Traffic Impact Study

To:	**City of Lone Tree**
From:	**Eli Farney, PE, PTOE**
Date:	**April 1, 2026**

High Note Regional Park

Lone Tree, Colorado

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Executive Summary

JR Engineering (JR) has completed a review of the traffic impacts resulting from the proposed High Note Regional Park (Project) in Lone Tree (City).

The objectives of this Traffic Impact Study (TIS, Study) are:

- Estimate vehicle trip generation rates for the park
- Estimate parking generation rates for the park
- Analyze Phase 1 traffic operations
- Analyze year 2030 Full Build-Out traffic operations
- Analyze peak traffic operations during park events
- Recommend mitigations to accommodate added traffic
- Perform traffic signal warrant analysis at Lyric & Octave intersection

The methodology, content, and findings of this TIS are consistent with the following documents:

- *Douglas County Roadway Design and Construction Standards*, Appendix B – Traffic Impact Study Criteria
- *RidgeGate – Southwest Village Traffic Impact Study* by JR Engineering, dated October 22, 2020

Key Findings of this TIS

Land Use and Trip Generation: High Note Regional Park was modeled as a public park with soccer fields and tennis courts (pickleball courts are proposed, but ITE only has data for tennis courts). The park is expected to generate 706 weekday daily trips. However, trip generation may be significantly higher when the park hosts events such as soccer tournaments and concerts.

Traffic Operational Results: Levels of service and 95th percentile queue lengths are expected to be satisfactory during the typical AM and PM peak hours, as well as the peak tournament scenario.

During infrequent high-attendance events (up to 5,000 people), temporary operational failures are expected to occur, particularly at the eastbound left/through movement at Lyric & Octave. These conditions are typical for park and event venues and are generally short in duration. Available on-site circulation and parking areas are expected to accommodate vehicle queues, which are anticipated to dissipate within a short period following peak arrival times.

Phase 1 Analysis: Upon the completion of Phase 1, intersection operations are expected to perform acceptably during the weekday peak hours and the tournament peak hour, with levels of service and 95th percentile queue lengths within acceptable thresholds.

During infrequent high-attendance events, such as concerts, increased traffic demand may result in temporary queuing at the eastbound left/through movement at Lyric & Octave. These types of conditions are typical for park and event venues and are generally short in duration. Available on-site circulation and parking areas are expected to accommodate vehicle queues, which are anticipated to dissipate within a short period following peak arrival times.

A southbound right-turn lane at Lyric & Octave is not warranted under Phase 1 conditions; however, sufficient right-of-way should be preserved to accommodate a future turn lane if needed. The parking supply provided in Phase 1 is expected to be adequate to serve projected demand.

Parking Generation: At full build-out, High Note Regional Park is expected to generate 536 parked vehicles on a Sunday when a soccer tournament is held. Actual parking generation may be higher when the park hosts large events such as concerts. The latest site plan includes approximately 650 parking spaces.

Recommendations: JR recommends accepting brief, manageable queuing conditions that may occur during infrequent high-attendance events at the park, as these conditions are short-term and expected to dissipate quickly. The City should continue to monitor the need for a signal at the Lyric & Octave intersection according to MUTCD Warrants 1-4 (8-Hour, 4-Hour, Peak Hour, and Pedestrian Volume).

Introduction

JR has completed a review of the forecasted traffic operations in the vicinity of the High Note Regional Park. A vicinity map is included in **Figure 1**. Site plans for full build-out and Phase 1 are included in **Appendix A**.

Proposed Land Use

The Regional Park is proposed to contain five soccer fields, eight pickleball courts, a playground, trails, and a communal space for sports, entertainment, and leisure. For the purposes of this Study, the following ITE land uses were assumed:

- 24-Acre Public Park (ITE 411)
- 5 Soccer Fields (ITE 488)
- 8 Tennis Courts (ITE 490)*

*The park is proposed to contain pickleball courts only. However, tennis courts were assumed since there is no ITE data for pickleball courts.

Study Intersections

The following intersections were analyzed in this Study:

1. Lyric Street & Octave Avenue
2. Lyric Street & High Note Avenue
3. High Note Avenue & Stanza Lane
4. Stanza Lane & Stanza Circle
5. Stanza Lane & Gable Lane

Background Improvements

JR notes that the following improvements are proposed in the vicinity of the Project:

- High Note Avenue connection from Havana Street to Lyric Street
- Recommended improvements in the *RidgeGate Southwest Village Traffic Impact Study*

Excerpts from the *RidgeGate Southwest Village TIS* are included in **Appendix B**.

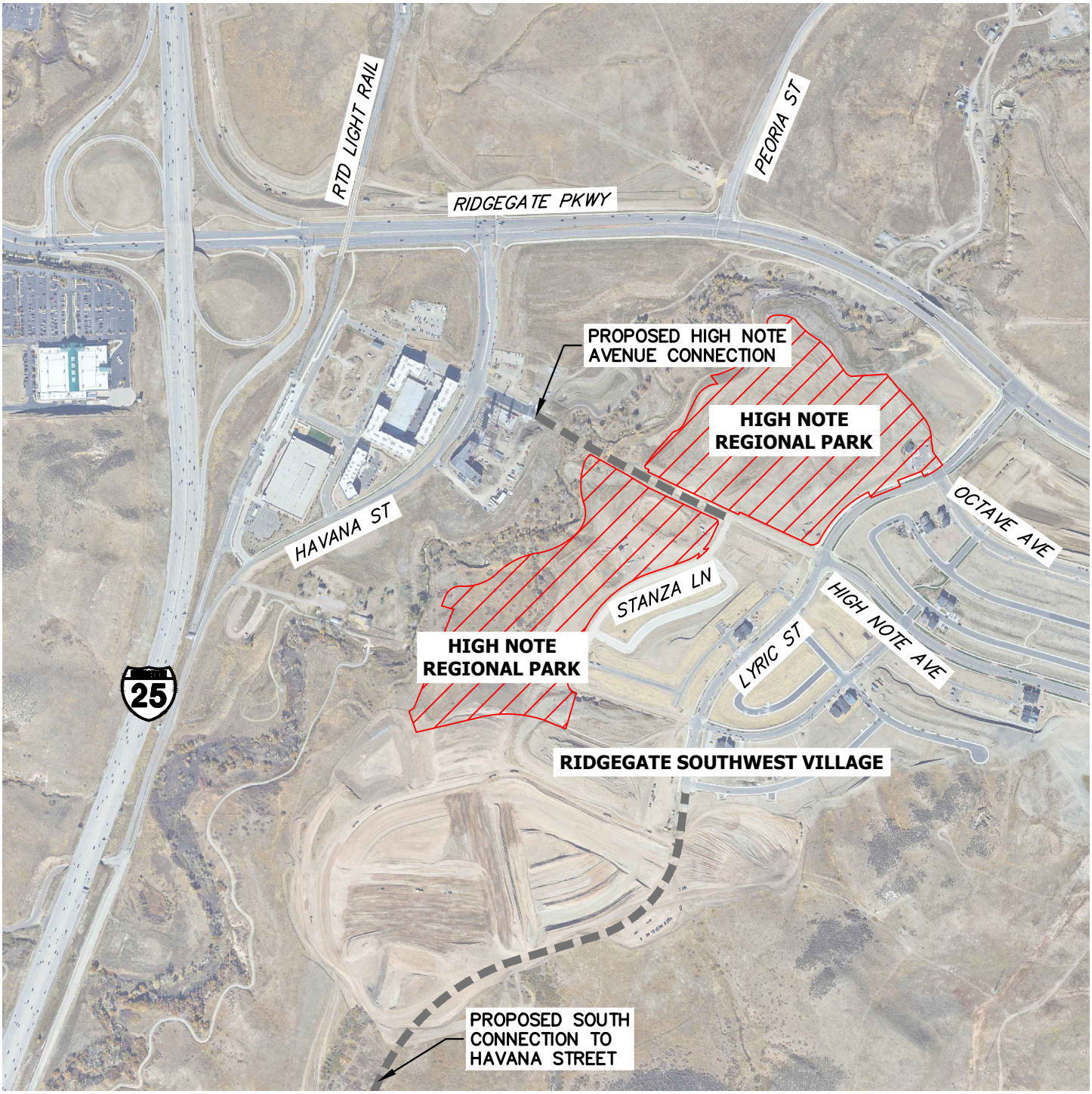
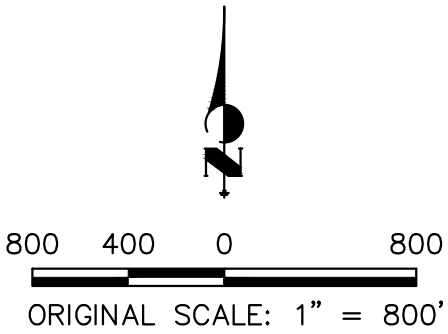


Figure 1 - Vicinity Map



Existing Conditions

Existing Land Use

The Project site is currently vacant. The site does not generate trips in the existing condition.

Existing Lane Geometry

The Study intersections have been recently completed, but construction of RidgeGate Southwest Village is ongoing. JR did not analyze existing traffic operations, as the results would not be meaningful due to construction.

Existing Traffic Volumes

Similar to lane geometry, existing traffic volumes are heavily affected by ongoing construction. For traffic volumes at the Study intersections, JR referenced the *RidgeGate Southwest Village TIS*. Forecasted site-generated traffic volumes from the original TIS are included in **Appendix B**.

Traffic Volumes and Distribution

Background Traffic

Traffic generated by the RidgeGate Southwest Village development was considered as background traffic for the analysis of the Regional Park. According to the *Southwest Village TIS*, the development is anticipated to be built out by 2026, which likely precedes the opening of the Regional Park. Since the *Southwest Village TIS* included the Regional Park in its analysis, JR adjusted the volumes in order to not double-count the park trips.

Background Traffic Growth Rate

In addition to the traffic generated by RidgeGate Southwest Village, other regional developments may continue to add traffic in the vicinity of the Regional Park. To account for this, JR applied a 0.5% annual growth rate to estimate traffic volumes in the year 2030.

Year 2030 background traffic volumes are shown in **Figure 4**.

Site-Generated Traffic Volumes

Site-generated traffic volumes were estimated using ITE *Trip Generation Manual*, 11th Edition. The Regional Park is expected to produce the following trips upon full build-out:

- Average Weekday Daily Trips: 706
- Weekday AM Peak Entering Site: 33
- Weekday AM Peak Exiting Site: 30
- Weekday PM Peak Entering Site: 84
- Weekday PM Peak Exiting Site: 56
- Saturday Peak Entering Site: 111
- Saturday Peak Exiting Site: 117

This represents an increase in site-generated traffic for the Regional Park compared to the *Southwest Village TIS*, which estimated 428 weekday daily trips.

Site-generated traffic volumes are shown in **Figure 2**. A trip generation report is included in **Appendix C**.

Distribution of Site-Generated Traffic

Site-generated traffic was routed onto adjacent streets according to the distribution in **Figure 2**. The routing is consistent with the *Southwest Village TIS*. JR assumed that the High Note Avenue connection to Havana Street will be complete, and therefore assigned a portion of traffic to this route.

Total Traffic

Total traffic is the sum of background and site-generated traffic. JR forecasted total traffic volumes at the Study intersections in the year 2030, as shown in **Figure 5**.

Proposed Lane Geometry

The Study intersections are being constructed as part of the RidgeGate Southwest Village development. Lane geometry at full build-out is shown in **Figure 3**.

Peak Tournament Traffic

The Regional Park is expected to host soccer tournaments, which generate higher than average traffic volumes. To model this scenario, JR referenced the ITE *Trip Generation Manual*, which includes data for soccer fields during the peak hour when fields are in use. Forecasted tournament traffic volumes at the Study intersections in the year 2030 are shown in **Figure 6**.

A Phase 1 analysis of the Peak Tournament scenario is included on **Page 18** of this Study.

Peak Traffic during Park Events (e.g., Concerts)

The Regional Park is expected to host events such as concerts. During these events, site-generated traffic volumes are expected to be much higher than during normal peak hour conditions. Therefore, JR analyzed a scenario in which the park is at full capacity. The analysis focused on traffic exiting the park at the conclusion of an event, as this is typically the worst-case scenario. Entering traffic for large events is expected to occur over a longer period of time, and therefore, is less concerning from a traffic standpoint.

A Phase 1 analysis of the large event scenario is included on **Page 18** of this Study.

Trip Generation

JR estimates that the park can accommodate approximately 5,000 people during events. Assuming an average of four people per vehicle trip, this would result in 1,250 peak hour vehicle trips. JR assumed 10% entering and 90% exiting trips:

- Peak Entering Site: 125
- Peak Exiting Site: 1,125

Background Traffic

For this analysis, JR assumed typical PM peak hour background traffic.

Total Traffic

JR estimated total traffic volumes (background plus site-generated) during events. These volumes are shown in **Figure 7**.

Impacts from Event Traffic

JR considered the impact of event traffic on adjoining land uses. During periods of heavy traffic congestion near the park, residents of Southwest Village may try to avoid the congestion by rerouting while traveling to/from their homes. JR believes there are adequate rerouting options for residents, and therefore, the impact of event traffic on nearby land uses is not a concern.

During infrequent high-attendance events, such as concerts, increased traffic demand may result in temporary queuing at the eastbound left/through movement at Lyric & Octave. These conditions are typical for park and event venues and are generally short-term. Available on-site circulation and parking areas are expected to accommodate vehicle queues, which are anticipated to dissipate within a short period following peak arrival times.

Future Year Analysis

JR notes that the *Southwest Village TIS* considered the Regional Park in its analysis. The study analyzed the year 2040 and made recommendations for roadway improvements to accommodate future traffic volumes.

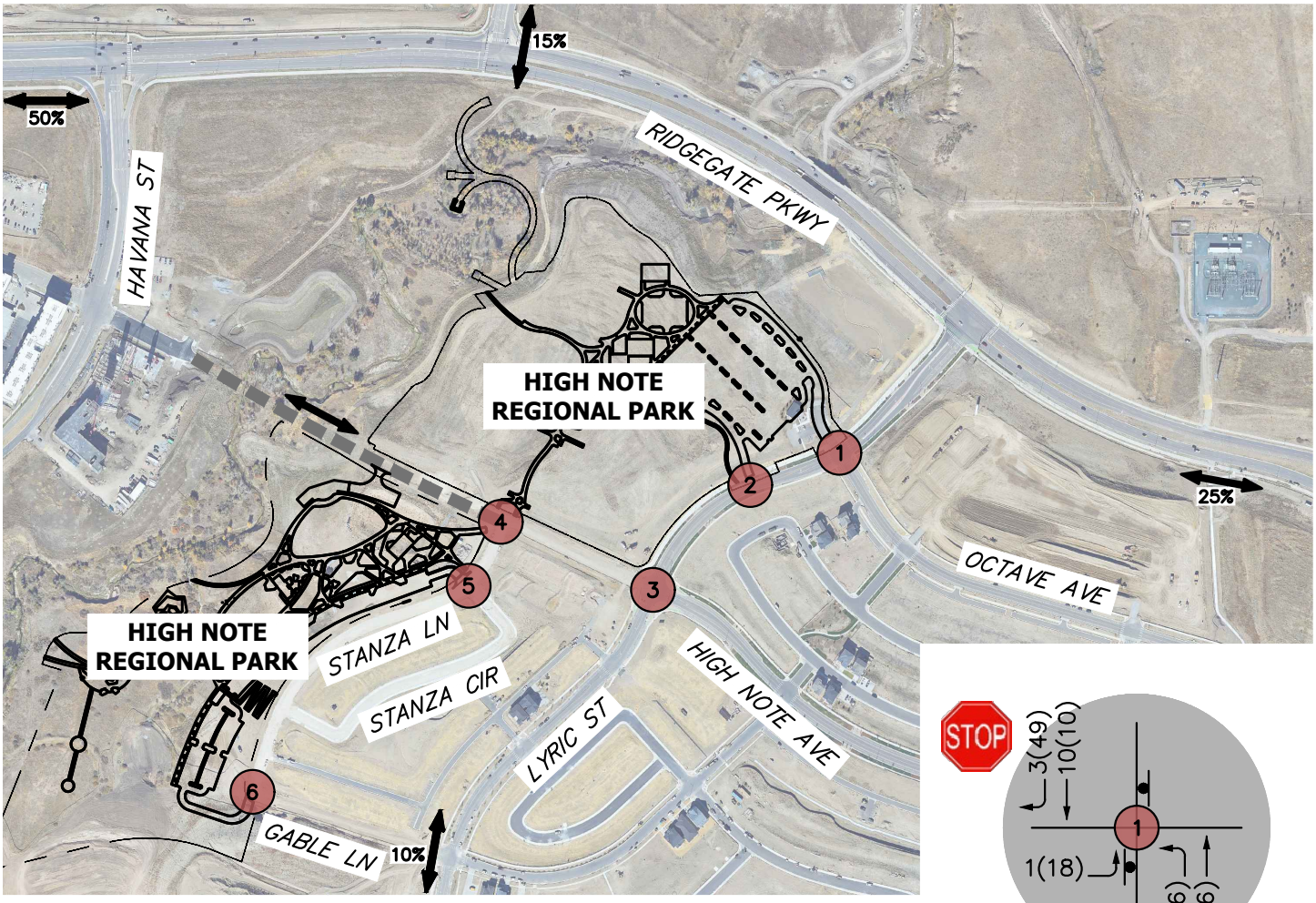
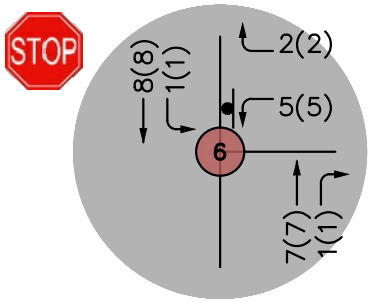
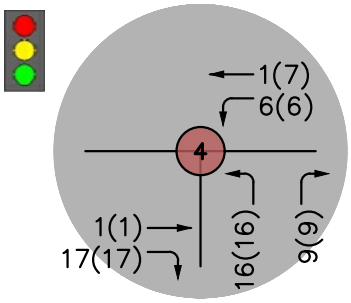


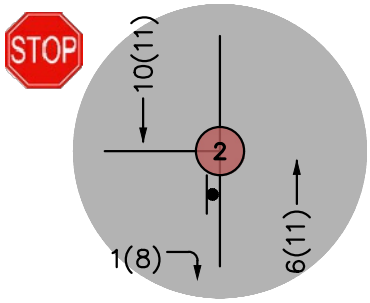
Figure 2 - Site-Generated Traffic Volumes and Distribution

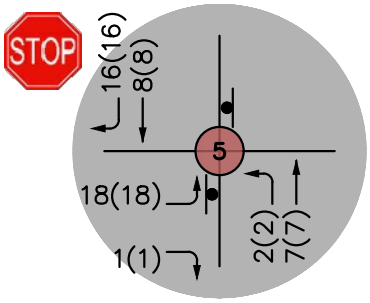
LEGEND

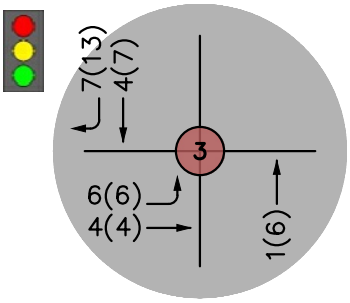
XX	EXISTING INTERSECTION
XX (XX)	AM (PM) PEAK HOUR TRIPS
	STOP SIGN CONTROL
XX%	DIRECTIONAL DISTRIBUTION

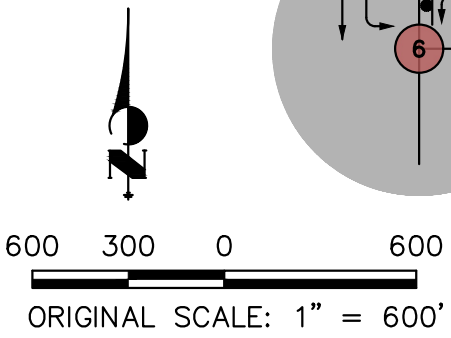












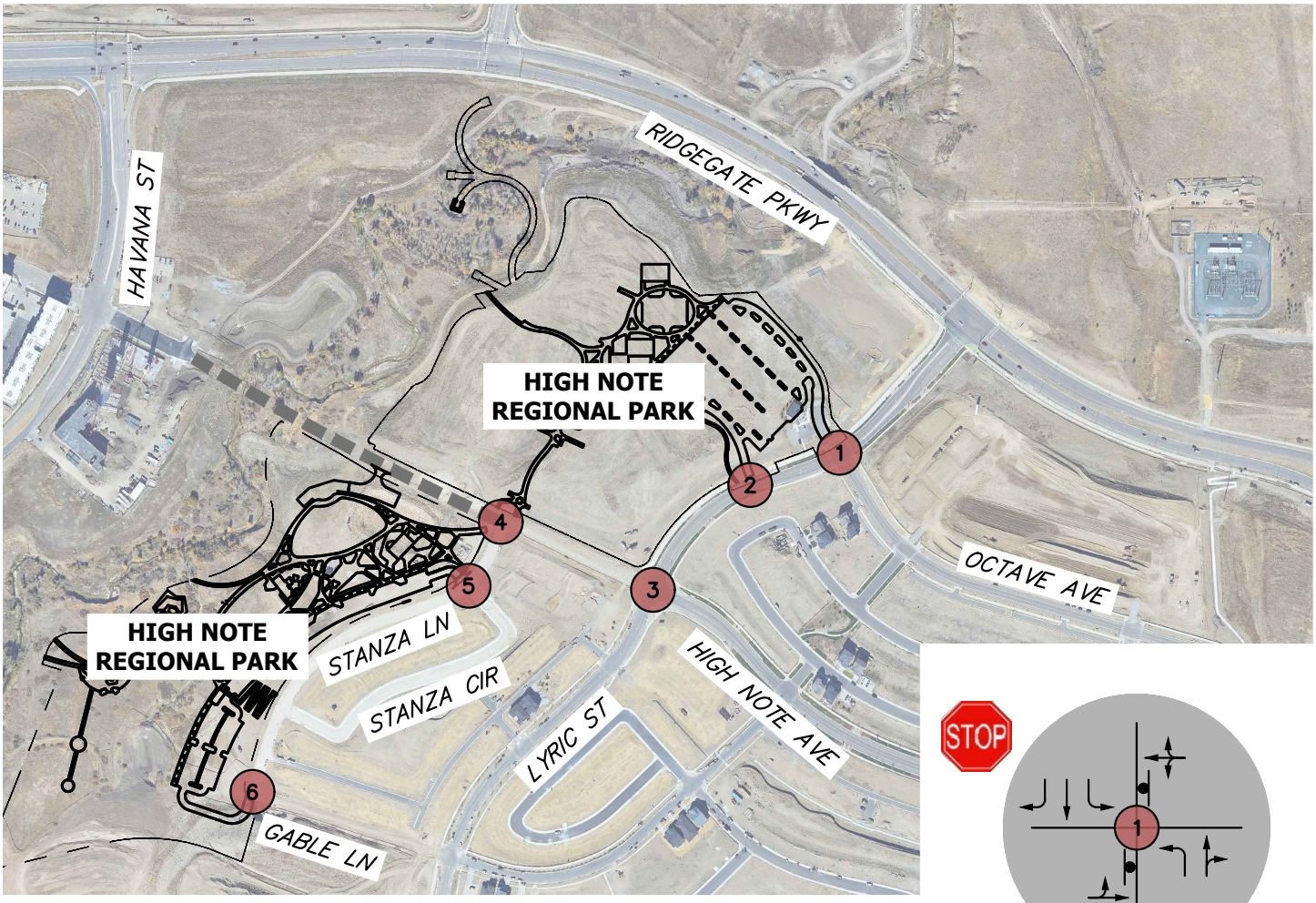
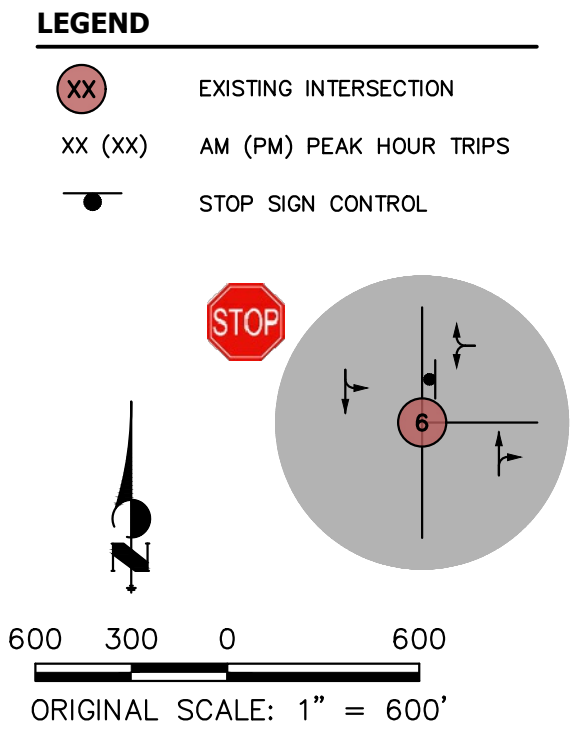
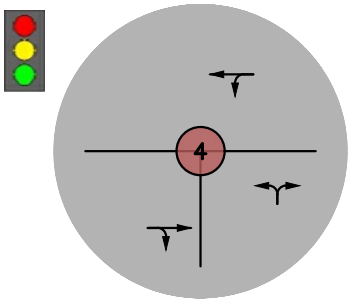
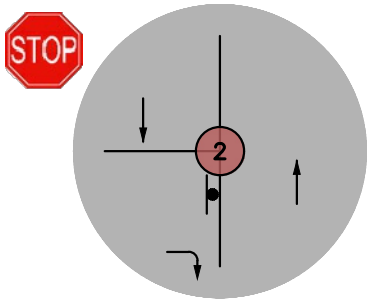
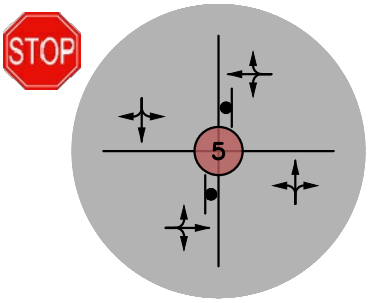


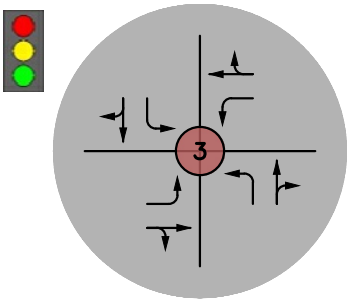
Figure 3 - Build-Out Lane Geometry











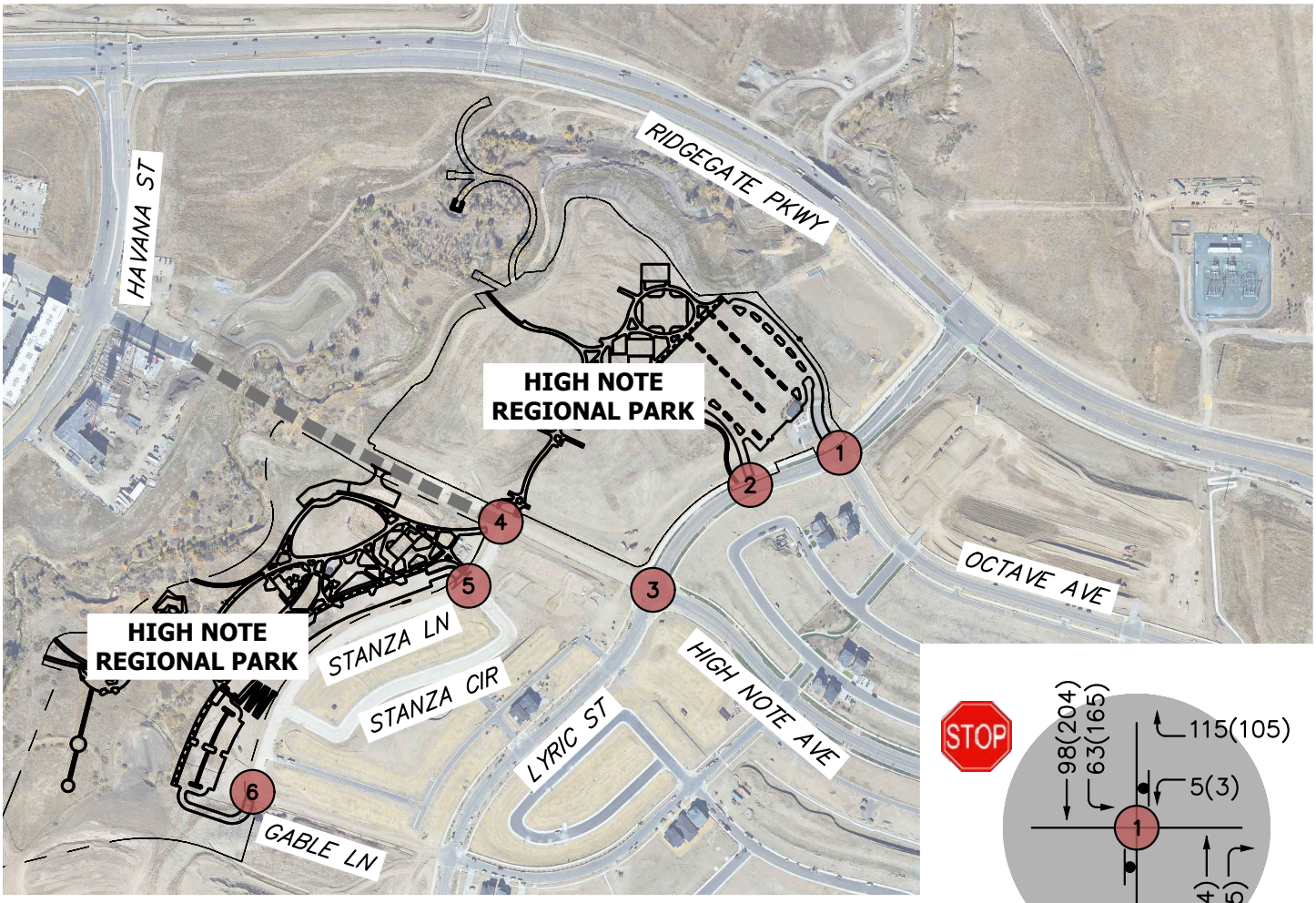


Figure 4 - 2030 Background Traffic Volumes

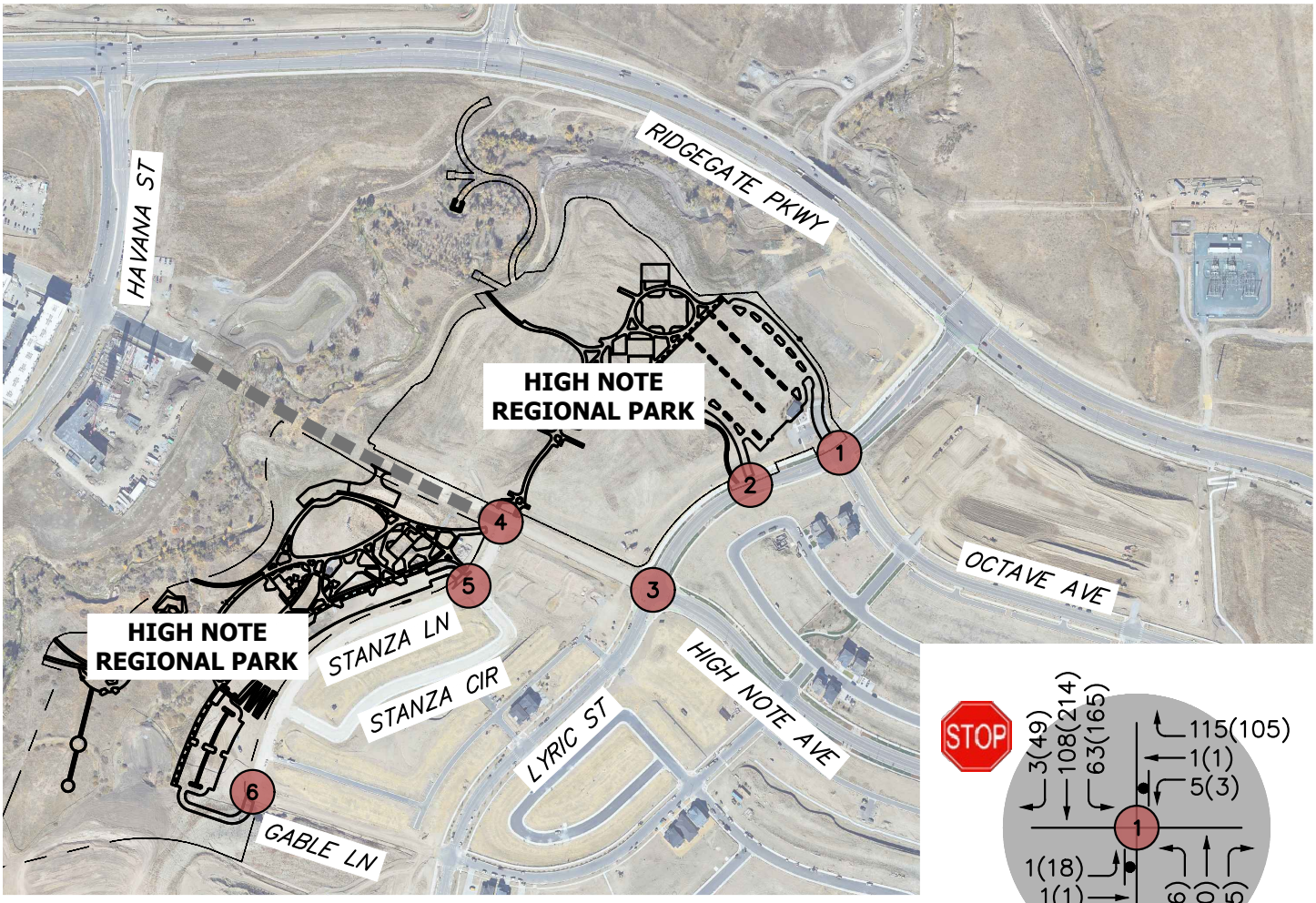


Figure 5 - 2030 Total Traffic Volumes

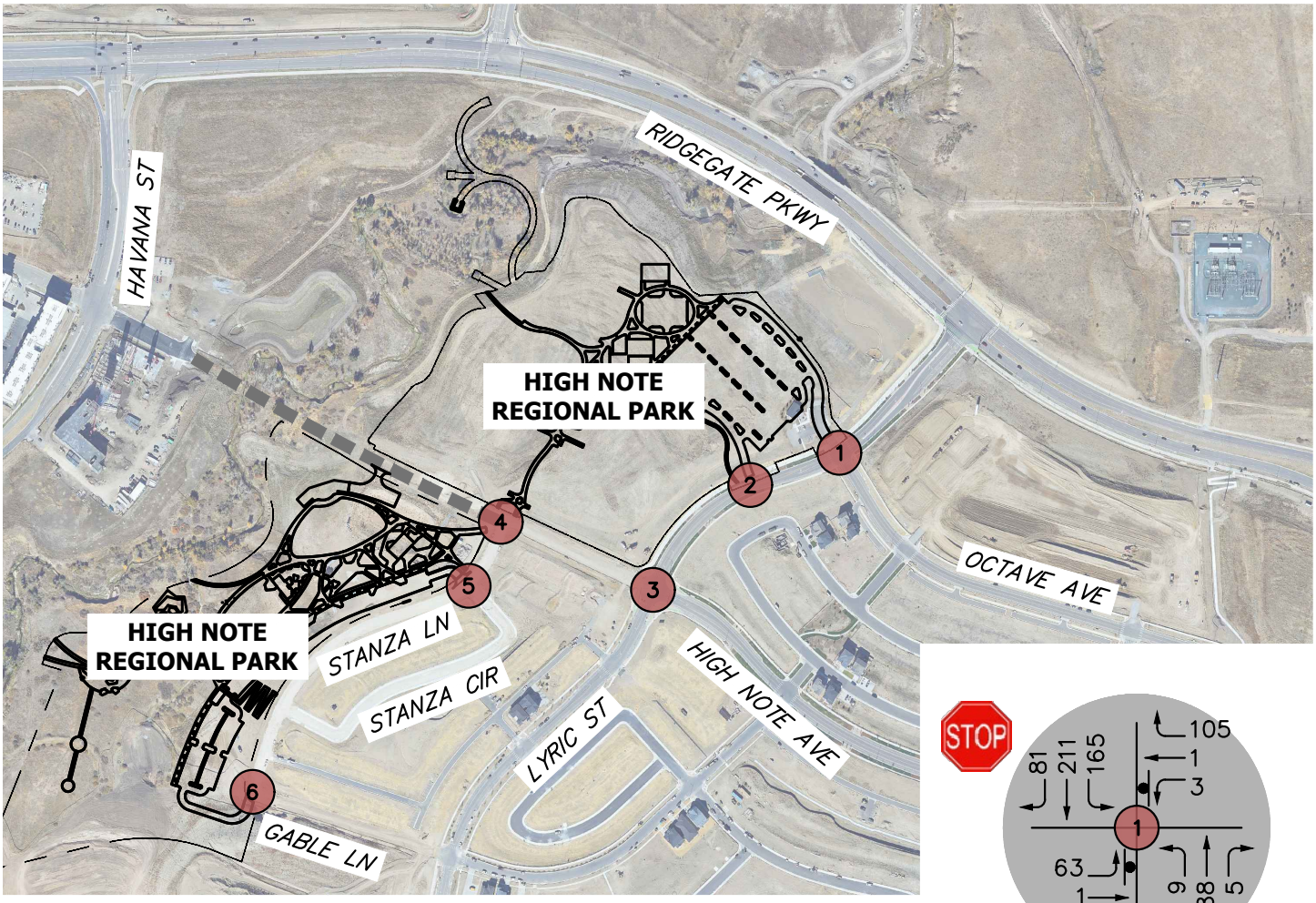


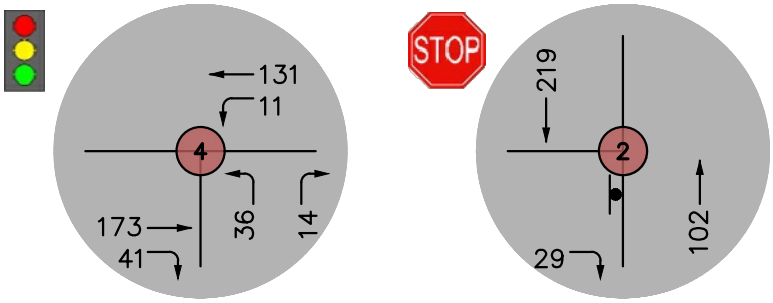
Figure 6 - Peak Tournament Traffic Volumes

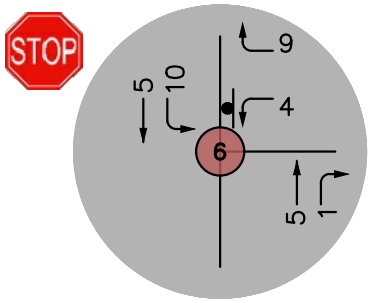
LEGEND

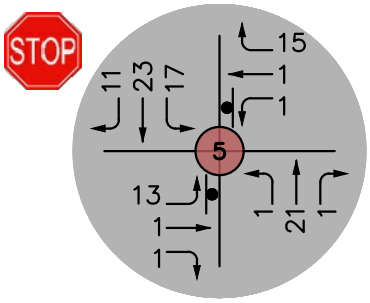
XX — EXISTING INTERSECTION

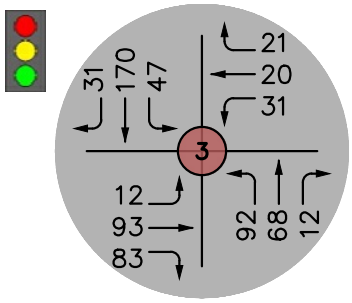
XX — SATURDAY PEAK HOUR TRIPS

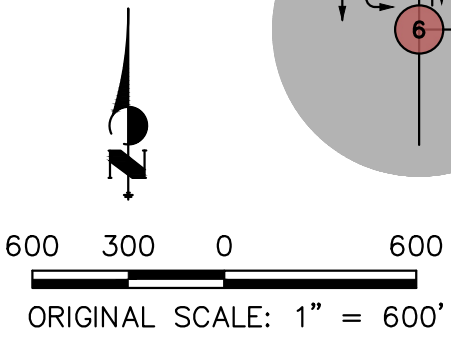
STOP SIGN CONTROL











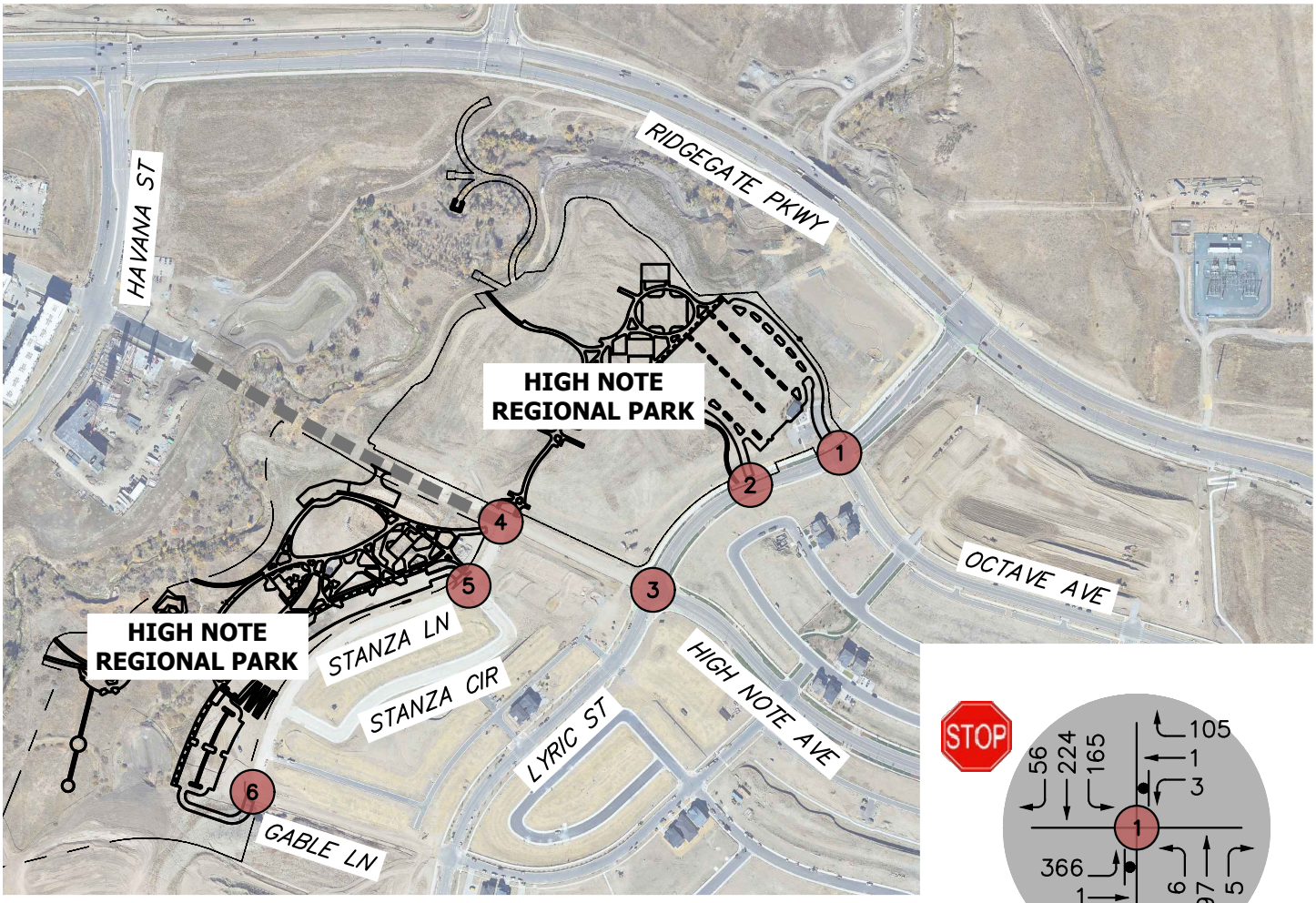
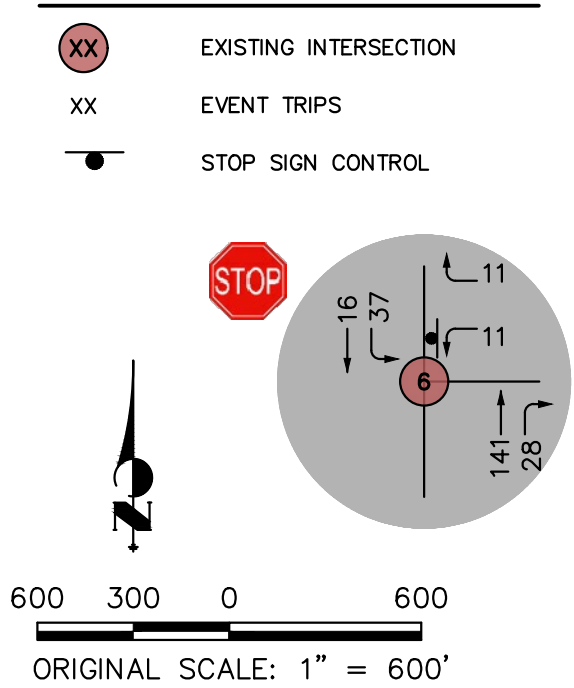
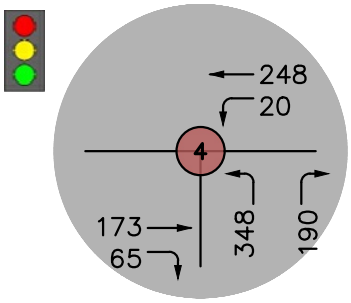
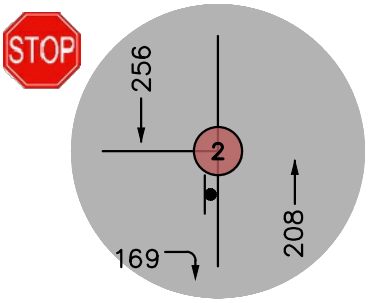
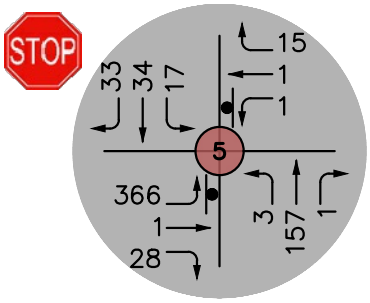


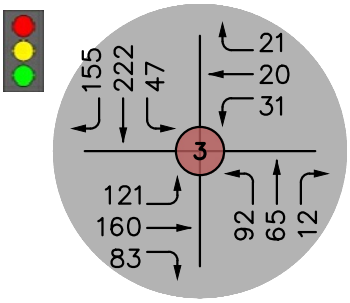
Figure 7 - Event Traffic Volumes











Traffic Operations Analysis

Traffic operations were analyzed using *Highway Capacity Manual*, 7th Edition methodology. Synchro reports are included in **Appendix D**.

Levels of Service

JR analyzed each of the Study intersections for peak hour level of service (LOS). **Table 1** includes the forecasted weekday LOS for each approach/movement in the year 2030 with both background and total traffic. It also includes forecasted LOS with peak traffic volumes during soccer tournaments and when the Regional Park is at full capacity during events.

Table 1: 2030 Build-Out Levels of Service

Intersection	Movement/ Approach	AM Peak LOS		PM Peak LOS		Peak Tourna-ment LOS	Event Traffic LOS
		Background Traffic	Total Traffic	Background Traffic	Total Traffic		
1: Lyric Street & Octave Avenue	EB Left/Thru	-	B	-	C	D	F (>300s)
	EB Right	-	A	-	A	A	A
	WB Approach	B	B	A	A	A	B
	NB Left	-	A	-	A	A	A
	SB Left	A	A	A	A	A	A
2: Lyric Street & Right-Out	EB Right	-	A	-	A	A	B
3: Lyric Street & High Note Avenue	EB Left	C	C	B	B	B	B
	EB Thru/Right	C	C	C	C	C	C
	WB Left	B	B	B	B	B	B
	WB Thru/Right	C	C	B	B	B	C
	NB Left	B	B	B	B	B	B
	NB Thru/Right	B	B	B	B	B	B
	SB Left	B	B	B	B	B	B
	SB Thru/Right	B	B	B	B	B	C
	Overall	**B**	**B**	**B**	**B**	**B**	**C**
4: High Note Avenue & Stanza Lane	EB Approach	B	B	B	B	B	C
	WB Approach	B	B	B	B	B	C
	NB Approach	A	A	A	A	A	B
	Overall	**B**	**B**	**B**	**B**	**B**	**B**
5: Stanza Lane & Stanza Circle	EB Approach	-	B	-	A	A	C
	WB Approach	A	A	A	A	A	A
	NB Approach	-	A	-	A	A	A
	SB Approach	A	A	A	A	A	A
6: Stanza Lane & Gable Lane	WB Approach	-	A	-	A	A	A
	SB Approach	-	A	-	A	A	A

Discussion on Levels of Service

During the typical AM and PM peak hours, all movements are expected to operate at LOS C or better.

During tournaments, most movements are expected to operate at LOS C or better. However, the eastbound left/through at Lyric & Octave is anticipated to operate at LOS D due to high traffic volumes exiting the park.

In the event scenario, increased traffic demand may result in a temporary LOS failure at the eastbound left/through movement at Lyric & Octave. JR recommends accepting brief LOS conditions that may occur during infrequent high-attendance events, as these conditions are short-term and expected to dissipate quickly.

Queue Lengths

JR analyzed each of the Study intersections for 95th percentile queue lengths. **Table 2** includes the queue lengths for the year 2030 with total traffic in the weekday AM and PM peak hours, plus the tournament peak hour and a scenario in which the Regional Park is at full capacity during events.

Table 2: 2030 Build-Out 95th Percentile Queue Lengths

Intersection	Movement/Approach	AM Peak Queue (ft)	PM Peak Queue (ft)	Peak Tourna-ment Queue (ft)	Event Traffic Queue (ft)
1: Lyric Street & Octave Avenue	EB Left/Through	<25	<25	35	800
	EB Right	<25	<25	<25	<25
	WB Approach	<25	<25	<25	<25
	NB Left	<25	<25	<25	<25
	SB Left	<25	<25	<25	<25
2: Lyric Street & Right-Out	EB Right	<25	<25	<25	28
3: Lyric Street & High Note Avenue	EB Left	<25	<25	<25	66
	EB Through/Right	61	96	95	151
	WB Left	27	<25	<25	<25
	WB Through/Right	35	27	27	27
	NB Left	78	49	49	53
	NB Through/Right	70	51	53	54
	SB Left	<25	28	28	31
	SB Through/Right	66	119	132	308
4: High Note Avenue & Stanza Lane	EB Approach	79	95	97	145
	WB Approach	104	63	71	180
	NB Approach	33	<25	<25	250
5: Stanza Lane & Stanza Circle	EB Approach	<25	<25	<25	138
	WB Approach	<25	<25	<25	<25
	NB Approach	<25	<25	<25	<25
	SB Approach	<25	<25	<25	<25
6: Stanza Lane & Gable Lane	WB Approach	<25	<25	<25	<25
	SB Approach	<25	<25	<25	<25

Discussion on Queue Lengths

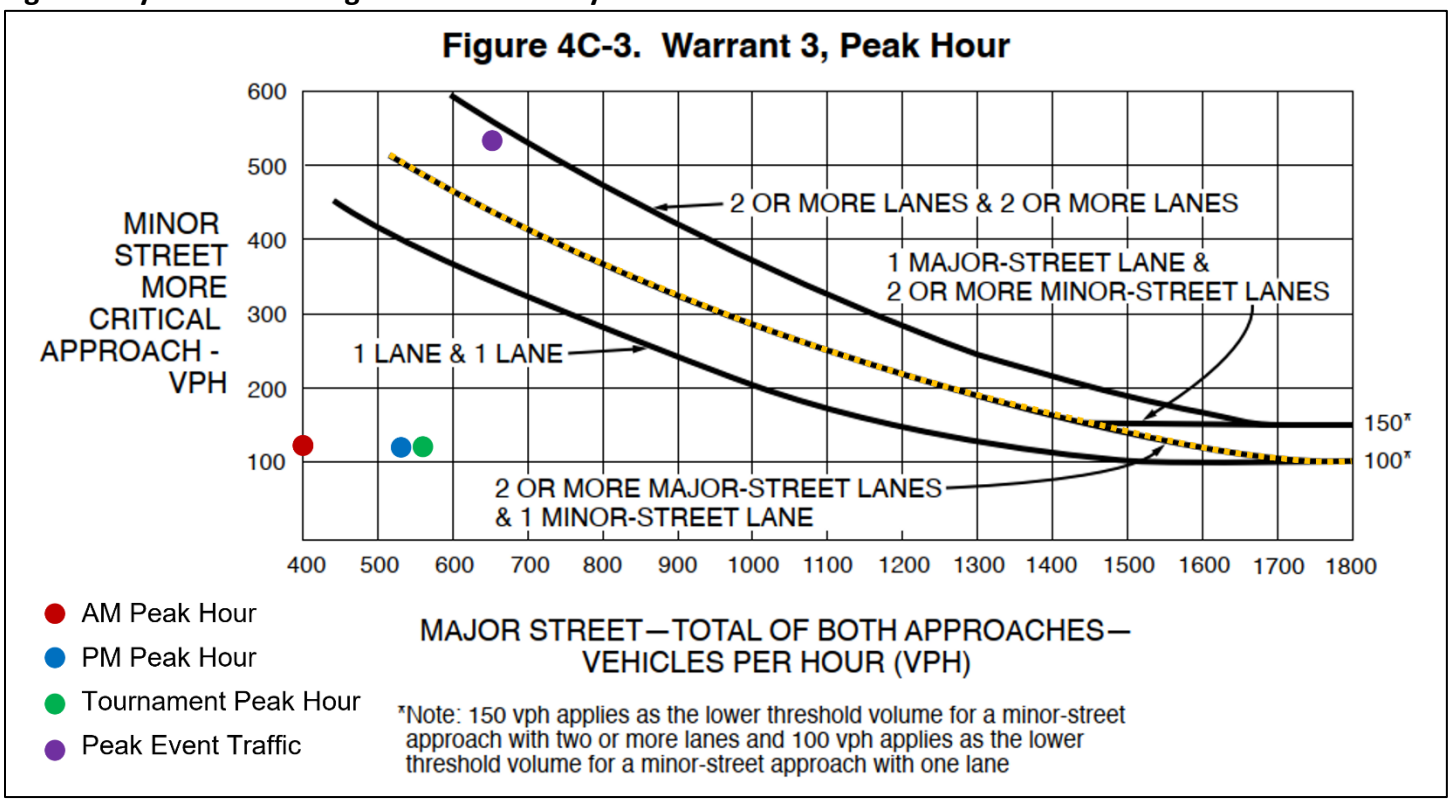
During the weekday AM, weekday PM, and tournament peak hours, no issues with queuing are anticipated.

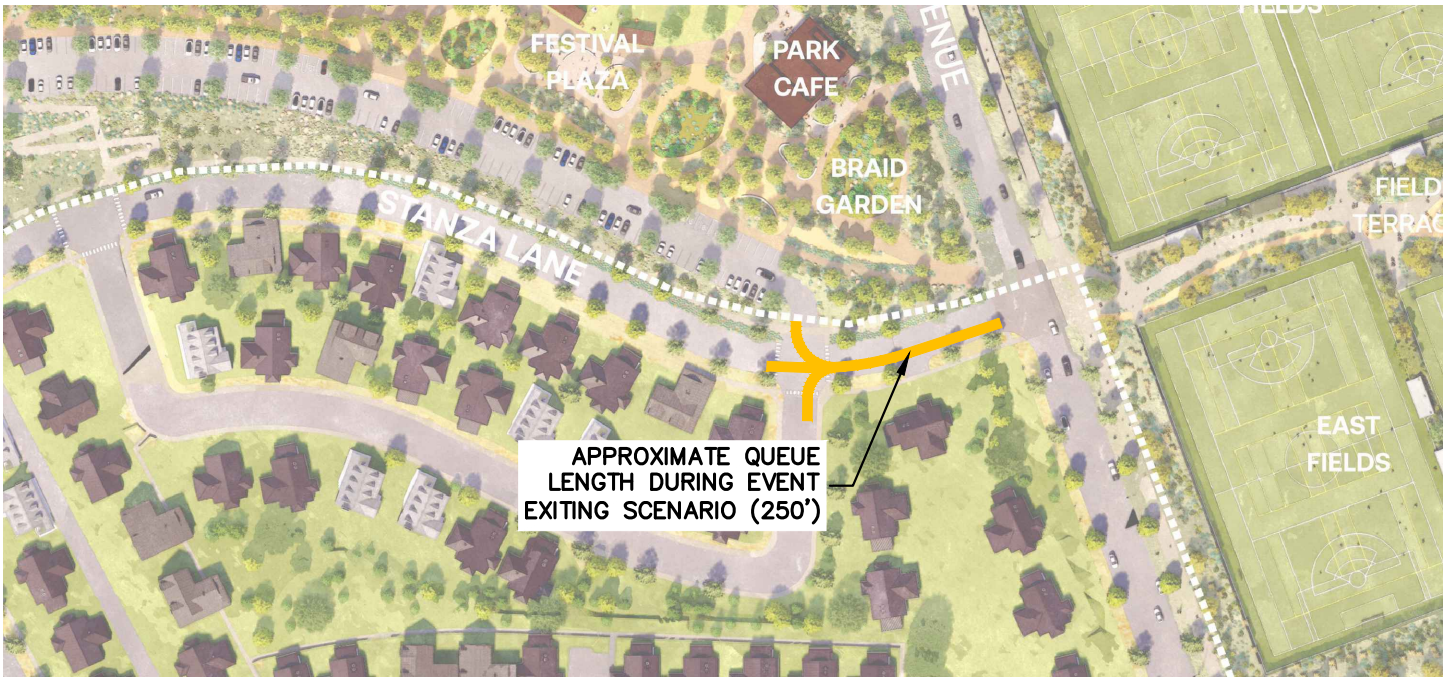
A couple of issues with queuing are identified during the event scenario when the park is at full capacity (about 5,000 people). Specifically, increased traffic demand may result in temporary queuing at the eastbound left/through at Lyric & Octave and the northbound approach of High Note & Stanza Lane. These queue lengths are illustrated in **Figure 9**. As with the LOS failures, JR recommends accepting these queue lengths, as they are only short-term occurrences during infrequent large events.

Lyric & Octave Signal Warrant Analysis

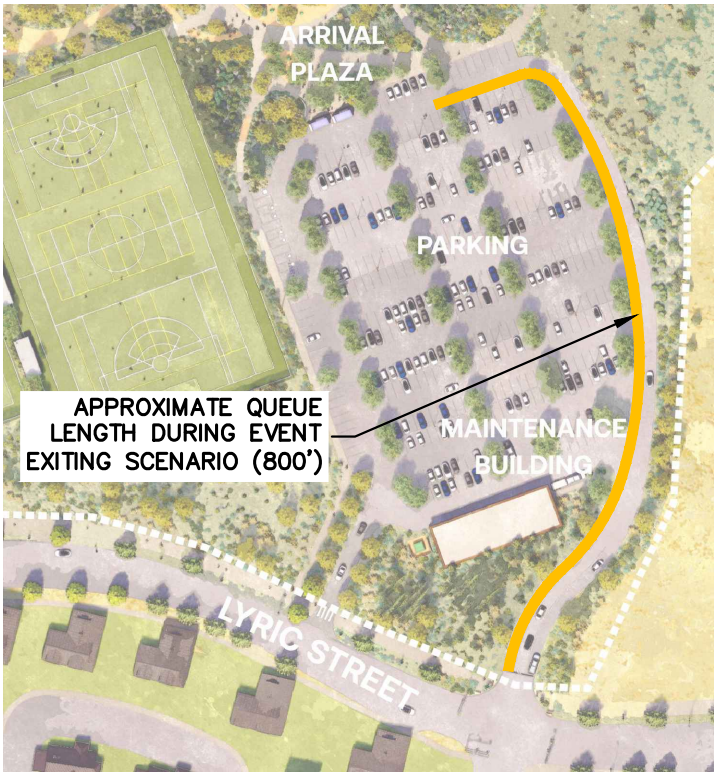
JR performed a peak hour signal warrant analysis at the intersection of Lyric & Octave upon full build-out of RidgeGate Southwest Village and the Regional Park. The intersection is anticipated to meet the peak hour warrant during the event traffic scenario. However, the intersection is not likely to meet the warrant under normal circumstances. Therefore, JR does not recommend signalization of Lyric & Octave. The plotted points on Figure 4C-3 from the MUTCD are shown in **Figure 8**. The City should continue to monitor the need for a signal according to MUTCD Warrants 1-4 (8-Hour, 4-Hour, Peak Hour, and Pedestrian Volume).

Figure 8: Lyric & Octave Signal Warrant Analysis





South Parking (Full Build-Out)



North Parking (Full Build-Out)

200 100 0 200

ORIGINAL SCALE: 1" = 200'

Figure 9 - Event Traffic Queuing

Phase 1 Traffic Analysis

In addition to analyzing the full build-out condition of High Note Regional Park, JR considered the interim traffic operations related to Phase 1 of the Project. Similar to the full build-out, the Phase 1 analysis includes trip generation rates, level of service results, and queue lengths for the AM Peak Hour, PM Peak Hour, Tournament Peak Hour, and Event Traffic scenarios. A site plan for Phase 1 is included in **Appendix A**.

Proposed Land Use

Phase 1 of the Regional Park is proposed to contain two soccer fields, a playground, a dog park, and an interim beer garden. For the purposes of this Study, the following ITE land uses were assumed:

- 6-Acre Public Park (ITE 411)
- 2 Soccer Fields (ITE 488)

Site-Generated Traffic Volumes

Site-generated traffic volumes were estimated using ITE *Trip Generation Manual*, 11th Edition. Phase 1 is expected to produce the following trips:

- Average Daily Trips: 236
- Weekday AM Peak Entering Site: 14
- Weekday AM Peak Exiting Site: 11
- Weekday PM Peak Entering Site: 35
- Weekday PM Peak Exiting Site: 21
- Saturday Peak Entering Site: 51
- Saturday Peak Exiting Site: 52

For the event traffic scenario, JR assumed that Phase 1 would generate 500 trips, with 10% entering and 90% exiting. This represents 40% of the event traffic anticipated during full build-out, which is assumed to be proportional.

Southbound Right at Lyric & Octave (Intersection 1)

JR considered the need for a southbound right turn lane at Lyric & Octave to improve access into the park. JR concludes that this turn lane is not warranted during Phase 1 because the peak hour turning volume does not meet the threshold of 50 vehicles per hour established by the CDOT Access Code. However, the lane is expected to be required upon full build-out of the park. Therefore, sufficient right-of-way should be preserved to accommodate a future turn lane if needed.

Levels of Service

Similar to the full build-out analysis, Phase 1 traffic operations were analyzed using *Highway Capacity Manual*, 7th Edition methodology. Synchro reports are included in **Appendix E**. Forecasted weekday LOS with both background and total traffic volumes are included in **Table 3**. The table also includes LOS during the tournament and event traffic scenarios. As shown, levels of service are mostly C or better, with the exception of the eastbound left/through movement at Lyric & Octave, which fails in the event traffic scenario.

Table 3: Phase 1 Levels of Service

Intersection	Movement/ Approach	AM Peak LOS		PM Peak LOS		Peak Tourna-ment LOS	Event Traffic LOS
		Background Traffic	Total Traffic	Background Traffic	Total Traffic		
1: Lyric Street & Octave Avenue	EB Left/Thru	-	B	-	C	C	F (>300s)
	EB Right	-	A	-	A	A	A
	WB Approach	B	B	A	A	A	A
	NB Left	-	A	-	A	A	A
	SB Left	A	A	A	A	A	A
2: Lyric Street & Right-Out	EB Right	-	A	-	A	A	A
3: Lyric Street & High Note Avenue	EB Left	C	C	B	B	B	B
	EB Thru/Right	C	C	C	C	C	C
	WB Left	B	B	B	B	B	B
	WB Thru/Right	C	C	B	B	B	B
	NB Left	B	B	B	B	B	B
	NB Thru/Right	B	B	B	B	B	B
	SB Left	B	B	B	B	B	B
	SB Thru/Right	B	B	B	B	B	B
	Overall	**B**	**B**	**B**	**B**	**B**	**B**

Queue Lengths

JR analyzed Phase 1 for 95th percentile queue lengths. **Table 4** includes queue lengths during the weekday AM and PM peak hours, plus the tournament and event traffic scenarios. As shown, most queue lengths are satisfactory, with the exception of the eastbound left/through movement at Lyric & Octave, which experiences significant queuing in the event traffic scenario.

Table 4: Phase 1 95th Percentile Queue Lengths

Intersection	Movement/Approach	AM Peak Queue (ft)	PM Peak Queue (ft)	Peak Tourna-ment Queue (ft)	Event Traffic Queue (ft)
1: Lyric Street & Octave Avenue	EB Left/Through	<25	<25	<25	738
	EB Right	<25	<25	<25	<25
	WB Approach	<25	<25	<25	<25
	NB Left	<25	<25	<25	<25
	SB Left	<25	<25	<25	<25
2: Lyric Street & Right-Out	EB Right	<25	<25	<25	<25
3: Lyric Street & High Note Avenue	EB Left	<25	<25	<25	<25
	EB Through/Right	55	90	90	90
	WB Left	26	<25	<25	<25
	WB Through/Right	33	27	27	27
	NB Left	75	48	48	48
	NB Through/Right	69	49	49	49
	SB Left	<25	28	28	28
	SB Through/Right	60	106	107	134

Parking Analysis

Parking Generation

Parking generation rates were estimated using ITE *Parking Generation Manual*, 6th Edition. At full build-out, the Regional Park is expected to generate the parking demand shown in **Table 5**. Parking demand for Phase 1 only is included in **Table 6**. Average rates and 85th percentile rates are both included in these tables.

Table 5: Parking Generation (Full Build-Out)

Land Use	Size	Time	Conditions	Average Parked Vehicles	85th % Parked Vehicles
Public Park (ITE 411)	24 Acres	Weekday	-	18	132
		Saturday	-	14	156
		Sunday	-	56	173
Soccer Complex (ITE 488)	5 Fields	Saturday	Tournament	299	348
			Non-Tournament	81	81
		Sunday	Tournament	324	338
			Non-Tournament	68	68
Tennis Courts (ITE 490)	8 Courts	Saturday	-	25	25
		Sunday	-	25	25
Total parking generation on Sunday with soccer tournament				**405**	**536**

Table 6: Parking Generation (Phase 1)

Land Use	Size	Time	Conditions	Average Parked Vehicles	85th % Parked Vehicles
Public Park (ITE 411)	6 Acres	Weekday	-	5	33
		Saturday	-	4	39
		Sunday	-	14	43
Soccer Complex (ITE 488)	2 Fields	Saturday	Tournament	120	139
			Non-Tournament	32	32
		Sunday	Tournament	130	135
			Non-Tournament	27	27
Total parking generation on Sunday with soccer tournament				**144**	**178**

Based on the ITE data, the highest parking generation is expected to occur on a Sunday with a soccer tournament. The total number of parked vehicles at the Regional Park after full build-out is estimated to be 405 (average) and 536 (85th percentile). Phase 1 generates about a third of parked vehicles.

The latest site plan for the Regional Park includes approximately 650 parking spaces. This is divided into two parking lots (400 spaces near the soccer fields and 250 spaces for the remainder of the park). The quantity of parking provided at full build-out is expected to be adequate to serve Project demand.

JR notes that the Regional Park is expected to host concerts and other large events. During these events, parking demand may exceed the provided 650 spaces.

Upon completion of Phase 1, there are expected to be approximately 200 parking spaces in the north parking lot near the soccer fields. This is anticipated to sufficiently serve Phase 1 demand.

On-Street Parking

On-street parking is permitted in some locations and not permitted in others, as illustrated in **Figure 10**.

Parking Circulation

Figure 11 shows suggested parking circulation for both parking lots, plus Phase 1 of the north parking lot.

Consideration should be given to how vehicles will circulate through the north parking lot. A drop-off area on the west side of the parking lot is approximately 130 feet long, or space for about five vehicles. Vehicles waiting in the drop-off area may impede circulating traffic.

JR considered whether vehicle circulation in the north parking lot may cause a queue spillback that reaches Lyric Street. The entrance driveway into the parking lot is about 230 feet long at full build-out, or enough space for nine vehicles to queue. JR believes that this is adequate to prevent queue spillback to Lyric Street. It is recommended that parking not be allowed along the entrance driveway. During large events, queuing is anticipated to dissipate shortly following peak arrival times.

Consideration should also be given to pedestrian movements within the north parking lot. Recent plans only show sidewalks on the west and south edges. Additional sidewalks along the north edge and within the parking lot may help to reduce conflicts between pedestrians and vehicles.

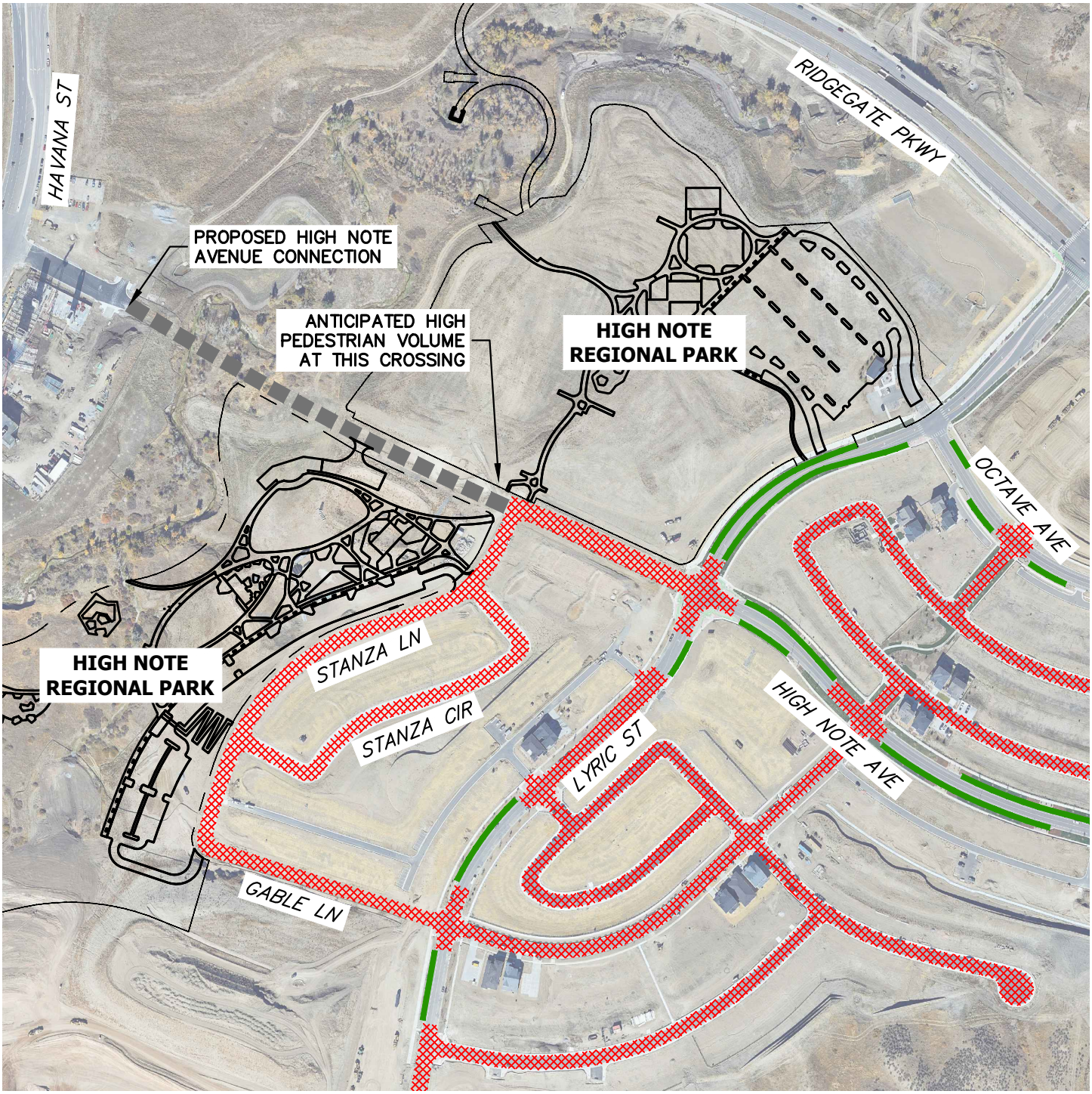
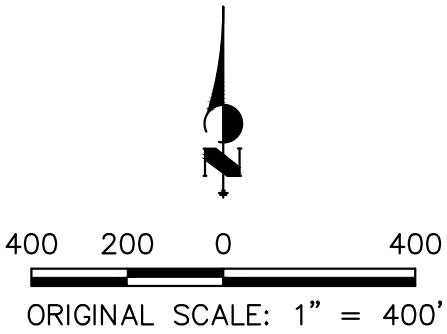
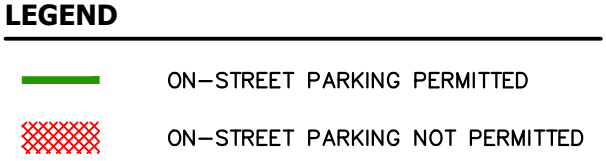
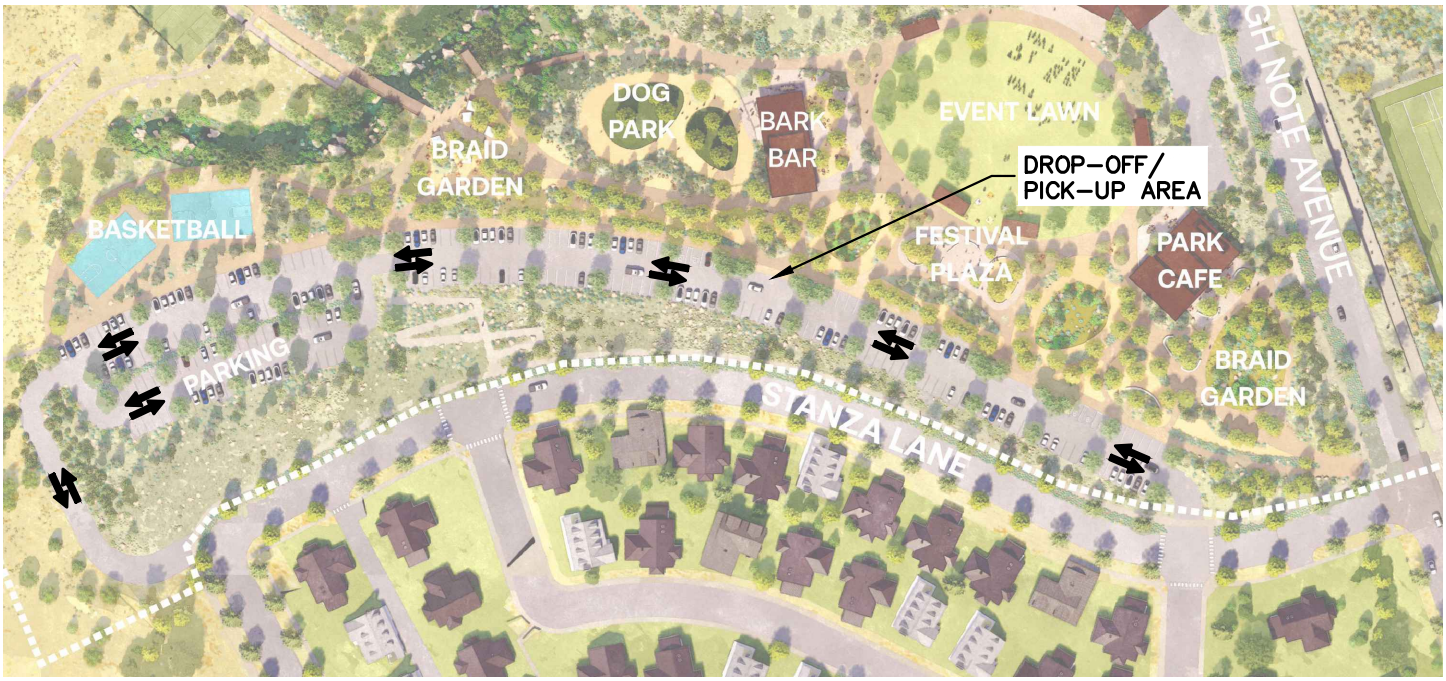


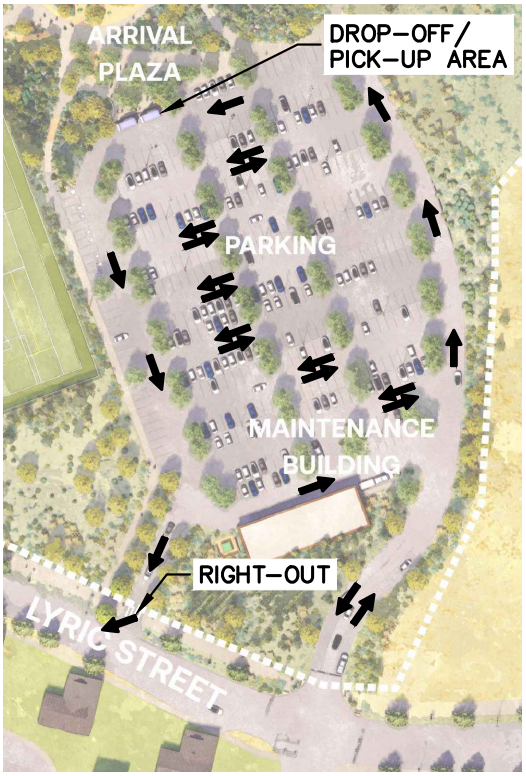
Figure 10 - On-Street Parking



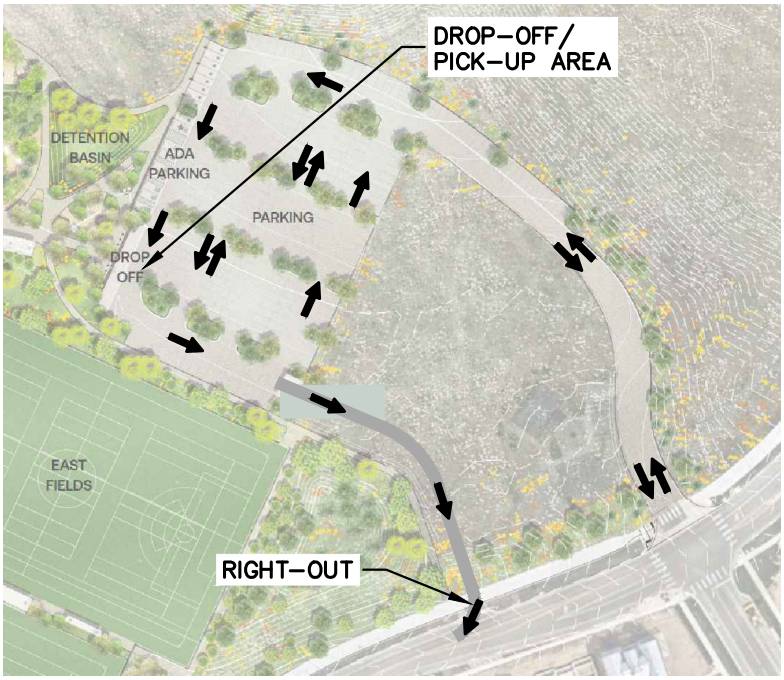




South Parking (Full Build-Out)



North Parking (Full Build-Out)



North Parking (Phase 1)

200 100 0 200

ORIGINAL SCALE: 1" = 200'

LEGEND

DIRECTIONAL TRAFFIC FLOW

Figure 11 - Parking Circulation

Pedestrian Analysis

High Note Regional Park is divided in half by High Note Avenue. It is expected that high pedestrian volumes will occur around the park, including across High Note Avenue. Therefore, JR considered the flow of pedestrian traffic at adjacent roadways and intersections.

Figure 12 shows the primary routes expected to be taken by pedestrians, along with intersection control and provided crosswalks.

According to the *Ridgegate Southwest Village TIS*, the signalized intersections of High Note & Lyric and High Note & Stanza will be protected intersections with separate crosswalks for pedestrians and bicyclists. The other Study intersections will have conventional striped crosswalks.

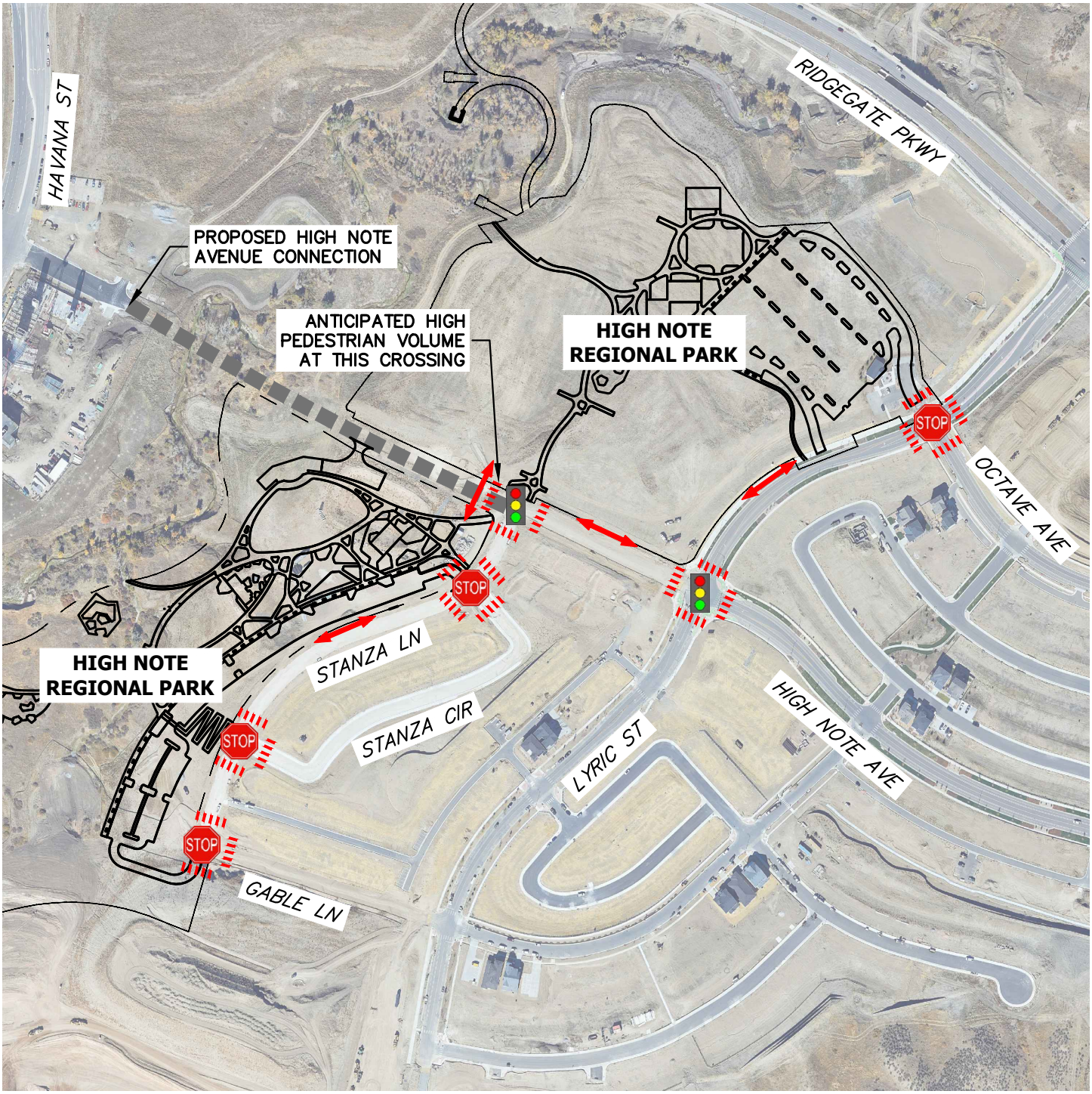


Figure 12 - Pedestrian Circulation

Conclusion

Below is a summary of the conclusions and findings of this TIS.

Land Use and Trip Generation

High Note Regional Park was modeled as a public park with soccer fields and tennis courts (pickleball courts are proposed, but ITE only has data for tennis courts). The park is expected to generate 706 daily trips. However, trip generation may be significantly higher when the park hosts events such as soccer tournaments and concerts.

Traffic Operational Results

Levels of service and 95th percentile queue lengths are expected to be satisfactory during the typical AM and PM peak hours, along with the peak tournament scenario.

During infrequent high-attendance events (up to 5,000 people), temporary operational failures are expected to occur, particularly at the eastbound left/through movement at Lyric & Octave. These conditions are typical for park and event venues and are generally short in duration. Available on-site circulation and parking areas are expected to accommodate vehicle queues, which are anticipated to dissipate within a short period following peak arrival times.

Phase 1 Analysis

Upon completion of Phase 1 of the Project, intersection operations are expected to perform acceptably during the weekday peak hours and the tournament peak hour, with acceptable levels of service and 95th percentile queue lengths.

During infrequent high-attendance events, increased traffic demand may result in temporary queuing at the eastbound left/through movement at Lyric & Octave. These types of conditions are typical for park and event venues and are generally short in duration. Available on-site circulation and parking areas are expected to accommodate vehicle queues, which are anticipated to dissipate shortly following peak arrival times.

A southbound right-turn lane at Lyric & Octave is not required under Phase 1 conditions; however, sufficient right-of-way should be preserved to accommodate a future turn lane if needed. The parking supply provided in Phase 1 is expected to be adequate to serve projected demand.

Parking Generation

Upon full build-out, High Note Regional Park is expected to generate 536 parked vehicles on a Sunday when a soccer tournament is held. Actual parking generation may be higher when the park hosts large events such as concerts. The latest site plan includes approximately 650 parking spaces, which is expected to be adequate to serve Project demand.

Recommendations

JR recommends accepting brief, manageable queuing conditions that may occur during infrequent high-attendance events at the park, as these conditions are short-term and expected to dissipate quickly. The City should continue to monitor the need for a signal at the Lyric & Octave intersection according to MUTCD Warrants 1-4 (8-Hour, 4-Hour, Peak Hour, and Pedestrian Volume).