

PLANNING COMMISSION AGENDA

Notice is hereby given that the Draper City Planning Commission will hold a Regular Meeting, at 5:30 p.m., on Thursday, October 3, 2013 in the City Council Chambers at 1020 East Pioneer Road.

The Agenda will be as follows: (Times listed on the agenda are approximate and may be accelerated or subject to change)

5:30 Dinner

Study Meeting: 6:00 p.m., City Council Chambers on the 1st floor

Study Business Items

Business Meeting: 6:30 p.m., City Council Chambers on the 1st floor

Citizen Comments: To be considerate of everyone attending the meeting and to more closely follow the published agenda times, public hearing comments will be limited to three minutes per person per item. A spokesperson who has been asked by a group to summarize their concerns will be allowed five minutes to speak. Comments which cannot be made within these limits should be submitted in writing to the City Recorder prior to noon the day before the meeting.

- 1. Action Item:** On the request of Richard Welch, representing Garbett Homes for approval of Land Use and Zoning Map Amendments of 9.02 acres at approximately 12052 South 300 East. The applicant is proposing to change the General Plan map from Low Density Residential to High Density Residential and changing the zoning designation from A5 Agriculture to RM2 Multiple Family Residential. The application is otherwise known as the *Smith Property Land Use and Zoning Map Amendments Request*, Application #130822-12052S. Staff contact is Dan Boles at 801-576-6335 or email Dan.Boles@draper.ut.us. *This item was continued from the September 19, 2013 Planning Commission meeting.*
- 2. Public Hearing:** On the request of Draper City, for approval of a Zoning Map Amendment of 2.34 acres at 365 E. Steep Mountain Drive from the OS Open Space zone to R3 Third-Acre Residential zone. This application is otherwise known as the *Steep Mountain Church Zone Change Request*, Application #130920-365E. Staff contact is Dennis Workman at 801-576-6522 or email Dennis.Workman@draper.ut.us.

Any person adversely affected by a decision of the Planning Commission regarding the transfer, issuance or denial of a conditional use permit may appeal such decision to the City Council by filing written notice of appeal stating the grounds therefore within fourteen (14) days from the date of such final determination.

Times listed above are approximate. Items may be held earlier or later than listed. For inquiries, please call the Planning Department, at 576-6539. In compliance with the American's with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Tracy Norr, Draper City Recorder, 576-6502, at least 3 days prior to meeting.

3. **Public Hearing:** On the request of Matt Lepire, representing Mariner Real Estate Management, First national Bank, and Quest Development for approval of Land Use and Zoning Map Amendments of 9.68 acres at 12223 S. Galena Park Boulevard. The applicant is proposing to change the General Plan map from Neighborhood Commercial to Residential Medium-High Density and changing the zoning designation from CC Community Commercial to RM1 Multiple Family Residential. This application is otherwise known as the *Galena Park Place General Plan and Zoning Map Amendments Request*, Application #130903-12223S. Staff contact is Dennis Workman at 801-576-6522 or email Dennis.Workman@draper.ut.us.
4. **Public Hearing:** On the request of Anika Hoybjerg, for approval of a Conditional Use Permit (CUP) in the RA2 (Residential Agricultural) zone to allow a school for children with autism at 12350 South 800 East (former Senior Center building). The application is otherwise known as the *Autism and Behavioral Intervention (ABI) CUP Request*, Application #130701-1974E. Staff contact is Dennis Workman at 801-576-6522 or email Dennis.Workman@draper.ut.us.
5. **Staff Reports**
 - a) Discussion Items
 - b) Administrative Reviews
 - c) Other Items
6. **Adjournment**

SALT LAKE COUNTY/UTAH COUNTY, STATE OF UTAH

I, the Deputy City Recorder of Draper City, certify that copies of the agenda for the **Planning Commission** meeting to be held the **October 3, 2013**, were posted on the Draper City Bulletin Board, Draper City website www.draper.ut.us, the Utah Public Meeting Notice website at www.utah.gov/pmn, and sent by facsimile to The Salt Lake Tribune, and The Deseret News.

City Seal

Angie Olsen, CMC, Deputy City Recorder
Draper City, State of Utah



MEMORANDUM

From: Dan Boles, AICP, Senior Planner

Date: September 26, 2013

Re: Smith Property Townhomes Land Use and Zoning Map Amendment Request

The purpose of this memo is to provide an overview of the traffic impact study that was prepared by Hales Engineering. The study was prepared with this proposed development in mind. A copy of the study is attached as exhibit 'A'.

In a memo from the Draper City Engineering Department, Brien Maxfield summarized the traffic study in the following way:

We have reviewed the applicant's traffic impact report dated September 2013 completed by Hales Engineering and concur with its findings that the with the proposed zone change and land use amendment of the subject property does not decrease the overall level of service, the capacity of the area streets and intersections, of 11950 South and 300 East specifically. This finding is based on an analysis of the existing traffic surrounding the subject lot, specifically the private school entrance located at 11950 South 300 East.

The report noted existing traffic queuing lengths in traffic directly related to the private school's operation, such as drop off and pick up. It also noted that during special events the traffic level of service could be significantly reduced, although it is not normal engineering practice to design and construct road capacity based on the occasional special event.

The level of service of streets is rated from A to F with the former being the best and latter failing based on congestion and delays. As noted in the report, there is only one leg where the level of service is a C, considered acceptable level of traffic not requiring street capacity upgrade. At other times of the day, including the change in zoning and land use of the subject property, 11950 South and 300 East function in a level of service of A and B.

Finally, also noted in the traffic report, the added traffic daily trips in the morning peak period are in the opposite direction as the school traffic. And in the afternoon peak period, the anticipated peak trip generation returning to the subject parcel would be at a different time as the afternoon peak of the school. Aside from the occasional special event, the application to amend the land use and change the parcel zoning on the subject property do not greatly impact the level of service of 11950 South and 300 East.

Additionally, the Planning Commission asked staff to search for other examples of High Density developments juxtaposed next to low density property. Staff was only able to find a couple of examples of high density and low density developments together. The Parc at Day Dairy is one example of a 17 units/acre development which backs against an acre lot development. Parc at Day Dairy is located on 12200 South and approximately 450 East. Another example is the



Richens project located on 800 East and 12100 South. That development is 11 units/acre surrounded by half to full acre properties. Bella Monte is approximately 10 units to the acre located on Bangerter Highway and 150 East and is directly across from RA1 and RA2 zoned property. Most, though not all, of the single family homes in that area do access off of 300 East as opposed to 150 East allowing much of the traffic from those developments to avoid one another. See Exhibit 'B' for locations.

While it is a practice that is used to buffer between properties, it is not the only practice as is evidenced by the above referenced properties. It is also not a requirement by code. Section 9-5-060(e) states, "a decision to amend the text of this Title or the zoning map is a matter committed to the legislative discretion of the City Council and is not controlled by any one standard." The code goes on to state "However, in making an amendment, the City Council should consider the following factors:

- (1) Whether the proposed amendment is consistent with goals, objectives and policies of the City's General Plan;
- (2) Whether the proposed amendment is harmonious with the overall character of existing development in the vicinity of the subject property;
- (3) Whether the proposed amendment is consistent with the standards of any applicable overlay zone.
- (4) The extent to which the proposed amendment may adversely affect adjacent property; and
- (5) The adequacy of facilities and services intended to serve the subject property, including but not limited to roadways, parks and recreation facilities, police and fire protection, schools, stormwater drainage systems, water supplies, and waste water and refuse collection.

After taking all of this into consideration, staff is still recommending approval of the request to change the Land Use and Zoning Maps to high density. This is based on the following considerations:

Land Use

1. That the change in land use designation to high density would create a balanced community where residents can live, work and play, and have their essential needs met.
2. Encourage infill development in close proximity to existing facilities to promote orderly growth while reducing the cost and extent of public services.
3. Encourage land uses that preserve a high quality of life and define Draper's unique identity within the region.
4. Support regional land use policies, patterns, and planning.
5. Maintain a balance of land uses that support a high quality of life, a diverse economic base, and a rich mixture of housing and leisure opportunities.
6. Incorporate a diverse range of residential and non-residential uses within mixed-use neighborhoods.
7. Encourage redevelopment that invigorates an area while also respecting the character of adjacent neighborhoods.



Zoning

1. That Section 9-5-060 of the Draper City Code allows for the amendment of the City's zoning map.
2. That the proposed amendment is consistent with the goals, objectives and policies of the City's General Plan, such as:
 - a. Promote development patterns and standards that are consistent with the surrounding uses and reinforce an area's character.
 - b. Encourage land uses that create a sense of community among those who work, live, and play within local neighborhoods.
 - c. Protect and revitalize established areas/neighborhoods by promoting new development and the adaptive reuse of existing community resources that reenergize an area.
3. That all five findings for a zone change, as contained in 9-5-060(e) and outlined in this staff report, are satisfied.
4. That adequate facilities and services exist to serve the subject property, including but not limited to roadways, parks and recreation facilities, police and fire protection, schools, storm water drainage systems, water supplies, and waste water and refuse collection.
5. That the proposed zone change is harmonious with the overall character of existing development in the vicinity of the subject property.
6. That due to the fact that 198 multi-family units exist on the adjacent parcels to the west, approval of the zoning request will not introduce a new standard in the neighborhood.
7. That the proposed amendment would not adversely affect adjacent property or the character of the neighborhood.

MODEL MOTIONS

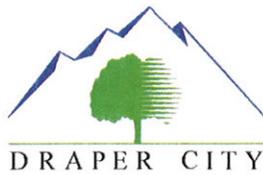
Land Use Map

Sample Motion for a Positive Recommendation – “I move we forward a positive recommendation to the City Council for the Smith Property Land Use Map Amendment Request by Richard Welch, representing Garbett Homes to change the land use designation from Residential, Low/Medium Density to Residential, High Density, application 130822-12052S, based on the findings listed in the Staff Report dated September 10, 2013:”

1. List any additional findings...

Sample Motion for a Negative Recommendation – “I move we forward a negative recommendation to the City Council for the Smith Property Land Use Map Amendment Request by Richard Welch, representing Garbett Homes to change the land use designation from Residential, Low/Medium Density to Residential, High Density, application 130822-12052S, based on the following findings:”

1. List any findings...



Planning Division
Community Development Department
1020 East Pioneer Road
Draper, Utah 84020
www.draper.ut.us

Zoning Map

Sample Motion for a Positive Recommendation – “I move we forward a positive recommendation to the City Council for the Smith Property Zoning Map Amendment Request by Richard Welch, representing Garbett Homes to change the zoning on the subject property from A5 (Agriculture) to RM2 (Residential Multi-Family), application 130822-12052S, based on the findings listed in the Staff Report dated September 10, 2013.”

1. List any additional findings...

Sample Motion for a Negative Recommendation – “I move we forward a negative recommendation to the City Council for the Smith Property Zoning Map Amendment Request by Richard Welch, representing Garbett Homes to change the zoning on the subject property from A5 (Agriculture) to RM2 (Residential Multi-Family), application 130822-12052S, based on the following findings:”

1. List any findings...

Exhibit 'A'
Traffic Study

Townhomes

Traffic Impact Study



Draper, Utah

September 2013

UT13-515

EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed townhome development in Draper, Utah. The proposed development is located on the southwest corner of the 11950 South / 300 East intersection.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways in the vicinity of the site.

TRAFFIC ANALYSIS

The following is an outline of the traffic analysis performed by Hales Engineering for the traffic conditions of this project.

Existing (2013) Background Conditions Analysis

Hales Engineering performed weekday morning (7:00 – 9:00 a.m.) and afternoon (4:00 to 6:00 p.m.) peak period traffic counts at the following intersections:

- 11950 South / 300 East
- 12000 South / 300 East

These counts were performed on Tuesday, September 17, 2013. The a.m. peak hour was determined to be between the hours of 7:30 and 8:30 a.m. and the p.m. peak hour between the hours of 4:15 and 5:15 p.m. Detailed count data are included in Appendix A.

The traffic counts showed that there was over twice as much traffic through these intersections during the a.m. peak hour. Therefore, all analyses in this study are completed with the a.m. volumes, to represent the worst case scenario.

As shown in Table ES-1, all study intersections are currently operating at acceptable levels of service during the a.m. peak hour. The 95th percentile queue in the northbound direction of the 11950 South / 300 East intersection is over 240 feet long.

Project Conditions Analysis

The proposed land use for the development has been identified as follows:

- Townhouse: 109 units

The total trip generation for the development is as follows:

- Daily Trips: 693
- a.m. Peak Hour Trips: 55
- p.m. Peak Hour Trips: 65

Existing (2013) Plus Project Conditions Analysis

As shown in Table ES-1, all study intersections are anticipated to operate at acceptable levels of service during the a.m. peak hour. The 95th percentile queue is anticipated to continue to be over 240 feet long.

TABLE ES-1 A.M. Peak Hour Draper - Townhomes		
Intersection	Existing 2013 Background	Existing 2013 Plus Project
Description	LOS (Sec/Veh ¹)	LOS (Sec/Veh ¹)
11950 South / 300 East	B (11.0)	B (10.2)
12000 South / 300 East	WB / A (8.1)	EB / C (15.5)
North Access / 11950 South ²	-	NB / A (4.7)

1. Intersection LOS and delay (seconds/vehicle) values represent the overall intersection average for signalized and all-way stop controlled intersections and the worst approach for all other unsignalized intersections.
 2. These are project intersections and were only evaluated in "plus project" scenarios.

Source: Hales Engineering, September 2013

RECOMMENDATIONS

The following mitigation measures are recommended:

Existing (2013) Background Conditions Analysis

No mitigation measures are recommended.

Existing (2013) Plus Project Conditions Analysis

No mitigation measures are recommended.

SUMMARY OF KEY FINDINGS/RECOMMENDATIONS

The following is a summary of key findings and recommendations:

- The study intersections currently experience acceptable levels of service.
- With project traffic added, no mitigation measures are recommended.
- Draper City access spacing requirements are met for both of the proposed accesses.

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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed townhome development in Draper, Utah. The proposed development is located on the southwest corner of the 11950 South / 300 East intersection. Figure 1 shows a vicinity map of the proposed development.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways in the vicinity of the site.

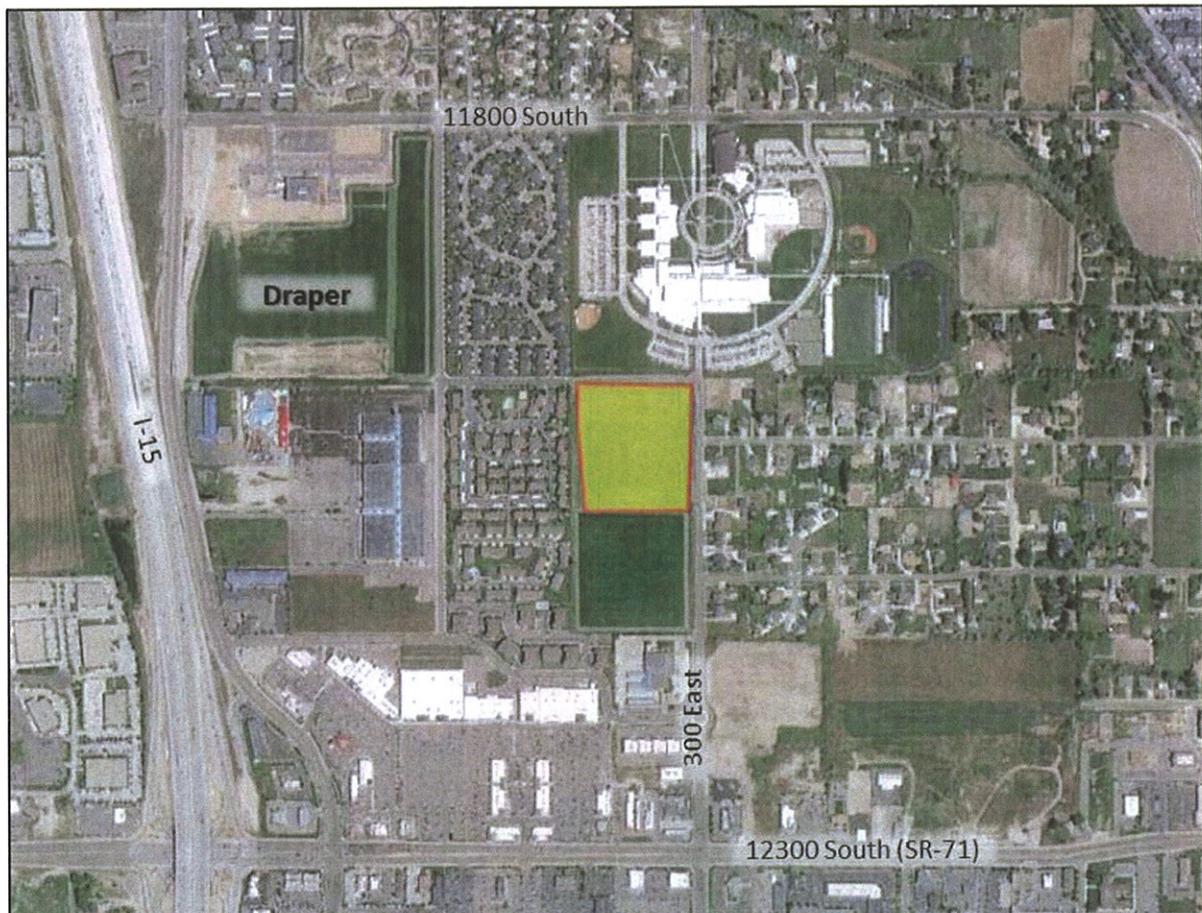


Figure 1 Vicinity map showing the project location in Draper, Utah

B. Scope

The study area was defined based on conversations with the Draper Traffic Engineer. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- 11950 South / 300 East
- 12000 South / 300 East

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections.

The Highway Capacity Manual 2010 (HCM 2010) methodology was used in this study to remain consistent with “state-of-the-practice” professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized and all-way stop intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections LOS is reported based on the worst approach.

D. Level of Service Standards

For the purposes of this study, a minimum overall intersection performance for each of the study intersections was set at LOS D. However, if LOS E or F conditions exist, an explanation and/or mitigation measures will be presented. An LOS D threshold is consistent with “state-of-the-practice” traffic engineering principles for urbanized areas.

Table 1 Level of Service Descriptions

Level of Service	Description of Traffic Conditions	Average Delay (seconds/vehicle)
Signalized Intersections		Overall Intersection
A	Extremely favorable progression and a very low level of control delay. Individual users are virtually unaffected by others in the traffic stream.	$0 \leq 10.0$
B	Good progression and a low level of control delay. The presence of other users in the traffic stream becomes noticeable.	> 10.0 and ≤ 20.0
C	Fair progression and a moderate level of control delay. The operation of individual users becomes somewhat affected by interactions with others in the traffic stream.	>20.0 and ≤ 35.0
D	Marginal progression with relatively high levels of control delay. Operating conditions are noticeably more constrained.	> 35.0 and ≤ 55.0
E	Poor progression with unacceptably high levels of control delay. Operating conditions are at or near capacity.	> 55.0 and ≤ 80.0
F	Unacceptable progression with forced or breakdown operating conditions.	> 80.0
Unsignalized Intersections		Worst Approach
A	Free Flow / Insignificant Delay	$0 \leq 10.0$
B	Stable Operations / Minimum Delays	>10.0 and ≤ 15.0
C	Stable Operations / Acceptable Delays	>15.0 and ≤ 25.0
D	Approaching Unstable Flows / Tolerable Delays	>25.0 and ≤ 35.0
E	Unstable Operations / Significant Delays Can Occur	>35.0 and ≤ 50.0
F	Forced Flows / Unpredictable Flows / Excessive Delays Occur	> 50.0

Source: Hales Engineering Descriptions, based on Highway Capacity Manual, 2010 Methodology (Transportation Research Board, 2010)

II. EXISTING (2013) BACKGROUND CONDITIONS

A. Purpose

The purpose of the existing (2013) background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified and potential mitigation measures recommended. This analysis will provide a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site is described below:

300 East – is a city maintained local road that would provide direct access to the proposed site. 300 East has one travel lane in each direction adjacent to the site. The posted speed limit on 300 East is 25 mph.

11950 South – is a city maintained local road that would provide direct access to the proposed site. 11950 South has one travel lane in each direction adjacent to the site. On-street parking is allowed on the street and it was observed during a field review that vehicles will often park on both sides of the road to drop off and load students. The existing pavement width is approximately 36 feet wide, with a parked vehicle on each side of the road, the effective width of the road is reduced to approximately 22 feet. The posted speed limit on 11950 South is 25 mph.

C. Traffic Volumes

Hales Engineering performed weekday morning (7:00 – 9:00 a.m.) and afternoon (4:00 to 6:00 p.m.) peak period traffic counts at the following intersections:

- 11950 South / 300 East
- 12000 South / 300 East

These counts were performed on Tuesday, September 17, 2013. The a.m. peak hour was determined to be between the hours of 7:30 and 8:30 a.m. and the p.m. peak hour between the hours of 4:15 and 5:15 p.m. Detailed count data are included in Appendix A.

The traffic counts showed that there was over twice as much traffic through these intersections during the a.m. peak hour. Therefore, all analyses in this study are completed with the a.m. volumes, to represent the worst case scenario.

Figure 2 shows the existing a.m. peak hour volume as well as intersection geometry at the study intersections.

D. Level of Service Analysis

Using Synchro/SimTraffic, which follow the Highway Capacity Manual (HCM) 2010 methodology introduced in Chapter I, the a.m. peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 2 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2013) conditions. As shown in Table 2, all study intersections are currently operating at acceptable levels of service during the a.m. peak hour.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix D. The 95th percentile queue in the northbound direction of the 11950 South / 300 East intersection is over 240 feet long. This was verified by field observations.

F. Mitigation Measures

No mitigation measures are recommended.

Table 2 Existing (2013) Background a.m. Peak Hour Level of Service

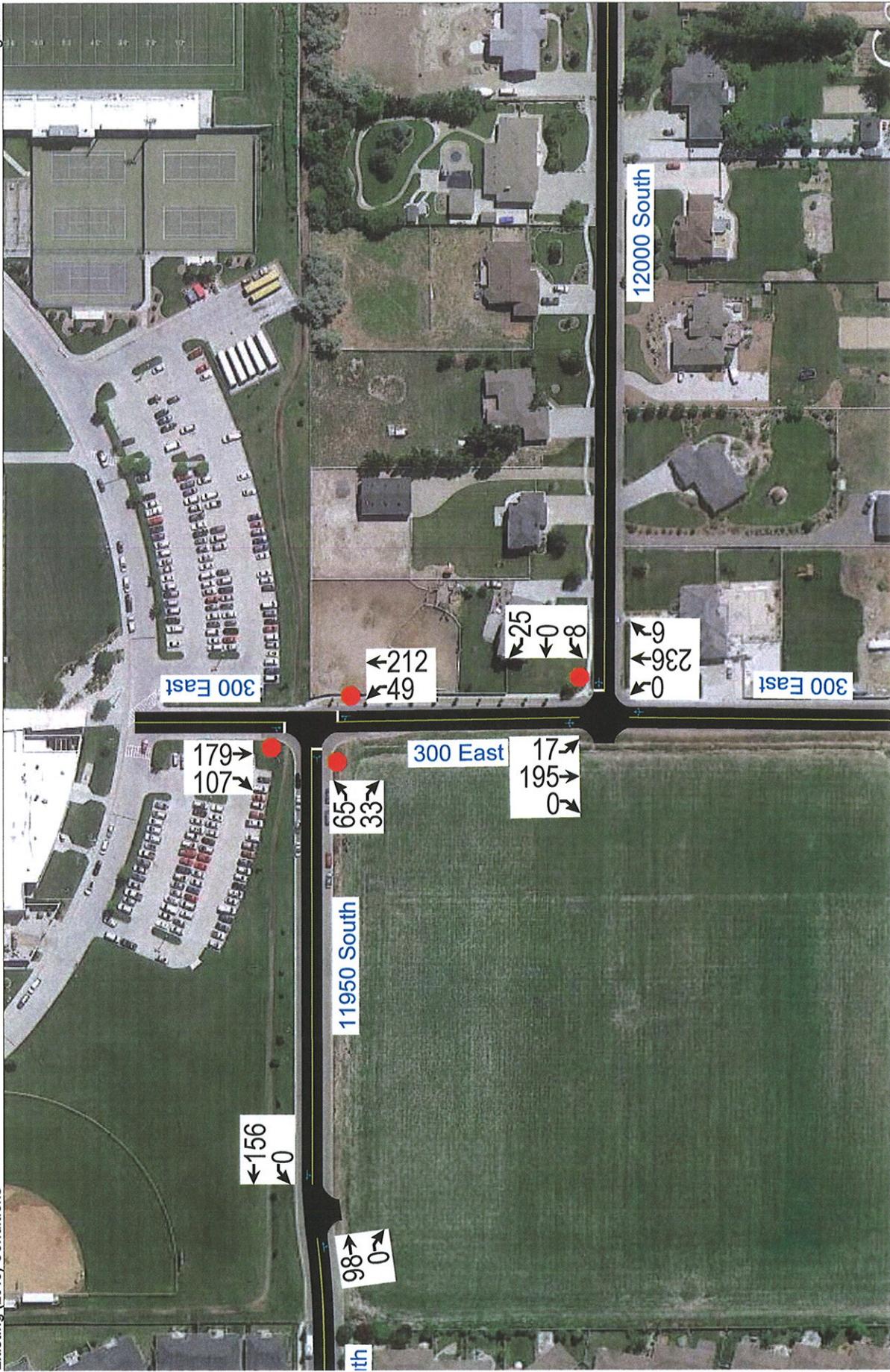
Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach ^{1,3}	Aver. Delay (Sec/Veh) ¹	LOS ¹	Aver. Delay (Sec/Veh) ²	LOS ²
11950 South / 300 East	3-way stop	-	-	-	11.0	B
12000 South / 300 East	WB Stop	WB	8.1	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
 2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal controlled intersections.
 3. SB = Southbound approach, etc.

Source: Hales Engineering, September 2013

Draper - Townhomes TIS
Existing (2013) Conditions

a.m. Peak Hour
Figure 2



Hales Engineering
2975 W. Executive Pkwy. Ste 151 Lehi UT 84043

801.766.4343
9/18/2013

III. PROJECT CONDITIONS

A. Purpose

The project conditions analysis explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in the Introduction.

B. Project Description

This study addresses the traffic impacts associated with the proposed townhome development in Draper, Utah. The proposed development is located on the southwest corner of the 11950 South / 300 East intersection. A concept plan for the proposed development has been included in Appendix C.

The proposed land use for the development has been identified as follows:

- Townhouse: 109 units

C. Trip Generation

Trip generation for the project was calculated using rates published in the ITE *Trip Generation (9th Edition, 2012)*. Trip Generation for the proposed project is included in Table 3.

D. Trip Distribution and Assignment

Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially in close proximity to the site. The resulting distribution of project generated trips is as follows:

To/From Project:

- 50% West
- 40% South
- 10% East

These trip distribution assumptions were used to assign the a.m. peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 3.

**Table 3
Draper - Townhomes
Trip Generation**

Table 3 Draper - Townhomes Trip Generation								
Weekday Daily								
Land Use ¹	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total Daily Trips
Residential Condominium/Townhouse (230)	109	Dwelling Units	693	50%	50%	347	347	693
Project Total Daily Trips						347	347	693
A.M. Peak Hour								
Land Use ¹	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total a.m. Trips
Residential Condominium/Townhouse (230)	109	Dwelling Units	55	17%	83%	9	46	55
Project Total a.m. Peak Hour Trips						9	46	55
P.M. Peak Hour								
Land Use ¹	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total p.m. Trips
Residential Condominium/Townhouse (230)	109	Dwelling Units	65	67%	33%	43	21	65
Project Total p.m. Peak Hour Trips						43	21	65
Saturday Daily								
Land Use ¹	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total Sat. Daily Trips
Residential Condominium/Townhouse (230)	109	Dwelling Units	823	50%	50%	411	411	823
Project Total Saturday Trips						411	411	823
Saturday Peak Hour								
Land Use ¹	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total Sat Pk Hr Trips
Residential Condominium/Townhouse (230)	109	Dwelling Units	74	54%	46%	40	34	74
Project Total Saturday Peak Hour Trips						40	34	74

1. Land Use Code from the Institute of Transportation Engineers - 9th Edition Trip Generation Manual (ITE Manual)

SOURCE: Hales Engineering, September 2013

E. Access

The proposed access for the site will be gained at the following locations (see also site plan in Appendix C):

300 East:

- 12000 South: The proposed full-movement access will be located directly across from the existing 12000 South roadway and approximately 275 feet South of 11950 South.

11950 South:

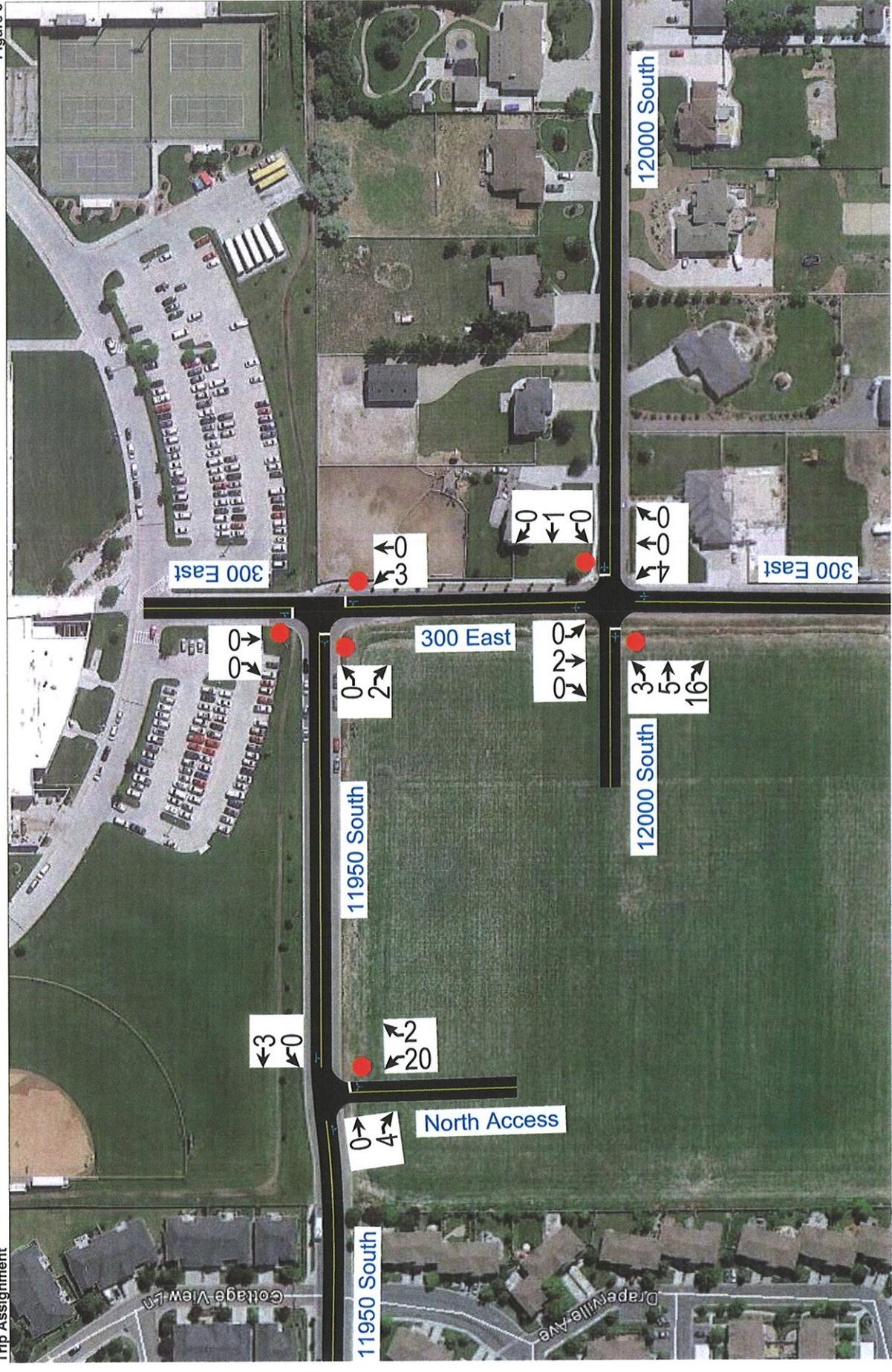
- North Access: The proposed full-movement access will be located approximately 500 feet west of 300 East.

F. Access Management

The Draper City Transportation Master Plan, dated December, 2011, outlines access spacing requirements for Draper roads and driveways. The project is adjacent to 11950 South and 300 East, both of which are classified as local roads. According to the Draper City Minimum Access Spacing Standards (Table 4-2, pg. 53) the public street spacing is 150 feet minimum and no minimum for private access spacing. Therefore, the proposed accesses meet Draper City access spacing requirements.

a.m. Peak Hour
Figure 3

Draper - Townhomes
Trip Assignment



801.766.4343
9/18/2013

Hales Engineering
2975 W. Executive Pkwy. Ste 151 Lehi UT 84043

IV. EXISTING (2013) PLUS PROJECT CONDITIONS

A. Purpose

This section of the report examines the traffic impacts of the proposed project at each of the study intersections. The net trips generated by the proposed development were combined with the existing background traffic volumes to create the existing plus project conditions. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Traffic Volumes

Project trips were assigned to the study intersections based on the trip distribution percentages discussed in Chapter III and permitted intersection turning movements.

The existing (2013) plus project a.m. peak hour volumes were generated for the study intersections and are shown in Figure 4.

C. Level of Service Analysis

Using Synchro/SimTraffic, which follow the Highway Capacity Manual (HCM) 2010 methodology introduced in Chapter I, the a.m. peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 4 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. As shown in Table 4, all study intersections are anticipated to operate at acceptable levels of service during the a.m. peak hour.

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix D. The 95th percentile queue is anticipated to continue to be over 240 feet long.

E. Mitigation Measures

No mitigation measures are recommended.

a.m. Peak Hour
Figure 4

Draper - Townhomes TIS
Existing (2013) Plus Project

