



December 1, 2021

Mr. Andrew Trietley
Ventana Capital
9801 East Easter Avenue
Centennial, CO 80112

SUBJECT: CHAMBERS AND HESS TRAFFIC COMPLIANCE LETTER (RICK ENGINEERING COMPANY JOB NUMBER D01173)

Dear Mr. Trietley:

[INTRODUCTION/PROJECT DESCRIPTION](#)

This traffic compliance letter has been prepared to provide a trip generation comparison based on the proposed changes to Douglas 234, Filing No. 6 and identify compliance with the original approved *Chambers and Hess Development Traffic Impact Study (TIS)*, dated September 14, 2020. The project proposes to construct a commercial development on a currently vacant 14-acre parcel, consisting of fast-food restaurants, a coffee shop, a gas station with convenience store, a tire store, a quick lubrication shop, a car wash, a pharmacy/drug store, a drive-in bank, a general office building, and a day care center. The project proposes one full and one right-in only access at S. Red Sky Drive, and one right-in/right-out access at E. Hess Road. On the same parcel, the approved TIS assumed similar land use types, layout of lots, and site access characteristics. The project is located at the southeast corner of S. Chambers Road and S. Red Sky Drive in the Town of Parker, Colorado.

Exhibit 1 shows the project vicinity map. **Exhibit 2** shows the project site plan. **Appendix A** contains excerpts from the approved TIS.

[SITE TRIP GENERATION](#)

The project traffic volumes anticipated to be generated by the proposed development were estimated using the nationally published trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. The project is anticipated to generate 9,476 daily weekday trips, of which 828 trips (447 inbound and 381 outbound) are anticipated to be generated during the AM peak hour, and 880 trips (435 inbound and 445 outbound) during the PM peak hour. These trips account for internal capture trip reductions, as explained in the approved TIS. In comparison, the trips estimated for the development in the approved TIS were expected to generate 9,371 daily weekday trips, of which 804 trips (435 inbound and 369 outbound) were anticipated to be generated during the AM peak hour, and 875 trips (429 inbound and 446 outbound) during the PM peak hour. As shown in **Table 1** below, the proposed development is expected to generate 105 more daily weekday trips, 24

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additional AM peak hour trips and 5 additional PM peak hour trips than the original development assumed in the approved TIS.

**TABLE 1
PROJECT TRIP GENERATION SUMMARY**

LAND USE	QUANTITY	ITE Trip Gen. 10th Edition Code	ADT	AM PEAK HOUR VOLUMES			PM PEAK HOUR VOLUMES			
				IN	OUT	TOTAL	IN	OUT	TOTAL	
				ORIGINAL DEVELOPMENT PER TIS						
Day Care Center	13	TSF	565	619	76	67	143	68	77	145
General Office Building	15	TSF	710	168	35	6	41	3	16	19
Pharmacy/Drugstore With a Drive-Through Window	12	TSF	881	1310	24	22	46	61	62	123
Drive-in Bank	3	TSF	912	324	14	10	24	26	26	51
Fast-Food Restaurant with Drive-Through Window	2.5	TSF	934	1177	51	49	100	43	39	82
Fast-Food Restaurant with Drive-Through Window	2	TSF	934	942	41	39	80	34	31	65
Coffee/Donut Shop with Drive-Through Window	2	TSF	937	1641	91	87	178	44	44	87
Quick Lubrication Vehicle Shop	3	TSF	941	209	13	4	17	11	15	26
Automobile Care Center ¹	6	TSF	942	See Footnote ¹	9	5	14	12	14	26
Gasoline/Service Station with Convenience Market	16	VFP	945	3,134	106	101	207	114	110	224
Automated Car Wash ²	1	CWT	948	See Footnote ²				39	39	78
Sub Total				9,524	460	390	850	455	473	926
Internal Capture				74	21	17	38	23	22	44
External Walk, Bike				79	4	4	8	3	4	7
TOTAL PROJECT TRIPS				9,371	435	369	804	429	446	875
PROPOSED DEVELOPMENT										
Day Care Center	12.985	TSF	565	618	76	67	143	68	76	144
General Office Building	10	TSF	710	114	31	5	36	2	11	13
Pharmacy/Drugstore With a Drive-Through Window	10.5	TSF	881	1147	21	19	40	54	54	108
Drive-in Bank	3	TSF	912	324	14	10	24	25	26	51
Fast-Food Restaurant with Drive-Through Window	4.85	TSF	934	2284	99	96	195	83	76	159
Fast-Food Restaurant with Drive-Through Window	1.75	TSF	934	824	36	34	70	30	27	57
Coffee/Donut Shop with Drive-Through Window	2.2	TSF	937	1805	100	96	196	48	47	95
Quick Lubrication Vehicle Shop	3	TSF	941	209	13	4	17	11	15	26
Tire Store	8.605	TSF	848	245	15	8	23	15	19	34
Gasoline/Service Station with Convenience Market	12	VFP	945	2,061	67	64	131	86	82	168
Automated Car Wash ²	1	CWT	948	See Footnote ²				39	39	78
Sub Total				9,631	472	403	875	461	472	933
Internal Capture				75	21	18	39	23	22	46
External Walk, Bike				80	4	4	8	3	4	7
TOTAL PROJECT TRIPS				9,476	447	381	828	435	445	880
TOTAL NET NEW PROJECT TRIPS				105	11	12	24	6	-1	5

Source: *Fehr and Peers MXD + Methodology and Validation Technical Memorandum, Dated May 06, 2020* – with revisions based on Town’s Comments on July 16, 2020, and further coordination with the Town on August 7, 2020.

TSF = Thousand Square Feet

VFP = Vehicle Fueling Position

CWT = Car Wash Tunnels

¹ITE Trip Generation Manual does not publish Weekday Daily Trips for Auto Care Centers. Instead, weekend (Saturday/Sunday) trips are provided in ITE to depict realistic use and hours of operation.

²ITE Trip Generation Manual does not publish Weekday Daily Trips or AM peak hour for Automated Car Wash. Instead, weekend (Saturday/Sunday) trips are provided in ITE to depict realistic use and hours of operation.

[SITE COMPARISON TO APPROVED TIS](#)

As shown in Exhibit 2, the layout of lots on the proposed parcel is the same layout proposed in the approved TIS. On the same parcel, the project proposes similar land use types as proposed in the approved TIS. The proposed site contains an 8,605 square-foot Les Schwab Tire Store in place of the 6,000 square-foot Automobile Care Center. The fast-food restaurants, coffee shop,

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gas station with convenience store, pharmacy/drug store, general office building, and day care center land uses remain from the approved TIS with changes in the proposed square footages as shown in Table 1. The drive-in bank, quick lubrication vehicle shop, and car wash land uses remain unchanged from the approved TIS. Access to the project is provided by one right-in only driveway at S. Red Sky Drive, a full access driveway at the intersection of Sliceroo Drive and S. Red Sky Drive, and a right-in/right-out driveway at the intersection of Sliceroo Drive and E. Hess Road, as proposed in the approved TIS.

CONCLUSIONS/RECOMMENDATIONS

The project does not propose any significant changes to the site from the original approved TIS. The adjustment to the tire store in place of the automobile care center and updated square footages of the remaining land uses result in minimal difference. Based on the Town of Parker's Traffic Impact Study guidelines outlined within the Town's Roadway Design and Construction Manual Section 5, a standard TIS would not be required if the average trip generation of the proposed project is less than 200 trips per day and 20 trips or less in the peak hour. The change in trips anticipated by the proposed project is anticipated to be 105 additional daily weekday trips, 24 additional trips during the AM peak hour and 5 additional trips during the PM peak hour. However, due to the minimal increase in peak hour trips during the AM peak hour, it is anticipated that the project would incur similar impacts to the surrounding transportation system and therefore, the proposed development is in conformance with the approved *Chambers and Hess Development Traffic Impact Study (TIS)*, dated September 14, 2020.

Should you have any questions, please contact either Phil Johnson at (303) 423-6036 or me at (619) 291-0707.

Sincerely,

RICK ENGINEERING COMPANY



Brian R. Stephenson, PE, PTOE
Associate Principal

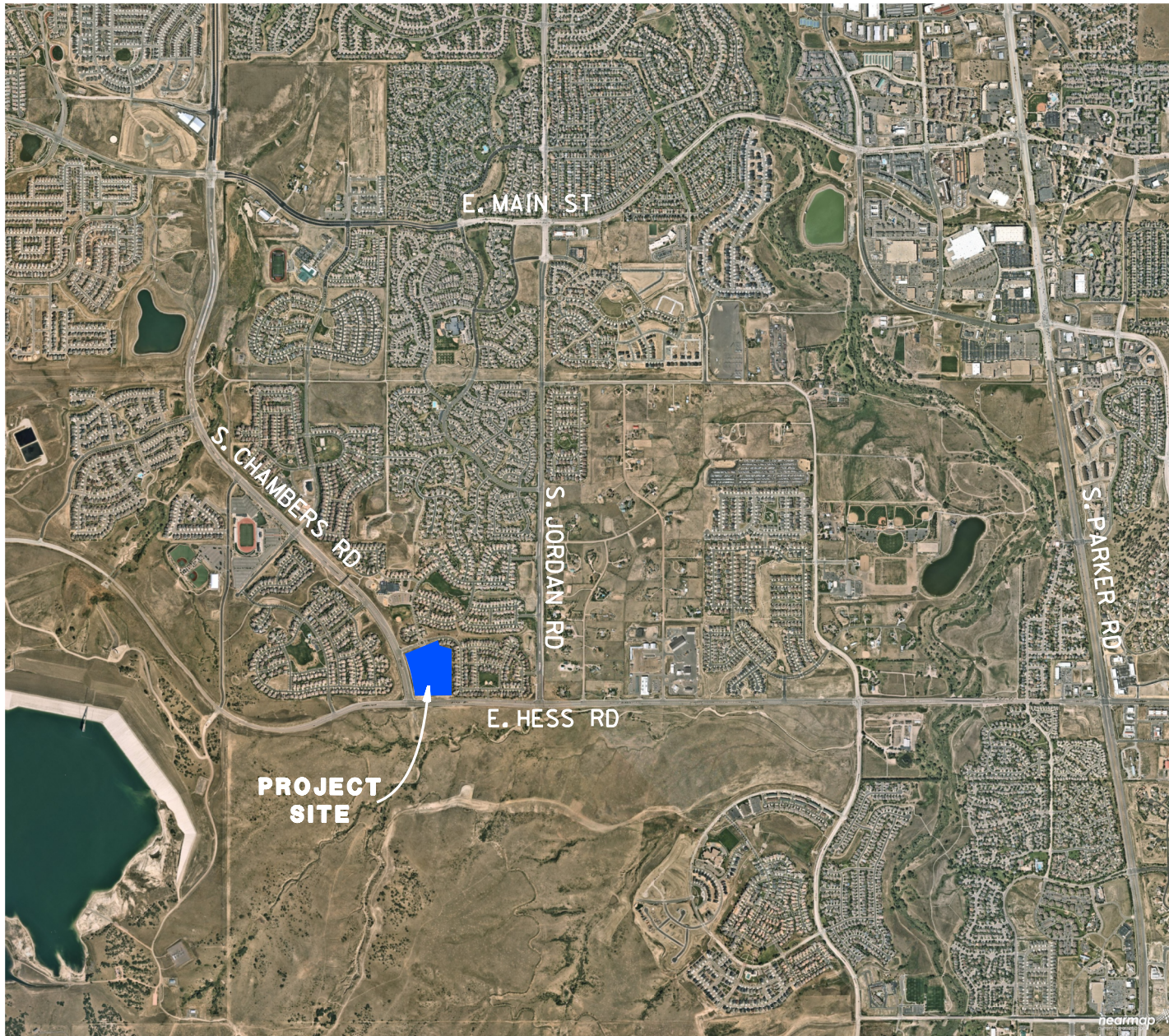


Attachments

Exhibit 1 Project vicinity map.

Exhibit 2 Project site plan.

Appendix A contains excerpts from approved *Chambers and Hess Development Traffic Impact Study (TIS)*, dated September 14, 2020.



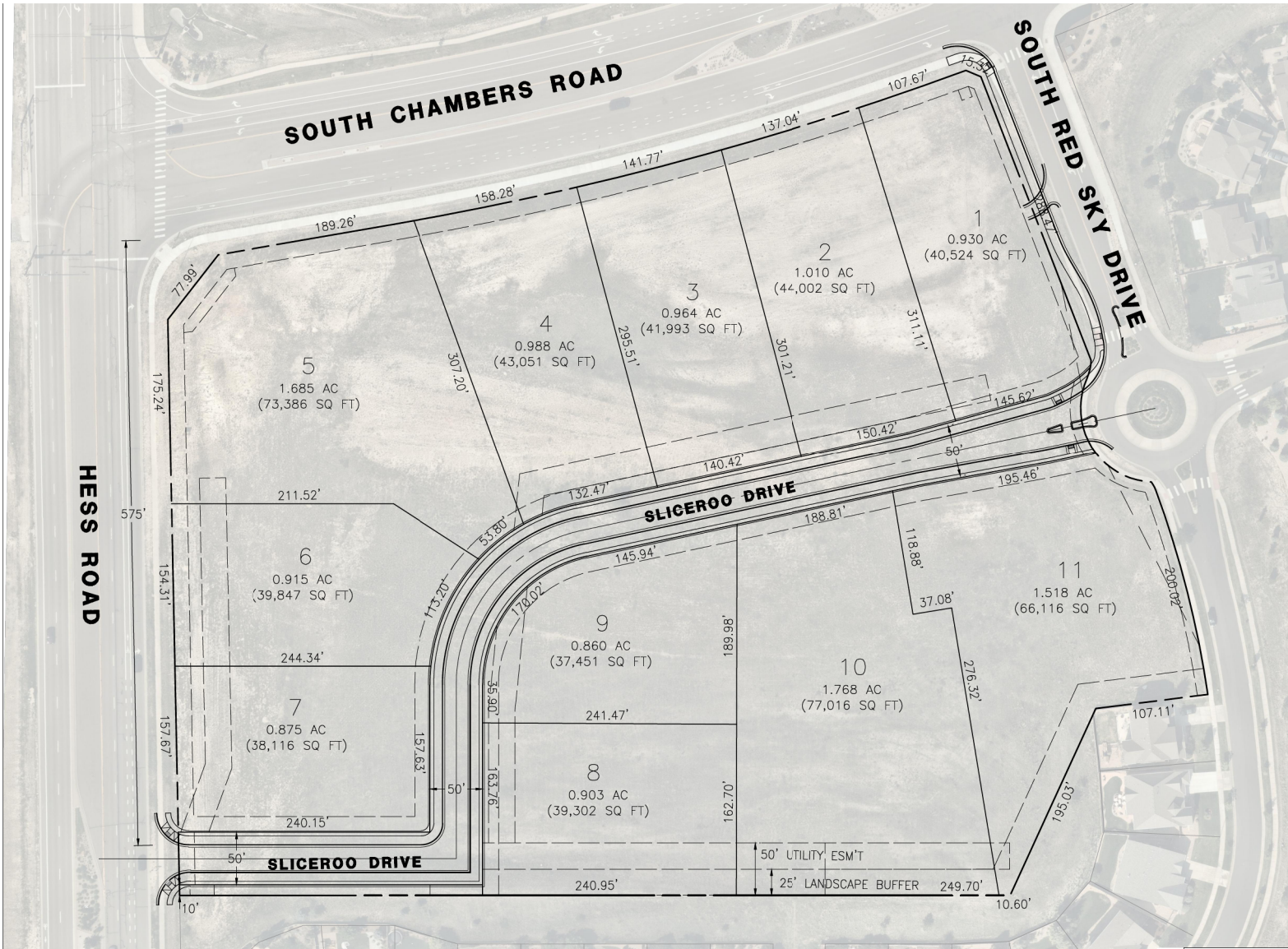
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EXHIBIT 1

VICINITY MAP

CHAMBERS AND HESS TRAFFIC COMPLIANCE



NOT TO SCALE



EXHIBIT 2
PROJECT SITE PLAN

CHAMBERS AND HESS TRAFFIC COMPLIANCE

APPENDIX A

CHAMBERS AND HESS DEVELOPMENT

TRAFFIC IMPACT STUDY, SEPTEMBER 14, 2020

CHAMBERS AND HESS DEVELOPMENT

TRAFFIC IMPACT STUDY (TIS)

TOWN OF PARKER, CO

SEPTEMBER 14, 2020

JOB NUMBER: 18633

RICK

RICK ENGINEERING COMPANY



rickengineering.com

**CHAMBERS AND HESS DEVELOPMENT
TRAFFIC IMPACT STUDY (TIS)
TOWN OF PARKER, CO**

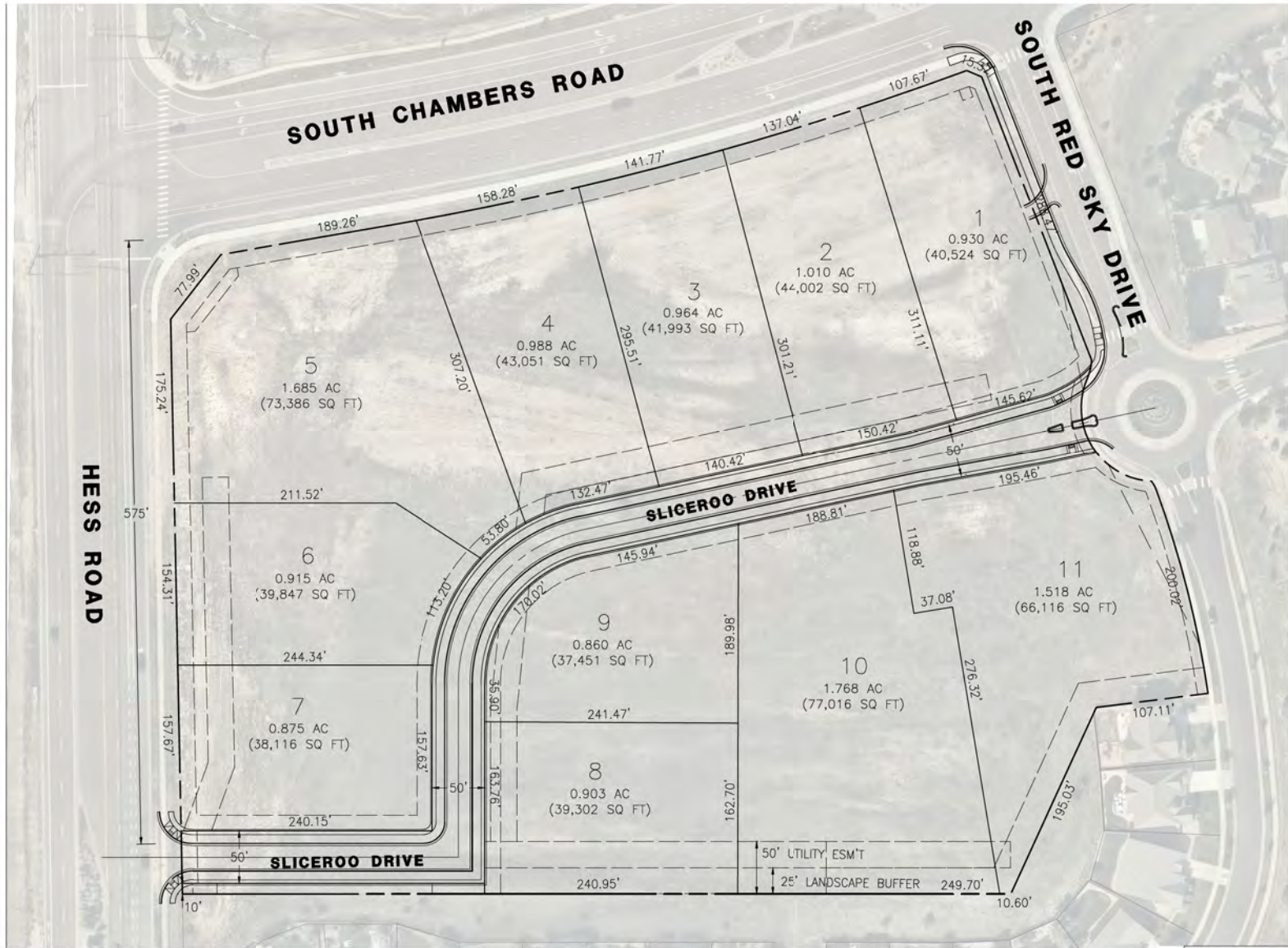
**ORIGINAL JANUARY 23, 2020
REVISED SEPTEMBER 14, 2020**

**PREPARED FOR:
VENTANA CAPITAL
9801 EAST EASTER AVENUE
CENTENNIAL, CO 80112**



Brian R. Stephens

PREPARED BY:



NOT TO SCALE



EXHIBIT 2

PROJECT SITE PLAN

CHAMBERS AND HESS DEVELOPMENT

**TABLE 3
PROJECT TRIP GENERATION SUMMARY
CHAMBERS AND HESS DEVELOPMENT**

LAND USE	QUANTITY		ITE Trip Gen. 10th Edition Code	ADT	AM PEAK HOUR			PM PEAK HOUR		
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for all movements and the closely spaced intersections (less than half a mile) along the corridor in long-term conditions, the green time allowed for each movement is limited and the 40 second minimum bandwidth is unachievable. Based on the results, the long-term scenarios showed bandwidth between 22 – 56 seconds.

Appendix H contains the time space diagrams.

5.6 SAFETY

The traffic pattern proposed with this project presents few safety hazards. This project proposes three access locations, as mentioned in the previous sections where the entrances have approach grades meeting the Town’s criteria and will be constructed with standard pedestrian crossings with appropriate signage and markings. In addition, each intersection has been reviewed for appropriate sight distance. Conflicts are also minimized at the driveways along Hess Road and S. Red Sky Drive, as the driveways are proposed to be right-in/right-out onto Hess Road and right-in only onto S. Red Sky Drive, with less conflict points than a full-access intersection. These movements typically cause few traffic incidents, and therefore, are not anticipated to have any significant or unusual safety concerns at these driveways. The S. Red Sky Dr. access will connect to the existing roundabout. Roundabouts are by nature safer than a standard four-way intersection due to reduced conflict points and a reduction in the severity of conflicts in the intersection. Additionally, the project proposes to install a traffic signal and an additional westbound left turn lane to mitigate the S. Chambers Road and S. Red Sky Drive intersection in the future. This will invariably improve the safety of traffic movements at the S. Red Sky Drive and S. Chambers Road intersection. As a result, it is assumed that this project will improve the overall safety of the traffic patterns in this area in the future.

6.0- CONCLUSION AND MITIGATIONS/RECOMMENDATIONS

Based on the analysis and results contained within this report, the traffic study evaluated any potential traffic impacts due to the proposed construction of the Chambers and Hess Development. In coordination with the Town of Parker, the study analyzed the nearby intersections and roadways based on the operational capabilities for the different study scenarios with and without the project generated traffic.

Recommendations are made in accordance with the Town of Parker’s benchmark for overall intersection to operate at LOS C or better for each peak period of every study year and that no approach or movement of an intersection shall fall below LOS E, and maintaining LOS D for all roadway segments. Based on the traffic generated by the project, and access roads requirements for the project site, the following are recommendations at the study area intersections and roadway segments:

- S. Chambers Road/E. Hess Road – Modify the traffic signal to allow for westbound U-turn movements for the short-term scenario, until the ultimate four-legged intersection is installed (by others) in the future. However, due to the high volumes proposed by the near-by Anthology development assumed to be opened by 2041; this intersection operates at LOS F. The recommendations provided by the Anthology study to install free-right turns for the westbound and eastbound directions have minimal improvements to the level of service and the intersection is anticipated to continue to operate at LOS F in the long-term.

- S. Chambers Road/S. Red Sky Drive - Install a traffic signal as warranted in the existing scenario. The traffic signal will help mitigate this intersection to operate at an acceptable level of service (LOS C or better). To further mitigate queuing for the long-term scenario with project conditions, install an additional westbound left turn lane at this intersection.
- S. Red Sky Drive/S. Swift Fox Way-Future Project Dwy - Install a yield controlled fourth-leg to provide a full northerly project access driveway at the existing roundabout, with a shared left-through-right lane for the northbound approach.
- E. Hess Road/Future Project Dwy – Install a right-in/right-out driveway with stop control for the southbound approach to provide a southerly access to the project.
- S. Red Sky Drive/ Future Project Dwy - Install a right-in only driveway along S. Red Sky Drive to provide a secondary northerly access to the project, west of the existing roundabout. This will also alleviate project trips from the roundabout.

The following are additional monitoring and coordination recommendations related to the nearby study area intersections to be installed by others:

- E. Hess Road/Fire Fly Lane – the installation of a traffic signal would mitigate this intersection to operate at acceptable levels of service.