Traffic Impact Study

RidgeGate Couplet Apartments

Lone Tree, Colorado

Prepared for:

Century Communities

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

RidgeGate Couplet Apartments

Lone Tree, Colorado

Prepared for
Century Communities
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1.0 EXECUTIVE SUMMARY

RidgeGate Couplet Apartments is proposed to be located within the eastern portion in between the eastbound (EB) and westbound (WB) travel lanes of RidgeGate Parkway, east of future Rhapsody Road, in Lone Tree, Colorado. The project is proposed to include 349 multifamily dwelling units. It is expected that RidgeGate Couplet Apartments will be completed in the next several years. Therefore, analysis was conducted for the 2025 short-term buildout horizon as well as the 2045 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study in accordance with the City of Lone Tree standards and requirements:

- RidgeGate Parkway WB & Rhapsody Road (#1)
- RidgeGate Parkway WB & West Road (#2)
- RidgeGate Parkway WB & East Road (#3)
- RidgeGate Parkway EB & Rhapsody Road (#4)
- RidgeGate Parkway EB & West Road (#5)
- RidgeGate Parkway EB & East Road (#6)

In addition, the proposed full movement West Access (#7) on the West Road and the proposed full movement East Access (#8) on the East Road were evaluated.

Regional access to the project will be provided by Interstate 25 (I-25), RidgeGate Parkway, and Chambers Road. Primary access will be provided by RidgeGate Parkway while direct access will be provided by a proposed full movement West Access (#7) along the proposed private north-south road to the west of the site—identified as West Road within this study—and a proposed full movement East Access (#8) along the proposed north-south road to the east of the site, identified as East Road herein.

RidgeGate Couplet Apartments is expected to generate approximately 1,586 weekday daily trips, with 129 of these trips occurring during the morning peak hour and 136 of these trips occurring during the afternoon peak hour.

Based on the analysis presented in this report, Kimley-Horn believes RidgeGate Couplet Apartments will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

2025 Recommendations

- Bicycle lanes and sidewalk are anticipated to be provided along each side of Rhapsody Road. Sidewalk is anticipated to be provided traveling north-south along the perimeter of the project site along West Road and East Road, in addition to sidewalk anticipated to be provided along the north and south ends of the project to connect West Road to East Road. Crosswalks are also anticipated to be provided in each direction at the RidgeGate Parkway WB and EB & Rhapsody Road intersections (#1 & #4). Crosswalks are also anticipated to be provided at the West Road and East Road intersections (#2, #3, #5, #6) to cross east-west across East Road and West Road. Sidewalk will also be provided onsite as appropriate to provide safe access to the apartment units from the parking and to and from other amenities anticipated to be provided by the apartment complex to residents.
- Rhapsody Road is proposed to be constructed as part of the RidgeGate King Soopers development with one through lane in each direction with on-street bicycle lanes and on-street parallel parking along both sides of the roadway. The RidgeGate Parkway WB & Rhapsody Road (#1) and the RidgeGate Parkway EB & Rhapsody Road (#4) intersections are anticipated to be signalized 'T'-intersections operating with full turning movements as appropriate on the one-way couplet. At these T-intersections, R3-1 No Right Turn signs should be installed at the approaches to RidgeGate Parkway and R6-1 "ONE WAY" signs should be posted along RidgeGate Parkway as appropriate to prevent vehicles from turning right and entering oncoming traffic. The RidgeGate Parkway WB & Rhapsody Road (#1) intersection should provide a westbound left turn lane with 190 feet in length and a 110-foot taper. A northbound left turn lane should also be provided with 120 feet in length and a 50-foot taper. The RidgeGate Parkway EB & Rhapsody Road (#4) intersection should provide an eastbound left turn lane 101 feet in length with a 75-foot taper. This intersection should also provide a

southbound left turn lane with 120 feet in length and a 50-foot taper. Any improvements to the Rhapsody Road intersections (#1 and #4) should be provided in construction of the RidgeGate King Soopers development. Of note, as Rhapsody Road is anticipated to provide north and south legs on either side of RidgeGate Parkway before 2045, it is recommended that sufficient pavement width be provided, and chevron striping be placed where the future southbound through and northbound through lanes will be placed.

- RidgeGate Parkway is anticipated to use the existing available pavement width to restripe the roadway to provide three through lanes in each direction within the study area during this horizon. It is recommended that the existing striped-out inside lane along RidgeGate Parkway in both directions be striped as the third through lane.
- Along RidgeGate Parkway WB, westbound left turn lanes should be provided at the West Road (#2) and East Road (#3) intersections. At the West Road (#2) intersection, a westbound left turn lane 190 feet in length with a 120-foot taper should be provided. The East Road (#3) intersection should also provide a westbound left turn lane 190 feet in length with a 120-foot taper. The northbound approach to each of these intersections are anticipated to be for northbound left turning movements and should be stop-controlled with R1-1 “STOP” signs placed at each northbound approach to these intersections. R3-1 No Right Turn signs should be placed underneath the “STOP” signs while R6-1 “ONE WAY” signs should be placed along RidgeGate Parkway WB as appropriate to prevent vehicles from turning right and entering oncoming traffic.
- Along RidgeGate Parkway EB, eastbound left turn lanes should be provided at the West Road (#5) and East Road (#6) intersections. Due to intersection spacing, the East Road (#5) intersection should provide an eastbound left turn lane 175 feet in length with a 75-foot taper. At the East Road (#6) intersection, an eastbound left turn lane with 190 feet in length and a 75-foot taper should be provided. The southbound approach to each of these intersections are anticipated to be for southbound left turning movements and should be stop-controlled with R1-1 “STOP” signs placed at each southbound approach to these intersections. R3-1 No Right Turn signs should be placed underneath the “STOP” signs while R6-1 “ONE WAY” signs should be placed along RidgeGate Parkway EB as appropriate to prevent vehicles from turning right and entering oncoming traffic.
- The East Road and West Road are both anticipated to operate well with one through lane in each direction with turning movements occurring from within the proposed through lanes.

- Two full movement accesses are proposed to be constructed with this project, with the West Access (#7) located along the West Road and the East Access (#8) located along the East Road. Each approach exiting the development should operate well with a shared left/right turn lane and should be stop-controlled with an R1-1 "STOP" sign.

2045 Recommendations

- The north and south legs of Rhapsody Road on either side of RidgeGate Parkway are anticipated to be constructed before the 2045 long-term horizon. When these legs are constructed, the two Rhapsody Road intersections (#1 and #4) will become four-leg signalized intersections. When this construction occurs, a westbound right turn lane 190 feet in length with a 120-foot taper should be provided at the RidgeGate Parkway WB & Rhapsody Road (#1) intersection while an eastbound right turn lane 190 feet in length with a 120-foot taper should be provided at the RidgeGate Parkway EB & Rhapsody Road (#4) intersection.
- The north and south legs of East Road on either side of RidgeGate Parkway are anticipated to be constructed before the 2045 long-term horizon. When these legs are constructed, the two East Road intersections (#3 and #6) will become four-leg signalized intersections. When this construction occurs, a westbound right turn lane 190 feet in length with a 120-foot taper should be provided at the RidgeGate Parkway WB & East Road (#3) intersection while the RidgeGate Parkway EB & East Road (#6) intersection is anticipated to operate well with eastbound right turning movements occurring from within the third eastbound through lane. The northbound and southbound approaches to each of these intersections along East Road are anticipated to operate well through the 2045 horizon with a shared lane for left/through or through/right turn lanes where appropriate.
- When the parcel to the west of the project site is developed, access along West Road should align with the West Access (#7) proposed in this project if an access to that development is anticipated along West Road. In like manner, when the parcel to the east of the project site is developed, access along East Road should align with the East Access (#8) constructed in this project if an access to that development is anticipated along East Road.

General Recommendations

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Lone Tree and the Manual on Uniform Traffic Control Devices (MUTCD) – 2009 Edition.

2.0 INTRODUCTION

Kimley-Horn and Associates, Inc. has prepared this report to document the results of a Traffic Impact Study for RidgeGate Couplet Apartments proposed to be located within the eastern portion in between the eastbound (EB) and westbound (WB) travel lanes of RidgeGate Parkway, east of future Rhapsody Road, in Lone Tree, Colorado. A vicinity map illustrating the RidgeGate Couplet Apartments development location is shown in **Figure 1**. RidgeGate Couplet Apartments is proposed to include 349 multifamily dwelling units. A conceptual site plan is attached in **Appendix G**. It is expected that RidgeGate Couplet Apartments will be completed in the next several years; therefore, analysis was conducted for the 2025 short-term buildout horizon as well as the 2045 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study in accordance with the City of Lone Tree standards and requirements:

- RidgeGate Parkway WB & Rhapsody Road (#1)
- RidgeGate Parkway WB & West Road (#2)
- RidgeGate Parkway WB & East Road (#3)
- RidgeGate Parkway EB & Rhapsody Road (#4)
- RidgeGate Parkway EB & West Road (#5)
- RidgeGate Parkway EB & East Road (#6)

In addition, the proposed full movement West Access (#7) on the West Road and the proposed full movement East Access (#8) on the East Road were evaluated.

Regional access to the project will be provided by Interstate 25 (I-25), RidgeGate Parkway, and Chambers Road. Primary access will be provided by RidgeGate Parkway while direct access will be provided by a proposed full movement West Access (#7) along the proposed private north-south road to the west of the site—identified as West Road within this study—and a proposed full movement East Access (#8) along the proposed north-south road to the east of the site, identified as East Road herein.

NORTH
NTS 196382001

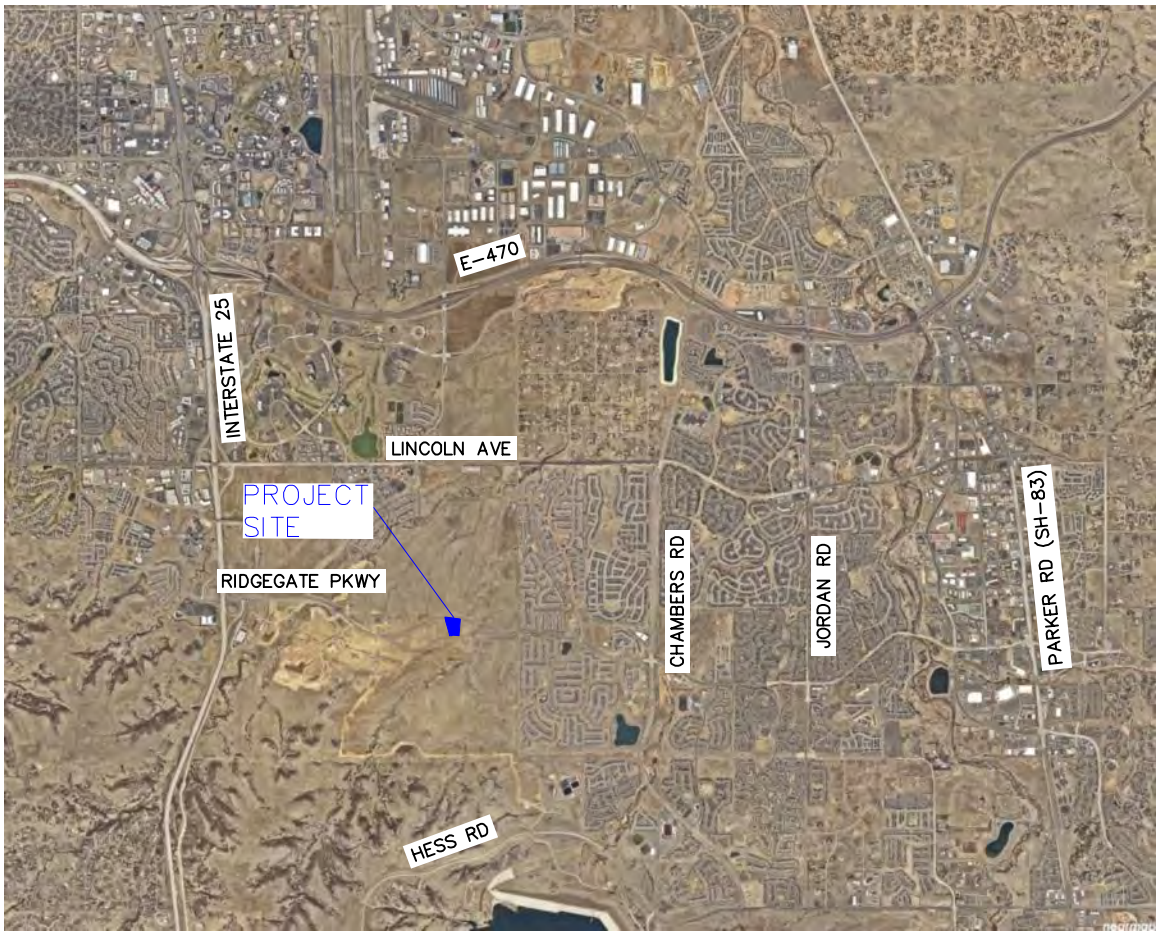


FIGURE 1
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
VICINITY MAP

3.0 EXISTING AND FUTURE CONDITIONS

3.1 Existing Study Area

The existing site is comprised of vacant land. The site is bounded to the north and south by the westbound and eastbound travel lanes of RidgeGate Parkway, respectively. Otherwise, surrounding the site is primarily vacant land. The City of Lone Tree Zoning Map refers to the area surrounding the site as "Planned Development District", specifically the "RidgeGate Planned Development."

3.2 Existing and Future Roadway Network

RidgeGate Parkway extends east-west with two through lanes in each direction within the study area, although each direction is planned to use the existing pavement width to provide three through lanes in the study area in the next few years. In the study area, RidgeGate Parkway separates the eastbound and westbound travel lanes by as much as approximately 750 feet in some areas. The RidgeGate Couplet Apartments project is proposed to be located within the eastern portion of this one-way couplet separation between the two directions of travel on RidgeGate Parkway. The posted speed limit is 45 miles per hour.

Rhapsody Road is a proposed future roadway approximately 300 feet to the west of the project area. It is anticipated this roadway will provide on-street bicycle lanes and on-street parallel parking along both sides of the roadway. This roadway will travel in the north-south direction between the two directions of travel of RidgeGate Parkway and is anticipated to provide one through lane in each direction with construction of the RidgeGate King Soopers project. As development continues to occur, this roadway is anticipated to provide north and south legs on either side of RidgeGate Parkway. Rhapsody Road is identified in the City of Lone Tree 2040 Transportation Plan as "Collector A" and according to the Transportation Plan it is anticipated to primarily provide one through lane in each direction. In the future, Rhapsody Road is anticipated to connect to Lincoln Avenue to the north and "Collector D" to the south.

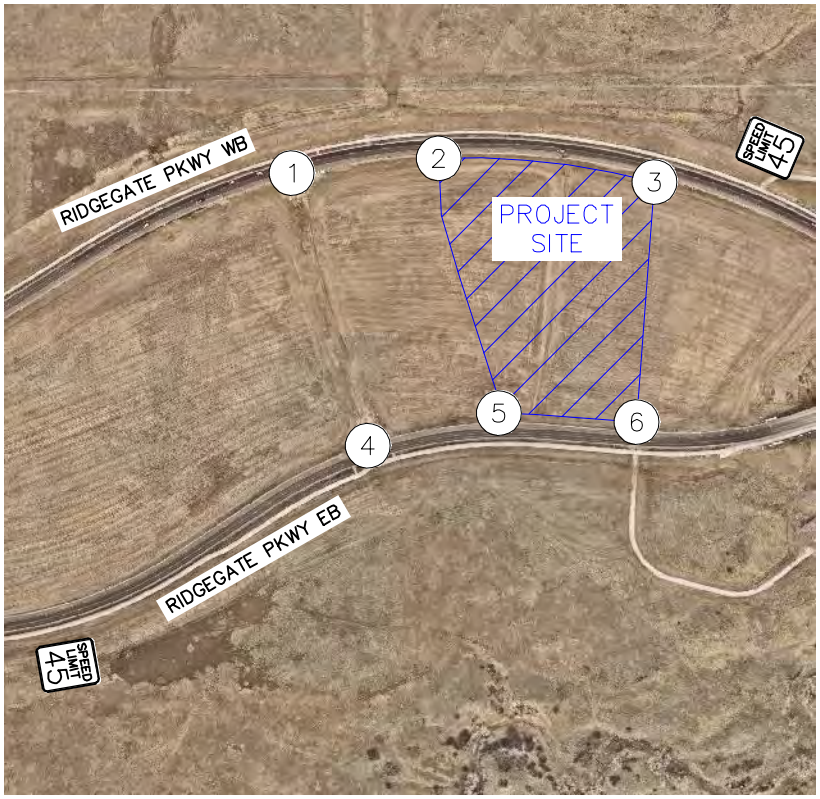
"West Road" is proposed to be constructed as a private road along the west side of the project site with project construction between the two directions of travel along RidgeGate Parkway with one through lane in each direction. "East Road" is proposed to be constructed along the east side of the project site with project construction between the two directions of travel along RidgeGate

Parkway with one through lane in each direction. As development progresses in the area, a north leg of East Road is anticipated to be constructed before the 2045 horizon that is anticipated to primarily serve residential uses, while a south leg to the south of RidgeGate Parkway is anticipated to be constructed as direct access into a medical/hospital land use. The existing intersection lane configuration within the study area is shown in **Figure 2**.

3.3 Existing Traffic Volumes

To provide a basis of eastbound and westbound through movement counts adjacent to the project site, existing turning movement counts were conducted at the intersection of RidgeGate Parkway and Peoria Street on Thursday, July 7, 2022, during the weekday morning and afternoon peak hours. The counts were conducted during the morning and afternoon peak hours of adjacent street traffic in 15-minute intervals from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on this count date. The existing intersection traffic volumes are shown in **Figure 3** with count sheets provided in **Appendix A**.

NORTH
NTS 196382001



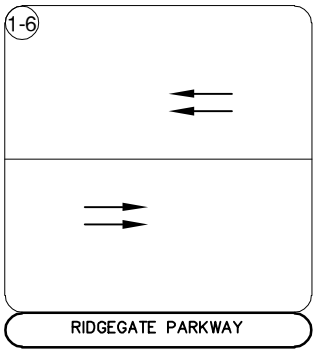


FIGURE 2
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
EXISTING GEOMETRY

LEGEND
X Study Area Key Intersection
SPEED LIMIT XX Roadway Speed Limit

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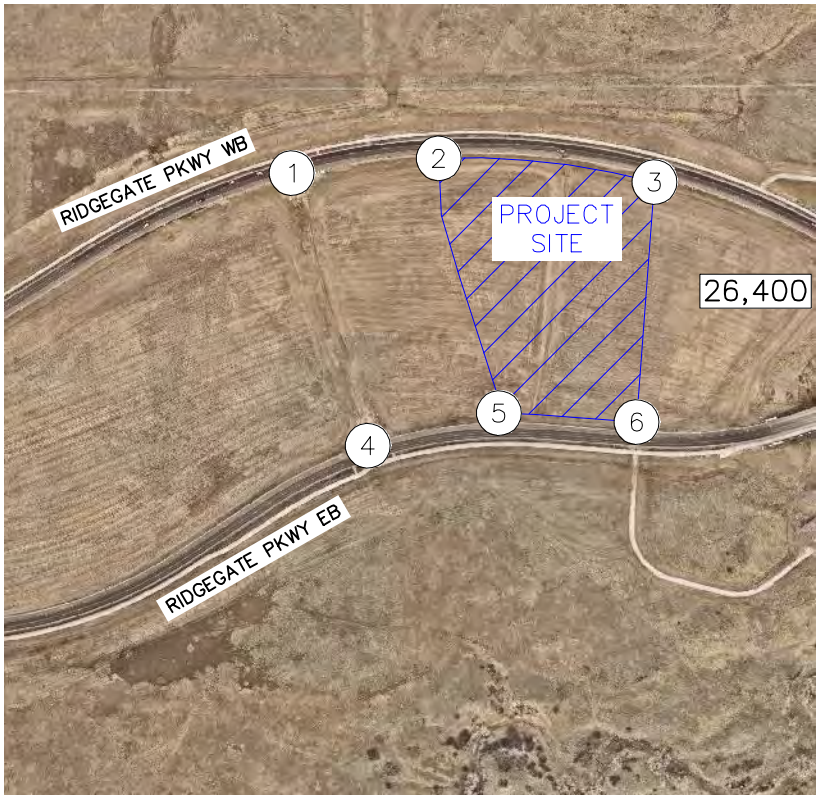
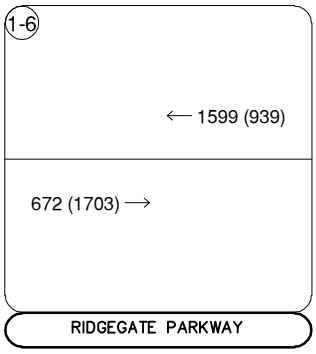
NORTH
NTS 196382001





Thursday, July 7, 2022
7:15 to 8:15 AM (4:30 to 5:30 PM)

LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 3
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2022 EXISTING TRAFFIC VOLUMES

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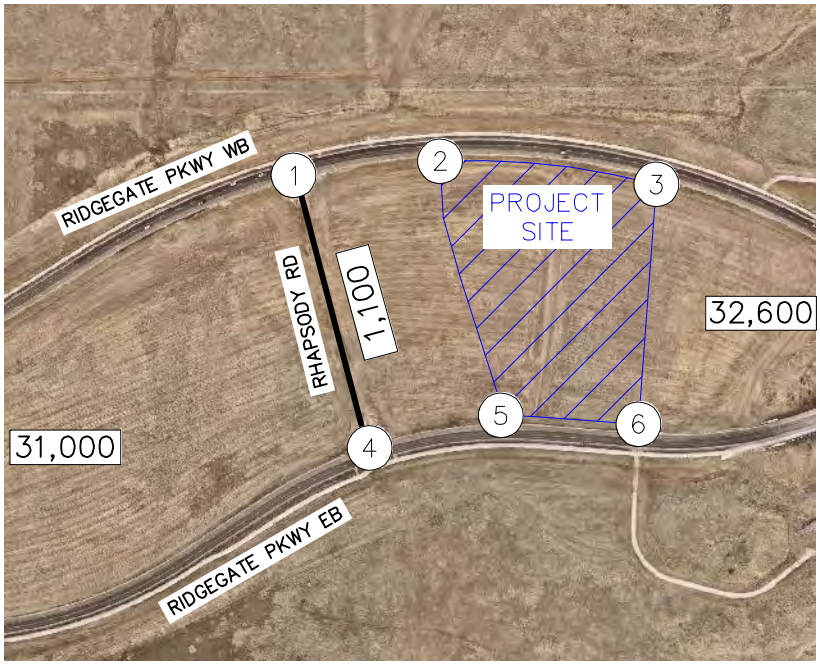
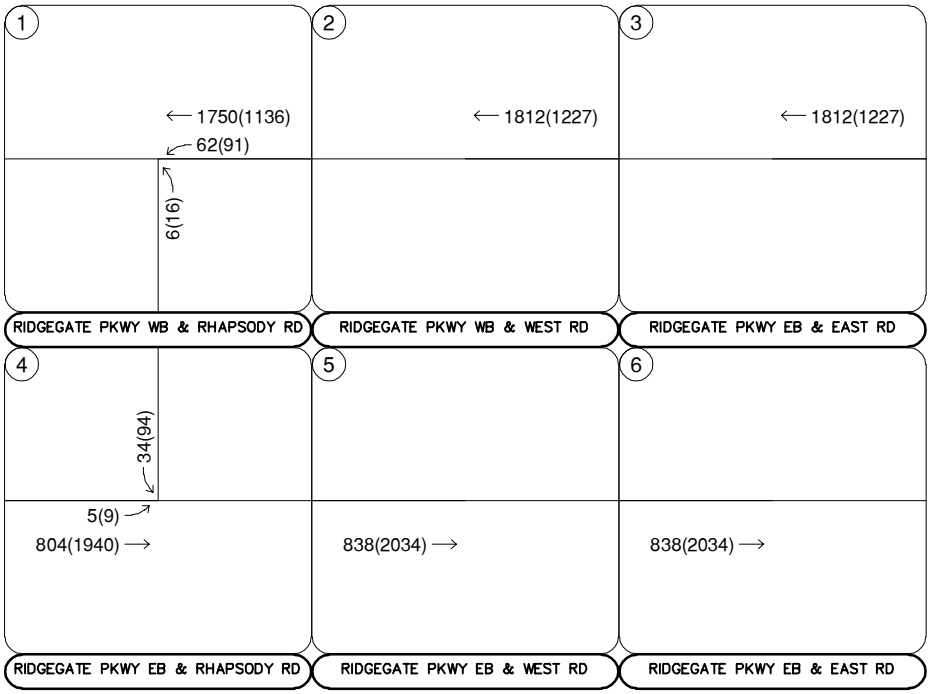
3.4 Unspecified Development Traffic Growth

According to traffic projections from the Denver Regional Council of Governments (DRCOG) traffic model, the area surrounding the site is expected to have an average 30-year growth factor of 1.87 based on a 2020 volume of 23,000 vehicles per day (vpd) and future 2050 projection of 43,000 vpd. This growth factor equates to an annual growth rate of 2.11 percent. Future traffic volume projections and growth rate calculations are provided in **Appendix B**. This annual growth rate was used to estimate short-term 2025 and long-term 2045 traffic volume projections in the RidgeGate King Soopers Traffic Impact Study completed by Kimley-Horn in March 2023. As the RidgeGate King Soopers is assumed to be completed prior to construction of this project, the background plus project traffic volumes from the RidgeGate King Soopers development were conservatively used as the background traffic volumes for this project. Of note, the RidgeGate King Soopers development included the traffic generated by the Southwest Village Traffic Impact Study completed by JR Engineering. The RidgeGate King Soopers study also included the traffic assumed to be induced by the future construction of the north and south legs of Rhapsody Road as well as High Note Avenue, which is a future proposed north-south roadway approximately 1,200 feet to the west of Rhapsody Road.

Within the one-way couplet, it is known that the approximately 200,000 square-foot property to the west of this project—between the proposed Rhapsody Road and the private West Road referenced in this project—is anticipated to be developed as general retail uses before the 2045 horizon. As such, the traffic anticipated to be generated by that retail development was included in the 2045 background volumes of this traffic study. Additionally, it is known that the approximately 178,000 square-foot property to the east of this project—east of the East Road referenced in this study—is anticipated to be developed as affordable multi-family housing before the 2045 horizon; the traffic generated by this development was also included in the 2045 background volumes of this traffic study. Finally, the anticipated land uses to the north of the project site as well as the medical/hospital land use to the south of the project site were also added into the background traffic volumes in the 2045 horizon. The assumed trip distribution and traffic assignment for the retail, affordable housing, and medical/hospital developments are included in **Appendix B** in **Figures B1** through **B6**. Of note, the medical/dental office building trip generation land use was conservatively assumed for the medical/hospital parcel, as this is a higher trip generator than a hospital. The calculated background traffic volumes for 2025 and 2045 are shown in **Figure 4** and **Figure 5,** respectively.





LEGEND

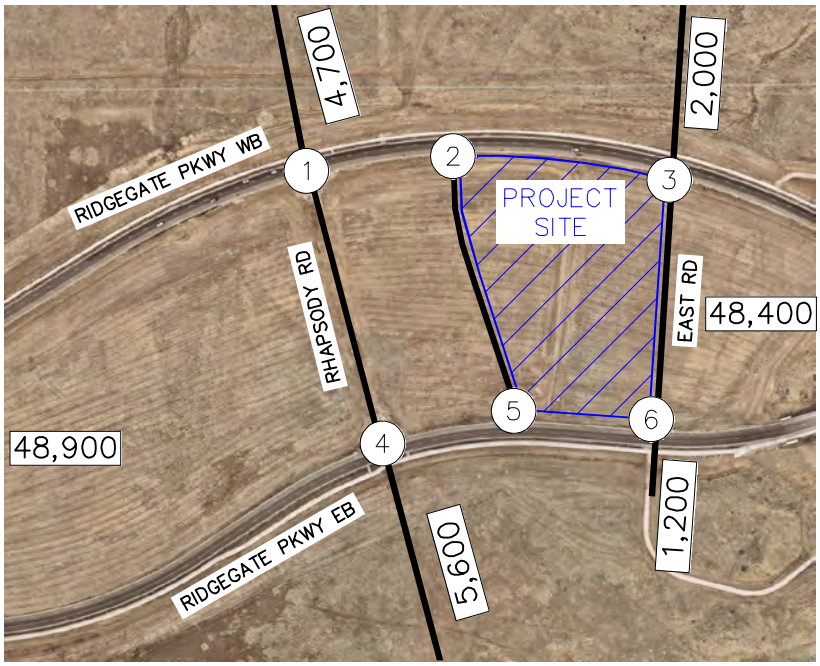
(X) Study Area Key Intersection

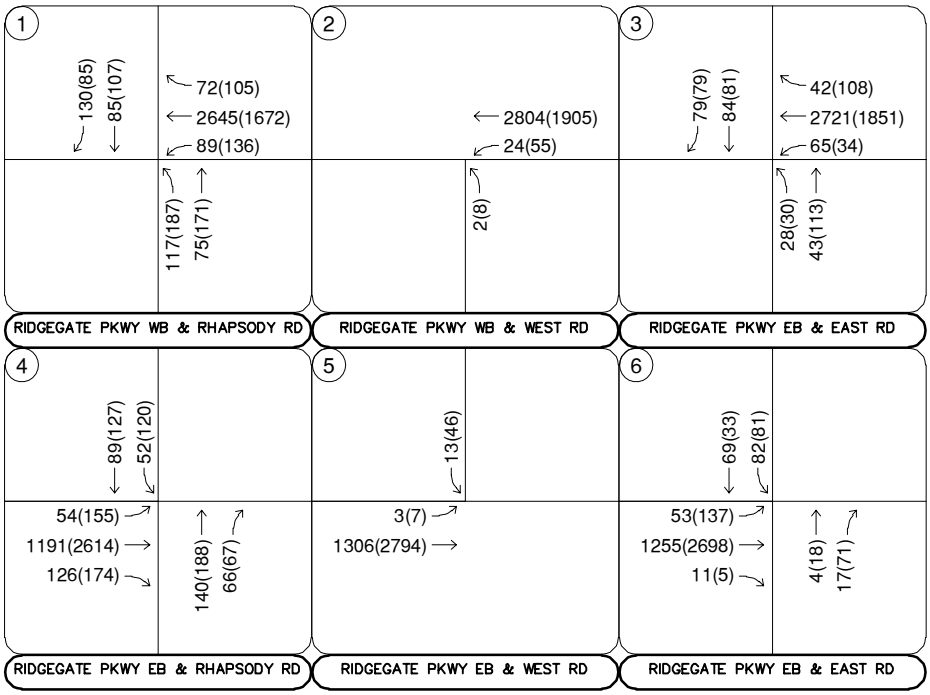
XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

[XX,X00] Estimated Daily Traffic Volume

FIGURE 4
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2025 BACKGROUND TRAFFIC VOLUMES

NORTH
NTS 196382001





LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 5
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 BACKGROUND TRAFFIC VOLUMES

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4.0 PROJECT TRAFFIC CHARACTERISTICS

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn used the ITE Trip Generation Report average rate equations that apply to Multifamily Mid-Rise Housing (ITE Land Use Code 221) for traffic associated with the development.

RidgeGate Couplet Apartments is expected to generate approximately 1,586 weekday daily trips, with 129 of these trips occurring during the morning peak hour and 136 of these trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 11th Edition – Volume 1: User's Guide and Handbook*, 2021. **Table 1** summarizes the estimated trip generation for the RidgeGate Couplet Apartments. The trip generation worksheets for RidgeGate Couplet Apartments as well as the adjacent proposed future retail and affordable housing developments are included in **Appendix C**.

Table 1 – RidgeGate Couplet Apartments Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Mid-Rise Housing (ITE 221) – 349 Dwelling Units	1,586	30	99	129	83	53	136

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

4.2 Trip Distribution

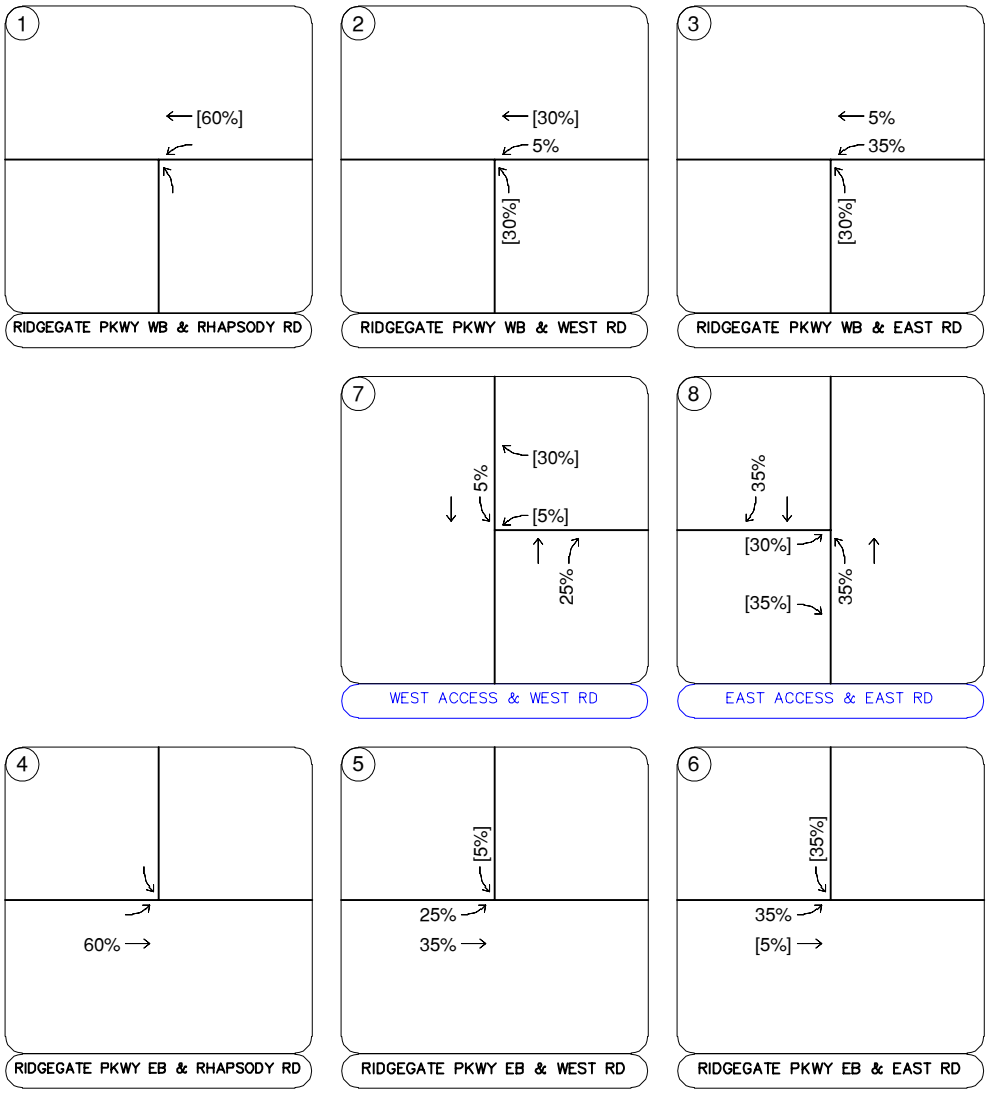
Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. Following construction of this development but prior to 2045, it is anticipated that the area surrounding the project site will be developed with additional roadway connections in place. As such, unique trip distributions were used for the 2025 and 2045 horizon years to account for this change. **Figure 6** shows the 2025 project trip distribution while **Figure 7** shows the 2045 trip distribution.

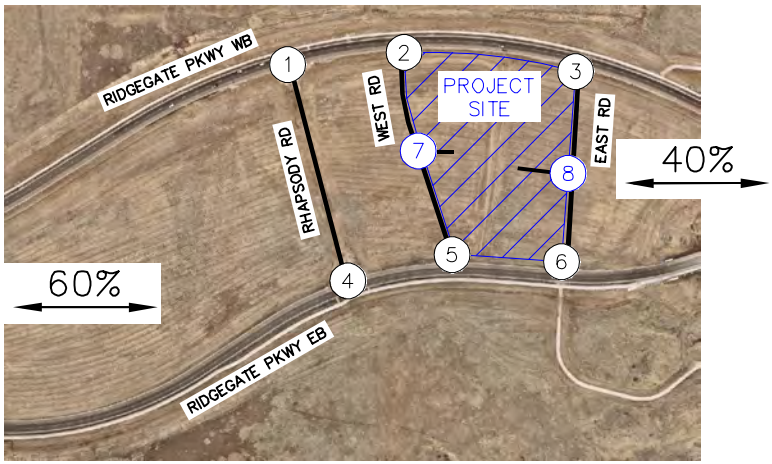
4.3 Traffic Assignment

RidgeGate Couplet Apartments traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 1**. Project traffic assignment for the 2025 horizon is shown in **Figure 8** while the traffic assignment in the 2045 horizon is shown in **Figure 9**.

4.4 Total (Background Plus Project) Traffic

Site traffic volumes were added to the background volumes to represent estimated traffic conditions for the short-term 2025 buildout horizon and long-term 2045 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2025 and 2045 horizon years in **Figures 10** and **11**, respectively.





LEGEND

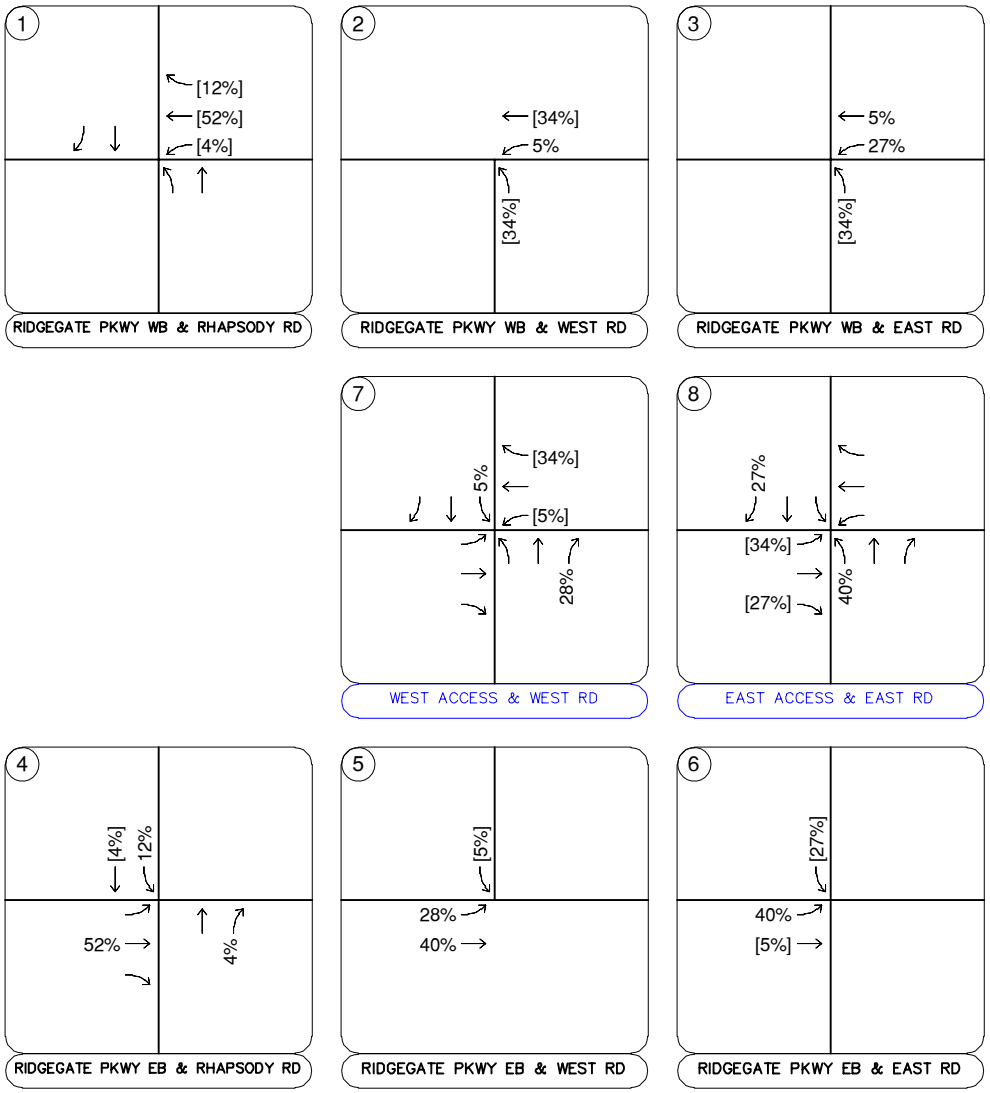
(X) Study Area Key Intersection

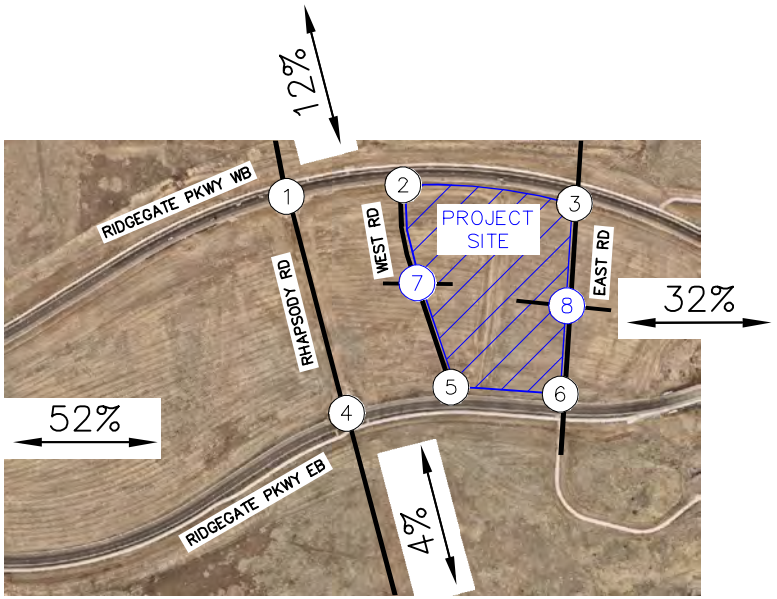
(X) Project Access Intersection

XX% External Trip Distribution Percentage

XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE 6
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2025 PROJECT TRIP DISTRIBUTION





LEGEND

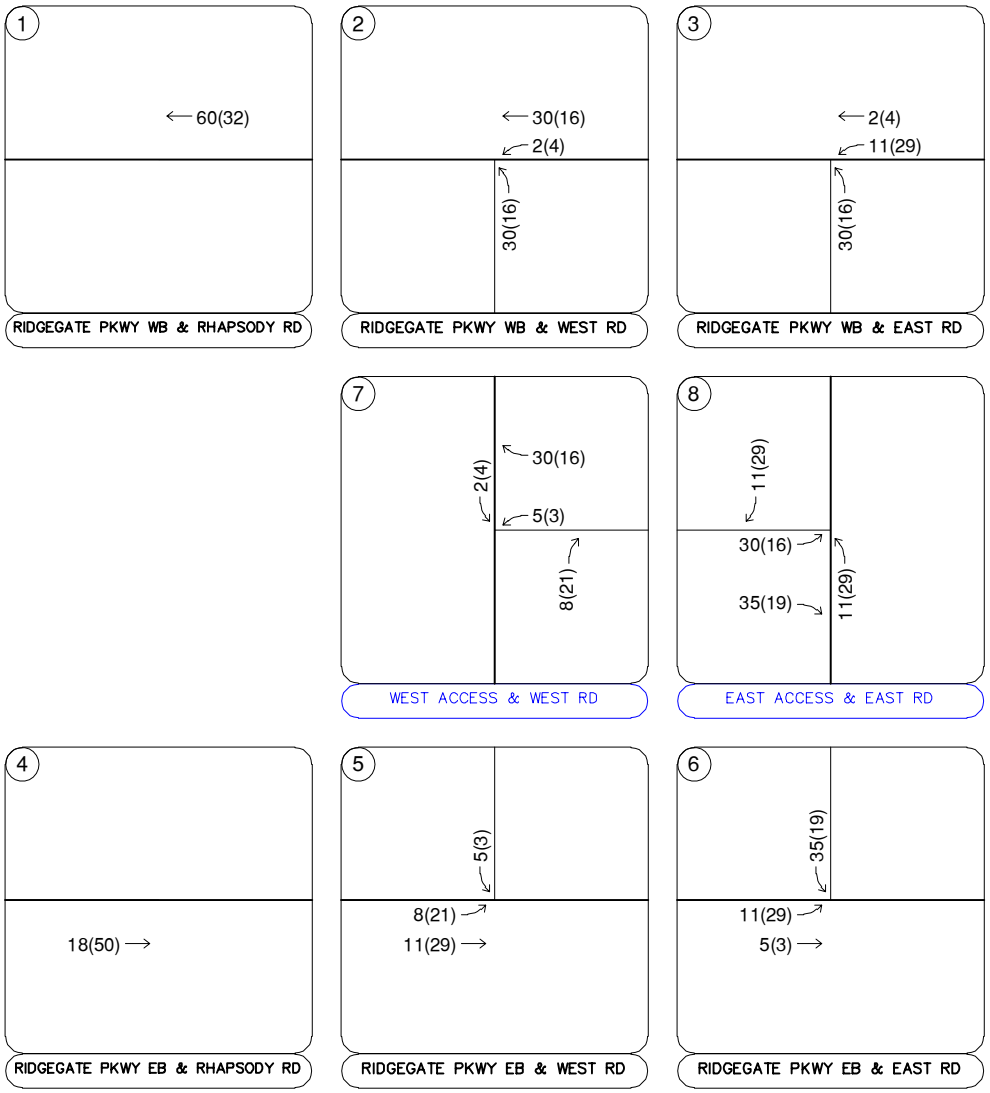
(X) Study Area Key Intersection

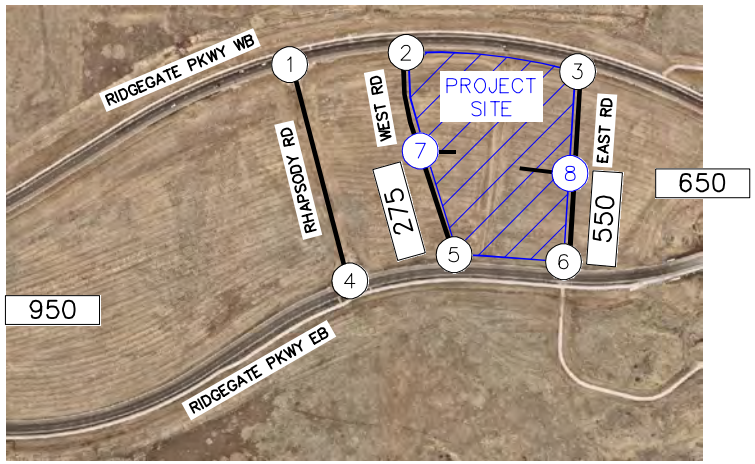
(X) Project Access Intersection

XX% External Trip Distribution Percentage

XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE 7
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 PROJECT TRIP DISTRIBUTION





LEGEND

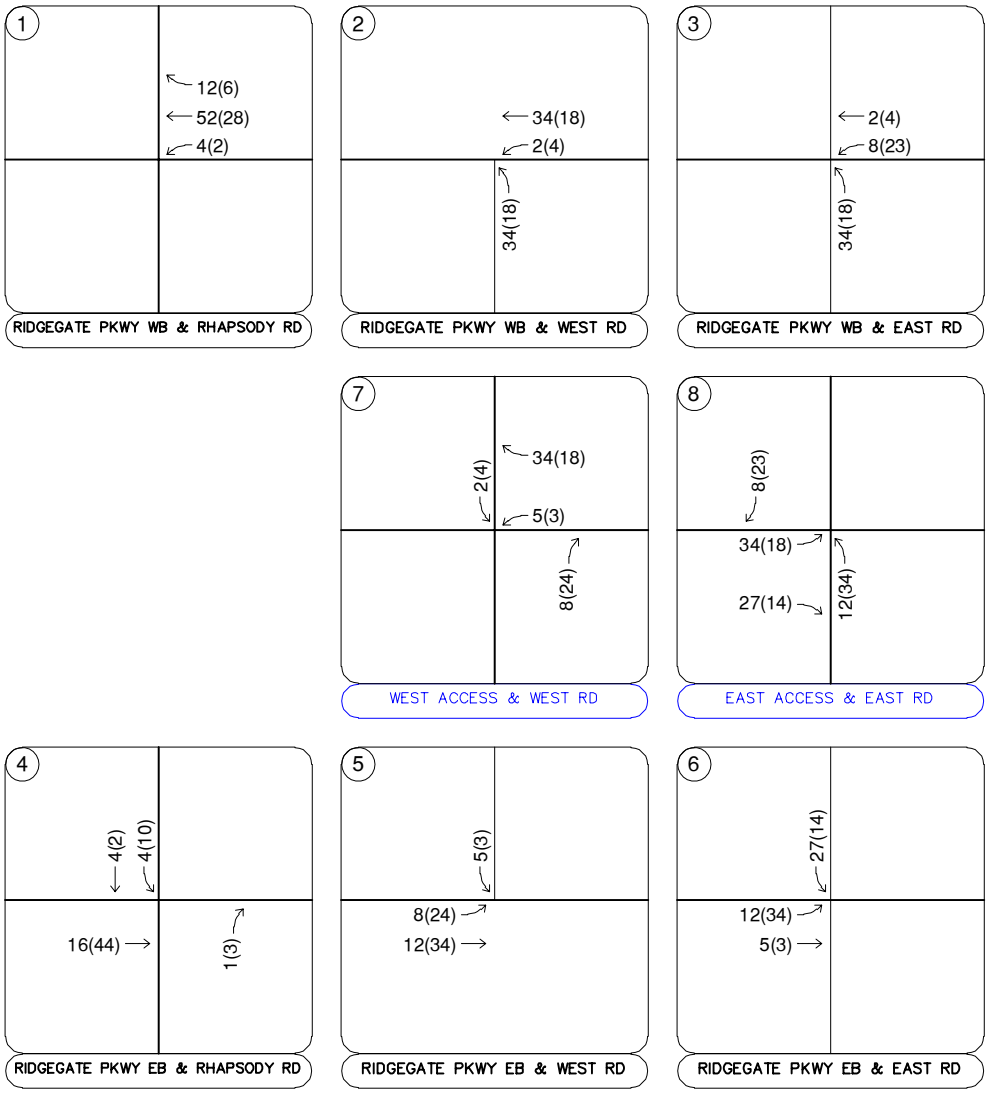
(X) Study Area Key Intersection

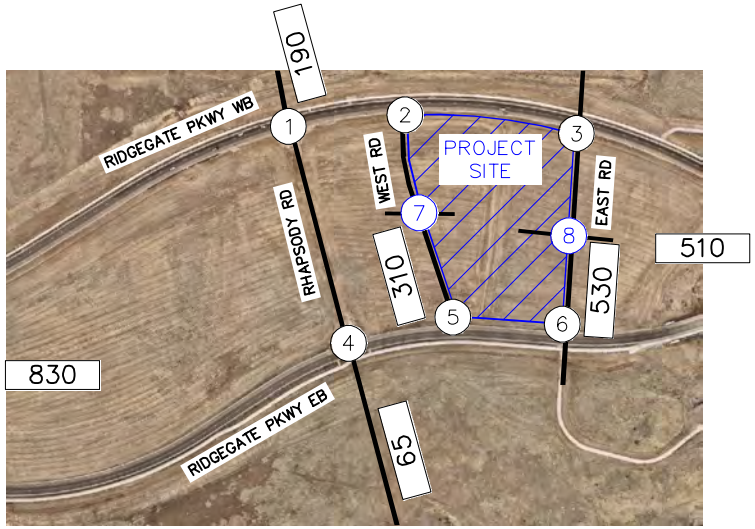
(X) Project Access Intersection

XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE 8
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2025 PROJECT TRAFFIC ASSIGNMENT

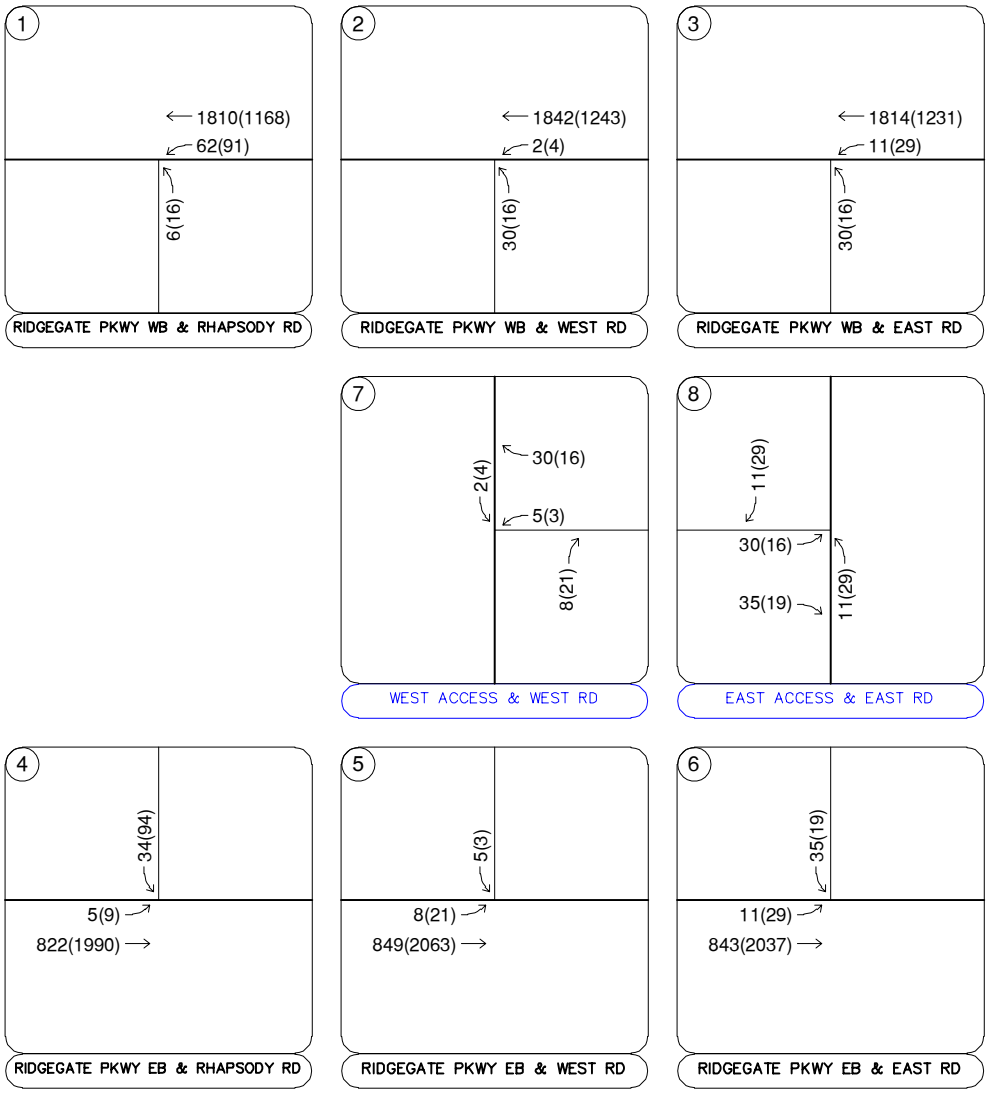


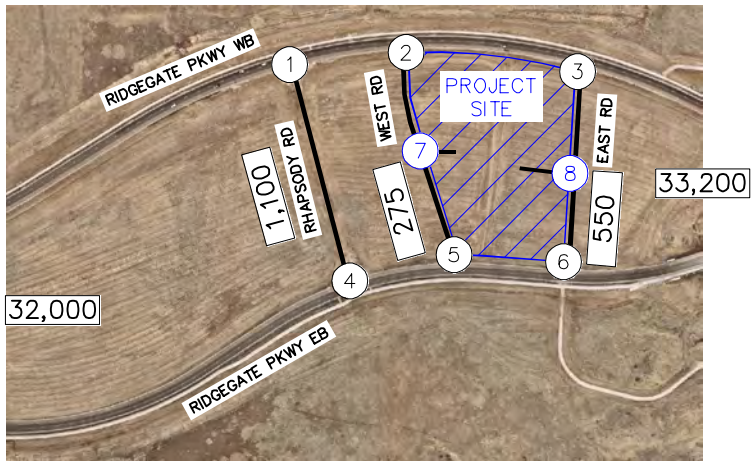


LEGEND

(X)	Study Area Key Intersection
(X)	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 9
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 PROJECT TRAFFIC ASSIGNMENT





LEGEND

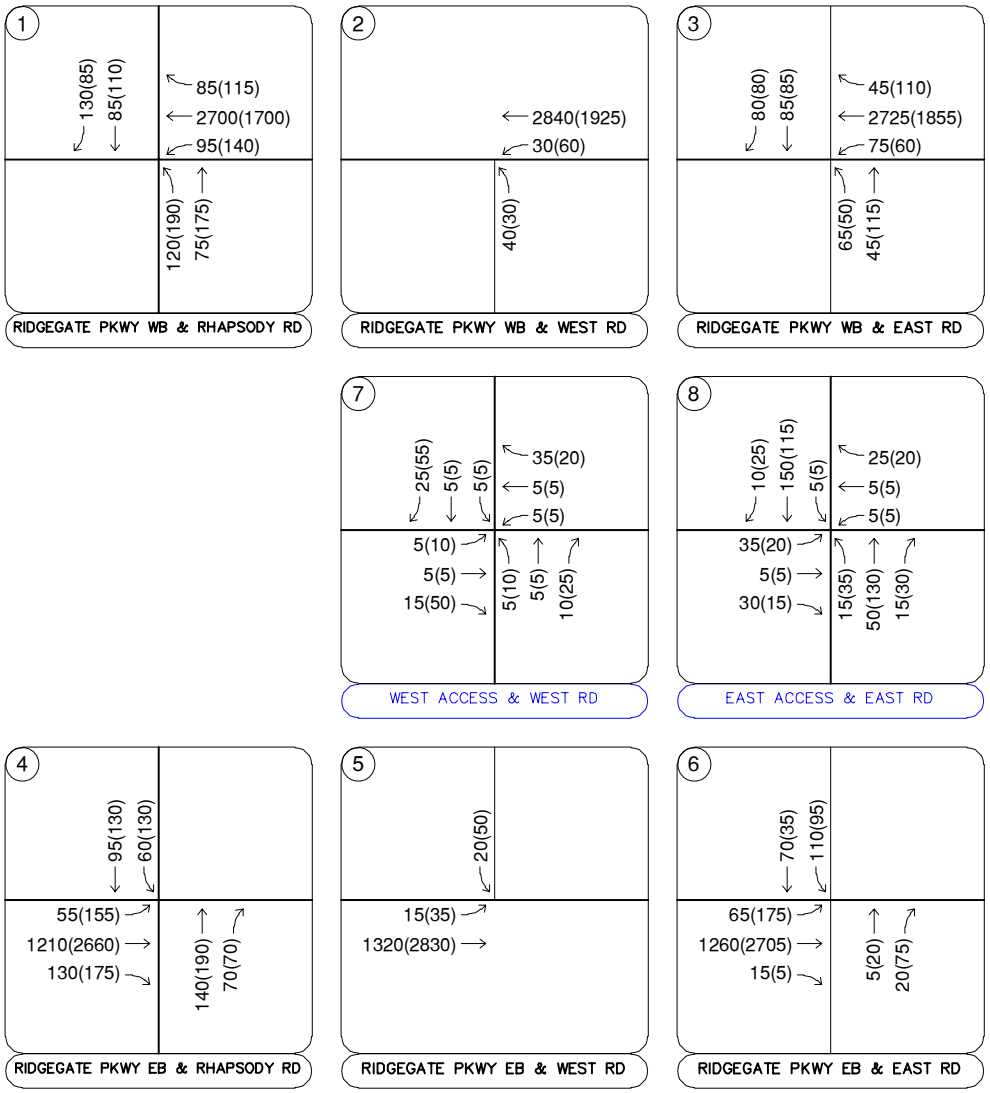
(X) Study Area Key Intersection

(X) Project Access Intersection

XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE 10
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2025 TOTAL TRAFFIC VOLUMES



LEGEND

(X) Study Area Key Intersection

(X) Project Access Intersection

XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE 11
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 TOTAL TRAFFIC VOLUMES

5.0 TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2025 and 2045 development horizons at the identified key intersections. The acknowledged source used in this study for determining overall capacity is the 6th Edition of the *Highway Capacity Manual (HCM)*[2].

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, standard traffic engineering practice recommends overall intersection LOS D and movement/approach LOS E as the minimum desirable thresholds for acceptable operations. **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Table 2 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Sixth Edition, Transportation Research Board, 2016.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.

5.2 Key Intersection Operational Analysis

Calculations for the operational level of service at the key intersections for the study area are provided in **Appendix D**. Existing peak hour factors were utilized in the 2025 and 2045 horizon analysis years. Synchro traffic analysis software was used to analyze the signalized and unsignalized key intersections for HCM level of service.

RidgeGate Parkway WB & Rhapsody Road (#1)

The intersection of RidgeGate Parkway WB & Rhapsody Road (#1) is a proposed future signalized intersection to the west of the project site. This intersection does not exist today but for purposes of this study it is assumed to be constructed as a 'T'-intersection in the 2025 horizon as part of the RidgeGate King Soopers project, with the north leg of the intersection to be constructed by others as development occurs to the north of RidgeGate Parkway prior to the 2045 horizon. In the 2025 horizon, this intersection is anticipated to be signalized to provide safer travel for pedestrians and bicyclists. A westbound left turn lane is anticipated to be provided as well as a northbound left turn lane during the 2025 horizon. As recommended in the RidgeGate King Soopers study, an R3-1 No Right Turn sign should be installed on the northbound approach to the intersection and R6-1 "ONE WAY" signs should be posted along RidgeGate Parkway as appropriate to prevent vehicles from turning right and entering oncoming traffic. A northbound through lane will eventually be necessary as the north leg of Rhapsody Road is constructed. As such, it is recommended that sufficient pavement width be provided, and chevron striping be placed where the future northbound through lane will be placed. With project traffic, this intersection is anticipated to operate at an acceptable level of service during both the 2025 and 2045 horizon years based on the addition of project traffic and this operational level of service analysis. **Table 3** provides the results of the LOS analysis conducted at this intersection.

Table 3 – RidgeGate Parkway WB & Rhapsody Road (#1) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Background #	7.1	A	7.2	A
2025 Background Plus Project #	7.3	A	7.3	A
2045 Background ##	16.2	B	16.2	B
2045 Background Plus Project ##	16.5	B	16.4	B

= Signalized 'T'-intersection; ## = Signalized 4-leg intersection

RidgeGate Parkway WB & West Road (#2)

The intersection of RidgeGate Parkway WB & West Road (#2) is proposed to be constructed along the west side of the project site as an unsignalized 'T'-intersection with development of this project with stop control on the northbound West Road approach to the intersection. West Road is anticipated to be a private road with one through lane in each direction between the two travel directions of RidgeGate Parkway. A westbound left turn lane is recommended to be provided at this intersection with project construction. The northbound approach to this intersection will be for northbound left turning movements only and should provide an R1-1 "STOP" sign with an R3-1 No Right Turn sign posted underneath the "STOP" sign and an R6-1 "ONE WAY" sign posted along RidgeGate Parkway directly to the north of the northbound West Road approach to prevent vehicles from turning right into oncoming traffic. With project traffic, this intersection is anticipated to operate at an acceptable level of service during both the 2025 and 2045 horizon years based on the addition of project traffic and this operational level of service analysis. **Table 4** provides the results of the LOS analysis conducted at this intersection.

Table 4 – RidgeGate Parkway WB & West Road (#2) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Background Plus Project Northbound Left	14.8	B	12.1	B
2045 Background Northbound Left	20.3	C	16.1	C
2045 Background Plus Project Northbound Left	24.2	C	17.3	C

RidgeGate Parkway WB & East Road (#3)

The intersection of RidgeGate Parkway WB & East Road (#3) is proposed to be constructed along the east side of the project site as an unsignalized 'T'-intersection with development of this project with stop control on the northbound East Road approach to the intersection in the 2025 horizon. East Road is anticipated to provide one through lane in each direction between the two travel directions of RidgeGate Parkway. A westbound left turn lane is recommended to be provided at this intersection with project construction. During the 2025 horizon, the northbound approach to this intersection will be for northbound left turning movements only and should provide an R1-1 "STOP" sign with an R3-1 No Right Turn sign posted underneath the "STOP" sign and an R6-1 "ONE WAY" sign posted along RidgeGate Parkway directly to the north of the northbound East Road approach to prevent vehicles from turning right into oncoming traffic.

By the 2045 horizon, it is anticipated that there will be a north leg constructed at this intersection to access additional planned development to the north of RidgeGate Parkway. When this development to the north of RidgeGate Parkway occurs, this intersection is anticipated to require signalization to continue operating at an acceptable level of service. A signal warrant analysis was conducted at this intersection in the 2025 background plus project and 2045 background horizons. A signal is not anticipated to be warranted or needed at this intersection solely with project traffic in the 2025 or 2045 horizons; the signal is anticipated to needed because of the development to the north of this project and construction of this north leg. The signal warrant analysis worksheets are provided in **Appendix E**. The intersection is recommended to provide a westbound right turn lane when development to the north of the project occurs, while the northbound approach should operate well through the 2045 horizon with a shared left/through lane and the southbound approach is anticipated to operate well with one lane for shared through/right turning movements.

With project traffic, this intersection is anticipated to operate at an acceptable level of service during both the 2025 and 2045 horizon years based on the addition of project traffic and this operational level of service analysis. **Table 5** provides the results of the LOS analysis conducted at this intersection.

Table 5 – RidgeGate Parkway WB & East Road (#3) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Background Plus Project # Northbound Left	14.9	B	12.6	B
2045 Background ##	13.7	B	12.1	B
2045 Background Plus Project ##	13.8	B	13.0	B

= Unsignalized 'T'-intersection ## = Signalized 4-leg intersection; WB: add a right turn lane; NB: shared left/through lane; SB: shared through/right turn lane

RidgeGate Parkway EB & Rhapsody Road (#4)

The intersection of RidgeGate Parkway EB & Rhapsody Road (#4) is a proposed future signalized intersection to the west of the project site. This intersection does not exist today but for purposes of this study it is assumed to be constructed as a 'T'-intersection in the 2025 horizon as part of the RidgeGate King Soopers project, with the south leg of the intersection to be constructed by others as development occurs to the south of RidgeGate Parkway prior to the 2045 horizon. In the 2025 horizon, this intersection is anticipated to be signalized to provide safer travel for pedestrians and bicyclists while also providing sufficient gaps for southbound left turning vehicles to turn onto RidgeGate Parkway EB. An eastbound left turn lane is anticipated to be provided as well as a southbound left turn lane during the 2025 horizon. As recommended in the RidgeGate King Soopers study, an R3-1 No Right Turn sign should be installed on the southbound approach to the intersection and R6-1 "ONE WAY" signs should be posted along RidgeGate Parkway as appropriate to prevent vehicles from turning right and entering oncoming traffic.

A southbound through lane will eventually be necessary as the south leg of Rhapsody Road is constructed. As such, it is recommended that sufficient pavement width be provided, and chevron striping be placed where the future southbound through lane will be placed. With project traffic, this intersection is anticipated to operate at an acceptable level of service during both the 2025 and 2045 horizon years based on the addition of project traffic and this operational level of service analysis. **Table 6** provides the results of the LOS analysis conducted at this intersection.

Table 6 – RidgeGate Parkway EB & Rhapsody Road (#4) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Background #	9.2	A	8.8	A
2025 Background Plus Project #	9.2	A	10.1	B
2045 Background ##	13.1	B	17.4	B
2045 Background Plus Project ##	13.3	B	18.6	B

= Signalized 'T'-intersection; ## = Signalized 4-leg intersection

RidgeGate Parkway EB & West Road (#5)

The intersection of RidgeGate Parkway EB & West Road (#5) is proposed to be constructed along the west side of the project site as an unsignalized 'T'-intersection with development of this project with stop control on the southbound West Road approach to the intersection. West Road is anticipated to be a private road with one through lane in each direction between the two travel directions of RidgeGate Parkway. An eastbound left turn lane is recommended to be provided at this intersection with project construction. The southbound approach to this intersection will be for southbound left turning movements only and should provide an R1-1 "STOP" sign with an R3-1 No Right Turn sign posted underneath the "STOP" sign and an R6-1 "ONE WAY" sign posted along RidgeGate Parkway directly to the south of the southbound West Road approach to prevent vehicles from turning right into oncoming traffic. With project traffic, this intersection is anticipated to operate at an acceptable level of service during both the 2025 and 2045 horizon years based on the addition of project traffic and this operational level of service analysis. **Table 7** provides the results of the LOS analysis conducted at this intersection.

Table 7 – RidgeGate Parkway EB & West Road (#5) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Background Plus Project Southbound Left	10.8	B	15.9	C
2045 Background Southbound Left	10.8	B	20.3	C
2045 Background Plus Project Southbound Left	12.6	B	26.6	D

RidgeGate Parkway EB & East Road (#6)

The intersection of RidgeGate Parkway EB & East Road (#6) is proposed to be constructed along the east side of the project site as an unsignalized 'T'-intersection with development of this project with stop control on the southbound East Road approach to the intersection during the 2025 horizon. East Road is anticipated to provide one through lane in each direction between the two travel directions of RidgeGate Parkway. An eastbound left turn lane is recommended to be provided at this intersection with project construction. The southbound approach to this intersection will be for southbound left turning movements only during the 2025 horizon and should provide an R1-1 "STOP" sign with an R6-1 No Right Turn sign posted underneath the "STOP" sign and an R6-1 "ONE WAY" sign posted along RidgeGate Parkway directly to the south of the southbound East Road approach to prevent vehicles from turning right into oncoming traffic.

By the 2045 horizon, it is anticipated that there will be a south leg constructed at this intersection to access a planned medical/hospital land use to the south of RidgeGate Parkway. When this development to the north of RidgeGate Parkway occurs, this intersection is anticipated to require signalization to continue operating at an acceptable level of service. A signal warrant analysis was conducted at this intersection in the 2025 background plus project and 2045 background horizons. A signal is not anticipated to be warranted or needed at this intersection solely with project traffic in the 2025 or 2045 horizons; the signal is anticipated to needed because of the development to the north and south of this project and the traffic from those developments that would use this roadway in between the one-way couplet of RidgeGate Parkway. The signal warrant analysis worksheets are provided in **Appendix E**. The northbound approach should operate well through the 2045 horizon with a shared through/right turn lane and the southbound approach is anticipated to operate well with one lane for shared left/through turning movements.

With project traffic, this intersection is anticipated to operate at an acceptable level of service during both the 2025 and 2045 horizon years based on the addition of project traffic and this operational level of service analysis. **Table 8** provides the results of the LOS analysis conducted at this intersection.

Table 8 – RidgeGate Parkway EB & East Road (#6) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Background Plus Project # Southbound Left	11.1	B	16.5	C
2045 Background ##	13.8	B	14.1	B
2045 Background Plus Project ##	13.9	B	14.3	B

= Unsignalized 'T'-intersection ## = Signalized 4-leg intersection;
NB: shared through/right turn lane; SB: shared left/through lane

Project Accesses

With completion of the RidgeGate Couplet Apartments project, two full movement accesses are proposed to the development. The West Access (#7) is proposed to be located along the West Road while the East Access (#8) is proposed to be located along the East Road. The westbound approach exiting the West Access (#7) and the eastbound approach exiting the East Access (#8) should each provide an R1-1 "STOP" sign for vehicles exiting the project site. The northbound approach to each access is anticipated to operate well through the 2045 horizon with a shared left/through lane along each roadway while the southbound approach to each access is also anticipated to operate well through the 2045 horizon with a shared left/through lane. Of note, it is assumed for purposes of this analysis that as the anticipated retail space to the west of West Road develops that an eastern access to that site will be constructed which should align with the West Access (#7). Additionally, it is assumed in this study that as the proposed affordable housing develops to the east of East Road that an access to that site will be constructed which should align with the East Access (#8).

Table 9 provides the results of the level of service for these accesses. As shown in the table, both accesses are anticipated to have all movements operating at LOS A during the peak hours in both the buildout year 2025 and the 2045 long-term horizons.

Table 9 – Project Access Level of Service Results

Intersection	2025 Total				2045 Total			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS
West Access & West Rd (#7)								
Northbound Left	-	-	-	-	7.3	A	7.4	A
Eastbound Approach	-	-	-	-	8.8	A	9.0	A
Westbound Approach	8.5	A	8.5	A	8.7	A	8.9	A
Southbound Left	7.2	A	7.3	A	7.3	A	7.3	A
East Access & East Rd (#8)								
Northbound Left	7.3	A	7.3	A	7.5	A	7.6	A
Eastbound Approach	8.8	A	8.8	A	10.1	B	10.6	B
Westbound Approach	-	-	-	-	9.3	A	9.8	A
Southbound Left	-	-	-	-	7.4	A	7.5	A

5.3 Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths. Results are shown in the following **Table 10** with calculations provided within the level of service operational sheets of **Appendix D** for unsignalized intersections and **Appendix F** for signalized intersections.

Table 10 – Turn Lane Queuing Analysis Results

Intersection Turn Lane	2025 Calculated Queue (feet)	2025 Recommended Length (feet)	2045 Calculated Queue (feet)	2045 Recommended Length (feet)
RidgeGate WB & Rhapsody (#1)				
Westbound Left	34’	**190’+110’T**	54’	190’+110’T
Westbound Right	DNE	DNE	20’	**190’+120’T**
Northbound Left	27’	**120’+50’T**	117’	120’+50’T
RidgeGate WB & West (#2)				
Westbound Left	0’	**190’+120’T**	0’	190’+120’T
Northbound Left	25’	**C**	25’	C
RidgeGate WB & East (#3)				
Westbound Left	0’	**190’+120’T**	0’	190’+120’T
Westbound Right	DNE	DNE	18’	**190’+120’T**
Northbound Approach	25’	**C**	152’	C
Southbound Approach	DNE	DNE	154’	**C**
RidgeGate EB & Rhapsody (#4)				
Eastbound Left	7’	**101’+75’T**	52’	101’+75’T
Eastbound Right	DNE	DNE	26’	**190’+120’T**
Southbound Left	106’	**120’+50’S**	93’	120’+50’S
RidgeGate EB & West (#5)				
Eastbound Left	0’	**175’+75’T**	0’	175’+75’T
Southbound Left	25’	**C**	25’	C
RidgeGate EB & East (#6)				
Eastbound Left	0’	**190’+75’T**	57’	190’+75’T
Northbound Approach	DNE	DNE	95’	**C**
Southbound Approach	25’	**C**	118’	C

DNE = Does Not Exist; T = Taper Length; C = Continuous; S = Shared Taper;
Blue Text = Recommendation

All queues are anticipated to remain within the recommended turn lane lengths through 2045. The storage and taper lengths along RidgeGate Parkway provided in **Table 10** are based on a standard turn lane length of 190 feet with a 120-foot taper. Where these turn lane and taper lengths are not feasible, the recommended turn lane length provided is the maximum feasible length based on site constraints, with the minimum recommended turn lane length set as 100 feet and the minimum taper length set as 75 feet. Of note, it is not advisable to provide a continuous deceleration/acceleration lane along either direction of RidgeGate Parkway as this would be likely to cause unsafe weaving maneuvers for vehicles entering and exiting the development. For this reason, separate left turn lanes have been recommended at each study area intersection on RidgeGate Parkway. The turn lanes along Rhapsody Road were assigned a minimum storage length of 100 feet, with additional storage length provided where advisable to accommodate

expected queues. The turn lane exhibit used for the provided turn lane and taper lengths is provided in **Appendix G**.

In 2025, the intersection of RidgeGate Parkway WB & Rhapsody Road (#1) is recommended to provide a westbound left turn lane with a storage length of 190 feet with a 110-foot taper. A northbound left turn lane should be provided at this intersection 120 feet in length with a 50-foot taper.

At the RidgeGate Parkway WB & West Road (#2) intersection, a westbound left turn lane should be provided with 190 feet in length and a 120-foot taper. The RidgeGate Parkway WB & East Road (#3) intersection should provide a westbound left turn lane 190 feet in length with a 120-foot taper.

In 2025, the intersection of RidgeGate Parkway EB & Rhapsody Road (#4) is recommended to provide an eastbound left turn lane with 101 feet in length and a 75-foot taper. A southbound left turn should also be provided at this intersection with 120 feet in length and a 50-foot shared taper; the taper length will be shared with the northbound left turn lane into the RidgeGate King Soopers development.

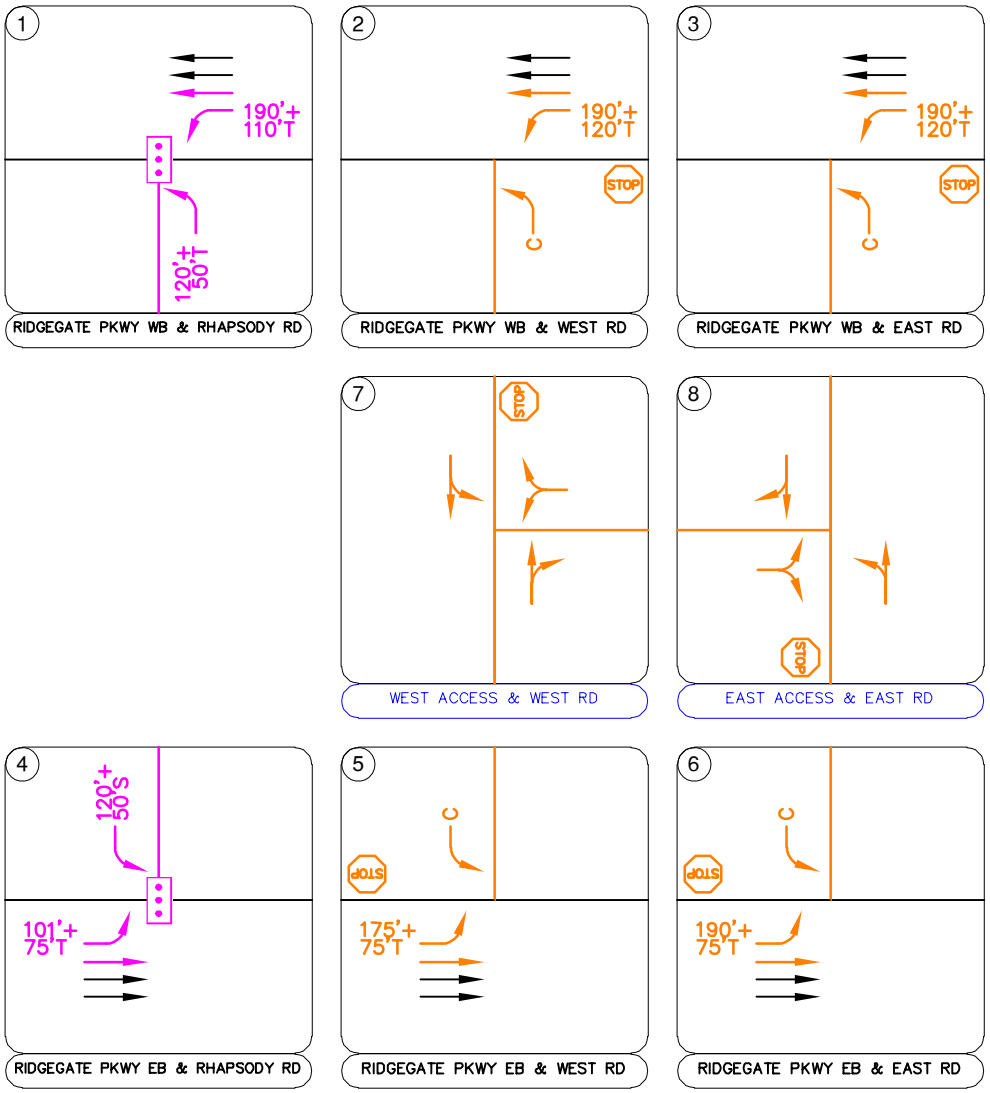
At the RidgeGate Parkway EB & West Road (#5) intersection, an eastbound left turn lane should be provided with 175 feet in length and a 75-foot taper. The RidgeGate Parkway EB & East Road (#6) intersection should provide an eastbound left turn lane 190 feet in length with a 75-foot taper. With the projected use of Rhapsody Road as a local collector by 2045, it is recommended that a westbound right turn lane be provided at the RidgeGate Parkway WB & Rhapsody Road (#1) intersection when the north leg of this intersection is constructed. This turn lane should provide 190 feet in length with a 120-foot taper. In like manner, an eastbound right turn lane should be provided with 190 feet in length and a 120-foot taper when the south leg of the RidgeGate Parkway EB & Rhapsody Road (#4) intersection is constructed. It is also recommended when development to the north of RidgeGate Parkway WB occurs that a westbound right turn lane be provided at the RidgeGate Parkway WB & East Road (#3) intersection be provided with 190 feet in length and a 120-foot taper.

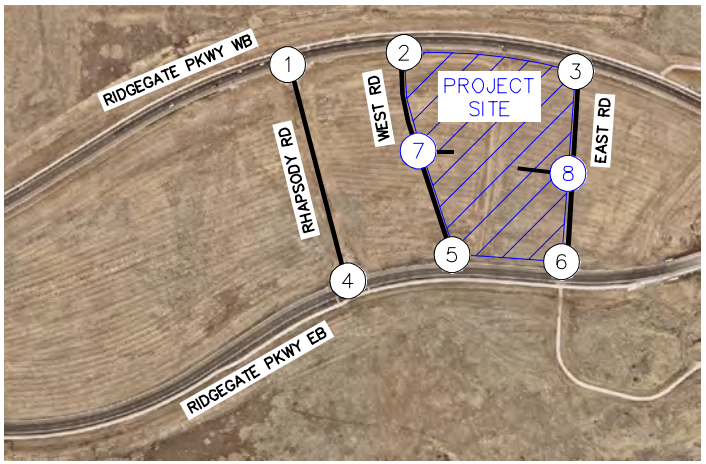
5.4 Pedestrian and Bicycle Evaluation

To address components of a multimodal traffic study, pedestrian and bicycle infrastructure evaluations were conducted. Sidewalk exists along both the eastbound and westbound RidgeGate Parkway couplets within the study area, with the sidewalk south of the eastbound direction able to be utilized as cycle track as it provides approximately a 12-foot width. Bicycle lanes and sidewalk are also anticipated to be provided along each side of Rhapsody Road. Sidewalk is anticipated to be provided traveling north-south along the perimeter of the project site along West Road and East Road, in addition to sidewalk anticipated to be provided along the north and south ends of the project to connect West Road to East Road. Crosswalks are also anticipated to be provided in each direction at the RidgeGate Parkway WB and EB & Rhapsody Road intersections (#1 & #4). Crosswalks are also anticipated to be provided at the West Road and East Road intersections (#2, #3, #5, #6) to cross east-west across East Road and West Road. Sidewalk will also be provided onsite as appropriate to provide safe access to the apartment units from the parking lot as well to and from the amenities anticipated to be provided by the apartment complex to residents. As the surrounding area continues to develop as part of the overall RidgeGate East Planned Development, these pedestrian and bicycle facilities will serve the larger community and provide safer access to the development.

5.5 Improvement Summary

Based on the results of the intersection operational and vehicle queuing analysis, the key intersection recommended improvements and control are shown in **Figure 12** for the 2025 horizon and in **Figure 13** for the 2045 long-term planning horizon.

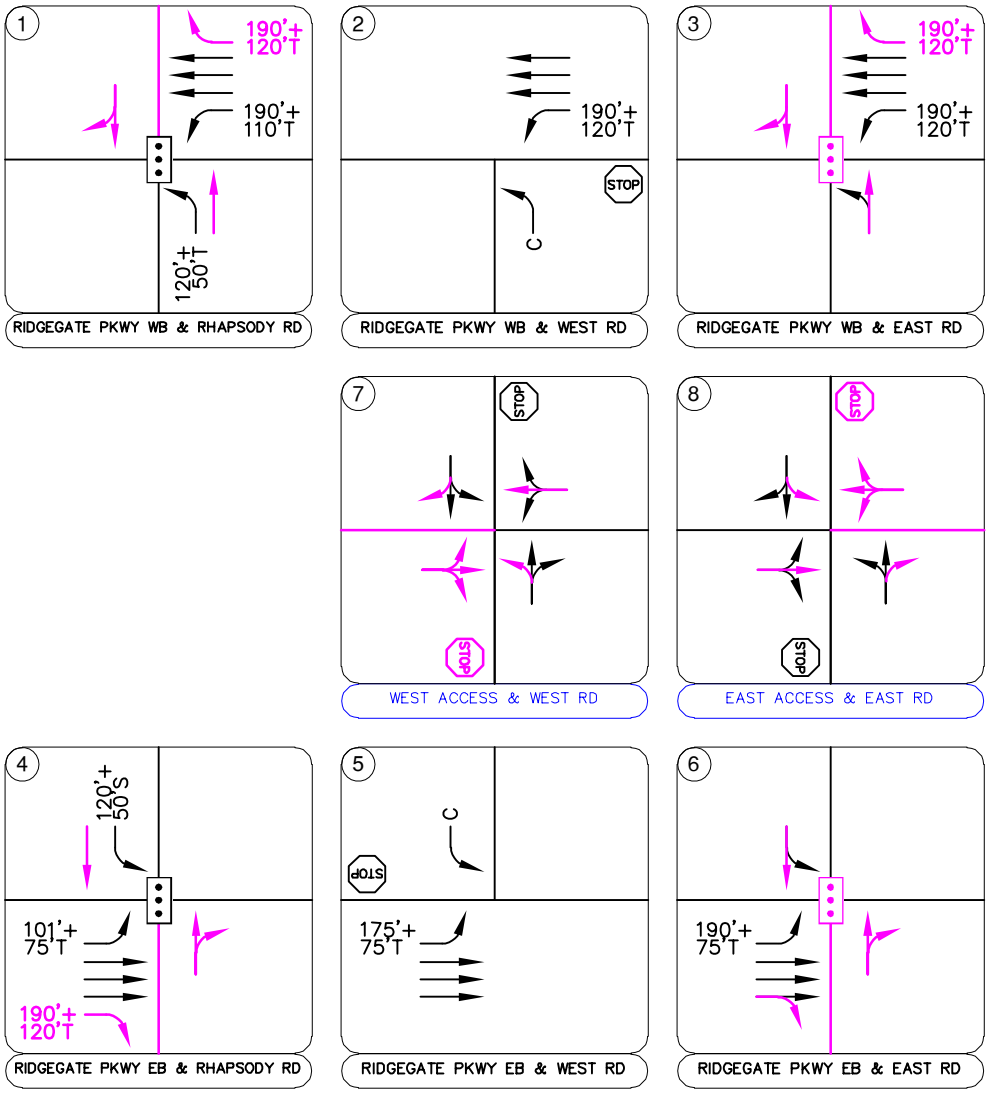




LEGEND

- Study Area Key Intersection
- Project Access Intersection
- Signalized Intersection
- Stop Controlled Approach
- Improvement By Others
- Recommended Improvement
- 100'+ Turn Lane Length (feet)
  100'T Taper Length (feet)
  100'S Shared Taper Length (feet)

FIGURE 12
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2025 RECOMMENDED GEOMETRY AND CONTROL



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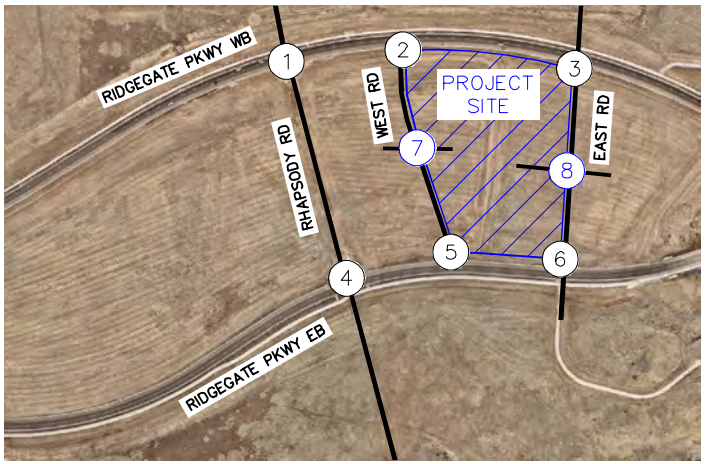


LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- Signalized Intersection
- STOP Stop Controlled Approach
- Improvement By Others
- 100'+ Turn Lane Length (feet)
  100'T Taper Length (feet)
  100'S Shared Taper Length (feet)

FIGURE 13
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 RECOMMENDED GEOMETRY AND CONTROL

Kimley»Horn

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, Kimley-Horn believes RidgeGate Couplet Apartments will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

2025 Recommendations

- Bicycle lanes and sidewalk are anticipated to be provided along each side of Rhapsody Road. Sidewalk is anticipated to be provided traveling north-south along the perimeter of the project site along West Road and East Road, in addition to sidewalk anticipated to be provided along the north and south ends of the project to connect West Road to East Road. Crosswalks are also anticipated to be provided in each direction at the RidgeGate Parkway WB and EB & Rhapsody Road intersections (#1 & #4). Crosswalks are also anticipated to be provided at the West Road and East Road intersections (#2, #3, #5, #6) to cross east-west across East Road and West Road. Sidewalk will also be provided onsite as appropriate to provide safe access to the apartment units from the parking and to and from other amenities anticipated to be provided by the apartment complex to residents.
- Rhapsody Road is proposed to be constructed as part of the RidgeGate King Soopers development with one through lane in each direction with on-street bicycle lanes and on-street parallel parking along both sides of the roadway. The RidgeGate Parkway WB & Rhapsody Road (#1) and the RidgeGate Parkway EB & Rhapsody Road (#4) intersections are anticipated to be signalized 'T'-intersections operating with full turning movements as appropriate on the one-way couplet. At these T-intersections, R3-1 No Right Turn signs should be installed at the approaches to RidgeGate Parkway and R6-1 "ONE WAY" signs should be posted along RidgeGate Parkway as appropriate to prevent vehicles from turning right and entering oncoming traffic. The RidgeGate Parkway WB & Rhapsody Road (#1) intersection should provide a westbound left turn lane with 190 feet in length and a 110-foot taper. A northbound left turn lane should also be provided with 120 feet in length and a 50-foot taper. The RidgeGate Parkway EB & Rhapsody Road (#4) intersection should provide an eastbound left turn lane 101 feet in length with a 75-foot taper. This intersection should also provide a southbound left turn lane with 120 feet in length and a 50-foot taper. Any improvements to the Rhapsody Road intersections (#1 and #4) should be provided in construction of the RidgeGate

King Soopers development. Of note, as Rhapsody Road is anticipated to provide north and south legs on either side of RidgeGate Parkway before 2045, it is recommended that sufficient pavement width be provided, and chevron striping be placed where the future southbound through and northbound through lanes will be placed.

- RidgeGate Parkway is anticipated to use the existing available pavement width to restripe the roadway to provide three through lanes in each direction within the study area during this horizon. It is recommended that the existing striped-out inside lane along RidgeGate Parkway in both directions be striped as the third through lane.
- Along RidgeGate Parkway WB, westbound left turn lanes should be provided at the West Road (#2) and East Road (#3) intersections. At the West Road (#2) intersection, a westbound left turn lane 190 feet in length with a 120-foot taper should be provided. The East Road (#3) intersection should also provide a westbound left turn lane 190 feet in length with a 120-foot taper. The northbound approach to each of these intersections are anticipated to be for northbound left turning movements and should be stop-controlled with R1-1 “STOP” signs placed at each northbound approach to these intersections. R3-1 No Right Turn signs should be placed underneath the “STOP” signs while R6-1 “ONE WAY” signs should be placed along RidgeGate Parkway WB as appropriate to prevent vehicles from turning right and entering oncoming traffic.
- Along RidgeGate Parkway EB, eastbound left turn lanes should be provided at the West Road (#5) and East Road (#6) intersections. Due to intersection spacing, the East Road (#5) intersection should provide an eastbound left turn lane 175 feet in length with a 75-foot taper. At the East Road (#6) intersection, an eastbound left turn lane with 190 feet in length and a 75-foot taper should be provided. The southbound approach to each of these intersections are anticipated to be for southbound left turning movements and should be stop-controlled with R1-1 “STOP” signs placed at each southbound approach to these intersections. R3-1 No Right Turn signs should be placed underneath the “STOP” signs while R6-1 “ONE WAY” signs should be placed along RidgeGate Parkway EB as appropriate to prevent vehicles from turning right and entering oncoming traffic.
- The East Road and West Road are both anticipated to operate well with one through lane in each direction with turning movements occurring from within the proposed through lanes.

- Two full movement accesses are proposed to be constructed with this project, with the West Access (#7) located along the West Road and the East Access (#8) located along the East Road. Each approach exiting the development should operate well with a shared left/right turn lane and should be stop-controlled with an R1-1 “STOP” sign.

2045 Recommendations

- The north and south legs of Rhapsody Road on either side of RidgeGate Parkway are anticipated to be constructed before the 2045 long-term horizon. When these legs are constructed, the two Rhapsody Road intersections (#1 and #4) will become four-leg signalized intersections. When this construction occurs, a westbound right turn lane 190 feet in length with a 120-foot taper should be provided at the RidgeGate Parkway WB & Rhapsody Road (#1) intersection while an eastbound right turn lane 190 feet in length with a 120-foot taper should be provided at the RidgeGate Parkway EB & Rhapsody Road (#4) intersection.
- The north and south legs of East Road on either side of RidgeGate Parkway are anticipated to be constructed before the 2045 long-term horizon. When these legs are constructed, the two East Road intersections (#3 and #6) will become four-leg signalized intersections. When this construction occurs, a westbound right turn lane 190 feet in length with a 120-foot taper should be provided at the RidgeGate Parkway WB & East Road (#3) intersection while the RidgeGate Parkway EB & East Road (#6) intersection is anticipated to operate well with eastbound right turning movements occurring from within the third eastbound through lane. The northbound and southbound approaches to each of these intersections along East Road are anticipated to operate well through the 2045 horizon with a shared lane for left/through or through/right turn lanes where appropriate.
- When the parcel to the west of the project site is developed, access along West Road should align with the West Access (#7) proposed in this project if an access to that development is anticipated along West Road. In like manner, when the parcel to the east of the project site is developed, access along East Road should align with the East Access (#8) constructed in this project if an access to that development is anticipated along East Road.

General Recommendations

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Lone Tree and the Manual on Uniform Traffic Control Devices (MUTCD) – 2009 Edition.

APPENDICES

APPENDIX A

Intersection Count Sheets

Ridgeview Data Collection

Lone Tree, CO
Ridgegate King Soopers
AM Peak
Ridgegate Pkwy and Peoria St

File Name : Ridgegate and Peoria AM
Site Code : IPO 609
Start Date : 7/7/2022
Page No : 1

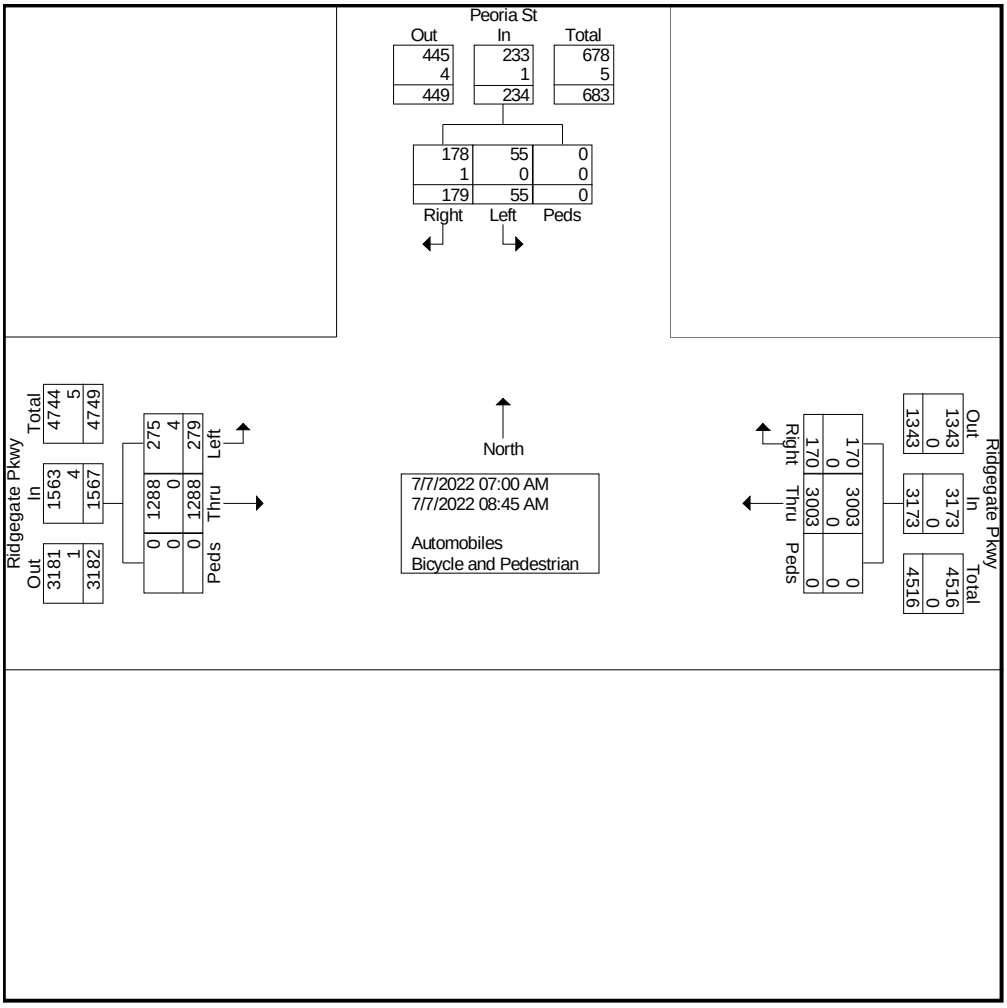
Groups Printed- Automobiles - Bicycle and Pedestrian

	Ridgegate Pkwy Eastbound				Ridgegate Pkwy Westbound				Peoria St Southbound				
Start Time	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
07:00 AM	34	130	0	164	343	15	0	358	3	21	0	24	546
07:15 AM	30	169	0	199	397	21	0	418	6	22	0	28	645
07:30 AM	37	145	0	182	418	29	0	447	7	24	0	31	660
07:45 AM	41	173	0	214	421	20	0	441	11	19	0	30	685
Total	142	617	0	759	1579	85	0	1664	27	86	0	113	2536
08:00 AM	34	155	0	189	363	24	0	387	6	20	0	26	602
08:15 AM	38	168	0	206	349	18	0	367	10	25	0	35	608
08:30 AM	40	179	0	219	334	17	0	351	7	28	0	35	605
08:45 AM	25	169	0	194	378	26	0	404	5	20	0	25	623
Total	137	671	0	808	1424	85	0	1509	28	93	0	121	2438
Grand Total	279	1288	0	1567	3003	170	0	3173	55	179	0	234	4974
Apprch %	17.8	82.2	0		94.6	5.4	0		23.5	76.5	0		
Total %	5.6	25.9	0	31.5	60.4	3.4	0	63.8	1.1	3.6	0	4.7	
Automobiles	275	1288	0	1563	3003	170	0	3173	55	178	0	233	4969
% Automobiles	98.6	100	0	99.7	100	100	0	100	100	99.4	0	99.6	99.9
Bicycle and Pedestrian	4	0	0	4	0	0	0	0	0	1	0	1	5
% Bicycle and Pedestrian	1.4	0	0	0.3	0	0	0	0	0	0.6	0	0.4	0.1

Ridgeview Data Collection

Lone Tree, CO
Ridgegate King Soopers
AM Peak
Ridgegate Pkwy and Peoria St

File Name : Ridgegate and Peoria AM
Site Code : IPO 609
Start Date : 7/7/2022
Page No : 2

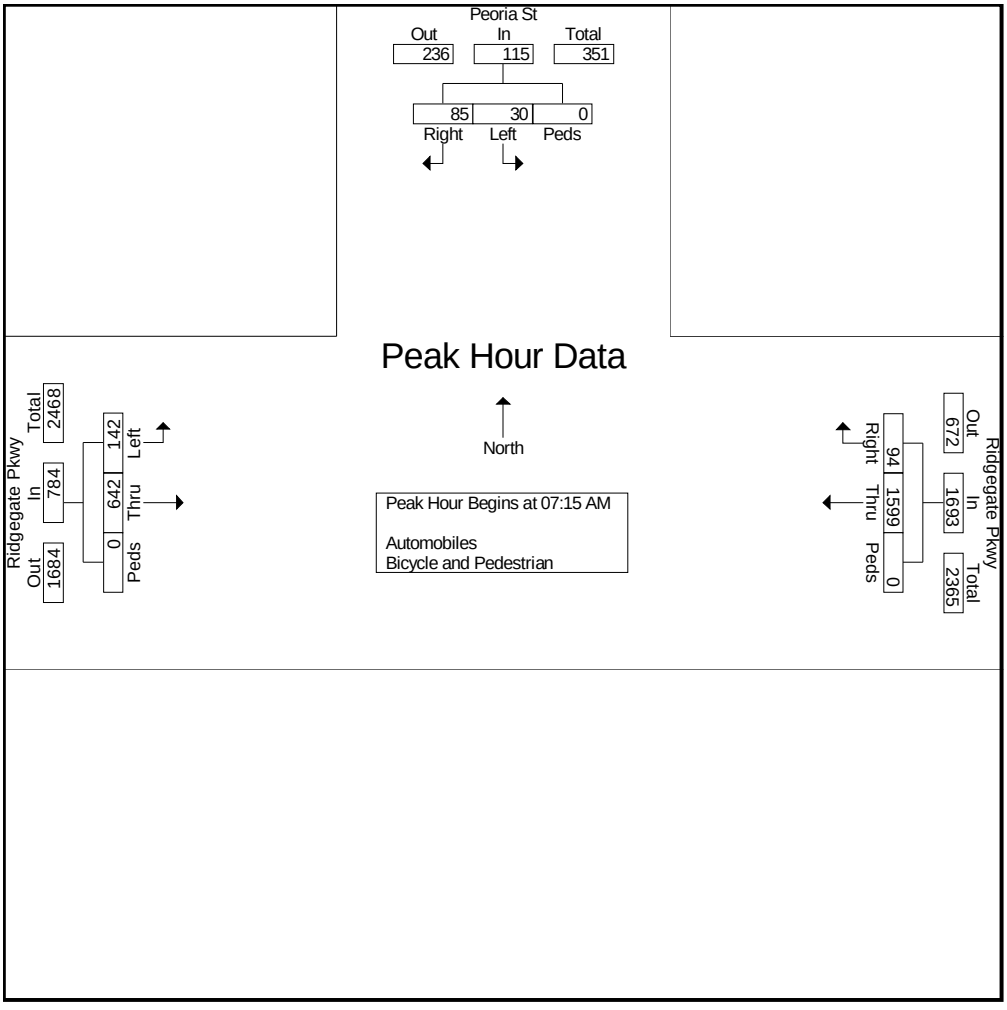


Ridgeview Data Collection

Lone Tree, CO
Ridgegate King Soopers
AM Peak
Ridgegate Pkwy and Peoria St

File Name : Ridgegate and Peoria AM
Site Code : IPO 609
Start Date : 7/7/2022
Page No : 3

	Ridgegate Pkwy Eastbound				Ridgegate Pkwy Westbound				Peoria St Southbound				
Start Time	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	30	169	0	199	397	21	0	418	6	22	0	28	645
07:30 AM	37	145	0	182	418	**29**	0	**447**	7	**24**	0	**31**	660
07:45 AM	**41**	**173**	0	**214**	**421**	20	0	441	**11**	19	0	30	**685**
08:00 AM	34	155	0	189	363	24	0	387	6	20	0	26	602
Total Volume	142	642	0	784	1599	94	0	1693	30	85	0	115	2592
% App. Total	18.1	81.9	0		94.4	5.6	0		26.1	73.9	0		
PHF	.866	.928	.000	.916	.950	.810	.000	.947	.682	.885	.000	.927	.946



Ridgeview Data Collection

Lone Tree, CO
Ridgegate King Soopers
PM Peak
Ridgegate Pkwy and Peoria St

File Name : Ridgegate and Peoria PM
Site Code : IPO 609
Start Date : 7/7/2022
Page No : 1

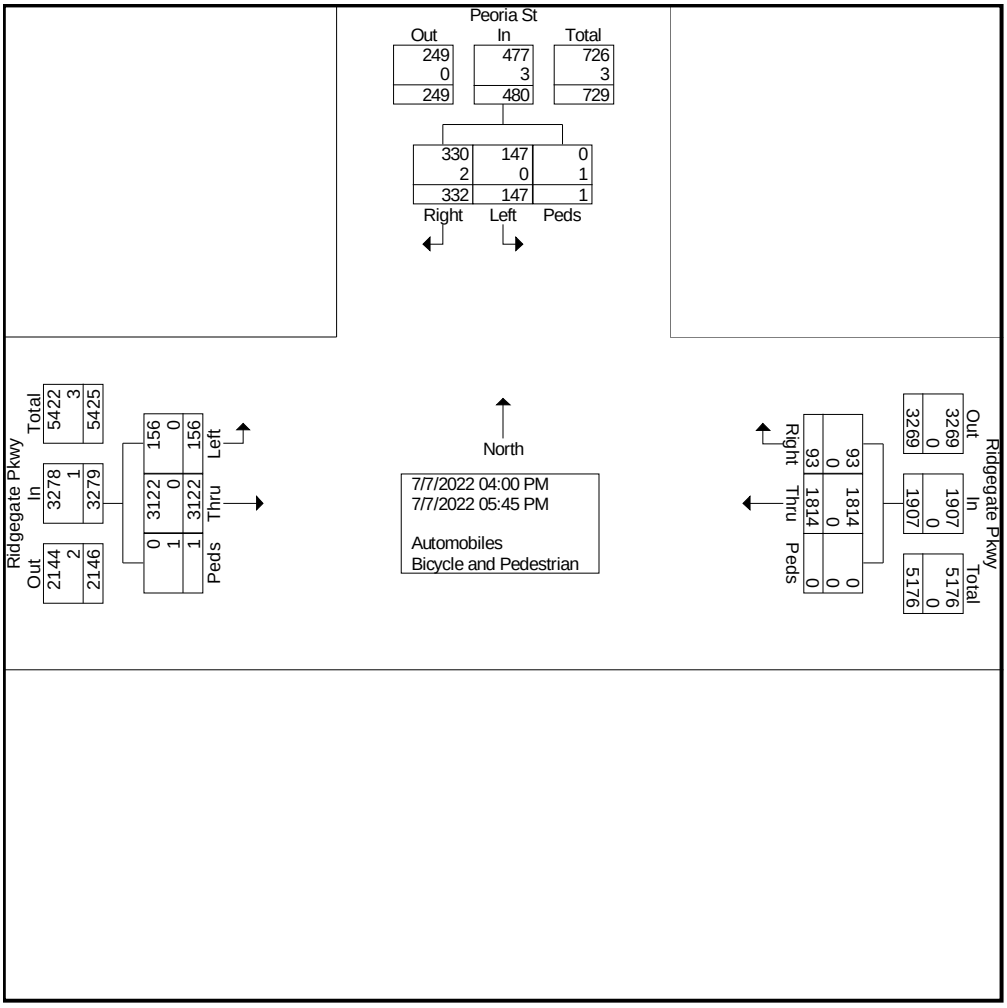
Groups Printed- Automobiles - Bicycle and Pedestrian

	Ridgegate Pkwy Eastbound				Ridgegate Pkwy Westbound				Peoria St Southbound				
Start Time	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
04:00 PM	14	354	0	368	217	11	0	228	17	40	0	57	653
04:15 PM	15	375	0	390	247	12	0	259	16	43	0	59	708
04:30 PM	27	387	0	414	227	10	0	237	11	44	0	55	706
04:45 PM	18	406	1	425	201	12	0	213	16	38	1	55	693
Total	74	1522	1	1597	892	45	0	937	60	165	1	226	2760
05:00 PM	29	411	0	440	209	11	0	220	30	42	0	72	732
05:15 PM	19	420	0	439	256	13	0	269	22	50	0	72	780
05:30 PM	20	381	0	401	212	14	0	226	18	43	0	61	688
05:45 PM	14	388	0	402	245	10	0	255	17	32	0	49	706
Total	82	1600	0	1682	922	48	0	970	87	167	0	254	2906
Grand Total	156	3122	1	3279	1814	93	0	1907	147	332	1	480	5666
Apprch %	4.8	95.2	0		95.1	4.9	0		30.6	69.2	0.2		
Total %	2.8	55.1	0	57.9	32	1.6	0	33.7	2.6	5.9	0	8.5	
Automobiles	156	3122	0	3278	1814	93	0	1907	147	330	0	477	5662
% Automobiles	100	100	0	100	100	100	0	100	100	99.4	0	99.4	99.9
Bicycle and Pedestrian	0	0	1	1	0	0	0	0	0	2	1	3	4
% Bicycle and Pedestrian	0	0	100	0	0	0	0	0	0	0.6	100	0.6	0.1

Ridgeview Data Collection

Lone Tree, CO
Ridgegate King Soopers
PM Peak
Ridgegate Pkwy and Peoria St

File Name : Ridgegate and Peoria PM
Site Code : IPO 609
Start Date : 7/7/2022
Page No : 2

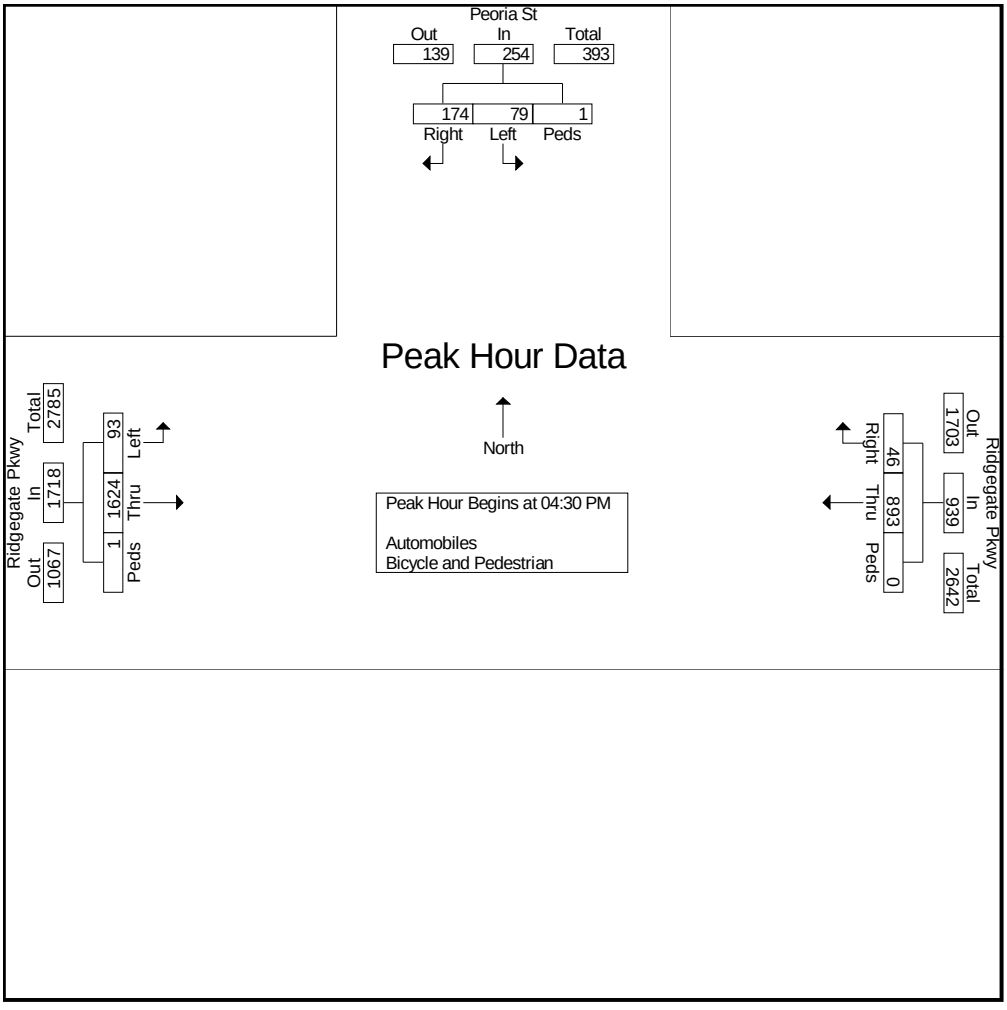


Ridgeview Data Collection

Lone Tree, CO
Ridgegate King Soopers
PM Peak
Ridgegate Pkwy and Peoria St

File Name : Ridgegate and Peoria PM
Site Code : IPO 609
Start Date : 7/7/2022
Page No : 3

	Ridgegate Pkwy Eastbound				Ridgegate Pkwy Westbound				Peoria St Southbound				
Start Time	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	27	387	0	414	227	10	0	237	11	44	0	55	706
04:45 PM	18	406	**1**	425	201	12	0	213	16	38	**1**	55	693
05:00 PM	**29**	411	0	**440**	209	11	0	220	**30**	42	0	**72**	732
05:15 PM	19	**420**	0	439	**256**	**13**	0	**269**	22	**50**	0	72	**780**
Total Volume	93	1624	1	1718	893	46	0	939	79	174	1	254	2911
% App. Total	5.4	94.5	0.1		95.1	4.9	0		31.1	68.5	0.4		
PHF	.802	.967	.250	.976	.872	.885	.000	.873	.658	.870	.250	.882	.933

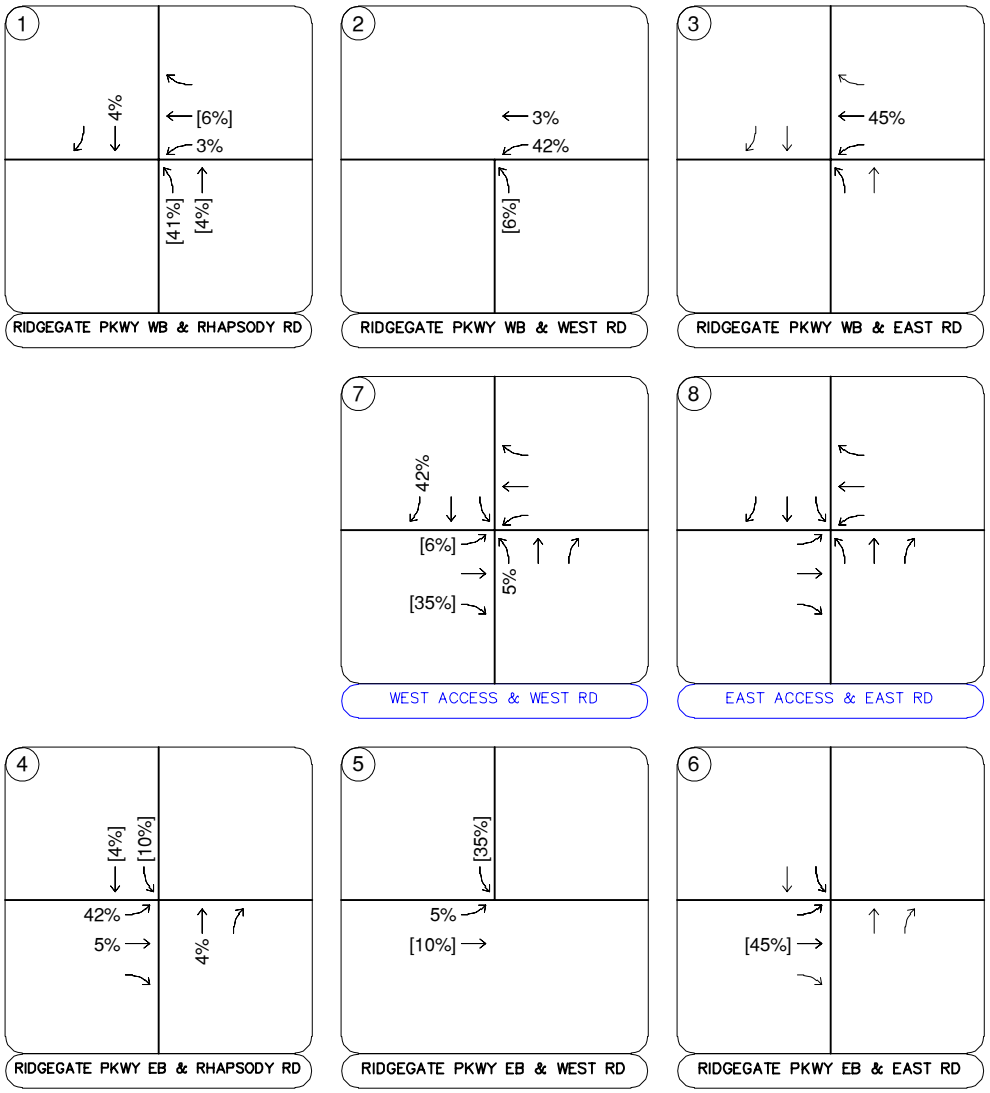


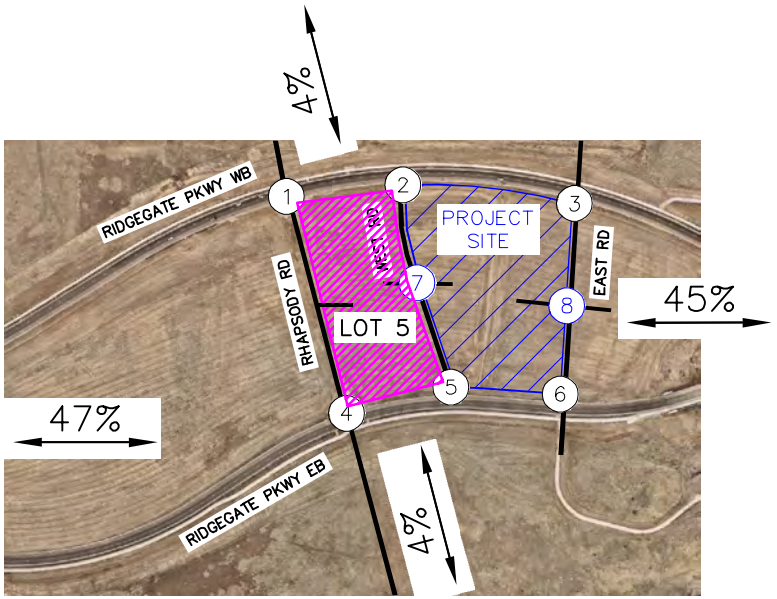
APPENDIX B

Future Traffic Projections and Adjacent Developments/Traffic Study

DRCOG Traffic Projections: Ridgegate King Soopers

Location	2020	2050	Growth Factor	Annual Growth
Ridgegate Parkway E/O Peoria St	23,000	43,000	1.87	**2.11%**





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NTS 196382001

LEGEND

X — Study Area Key Intersection

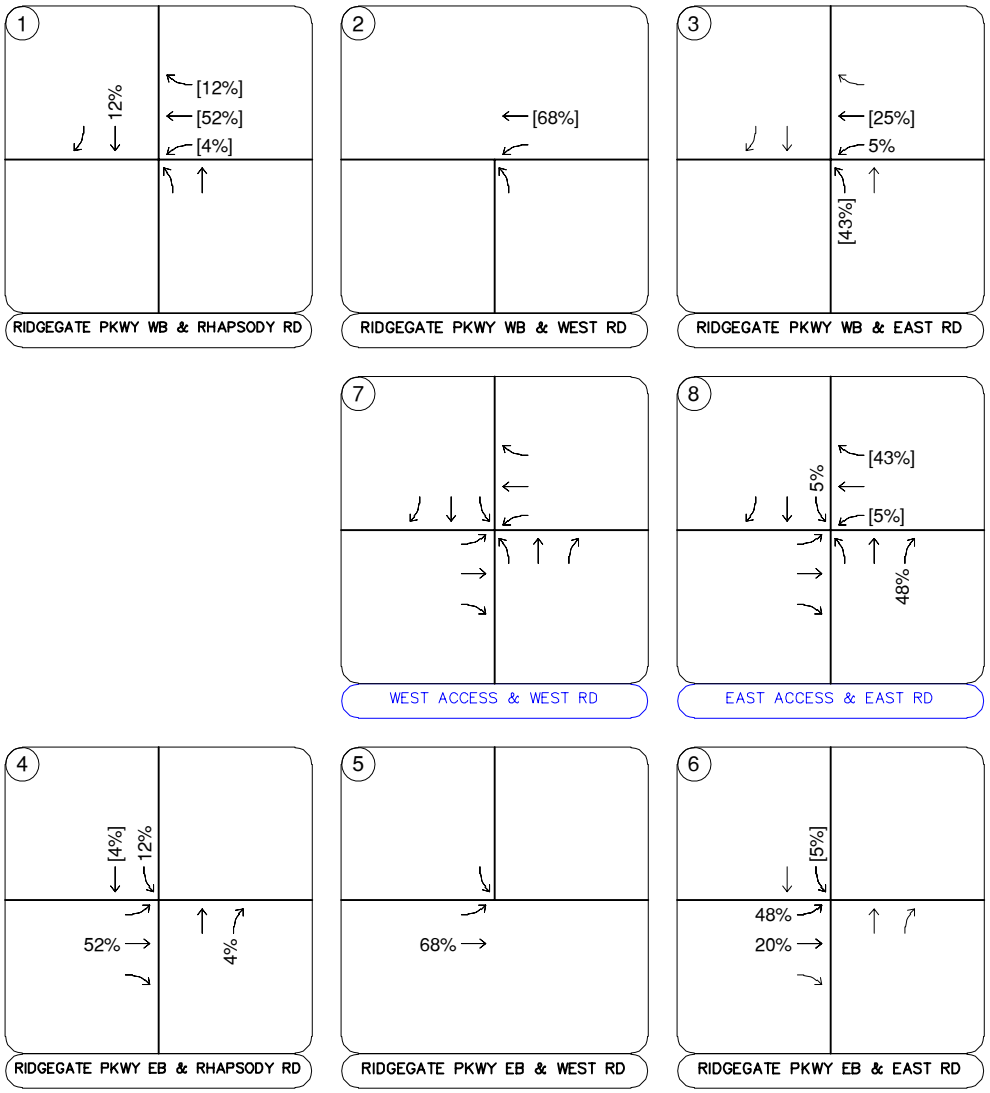
X — Project Access Intersection

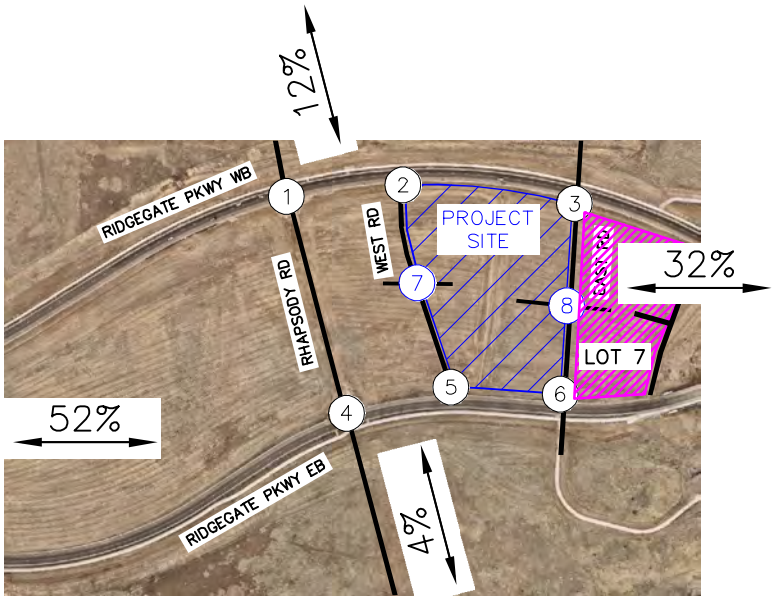
XX% — External Trip Distribution Percentage

XX%[XX%] — Entering[Exiting] Trip Distribution Percentage

FIGURE B1
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 ADJACENT LOT 5 RETAIL TRIP DISTRIBUTION

Kimley»Horn

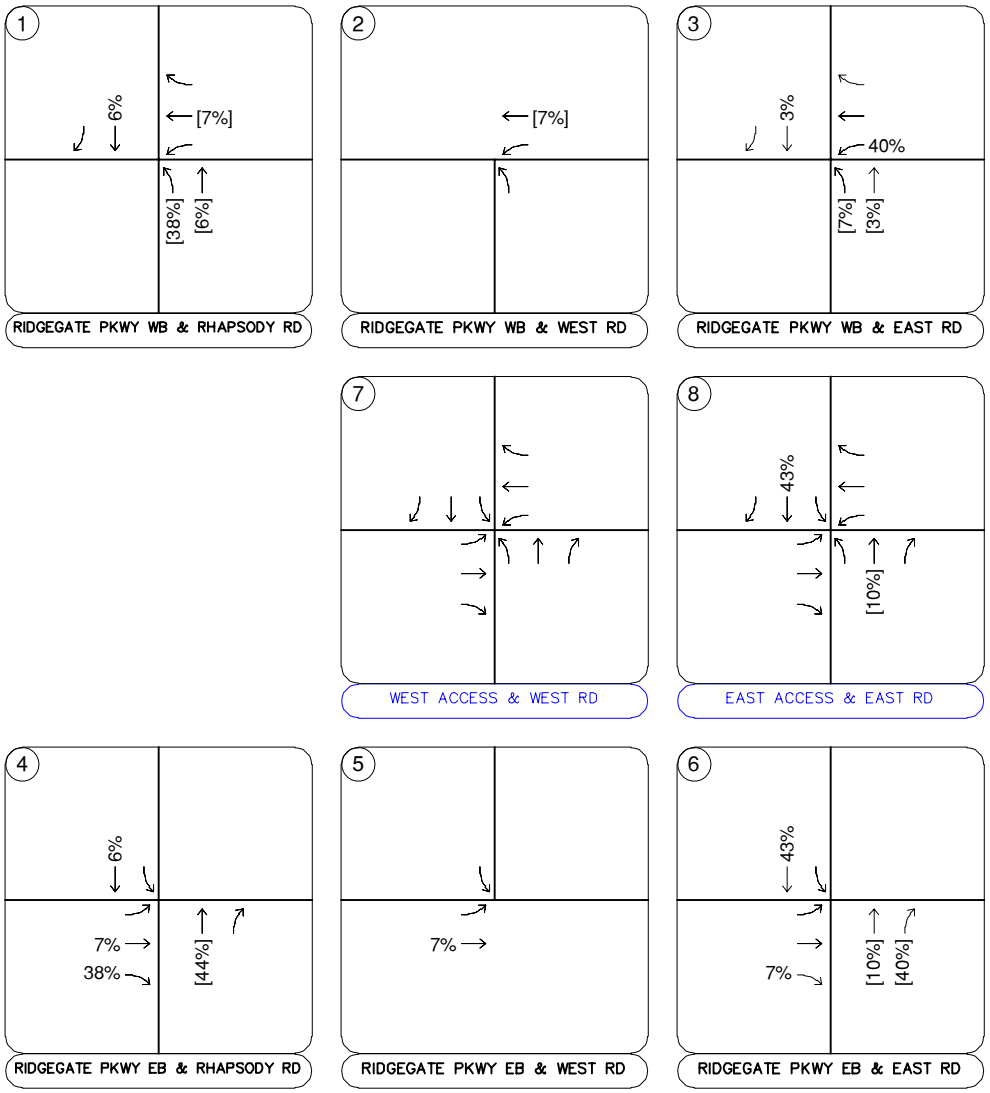


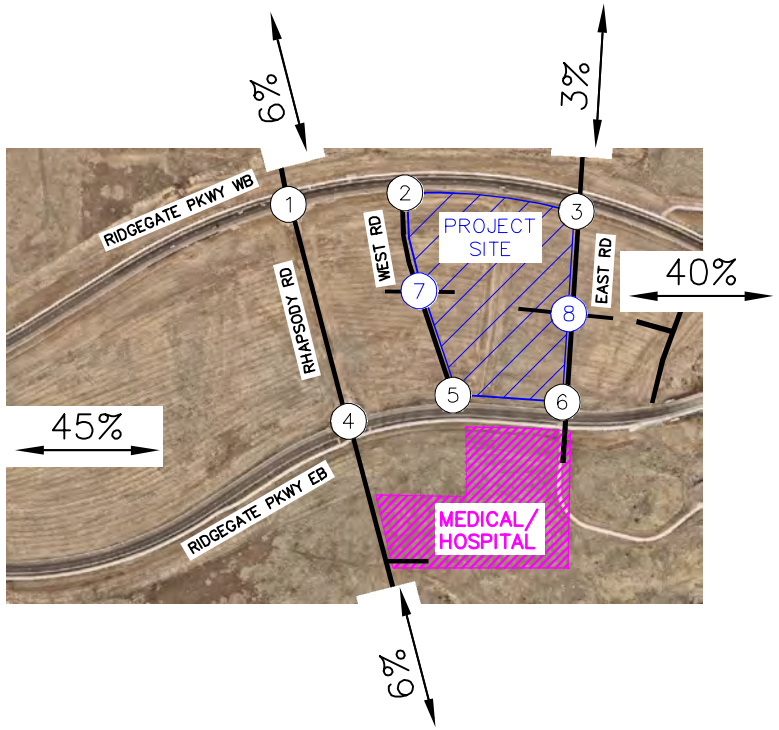


LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE B2
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 ADJACENT LOT 7 RESIDENTIAL TRIP DISTRIBUTION





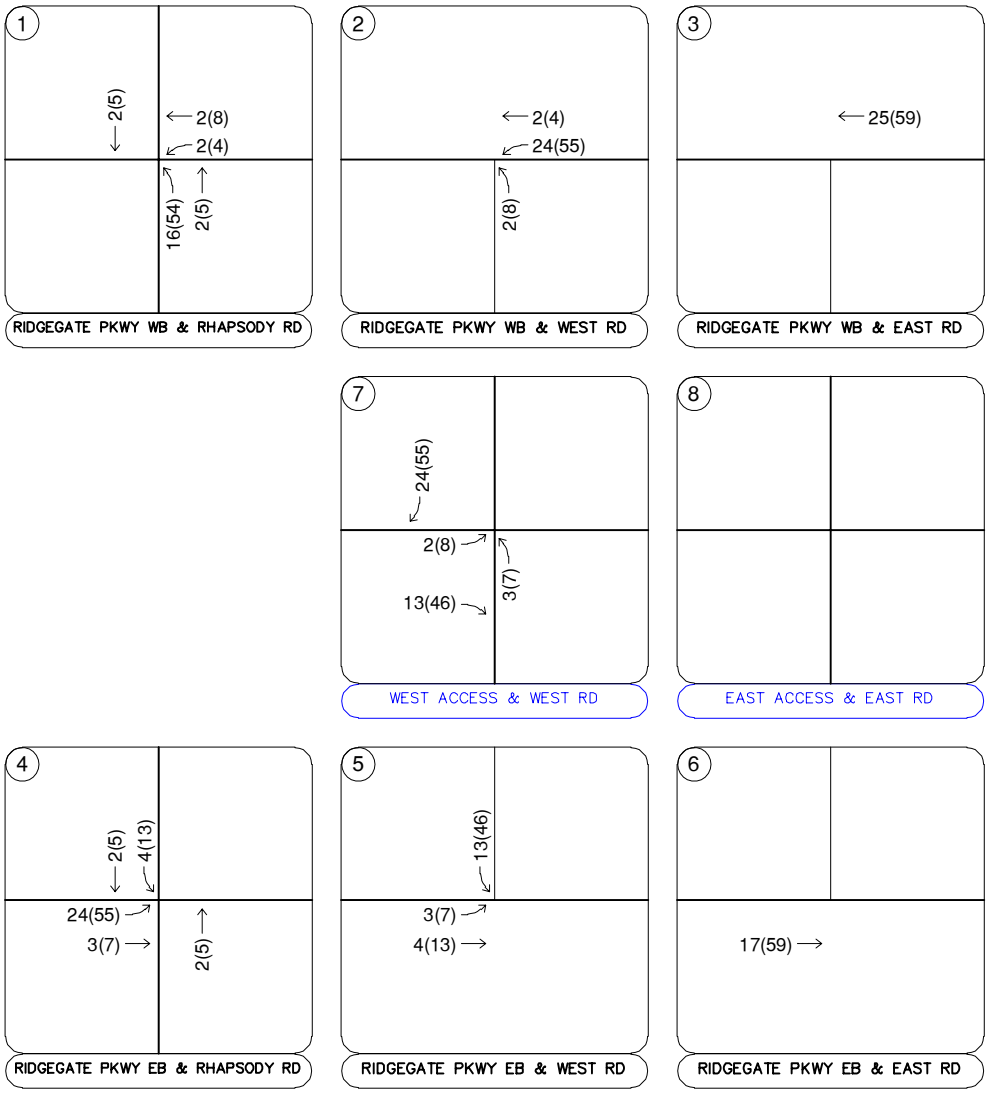
Kimley»Horn NORTH
NTS 196382001

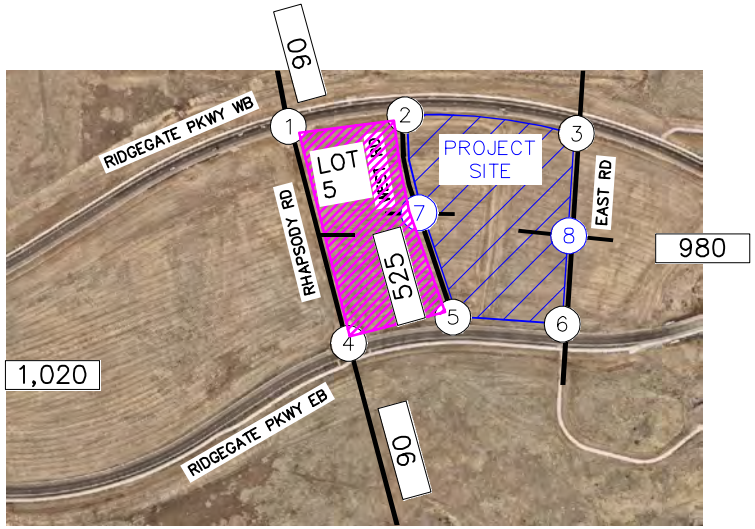
LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE B3
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 MEDICAL/HOSPITAL TRIP DISTRIBUTION

Kimley»Horn

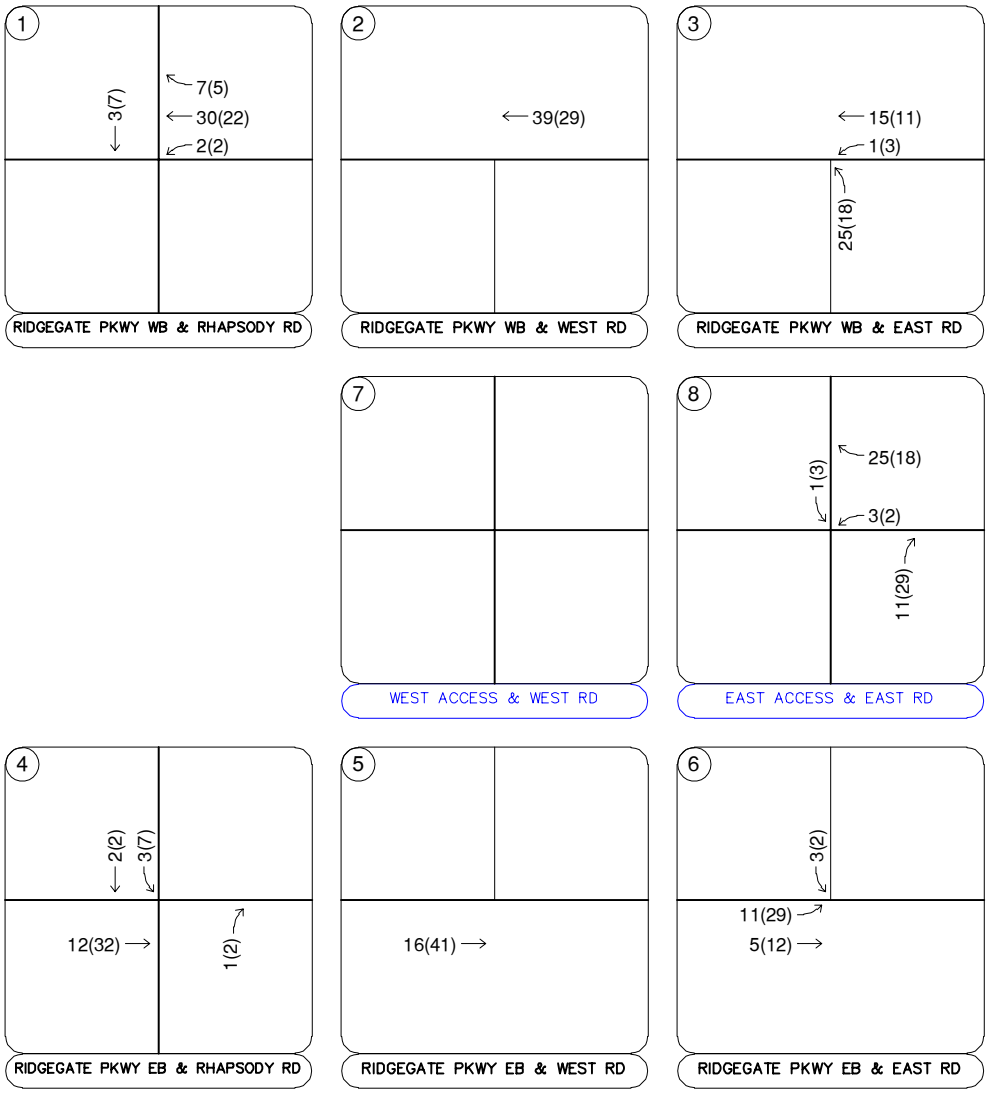


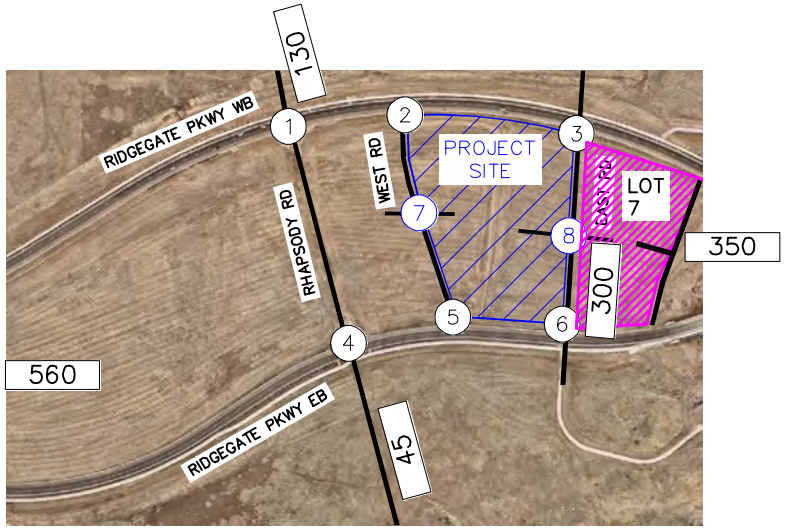


LEGEND

(X)	Study Area Key Intersection
(X)	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE B4
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 ADJACENT LOT 5 RETAIL TRAFFIC ASSIGNMENT

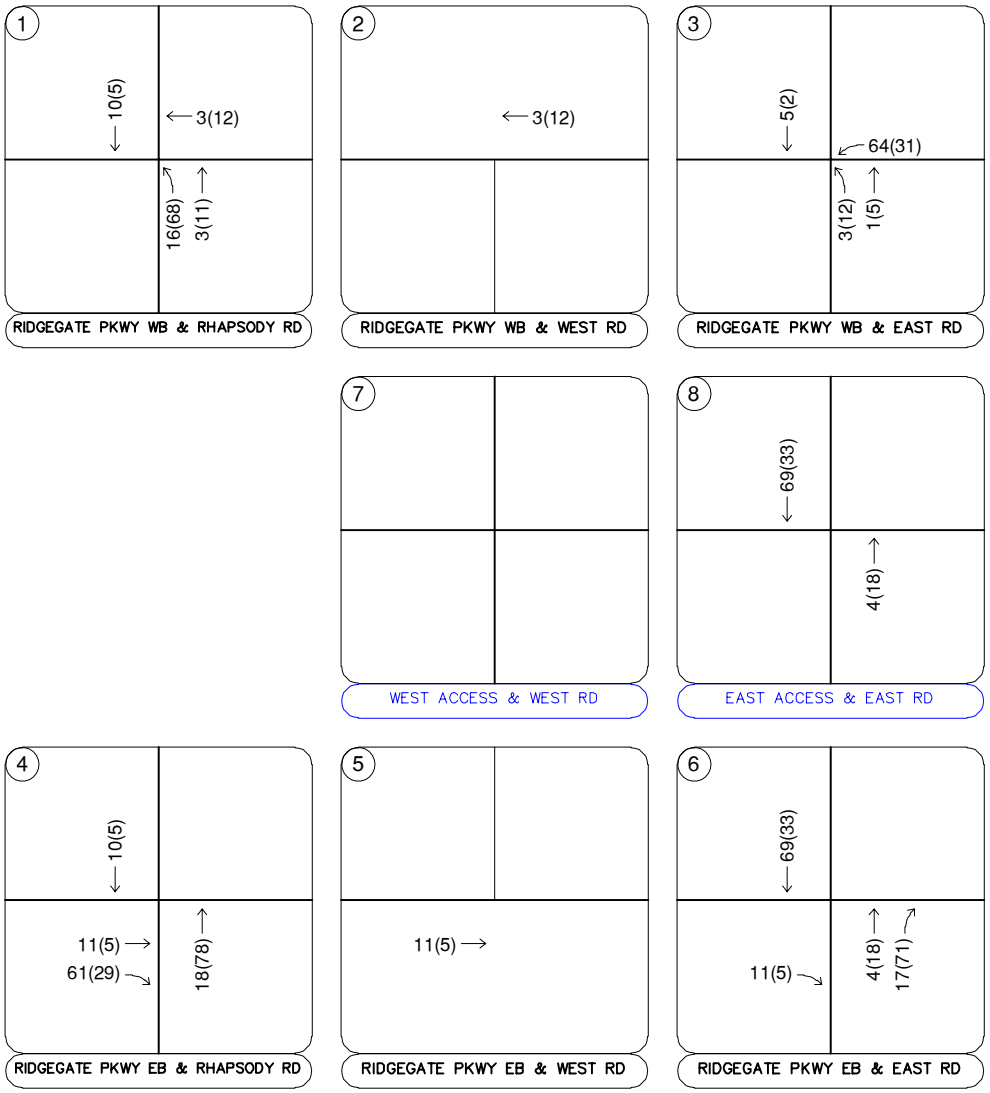


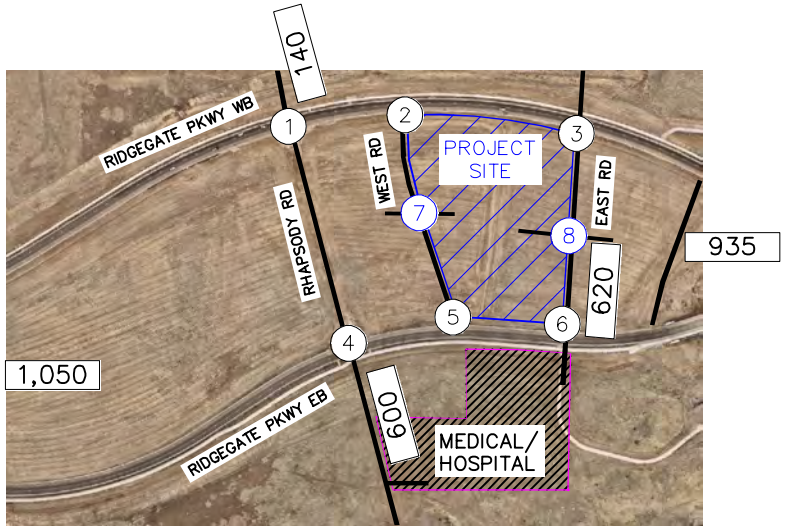


LEGEND

(X)	Study Area Key Intersection
(X)	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE B5
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 ADJACENT LOT 7 RESIDENTIAL TRAFFIC ASSIGNMENT





LEGEND

(X) Study Area Key Intersection

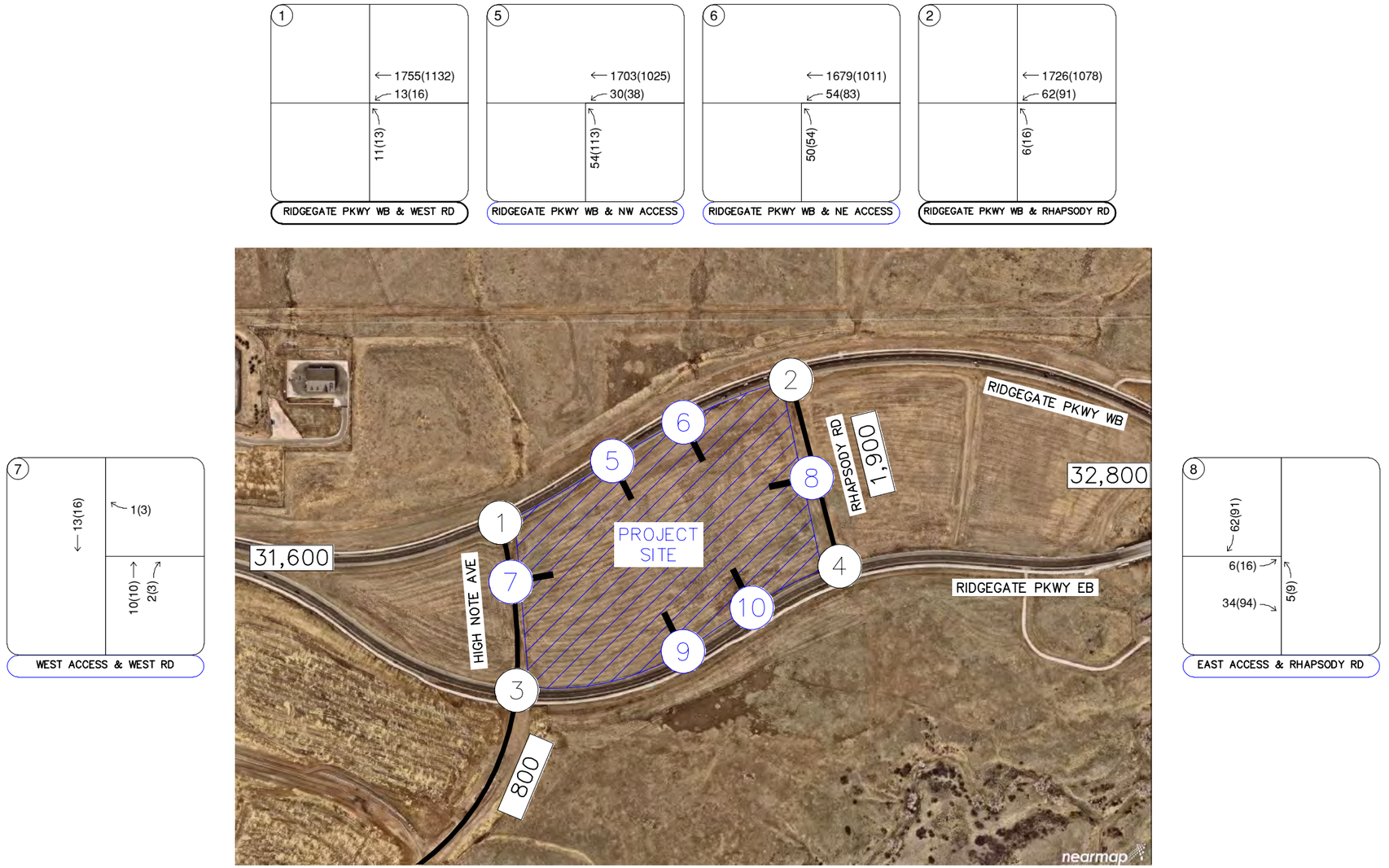
(X) Project Access Intersection

XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE B6
RIDGEGATE COUPLET APARTMENTS
LONE TREE, COLORADO
2045 MEDICAL/HOSPITAL TRAFFIC ASSIGNMENT

Kimley»Horn
NORTH
NTS 096083130



LEGEND

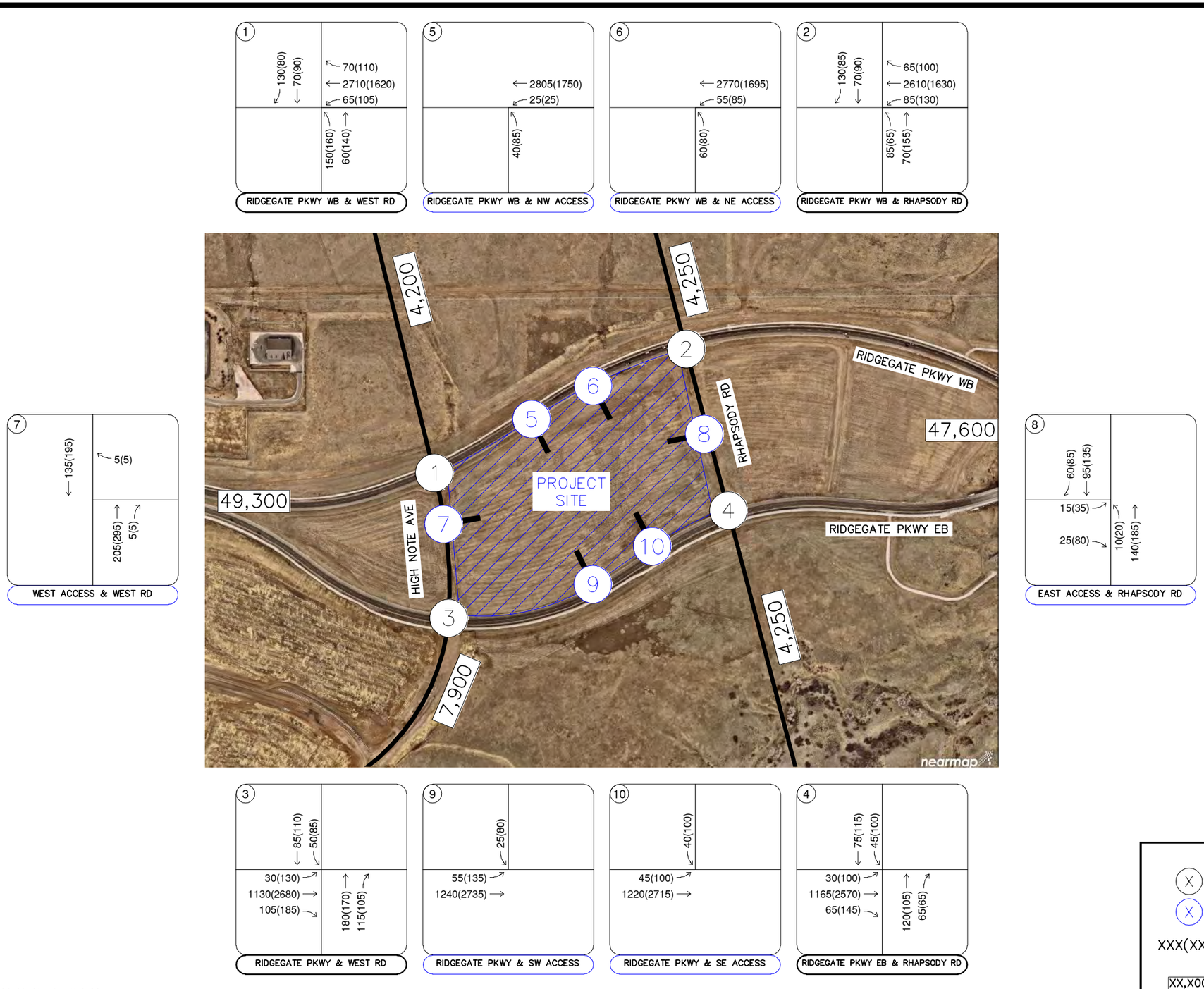
(X)	Study Area Key Intersection
(X)	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

RIDGEGATE KING SOOPERS
LONE TREE, COLORADO
2025 TOTAL TRAFFIC VOLUMES

FIGURE 13

Kimley»Horn

Kimley»Horn
NORTH
NTS 096083130



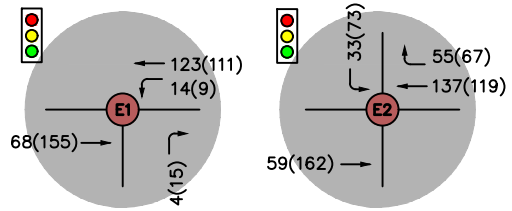
LEGEND

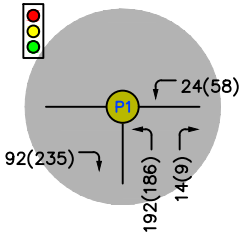
X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

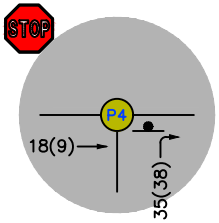
RIDGEGATE KING SOOPERS
LONE TREE, COLORADO
2045 TOTAL TRAFFIC VOLUMES

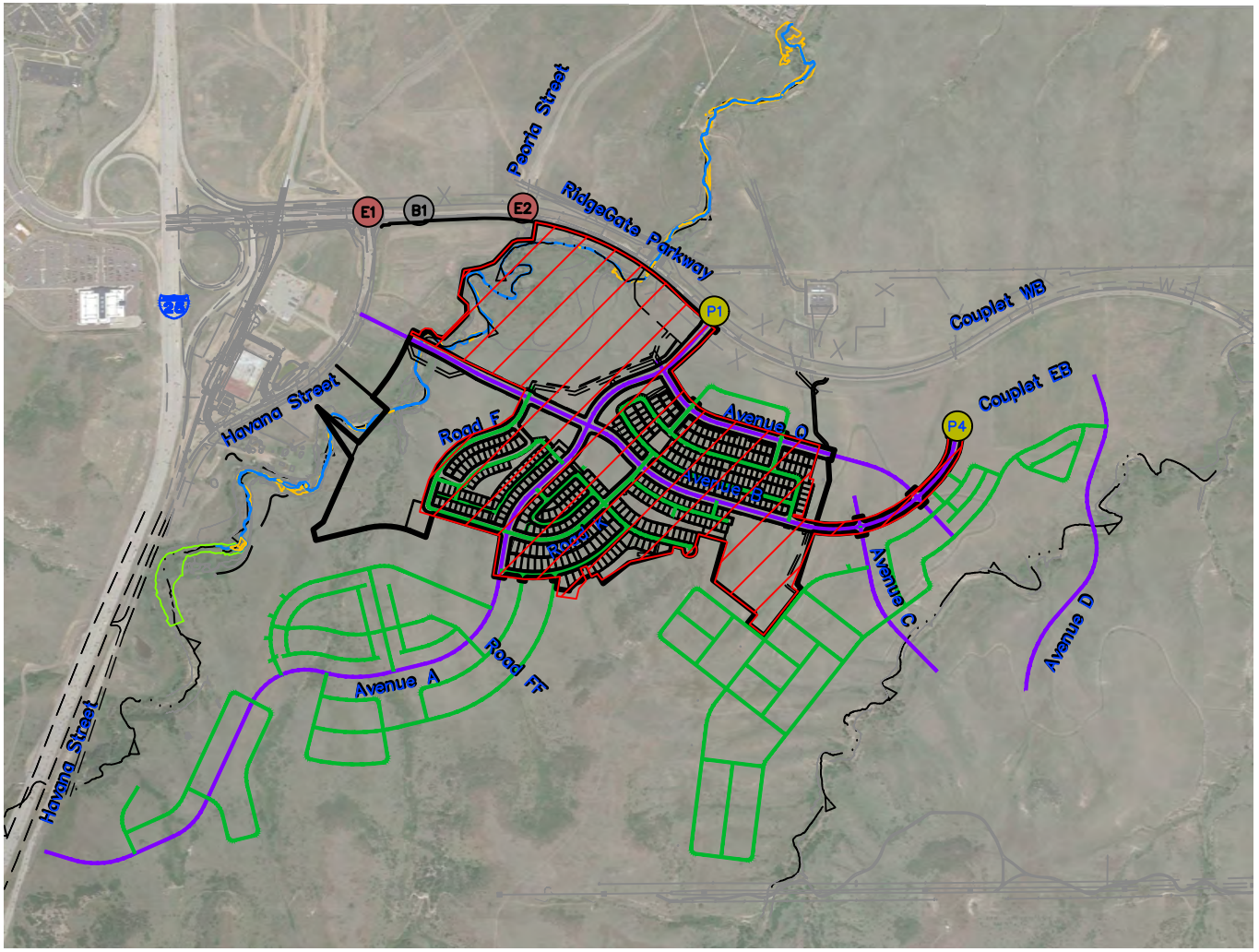
FIGURE 14

Kimley»Horn









LEGEND

- EXISTING INTERSECTION
- PROPOSED INTERSECTION – EXTERNAL
- PROPOSED INTERSECTION – INTERNAL
- AVERAGE DAILY TRAFFIC (ADT)
- XX (XX) AM (PM) PEAK HOUR TRIP DISTRIBUTION
- COLLECTOR ROAD
- LOCAL ROAD
- PROJECT SITE
- STOP SIGN CONTROL
- SIGNAL CONTROL

SITE GENERATED ADT

B1 3,100

1500 750 0 1500

ORIGINAL SCALE: 1" = 1500'

FIGURE 7 – YEAR 2022 SITE GENERATED TRAFFIC – EXTERNAL
RIDGEGATE SOUTHWEST VILLAGE FILING 1
PROJ. NO. 15950.01

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A Westrian Company
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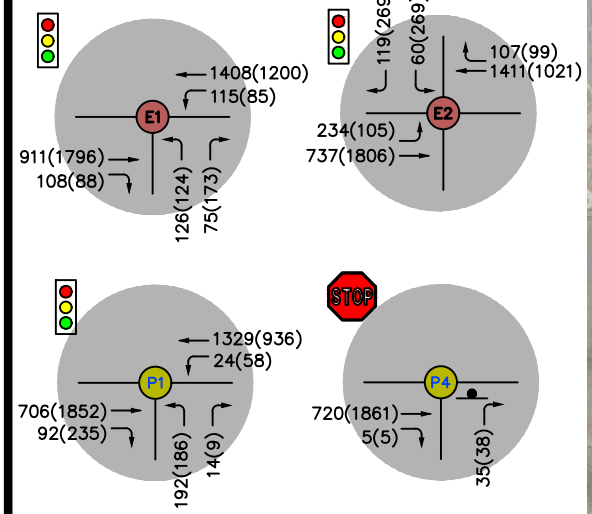
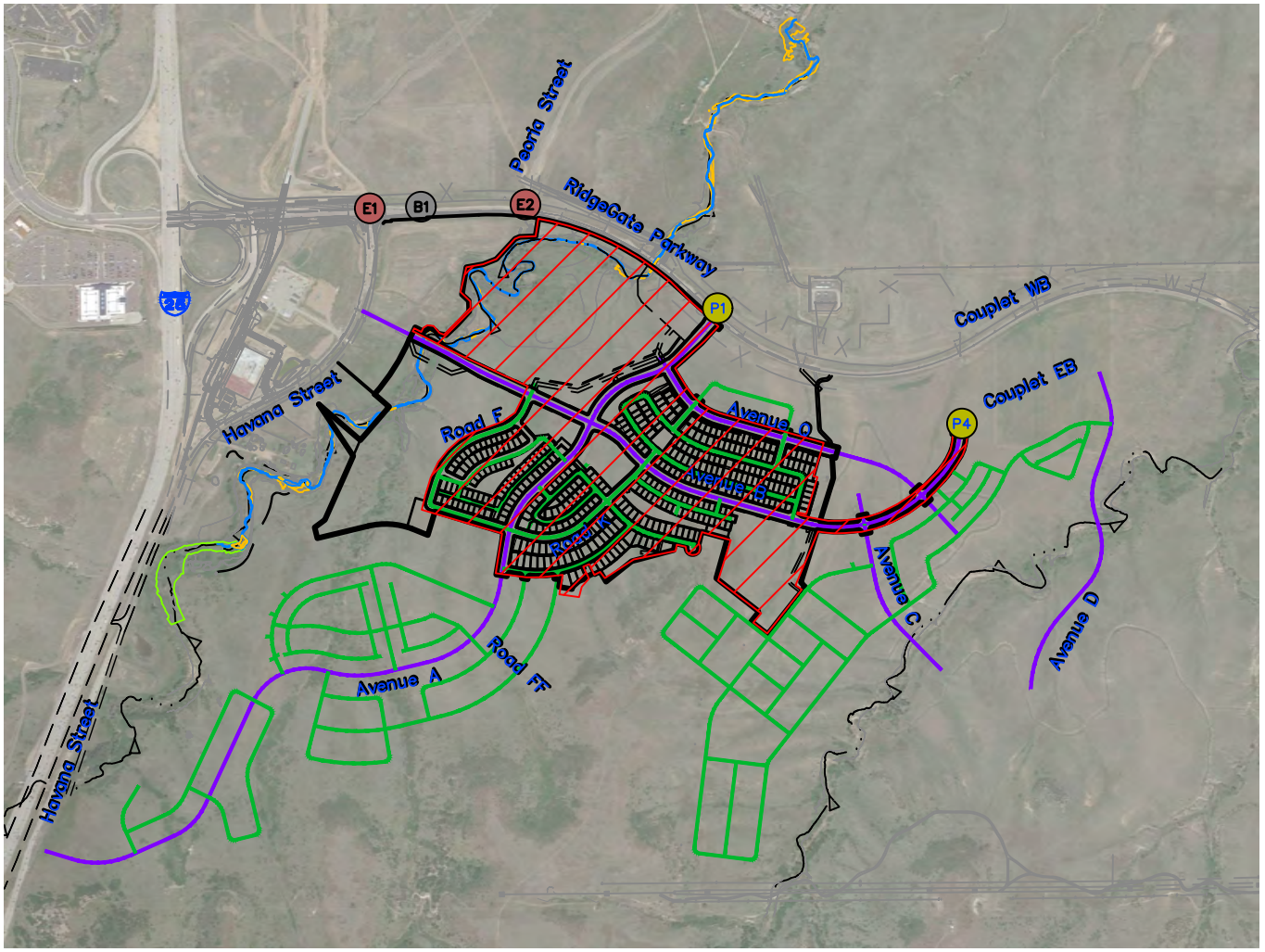
Fort Collins 970-491-9888 • www.jrengineering.com





LEGEND

- EXISTING INTERSECTION
- PROPOSED INTERSECTION – EXTERNAL
- PROPOSED INTERSECTION – INTERNAL
- AVERAGE DAILY TRAFFIC (ADT)
- XX (XX) AM (PM) PEAK HOUR TRIP DISTRIBUTION
- COLLECTOR ROAD
- LOCAL ROAD
- PROJECT SITE
- STOP SIGN CONTROL
- SIGNAL CONTROL

2022 TOTAL ADT

- B1 34,350

1500 750 0 1500

ORIGINAL SCALE: 1" = 1500'

FIGURE 8 – YEAR 2022
TOTAL TRAFFIC – EXTERNAL
RIDGEGATE SOUTHWEST VILLAGE
FILING 1
PROJ. NO. 15950.01

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Fort Collins 970-491-9888 • www.jrengineering.com

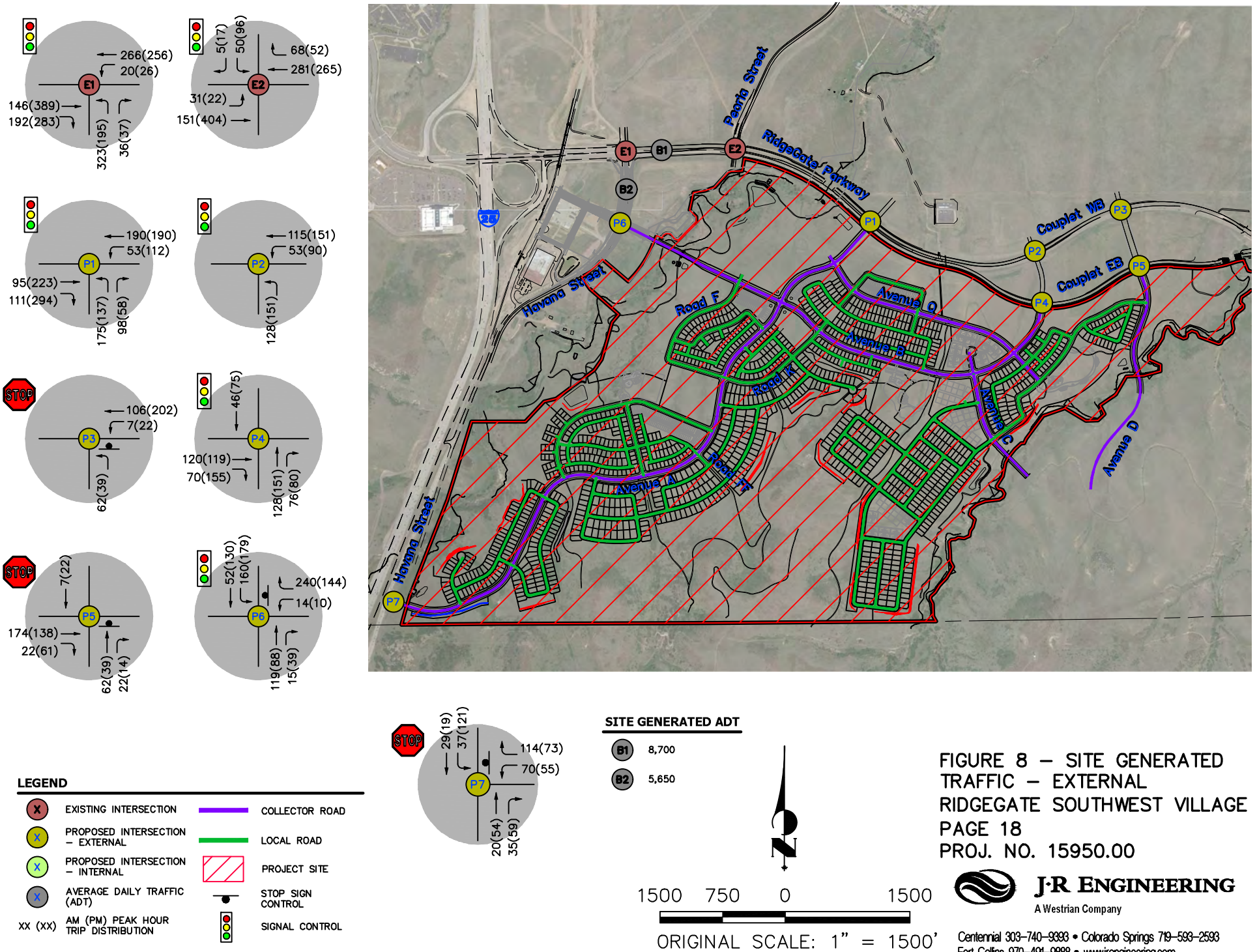

FIGURE 8 – SITE GENERATED TRAFFIC – EXTERNAL
RIDGEGATE SOUTHWEST VILLAGE
PAGE 18
PROJ. NO. 15950.00

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LINCOLN AVE

PEORIA ST

S PEC

SCHOOL SITE
90 AC

PARCEL 1
346.04 AC

PARCEL 1
AMENITY
4.50 AC

We will have to revise our plan to show this now as a continued residential collector some how

Typical Planned Signal

PA
8.75 AC

RIDGEGATE PKWY

PARCEL 2
320.27 AC

PARCEL 2
AMENITY
9.50 AC

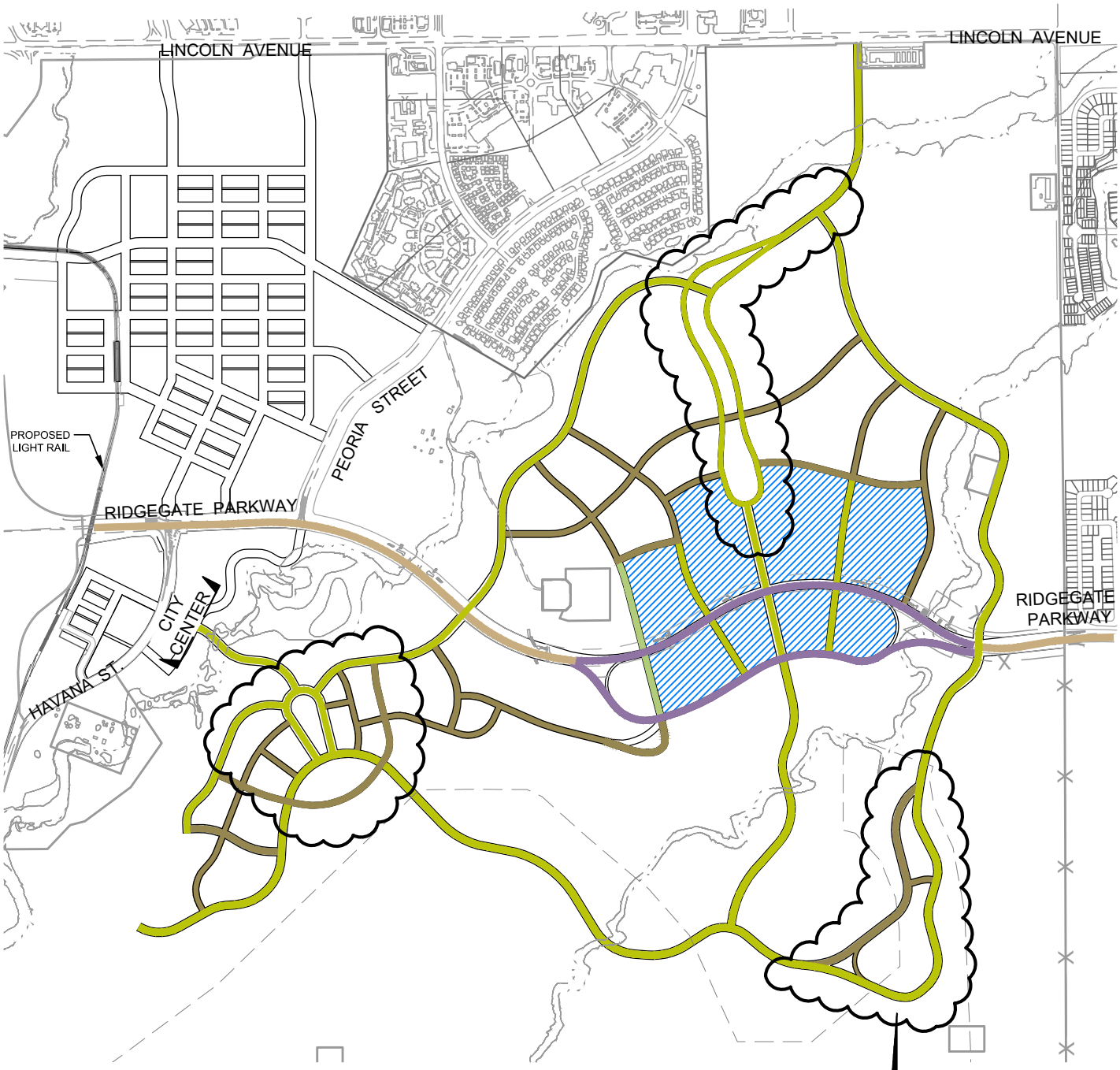
RIDGEGATE EAST

TECHNICAL SUPPLEMENT

February 2018

Amended July 2022

Ridge Gate EAST



LEGEND:

- COUPLET DISTRICT
- RESIDENTIAL LOCAL STREET
- RESIDENTIAL COLLECTOR
- COUPLET NORTH / SOUTH
- MAJOR ARTERIAL

NOTE:

1. STREET ALIGNMENTS AND CLASSIFICATIONS ARE CONCEPTUAL AND SUBJECT TO REFINEMENTS.
2. CLOUDED AREAS - TYPICAL SECTION DETAILS TO BE DETERMINED IN CONJUNCTION WITH THE VILLAGE PARK DESIGN.

1500' 0 750' 1500' 3000'

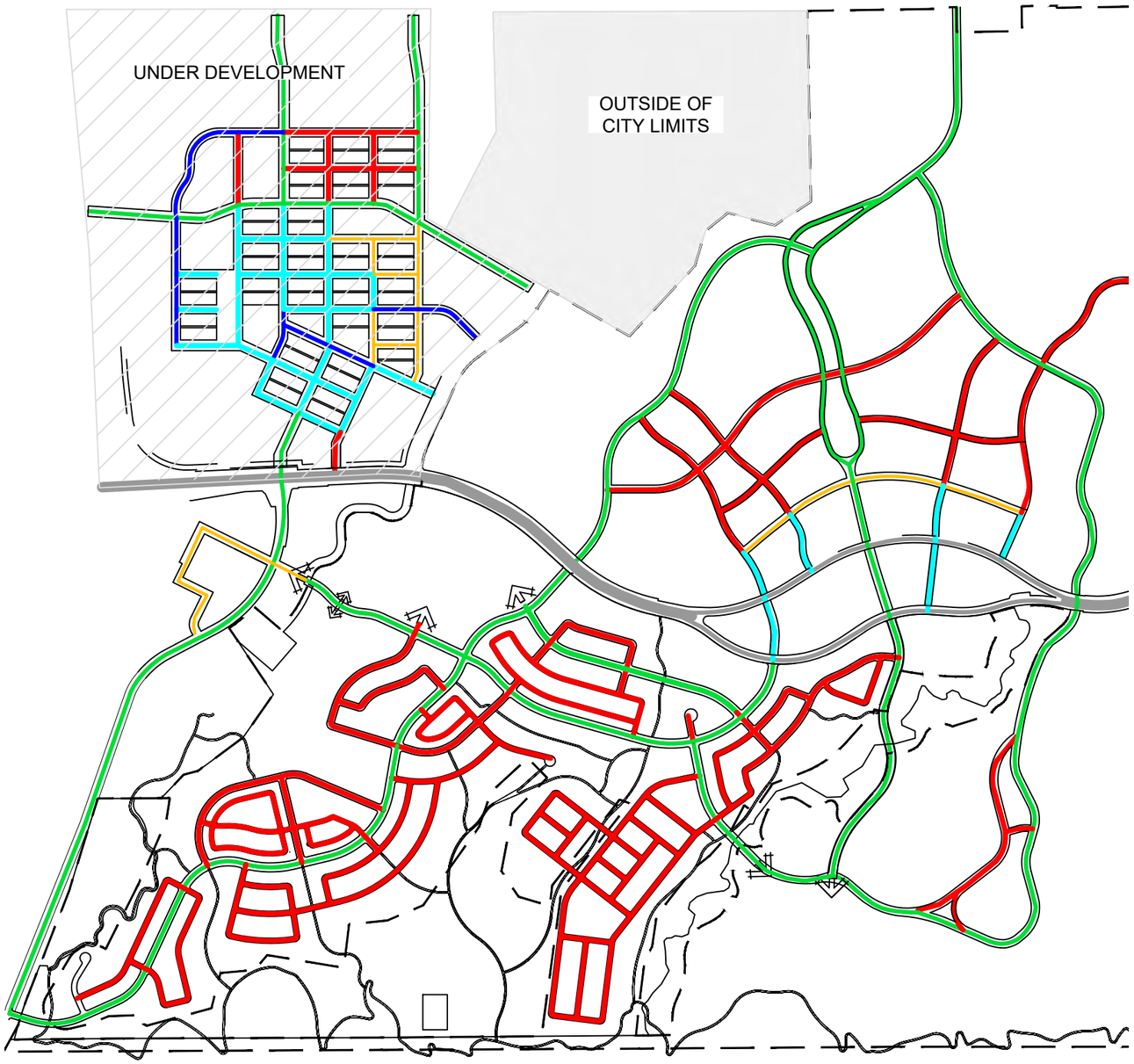
GRAPHIC SCALE

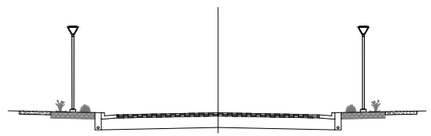
MERRICK®

RIDGEGATE - EAST VILLAGE
ROADWAY SECTION
KEY MAP

DATE: 1/26/2018

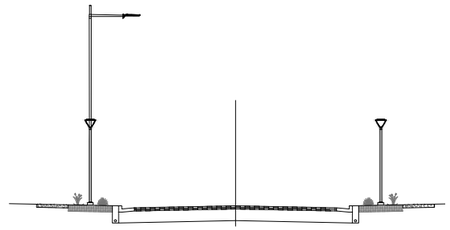
FIGURE 2-1



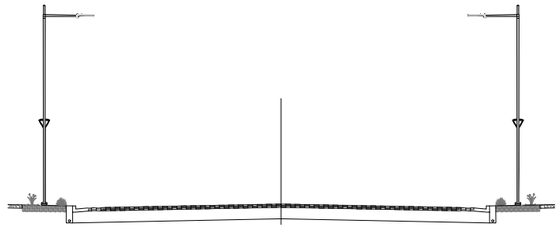


STRATEGY 1: PEDESTRIAN LIGHTING

*STREET LIGHTING AT INTERSECTIONS AND CUL-DE-SACS

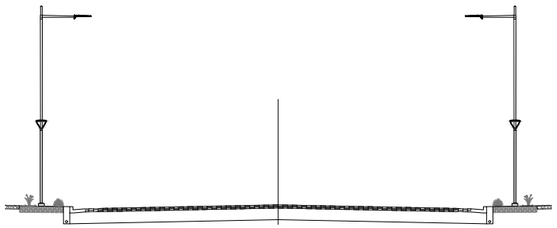


STRATEGY 2: CONTINUOUS PEDESTRIAN LIGHTING WITH STREET LIGHTS AT INTERSECTIONS

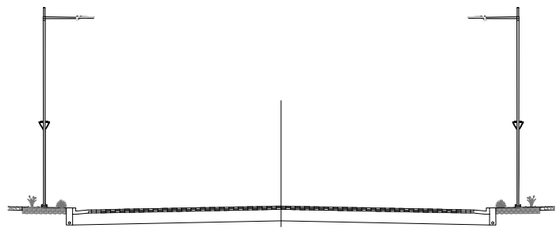


STRATEGY 3: STREET LIGHTING AT INTERSECTIONS WITH NON-CONTINUOUS PEDESTRIAN LIGHTING

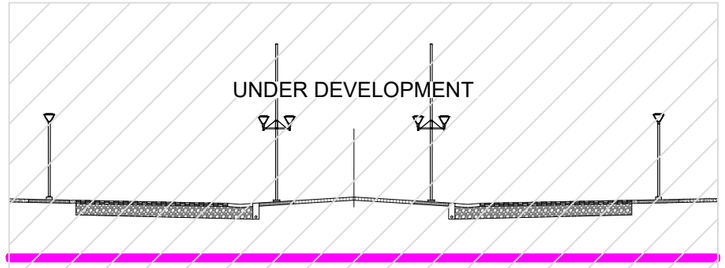
*STREET LIGHTING ALTERNATING 300' SPACING



STRATEGY 4: STREET LIGHTING AT INTERSECTIONS WITH CONTINUOUS PEDESTRIAN LIGHTING



LIGHTING STRATEGY 5: ALTERNATING STREET AND PEDESTRIAN LIGHTING



STRATEGY 6: CONTINUOUS PEDESTRIAN LIGHTING WITH PEDESTRIAN PATHWAY LIGHTING

*CITY MODIFICATIONS JULY 2022

CLANTON & ASSOCIATES

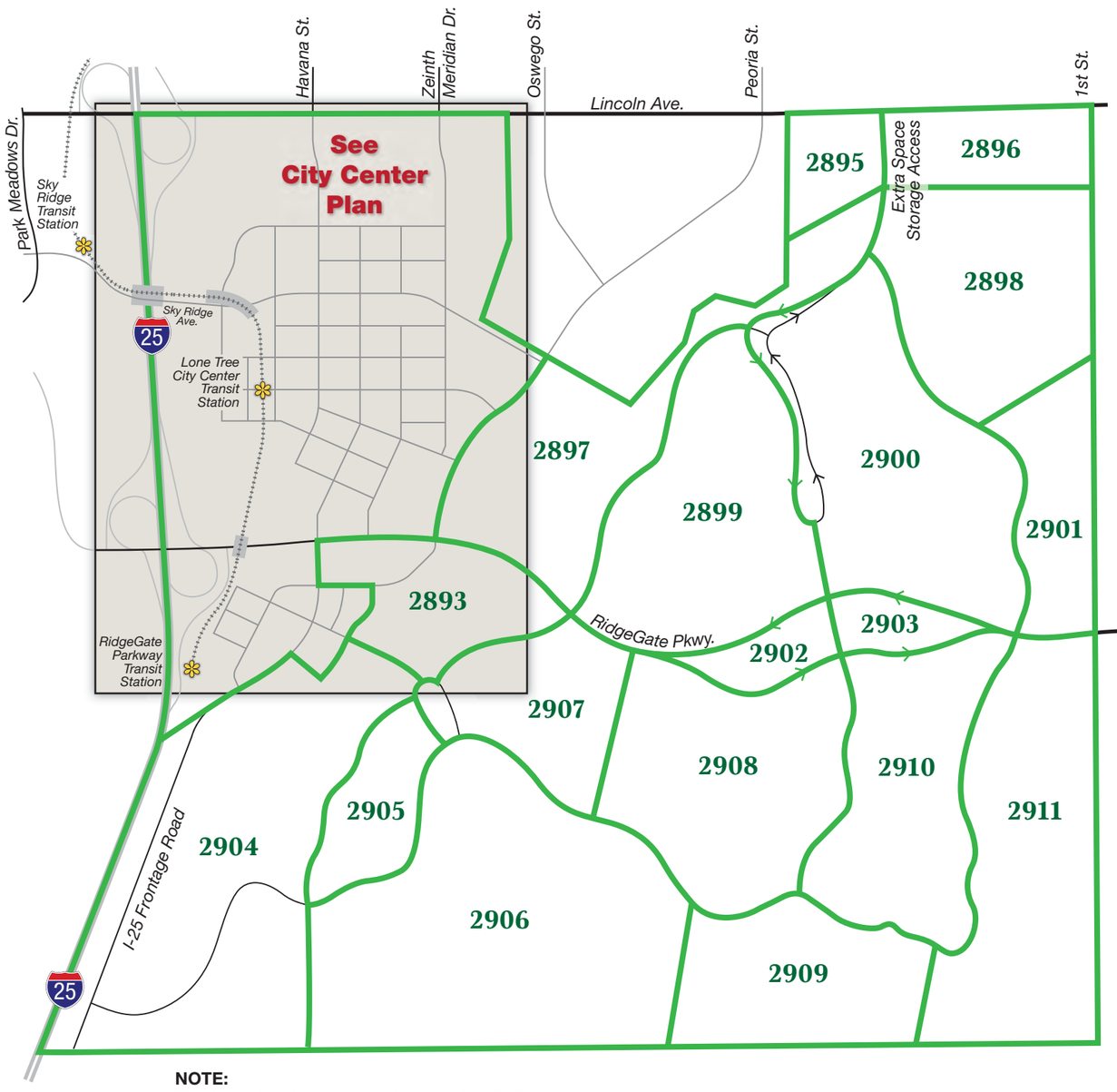
LIGHTING DESIGN AND ENGINEERING

LIGHTING STRATEGY MAP

Drawn: BL
Checked: DS
Date: 2022-04-05
Scale: N.T.S.

RidgeGate Development
Lighting Strategy Map

SK.01



NOTE:
Existing streets shown outside of the TAZ boundaries are for reference only.

LEGEND

XXXX = Traffic Analysis Zones

City Center Plan

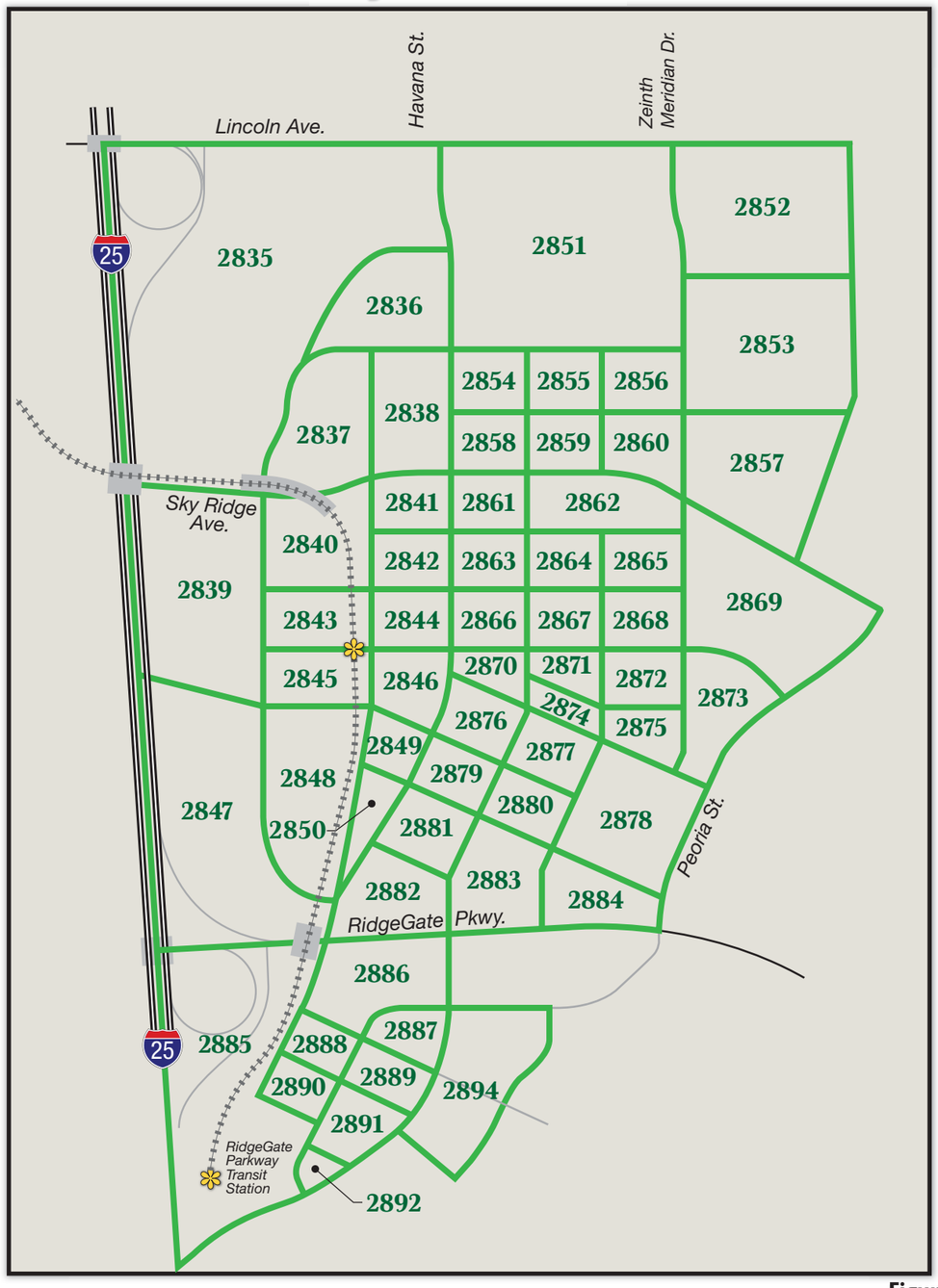


Figure 1
Traffic Analysis Zones

Traffic Analysis Zone (TAZ)	Residential Dwelling Units	Retail (Sq Ft)	Office (Sq Ft)
2874	270	0	213,186
2875	64	0	0
2876	150	5,670	118,466
2877	238	0	188,004
2878	341	0	0
2879	127	16,536	99,925
2880	214	0	168,377
2881	238	0	187,925
2882	0	69,688	0
2883	0	75,776	0
2884	0	70,196	0
2885	0	0	0
2886	0	102,219	0
2887	0	25,012	0
2888	83	5,490	65,371
2889	119	2,745	93,246
2890	65	4,848	51,018
2891	119	2,745	93,246
2892	87	0	0
2893	84	106,709	0
2894	65	0	0
2895	610	209,183	99,611
2896	467	159,992	76,186
2897	391	0	0
2898	0	0	0
2899	1,519	143,800	68,476
2900	1,380	97,216	46,293
2901	709	0	0
2902	320	109,634	52,207
2903	283	96,942	46,163
2904	750	0	0
2905	189	3,087	1,470
2906	463	0	0
2907	839	91,179	43,418
2908	1,435	81,505	38,812
2909	381	0	0
2910	1,076	0	0
2911	1,311	0	0
Total	**18,174**	**2,181,674**	**7,864,164**

II. GENERAL THROUGH LANEAGE REQUIREMENTS

The updated travel demand model was used to evaluate build-out through laneage requirements on roadways internal to the RidgeGate East project. The travel demand model is a tool designed to produce daily volume forecasts on roadways and to incorporate a transit component that allows the transit network to be refined to capture the impacts of the planned Lone Tree City Center and RidgeGate Parkway light rail stations.

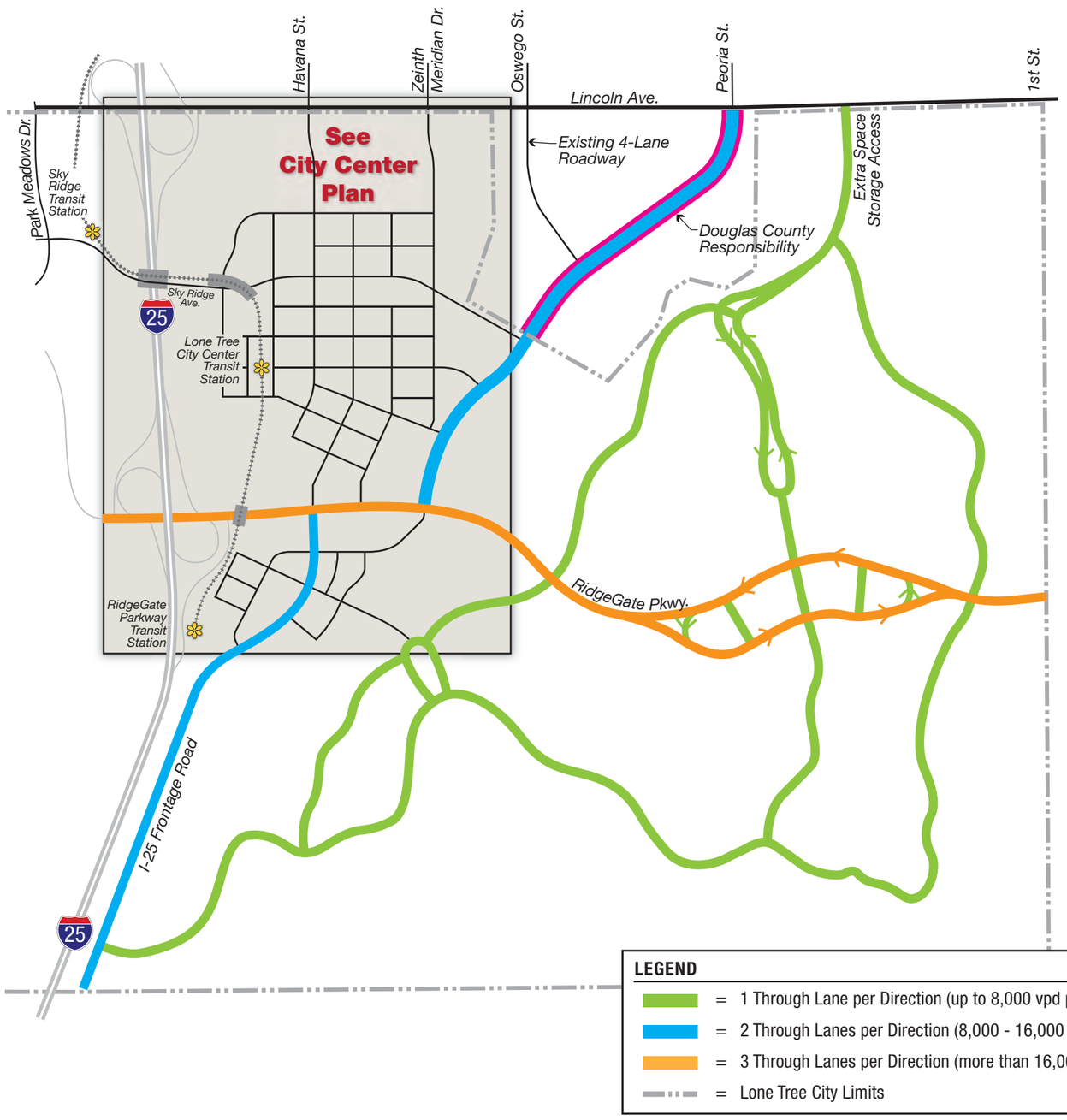
Figure 2 depicts the build-out through laneage requirements on roadways within the project area. The following summarizes the major findings of this analysis:

- RidgeGate Parkway within the project boundaries will need to have six through lanes given its east-west connectivity and regional access to the Town of Parker.
- Four-lane roadway segments are primarily located along those streets that are considered critical access routes into the City Center and that provide access to the roadway network outside the RidgeGate East boundary. Portions of Sky Ridge Avenue, Peoria Street, Zenith Meridian Drive, and Havana Street will each require four through travel lanes. Also, an unnamed east-west roadway in the southern portion of the City Center was identified as a four-lane roadway as it is anticipated to serve significant vehicular volumes destined for the Corporate Office zoning identified in the southwest corner of the City Center planning area.
- Other streets within RidgeGate East have traffic volume projections that will allow them to have a two-lane roadway cross-section.

Figure 2 only represents the number of through lanes needed within RidgeGate East; it does not identify intersection geometry and auxiliary lane requirements. **Section III** of this memorandum details the intersection geometry and auxiliary lane needs. Additionally, intersections that are constructed in-between the major intersections that are included in this report may require auxiliary lanes, specifically left turn lanes.

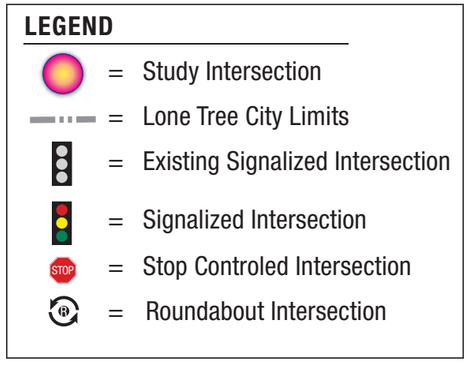
III. INTERSECTION TRAFFIC CONTROL AND GEOMETRY

An evaluation was conducted to understand the likely traffic control needs for RidgeGate East and to understand the laneage requirements on intersection approaches. **Figure 3** identifies the intersections that were included in this analysis. This evaluation does not make any judgment or recommendation about other intersections throughout the development or provide any details about requirements outside the project boundaries due to the high-level planning nature of this study. As future development occurs within the site, ongoing analysis and refinement of the network traffic control and laneage requirements will need to occur to determine the appropriate intersection characteristics.



City Center Plan

Figure 2
Through Laneage Requirements



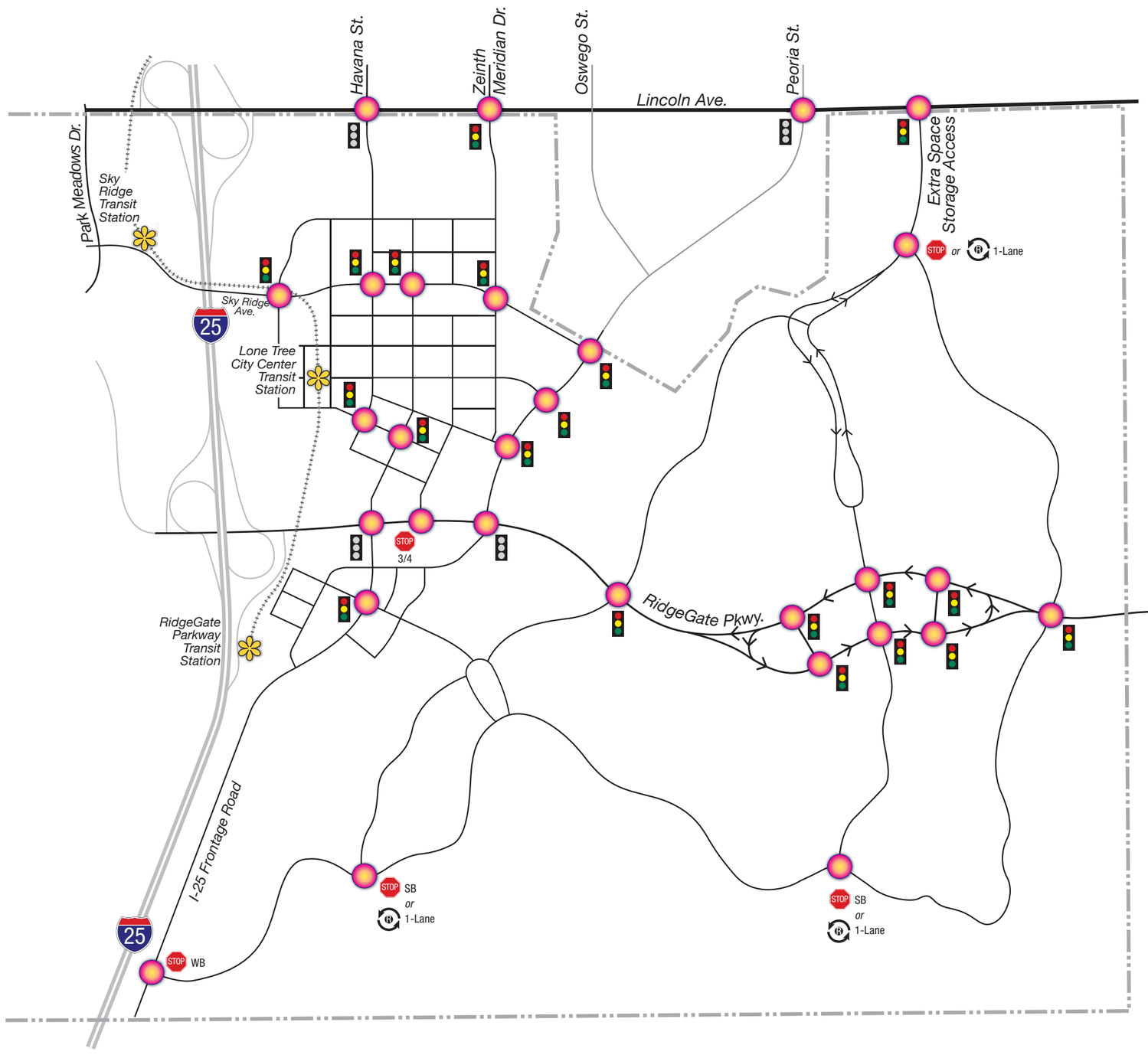
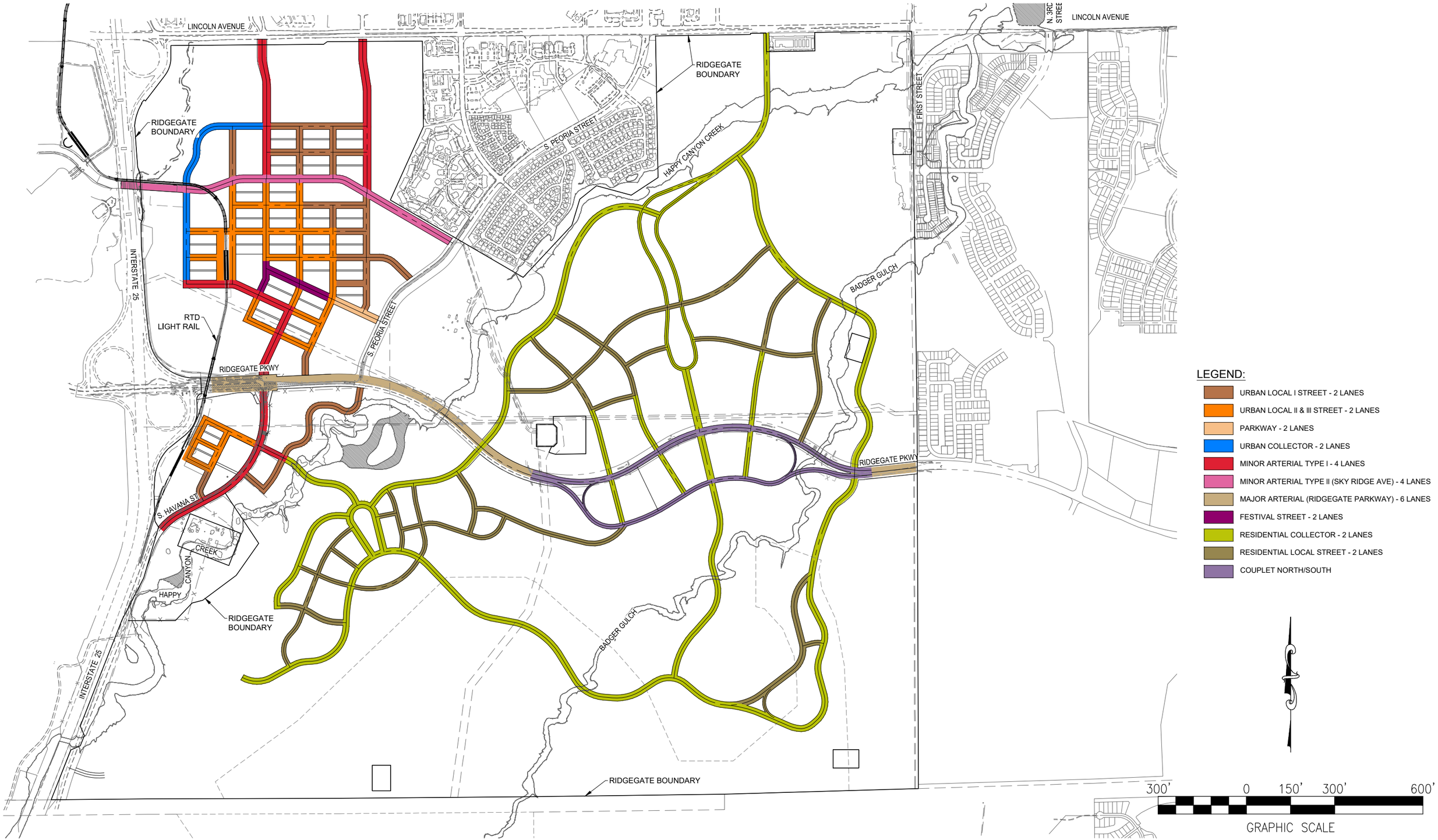


Figure 5
Traffic Control



MERRICK & COMPANY

RIDGEGATE EAST
FRAMEWORK INFRASTRUCTURE EXHIBIT
OVERALL STREETS

DATE: 01/26/18

SHEET: 1 OF 1

APPENDIX C

Trip Generation Worksheets

Kimley»Horn

Project	RidgeGate Couplet Apartments				
Subject	Trip Generation for Multifamily Housing (Mid-Rise)				
Designed by	TJD	*Date*	March 02, 2023	*Job No.*	196382001
Checked by		*Date*		*Sheet No.*	1 of 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Multifamily Housing (Mid-Rise) (221)

Independent Variable - Dwelling Units (X)

X = 349
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 275)

Average Weekday
(T) = 0.37 (X)
(T) = 0.37 * (349.0)

Directional Distribution: 23% ent. 77% exit.
T = 129 Average Vehicle Trip Ends
30 entering 99 exiting

30 + 99 = 129

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 276)

Average Weekday
(T) = 0.39(X)
(T) = 0.39 * (349.0)

Directional Distribution: 61% ent. 39% exit.
T = 136 Average Vehicle Trip Ends
83 entering 53 exiting

83 + 53 = 136

Weekday (200 Series Page 274)

Average Weekday
(T) = 4.54 (X)
(T) = 4.54 * (349.0)

Directional Distribution: 50% entering, 50% exiting
T = 1586 Average Vehicle Trip Ends
793 entering 793 exiting

793 + 793 = 1586

Kimley»Horn

Project	RidgeGate Couplet (2045 Background Traffic Lot 7)				
Subject	Trip Generation for Affordable Housing (Income Limits)				
Designed by	TJD	*Date*	September 21, 2022	*Job No.*	196382001
Checked by				*Sheet No.*	1 *of* 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Affordable Housing (Income Limits) (ITE 223)

Independent Variable - Dwelling Units (X)

X = 225
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Page 342)

Average Weekday
T = 0.36 (X)
T = 0.36 * 225

Directional Distribution: 29% ent. 71% exit.
T = 81 Average Vehicle Trip Ends
23 entering 58 exiting

23 + 58 = 81

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Page 343)

Average Weekday
(T) = 0.46 (X)
T = 0.46 * 225

Directional Distribution: 59% ent. 41% exit.
T = 104 Average Vehicle Trip Ends
61 entering 43 exiting

61 + 43 = 104

Weekday (Page 341)

Average Weekday
(T) = 4.81 (X)
T = 4.81 * 225

Directional Distribution: 50% ent. 50% exit.
T = 1084 Average Vehicle Trip Ends
542 entering 542 exiting

542 + 542 = 1084

Kimley»Horn

Project RidgeGate Couplet Apartments (2045 Background Traffic Lot 5)
Subject Trip Generation for Strip Retail Plaza (<40k)
Designed by TJD *Date* September 21, 2022 *Job No.* 196382001
Checked by *Date* *Sheet No.* 1 *of* 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Strip Retail Plaza (<40k) (822)

Independent Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 40,000 Square Feet
X = 40.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 230)

Average Weekday — Directional Distribution: 60% ent. 40% exit.
T = 2.36 * (X) — T = 94 Average Vehicle Trip Ends
T = 2.36 * 40 — 56 entering 38 exiting

56 + 38 = 94

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series page 231)

Average Weekday — Directional Distribution: 50% ent. 50% exit.
T = 6.59 * (X) — T = 264 Average Vehicle Trip Ends
T = 6.59 * 40 — 132 entering 132 exiting

132 + 132 = 264

Weekday (800 Series page 229)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 54.45 * (X) — T = 2178 Average Vehicle Trip Ends
T = 54.45 * 40 — 1089 entering 1089 exiting

1089 + 1089 = 2178

Non Pass-By Trip Volumes (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 60% Non-Pass By — PM Peak Hour = 60% Non-Pass By

	IN	Out	Total	
AM Peak	34	23	56	Pass-By Rates from ITE 821
PM Peak	79	79	159	PM Peak Hour Rate Applied to AM Peak Hour
Daily	653	653	1306	PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 40% Pass By — PM Peak Hour = 40% Pass By

	IN	Out	Total	
AM Peak	22	15	38	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	53	53	106	
Daily	436	436	872	PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	RidgeGate Couplet (Medical/Hospital Parcel)				
Subject	Trip Generation for General Medical-Dental Office Building - Stand-Alone				
Designed by	TJD	*Date*	April 04, 2023	*Job No.*	196382001
Checked by				*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates

Land Use Code - Medical-Dental Office Building (720)

Independent Variable - 1000 Square Feet (X)
SF = 65,000
X = 65.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (700 Series Page 762)

Directional Distribution: 79% ent. 21% exit.
(T) = 3.10 (X) T = 202 Average Vehicle Trip Ends
(T) = 3.10 * (65.0) 160 entering 42 exiting

160 + 42 = 202

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (700 Series Page 763)

Directional Distribution: 30% ent. 70% exit.
(T) = 3.93 (X) T = 255 Average Vehicle Trip Ends
(T) = 3.93 * (65.0) 77 entering 179 exiting

77 + 178 = 255

Weekday (700 Series Page 761)

Directional Distribution: 50% ent. 50% exit.
(T) = 36.00 (X) T = 2340 Average Vehicle Trip Ends
(T) = 36.00 * (65.0) 1170 entering 1170 exiting

1170 + 1170 = 2340

Kimley»Horn

Project	RidgeGate Couple (Single-Family North of RidgeGate - TAZ 2900)				
Subject	Trip Generation for Single-Family Detached Housing				
Designed by		*Date*	April 04, 2023	*Job No.*	196382001
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Single-Family Detached Housing (210)

Independent Variable - Dwelling Units (X)

X = 1,380
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 220)

Average Weekday
(T) = 0.70(X)
(T) = 0.70 * (1380.0)

Directional Distribution: 26% ent. 74% exit.
T = 966 Average Vehicle Trip Ends
251 entering 715 exiting

251 + 715 = 966

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 221)

Average Weekday
(T) = 0.94(X)
(T) = 0.94 * (1380.0)

Directional Distribution: 63% ent. 37% exit.
T = 1297 Average Vehicle Trip Ends
817 entering 480 exiting

817 + 480 = 1297

Weekday (200 Series Page 219)

Average Weekday
(T) = 9.43(X)
(T) = 9.43 * (1380.0)

Directional Distribution: 50% entering, 50% exiting
T = 13014 Average Vehicle Trip Ends
6507 entering 6507 exiting

6507 + 6507 = 13014

Kimley»Horn

Project	RidgeGate Couplet (Office North of RidgeGate - TAZ 2900)				
Subject	Trip Generation for General Office Building				
Designed by	TJD	*Date*	April 04, 2023	*Job No.*	196382001
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates

Land Use Code - General Office Building (710)

Independent Variable - 1000 Square Feet (X)
SF = 46,293
X = 46.293
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (700 Series Page 710)

Directional Distribution: 88% ent. 12% exit.
(T) = 1.52 (X) T = 70 Average Vehicle Trip Ends
(T) = 1.52 * (46.3) 62 entering 8 exiting

62 + 8 = 70

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (700 Series Page 711)

Directional Distribution: 17% ent. 83% exit.
(T) = 1.44 (X) T = 67 Average Vehicle Trip Ends
(T) = 1.44 * (46.3) 11 entering 56 exiting

11 + 56 = 67

Weekday (700 Series Page 709)

Directional Distribution: 50% ent. 50% exit.
(T) = 10.84 (X) T = 502 Average Vehicle Trip Ends
(T) = 10.84 * (46.3) 251 entering 251 exiting

251 + 251 = 502

Kimley»Horn

Project RidgeGate Couplet (Retail North of RidgeGate - TAZ 2900)
Subject Trip Generation for Shopping Plaza (40-150k) - Supermarket-No
Designed by TJD *Date* April 04, 2023 *Job No.* 196382001
Checked by *Date* *Sheet No.* *of*

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Shopping Plaza (40-150k) - Supermarket-No (821)

Independent Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 97,216 Square Feet
X = 97.216
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 213)

Average Weekday — Directional Distribution: 62% ent. 38% exit.
T = 1.73 * (X) — T = 168 Average Vehicle Trip Ends
T = 1.73 * 97.216 — 104 entering 64 exiting

104 + 64 = 168

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series page 214)

Average Weekday — Directional Distribution: 49% ent. 51% exit.
T = 5.19 * (X) — T = 505 Average Vehicle Trip Ends
T = 5.19 * 97.216 — 247 entering 258 exiting

247 + 258 = 505

Weekday (800 Series page 212)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 67.52 * (X) — T = 6564 Average Vehicle Trip Ends
T = 67.52 * 97.216 — 3282 entering 3282 exiting

3282 + 3282 = 6564

Non Pass-By Trip Volumes (Between 40 and 150k) (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 60% Non-Pass By — PM Peak Hour = 60% Non-Pass By

	IN	Out	Total	
AM Peak	62	38	101	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	148	155	303	
Daily	1969	1969	3938	PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Between 40 and 150k) (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 40% Pass By — PM Peak Hour = 40% Pass By

	IN	Out	Total	
AM Peak	42	26	68	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	99	103	202	
Daily	1313	1313	2626	PM Peak Hour Rate Applied to Daily

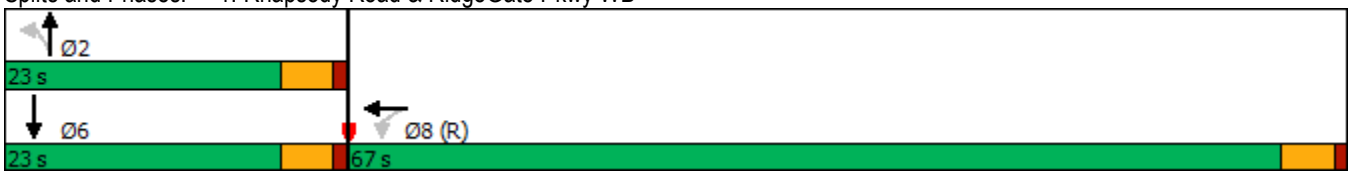
APPENDIX D

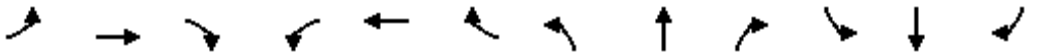
Intersection Analysis Worksheets

Lane Group	WBL	WBT	NBL	Ø6
Lane Configurations				
Traffic Volume (vph)	62	1750	6	
Future Volume (vph)	62	1750	6	
Turn Type	Perm	NA	Perm	
Protected Phases		8		6
Permitted Phases	8		2	
Detector Phase	8	8	2	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	23.0	23.0
Total Split (%)	74.4%	74.4%	25.6%	26%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	Max
Act Effct Green (s)	62.5	62.5	18.5	
Actuated g/C Ratio	0.69	0.69	0.21	
v/c Ratio	0.05	0.52	0.02	
Control Delay	4.5	7.2	27.0	
Queue Delay	0.0	0.0	0.0	
Total Delay	4.5	7.2	27.0	
LOS	A	A	C	
Approach Delay		7.1		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 24 (27%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 7.2	Intersection LOS: A
Intersection Capacity Utilization 53.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	62	1750	0	6	0	0	0	0	0
Future Volume (veh/h)	0	0	0	62	1750	0	6	0	0	0	0	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	0	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				65	1842	0	6	0	0	0	0	0
Peak Hour Factor				0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	0	2	2	0	0	2	2
Cap, veh/h				1237	3546	0	446	384	0	0	384	0
Arrive On Green				0.69	0.69	0.00	0.21	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h				1781	5274	0	1781	1870	0	0	1870	0
Grp Volume(v), veh/h				65	1842	0	6	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln				1781	1702	0	1781	1870	0	0	1870	0
Q Serve(g_s), s				1.0	15.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				1.0	15.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1237	3546	0	446	384	0	0	384	0
V/C Ratio(X)				0.05	0.52	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h				1237	3546	0	446	384	0	0	384	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh				4.4	6.6	0.0	28.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.1	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	4.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				4.4	7.1	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS				A	A	A	C	A	A	A	A	A
Approach Vol, veh/h					1907			6			0	
Approach Delay, s/veh					7.0			28.6			0.0	
Approach LOS					A			C				

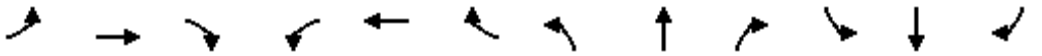
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		23.0				23.0		67.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		18.5				18.5		62.5				
Max Q Clear Time (g_c+I1), s		2.2				0.0		3.0				
Green Ext Time (p_c), s		0.0				0.0		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		7.1
HCM 6th LOS		A

Lane Group	WBL	WBT	NBL	Ø6
Lane Configurations				
Traffic Volume (vph)	62	1750	6	
Future Volume (vph)	62	1750	6	
Turn Type	Perm	NA	Perm	
Protected Phases		8		6
Permitted Phases	8		2	
Detector Phase	8	8	2	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	23.0	23.0
Total Split (%)	74.4%	74.4%	25.6%	26%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	None
Act Effct Green (s)	62.5	62.5	18.5	
Actuated g/C Ratio	0.69	0.69	0.21	
v/c Ratio	0.05	0.53	0.02	
Control Delay	4.5	7.3	27.0	
Queue Delay	0.0	0.0	0.0	
Total Delay	4.5	7.3	27.0	
LOS	A	A	C	
Approach Delay		7.2		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 24 (27%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 53.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	62	1750	0	6	0	0	0	0	0
Future Volume (veh/h)	0	0	0	62	1750	0	6	0	0	0	0	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	0	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				67	1882	0	6	0	0	0	0	0
Peak Hour Factor				0.93	0.93	0.92	0.93	0.92	0.93	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	0	2	2	0	0	2	2
Cap, veh/h				1237	3546	0	446	384	0	0	384	0
Arrive On Green				0.69	0.69	0.00	0.21	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h				1781	5274	0	1781	1870	0	0	1870	0
Grp Volume(v), veh/h				67	1882	0	6	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln				1781	1702	0	1781	1870	0	0	1870	0
Q Serve(g_s), s				1.1	16.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				1.1	16.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1237	3546	0	446	384	0	0	384	0
V/C Ratio(X)				0.05	0.53	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h				1237	3546	0	446	384	0	0	384	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh				4.4	6.7	0.0	28.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.1	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	4.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				4.4	7.2	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS				A	A	A	C	A	A	A	A	A
Approach Vol, veh/h					1949			6			0	
Approach Delay, s/veh					7.1			28.6			0.0	
Approach LOS					A			C				

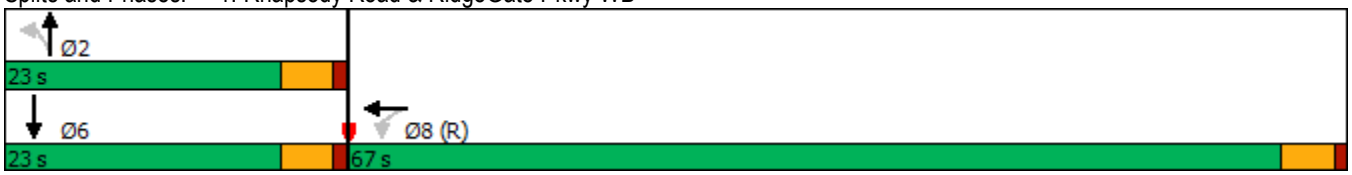
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		23.0				23.0		67.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		18.5				18.5		62.5				
Max Q Clear Time (g_c+I1), s		2.2				0.0		3.1				
Green Ext Time (p_c), s		0.0				0.0		0.1				

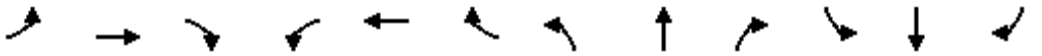
Intersection Summary		
HCM 6th Ctrl Delay		7.2
HCM 6th LOS		A

Lane Group	WBL	WBT	NBL	Ø6
Lane Configurations				
Traffic Volume (vph)	62	1810	6	
Future Volume (vph)	62	1810	6	
Turn Type	Perm	NA	Perm	
Protected Phases		8		6
Permitted Phases	8		2	
Detector Phase	8	8	2	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	23.0	23.0
Total Split (%)	74.4%	74.4%	25.6%	26%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	Max
Act Effct Green (s)	62.5	62.5	18.5	
Actuated g/C Ratio	0.69	0.69	0.21	
v/c Ratio	0.05	0.54	0.02	
Control Delay	4.5	7.4	26.2	
Queue Delay	0.0	0.0	0.0	
Total Delay	4.5	7.4	26.2	
LOS	A	A	C	
Approach Delay		7.3		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 24 (27%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 7.4	Intersection LOS: A
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	62	1810	0	6	0	0	0	0	0
Future Volume (veh/h)	0	0	0	62	1810	0	6	0	0	0	0	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				65	1905	0	6	0	0	0	0	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1237	3546	0	446	384	0	0	384	0
Arrive On Green				0.69	0.69	0.00	0.21	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h				1781	5274	0	1781	1870	0	0	1870	0
Grp Volume(v), veh/h				65	1905	0	6	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln				1781	1702	0	1781	1870	0	0	1870	0
Q Serve(g_s), s				1.0	16.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				1.0	16.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1237	3546	0	446	384	0	0	384	0
V/C Ratio(X)				0.05	0.54	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h				1237	3546	0	446	384	0	0	384	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh				4.4	6.7	0.0	28.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.1	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	4.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				4.4	7.3	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS				A	A	A	C	A	A	A	A	A
Approach Vol, veh/h					1970			6			0	
Approach Delay, s/veh					7.2			28.6			0.0	
Approach LOS					A			C				

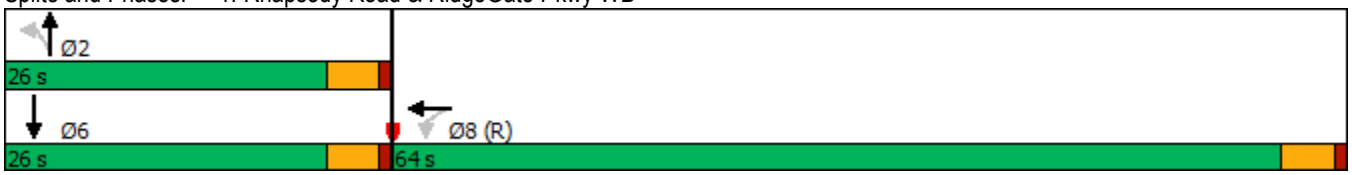
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		23.0				23.0		67.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		18.5				18.5		62.5				
Max Q Clear Time (g_c+I1), s		2.2				0.0		18.4				
Green Ext Time (p_c), s		0.0				0.0		21.1				

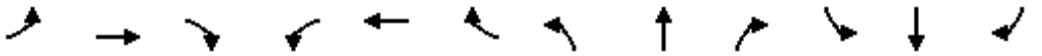
Intersection Summary		
HCM 6th Ctrl Delay	7.3	
HCM 6th LOS	A	

Lane Group	WBL	WBT	NBL	Ø6
Lane Configurations				
Traffic Volume (vph)	91	1168	16	
Future Volume (vph)	91	1168	16	
Turn Type	Perm	NA	Perm	
Protected Phases		8		6
Permitted Phases	8		2	
Detector Phase	8	8	2	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	64.0	64.0	26.0	26.0
Total Split (%)	71.1%	71.1%	28.9%	29%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	Max
Act Effct Green (s)	59.5	59.5	21.5	
Actuated g/C Ratio	0.66	0.66	0.24	
v/c Ratio	0.08	0.37	0.05	
Control Delay	5.7	7.2	28.2	
Queue Delay	0.0	0.0	0.0	
Total Delay	5.7	7.2	28.2	
LOS	A	A	C	
Approach Delay		7.1		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 43.6 (48%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 7.4	Intersection LOS: A
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	91	1168	0	16	0	0	0	0	0
Future Volume (veh/h)	0	0	0	91	1168	0	16	0	0	0	0	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				98	1256	0	17	0	0	0	0	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1178	3376	0	506	447	0	0	447	0
Arrive On Green				0.66	0.66	0.00	0.24	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h				1781	5274	0	1781	1870	0	0	1870	0
Grp Volume(v), veh/h				98	1256	0	17	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln				1781	1702	0	1781	1870	0	0	1870	0
Q Serve(g_s), s				1.8	9.9	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				1.8	9.9	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1178	3376	0	506	447	0	0	447	0
V/C Ratio(X)				0.08	0.37	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h				1178	3376	0	506	447	0	0	447	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh				5.5	6.9	0.0	26.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	2.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				5.6	7.2	0.0	26.4	0.0	0.0	0.0	0.0	0.0
LnGrp LOS				A	A	A	C	A	A	A	A	A
Approach Vol, veh/h					1354			17			0	
Approach Delay, s/veh					7.1			26.4			0.0	
Approach LOS					A			C				

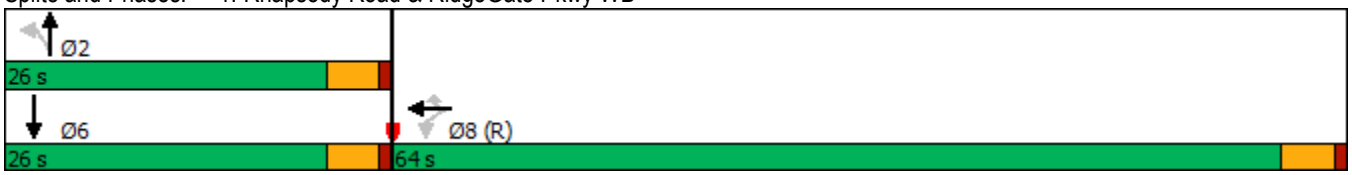
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		26.0				26.0		64.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		21.5				21.5		59.5				
Max Q Clear Time (g_c+I1), s		2.7				0.0		11.9				
Green Ext Time (p_c), s		0.0				0.0		11.4				

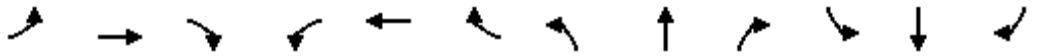
Intersection Summary		
HCM 6th Ctrl Delay	7.3	
HCM 6th LOS	A	

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	89	2645	72	117	75	85
Future Volume (vph)	89	2645	72	117	75	85
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	64.0	64.0	64.0	26.0	26.0	26.0
Total Split (%)	71.1%	71.1%	71.1%	28.9%	28.9%	28.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	59.5	59.5	59.5	21.5	21.5	21.5
Actuated g/C Ratio	0.66	0.66	0.66	0.24	0.24	0.24
v/c Ratio	0.08	0.83	0.07	0.61	0.18	0.57
Control Delay	8.2	15.0	4.4	49.5	34.9	36.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.2	15.0	4.4	49.5	34.9	36.1
LOS	A	B	A	D	C	D
Approach Delay		14.5			43.6	36.1
Approach LOS		B			D	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 24 (27%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 81.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	89	2645	72	117	75	0	0	85	130
Future Volume (veh/h)	0	0	0	89	2645	72	117	75	0	0	85	130
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				94	2784	78	123	82	0	0	92	141
Peak Hour Factor				0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1178	3376	1048	214	447	0	0	159	244
Arrive On Green				0.66	0.66	0.66	0.40	0.40	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	5106	1585	1147	1870	0	0	666	1021
Grp Volume(v), veh/h				94	2784	78	123	82	0	0	0	233
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1147	1870	0	0	0	1687
Q Serve(g_s), s				1.7	36.6	1.6	9.5	2.6	0.0	0.0	0.0	11.0
Cycle Q Clear(g_c), s				1.7	36.6	1.6	20.4	2.6	0.0	0.0	0.0	11.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.61
Lane Grp Cap(c), veh/h				1178	3376	1048	214	447	0	0	0	403
V/C Ratio(X)				0.08	0.82	0.07	0.57	0.18	0.00	0.00	0.00	0.58
Avail Cap(c_a), veh/h				1178	3376	1048	214	447	0	0	0	403
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.96	0.96	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				5.5	11.4	5.4	32.1	21.4	0.0	0.0	0.0	30.2
Incr Delay (d2), s/veh				0.1	2.4	0.1	10.3	0.9	0.0	0.0	0.0	5.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	10.8	0.4	2.9	1.2	0.0	0.0	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				5.6	13.8	5.6	42.4	22.2	0.0	0.0	0.0	36.2
LnGrp LOS				A	B	A	D	C	A	A	A	D
Approach Vol, veh/h					2956			205			233	
Approach Delay, s/veh					13.3			34.4			36.2	
Approach LOS					B			C			D	

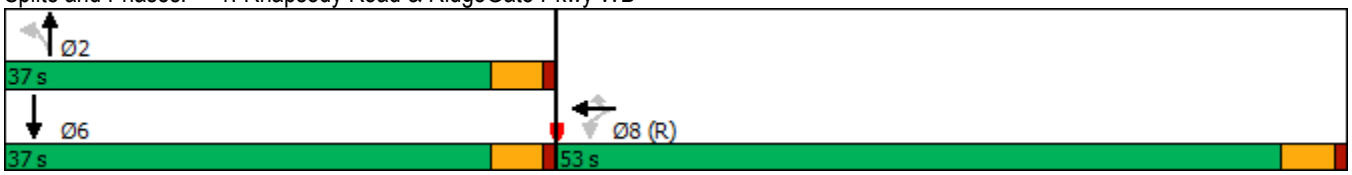
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		26.0				26.0		64.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		21.5				21.5		59.5				
Max Q Clear Time (g_c+I1), s		22.4				13.0		38.6				
Green Ext Time (p_c), s		0.0				0.8		18.8				

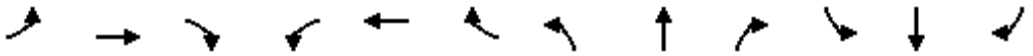
Intersection Summary		
HCM 6th Ctrl Delay		16.2
HCM 6th LOS		B

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	136	1672	105	187	171	107
Future Volume (vph)	136	1672	105	187	171	107
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	53.0	53.0	53.0	37.0	37.0	37.0
Total Split (%)	58.9%	58.9%	58.9%	41.1%	41.1%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	None
Act Effct Green (s)	48.5	48.5	48.5	32.5	32.5	32.5
Actuated g/C Ratio	0.54	0.54	0.54	0.36	0.36	0.36
v/c Ratio	0.15	0.66	0.13	0.53	0.28	0.33
Control Delay	4.2	8.2	0.4	33.5	27.3	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	8.2	0.4	33.5	27.3	21.4
LOS	A	A	A	C	C	C
Approach Delay		7.5			30.5	21.4
Approach LOS		A			C	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 43.6 (48%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	136	1672	105	187	171	0	0	107	85
Future Volume (veh/h)	0	0	0	136	1672	105	187	171	0	0	107	85
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				146	1798	114	201	186	0	0	116	92
Peak Hour Factor				0.93	0.93	0.92	0.93	0.92	0.93	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				960	2752	854	402	675	0	0	349	277
Arrive On Green				0.54	0.54	0.54	0.60	0.60	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1781	5106	1585	1174	1870	0	0	966	766
Grp Volume(v), veh/h				146	1798	114	201	186	0	0	0	208
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1174	1870	0	0	0	1732
Q Serve(g_s), s				3.7	22.6	3.2	11.7	4.3	0.0	0.0	0.0	7.8
Cycle Q Clear(g_c), s				3.7	22.6	3.2	19.6	4.3	0.0	0.0	0.0	7.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.44
Lane Grp Cap(c), veh/h				960	2752	854	402	675	0	0	0	626
V/C Ratio(X)				0.15	0.65	0.13	0.50	0.28	0.00	0.00	0.00	0.33
Avail Cap(c_a), veh/h				960	2752	854	402	675	0	0	0	626
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.91	0.91	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.4	14.8	10.3	18.3	12.3	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh				0.3	1.2	0.3	4.0	0.9	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.4	7.7	1.1	2.9	1.8	0.0	0.0	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				10.8	16.0	10.6	22.3	13.2	0.0	0.0	0.0	21.2
LnGrp LOS				B	B	B	C	B	A	A	A	C
Approach Vol, veh/h					2058			387			208	
Approach Delay, s/veh					15.3			17.9			21.2	
Approach LOS					B			B			C	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	37.0		37.0		53.0			
Change Period (Y+Rc), s	4.5		4.5		4.5			
Max Green Setting (Gmax), s	32.5		32.5		48.5			
Max Q Clear Time (g_c+I1), s	21.6		9.8		24.6			
Green Ext Time (p_c), s	1.4		1.2		14.9			

Intersection Summary		
HCM 6th Ctrl Delay	16.2	
HCM 6th LOS	B	

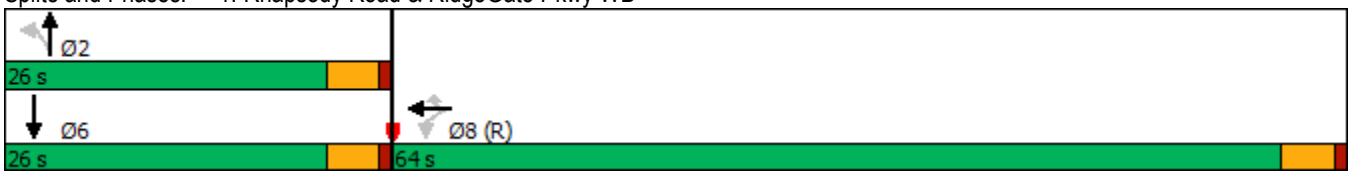
Notes

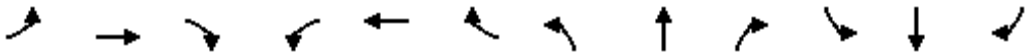
User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	95	2700	85	120	75	85
Future Volume (vph)	95	2700	85	120	75	85
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	64.0	64.0	64.0	26.0	26.0	26.0
Total Split (%)	71.1%	71.1%	71.1%	28.9%	28.9%	28.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	59.5	59.5	59.5	21.5	21.5	21.5
Actuated g/C Ratio	0.66	0.66	0.66	0.24	0.24	0.24
v/c Ratio	0.09	0.85	0.08	0.61	0.18	0.55
Control Delay	4.4	7.1	1.2	48.5	34.4	35.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.4	7.1	1.2	48.5	34.4	35.5
LOS	A	A	A	D	C	D
Approach Delay		6.8			43.1	35.5
Approach LOS		A			D	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 24 (27%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	95	2700	85	120	75	0	0	85	130
Future Volume (veh/h)	0	0	0	95	2700	85	120	75	0	0	85	130
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				100	2842	89	126	79	0	0	89	137
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1178	3376	1048	220	447	0	0	159	244
Arrive On Green				0.66	0.66	0.66	0.40	0.40	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	5106	1585	1155	1870	0	0	664	1022
Grp Volume(v), veh/h				100	2842	89	126	79	0	0	0	226
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1155	1870	0	0	0	1686
Q Serve(g_s), s				1.8	38.3	1.8	9.6	2.5	0.0	0.0	0.0	10.6
Cycle Q Clear(g_c), s				1.8	38.3	1.8	20.2	2.5	0.0	0.0	0.0	10.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.61
Lane Grp Cap(c), veh/h				1178	3376	1048	220	447	0	0	0	403
V/C Ratio(X)				0.08	0.84	0.08	0.57	0.18	0.00	0.00	0.00	0.56
Avail Cap(c_a), veh/h				1178	3376	1048	220	447	0	0	0	403
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.97	0.97	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				5.5	11.7	5.5	31.8	21.3	0.0	0.0	0.0	30.1
Incr Delay (d2), s/veh				0.1	2.7	0.2	10.1	0.8	0.0	0.0	0.0	5.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	11.4	0.5	3.0	1.1	0.0	0.0	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				5.6	14.4	5.6	42.0	22.2	0.0	0.0	0.0	35.7
LnGrp LOS				A	B	A	D	C	A	A	A	D
Approach Vol, veh/h					3031			205			226	
Approach Delay, s/veh					13.8			34.3			35.7	
Approach LOS					B			C			D	

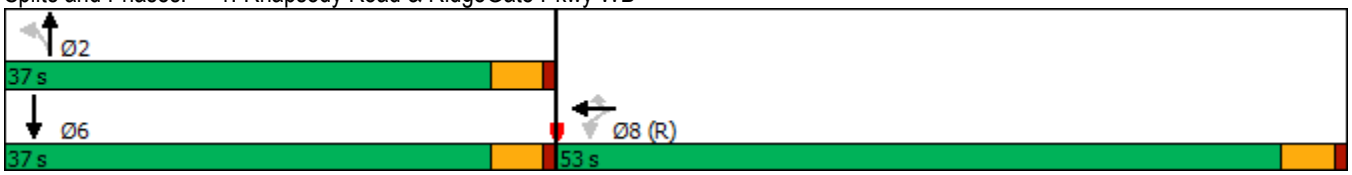
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		26.0				26.0		64.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		21.5				21.5		59.5				
Max Q Clear Time (g_c+I1), s		22.2				12.6		40.3				
Green Ext Time (p_c), s		0.0				0.8		17.6				

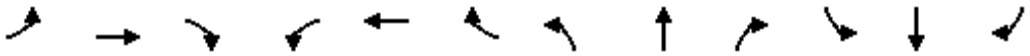
Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	140	1700	115	190	175	110
Future Volume (vph)	140	1700	115	190	175	110
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	53.0	53.0	53.0	37.0	37.0	37.0
Total Split (%)	58.9%	58.9%	58.9%	41.1%	41.1%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	48.5	48.5	48.5	32.5	32.5	32.5
Actuated g/C Ratio	0.54	0.54	0.54	0.36	0.36	0.36
v/c Ratio	0.16	0.67	0.14	0.53	0.28	0.33
Control Delay	4.6	8.8	0.4	33.8	27.3	21.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.6	8.8	0.4	33.8	27.3	21.6
LOS	A	A	A	C	C	C
Approach Delay		8.0			30.7	21.6
Approach LOS		A			C	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 43.6 (48%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 84.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Rhapsody Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	140	1700	115	190	175	0	0	110	85
Future Volume (veh/h)	0	0	0	140	1700	115	190	175	0	0	110	85
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				151	1828	124	204	188	0	0	118	91
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				960	2752	854	401	675	0	0	354	273
Arrive On Green				0.54	0.54	0.54	0.60	0.60	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1781	5106	1585	1173	1870	0	0	979	755
Grp Volume(v), veh/h				151	1828	124	204	188	0	0	0	209
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1173	1870	0	0	0	1734
Q Serve(g_s), s				3.8	23.1	3.5	12.0	4.3	0.0	0.0	0.0	7.9
Cycle Q Clear(g_c), s				3.8	23.1	3.5	19.9	4.3	0.0	0.0	0.0	7.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.44
Lane Grp Cap(c), veh/h				960	2752	854	401	675	0	0	0	626
V/C Ratio(X)				0.16	0.66	0.15	0.51	0.28	0.00	0.00	0.00	0.33
Avail Cap(c_a), veh/h				960	2752	854	401	675	0	0	0	626
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.91	0.91	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.5	14.9	10.4	18.4	12.3	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh				0.3	1.3	0.4	4.2	0.9	0.0	0.0	0.0	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.4	7.9	1.2	3.0	1.8	0.0	0.0	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				10.8	16.2	10.7	22.5	13.2	0.0	0.0	0.0	22.3
LnGrp LOS				B	B	B	C	B	A	A	A	C
Approach Vol, veh/h					2103			392			209	
Approach Delay, s/veh					15.5			18.1			22.3	
Approach LOS					B			B			C	

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		37.0				37.0		53.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		32.5				32.5		48.5				
Max Q Clear Time (g_c+I1), s		21.9				9.9		25.1				
Green Ext Time (p_c), s		1.4				1.2		14.9				

Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	2	1842	30	0
Future Vol, veh/h	0	0	2	1842	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	2	1939	32	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	780	-
Stage 1	-	-	0	-
Stage 2	-	-	780	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	400	0
Stage 1	-	-	-	0
Stage 2	-	-	374	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	400	-
Mov Cap-2 Maneuver	-	-	400	-
Stage 1	-	-	-	-
Stage 2	-	-	374	-

Approach	WB	NB
HCM Control Delay, s		14.8
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	400	-	-
HCM Lane V/C Ratio	0.079	-	-
HCM Control Delay (s)	14.8	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	4	1243	16	0
Future Vol, veh/h	0	0	4	1243	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	4	1337	17	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	543	-
Stage 1	-	-	0	-
Stage 2	-	-	543	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	522	0
Stage 1	-	-	-	0
Stage 2	-	-	499	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	522	-
Mov Cap-2 Maneuver	-	-	522	-
Stage 1	-	-	-	-
Stage 2	-	-	499	-

Approach	WB	NB
HCM Control Delay, s		12.1
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	522	-	-
HCM Lane V/C Ratio	0.033	-	-
HCM Control Delay (s)	12.1	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	24	2804	2	0
Future Vol, veh/h	0	0	24	2804	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	25	2952	2	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	1231	-
Stage 1	-	-	0	-
Stage 2	-	-	1231	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	237	0
Stage 1	-	-	-	0
Stage 2	-	-	214	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	237	-
Mov Cap-2 Maneuver	-	-	237	-
Stage 1	-	-	-	-
Stage 2	-	-	214	-

Approach	WB	NB
HCM Control Delay, s		20.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	237	-	-
HCM Lane V/C Ratio	0.009	-	-
HCM Control Delay (s)	20.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	55	1905	8	0
Future Vol, veh/h	0	0	55	1905	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	59	2048	9	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	937	-
Stage 1	-	-	0	-
Stage 2	-	-	937	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	334	0
Stage 1	-	-	-	0
Stage 2	-	-	309	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	334	-
Mov Cap-2 Maneuver	-	-	334	-
Stage 1	-	-	-	-
Stage 2	-	-	309	-

Approach	WB	NB
HCM Control Delay, s		16.1
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	334	-	-
HCM Lane V/C Ratio	0.026	-	-
HCM Control Delay (s)	16.1	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	30	2840	40	0
Future Vol, veh/h	0	0	30	2840	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	32	2989	42	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	1260	-
Stage 1	-	-	0	-
Stage 2	-	-	1260	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	229	0
Stage 1	-	-	-	0
Stage 2	-	-	206	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	229	-
Mov Cap-2 Maneuver	-	-	229	-
Stage 1	-	-	-	-
Stage 2	-	-	206	-

Approach	WB	NB
HCM Control Delay, s		24.2
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	229	-	-
HCM Lane V/C Ratio	0.184	-	-
HCM Control Delay (s)	24.2	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.7	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	60	1925	30	0
Future Vol, veh/h	0	0	60	1925	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	65	2070	32	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	958	-
Stage 1	-	-	0	-
Stage 2	-	-	958	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	326	0
Stage 1	-	-	-	0
Stage 2	-	-	301	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	326	-
Mov Cap-2 Maneuver	-	-	326	-
Stage 1	-	-	-	-
Stage 2	-	-	301	-

Approach	WB	NB
HCM Control Delay, s		17.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	326	-	-
HCM Lane V/C Ratio	0.099	-	-
HCM Control Delay (s)	17.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	11	1814	30	0
Future Vol, veh/h	0	0	11	1814	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	12	1909	32	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	788	-
Stage 1	-	-	0	-
Stage 2	-	-	788	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	396	0
Stage 1	-	-	-	0
Stage 2	-	-	371	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	396	-
Mov Cap-2 Maneuver	-	-	396	-
Stage 1	-	-	-	-
Stage 2	-	-	371	-

Approach	WB	NB
HCM Control Delay, s		14.9
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	396	-	-
HCM Lane V/C Ratio	0.08	-	-
HCM Control Delay (s)	14.9	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	29	1231	16	0
Future Vol, veh/h	0	0	29	1231	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	31	1324	17	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	592	-
Stage 1	-	-	0	-
Stage 2	-	-	592	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	494	0
Stage 1	-	-	-	0
Stage 2	-	-	470	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	494	-
Mov Cap-2 Maneuver	-	-	494	-
Stage 1	-	-	-	-
Stage 2	-	-	470	-

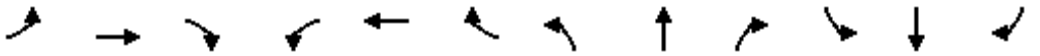
Approach	WB	NB
HCM Control Delay, s		12.6
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	494	-	-
HCM Lane V/C Ratio	0.035	-	-
HCM Control Delay (s)	12.6	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	65	2721	42	28	43	84
Future Volume (vph)	65	2721	42	28	43	84
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	67.0	23.0	23.0	23.0
Total Split (%)	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	62.5	62.5	62.5		18.5	18.5
Actuated g/C Ratio	0.69	0.69	0.69		0.21	0.21
v/c Ratio	0.06	0.81	0.04		0.23	0.47
Control Delay	4.5	12.1	1.8		47.3	36.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	4.5	12.1	1.8		47.3	36.0
LOS	A	B	A		D	D
Approach Delay		11.7			47.3	36.0
Approach LOS		B			D	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 22.5 (25%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: East Road & RidgeGate Pkwy WB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	65	2721	42	28	43	0	0	84	79
Future Volume (veh/h)	0	0	0	65	2721	42	28	43	0	0	84	79
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				68	2864	44	29	45	0	0	88	30
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1193	3421	1062	164	233	0	0	307	105
Arrive On Green				0.67	0.67	0.67	0.23	0.23	0.00	0.00	0.23	0.23
Sat Flow, veh/h				1781	5106	1585	473	1013	0	0	1334	455
Grp Volume(v), veh/h				68	2864	44	74	0	0	0	0	118
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1485	0	0	0	0	1789
Q Serve(g_s), s				1.2	37.9	0.8	0.1	0.0	0.0	0.0	0.0	4.9
Cycle Q Clear(g_c), s				1.2	37.9	0.8	5.0	0.0	0.0	0.0	0.0	4.9
Prop In Lane				1.00		1.00	0.39		0.00	0.00		0.25
Lane Grp Cap(c), veh/h				1193	3421	1062	397	0	0	0	0	411
V/C Ratio(X)				0.06	0.84	0.04	0.19	0.00	0.00	0.00	0.00	0.29
Avail Cap(c_a), veh/h				1237	3546	1101	397	0	0	0	0	411
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				5.1	11.2	5.0	27.8	0.0	0.0	0.0	0.0	28.6
Incr Delay (d2), s/veh				0.0	1.8	0.0	1.0	0.0	0.0	0.0	0.0	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	10.8	0.2	1.4	0.0	0.0	0.0	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				5.1	13.0	5.1	28.8	0.0	0.0	0.0	0.0	30.3
LnGrp LOS				A	B	A	C	A	A	A	A	C
Approach Vol, veh/h					2976			74			118	
Approach Delay, s/veh					12.7			28.8			30.3	
Approach LOS					B			C			C	

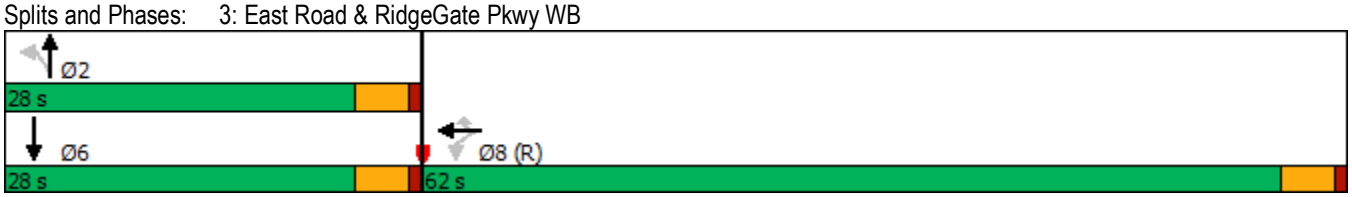
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		25.2				25.2		64.8				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		18.5				18.5		62.5				
Max Q Clear Time (g_c+I1), s		7.0				6.9		39.9				
Green Ext Time (p_c), s		0.2				0.4		20.4				

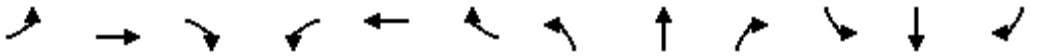
Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	34	1851	108	30	113	81
Future Volume (vph)	34	1851	108	30	113	81
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	28.0	28.0	28.0
Total Split (%)	68.9%	68.9%	68.9%	31.1%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	57.5	57.5	57.5		23.5	23.5
Actuated g/C Ratio	0.64	0.64	0.64		0.26	0.26
v/c Ratio	0.03	0.61	0.11		0.35	0.37
Control Delay	6.1	10.7	1.5		27.1	27.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	6.1	10.7	1.5		27.1	27.5
LOS	A	B	A		C	C
Approach Delay		10.1			27.1	27.5
Approach LOS		B			C	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 26 (29%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 12.4	Intersection LOS: B
Intersection Capacity Utilization 63.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: East Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	34	1851	108	30	113	0	0	81	79
Future Volume (veh/h)	0	0	0	34	1851	108	30	113	0	0	81	79
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				37	1990	116	32	122	0	0	87	85
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1138	3262	1013	111	386	0	0	227	222
Arrive On Green				0.64	0.64	0.64	0.52	0.52	0.00	0.00	0.26	0.26
Sat Flow, veh/h				1781	5106	1585	239	1480	0	0	869	849
Grp Volume(v), veh/h				37	1990	116	154	0	0	0	0	172
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1719	0	0	0	0	1718
Q Serve(g_s), s				0.7	20.8	2.6	0.1	0.0	0.0	0.0	0.0	7.4
Cycle Q Clear(g_c), s				0.7	20.8	2.6	7.5	0.0	0.0	0.0	0.0	7.4
Prop In Lane				1.00		1.00	0.21		0.00	0.00		0.49
Lane Grp Cap(c), veh/h				1138	3262	1013	497	0	0	0	0	448
V/C Ratio(X)				0.03	0.61	0.11	0.31	0.00	0.00	0.00	0.00	0.38
Avail Cap(c_a), veh/h				1138	3262	1013	497	0	0	0	0	448
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.99	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				6.0	9.6	6.3	16.9	0.0	0.0	0.0	0.0	27.3
Incr Delay (d2), s/veh				0.1	0.9	0.2	1.6	0.0	0.0	0.0	0.0	2.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.2	6.2	0.7	1.9	0.0	0.0	0.0	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				6.0	10.5	6.6	18.5	0.0	0.0	0.0	0.0	29.8
LnGrp LOS				A	B	A	B	A	A	A	A	C
Approach Vol, veh/h					2143			154			172	
Approach Delay, s/veh					10.2			18.5			29.8	
Approach LOS					B			B			C	

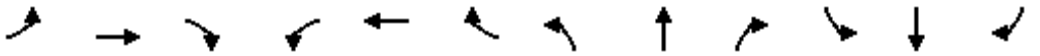
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		28.0				28.0		62.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		23.5				23.5		57.5				
Max Q Clear Time (g_c+I1), s		9.5				9.4		22.8				
Green Ext Time (p_c), s		0.6				0.8		20.5				

Intersection Summary												
HCM 6th Ctrl Delay			12.1									
HCM 6th LOS			B									

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	75	2725	45	65	45	85
Future Volume (vph)	75	2725	45	65	45	85
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	67.0	23.0	23.0	23.0
Total Split (%)	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	62.5	62.5	62.5		18.5	18.5
Actuated g/C Ratio	0.69	0.69	0.69		0.21	0.21
v/c Ratio	0.06	0.81	0.04		0.47	0.50
Control Delay	4.6	12.1	1.8		38.2	36.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	4.6	12.1	1.8		38.2	36.6
LOS	A	B	A		D	D
Approach Delay		11.7			38.2	36.6
Approach LOS		B			D	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 22.5 (25%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 14.0	Intersection LOS: B
Intersection Capacity Utilization 79.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: East Road & RidgeGate Pkwy WB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	75	2725	45	65	45	0	0	85	80
Future Volume (veh/h)	0	0	0	75	2725	45	65	45	0	0	85	80
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				79	2868	49	68	49	0	0	92	87
Peak Hour Factor				0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1237	3546	1101	156	97	0	0	182	172
Arrive On Green				0.69	0.69	0.69	0.21	0.21	0.00	0.00	0.21	0.21
Sat Flow, veh/h				1781	5106	1585	454	472	0	0	884	836
Grp Volume(v), veh/h				79	2868	49	117	0	0	0	0	179
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	926	0	0	0	0	1720
Q Serve(g_s), s				1.3	35.2	0.9	5.1	0.0	0.0	0.0	0.0	8.3
Cycle Q Clear(g_c), s				1.3	35.2	0.9	13.4	0.0	0.0	0.0	0.0	8.3
Prop In Lane				1.00		1.00	0.58		0.00	0.00		0.49
Lane Grp Cap(c), veh/h				1237	3546	1101	254	0	0	0	0	354
V/C Ratio(X)				0.06	0.81	0.04	0.46	0.00	0.00	0.00	0.00	0.51
Avail Cap(c_a), veh/h				1237	3546	1101	254	0	0	0	0	354
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				4.4	9.6	4.3	35.1	0.0	0.0	0.0	0.0	31.7
Incr Delay (d2), s/veh				0.1	2.1	0.1	5.9	0.0	0.0	0.0	0.0	5.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.4	9.6	0.2	2.8	0.0	0.0	0.0	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				4.5	11.7	4.4	41.0	0.0	0.0	0.0	0.0	36.8
LnGrp LOS				A	B	A	D	A	A	A	A	D
Approach Vol, veh/h					2996			117			179	
Approach Delay, s/veh					11.4			41.0			36.8	
Approach LOS					B			D			D	

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		23.0				23.0		67.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		18.5				18.5		62.5				
Max Q Clear Time (g_c+I1), s		15.4				10.3		37.2				
Green Ext Time (p_c), s		0.1				0.6		22.6				

Intersection Summary		
HCM 6th Ctrl Delay	13.8	
HCM 6th LOS	B	

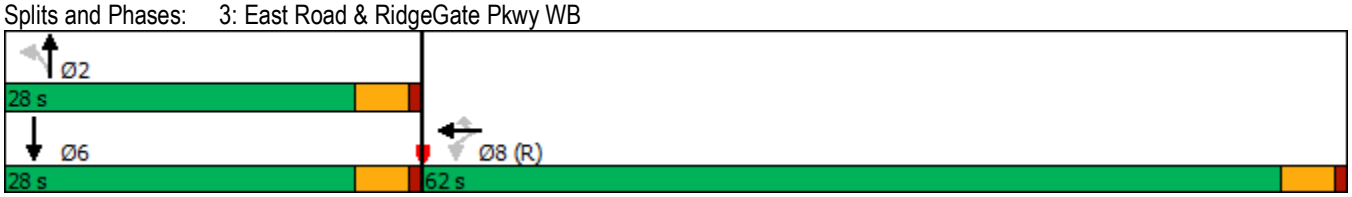
Notes

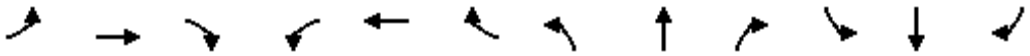
User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	60	1855	110	50	115	85
Future Volume (vph)	60	1855	110	50	115	85
Turn Type	Perm	NA	Perm	Perm	NA	NA
Protected Phases		8			2	6
Permitted Phases	8		8	2		
Detector Phase	8	8	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	28.0	28.0	28.0
Total Split (%)	68.9%	68.9%	68.9%	31.1%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	57.5	57.5	57.5		23.5	23.5
Actuated g/C Ratio	0.64	0.64	0.64		0.26	0.26
v/c Ratio	0.06	0.61	0.11		0.43	0.38
Control Delay	6.3	10.7	1.5		29.8	27.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	6.3	10.7	1.5		29.8	27.8
LOS	A	B	A		C	C
Approach Delay		10.0			29.8	27.8
Approach LOS		B			C	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 26 (29%), Referenced to phase 8:WBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 12.7	Intersection LOS: B
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: East Road & RidgeGate Pkwy WB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	60	1855	110	50	115	0	0	85	80
Future Volume (veh/h)	0	0	0	60	1855	110	50	115	0	0	85	80
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				65	1995	120	54	125	0	0	92	87
Peak Hour Factor				0.93	0.93	0.92	0.93	0.92	0.93	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				1138	3262	1013	137	291	0	0	231	218
Arrive On Green				0.64	0.64	0.64	0.26	0.26	0.00	0.00	0.26	0.26
Sat Flow, veh/h				1781	5106	1585	325	1115	0	0	884	836
Grp Volume(v), veh/h				65	1995	120	179	0	0	0	0	179
Grp Sat Flow(s),veh/h/ln				1781	1702	1585	1439	0	0	0	0	1720
Q Serve(g_s), s				1.2	20.8	2.7	3.3	0.0	0.0	0.0	0.0	7.7
Cycle Q Clear(g_c), s				1.2	20.8	2.7	11.1	0.0	0.0	0.0	0.0	7.7
Prop In Lane				1.00		1.00	0.30		0.00	0.00		0.49
Lane Grp Cap(c), veh/h				1138	3262	1013	428	0	0	0	0	449
V/C Ratio(X)				0.06	0.61	0.12	0.42	0.00	0.00	0.00	0.00	0.40
Avail Cap(c_a), veh/h				1138	3262	1013	428	0	0	0	0	449
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				6.1	9.6	6.3	28.2	0.0	0.0	0.0	0.0	27.4
Incr Delay (d2), s/veh				0.1	0.9	0.2	3.0	0.0	0.0	0.0	0.0	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.4	6.2	0.8	3.6	0.0	0.0	0.0	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				6.2	10.5	6.6	31.2	0.0	0.0	0.0	0.0	30.1
LnGrp LOS				A	B	A	C	A	A	A	A	C
Approach Vol, veh/h					2180			179			179	
Approach Delay, s/veh					10.2			31.2			30.1	
Approach LOS					B			C			C	

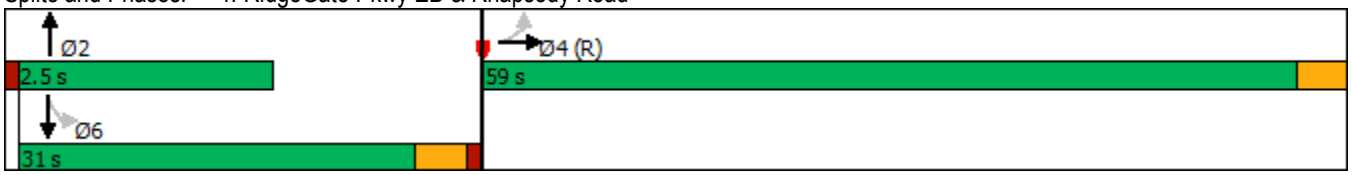
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		28.0				28.0		62.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		23.5				23.5		57.5				
Max Q Clear Time (g_c+I1), s		13.1				9.7		22.8				
Green Ext Time (p_c), s		0.7				0.8		20.7				

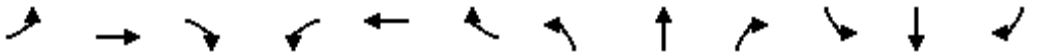
Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	SBL	Ø2
Lane Configurations				
Traffic Volume (vph)	5	804	34	
Future Volume (vph)	5	804	34	
Turn Type	Perm	NA	Perm	
Protected Phases		4		2
Permitted Phases	4		6	
Detector Phase	4	4	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	59.0	59.0	31.0	22.5
Total Split (%)	65.6%	65.6%	34.4%	25%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	None
Act Effct Green (s)	54.5	54.5	26.5	
Actuated g/C Ratio	0.61	0.61	0.29	
v/c Ratio	0.00	0.27	0.09	
Control Delay	7.0	8.7	31.1	
Queue Delay	0.0	0.0	0.0	
Total Delay	7.0	8.7	31.1	
LOS	A	A	C	
Approach Delay		8.7		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 32 (36%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.27	
Intersection Signal Delay: 9.6	Intersection LOS: A
Intersection Capacity Utilization 53.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: RidgeGate Pkwy EB & Rhapsody Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	804	0	0	0	0	0	0	0	34	0	0
Future Volume (veh/h)	5	804	0	0	0	0	0	0	0	34	0	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	5	846	0				0	0	0	36	0	0
Peak Hour Factor	0.95	0.95	0.92				0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	0				0	2	2	2	2	0
Cap, veh/h	1079	3092	0				0	551	0	604	551	0
Arrive On Green	0.61	0.61	0.00				0.00	0.00	0.00	0.29	0.00	0.00
Sat Flow, veh/h	1781	5274	0				0	1870	0	1781	1870	0
Grp Volume(v), veh/h	5	846	0				0	0	0	36	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0				0	1870	0	1781	1870	0
Q Serve(g_s), s	0.1	7.0	0.0				0.0	0.0	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.1	7.0	0.0				0.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	1079	3092	0				0	551	0	604	551	0
V/C Ratio(X)	0.00	0.27	0.00				0.00	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1079	3092	0				0	551	0	604	551	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.0	8.4	0.0				0.0	0.0	0.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0				0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.2	0.0				0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.0	8.6	0.0				0.0	0.0	0.0	23.1	0.0	0.0
LnGrp LOS	A	A	A				A	A	A	C	A	A
Approach Vol, veh/h		851						0			36	
Approach Delay, s/veh		8.6						0.0			23.1	
Approach LOS		A									C	

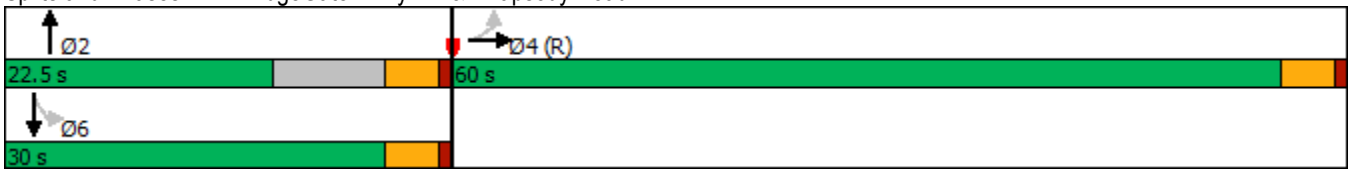
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.0		59.0		31.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		18.0		54.5		26.5						
Max Q Clear Time (g_c+I1), s		0.0		2.1		3.3						
Green Ext Time (p_c), s		0.0		0.0		0.1						

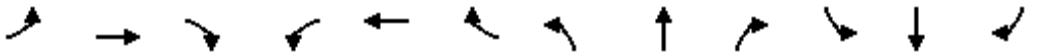
Intersection Summary												
HCM 6th Ctrl Delay			9.2									
HCM 6th LOS			A									

Lane Group	EBL	EBT	SBL	Ø2
Lane Configurations				
Traffic Volume (vph)	5	804	34	
Future Volume (vph)	5	804	34	
Turn Type	Perm	NA	Perm	
Protected Phases		4		2
Permitted Phases	4		6	
Detector Phase	4	4	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	60.0	60.0	30.0	22.5
Total Split (%)	66.7%	66.7%	33.3%	25%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	None
Act Effct Green (s)	55.5	55.5	25.5	
Actuated g/C Ratio	0.62	0.62	0.28	
v/c Ratio	0.00	0.28	0.09	
Control Delay	6.6	8.2	31.2	
Queue Delay	0.0	0.0	0.0	
Total Delay	6.6	8.2	31.2	
LOS	A	A	C	
Approach Delay		8.2		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 31 (34%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 53.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: RidgeGate Pkwy EB & Rhapsody Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	804	0	0	0	0	0	0	0	34	0	0
Future Volume (veh/h)	5	804	0	0	0	0	0	0	0	34	0	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	5	865	0				0	0	0	37	0	0
Peak Hour Factor	0.93	0.93	0.92				0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	2	2	0				0	2	2	2	2	0
Cap, veh/h	1098	3149	0				0	530	0	585	530	0
Arrive On Green	0.62	0.62	0.00				0.00	0.00	0.00	0.28	0.00	0.00
Sat Flow, veh/h	1781	5274	0				0	1870	0	1781	1870	0
Grp Volume(v), veh/h	5	865	0				0	0	0	37	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0				0	1870	0	1781	1870	0
Q Serve(g_s), s	0.1	7.0	0.0				0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	0.1	7.0	0.0				0.0	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	1098	3149	0				0	530	0	585	530	0
V/C Ratio(X)	0.00	0.27	0.00				0.00	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1098	3149	0				0	530	0	585	530	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	8.0	0.0				0.0	0.0	0.0	23.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0				0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.2	0.0				0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.6	8.2	0.0				0.0	0.0	0.0	23.8	0.0	0.0
LnGrp LOS	A	A	A				A	A	A	C	A	A
Approach Vol, veh/h		870						0			37	
Approach Delay, s/veh		8.2						0.0			23.8	
Approach LOS		A									C	

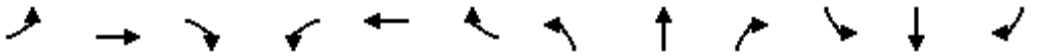
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		30.0		60.0		30.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		18.0		55.5		25.5						
Max Q Clear Time (g_c+I1), s		0.0		2.1		3.4						
Green Ext Time (p_c), s		0.0		0.0		0.1						

Intersection Summary												
HCM 6th Ctrl Delay			8.8									
HCM 6th LOS			A									

Lane Group	EBL	EBT	SBL	Ø2
Lane Configurations				
Traffic Volume (vph)	5	822	34	
Future Volume (vph)	5	822	34	
Turn Type	Perm	NA	Perm	
Protected Phases		4		2
Permitted Phases	4		6	
Detector Phase	4	4	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	59.0	59.0	31.0	31.0
Total Split (%)	65.6%	65.6%	34.4%	34%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	Max
Act Effct Green (s)	54.5	54.5	26.5	
Actuated g/C Ratio	0.61	0.61	0.29	
v/c Ratio	0.00	0.28	0.09	
Control Delay	7.0	8.7	32.0	
Queue Delay	0.0	0.0	0.0	
Total Delay	7.0	8.7	32.0	
LOS	A	A	C	
Approach Delay		8.7		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 33 (37%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay: 9.6	Intersection LOS: A
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Rhapsody Road & RidgeGate Pkwy EB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	822	0	0	0	0	0	0	0	34	0	0
Future Volume (veh/h)	5	822	0	0	0	0	0	0	0	34	0	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	5	865	0				0	0	0	36	0	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1079	3092	0				0	551	0	604	551	0
Arrive On Green	0.61	0.61	0.00				0.00	0.00	0.00	0.29	0.00	0.00
Sat Flow, veh/h	1781	5274	0				0	1870	0	1781	1870	0
Grp Volume(v), veh/h	5	865	0				0	0	0	36	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0				0	1870	0	1781	1870	0
Q Serve(g_s), s	0.1	7.2	0.0				0.0	0.0	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.1	7.2	0.0				0.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	1079	3092	0				0	551	0	604	551	0
V/C Ratio(X)	0.00	0.28	0.00				0.00	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1079	3092	0				0	551	0	604	551	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.0	8.4	0.0				0.0	0.0	0.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0				0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	0.0				0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.0	8.7	0.0				0.0	0.0	0.0	23.1	0.0	0.0
LnGrp LOS	A	A	A				A	A	A	C	A	A
Approach Vol, veh/h		870						0			36	
Approach Delay, s/veh		8.6						0.0			23.1	
Approach LOS		A									C	

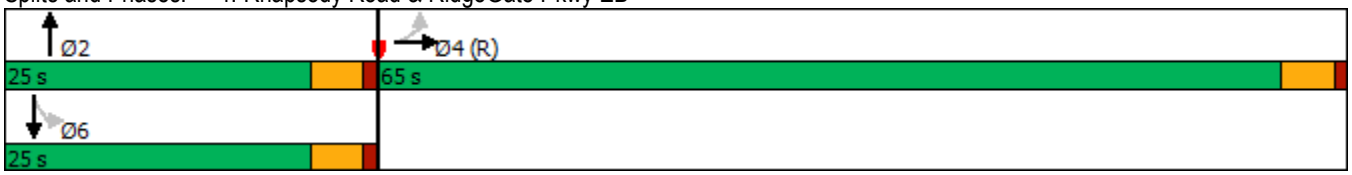
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.0		59.0		31.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		26.5		54.5		26.5						
Max Q Clear Time (g_c+I1), s		0.0		9.2		3.3						
Green Ext Time (p_c), s		0.0		6.5		0.1						

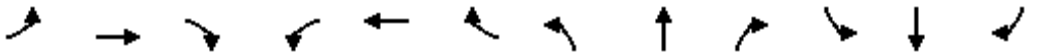
Intersection Summary												
HCM 6th Ctrl Delay			9.2									
HCM 6th LOS			A									

Lane Group	EBL	EBT	SBL	Ø2
Lane Configurations				
Traffic Volume (vph)	9	1990	94	
Future Volume (vph)	9	1990	94	
Turn Type	Perm	NA	Perm	
Protected Phases		4		2
Permitted Phases	4		6	
Detector Phase	4	4	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5
Total Split (s)	65.0	65.0	25.0	25.0
Total Split (%)	72.2%	72.2%	27.8%	28%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	Max	Max
Act Effct Green (s)	60.5	60.5	20.5	
Actuated g/C Ratio	0.67	0.67	0.23	
v/c Ratio	0.01	0.63	0.31	
Control Delay	4.9	9.4	34.3	
Queue Delay	0.0	0.0	0.0	
Total Delay	4.9	9.4	34.3	
LOS	A	A	C	
Approach Delay		9.3		
Approach LOS		A		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 43.6 (48%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Rhapsody Road & RidgeGate Pkwy EB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1990	0	0	0	0	0	0	0	94	0	0
Future Volume (veh/h)	9	1990	0	0	0	0	0	0	0	94	0	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	10	2140	0				0	0	0	101	0	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1197	3432	0				0	426	0	486	426	0
Arrive On Green	0.67	0.67	0.00				0.00	0.00	0.00	0.23	0.00	0.00
Sat Flow, veh/h	1781	5274	0				0	1870	0	1781	1870	0
Grp Volume(v), veh/h	10	2140	0				0	0	0	101	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0				0	1870	0	1781	1870	0
Q Serve(g_s), s	0.2	21.3	0.0				0.0	0.0	0.0	4.2	0.0	0.0
Cycle Q Clear(g_c), s	0.2	21.3	0.0				0.0	0.0	0.0	4.2	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	1197	3432	0				0	426	0	486	426	0
V/C Ratio(X)	0.01	0.62	0.00				0.00	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	1197	3432	0				0	426	0	486	426	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	8.3	0.0				0.0	0.0	0.0	28.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0				0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.9	0.0				0.0	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.9	9.2	0.0				0.0	0.0	0.0	29.4	0.0	0.0
LnGrp LOS	A	A	A				A	A	A	C	A	A
Approach Vol, veh/h		2150						0			101	
Approach Delay, s/veh		9.2						0.0			29.4	
Approach LOS		A									C	

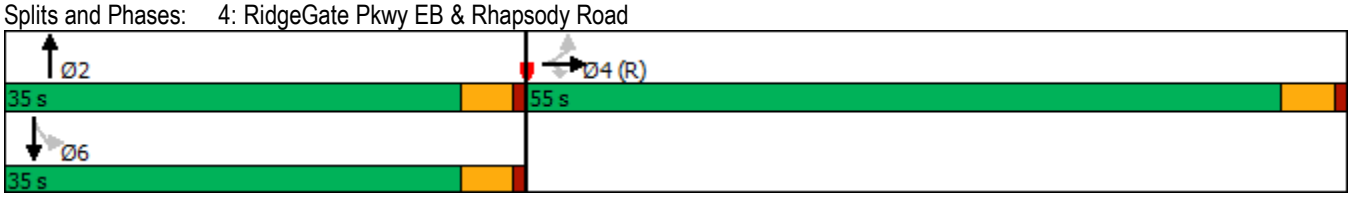
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		25.0		65.0		25.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		20.5		60.5		20.5						
Max Q Clear Time (g_c+I1), s		0.0		23.3		6.2						
Green Ext Time (p_c), s		0.0		22.6		0.2						

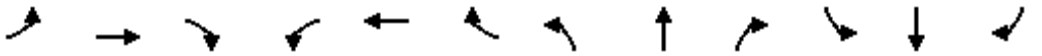
Intersection Summary												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	1191	126	140	52	89
Future Volume (vph)	54	1191	126	140	52	89
Turn Type	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		2		6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	55.0	55.0	55.0	35.0	35.0	35.0
Total Split (%)	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	None	Max	Max
Act Effct Green (s)	50.5	50.5	50.5	30.5	30.5	30.5
Actuated g/C Ratio	0.56	0.56	0.56	0.34	0.34	0.34
v/c Ratio	0.06	0.44	0.14	0.36	0.16	0.15
Control Delay	9.2	12.1	2.1	21.3	19.9	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.2	12.1	2.1	21.3	19.9	18.7
LOS	A	B	A	C	B	B
Approach Delay		11.0		21.3		19.1
Approach LOS		B		C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 33 (37%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.44	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 81.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: RidgeGate Pkwy EB & Rhapsody Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	1191	126	0	0	0	0	140	66	52	89	0
Future Volume (veh/h)	54	1191	126	0	0	0	0	140	66	52	89	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	57	1254	137				0	152	72	55	97	0
Peak Hour Factor	0.95	0.95	0.92				0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1000	2865	889				0	407	193	361	634	0
Arrive On Green	0.56	0.56	0.56				0.00	0.34	0.34	0.68	0.68	0.00
Sat Flow, veh/h	1781	5106	1585				0	1200	568	1157	1870	0
Grp Volume(v), veh/h	57	1254	137				0	0	224	55	97	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	0	1768	1157	1870	0
Q Serve(g_s), s	1.3	12.9	3.7				0.0	0.0	8.6	2.4	1.7	0.0
Cycle Q Clear(g_c), s	1.3	12.9	3.7				0.0	0.0	8.6	11.1	1.7	0.0
Prop In Lane	1.00		1.00				0.00		0.32	1.00		0.00
Lane Grp Cap(c), veh/h	1000	2865	889				0	0	599	361	634	0
V/C Ratio(X)	0.06	0.44	0.15				0.00	0.00	0.37	0.15	0.15	0.00
Avail Cap(c_a), veh/h	1000	2865	889				0	0	599	361	634	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	0.91	0.91	0.00
Uniform Delay (d), s/veh	9.0	11.5	9.5				0.0	0.0	22.5	13.8	9.9	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.4				0.0	0.0	0.4	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.2	1.2				0.0	0.0	3.6	0.5	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	12.0	9.9				0.0	0.0	22.9	14.6	10.3	0.0
LnGrp LOS	A	B	A				A	A	C	B	B	A
Approach Vol, veh/h		1448						224			152	
Approach Delay, s/veh		11.7						22.9			11.9	
Approach LOS		B						C			B	

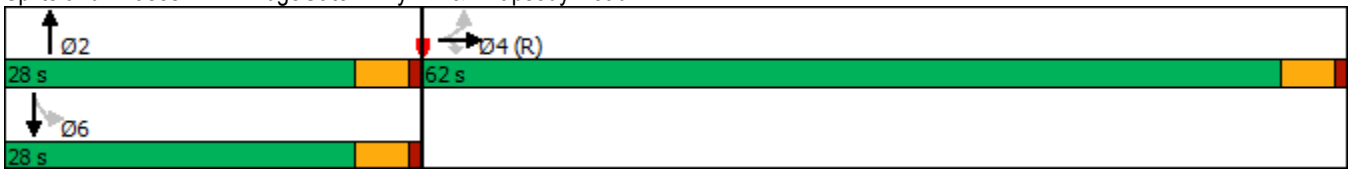
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		35.0		55.0		35.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		30.5		50.5		30.5						
Max Q Clear Time (g_c+I1), s		10.6		14.9		13.1						
Green Ext Time (p_c), s		1.2		11.2		0.6						

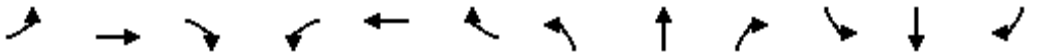
Intersection Summary												
HCM 6th Ctrl Delay			13.1									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	155	2614	174	188	120	127
Future Volume (vph)	155	2614	174	188	120	127
Turn Type	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		2		6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	28.0	28.0	28.0
Total Split (%)	68.9%	68.9%	68.9%	31.1%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	None	Max	Max
Act Effct Green (s)	57.5	57.5	57.5	23.5	23.5	23.5
Actuated g/C Ratio	0.64	0.64	0.64	0.26	0.26	0.26
v/c Ratio	0.15	0.87	0.18	0.59	0.66	0.28
Control Delay	6.9	16.9	2.4	34.8	44.4	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.9	16.9	2.4	34.8	44.4	25.0
LOS	A	B	A	C	D	C
Approach Delay		15.5		34.8		34.4
Approach LOS		B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 43.6 (48%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 18.3	Intersection LOS: B
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: RidgeGate Pkwy EB & Rhapsody Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	2614	174	0	0	0	0	188	67	120	127	0
Future Volume (veh/h)	155	2614	174	0	0	0	0	188	67	120	127	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	167	2811	189				0	204	73	129	138	0
Peak Hour Factor	0.93	0.93	0.92				0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1138	3262	1013				0	343	123	218	488	0
Arrive On Green	0.64	0.64	0.64				0.00	0.26	0.26	0.52	0.52	0.00
Sat Flow, veh/h	1781	5106	1585				0	1315	471	1102	1870	0
Grp Volume(v), veh/h	167	2811	189				0	0	277	129	138	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	0	1786	1102	1870	0
Q Serve(g_s), s	3.4	39.8	4.4				0.0	0.0	12.2	10.3	3.7	0.0
Cycle Q Clear(g_c), s	3.4	39.8	4.4				0.0	0.0	12.2	22.5	3.7	0.0
Prop In Lane	1.00		1.00				0.00		0.26	1.00		0.00
Lane Grp Cap(c), veh/h	1138	3262	1013				0	0	466	218	488	0
V/C Ratio(X)	0.15	0.86	0.19				0.00	0.00	0.59	0.59	0.28	0.00
Avail Cap(c_a), veh/h	1138	3262	1013				0	0	466	218	488	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	6.5	13.1	6.7				0.0	0.0	29.1	27.2	16.8	0.0
Incr Delay (d2), s/veh	0.3	3.3	0.4				0.0	0.0	2.0	11.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	12.4	1.3				0.0	0.0	5.4	2.9	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	16.3	7.1				0.0	0.0	31.1	38.3	18.2	0.0
LnGrp LOS	A	B	A				A	A	C	D	B	A
Approach Vol, veh/h		3167						277			267	
Approach Delay, s/veh		15.3						31.1			27.9	
Approach LOS		B						C			C	

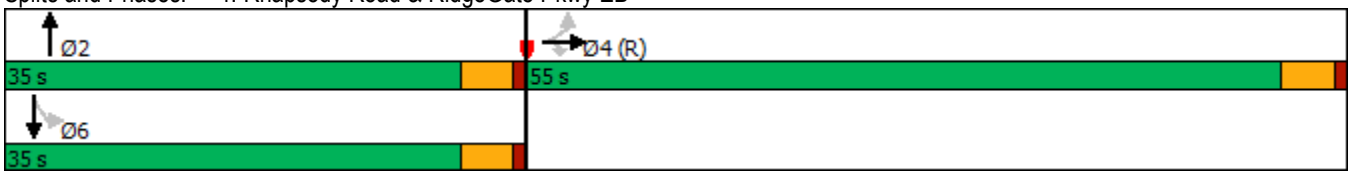
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		28.0		62.0		28.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		23.5		57.5		23.5						
Max Q Clear Time (g_c+I1), s		14.2		41.8		24.5						
Green Ext Time (p_c), s		1.1		14.6		0.0						

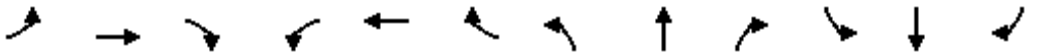
Intersection Summary												
HCM 6th Ctrl Delay			17.4									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	55	1210	130	140	60	95
Future Volume (vph)	55	1210	130	140	60	95
Turn Type	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		2		6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	55.0	55.0	55.0	35.0	35.0	35.0
Total Split (%)	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	50.5	50.5	50.5	30.5	30.5	30.5
Actuated g/C Ratio	0.56	0.56	0.56	0.34	0.34	0.34
v/c Ratio	0.06	0.45	0.14	0.36	0.18	0.16
Control Delay	9.2	12.2	2.1	21.1	17.6	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.2	12.2	2.1	21.1	17.6	16.5
LOS	A	B	A	C	B	B
Approach Delay		11.1		21.1		16.9
Approach LOS		B		C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 33 (37%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 12.8	Intersection LOS: B
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rhapsody Road & RidgeGate Pkwy EB





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	1210	130	0	0	0	0	140	70	60	95	0
Future Volume (veh/h)	55	1210	130	0	0	0	0	140	70	60	95	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	58	1274	137				0	147	74	63	100	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1000	2865	889				0	398	200	363	634	0
Arrive On Green	0.56	0.56	0.56				0.00	0.34	0.34	0.68	0.68	0.00
Sat Flow, veh/h	1781	5106	1585				0	1173	591	1160	1870	0
Grp Volume(v), veh/h	58	1274	137				0	0	221	63	100	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	0	1764	1160	1870	0
Q Serve(g_s), s	1.3	13.1	3.7				0.0	0.0	8.5	2.8	1.7	0.0
Cycle Q Clear(g_c), s	1.3	13.1	3.7				0.0	0.0	8.5	11.3	1.7	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	1000	2865	889				0	0	598	363	634	0
V/C Ratio(X)	0.06	0.44	0.15				0.00	0.00	0.37	0.17	0.16	0.00
Avail Cap(c_a), veh/h	1000	2865	889				0	0	598	363	634	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	9.0	11.5	9.5				0.0	0.0	22.5	13.9	9.9	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.4				0.0	0.0	1.8	1.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.3	1.2				0.0	0.0	3.7	0.6	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	12.1	9.9				0.0	0.0	24.2	14.8	10.4	0.0
LnGrp LOS	A	B	A				A	A	C	B	B	A
Approach Vol, veh/h		1469						221			163	
Approach Delay, s/veh		11.7						24.2			12.1	
Approach LOS		B						C			B	

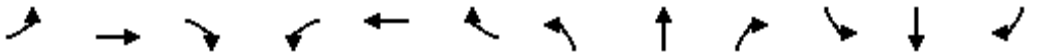
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		35.0		55.0		35.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		30.5		50.5		30.5						
Max Q Clear Time (g_c+I1), s		10.5		15.1		13.3						
Green Ext Time (p_c), s		1.2		11.5		0.6						

Intersection Summary												
HCM 6th Ctrl Delay			13.3									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	155	2660	175	190	130	130
Future Volume (vph)	155	2660	175	190	130	130
Turn Type	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		2		6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	28.0	28.0	28.0
Total Split (%)	68.9%	68.9%	68.9%	31.1%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	57.5	57.5	57.5	23.5	23.5	23.5
Actuated g/C Ratio	0.64	0.64	0.64	0.26	0.26	0.26
v/c Ratio	0.15	0.88	0.18	0.59	0.73	0.29
Control Delay	6.9	17.7	2.5	35.0	50.5	25.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.9	17.7	2.5	35.0	50.5	25.3
LOS	A	B	A	C	D	C
Approach Delay		16.2		35.0		37.9
Approach LOS		B		C		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 43.6 (48%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 84.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rhapsody Road & RidgeGate Pkwy EB



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	2660	175	0	0	0	0	190	70	130	130	0
Future Volume (veh/h)	155	2660	175	0	0	0	0	190	70	130	130	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	167	2860	188				0	204	75	140	140	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1138	3262	1013				0	341	125	217	488	0
Arrive On Green	0.64	0.64	0.64				0.00	0.26	0.26	0.44	0.44	0.00
Sat Flow, veh/h	1781	5106	1585				0	1304	480	1100	1870	0
Grp Volume(v), veh/h	167	2860	188				0	0	279	140	140	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	0	1784	1100	1870	0
Q Serve(g_s), s	3.4	41.4	4.4				0.0	0.0	12.3	11.2	4.3	0.0
Cycle Q Clear(g_c), s	3.4	41.4	4.4				0.0	0.0	12.3	23.5	4.3	0.0
Prop In Lane	1.00		1.00				0.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	1138	3262	1013				0	0	466	217	488	0
V/C Ratio(X)	0.15	0.88	0.19				0.00	0.00	0.60	0.65	0.29	0.00
Avail Cap(c_a), veh/h	1138	3262	1013				0	0	466	217	488	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	6.5	13.3	6.7				0.0	0.0	29.1	31.7	20.0	0.0
Incr Delay (d2), s/veh	0.3	3.7	0.4				0.0	0.0	5.6	13.7	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	12.9	1.3				0.0	0.0	5.9	3.5	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	17.0	7.1				0.0	0.0	34.7	45.4	21.4	0.0
LnGrp LOS	A	B	A				A	A	C	D	C	A
Approach Vol, veh/h		3215						279			280	
Approach Delay, s/veh		15.9						34.7			33.4	
Approach LOS		B						C			C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		28.0		62.0		28.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		23.5		57.5		23.5						
Max Q Clear Time (g_c+I1), s		14.3		43.4		25.5						
Green Ext Time (p_c), s		1.1		13.3		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			18.6									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	849	0	0	5	0
Future Vol, veh/h	8	849	0	0	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	1080	442304	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	894	0	0	5	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	374	-
Stage 1	-	-	0	-
Stage 2	-	-	374	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	629	0
Stage 1	-	-	-	0
Stage 2	-	-	610	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	629	-
Mov Cap-2 Maneuver	-	-	629	-
Stage 1	-	-	-	-
Stage 2	-	-	610	-

Approach	EB	SB
HCM Control Delay, s		10.8
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	629
HCM Lane V/C Ratio	-	-	0.008
HCM Control Delay (s)	-	-	10.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	2063	0	0	3	0
Future Vol, veh/h	21	2063	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	1080	442304	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	2218	0	0	3	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	933	-
Stage 1	-	-	0	-
Stage 2	-	-	933	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	335	0
Stage 1	-	-	-	0
Stage 2	-	-	310	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	335	-
Mov Cap-2 Maneuver	-	-	335	-
Stage 1	-	-	-	-
Stage 2	-	-	310	-

Approach	EB	SB
HCM Control Delay, s		15.9
HCM LOS		C

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	335
HCM Lane V/C Ratio	-	-	0.01
HCM Control Delay (s)	-	-	15.9
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1306	0	0	13	0
Future Vol, veh/h	3	1306	0	0	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	1080	442304	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1375	0	0	14	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	556	-
Stage 1	-	-	0	-
Stage 2	-	-	556	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	*639	0
Stage 1	-	-	-	0
Stage 2	-	-	*639	0
Platoon blocked, %		-	1	
Mov Cap-1 Maneuver	-	-	*639	-
Mov Cap-2 Maneuver	-	-	*639	-
Stage 1	-	-	-	-
Stage 2	-	-	*639	-

Approach	EB	SB
HCM Control Delay, s		10.8
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	639
HCM Lane V/C Ratio	-	-	0.021
HCM Control Delay (s)	-	-	10.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	2794	0	0	46	0
Future Vol, veh/h	7	2794	0	0	46	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	1080	442304	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	3004	0	0	49	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	1218	-
Stage 1	-	-	0	-
Stage 2	-	-	1218	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	*284	0
Stage 1	-	-	-	0
Stage 2	-	-	*284	0
Platoon blocked, %		-	1	
Mov Cap-1 Maneuver	-	-	*284	-
Mov Cap-2 Maneuver	-	-	*284	-
Stage 1	-	-	-	-
Stage 2	-	-	*284	-

Approach	EB	SB
HCM Control Delay, s		20.3
HCM LOS		C

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	284
HCM Lane V/C Ratio	-	-	0.174
HCM Control Delay (s)	-	-	20.3
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.6

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

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1320	0	0	20	0
Future Vol, veh/h	15	1320	0	0	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	1080	442304	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1389	0	0	21	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	588	-
Stage 1	-	-	0	-
Stage 2	-	-	588	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	496	0
Stage 1	-	-	-	0
Stage 2	-	-	472	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	496	-
Mov Cap-2 Maneuver	-	-	496	-
Stage 1	-	-	-	-
Stage 2	-	-	472	-

Approach	EB	SB
HCM Control Delay, s		12.6
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	496
HCM Lane V/C Ratio	-	-	0.042
HCM Control Delay (s)	-	-	12.6
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	2830	0	0	50	0
Future Vol, veh/h	35	2830	0	0	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	1080	442304	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	3043	0	0	54	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	1293	-
Stage 1	-	-	0	-
Stage 2	-	-	1293	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	220	0
Stage 1	-	-	-	0
Stage 2	-	-	198	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	220	-
Mov Cap-2 Maneuver	-	-	220	-
Stage 1	-	-	-	-
Stage 2	-	-	198	-

Approach	EB	SB
HCM Control Delay, s		26.6
HCM LOS		D

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	220
HCM Lane V/C Ratio	-	-	0.244
HCM Control Delay (s)	-	-	26.6
HCM Lane LOS	-	-	D
HCM 95th %tile Q(veh)	-	-	0.9

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	843	0	0	35	0
Future Vol, veh/h	11	843	0	0	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	887	0	0	37	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	379	-
Stage 1	-	-	0	-
Stage 2	-	-	379	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	625	0
Stage 1	-	-	-	0
Stage 2	-	-	606	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	625	-
Mov Cap-2 Maneuver	-	-	625	-
Stage 1	-	-	-	-
Stage 2	-	-	606	-

Approach	EB	SB
HCM Control Delay, s		11.1
HCM LOS		B

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	625
HCM Lane V/C Ratio	-	-	0.059
HCM Control Delay (s)	-	-	11.1
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	2037	0	0	19	0
Future Vol, veh/h	29	2037	0	0	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	2	2
Mvmt Flow	31	2190	0	0	20	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	938	-
Stage 1	-	-	0	-
Stage 2	-	-	938	-
Critical Hdwy	5.34	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	3.12	-	3.82	-
Pot Cap-1 Maneuver	-	-	333	0
Stage 1	-	-	-	0
Stage 2	-	-	308	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	333	-
Mov Cap-2 Maneuver	-	-	333	-
Stage 1	-	-	-	-
Stage 2	-	-	308	-

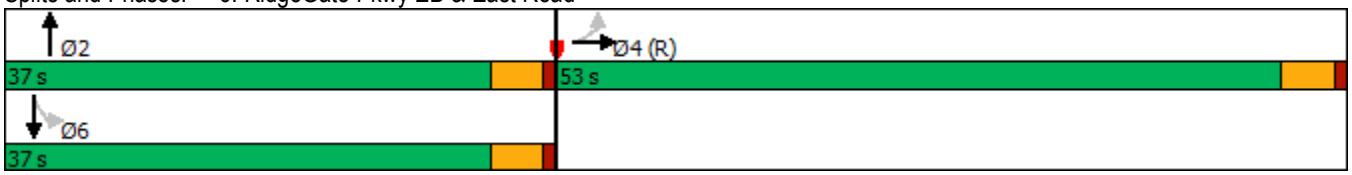
Approach	EB	SB
HCM Control Delay, s		16.5
HCM LOS		C

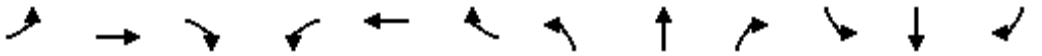
Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	333
HCM Lane V/C Ratio	-	-	0.061
HCM Control Delay (s)	-	-	16.5
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.2

Lane Group	EBL	EBT	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	53	1255	4	82	69
Future Volume (vph)	53	1255	4	82	69
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		4	2		6
Permitted Phases	4			6	
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	53.0	53.0	37.0	37.0	37.0
Total Split (%)	58.9%	58.9%	41.1%	41.1%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	48.5	48.5	32.5		32.5
Actuated g/C Ratio	0.54	0.54	0.36		0.36
v/c Ratio	0.06	0.49	0.04		0.28
Control Delay	6.8	7.8	10.0		32.8
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	6.8	7.8	10.0		32.8
LOS	A	A	A		C
Approach Delay		7.8	10.0		32.8
Approach LOS		A	A		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 29 (32%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 10.4	Intersection LOS: B
Intersection Capacity Utilization 46.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: RidgeGate Pkwy EB & East Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	1255	11	0	0	0	0	4	17	82	69	0
Future Volume (veh/h)	53	1255	11	0	0	0	0	4	17	82	69	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	56	1321	12				0	4	18	86	73	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	960	2812	26				0	107	482	353	283	0
Arrive On Green	0.54	0.54	0.54				0.00	0.36	0.36	0.60	0.60	0.00
Sat Flow, veh/h	1781	5218	47				0	296	1334	808	783	0
Grp Volume(v), veh/h	56	862	471				0	0	22	159	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1862				0	0	1630	1591	0	0
Q Serve(g_s), s	1.3	14.1	14.1				0.0	0.0	0.8	2.3	0.0	0.0
Cycle Q Clear(g_c), s	1.3	14.1	14.1				0.0	0.0	0.8	4.0	0.0	0.0
Prop In Lane	1.00		0.03				0.00		0.82	0.54		0.00
Lane Grp Cap(c), veh/h	960	1834	1003				0	0	589	636	0	0
V/C Ratio(X)	0.06	0.47	0.47				0.00	0.00	0.04	0.25	0.00	0.00
Avail Cap(c_a), veh/h	960	1834	1003				0	0	589	636	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	0.94	0.00	0.00
Uniform Delay (d), s/veh	9.9	12.8	12.8				0.0	0.0	18.6	12.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.9	1.6				0.0	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.8	5.5				0.0	0.0	0.3	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.0	13.7	14.4				0.0	0.0	18.7	13.0	0.0	0.0
LnGrp LOS	A	B	B				A	A	B	B	A	A
Approach Vol, veh/h		1389						22			159	
Approach Delay, s/veh		13.8						18.7			13.0	
Approach LOS		B						B			B	

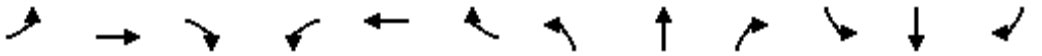
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		37.0		53.0		37.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		32.5		48.5		32.5						
Max Q Clear Time (g_c+I1), s		2.8		16.1		6.0						
Green Ext Time (p_c), s		0.1		10.3		0.9						

Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									

Lane Group	EBL	EBT	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	137	2698	18	81	33
Future Volume (vph)	137	2698	18	81	33
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		4	2		6
Permitted Phases	4			6	
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	23.0	23.0	23.0
Total Split (%)	74.4%	74.4%	25.6%	25.6%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	62.5	62.5	18.5		18.5
Actuated g/C Ratio	0.69	0.69	0.21		0.21
v/c Ratio	0.12	0.82	0.28		0.44
Control Delay	6.4	10.4	31.7		37.5
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	6.4	10.4	31.7		37.5
LOS	A	B	C		D
Approach Delay		10.2	31.7		37.5
Approach LOS		B	C		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 23 (26%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 72.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: RidgeGate Pkwy EB & East Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	2698	5	0	0	0	0	18	71	81	33	0
Future Volume (veh/h)	137	2698	5	0	0	0	0	18	71	81	33	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	147	2901	5				0	19	76	87	35	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1237	3655	6				0	67	269	228	81	0
Arrive On Green	0.69	0.69	0.69				0.00	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1781	5264	9				0	327	1308	774	393	0
Grp Volume(v), veh/h	147	1876	1030				0	0	95	122	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1869				0	0	1635	1167	0	0
Q Serve(g_s), s	2.5	33.7	33.8				0.0	0.0	4.4	6.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	33.7	33.8				0.0	0.0	4.4	10.4	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.80	0.71		0.00
Lane Grp Cap(c), veh/h	1237	2364	1298				0	0	336	308	0	0
V/C Ratio(X)	0.12	0.79	0.79				0.00	0.00	0.28	0.40	0.00	0.00
Avail Cap(c_a), veh/h	1237	2364	1298				0	0	336	308	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	0.96	0.00	0.00
Uniform Delay (d), s/veh	4.6	9.4	9.4				0.0	0.0	30.2	33.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	2.8	5.1				0.0	0.0	2.1	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	9.4	11.2				0.0	0.0	1.9	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.8	12.2	14.4				0.0	0.0	32.3	37.2	0.0	0.0
LnGrp LOS	A	B	B				A	A	C	D	A	A
Approach Vol, veh/h		3053						95			122	
Approach Delay, s/veh		12.6						32.3			37.2	
Approach LOS		B						C			D	

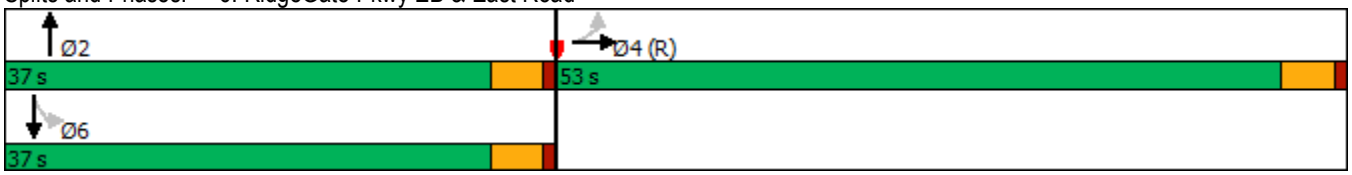
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		23.0		67.0		23.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		18.5		62.5		18.5						
Max Q Clear Time (g_c+I1), s		6.4		35.8		12.4						
Green Ext Time (p_c), s		0.3		23.4		0.3						

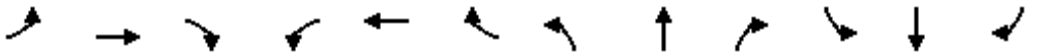
Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									

Lane Group	EBL	EBT	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	65	1260	5	110	70
Future Volume (vph)	65	1260	5	110	70
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		4	2		6
Permitted Phases	4			6	
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	53.0	53.0	37.0	37.0	37.0
Total Split (%)	58.9%	58.9%	41.1%	41.1%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	48.5	48.5	32.5		32.5
Actuated g/C Ratio	0.54	0.54	0.36		0.36
v/c Ratio	0.07	0.49	0.04		0.35
Control Delay	6.9	7.9	9.4		20.7
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	6.9	7.9	9.4		20.7
LOS	A	A	A		C
Approach Delay		7.9	9.4		20.7
Approach LOS		A	A		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 29 (32%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: RidgeGate Pkwy EB & East Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	1260	15	0	0	0	0	5	20	110	70	0
Future Volume (veh/h)	65	1260	15	0	0	0	0	5	20	110	70	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	68	1326	16				0	5	22	116	76	0
Peak Hour Factor	0.95	0.95	0.92				0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	960	2802	34				0	109	480	387	239	0
Arrive On Green	0.54	0.54	0.54				0.00	0.36	0.36	0.60	0.60	0.00
Sat Flow, veh/h	1781	5200	63				0	302	1329	894	661	0
Grp Volume(v), veh/h	68	868	474				0	0	27	192	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1859				0	0	1631	1556	0	0
Q Serve(g_s), s	1.6	14.2	14.2				0.0	0.0	1.0	4.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	14.2	14.2				0.0	0.0	1.0	5.3	0.0	0.0
Prop In Lane	1.00		0.03				0.00		0.81	0.60		0.00
Lane Grp Cap(c), veh/h	960	1834	1002				0	0	589	626	0	0
V/C Ratio(X)	0.07	0.47	0.47				0.00	0.00	0.05	0.31	0.00	0.00
Avail Cap(c_a), veh/h	960	1834	1002				0	0	589	626	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.9	12.8	12.8				0.0	0.0	18.7	12.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.9	1.6				0.0	0.0	0.1	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.9	5.5				0.0	0.0	0.4	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.1	13.7	14.4				0.0	0.0	18.8	13.7	0.0	0.0
LnGrp LOS	B	B	B				A	A	B	B	A	A
Approach Vol, veh/h		1410						27			192	
Approach Delay, s/veh		13.8						18.8			13.7	
Approach LOS		B						B			B	

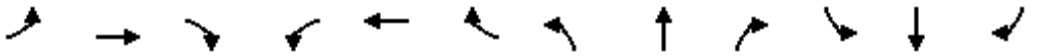
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		37.0		53.0		37.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		32.5		48.5		32.5						
Max Q Clear Time (g_c+I1), s		3.0		16.2		7.3						
Green Ext Time (p_c), s		0.1		10.4		1.1						

Intersection Summary												
HCM 6th Ctrl Delay			13.9									
HCM 6th LOS			B									

Lane Group	EBL	EBT	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	175	2705	20	95	35
Future Volume (vph)	175	2705	20	95	35
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		4	2		6
Permitted Phases	4			6	
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	23.0	23.0	23.0
Total Split (%)	74.4%	74.4%	25.6%	25.6%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	62.5	62.5	18.5		18.5
Actuated g/C Ratio	0.69	0.69	0.21		0.21
v/c Ratio	0.15	0.83	0.30		0.51
Control Delay	6.6	10.6	32.2		40.0
Queue Delay	0.0	0.0	0.0		0.0
Total Delay	6.6	10.6	32.2		40.0
LOS	A	B	C		D
Approach Delay		10.3	32.3		40.0
Approach LOS		B	C		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 23 (26%), Referenced to phase 4:EBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: RidgeGate Pkwy EB & East Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	2705	5	0	0	0	0	20	75	95	35	0
Future Volume (veh/h)	175	2705	5	0	0	0	0	20	75	95	35	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	188	2909	5				0	22	82	102	38	0
Peak Hour Factor	0.93	0.93	0.92				0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1237	3655	6				0	71	265	225	73	0
Arrive On Green	0.69	0.69	0.69				0.00	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1781	5264	9				0	346	1291	757	358	0
Grp Volume(v), veh/h	188	1881	1033				0	0	104	140	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1869				0	0	1638	1115	0	0
Q Serve(g_s), s	3.2	33.9	34.0				0.0	0.0	4.8	7.3	0.0	0.0
Cycle Q Clear(g_c), s	3.2	33.9	34.0				0.0	0.0	4.8	12.2	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.79	0.73		0.00
Lane Grp Cap(c), veh/h	1237	2364	1298				0	0	337	298	0	0
V/C Ratio(X)	0.15	0.80	0.80				0.00	0.00	0.31	0.47	0.00	0.00
Avail Cap(c_a), veh/h	1237	2364	1298				0	0	337	298	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.7	9.4	9.4				0.0	0.0	30.3	34.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	2.9	5.1				0.0	0.0	2.4	5.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.5	11.3				0.0	0.0	2.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.0	12.3	14.5				0.0	0.0	32.7	39.8	0.0	0.0
LnGrp LOS	A	B	B				A	A	C	D	A	A
Approach Vol, veh/h		3102						104			140	
Approach Delay, s/veh		12.6						32.7			39.8	
Approach LOS		B						C			D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		23.0		67.0		23.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		18.5		62.5		18.5						
Max Q Clear Time (g_c+I1), s		6.8		36.0		14.2						
Green Ext Time (p_c), s		0.4		23.3		0.2						

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	30	0	8	2	0
Future Vol, veh/h	5	30	0	8	2	0
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	32	0	8	2	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	8	4	0	0	8	0
Stage 1	4	-	-	-	-	-
Stage 2	4	-	-	-	-	-
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	1013	1080	-	-	1612	-
Stage 1	1019	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1012	1080	-	-	1612	-
Mov Cap-2 Maneuver	1012	-	-	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	1018	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	7.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	1612	-
HCM Lane V/C Ratio	-	-	0.034	0.001	-
HCM Control Delay (s)	-	-	8.5	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	16	0	21	4	0
Future Vol, veh/h	3	16	0	21	4	0
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	2	2
Mvmt Flow	3	17	0	23	4	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	20	12	0	0	23	0
Stage 1	12	-	-	-	-	-
Stage 2	8	-	-	-	-	-
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	997	1069	-	-	1592	-
Stage 1	1011	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	994	1069	-	-	1592	-
Mov Cap-2 Maneuver	994	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	1012	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1056	1592	-
HCM Lane V/C Ratio	-	-	0.019	0.003	-
HCM Control Delay (s)	-	-	8.5	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	5	15	5	5	35	5	5	10	5	5	25
Future Vol, veh/h	5	5	15	5	5	35	5	5	10	5	5	25
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	16	5	5	37	5	5	11	5	5	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	70	54	18	60	62	11	31	0	0	16	0	0
Stage 1	28	28	-	21	21	-	-	-	-	-	-	-
Stage 2	42	26	-	39	41	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	922	837	1061	936	829	1070	1582	-	-	1602	-	-
Stage 1	989	872	-	998	878	-	-	-	-	-	-	-
Stage 2	972	874	-	976	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	881	832	1061	914	824	1070	1582	-	-	1602	-	-
Mov Cap-2 Maneuver	881	832	-	914	824	-	-	-	-	-	-	-
Stage 1	986	869	-	995	875	-	-	-	-	-	-	-
Stage 2	930	871	-	953	858	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	8.7	1.8	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1582	-	-	968	1017	1602	-	-
HCM Lane V/C Ratio	0.003	-	-	0.027	0.047	0.003	-	-
HCM Control Delay (s)	7.3	0	-	8.8	8.7	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	5	50	5	5	20	10	5	25	5	5	55
Future Vol, veh/h	10	5	50	5	5	20	10	5	25	5	5	55
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	5	54	5	5	22	11	5	27	5	5	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	99	99	35	115	115	19	64	0	0	32	0	0
Stage 1	45	45	-	41	41	-	-	-	-	-	-	-
Stage 2	54	54	-	74	74	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	883	791	1038	862	775	1059	1538	-	-	1580	-	-
Stage 1	969	857	-	974	861	-	-	-	-	-	-	-
Stage 2	958	850	-	935	833	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	854	783	1038	807	767	1059	1538	-	-	1580	-	-
Mov Cap-2 Maneuver	854	783	-	807	767	-	-	-	-	-	-	-
Stage 1	962	854	-	967	855	-	-	-	-	-	-	-
Stage 2	926	844	-	878	831	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	8.9	1.8	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	981	949	1580	-	-
HCM Lane V/C Ratio	0.007	-	-	0.071	0.034	0.003	-	-
HCM Control Delay (s)	7.4	0	-	9	8.9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	35	11	0	0	11
Future Vol, veh/h	30	35	11	0	0	11
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	37	12	0	0	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	30	6	12	0	-	0
Stage 1	6	-	-	-	-	-
Stage 2	24	-	-	-	-	-
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	984	1077	1607	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	977	1077	1607	-	-	-
Mov Cap-2 Maneuver	977	-	-	-	-	-
Stage 1	1010	-	-	-	-	-
Stage 2	999	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1607	-	1028	-	-
HCM Lane V/C Ratio	0.007	-	0.067	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	19	29	0	0	29
Future Vol, veh/h	16	19	29	0	0	29
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	2	2
Mvmt Flow	17	20	31	0	0	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	78	16	31	0	-	0
Stage 1	16	-	-	-	-	-
Stage 2	62	-	-	-	-	-
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	925	1063	1582	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	961	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	907	1063	1582	-	-	-
Mov Cap-2 Maneuver	907	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	961	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1582	-	986	-	-
HCM Lane V/C Ratio	0.02	-	0.038	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	5	30	5	5	25	15	50	15	5	150	10
Future Vol, veh/h	35	5	30	5	5	25	15	50	15	5	150	10
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	5	32	5	5	26	16	53	16	5	158	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	283	275	164	285	272	61	169	0	0	69	0	0
Stage 1	174	174	-	93	93	-	-	-	-	-	-	-
Stage 2	109	101	-	192	179	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	717	663	963	715	666	1012	1437	-	-	1535	-	-
Stage 1	896	788	-	920	821	-	-	-	-	-	-	-
Stage 2	903	814	-	874	784	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	685	653	963	679	655	1012	1437	-	-	1535	-	-
Mov Cap-2 Maneuver	685	653	-	679	655	-	-	-	-	-	-	-
Stage 1	886	785	-	909	811	-	-	-	-	-	-	-
Stage 2	863	805	-	836	780	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9.3	1.4	0.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1437	-	-	779	882	1535	-	-
HCM Lane V/C Ratio	0.011	-	-	0.095	0.042	0.003	-	-
HCM Control Delay (s)	7.5	0	-	10.1	9.3	7.4	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	5	15	5	5	20	35	130	30	5	115	25
Future Vol, veh/h	20	5	15	5	5	20	35	130	30	5	115	25
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	5	16	5	5	22	38	140	32	5	124	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	394	396	138	390	393	156	151	0	0	172	0	0
Stage 1	148	148	-	232	232	-	-	-	-	-	-	-
Stage 2	246	248	-	158	161	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	622	576	967	626	578	944	1449	-	-	1422	-	-
Stage 1	903	798	-	808	729	-	-	-	-	-	-	-
Stage 2	793	717	-	890	787	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	588	557	967	596	559	944	1449	-	-	1422	-	-
Mov Cap-2 Maneuver	588	557	-	596	559	-	-	-	-	-	-	-
Stage 1	876	795	-	785	708	-	-	-	-	-	-	-
Stage 2	747	696	-	866	784	-	-	-	-	-	-	-

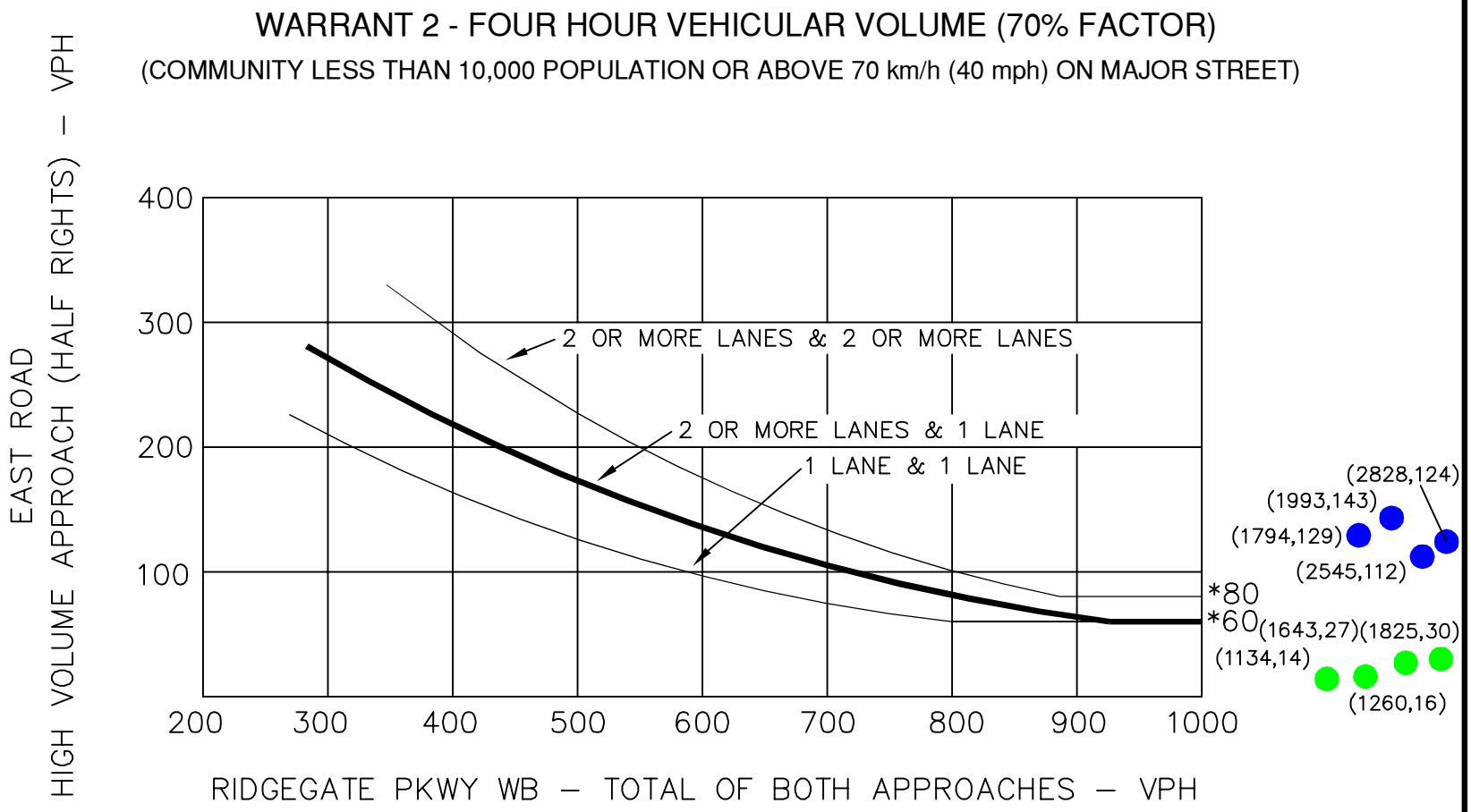
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	9.8	1.4	0.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1449	-	-	684	779	1422	-	-
HCM Lane V/C Ratio	0.026	-	-	0.063	0.041	0.004	-	-
HCM Control Delay (s)	7.6	0	-	10.6	9.8	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-

APPENDIX E

Signal Warrant Analysis Worksheets

Scale: 1=100



* NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

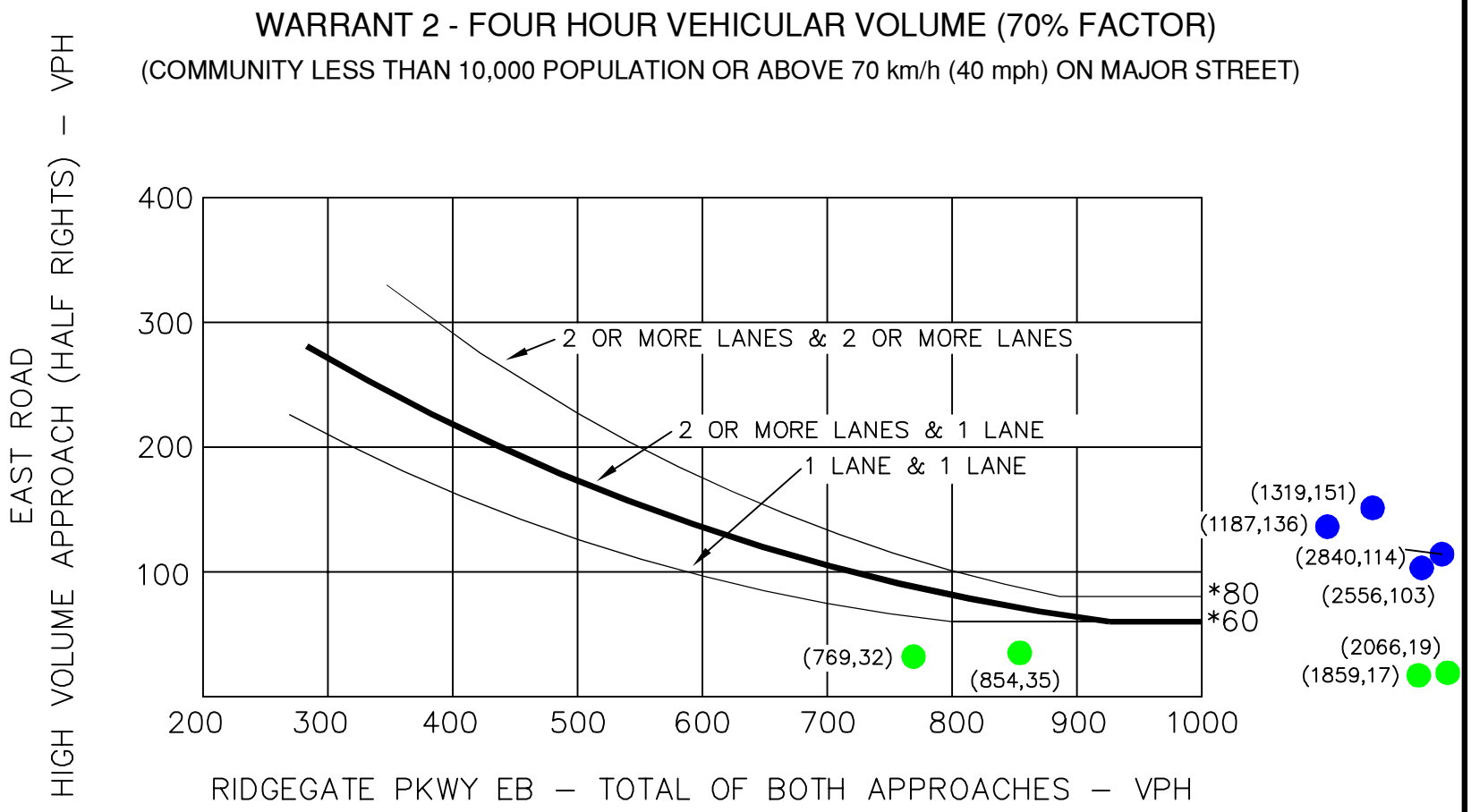
RIDGEGATE PKWY WB & EAST RD (#3)
SIGNAL WARRANT ANALYSIS
FOUR HOUR VOLUME WARRANT

● 2025 TOTAL TRAFFIC DATA POINT
● 2045 BACKGROUND TRAFFIC DATA POINT

Source: Manual of Uniform Traffic Control Devices 2009

Kimley»Horn

Scale: 1=100



* NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

RIDGEGATE PKWY EB & EAST RD (#6)
SIGNAL WARRANT ANALYSIS
FOUR HOUR VOLUME WARRANT

● 2025 TOTAL TRAFFIC DATA POINT
● 2045 BACKGROUND TRAFFIC DATA POINT

Source: Manual of Uniform Traffic Control Devices 2009

Kimley»Horn

APPENDIX F

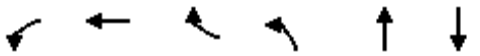
Queue Analysis Worksheets

Lane Group	WBL	WBT	NBL
Lane Group Flow (vph)	65	1905	6
v/c Ratio	0.05	0.54	0.02
Control Delay	4.5	7.4	26.2
Queue Delay	0.0	0.0	0.0
Total Delay	4.5	7.4	26.2
Queue Length 50th (ft)	10	167	3
Queue Length 95th (ft)	22	200	14
Internal Link Dist (ft)		399	
Turn Bay Length (ft)	150		150
Base Capacity (vph)	1229	3531	289
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.05	0.54	0.02

Intersection Summary

Lane Group	WBL	WBT	NBL
Lane Group Flow (vph)	98	1256	17
v/c Ratio	0.08	0.37	0.05
Control Delay	5.7	7.2	28.2
Queue Delay	0.0	0.0	0.0
Total Delay	5.7	7.2	28.2
Queue Length 50th (ft)	18	104	8
Queue Length 95th (ft)	34	128	27
Internal Link Dist (ft)		399	
Turn Bay Length (ft)	150		150
Base Capacity (vph)	1170	3361	336
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.08	0.37	0.05

Intersection Summary

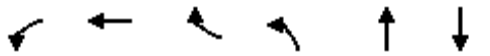


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	100	2842	89	126	79	226
v/c Ratio	0.10	1.02	0.10	0.40	0.14	0.44
Control Delay	6.8	36.8	2.5	21.4	16.3	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	36.8	2.5	21.4	16.3	20.2
Queue Length 50th (ft)	15	~357	1	36	21	65
Queue Length 95th (ft)	34	#504	17	79	48	120
Internal Link Dist (ft)		399			658	464
Turn Bay Length (ft)	150		150	150		
Base Capacity (vph)	973	2796	906	315	558	513
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	1.02	0.10	0.40	0.14	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	151	1828	124	204	188	209
v/c Ratio	0.17	0.71	0.14	0.53	0.30	0.35
Control Delay	8.6	13.2	2.3	22.0	16.1	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	13.2	2.3	22.0	16.1	16.2
Queue Length 50th (ft)	27	171	0	58	49	53
Queue Length 95th (ft)	54	220	20	117	92	100
Internal Link Dist (ft)		399			658	464
Turn Bay Length (ft)	150		150	150		
Base Capacity (vph)	899	2584	865	385	636	604
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.71	0.14	0.53	0.30	0.35

Intersection Summary

Lane Group	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	79	2868	49	117	179
v/c Ratio	0.06	0.81	0.04	0.47	0.50
Control Delay	4.6	12.1	1.8	38.2	36.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.6	12.1	1.8	38.2	36.6
Queue Length 50th (ft)	12	360	1	64	89
Queue Length 95th (ft)	25	429	10	119	154
Internal Link Dist (ft)		408		266	230
Turn Bay Length (ft)	150		150		
Base Capacity (vph)	1229	3531	1112	247	360
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.06	0.81	0.04	0.47	0.50

Intersection Summary

Lane Group	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	65	1995	120	179	179
v/c Ratio	0.06	0.61	0.11	0.43	0.38
Control Delay	6.3	10.7	1.5	29.8	27.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.3	10.7	1.5	29.8	27.8
Queue Length 50th (ft)	12	221	0	82	76
Queue Length 95th (ft)	27	264	18	152	135
Internal Link Dist (ft)		408		266	230
Turn Bay Length (ft)	150		150		
Base Capacity (vph)	1130	3248	1054	418	465
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.06	0.61	0.11	0.43	0.38

Intersection Summary

Lane Group	EBL	EBT	SBL
Lane Group Flow (vph)	5	865	36
v/c Ratio	0.00	0.28	0.09
Control Delay	7.0	8.7	32.0
Queue Delay	0.0	0.0	0.0
Total Delay	7.0	8.7	32.0
Queue Length 50th (ft)	1	78	19
Queue Length 95th (ft)	5	100	47
Internal Link Dist (ft)		554	
Turn Bay Length (ft)	150		150
Base Capacity (vph)	1071	3079	415
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.00	0.28	0.09

Intersection Summary

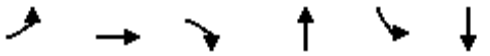
Lane Group	EBL	EBT	SBL
Lane Group Flow (vph)	10	2140	101
v/c Ratio	0.01	0.63	0.31
Control Delay	4.9	9.4	34.3
Queue Delay	0.0	0.0	0.0
Total Delay	4.9	9.4	34.3
Queue Length 50th (ft)	2	221	54
Queue Length 95th (ft)	7	263	106
Internal Link Dist (ft)		554	
Turn Bay Length (ft)	150		150
Base Capacity (vph)	1189	3418	321
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.01	0.63	0.31

Intersection Summary

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	58	1274	137	221	63	100
v/c Ratio	0.06	0.45	0.14	0.36	0.18	0.16
Control Delay	9.2	12.2	2.1	21.1	17.6	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.2	12.2	2.1	21.1	17.6	16.5
Queue Length 50th (ft)	14	145	0	80	18	29
Queue Length 95th (ft)	31	178	24	140	m42	m61
Internal Link Dist (ft)		554		198		658
Turn Bay Length (ft)	150		150		150	
Base Capacity (vph)	993	2853	948	622	342	631
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.45	0.14	0.36	0.18	0.16

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	167	2860	188	279	140	140
v/c Ratio	0.17	1.02	0.20	0.52	0.52	0.25
Control Delay	7.3	38.8	2.3	21.5	26.6	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.3	38.8	2.3	21.5	26.6	18.7
Queue Length 50th (ft)	27	~368	3	82	40	38
Queue Length 95th (ft)	52	#509	26	147	93	84
Internal Link Dist (ft)		554		198		658
Turn Bay Length (ft)	150		150		150	
Base Capacity (vph)	973	2796	945	539	270	558
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	1.02	0.20	0.52	0.52	0.25

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	68	1342	27	192
v/c Ratio	0.07	0.49	0.04	0.35
Control Delay	6.9	7.9	9.4	20.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.9	7.9	9.4	20.7
Queue Length 50th (ft)	10	73	2	55
Queue Length 95th (ft)	21	86	19	114
Internal Link Dist (ft)		242	180	245
Turn Bay Length (ft)	150			
Base Capacity (vph)	953	2736	612	544
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.07	0.49	0.04	0.35

Intersection Summary

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	188	2914	104	140
v/c Ratio	0.15	0.83	0.30	0.51
Control Delay	6.6	10.6	32.2	40.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.6	10.6	32.2	40.0
Queue Length 50th (ft)	39	266	49	56
Queue Length 95th (ft)	m57	337	95	118
Internal Link Dist (ft)		242	180	245
Turn Bay Length (ft)	150			
Base Capacity (vph)	1229	3531	344	275
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.83	0.30	0.51

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX G

Conceptual Site Plan and Turn Lane Exhibit

RidgeGate Couplet

LONE TREE, CO

SITE PLAN NOTES

1. THE PROPERTY DESCRIBED HEREIN IS SUBJECT TO ALL APPLICABLE REQUIREMENTS OF THE LONE TREE ZONING CODE AND DESIGN STANDARDS, INCLUDING BUT NOT LIMITED TO, PROPERTY MAINTENANCE, LIGHTING, PARKING, SIGNAGE, LANDSCAPING AND OUTDOOR STORAGE, EXCEPT AS MAY OTHERWISE BE ADDRESSED IN AN APPROVED PLANNED DEVELOPMENT PLAN, SUB-AREA PLAN, OR OTHER APPLICABLE PLAN OR AGREEMENT APPROVED BY THE CITY.

2. THE APPLICANT ASSUMES RESPONSIBILITY TO ENSURE THE PROJECT IS COMPLETED IN ACCORDANCE WITH THE APPROVED SIP AND ANY ASSOCIATED MATERIALS SAMPLE BOARDS AND FURTHER ASSUMES THE RISK ASSOCIATED WITH ANY CHANGES OR OMISSIONS MADE WITHOUT PRIOR CITY APPROVAL. MODIFICATIONS TO STRUCTURES OR SITES MAY REQUIRE AN AMENDMENT TO THE SIP AS DETERMINED BY THE CITY'S COMMUNITY DEVELOPMENT DIRECTOR, PER SEC. 16-27-180. UNAUTHORIZED CHANGES OR OMISSIONS MADE WITHOUT PRIOR CITY APPROVAL CORRECTIVE ACTIONS, DELAY OF PERMITS OR CITATIONS FOR ZONING VIOLATIONS WITH ASSOCIATED FINES AND LEGAL MEASURES. BUILDING PLANS SHALL CONFORM TO THE APPROVED SIP.

3. WITHIN SITE TRIANGLES, AS SHOWN, LIMITED LANDSCAPING SHALL BE ALLOWED WITH NO SOLID STRUCTURES PERMITTED AS STATED IN THE CITY OF LONE TREE'S LANDSCAPE DESIGN GUIDELINES AND STANDARDS FOR LANDSCAPING. LANDSCAPING WITHIN THE SIGHT TRIANGLE SHALL BE MAINTAINED BY THE PROPERTY OWNER OR APPROPRIATE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED IN MAINTENANCE AGREEMENTS RECORDED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE.

4. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION OF ALL ROADWAY SIGNAGE, INCLUDING "NO PARKING/FIRE LANE" SIGNAGE, AS REQUIRED BY THE CITY PUBLIC WORKS DEPARTMENT AND/OR THE FIRE DISTRICT. SUCH SIGNAGE SHALL BE MAINTAINED BY THE PROPERTY OWNER OR APPROPRIATE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED IN MAINTENANCE AGREEMENTS RECORDED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE.

5. SITE LANDSCAPING, SITE AMENITIES AND FURNISHINGS, AND ALL SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, SIDEWALKS AND PARKING AREAS SHALL BE MAINTAINED IN A STATE OF GOOD REPAIR CONSISTENT WITH THE APPROVED SIP AND THE LONE TREE MUNICIPAL CODE AND DESIGN GUIDELINES AND STANDARDS. SUCH MAINTENANCE SHALL INCLUDE THE REGULAR MAINTENANCE OF PET WASTE STATIONS (WHEN PRESENT), TO INCLUDE WASTE COLLECTION AND WASTE BAG REPLACEMENT. LANDSCAPE PLANTINGS MUST BE ALIVE AND ALL IRRIGATION MUST BE FUNCTIONAL. ALL MAINTENANCE OBLIGATIONS SHALL BE COMPLETED BY THE PROPERTY OWNER OR APPROPRIATE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED IN MAINTENANCE AGREEMENTS RECORDED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE.

6. THE CITY OF LONE TREE REQUIRES THAT MAINTENANCE ACCESS BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES,INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SITE IMPROVEMENT PLAN IMPROVEMENTS AGREEMENT. SHOULD THE OWNER FAIL TO ADEQUATELY MAINTAIN SAID FACILITIES, THE CITY OF LONE TREE SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE PURPOSES OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNER OR THE RESPONSIBLE MAINTENANCE AUTHORITY.

LAND USE CHART

GROSS DENSITY	
GROSS AREA	280,927 SF (6.449 AC)
TOTAL DWELLING UNITS	349
GROSS DENSITY	54.12 DU/AC

DWELLING UNIT BREAKDOWN			
UNIT TYPE:	DWELLING UNITS	TOTAL BEDROOMS	% (DU)
ONE BEDROOM	223	223	63.90
TWO BEDROOM	103	206	29.51
THREE BEDROOM	23	69	6.59
TOTAL	**349**	**498**	**100.00**

PROJECT PARKING		
	PROVIDED	*REQUIRED
OFF-STREET PARKING GARAGE	569	611
OFF-STREET STANDARD	4	
ON-STREET DIAGONAL	14	
ON-STREET PARALLEL	23	
STANDARD DELIVERY AND LOADING	3	
RESIDENTIAL LOADING	2	
TOTAL	**615**	**611**

* REQUIRED SPACES ARE CALCULATED AS FOLLOWED:
1.5 SPACES PER DWELLING = 524 SPACES
.25 SPACE PER DWELLING FOR GUESTS = 87 SPACES

PROJECT BIKE PARKING		
	PROVIDED	*REQUIRED
SURFACE MOUNTED BIKE PARKING	18	12
TOTAL	**18**	**12**

* REQUIRED SPACES ARE CALCULATED AS FOLLOWED:
- "MINIMUM NUMBER OF BICYCLE PARKING SPACES SHALL BE PROVIDED EQUAL IN NUMBER TO PERCENT (2%) OF THE TOTAL NUMBER OF AUTOMOBILE PARKING SPACES PROVIDED"
-AUTOMOBILE PARKING SPACES PROVIDED = 615
- .02 X 615 = 12 REQUIRED BIKE PARKING SPACES

SHEET INDEX

RIDGEGATE COUPLET

DESIGN DEVELOPMENT

LONE TREE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING
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ENGINEER
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Kristofer Wiest
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Greenwood Village, CO 80111
p. 303.353.3695

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	DRC SD SUBMITTAL	10/20/2022
02	DRC DD SUBMITTAL	12/12/2022
03	DRC DD 2 SUBMITTAL	02/22/2023

REVISIONS

No.	DESCRIPTION	DATE

COVER

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R22-035
DRAWN BY:	EC/AG
REVIEWED BY:	SC

DRAWING NUMBER:

1 OF 46

Plotted By: Sam Coutts **Layout:** 1 Cover **Printed On:** 2/23/2023 10:01 AM **File Name:** 1 Cover.dwg

RIDGEGATE COUPLET

DESIGN DEVELOPMENT

LONE TREE, CO

PREPARED BY:

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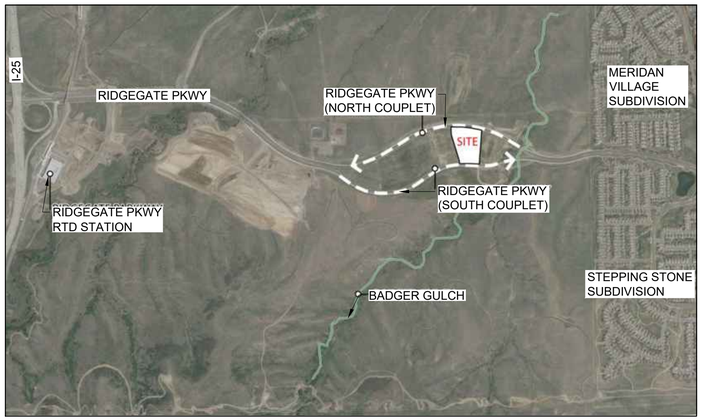
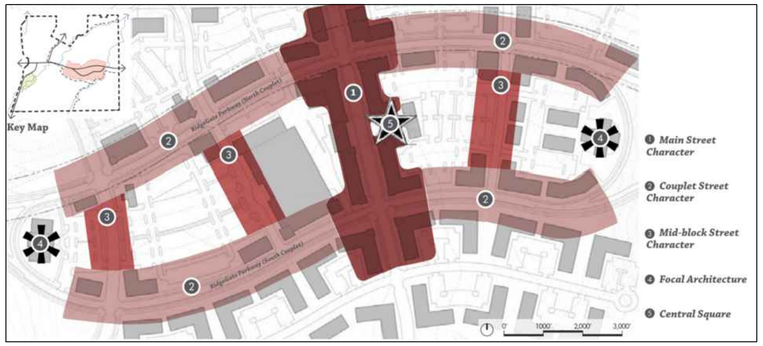
PROJECT CONTEXT



FRAMEWORK PLAN

BLOCKFACE DIAGRAM



NORTH
0 75 150 300
SCALE: 1"=150'-0"
ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	DRC SD SUBMITTAL	10/20/2022
02	DRC DD SUBMITTAL	12/12/2022
03	DRC DD 2 SUBMITTAL	02/22/2023

REVISIONS

No.	DESCRIPTION	DATE

URBAN CONTEXT PLAN

SEAL:

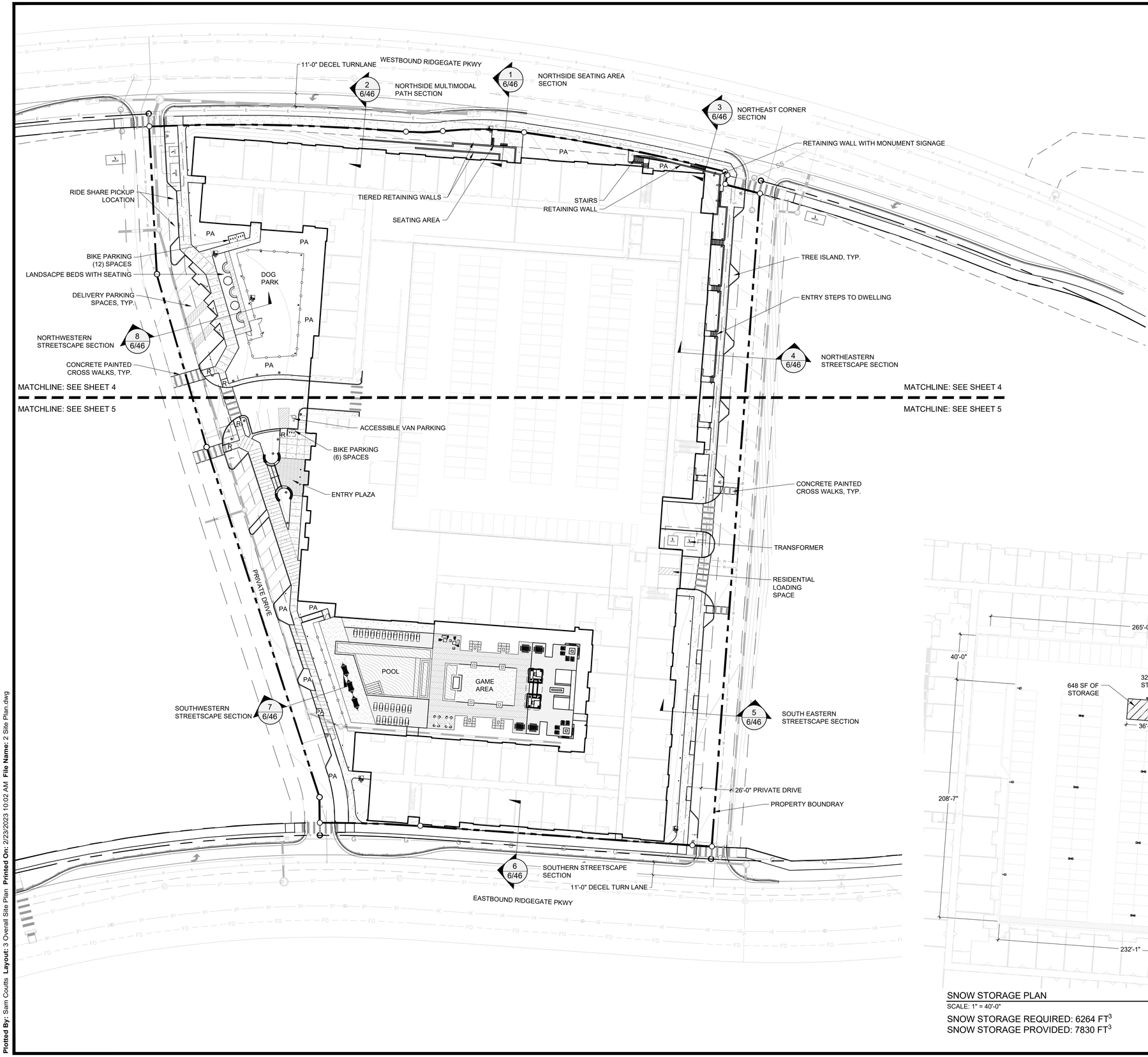
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R22-035
DRAWN BY:	EC/AG
REVIEWED BY:	SC

DRAWING NUMBER:

2 OF 46

Plotted By: Sam Coutts **Layout:** Urban Context Plan **Printed On:** 2/23/2023 10:01 AM **File Name:** Urban Context Plan.dwg



LEGEND

SYMBOL	02 LANDSCAPE MATERIAL DESCRIPTION
	CONCRETE
	ACKERSTONE 3X24 RB RUNNING BOND PATTERN.
	COLORED CONCRETE
	ACKERSTONE 3X18 HB HERRINGBONE PATTERN.
	ARTIFICAL TURF
	POOL
	CRUSHED FINES

FURNISHINGS LEGEND

- CHAISE LOUNGE CHAIR
- HAMMOCK
- SEATING WITH COFFEE TABLE
- CAFE STYLE SEATING
- BAR SEATING
- PICNIC TABLE
- MOVABLE SEATING
- FIRE PIT
- PA — PLANTING AREA
- R — CURB RAMP
- PEDESTRIAN POLE LIGHTS
- LIT BOLLARDS

SNOW STORAGE PLAN
SCALE: 1" = 40'-0"

SNOW STORAGE REQUIRED: 6264 FT^3
SNOW STORAGE PROVIDED: 7830 FT^3

RIDGEGATE COUPLET

DESIGN DEVELOPMENT

LONE TREE, CO

PREPARED BY:

ripleydesign
LANDSCAPE ARCHITECTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

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DEVELOPER
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Greenwood Village, CO 80111
p. 303.770.8300

ARCHITECT
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Sarah Hunter
3660 Blake St. Suite 500
Denver, CO 80205
p. 303-389-6004

ENGINEER
MERRICK & COMPANY
Kristofer Wiest
5970 Greenwood Plaza Blvd
Greenwood Village, CO 80111
p. 303.353.3695

NORTH SCALE: 1"=40'-0" (0 20 40 80)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	DRC SD SUBMITTAL	10/20/2022
02	DRC DD SUBMITTAL	12/12/2022
03	DRC DD 2 SUBMITTAL	02/22/2023

REVISIONS

No.	DESCRIPTION	DATE

OVERALL SITE PLAN

SEAL:

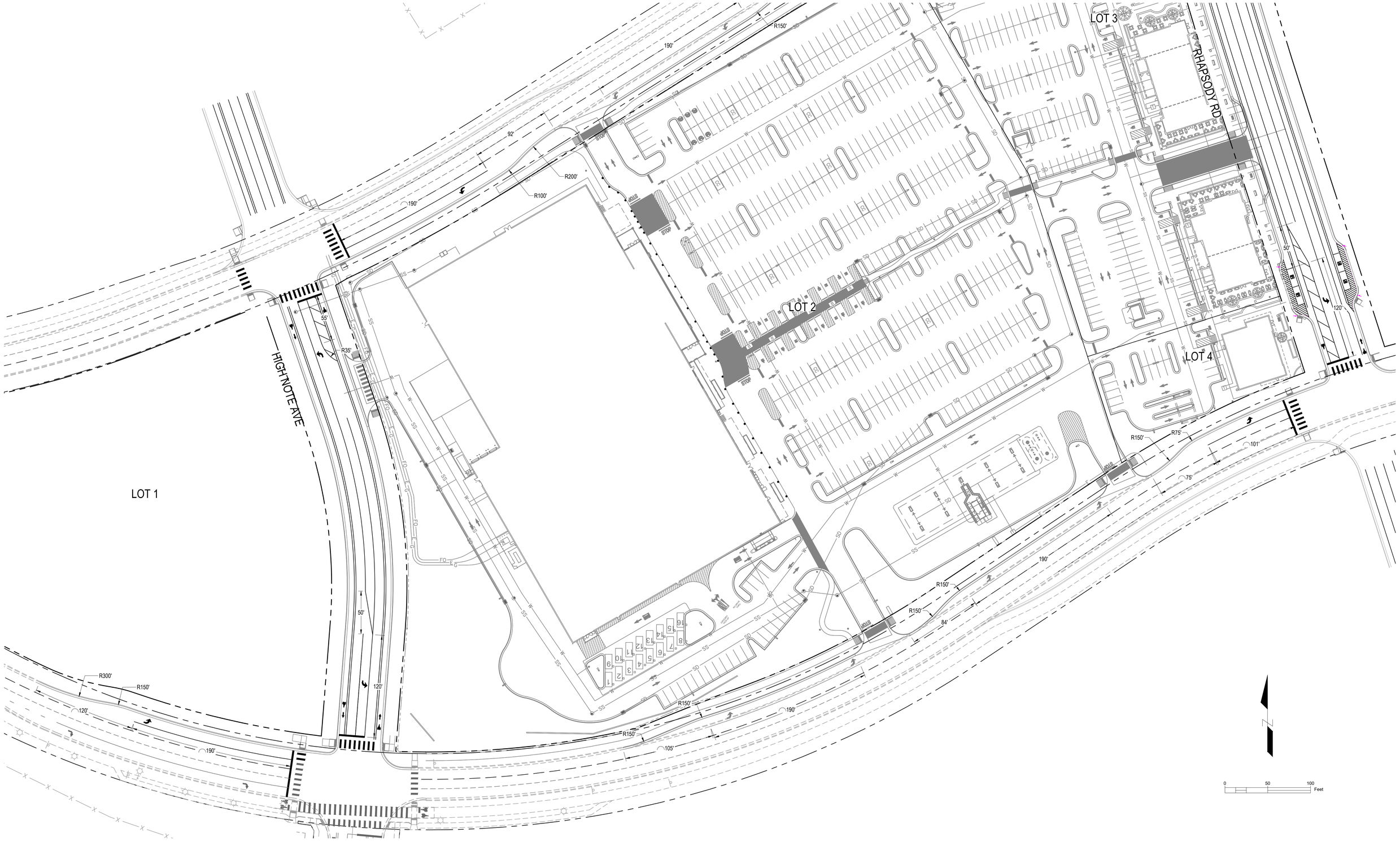
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R22-035
DRAWN BY:	EC/AG
REVIEWED BY:	SC

DRAWING NUMBER:

3 OF 46

Plotted By: Sam Coutts **Layout:** 3 Overall Site Plan **Printed On:** 2/23/2023 10:02 AM **File Name:** 2 Site Plan.dwg


LOT 1
LOT 2
LOT 3
LOT 4
HIGH NOTE AVE
RHAPSODY RD
R150'
R200'
R100'
R300'
R75'
190'
120'
105'
101'
92'
84'
75'
50'
55'
R35'
STOP
N
0
50
100
Feet

LOT 3

LOT 5

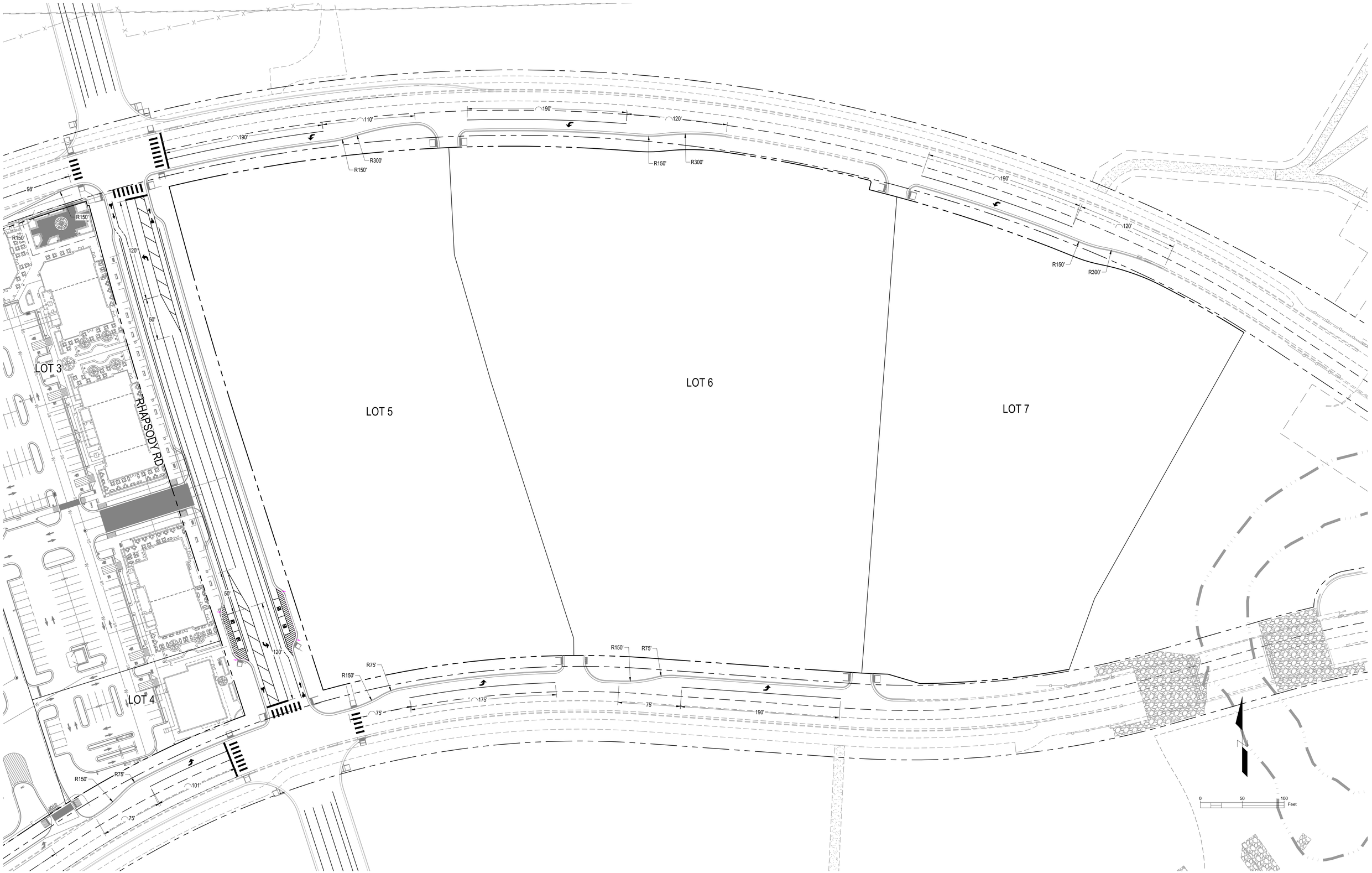
LOT 6

LOT 2

LOT 4

RHAPSODY RD

98'
190'
100'
R150'
R150'
190'
R200'
120'
50'
120'
R150'
R150'
R300'
190'
110'
190'
120'
R150'
R300'
R150'
R75'
R150'
R75'
75'
175'
75'
190'
R150'
R75'
75'
101'
0
50
100
Feet


LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
RHAPSODY RD
98'
50'
50'
120'
110'
190'
120'
190'
120'
190'
120'
R150'
R300'
R150'
R300'
R150'
R300'
R150'
R150'
R75'
R150'
R75'
R150'
R75'
R150'
R75'
175'
75'
190'
75'
101'
75'
0
50
100
Feet