 1064 -
Mov Cap-2 Maneuver	196	-	- - - -
Stage 1	610	-	- - - -
Stage 2	470	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	196	572	1064	-
HCM Lane V/C Ratio	-	-	0.24	0.326	0.057	-
HCM Control Delay (s)	-	-	29.1	14.3	8.6	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.9	1.4	0.2	-

Intersection									
Intersection Delay, s/veh	30.4								
Intersection LOS	D								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	26	27	0	210	402	0	302	212
Future Vol, veh/h	0	26	27	0	210	402	0	302	212
Peak Hour Factor	1.00	0.88	0.88	1.00	0.88	0.88	1.00	0.88	0.88
Heavy Vehicles, %	2	11	11	2	3	3	2	1	1
Mvmt Flow	0	30	31	0	239	457	0	343	241
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	10.5			40.5			20.5		
HCM LOS	B			E			C		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	34%	49%	0%						
Vol Thru, %	66%	0%	59%						
Vol Right, %	0%	51%	41%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	612	53	514						
LT Vol	210	26	0						
Through Vol	402	0	302						
RT Vol	0	27	212						
Lane Flow Rate	695	60	584						
Geometry Grp	1	1	1						
Degree of Util (X)	0.932	0.112	0.752						
Departure Headway (Hd)	4.824	6.689	4.632						
Convergence, Y/N	Yes	Yes	Yes						
Cap	744	539	771						
Service Time	2.903	4.689	2.708						
HCM Lane V/C Ratio	0.934	0.111	0.757						
HCM Control Delay	40.5	10.5	20.5						
HCM Lane LOS	E	B	C						
HCM 95th-tile Q	13.2	0.4	7						

Intersection

Int Delay, s/veh 5.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	5	268	335	0	91	226
Future Vol, veh/h	5	268	335	0	91	226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	1	1	3	3	3	3
Mvmt Flow	6	319	399	0	108	269

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	885	399	0
Stage 1	399	-	-
Stage 2	486	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	317	653	1154
Stage 1	680	-	-
Stage 2	621	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	282	653	1154
Mov Cap-2 Maneuver	282	-	-
Stage 1	680	-	-
Stage 2	553	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.4	0	2.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	638	1154
HCM Lane V/C Ratio	-	-	0.509	0.094
HCM Control Delay (s)	-	-	16.4	8.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	2.9	0.3

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	91	0	0	0	0	553	0	0	467	268
Future Vol, veh/h	0	0	91	0	0	0	0	553	0	0	467	268
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	3	3	3
Mvmt Flow	0	0	110	0	0	0	0	666	0	0	563	323

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	897	1230	565	1230	1230	333	564	0	0	666	0	0
Stage 1	564	564	-	666	666	-	-	-	-	-	-	-
Stage 2	333	666	-	564	564	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.12	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.23	-	-
Pot Cap-1 Maneuver	250	179	528	146	179	669	1008	-	-	913	-	-
Stage 1	514	512	-	420	460	-	-	-	-	-	-	-
Stage 2	660	460	-	514	512	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	250	179	527	116	179	669	1007	-	-	913	-	-
Mov Cap-2 Maneuver	250	179	-	116	179	-	-	-	-	-	-	-
Stage 1	514	512	-	420	460	-	-	-	-	-	-	-
Stage 2	660	460	-	407	512	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.6	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1007	-	-	527	-	913	-
HCM Lane V/C Ratio	-	-	-	0.208	-	-	-
HCM Control Delay (s)	0	-	-	13.6	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	-	0	-

HCM 2010 TWSC
5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 56.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	122	1	113	22	0	34	117	425	13	17	529	127
Future Vol, veh/h	122	1	113	22	0	34	117	425	13	17	529	127
Conflicting Peds, #/hr	1	0	3	2	0	0	3	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	5	5	5
Mvmt Flow	144	1	133	26	0	40	138	500	15	20	622	149

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1267	1533	392	1140	1600	261	775	0	0	517	0	0
Stage 1	740	740	-	785	785	-	-	-	-	-	-	-
Stage 2	527	793	-	355	815	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.14	-	-	4.2	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.22	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 127	117	610	158	107	744	837	-	-	1024	-	-
Stage 1	377	424	-	356	407	-	-	-	-	-	-	-
Stage 2	505	401	-	641	394	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 103	95	606	105	87	742	835	-	-	1023	-	-
Mov Cap-2 Maneuver	~ 103	95	-	105	87	-	-	-	-	-	-	-
Stage 1	314	414	-	297	339	-	-	-	-	-	-	-
Stage 2	398	334	-	488	385	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 353.7	28.4	2.1	0.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	171	219	1023	-
HCM Lane V/C Ratio	0.165	-	-	1.624	0.301	0.02	-
HCM Control Delay (s)	10.2	-	-	\$ 353.7	28.4	8.6	-
HCM Lane LOS	B	-	-	F	D	A	-
HCM 95th %tile Q(veh)	0.6	-	-	18.9	1.2	0.1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions with One Gate

School In Session

PM Peak Hour

Intersection

Int Delay, s/veh 2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	31	82	332	53	99	232
Future Vol, veh/h	31	82	332	53	99	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	33	88	357	57	106	249

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	847	385	0
Stage 1	385	-	-
Stage 2	462	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	332	663	1150
Stage 1	688	-	-
Stage 2	634	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	301	663	1150
Mov Cap-2 Maneuver	301	-	-
Stage 1	688	-	-
Stage 2	576	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	2.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	301	663	1150	-
HCM Lane V/C Ratio	-	-	0.111	0.133	0.093	-
HCM Control Delay (s)	-	-	18.4	11.3	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.5	0.3	-

Intersection									
Intersection Delay, s/veh	17								
Intersection LOS	C								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	187	314	0	65	191	0	239	20
Future Vol, veh/h	0	187	314	0	65	191	0	239	20
Peak Hour Factor	1.00	0.97	0.97	1.00	0.97	0.97	1.00	0.97	0.97
Heavy Vehicles, %	2	1	1	2	2	2	2	2	2
Mvmt Flow	0	193	324	0	67	197	0	246	21
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	21			13.3			13.1		
HCM LOS	C			B			B		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	25%	37%	0%						
Vol Thru, %	75%	0%	92%						
Vol Right, %	0%	63%	8%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	256	501	259						
LT Vol	65	187	0						
Through Vol	191	0	239						
RT Vol	0	314	20						
Lane Flow Rate	264	516	267						
Geometry Grp	1	1	1						
Degree of Util (X)	0.43	0.734	0.428						
Departure Headway (Hd)	5.865	5.115	5.769						
Convergence, Y/N	Yes	Yes	Yes						
Cap	612	708	622						
Service Time	3.924	3.162	3.828						
HCM Lane V/C Ratio	0.431	0.729	0.429						
HCM Control Delay	13.3	21	13.1						
HCM Lane LOS	B	C	B						
HCM 95th-tile Q	2.2	6.5	2.1						

Intersection

Int Delay, s/veh 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	52	210	7	194	370
Future Vol, veh/h	0	52	210	7	194	370
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	56	226	8	209	398

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1045	230	0
Stage 1	230	-	-
Stage 2	815	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	253	809	1340
Stage 1	808	-	-
Stage 2	435	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	202	809	1340
Mov Cap-2 Maneuver	202	-	-
Stage 1	808	-	-
Stage 2	348	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	809	1340
HCM Lane V/C Ratio	-	-	0.069	0.156
HCM Control Delay (s)	-	-	9.8	8.2
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.6

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/12/2016

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	192	0	0	0	0	684	0	0	520	53
Future Vol, veh/h	0	0	192	0	0	0	0	684	0	0	520	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	2	2	2
Mvmt Flow	0	0	216	0	0	0	0	769	0	0	584	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	968	1353	584	1353	1353	384	584	0	0	769	0	0
Stage 1	584	584	-	769	769	-	-	-	-	-	-	-
Stage 2	384	769	-	584	584	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.315	6.515	6.915	4.11	-	-	4.14	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.515	5.515	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.115	5.515	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095	2.209	-	-	2.22	-	-
Pot Cap-1 Maneuver	222	150	513	118	150	617	996	-	-	841	-	-
Stage 1	499	499	-	363	412	-	-	-	-	-	-	-
Stage 2	614	412	-	499	499	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	222	150	513	68	150	617	996	-	-	841	-	-
Mov Cap-2 Maneuver	222	150	-	68	150	-	-	-	-	-	-	-
Stage 1	499	499	-	363	412	-	-	-	-	-	-	-
Stage 2	614	412	-	289	499	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	996	-	-	513	-	841	-	-
HCM Lane V/C Ratio	-	-	-	0.421	-	-	-	-
HCM Control Delay (s)	0	-	-	17	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/12/2016

Intersection

Int Delay, s/veh 5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	66	3	42	7	1	19	69	604	21	39	522	116
Future Vol, veh/h	66	3	42	7	1	19	69	604	21	39	522	116
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	11	11	11	1	1	1	2	2	2
Mvmt Flow	73	3	46	8	1	21	76	664	23	43	574	127

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1208	1562	352	1202	1615	345	701	0	0	688	0	0
Stage 1	723	723	-	828	828	-	-	-	-	-	-	-
Stage 2	485	839	-	374	787	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.72	6.72	7.12	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.72	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.72	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.61	4.11	3.41	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	139	111	644	130	94	626	899	-	-	902	-	-
Stage 1	384	429	-	313	363	-	-	-	-	-	-	-
Stage 2	532	379	-	595	380	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	120	97	643	106	82	625	898	-	-	901	-	-
Mov Cap-2 Maneuver	120	97	-	106	82	-	-	-	-	-	-	-
Stage 1	352	409	-	286	332	-	-	-	-	-	-	-
Stage 2	469	347	-	521	362	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65.2	21.4	0.9	0.5
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	898	-	-	172	249	901	-
HCM Lane V/C Ratio	0.084	-	-	0.709	0.119	0.048	-
HCM Control Delay (s)	9.4	-	-	65.2	21.4	9.2	-
HCM Lane LOS	A	-	-	F	C	A	-
HCM 95th %tile Q(veh)	0.3	-	-	4.3	0.4	0.1	-

Existing Conditions with Two Gates

School In Session

PM Peak Hour

Intersection

Int Delay, s/veh 2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	31	82	332	53	99	232
Future Vol, veh/h	31	82	332	53	99	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	33	88	357	57	106	249

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	847	385	0 0 414 0
Stage 1	385	-	- - - -
Stage 2	462	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.11 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.209 -
Pot Cap-1 Maneuver	332	663	- - 1150 -
Stage 1	688	-	- - - -
Stage 2	634	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	301	663	- - 1150 -
Mov Cap-2 Maneuver	301	-	- - - -
Stage 1	688	-	- - - -
Stage 2	576	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	2.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	301	663	1150	-
HCM Lane V/C Ratio	-	-	0.111	0.133	0.093	-
HCM Control Delay (s)	-	-	18.4	11.3	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.5	0.3	-

Intersection

Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	187	314	0	65	191	0	239	20
Future Vol, veh/h	0	187	314	0	65	191	0	239	20
Peak Hour Factor	1.00	0.97	0.97	1.00	0.97	0.97	1.00	0.97	0.97
Heavy Vehicles, %	2	1	1	2	2	2	2	2	2
Mvmt Flow	0	193	324	0	67	197	0	246	21
Number of Lanes	0	1	0	0	0	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	21	13.3	13.1
HCM LOS	C	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	25%	37%	0%
Vol Thru, %	75%	0%	92%
Vol Right, %	0%	63%	8%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	256	501	259
LT Vol	65	187	0
Through Vol	191	0	239
RT Vol	0	314	20
Lane Flow Rate	264	516	267
Geometry Grp	1	1	1
Degree of Util (X)	0.43	0.734	0.428
Departure Headway (Hd)	5.865	5.115	5.769
Convergence, Y/N	Yes	Yes	Yes
Cap	612	708	622
Service Time	3.924	3.162	3.828
HCM Lane V/C Ratio	0.431	0.729	0.429
HCM Control Delay	13.3	21	13.1
HCM Lane LOS	B	C	B
HCM 95th-tile Q	2.2	6.5	2.1

Intersection

Int Delay, s/veh 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	52	210	7	194	370
Future Vol, veh/h	0	52	210	7	194	370
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	56	226	8	209	398

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1045	230	0
Stage 1	230	-	-
Stage 2	815	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	253	809	1340
Stage 1	808	-	-
Stage 2	435	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	202	809	1340
Mov Cap-2 Maneuver	202	-	-
Stage 1	808	-	-
Stage 2	348	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	809	1340
HCM Lane V/C Ratio	-	-	0.069	0.156
HCM Control Delay (s)	-	-	9.8	8.2
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.6

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/12/2016

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	192	0	0	0	0	684	0	0	520	53
Future Vol, veh/h	0	0	192	0	0	0	0	684	0	0	520	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	2	2	2
Mvmt Flow	0	0	216	0	0	0	0	769	0	0	584	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	968	1353	584	1353	1353	384	584	0	0	769	0	0
Stage 1	584	584	-	769	769	-	-	-	-	-	-	-
Stage 2	384	769	-	584	584	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.315	6.515	6.915	4.11	-	-	4.14	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.515	5.515	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.115	5.515	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095	2.209	-	-	2.22	-	-
Pot Cap-1 Maneuver	222	150	513	118	150	617	996	-	-	841	-	-
Stage 1	499	499	-	363	412	-	-	-	-	-	-	-
Stage 2	614	412	-	499	499	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	222	150	513	68	150	617	996	-	-	841	-	-
Mov Cap-2 Maneuver	222	150	-	68	150	-	-	-	-	-	-	-
Stage 1	499	499	-	363	412	-	-	-	-	-	-	-
Stage 2	614	412	-	289	499	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	996	-	-	513	-	841	-	-
HCM Lane V/C Ratio	-	-	-	0.421	-	-	-	-
HCM Control Delay (s)	0	-	-	17	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.1	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/12/2016

Intersection

Int Delay, s/veh 5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	66	3	42	7	1	19	69	604	21	39	522	116
Future Vol, veh/h	66	3	42	7	1	19	69	604	21	39	522	116
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	11	11	11	1	1	1	2	2	2
Mvmt Flow	73	3	46	8	1	21	76	664	23	43	574	127

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1208	1562	352	1202	1615	345	701	0	0	688	0	0
Stage 1	723	723	-	828	828	-	-	-	-	-	-	-
Stage 2	485	839	-	374	787	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.72	6.72	7.12	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.72	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.72	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.61	4.11	3.41	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	139	111	644	130	94	626	899	-	-	902	-	-
Stage 1	384	429	-	313	363	-	-	-	-	-	-	-
Stage 2	532	379	-	595	380	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	120	97	643	106	82	625	898	-	-	901	-	-
Mov Cap-2 Maneuver	120	97	-	106	82	-	-	-	-	-	-	-
Stage 1	352	409	-	286	332	-	-	-	-	-	-	-
Stage 2	469	347	-	521	362	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65.2	21.4	0.9	0.5
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	898	-	-	172	249	901	-
HCM Lane V/C Ratio	0.084	-	-	0.709	0.119	0.048	-
HCM Control Delay (s)	9.4	-	-	65.2	21.4	9.2	-
HCM Lane LOS	A	-	-	F	C	A	-
HCM 95th %tile Q(veh)	0.3	-	-	4.3	0.4	0.1	-

Existing Conditions without Gates

School In Session

PM Peak Hour

Intersection

Int Delay, s/veh 3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	21	82	332	42	155	232
Future Vol, veh/h	21	82	332	42	155	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	23	88	357	45	167	249

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	963	380	0
Stage 1	380	-	-
Stage 2	583	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	284	667	1162
Stage 1	691	-	-
Stage 2	558	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	243	667	1162
Mov Cap-2 Maneuver	243	-	-
Stage 1	691	-	-
Stage 2	478	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	3.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	243	667	1162	-
HCM Lane V/C Ratio	-	-	0.093	0.132	0.143	-
HCM Control Delay (s)	-	-	21.3	11.2	8.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.5	0.5	-

Intersection

Intersection Delay, s/veh	16.6
Intersection LOS	C

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	187	314	0	65	180	0	229	20
Future Vol, veh/h	0	187	314	0	65	180	0	229	20
Peak Hour Factor	1.00	0.97	0.97	1.00	0.97	0.97	1.00	0.97	0.97
Heavy Vehicles, %	2	1	1	2	2	2	2	2	2
Mvmt Flow	0	193	324	0	67	186	0	236	21
Number of Lanes	0	1	0	0	0	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	20.3	12.9	12.7
HCM LOS	C	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	27%	37%	0%
Vol Thru, %	73%	0%	92%
Vol Right, %	0%	63%	8%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	245	501	249
LT Vol	65	187	0
Through Vol	180	0	229
RT Vol	0	314	20
Lane Flow Rate	253	516	257
Geometry Grp	1	1	1
Degree of Util (X)	0.409	0.725	0.409
Departure Headway (Hd)	5.831	5.05	5.729
Convergence, Y/N	Yes	Yes	Yes
Cap	616	713	626
Service Time	3.886	3.095	3.783
HCM Lane V/C Ratio	0.411	0.724	0.411
HCM Control Delay	12.9	20.3	12.7
HCM Lane LOS	B	C	B
HCM 95th-tile Q	2	6.3	2

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	52	199	7	194	360
Future Vol, veh/h	0	52	199	7	194	360
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	56	214	8	209	387

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1022	218	0
Stage 1	218	-	-
Stage 2	804	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	261	822	1353
Stage 1	818	-	-
Stage 2	440	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	210	822	1353
Mov Cap-2 Maneuver	210	-	-
Stage 1	818	-	-
Stage 2	353	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	2.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	822	1353
HCM Lane V/C Ratio	-	-	0.068	0.154
HCM Control Delay (s)	-	-	9.7	8.1
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.5

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	192	0	0	0	0	694	0	0	531	53
Future Vol, veh/h	0	0	192	0	0	0	0	694	0	0	531	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	2	2	2
Mvmt Flow	0	0	216	0	0	0	0	780	0	0	597	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	987	1377	597	1377	1377	390	597	0	0	780	0	0
Stage 1	597	597	-	780	780	-	-	-	-	-	-	-
Stage 2	390	780	-	597	597	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.315	6.515	6.915	4.11	-	-	4.14	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.515	5.515	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.115	5.515	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095	2.209	-	-	2.22	-	-
Pot Cap-1 Maneuver	215	145	504	114	145	612	985	-	-	833	-	-
Stage 1	491	493	-	357	407	-	-	-	-	-	-	-
Stage 2	609	407	-	491	493	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	215	145	504	65	145	612	985	-	-	833	-	-
Mov Cap-2 Maneuver	215	145	-	65	145	-	-	-	-	-	-	-
Stage 1	491	493	-	357	407	-	-	-	-	-	-	-
Stage 2	609	407	-	281	493	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.4	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	985	-	-	504	-	833	-	-
HCM Lane V/C Ratio	-	-	-	0.428	-	-	-	-
HCM Control Delay (s)	0	-	-	17.4	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.1	-	0	-	-

HCM 2010 TWSC
5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	66	3	52	7	1	19	80	604	21	39	522	60
Future Vol, veh/h	66	3	52	7	1	19	80	604	21	39	522	60
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	11	11	11	1	1	1	2	2	2
Mvmt Flow	73	3	57	8	1	21	88	664	23	43	574	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1201	1556	321	1226	1577	345	640	0	0	688	0	0
Stage 1	692	692	-	852	852	-	-	-	-	-	-	-
Stage 2	509	864	-	374	725	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.72	6.72	7.12	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.72	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.72	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.61	4.11	3.41	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	140	112	675	125	99	626	947	-	-	902	-	-
Stage 1	400	443	-	302	354	-	-	-	-	-	-	-
Stage 2	515	369	-	595	407	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	120	97	674	100	85	625	946	-	-	901	-	-
Mov Cap-2 Maneuver	120	97	-	100	85	-	-	-	-	-	-	-
Stage 1	363	422	-	274	321	-	-	-	-	-	-	-
Stage 2	450	334	-	514	388	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.4	22	1	0.6
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	946	-	-	184	241	901	-	-
HCM Lane V/C Ratio	0.093	-	-	0.723	0.123	0.048	-	-
HCM Control Delay (s)	9.2	-	-	63.4	22	9.2	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	4.6	0.4	0.1	-	-

Existing Conditions Plus Approved Projects
with One Gate

School Out of Session

AM Peak Hour

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	39	95	483	8	21	660
Future Vol, veh/h	39	95	483	8	21	660
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	4	4	3	3
Mvmt Flow	49	119	604	10	26	825

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	1487	609	0	0	614	0
Stage 1	609	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	138	499	-	-	961	-
Stage 1	547	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	134	499	-	-	961	-
Mov Cap-2 Maneuver	134	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	399	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.8	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	134	499	961	-
HCM Lane V/C Ratio	-	-	0.364	0.238	0.027	-
HCM Control Delay (s)	-	-	46.5	14.5	8.9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.9	0.1	-

Intersection									
Intersection Delay, s/veh	62								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	132	232	0	1119	354	0	169	528
Future Vol, veh/h	0	132	232	0	1119	354	0	169	528
Peak Hour Factor	1.00	0.76	0.76	1.00	0.76	0.76	1.00	0.76	0.76
Heavy Vehicles, %	2	4	4	2	4	4	2	3	3
Mvmt Flow	0	174	305	0	1472	466	0	222	695
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	44			66.1			62.9		
HCM LOS	E			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	76%	36%	0%						
Vol Thru, %	24%	0%	24%						
Vol Right, %	0%	64%	76%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	1473	364	697						
LT Vol	1119	132	0						
Through Vol	354	0	169						
RT Vol	0	232	528						
Lane Flow Rate	1938	479	917						
Geometry Grp	1	1	1						
Degree of Util (X)	1	0.899	1						
Departure Headway (Hd)	6.927	6.755	6.303						
Convergence, Y/N	Yes	Yes	Yes						
Cap	543	541	578						
Service Time	4.997	4.755	4.372						
HCM Lane V/C Ratio	3.569	0.885	1.587						
HCM Control Delay	66.1	44	62.9						
HCM Lane LOS	F	E	F						
HCM 95th-tile Q	13.9	10.5	14.6						

Intersection

Int Delay, s/veh 79.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	1	322	1147	0	75	327
Future Vol, veh/h	1	322	1147	0	75	327
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	5	5	8	8
Mvmt Flow	1	366	1303	0	85	372

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1845	1303	0	0	1303	0
Stage 1	1303	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.18	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.272	-
Pot Cap-1 Maneuver	82	~ 196	-	-	512	-
Stage 1	254	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	65	~ 196	-	-	512	-
Mov Cap-2 Maneuver	65	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 456.6	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 195	512	-
HCM Lane V/C Ratio	-	- 1.882	0.166	-
HCM Control Delay (s)	-	-\$ 456.6	13.4	0
HCM Lane LOS	-	- F	B	A
HCM 95th %tile Q(veh)	-	- 26.7	0.6	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	77	0	0	0	0	676	0	0	544	304
Future Vol, veh/h	0	0	77	0	0	0	0	676	0	0	544	304
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	89	0	0	0	0	777	0	0	625	349

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	1404	628	1449	1404	389	627	0	0	777	0	0
Stage 1	627	627	-	777	777	-	-	-	-	-	-	-
Stage 2	389	777	-	672	627	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.23	-	-
Pot Cap-1 Maneuver	206	141	487	102	141	615	950	-	-	829	-	-
Stage 1	475	479	-	360	410	-	-	-	-	-	-	-
Stage 2	612	410	-	449	479	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	206	141	486	83	141	615	949	-	-	829	-	-
Mov Cap-2 Maneuver	206	141	-	83	141	-	-	-	-	-	-	-
Stage 1	474	478	-	360	410	-	-	-	-	-	-	-
Stage 2	612	410	-	367	478	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	949	-	-	486	-	829	-
HCM Lane V/C Ratio	-	-	-	0.182	-	-	-
HCM Control Delay (s)	0	-	-	14	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	25	1	17	63	1	65	18	633	6	6	730	19
Future Vol, veh/h	25	1	17	63	1	65	18	633	6	6	730	19
Conflicting Peds, #/hr	3	0	1	4	0	6	1	0	4	6	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	0	0	0	4	4	4	3	3	3
Mvmt Flow	29	1	20	72	1	75	21	728	7	7	839	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1279	1649	437	1215	1656	379	864	0	0	740	0	0
Stage 1	867	867	-	778	778	-	-	-	-	-	-	-
Stage 2	412	782	-	437	878	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.18	-	-	4.16	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.24	-	-	2.23	-	-
Pot Cap-1 Maneuver	124	99	570	139	99	625	762	-	-	856	-	-
Stage 1	316	370	-	360	410	-	-	-	-	-	-	-
Stage 2	591	405	-	574	368	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	104	95	566	128	95	618	759	-	-	852	-	-
Mov Cap-2 Maneuver	104	95	-	128	95	-	-	-	-	-	-	-
Stage 1	306	366	-	348	396	-	-	-	-	-	-	-
Stage 2	501	391	-	546	364	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.4	53.9	0.3	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	759	-	-	153	212	852	-
HCM Lane V/C Ratio	0.027	-	-	0.323	0.699	0.008	-
HCM Control Delay (s)	9.9	-	-	39.4	53.9	9.3	-
HCM Lane LOS	A	-	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	4.5	0	-

Existing Conditions Plus Approved Projects with Two Gates

School Out of Session

AM Peak Hour

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	39	95	483	8	21	660
Future Vol, veh/h	39	95	483	8	21	660
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	4	4	3	3
Mvmt Flow	49	119	604	10	26	825

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	1487	609	0	0	614	0
Stage 1	609	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	138	499	-	-	961	-
Stage 1	547	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	134	499	-	-	961	-
Mov Cap-2 Maneuver	134	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	399	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.8	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	134	499	961	-
HCM Lane V/C Ratio	-	-	0.364	0.238	0.027	-
HCM Control Delay (s)	-	-	46.5	14.5	8.9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.9	0.1	-

Intersection									
Intersection Delay, s/veh	62								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	132	232	0	1119	354	0	169	528
Future Vol, veh/h	0	132	232	0	1119	354	0	169	528
Peak Hour Factor	1.00	0.76	0.76	1.00	0.76	0.76	1.00	0.76	0.76
Heavy Vehicles, %	2	4	4	2	4	4	2	3	3
Mvmt Flow	0	174	305	0	1472	466	0	222	695
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	44			66.1			62.9		
HCM LOS	E			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	76%	36%	0%						
Vol Thru, %	24%	0%	24%						
Vol Right, %	0%	64%	76%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	1473	364	697						
LT Vol	1119	132	0						
Through Vol	354	0	169						
RT Vol	0	232	528						
Lane Flow Rate	1938	479	917						
Geometry Grp	1	1	1						
Degree of Util (X)	1	0.899	1						
Departure Headway (Hd)	6.927	6.755	6.303						
Convergence, Y/N	Yes	Yes	Yes						
Cap	543	541	578						
Service Time	4.997	4.755	4.372						
HCM Lane V/C Ratio	3.569	0.885	1.587						
HCM Control Delay	66.1	44	62.9						
HCM Lane LOS	F	E	F						
HCM 95th-tile Q	13.9	10.5	14.6						

Intersection

Int Delay, s/veh 79.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	1	322	1147	0	75	327
Future Vol, veh/h	1	322	1147	0	75	327
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	5	5	8	8
Mvmt Flow	1	366	1303	0	85	372

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1845	1303	0
Stage 1	1303	-	-
Stage 2	542	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	82	~ 196	-
Stage 1	254	-	-
Stage 2	583	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	65	~ 196	-
Mov Cap-2 Maneuver	65	-	-
Stage 1	254	-	-
Stage 2	461	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 456.6	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 195	512	-
HCM Lane V/C Ratio	-	- 1.882	0.166	-
HCM Control Delay (s)	-	-\$ 456.6	13.4	0
HCM Lane LOS	-	- F	B	A
HCM 95th %tile Q(veh)	-	- 26.7	0.6	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	77	0	0	0	0	676	0	0	544	304
Future Vol, veh/h	0	0	77	0	0	0	0	676	0	0	544	304
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	89	0	0	0	0	777	0	0	625	349

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	1404	628	1449	1404	389	627	0	0	777	0	0
Stage 1	627	627	-	777	777	-	-	-	-	-	-	-
Stage 2	389	777	-	672	627	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.23	-	-
Pot Cap-1 Maneuver	206	141	487	102	141	615	950	-	-	829	-	-
Stage 1	475	479	-	360	410	-	-	-	-	-	-	-
Stage 2	612	410	-	449	479	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	206	141	486	83	141	615	949	-	-	829	-	-
Mov Cap-2 Maneuver	206	141	-	83	141	-	-	-	-	-	-	-
Stage 1	474	478	-	360	410	-	-	-	-	-	-	-
Stage 2	612	410	-	367	478	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	949	-	-	486	-	829	-
HCM Lane V/C Ratio	-	-	-	0.182	-	-	-
HCM Control Delay (s)	0	-	-	14	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	25	1	17	63	1	65	18	633	6	6	730	19
Future Vol, veh/h	25	1	17	63	1	65	18	633	6	6	730	19
Conflicting Peds, #/hr	3	0	1	4	0	6	1	0	4	6	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	0	0	0	4	4	4	3	3	3
Mvmt Flow	29	1	20	72	1	75	21	728	7	7	839	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1279	1649	437	1215	1656	379	864	0	0	740	0	0
Stage 1	867	867	-	778	778	-	-	-	-	-	-	-
Stage 2	412	782	-	437	878	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.18	-	-	4.16	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.24	-	-	2.23	-	-
Pot Cap-1 Maneuver	124	99	570	139	99	625	762	-	-	856	-	-
Stage 1	316	370	-	360	410	-	-	-	-	-	-	-
Stage 2	591	405	-	574	368	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	104	95	566	128	95	618	759	-	-	852	-	-
Mov Cap-2 Maneuver	104	95	-	128	95	-	-	-	-	-	-	-
Stage 1	306	366	-	348	396	-	-	-	-	-	-	-
Stage 2	501	391	-	546	364	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.4	53.9	0.3	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	759	-	-	153	212	852	-
HCM Lane V/C Ratio	0.027	-	-	0.323	0.699	0.008	-
HCM Control Delay (s)	9.9	-	-	39.4	53.9	9.3	-
HCM Lane LOS	A	-	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	4.5	0	-

Existing Conditions Plus Approved Projects
without Gates

School Out of Session

AM Peak Hour

Intersection

Int Delay, s/veh 2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	29	95	483	2	21	660
Future Vol, veh/h	29	95	483	2	21	660
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	4	4	3	3
Mvmt Flow	36	119	604	3	26	825

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	1483	605	0	0	606	0
Stage 1	605	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	139	501	-	-	967	-
Stage 1	549	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	135	501	-	-	967	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	399	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.7	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	135	501	967	-
HCM Lane V/C Ratio	-	-	0.269	0.237	0.027	-
HCM Control Delay (s)	-	-	41.2	14.4	8.8	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.9	0.1	-

Intersection

Intersection Delay, s/veh	62
Intersection LOS	F

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	132	232	0	1119	348	0	159	528
Future Vol, veh/h	0	132	232	0	1119	348	0	159	528
Peak Hour Factor	1.00	0.76	0.76	1.00	0.76	0.76	1.00	0.76	0.76
Heavy Vehicles, %	2	4	4	2	4	4	2	3	3
Mvmt Flow	0	174	305	0	1472	458	0	209	695
Number of Lanes	0	1	0	0	0	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	44	66.1	62.9
HCM LOS	E	F	F

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	76%	36%	0%
Vol Thru, %	24%	0%	23%
Vol Right, %	0%	64%	77%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1467	364	687
LT Vol	1119	132	0
Through Vol	348	0	159
RT Vol	0	232	528
Lane Flow Rate	1930	479	904
Geometry Grp	1	1	1
Degree of Util (X)	1	0.899	1
Departure Headway (Hd)	6.926	6.755	6.294
Convergence, Y/N	Yes	Yes	Yes
Cap	540	541	579
Service Time	4.998	4.755	4.366
HCM Lane V/C Ratio	3.574	0.885	1.561
HCM Control Delay	66.1	44	62.9
HCM Lane LOS	F	E	F
HCM 95th-tile Q	13.9	10.5	14.6

Intersection

Int Delay, s/veh 78.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	1	322	1141	0	75	317
Future Vol, veh/h	1	322	1141	0	75	317
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	5	5	8	8
Mvmt Flow	1	366	1297	0	85	360

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1828	1297	0
Stage 1	1297	-	-
Stage 2	531	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	84	~ 198	-
Stage 1	256	-	-
Stage 2	590	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	67	~ 198	-
Mov Cap-2 Maneuver	67	-	-
Stage 1	256	-	-
Stage 2	468	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 447.8	0	2.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 197	515	-
HCM Lane V/C Ratio	-	- 1.863	0.165	-
HCM Control Delay (s)	-	-\$ 447.8	13.4	0
HCM Lane LOS	-	- F	B	A
HCM 95th %tile Q(veh)	-	- 26.5	0.6	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	77	0	0	0	0	682	0	0	554	304
Future Vol, veh/h	0	0	77	0	0	0	0	682	0	0	554	304
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	89	0	0	0	0	784	0	0	637	349

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1031	1423	640	1467	1423	392	639	0	0	784	0	0
Stage 1	639	639	-	784	784	-	-	-	-	-	-	-
Stage 2	392	784	-	683	639	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.23	-	-
Pot Cap-1 Maneuver	201	137	479	99	137	613	940	-	-	824	-	-
Stage 1	468	474	-	357	407	-	-	-	-	-	-	-
Stage 2	610	407	-	442	474	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	201	137	478	81	137	613	939	-	-	824	-	-
Mov Cap-2 Maneuver	201	137	-	81	137	-	-	-	-	-	-	-
Stage 1	467	473	-	357	407	-	-	-	-	-	-	-
Stage 2	610	407	-	360	473	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	939	-	-	478	-	824	-
HCM Lane V/C Ratio	-	-	-	0.185	-	-	-
HCM Control Delay (s)	0	-	-	14.2	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	0	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	25	1	27	63	1	65	24	633	6	6	730	19
Future Vol, veh/h	25	1	27	63	1	65	24	633	6	6	730	19
Conflicting Peds, #/hr	3	0	1	4	0	6	1	0	4	6	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	0	0	0	4	4	4	3	3	3
Mvmt Flow	29	1	31	72	1	75	28	728	7	7	839	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1293	1663	437	1229	1670	379	864	0	0	740	0	0
Stage 1	867	867	-	792	792	-	-	-	-	-	-	-
Stage 2	426	796	-	437	878	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.18	-	-	4.16	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.24	-	-	2.23	-	-
Pot Cap-1 Maneuver	121	97	570	136	97	625	762	-	-	856	-	-
Stage 1	316	370	-	353	404	-	-	-	-	-	-	-
Stage 2	579	399	-	574	368	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	101	92	566	122	92	618	759	-	-	852	-	-
Mov Cap-2 Maneuver	101	92	-	122	92	-	-	-	-	-	-	-
Stage 1	303	366	-	338	387	-	-	-	-	-	-	-
Stage 2	486	382	-	535	364	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36.7	58.9	0.4	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	759	-	-	173	204	852	-
HCM Lane V/C Ratio	0.036	-	-	0.352	0.727	0.008	-
HCM Control Delay (s)	9.9	-	-	36.7	58.9	9.3	-
HCM Lane LOS	A	-	-	E	F	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.5	4.7	0	-

Existing Conditions Plus Approved Projects
with One Gate

School Out of Session

PM Peak Hour

Intersection

Int Delay, s/veh 10.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	35	87	900	45	120	631
Future Vol, veh/h	35	87	900	45	120	631
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	109	1125	56	150	789

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2242	1153	0	0	1181	0
Stage 1	1153	-	-	-	-	-
Stage 2	1089	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	46	240	-	-	591	-
Stage 1	301	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 34	240	-	-	591	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	301	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	146.5	0	2.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	34	240	591	-
HCM Lane V/C Ratio	-	-	1.287	0.453	0.254	-
HCM Control Delay (s)	-	-	\$ 431.3	31.9	13.2	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	4.7	2.2	1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection									
Intersection Delay, s/veh	65.4								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	540	1177	0	443	375	0	533	175
Future Vol, veh/h	0	540	1177	0	443	375	0	533	175
Peak Hour Factor	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94
Heavy Vehicles, %	2	3	3	2	3	3	2	2	2
Mvmt Flow	0	574	1252	0	471	399	0	567	186
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	64.6			66.9			65.5		
HCM LOS	F			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	54%	31%	0%						
Vol Thru, %	46%	0%	75%						
Vol Right, %	0%	69%	25%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	818	1717	708						
LT Vol	443	540	0						
Through Vol	375	0	533						
RT Vol	0	1177	175						
Lane Flow Rate	870	1827	753						
Geometry Grp	1	1	1						
Degree of Util (X)	1	1	1						
Departure Headway (Hd)	7.156	6.7	6.883						
Convergence, Y/N	Yes	Yes	Yes						
Cap	513	566	535						
Service Time	5.156	4.7	4.883						
HCM Lane V/C Ratio	1.696	3.228	1.407						
HCM Control Delay	66.9	64.6	65.5						
HCM Lane LOS	F	F	F						
HCM 95th-tile Q	13.7	14.2	14						

Intersection

Int Delay, s/veh 5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	129	686	2	450	1267
Future Vol, veh/h	3	129	686	2	450	1267
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	143	762	2	500	1408

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3171	763	0
Stage 1	763	-	-
Stage 2	2408	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	12	404	849
Stage 1	460	-	-
Stage 2	71	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	12	404	849
Mov Cap-2 Maneuver	12	-	-
Stage 1	460	-	-
Stage 2	71	-	-

Approach	WB	NB	SB
HCM Control Delay, s	43.9	0	4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	232	849
HCM Lane V/C Ratio	-	-	0.632	0.589
HCM Control Delay (s)	-	-	43.9	15.1
HCM Lane LOS	-	-	E	C
HCM 95th %tile Q(veh)	-	-	3.8	3.9

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 27.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	426	0	0	0	0	1170	0	0	747	145
Future Vol, veh/h	0	0	426	0	0	0	0	1170	0	0	747	145
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	468	0	0	0	0	1286	0	0	821	159

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1464	2107	821	2107	2107	643	821	0	0	1286	0	0
Stage 1	821	821	-	1286	1286	-	-	-	-	-	-	-
Stage 2	643	1286	-	821	821	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.209	-	-	2.21	-	-
Pot Cap-1 Maneuver	98	51	~ 376	34	52	421	813	-	-	541	-	-
Stage 1	370	390	-	177	237	-	-	-	-	-	-	-
Stage 2	431	236	-	371	391	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	98	51	~ 376	-	52	421	813	-	-	541	-	-
Mov Cap-2 Maneuver	98	51	-	-	52	-	-	-	-	-	-	-
Stage 1	370	390	-	177	237	-	-	-	-	-	-	-
Stage 2	431	236	-	-	391	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	161.4	0	0	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	813	-	-	376	-	541	-	-
HCM Lane V/C Ratio	-	-	-	1.245	-	-	-	-
HCM Control Delay (s)	0	-	-	161.4	0	0	-	-
HCM Lane LOS	A	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	20.2	-	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 53.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	71	0	34	11	3	23	44	1196	18	448	836	107
Future Vol, veh/h	71	0	34	11	3	23	44	1196	18	448	836	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	1	1	1
Mvmt Flow	73	0	35	11	3	24	45	1233	19	462	862	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2550	3183	486	2688	3229	626	972	0	0	1252	0	0
Stage 1	1841	1841	-	1333	1333	-	-	-	-	-	-	-
Stage 2	709	1342	-	1355	1896	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 14	10	533	~ 10	9	425	711	-	-	557	-	-
Stage 1	80	127	-	161	219	-	-	-	-	-	-	-
Stage 2	396	223	-	156	115	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	-	2	533	~ 3	~ 1	425	711	-	-	557	-	-
Mov Cap-2 Maneuver	-	2	-	~ 3	~ 1	-	-	-	-	-	-	-
Stage 1	75	22	-	151	205	-	-	-	-	-	-	-
Stage 2	345	209	-	25	20	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		\$ 3590.7	0.4	11.4
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	711	-	-	- 6	557	-	-
HCM Lane V/C Ratio	0.064	-	-	- 6.357	0.829	-	-
HCM Control Delay (s)	10.4	-	-	\$ 3590.7	35.4	-	-
HCM Lane LOS	B	-	-	- F	E		

Existing Conditions Plus Approved Projects
with Two Gates

School Out of Session

PM Peak Hour

Intersection

Int Delay, s/veh 10.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	35	87	900	45	120	631
Future Vol, veh/h	35	87	900	45	120	631
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	109	1125	56	150	789

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2242	1153	0	0	1181	0
Stage 1	1153	-	-	-	-	-
Stage 2	1089	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	46	240	-	-	591	-
Stage 1	301	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	~ 34	240	-	-	591	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	301	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	146.5	0	2.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	34	240	591	-
HCM Lane V/C Ratio	-	-	1.287	0.453	0.254	-
HCM Control Delay (s)	-	-	\$ 431.3	31.9	13.2	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	4.7	2.2	1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection									
Intersection Delay, s/veh	65.4								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	540	1177	0	443	375	0	533	175
Future Vol, veh/h	0	540	1177	0	443	375	0	533	175
Peak Hour Factor	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94
Heavy Vehicles, %	2	3	3	2	3	3	2	2	2
Mvmt Flow	0	574	1252	0	471	399	0	567	186
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	64.6			66.9			65.5		
HCM LOS	F			F			F		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	54%	31%	0%						
Vol Thru, %	46%	0%	75%						
Vol Right, %	0%	69%	25%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	818	1717	708						
LT Vol	443	540	0						
Through Vol	375	0	533						
RT Vol	0	1177	175						
Lane Flow Rate	870	1827	753						
Geometry Grp	1	1	1						
Degree of Util (X)	1	1	1						
Departure Headway (Hd)	7.156	6.7	6.883						
Convergence, Y/N	Yes	Yes	Yes						
Cap	513	566	535						
Service Time	5.156	4.7	4.883						
HCM Lane V/C Ratio	1.696	3.228	1.407						
HCM Control Delay	66.9	64.6	65.5						
HCM Lane LOS	F	F	F						
HCM 95th-tile Q	13.7	14.2	14						

Intersection

Int Delay, s/veh 5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	129	686	2	450	1267
Future Vol, veh/h	3	129	686	2	450	1267
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	143	762	2	500	1408

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3171	763	0
Stage 1	763	-	-
Stage 2	2408	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	12	404	849
Stage 1	460	-	-
Stage 2	71	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	12	404	849
Mov Cap-2 Maneuver	12	-	-
Stage 1	460	-	-
Stage 2	71	-	-

Approach	WB	NB	SB
HCM Control Delay, s	43.9	0	4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	232	849
HCM Lane V/C Ratio	-	-	0.632	0.589
HCM Control Delay (s)	-	-	43.9	15.1
HCM Lane LOS	-	-	E	C
HCM 95th %tile Q(veh)	-	-	3.8	3.9

HCM 2010 TWSC
4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 27.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	426	0	0	0	0	1170	0	0	747	145
Future Vol, veh/h	0	0	426	0	0	0	0	1170	0	0	747	145
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	468	0	0	0	0	1286	0	0	821	159

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1464	2107	821	2107	2107	643	821	0	0	1286	0	0
Stage 1	821	821	-	1286	1286	-	-	-	-	-	-	-
Stage 2	643	1286	-	821	821	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.209	-	-	2.21	-	-
Pot Cap-1 Maneuver	98	51	~ 376	34	52	421	813	-	-	541	-	-
Stage 1	370	390	-	177	237	-	-	-	-	-	-	-
Stage 2	431	236	-	371	391	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	98	51	~ 376	-	52	421	813	-	-	541	-	-
Mov Cap-2 Maneuver	98	51	-	-	52	-	-	-	-	-	-	-
Stage 1	370	390	-	177	237	-	-	-	-	-	-	-
Stage 2	431	236	-	-	391	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	161.4	0	0	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	813	-	-	376	-	541	-	-
HCM Lane V/C Ratio	-	-	-	1.245	-	-	-	-
HCM Control Delay (s)	0	-	-	161.4	0	0	-	-
HCM Lane LOS	A	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	20.2	-	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 53.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	71	0	34	11	3	23	44	1196	18	448	836	107
Future Vol, veh/h	71	0	34	11	3	23	44	1196	18	448	836	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	1	1	1
Mvmt Flow	73	0	35	11	3	24	45	1233	19	462	862	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2550	3183	486	2688	3229	626	972	0	0	1252	0	0
Stage 1	1841	1841	-	1333	1333	-	-	-	-	-	-	-
Stage 2	709	1342	-	1355	1896	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 14	10	533	~ 10	9	425	711	-	-	557	-	-
Stage 1	80	127	-	161	219	-	-	-	-	-	-	-
Stage 2	396	223	-	156	115	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	2	533	~ 3	~ 1	425	711	-	-	557	-	-
Mov Cap-2 Maneuver	-	2	-	~ 3	~ 1	-	-	-	-	-	-	-
Stage 1	75	22	-	151	205	-	-	-	-	-	-	-
Stage 2	345	209	-	25	20	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		\$ 3590.7	0.4	11.4
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	711	-	-	- 6	557	-	-
HCM Lane V/C Ratio	0.064	-	-	- 6.357	0.829	-	-
HCM Control Delay (s)	10.4	-	-	\$ 3590.7	35.4	-	-
HCM Lane LOS	B	-	-	- F	E	-	-

Existing Conditions Plus Approved Projects
without Gates

School Out of Session

PM Peak Hour

Intersection

Int Delay, s/veh 10

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	25	87	900	34	176	631
Future Vol, veh/h	25	87	900	34	176	631
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	109	1125	43	220	789

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2375	1146	0	0	1168	0
Stage 1	1146	-	-	-	-	-
Stage 2	1229	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	38	243	-	-	598	-
Stage 1	303	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 24	243	-	-	598	-
Mov Cap-2 Maneuver	~ 24	-	-	-	-	-
Stage 1	303	-	-	-	-	-
Stage 2	174	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	142	0	3.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	24	243	598	-
HCM Lane V/C Ratio	-	-	1.302	0.448	0.368	-
HCM Control Delay (s)	-	-	\$ 527.1	31.3	14.5	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	3.9	2.2	1.7	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection									
Intersection Delay, s/veh	65.4								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	540	1177	0	443	364	0	523	175
Future Vol, veh/h	0	540	1177	0	443	364	0	523	175
Peak Hour Factor	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94
Heavy Vehicles, %	2	3	3	2	3	3	2	2	2
Mvmt Flow	0	574	1252	0	471	387	0	556	186
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	64.6			66.9			65.5		
HCM LOS	F			F			F		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	55%	31%	0%						
Vol Thru, %	45%	0%	75%						
Vol Right, %	0%	69%	25%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	807	1717	698						
LT Vol	443	540	0						
Through Vol	364	0	523						
RT Vol	0	1177	175						
Lane Flow Rate	859	1827	743						
Geometry Grp	1	1	1						
Degree of Util (X)	1	1	1						
Departure Headway (Hd)	7.158	6.7	6.881						
Convergence, Y/N	Yes	Yes	Yes						
Cap	515	566	535						
Service Time	5.158	4.7	4.881						
HCM Lane V/C Ratio	1.668	3.228	1.389						
HCM Control Delay	66.9	64.6	65.5						
HCM Lane LOS	F	F	F						
HCM 95th-tile Q	13.7	14.2	14						

Intersection

Int Delay, s/veh 4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	129	675	2	450	1257
Future Vol, veh/h	3	129	675	2	450	1257
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	143	750	2	500	1397

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3148	751	0 0 752 0
Stage 1	751	-	- - - -
Stage 2	2397	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.12 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.218 -
Pot Cap-1 Maneuver	12	411	- - 858 -
Stage 1	466	-	- - - -
Stage 2	72	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	12	411	- - 858 -
Mov Cap-2 Maneuver	12	-	- - - -
Stage 1	466	-	- - - -
Stage 2	72	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	43.1	0	3.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 234	858	-
HCM Lane V/C Ratio	-	- 0.627	0.583	-
HCM Control Delay (s)	-	- 43.1	14.9	0
HCM Lane LOS	-	- E	B	A
HCM 95th %tile Q(veh)	-	- 3.8	3.9	-

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 93.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	426	0	0	0	0	1180	0	0	1165	145
Future Vol, veh/h	0	0	426	0	0	0	0	1180	0	0	1165	145
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	468	0	0	0	0	1297	0	0	1280	159

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1928	2577	1280	2577	2577	648	1280	0	0	1297	0	0
Stage 1	1280	1280	-	1297	1297	-	-	-	-	-	-	-
Stage 2	648	1297	-	1280	1280	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.209	-	-	2.21	-	-
Pot Cap-1 Maneuver	45	26	~ 203	15	26	418	546	-	-	535	-	-
Stage 1	204	237	-	174	234	-	-	-	-	-	-	-
Stage 2	428	233	-	206	239	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	45	26	~ 203	-	26	418	546	-	-	535	-	-
Mov Cap-2 Maneuver	45	26	-	-	26	-	-	-	-	-	-	-
Stage 1	204	237	-	174	234	-	-	-	-	-	-	-
Stage 2	428	233	-	-	239	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 640.3	0	0	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	546	-	-	203	-	535	-
HCM Lane V/C Ratio	-	-	-	2.306	-	-	-
HCM Control Delay (s)	0	-	-	\$ 640.3	0	0	-
HCM Lane LOS	A	-	-	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	37.8	-	0	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 66.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	71	0	44	11	3	23	55	1196	18	41	1243	51
Future Vol, veh/h	71	0	44	11	3	23	55	1196	18	41	1243	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	1	1	1
Mvmt Flow	73	0	45	11	3	24	57	1233	19	42	1281	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2123	2757	667	2081	2775	626	1334	0	0	1252	0	0
Stage 1	1392	1392	-	1356	1356	-	-	-	-	-	-	-
Stage 2	731	1365	-	725	1419	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 29	20	406	30	18	425	518	-	-	557	-	-
Stage 1	152	211	-	156	214	-	-	-	-	-	-	-
Stage 2	384	217	-	380	199	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 20	16	406	23	15	425	518	-	-	557	-	-
Mov Cap-2 Maneuver	~ 20	16	-	23	15	-	-	-	-	-	-	-
Stage 1	135	195	-	139	190	-	-	-	-	-	-	-
Stage 2	317	193	-	312	184	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 1533.6	183.1	0.6	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	518	-	-	31	51	557	-	-
HCM Lane V/C Ratio	0.109	-	-	3.824	0.748	0.076	-	-
HCM Control Delay (s)	12.8	-	-	\$ 1533.6	183.1	12	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	14.1	3.1	0.2	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions Plus Approved Projects
with One Gate

School In Session

AM Peak Hour

Intersection

Int Delay, s/veh 11.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	49	155	775	17	50	915
Future Vol, veh/h	49	155	775	17	50	915
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	59	187	934	20	60	1102

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2167	944	0	0	954	0
Stage 1	944	-	-	-	-	-
Stage 2	1223	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	~ 52	318	-	-	724	-
Stage 1	378	-	-	-	-	-
Stage 2	278	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	~ 48	318	-	-	724	-
Mov Cap-2 Maneuver	~ 48	-	-	-	-	-
Stage 1	378	-	-	-	-	-
Stage 2	255	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	105.8	0	0.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	48	318	724	-
HCM Lane V/C Ratio	-	-	1.23	0.587	0.083	-
HCM Control Delay (s)	-	-	\$ 341.9	31.2	10.4	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	5.4	3.5	0.3	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection									
Intersection Delay, s/veh	58.8								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	118	221	0	1005	681	0	406	556
Future Vol, veh/h	0	118	221	0	1005	681	0	406	556
Peak Hour Factor	1.00	0.88	0.88	1.00	0.88	0.88	1.00	0.88	0.88
Heavy Vehicles, %	2	11	11	2	3	3	2	1	1
Mvmt Flow	0	134	251	0	1142	774	0	461	632
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	26.3			63.9			61.3		
HCM LOS	D			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	60%	35%	0%						
Vol Thru, %	40%	0%	42%						
Vol Right, %	0%	65%	58%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	1686	339	962						
LT Vol	1005	118	0						
Through Vol	681	0	406						
RT Vol	0	221	556						
Lane Flow Rate	1916	385	1093						
Geometry Grp	1	1	1						
Degree of Util (X)	1	0.731	1						
Departure Headway (Hd)	6.558	6.833	6.057						
Convergence, Y/N	Yes	Yes	Yes						
Cap	575	532	612						
Service Time	4.558	4.863	4.057						
HCM Lane V/C Ratio	3.332	0.724	1.786						
HCM Control Delay	63.9	26.3	61.3						
HCM Lane LOS	F	D	F						
HCM 95th-tile Q	14.3	6.1	14.9						

Intersection

Int Delay, s/veh 228.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	5	409	1265	0	150	465
Future Vol, veh/h	5	409	1265	0	150	465
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	1	1	3	3	3	3
Mvmt Flow	6	487	1506	0	179	554

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2417	1506	0
Stage 1	1506	-	-
Stage 2	911	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	36	~ 150	442
Stage 1	204	-	-
Stage 2	394	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	15	~ 150	442
Mov Cap-2 Maneuver	15	-	-
Stage 1	204	-	-
Stage 2	164	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 1260.2	0	4.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 135	442	-
HCM Lane V/C Ratio	-	- 3.651	0.404	-
HCM Control Delay (s)	-	\$ 1260.2	18.6	0
HCM Lane LOS	-	- F	C	A
HCM 95th %tile Q(veh)	-	- 48.5	1.9	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	150	0	0	0	0	898	0	0	712	409
Future Vol, veh/h	0	0	150	0	0	0	0	898	0	0	712	409
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	0	0	181	0	0	0	0	1082	0	0	858	493

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1399	1940	858	1940	1940	542	858	0	0	1082	0	0
Stage 1	858	858	-	1082	1082	-	-	-	-	-	-	-
Stage 2	541	1082	-	858	858	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.11	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.23	-	-
Pot Cap-1 Maneuver	110	66	359	45	66	490	787	-	-	635	-	-
Stage 1	354	376	-	236	296	-	-	-	-	-	-	-
Stage 2	498	296	-	354	376	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	110	66	359	22	66	490	787	-	-	634	-	-
Mov Cap-2 Maneuver	110	66	-	22	66	-	-	-	-	-	-	-
Stage 1	354	376	-	236	296	-	-	-	-	-	-	-
Stage 2	498	296	-	176	376	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.8	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	787	-	-	359	-	634	-	-
HCM Lane V/C Ratio	-	-	-	0.503	-	-	-	-
HCM Control Delay (s)	0	-	-	24.8	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.7	-	0	-	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

9/13/2016

Intersection

Int Delay, s/veh 207.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	122	1	104	22	0	34	112	794	13	17	924	127
Future Vol, veh/h	122	1	104	22	0	34	112	794	13	17	924	127
Conflicting Peds, #/hr	1	0	1	2	0	0	3	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	5	5	5
Mvmt Flow	144	1	122	26	0	40	132	934	15	20	1087	149

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1936	2418	622	1792	2484	478	1237	0	0	951	0	0
Stage 1	1203	1203	-	1207	1207	-	-	-	-	-	-	-
Stage 2	733	1215	-	585	1277	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.14	-	-	4.2	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.22	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 40	33	432	52	30	539	559	-	-	700	-	-
Stage 1	197	258	-	198	259	-	-	-	-	-	-	-
Stage 2	381	254	-	469	239	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 30	24	430	29	22	537	558	-	-	699	-	-
Mov Cap-2 Maneuver	~ 30	24	-	29	22	-	-	-	-	-	-	-
Stage 1	150	250	-	151	197	-	-	-	-	-	-	-
Stage 2	269	193	-	324	232	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 2017.6	203	1.6	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	558	-	-	52	68	699	-	-
HCM Lane V/C Ratio	0.236	-	-	5.136	0.969	0.029	-	-
HCM Control Delay (s)	13.4	-	-	\$ 2017.6	203	10.3	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.9	-	-	30.2	4.8	0.1	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions Plus Approved Projects with Two Gates

School In Session

AM Peak Hour

Intersection

Int Delay, s/veh 10.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	47	153	775	16	48	917
Future Vol, veh/h	47	153	775	16	48	917
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	57	184	934	19	58	1105

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2163	943	0 0 953 0
Stage 1	943	-	- - - -
Stage 2	1220	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.11 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.209 -
Pot Cap-1 Maneuver	~ 52	318	- - 725 -
Stage 1	379	-	- - - -
Stage 2	279	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	~ 48	318	- - 725 -
Mov Cap-2 Maneuver	~ 48	-	- - - -
Stage 1	379	-	- - - -
Stage 2	257	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	99.7	0	0.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	48	318	725	-
HCM Lane V/C Ratio	-	-	1.18	0.58	0.08	-
HCM Control Delay (s)	-	-	\$ 324	30.8	10.4	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	5.2	3.4	0.3	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection									
Intersection Delay, s/veh	58.8								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	118	221	0	1005	680	0	408	556
Future Vol, veh/h	0	118	221	0	1005	680	0	408	556
Peak Hour Factor	1.00	0.88	0.88	1.00	0.88	0.88	1.00	0.88	0.88
Heavy Vehicles, %	2	11	11	2	3	3	2	1	1
Mvmt Flow	0	134	251	0	1142	773	0	464	632
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	26.3			63.9			61.3		
HCM LOS	D			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	60%	35%	0%						
Vol Thru, %	40%	0%	42%						
Vol Right, %	0%	65%	58%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	1685	339	964						
LT Vol	1005	118	0						
Through Vol	680	0	408						
RT Vol	0	221	556						
Lane Flow Rate	1915	385	1095						
Geometry Grp	1	1	1						
Degree of Util (X)	1	0.731	1						
Departure Headway (Hd)	6.558	6.835	6.058						
Convergence, Y/N	Yes	Yes	Yes						
Cap	574	532	613						
Service Time	4.558	4.863	4.058						
HCM Lane V/C Ratio	3.336	0.724	1.786						
HCM Control Delay	63.9	26.3	61.3						
HCM Lane LOS	F	D	F						
HCM 95th-tile Q	14.3	6.1	14.9						

Intersection

Int Delay, s/veh 230.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	5	409	1265	2	152	465
Future Vol, veh/h	5	409	1265	2	152	465
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	1	1	3	3	3	3
Mvmt Flow	6	487	1506	2	181	554

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2422	1507	0
Stage 1	1507	-	-
Stage 2	915	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	36	~ 149	441
Stage 1	203	-	-
Stage 2	392	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	15	~ 149	441
Mov Cap-2 Maneuver	15	-	-
Stage 1	203	-	-
Stage 2	160	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 1272.8	0	4.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 134	441	-
HCM Lane V/C Ratio	-	- 3.678	0.41	-
HCM Control Delay (s)	-	\$ 1272.8	18.7	0
HCM Lane LOS	-	- F	C	A
HCM 95th %tile Q(veh)	-	- 48.7	2	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/7/2016

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	154	0	0	0	0	900	0	0	712	409
Future Vol, veh/h	0	0	154	0	0	0	0	900	0	0	712	409
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	0	0	186	0	0	0	0	1084	0	0	858	493

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1400	1942	858	1942	1942	543	858	0	0	1084	0	0
Stage 1	858	858	-	1084	1084	-	-	-	-	-	-	-
Stage 2	542	1084	-	858	858	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.11	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.23	-	-
Pot Cap-1 Maneuver	110	66	359	45	66	489	787	-	-	633	-	-
Stage 1	354	376	-	235	296	-	-	-	-	-	-	-
Stage 2	497	296	-	354	376	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	110	66	359	22	66	489	787	-	-	632	-	-
Mov Cap-2 Maneuver	110	66	-	22	66	-	-	-	-	-	-	-
Stage 1	354	376	-	235	296	-	-	-	-	-	-	-
Stage 2	497	296	-	171	376	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.3	0	0	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	787	-	-	359	-	632	-
HCM Lane V/C Ratio	-	-	-	0.517	-	-	-
HCM Control Delay (s)	0	-	-	25.3	0	0	-
HCM Lane LOS	A	-	-	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.8	-	0	-

HCM 2010 TWSC
 5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/7/2016

Intersection

Int Delay, s/veh 219.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	124	1	106	22	0	34	116	794	13	17	924	127
Future Vol, veh/h	124	1	106	22	0	34	116	794	13	17	924	127
Conflicting Peds, #/hr	1	0	1	2	0	0	3	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	5	5	5
Mvmt Flow	146	1	125	26	0	40	136	934	15	20	1087	149

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1945	2427	622	1802	2494	478	1237	0	0	951	0	0
Stage 1	1203	1203	-	1217	1217	-	-	-	-	-	-	-
Stage 2	742	1224	-	585	1277	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.14	-	-	4.2	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.22	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 39	32	432	51	29	539	559	-	-	700	-	-
Stage 1	197	258	-	195	256	-	-	-	-	-	-	-
Stage 2	376	252	-	469	239	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 29	23	430	28	21	537	558	-	-	699	-	-
Mov Cap-2 Maneuver	~ 29	23	-	28	21	-	-	-	-	-	-	-
Stage 1	149	250	-	147	193	-	-	-	-	-	-	-
Stage 2	263	190	-	321	232	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 2106.8	215.7	1.7	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	558	-	-	51	66	699	-	-
HCM Lane V/C Ratio	0.245	-	-	5.329	0.998	0.029	-	-
HCM Control Delay (s)	13.5	-	-	\$ 2106.8	215.7	10.3	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	1	-	-	30.9	5	0.1	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions Plus Approved Projects
without Gates

School In Session

AM Peak Hour

Intersection

Int Delay, s/veh 8.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	40	155	775	12	49	915
Future Vol, veh/h	40	155	775	12	49	915
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	48	187	934	14	59	1102

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2161	941	0 0 948 0
Stage 1	941	-	- - - -
Stage 2	1220	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.11 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.209 -
Pot Cap-1 Maneuver	52	319	- - 728 -
Stage 1	380	-	- - - -
Stage 2	279	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	~ 48	319	- - 728 -
Mov Cap-2 Maneuver	~ 48	-	- - - -
Stage 1	380	-	- - - -
Stage 2	256	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	79.1	0	0.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	48	319	728	-
HCM Lane V/C Ratio	-	-	1.004	0.585	0.081	-
HCM Control Delay (s)	-	-	265	31.1	10.4	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	4.3	3.5	0.3	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection									
Intersection Delay, s/veh	58.7								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	118	221	0	1005	676	0	396	556
Future Vol, veh/h	0	118	221	0	1005	676	0	396	556
Peak Hour Factor	1.00	0.88	0.88	1.00	0.88	0.88	1.00	0.88	0.88
Heavy Vehicles, %	2	11	11	2	3	3	2	1	1
Mvmt Flow	0	134	251	0	1142	768	0	450	632
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	26.2			63.9			61.2		
HCM LOS	D			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	60%	35%	0%						
Vol Thru, %	40%	0%	42%						
Vol Right, %	0%	65%	58%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	1681	339	952						
LT Vol	1005	118	0						
Through Vol	676	0	396						
RT Vol	0	221	556						
Lane Flow Rate	1910	385	1082						
Geometry Grp	1	1	1						
Degree of Util (X)	1	0.73	1						
Departure Headway (Hd)	6.556	6.821	6.051						
Convergence, Y/N	Yes	Yes	Yes						
Cap	573	532	606						
Service Time	4.556	4.863	4.051						
HCM Lane V/C Ratio	3.333	0.724	1.785						
HCM Control Delay	63.9	26.2	61.2						
HCM Lane LOS	F	D	F						
HCM 95th-tile Q	14.3	6	14.9						

Intersection

Int Delay, s/veh 225.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	5	409	1260	0	150	455
Future Vol, veh/h	5	409	1260	0	150	455
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	1	1	3	3	3	3
Mvmt Flow	6	487	1500	0	179	542

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2399	1500	0
Stage 1	1500	-	-
Stage 2	899	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	37	~ 151	444
Stage 1	205	-	-
Stage 2	399	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	16	~ 151	444
Mov Cap-2 Maneuver	16	-	-
Stage 1	205	-	-
Stage 2	169	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 1235.5	0	4.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 137	444	-
HCM Lane V/C Ratio	-	- 3.597	0.402	-
HCM Control Delay (s)	-	\$ 1235.5	18.5	0
HCM Lane LOS	-	- F	C	A
HCM 95th %tile Q(veh)	-	- 48.3	1.9	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	150	0	0	0	0	904	0	0	722	409
Future Vol, veh/h	0	0	150	0	0	0	0	904	0	0	722	409
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	0	0	181	0	0	0	0	1089	0	0	870	493

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1415	1959	870	1959	1959	546	870	0	0	1089	0	0
Stage 1	870	870	-	1089	1089	-	-	-	-	-	-	-
Stage 2	545	1089	-	870	870	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.11	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.23	-	-
Pot Cap-1 Maneuver	107	64	354	43	64	487	779	-	-	631	-	-
Stage 1	349	372	-	233	294	-	-	-	-	-	-	-
Stage 2	495	294	-	349	372	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	64	354	21	64	487	779	-	-	630	-	-
Mov Cap-2 Maneuver	107	64	-	21	64	-	-	-	-	-	-	-
Stage 1	349	372	-	233	294	-	-	-	-	-	-	-
Stage 2	495	294	-	171	372	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.3	0	0	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	779	-	-	354	-	630	-	-
HCM Lane V/C Ratio	-	-	-	0.511	-	-	-	-
HCM Control Delay (s)	0	-	-	25.3	0	0	-	-
HCM Lane LOS	A	-	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.8	-	0	-	-

HCM 2010 TWSC
5: CORRAL HOLLOW RD & GOLDEN LEAF LN

10/20/2016

Intersection

Int Delay, s/veh 231.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	122	1	114	22	0	34	118	794	13	17	924	127
Future Vol, veh/h	122	1	114	22	0	34	118	794	13	17	924	127
Conflicting Peds, #/hr	1	0	1	2	0	0	3	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	0	0	0	2	2	2	5	5	5
Mvmt Flow	144	1	134	26	0	40	139	934	15	20	1087	149

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1950	2432	622	1806	2498	478	1237	0	0	951	0	0
Stage 1	1203	1203	-	1221	1221	-	-	-	-	-	-	-
Stage 2	747	1229	-	585	1277	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.14	-	-	4.2	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.22	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 39	32	432	51	29	539	559	-	-	700	-	-
Stage 1	197	258	-	194	255	-	-	-	-	-	-	-
Stage 2	373	250	-	469	239	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 28	23	430	27	21	537	558	-	-	699	-	-
Mov Cap-2 Maneuver	~ 28	23	-	27	21	-	-	-	-	-	-	-
Stage 1	148	250	-	145	191	-	-	-	-	-	-	-
Stage 2	259	187	-	311	232	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 2168.8	229.4	1.7	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	558	-	-	51	64	699	-	-
HCM Lane V/C Ratio	0.249	-	-	5.467	1.029	0.029	-	-
HCM Control Delay (s)	13.6	-	-	\$ 2168.8	229.4	10.3	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	1	-	-	31.8	5.1	0.1	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions Plus Approved Projects
with One Gate

School In Session

PM Peak Hour

Intersection

Int Delay, s/veh 4.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	31	82	972	53	99	746
Future Vol, veh/h	31	82	972	53	99	746
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	33	88	1045	57	106	802

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2089	1074	0	0	1102	0
Stage 1	1074	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	58	267	-	-	637	-
Stage 1	328	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	48	267	-	-	637	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	328	-	-	-	-	-
Stage 2	292	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	67.3	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	48	267	637	-
HCM Lane V/C Ratio	-	-	0.694	0.33	0.167	-
HCM Control Delay (s)	-	-	179.1	25	11.8	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	2.7	1.4	0.6	-

Intersection									
Intersection Delay, s/veh	65.3								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	576	1206	0	435	435	0	593	176
Future Vol, veh/h	0	576	1206	0	435	435	0	593	176
Peak Hour Factor	1.00	0.97	0.97	1.00	0.97	0.97	1.00	0.97	0.97
Heavy Vehicles, %	2	1	1	2	2	2	2	2	2
Mvmt Flow	0	594	1243	0	448	448	0	611	181
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	64.5			66.8			65.6		
HCM LOS	F			F			F		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	50%	32%	0%						
Vol Thru, %	50%	0%	77%						
Vol Right, %	0%	68%	23%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	870	1782	769						
LT Vol	435	576	0						
Through Vol	435	0	593						
RT Vol	0	1206	176						
Lane Flow Rate	897	1837	793						
Geometry Grp	1	1	1						
Degree of Util (X)	1	1	1						
Departure Headway (Hd)	7.131	6.673	6.894						
Convergence, Y/N	Yes	Yes	Yes						
Cap	520	570	531						
Service Time	5.131	4.673	4.894						
HCM Lane V/C Ratio	1.725	3.223	1.493						
HCM Control Delay	66.8	64.5	65.6						
HCM Lane LOS	F	F	F						
HCM 95th-tile Q	13.8	14.2	14						

Intersection

Int Delay, s/veh 3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	136	737	8	465	1335
Future Vol, veh/h	0	136	737	8	465	1335
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	146	792	9	500	1435

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3232	797	0 0 801 0
Stage 1	797	-	- - - -
Stage 2	2435	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.11 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.209 -
Pot Cap-1 Maneuver	11	387	- - 827 -
Stage 1	444	-	- - - -
Stage 2	69	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	11	387	- - 827 -
Mov Cap-2 Maneuver	11	-	- - - -
Stage 1	444	-	- - - -
Stage 2	69	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	4.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 387	827	-
HCM Lane V/C Ratio	-	- 0.378	0.605	-
HCM Control Delay (s)	-	- 19.8	15.8	0
HCM Lane LOS	-	- C	C	A
HCM 95th %tile Q(veh)	-	- 1.7	4.2	-

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 116.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	493	0	0	0	0	1303	0	0	1121	137
Future Vol, veh/h	0	0	493	0	0	0	0	1303	0	0	1121	137
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	542	0	0	0	0	1432	0	0	1232	151

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1948	2664	1232	2664	2664	716	1232	0	0	1432	0	0
Stage 1	1232	1232	-	1432	1432	-	-	-	-	-	-	-
Stage 2	716	1432	-	1232	1232	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.209	-	-	2.21	-	-
Pot Cap-1 Maneuver	44	23	~ 217	13	23	377	569	-	-	476	-	-
Stage 1	217	250	-	144	202	-	-	-	-	-	-	-
Stage 2	390	200	-	219	252	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	44	23	~ 217	-	23	377	569	-	-	476	-	-
Mov Cap-2 Maneuver	44	23	-	-	23	-	-	-	-	-	-	-
Stage 1	217	250	-	144	202	-	-	-	-	-	-	-
Stage 2	390	200	-	-	252	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 721.7	0	0	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	569	-	-	217	-	476	-
HCM Lane V/C Ratio	-	-	-	2.497	-	-	-
HCM Control Delay (s)	0	-	-	\$ 721.7	0	0	-
HCM Lane LOS	A	-	-	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	45.1	-	0	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
5: CORRAL HOLLOW RD

9/13/2016

Intersection

Int Delay, s/veh 64.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	66	3	43	7	1	19	70	1304	21	39	1206	116
Future Vol, veh/h	66	3	43	7	1	19	70	1304	21	39	1206	116
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	1	1	1
Mvmt Flow	68	3	44	7	1	20	72	1344	22	40	1243	120

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2201	2894	681	2203	2942	683	1363	0	0	1366	0	0
Stage 1	1384	1384	-	1499	1499	-	-	-	-	-	-	-
Stage 2	817	1510	-	704	1443	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 25	16	398	24	14	389	505	-	-	504	-	-
Stage 1	154	213	-	127	182	-	-	-	-	-	-	-
Stage 2	341	185	-	391	194	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 19	13	398	15	11	389	505	-	-	504	-	-
Mov Cap-2 Maneuver	~ 19	13	-	15	11	-	-	-	-	-	-	-
Stage 1	132	196	-	109	156	-	-	-	-	-	-	-
Stage 2	276	159	-	315	179	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 1620	171.3	0.7	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	505	-	-	29	45	504	-	-
HCM Lane V/C Ratio	0.143	-	-	3.982	0.619	0.08	-	-
HCM Control Delay (s)	13.3	-	-	\$ 1620	171.3	12.8	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	13.9	2.3	0.3	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions Plus Approved Projects with Two Gates

School In Session

PM Peak Hour

Intersection

Int Delay, s/veh 4.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	31	82	972	53	99	746
Future Vol, veh/h	31	82	972	53	99	746
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	33	88	1045	57	106	802

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2089	1074	0	0	1102	0
Stage 1	1074	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	58	267	-	-	637	-
Stage 1	328	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	48	267	-	-	637	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	328	-	-	-	-	-
Stage 2	292	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	67.3	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	48	267	637	-
HCM Lane V/C Ratio	-	-	0.694	0.33	0.167	-
HCM Control Delay (s)	-	-	179.1	25	11.8	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	2.7	1.4	0.6	-

Intersection									
Intersection Delay, s/veh	65.3								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	576	1206	0	435	435	0	593	176
Future Vol, veh/h	0	576	1206	0	435	435	0	593	176
Peak Hour Factor	1.00	0.97	0.97	1.00	0.97	0.97	1.00	0.97	0.97
Heavy Vehicles, %	2	1	1	2	2	2	2	2	2
Mvmt Flow	0	594	1243	0	448	448	0	611	181
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	64.5			66.8			65.6		
HCM LOS	F			F			F		
Lane	NBLn1	EBLn1	SBLn1						
Vol Left, %	50%	32%	0%						
Vol Thru, %	50%	0%	77%						
Vol Right, %	0%	68%	23%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	870	1782	769						
LT Vol	435	576	0						
Through Vol	435	0	593						
RT Vol	0	1206	176						
Lane Flow Rate	897	1837	793						
Geometry Grp	1	1	1						
Degree of Util (X)	1	1	1						
Departure Headway (Hd)	7.131	6.673	6.894						
Convergence, Y/N	Yes	Yes	Yes						
Cap	520	570	531						
Service Time	5.131	4.673	4.894						
HCM Lane V/C Ratio	1.725	3.223	1.493						
HCM Control Delay	66.8	64.5	65.6						
HCM Lane LOS	F	F	F						
HCM 95th-tile Q	13.8	14.2	14						

Intersection

Int Delay, s/veh 3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	136	737	8	465	1335
Future Vol, veh/h	0	136	737	8	465	1335
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	146	792	9	500	1435

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3232	797	0
Stage 1	797	-	-
Stage 2	2435	-	-
Critical Hdwy	6.42	6.22	4.11
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.209
Pot Cap-1 Maneuver	11	387	827
Stage 1	444	-	-
Stage 2	69	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	11	387	827
Mov Cap-2 Maneuver	11	-	-
Stage 1	444	-	-
Stage 2	69	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	4.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 387	827	-
HCM Lane V/C Ratio	-	- 0.378	0.605	-
HCM Control Delay (s)	-	- 19.8	15.8	0
HCM Lane LOS	-	- C	C	A
HCM 95th %tile Q(veh)	-	- 1.7	4.2	-

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

9/13/2016

Intersection

Int Delay, s/veh 116.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	493	0	0	0	0	1303	0	0	1121	137
Future Vol, veh/h	0	0	493	0	0	0	0	1303	0	0	1121	137
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	542	0	0	0	0	1432	0	0	1232	151

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1948	2664	1232	2664	2664	716	1232	0	0	1432	0	0
Stage 1	1232	1232	-	1432	1432	-	-	-	-	-	-	-
Stage 2	716	1432	-	1232	1232	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.209	-	-	2.21	-	-
Pot Cap-1 Maneuver	44	23	~ 217	13	23	377	569	-	-	476	-	-
Stage 1	217	250	-	144	202	-	-	-	-	-	-	-
Stage 2	390	200	-	219	252	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	44	23	~ 217	-	23	377	569	-	-	476	-	-
Mov Cap-2 Maneuver	44	23	-	-	23	-	-	-	-	-	-	-
Stage 1	217	250	-	144	202	-	-	-	-	-	-	-
Stage 2	390	200	-	-	252	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 721.7	0	0	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	569	-	-	217	-	476	-	-
HCM Lane V/C Ratio	-	-	-	2.497	-	-	-	-
HCM Control Delay (s)	0	-	-	\$ 721.7	0	0	-	-
HCM Lane LOS	A	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	45.1	-	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
5: CORRAL HOLLOW RD

9/13/2016

Intersection

Int Delay, s/veh 64.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	66	3	43	7	1	19	70	1304	21	39	1206	116
Future Vol, veh/h	66	3	43	7	1	19	70	1304	21	39	1206	116
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	1	1	1
Mvmt Flow	68	3	44	7	1	20	72	1344	22	40	1243	120

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2201	2894	681	2203	2942	683	1363	0	0	1366	0	0
Stage 1	1384	1384	-	1499	1499	-	-	-	-	-	-	-
Stage 2	817	1510	-	704	1443	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 25	16	398	24	14	389	505	-	-	504	-	-
Stage 1	154	213	-	127	182	-	-	-	-	-	-	-
Stage 2	341	185	-	391	194	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 19	13	398	15	11	389	505	-	-	504	-	-
Mov Cap-2 Maneuver	~ 19	13	-	15	11	-	-	-	-	-	-	-
Stage 1	132	196	-	109	156	-	-	-	-	-	-	-
Stage 2	276	159	-	315	179	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 1620	171.3	0.7	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	505	-	-	29	45	504	-	-
HCM Lane V/C Ratio	0.143	-	-	3.982	0.619	0.08	-	-
HCM Control Delay (s)	13.3	-	-	\$ 1620	171.3	12.8	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	13.9	2.3	0.3	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Existing Conditions Plus Approved Projects
without Gates

School In Session

PM Peak Hour

Intersection

Int Delay, s/veh 2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	16	21	972	42	155	746
Future Vol, veh/h	16	21	972	42	155	746
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	440	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	17	23	1045	45	167	802

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	2203	1068	0	0	1090	0
Stage 1	1068	-	-	-	-	-
Stage 2	1135	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	49	269	-	-	644	-
Stage 1	330	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	36	269	-	-	644	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	330	-	-	-	-	-
Stage 2	227	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	87	0	2.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	269	644	-
HCM Lane V/C Ratio	-	-	0.478	0.084	0.259	-
HCM Control Delay (s)	-	-	175.4	19.6	12.5	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	1.6	0.3	1	-

Intersection									
Intersection Delay, s/veh	65.3								
Intersection LOS	F								
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Traffic Vol, veh/h	0	576	1206	0	435	424	0	583	176
Future Vol, veh/h	0	576	1206	0	435	424	0	583	176
Peak Hour Factor	1.00	0.97	0.97	1.00	0.97	0.97	1.00	0.97	0.97
Heavy Vehicles, %	2	1	1	2	2	2	2	2	2
Mvmt Flow	0	594	1243	0	448	437	0	601	181
Number of Lanes	0	1	0	0	0	1	0	1	0
Approach									
	EB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	SB			EB					
Conflicting Lanes Left	1			1			0		
Conflicting Approach Right	NB						EB		
Conflicting Lanes Right	1			0			1		
HCM Control Delay	64.5			66.8			65.6		
HCM LOS	F			F			F		
Lane									
	NBLn1	EBLn1	SBLn1						
Vol Left, %	51%	32%	0%						
Vol Thru, %	49%	0%	77%						
Vol Right, %	0%	68%	23%						
Sign Control	Stop	Stop	Stop						
Traffic Vol by Lane	859	1782	759						
LT Vol	435	576	0						
Through Vol	424	0	583						
RT Vol	0	1206	176						
Lane Flow Rate	886	1837	782						
Geometry Grp	1	1	1						
Degree of Util (X)	1	1	1						
Departure Headway (Hd)	7.132	6.673	6.892						
Convergence, Y/N	Yes	Yes	Yes						
Cap	514	570	532						
Service Time	5.132	4.673	4.892						
HCM Lane V/C Ratio	1.724	3.223	1.47						
HCM Control Delay	66.8	64.5	65.6						
HCM Lane LOS	F	F	F						
HCM 95th-tile Q	13.8	14.2	14						

Intersection

Int Delay, s/veh 4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	136	726	8	495	1325
Future Vol, veh/h	0	136	726	8	495	1325
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	146	781	9	532	1425

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	3274	785	0	0	789	0
Stage 1	785	-	-	-	-	-
Stage 2	2489	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	10	393	-	-	835	-
Stage 1	449	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	10	393	-	-	835	-
Mov Cap-2 Maneuver	10	-	-	-	-	-
Stage 1	449	-	-	-	-	-
Stage 2	64	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.5	0	4.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	393	835	-
HCM Lane V/C Ratio	-	-	0.372	0.637	-
HCM Control Delay (s)	-	-	19.5	16.6	0
HCM Lane LOS	-	-	C	C	A
HCM 95th %tile Q(veh)	-	-	1.7	4.7	-

HCM 2010 TWSC
 4: CORRAL HOLLOW RD & SHULTE RD

10/20/2016

Intersection

Int Delay, s/veh 119.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	493	0	0	0	0	1313	0	0	1132	137
Future Vol, veh/h	0	0	493	0	0	0	0	1313	0	0	1132	137
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	542	0	0	0	0	1443	0	0	1244	151

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1965	2687	1244	2687	2687	721	1244	0	0	1443	0	0
Stage 1	1244	1244	-	1443	1443	-	-	-	-	-	-	-
Stage 2	721	1443	-	1244	1244	-	-	-	-	-	-	-
Critical Hdwy	7.315	6.515	6.215	7.3	6.5	6.9	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.115	5.515	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.515	5.515	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5095	4.0095	3.3095	3.5	4	3.3	2.209	-	-	2.21	-	-
Pot Cap-1 Maneuver	43	22	~ 213	12	22	374	563	-	-	471	-	-
Stage 1	214	247	-	141	199	-	-	-	-	-	-	-
Stage 2	387	198	-	215	248	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	43	22	~ 213	-	22	374	563	-	-	471	-	-
Mov Cap-2 Maneuver	43	22	-	-	22	-	-	-	-	-	-	-
Stage 1	214	247	-	141	199	-	-	-	-	-	-	-
Stage 2	387	198	-	-	248	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 743.3	0	0	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	563	-	-	213	-	471	-	-
HCM Lane V/C Ratio	-	-	-	2.543	-	-	-	-
HCM Control Delay (s)	0	-	-	\$ 743.3	0	0	-	-
HCM Lane LOS	A	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	45.6	-	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 69.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	66	3	53	7	1	19	81	1304	21	39	1206	60
Future Vol, veh/h	66	3	53	7	1	19	81	1304	21	39	1206	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	245	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	1	1	1
Mvmt Flow	68	3	55	7	1	20	84	1344	22	40	1243	62

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2195	2888	653	2226	2908	683	1305	0	0	1366	0	0
Stage 1	1355	1355	-	1522	1522	-	-	-	-	-	-	-
Stage 2	840	1533	-	704	1386	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.56	6.56	6.96	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.53	4.03	3.33	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 26	16	415	23	15	389	532	-	-	504	-	-
Stage 1	160	220	-	123	177	-	-	-	-	-	-	-
Stage 2	330	180	-	391	207	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 19	12	415	13	12	389	532	-	-	504	-	-
Mov Cap-2 Maneuver	~ 19	12	-	13	12	-	-	-	-	-	-	-
Stage 1	135	203	-	104	149	-	-	-	-	-	-	-
Stage 2	262	152	-	308	191	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 1572.9	207.9	0.8	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	532	-	-	32	40	504	-	-
HCM Lane V/C Ratio	0.157	-	-	3.93	0.696	0.08	-	-
HCM Control Delay (s)	13	-	-	\$ 1572.9	207.9	12.8	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.6	-	-	14.9	2.6	0.3	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon