



# Cedar City

10 North Main Street • Cedar City, UT 84720  
435-586-2950 • FAX 435-586-4362  
to [www.cedarcityut.gov](http://www.cedarcityut.gov)

## **CITY COUNCIL WORK MEETING** **JANUARY 7, 2026** **5:30 P.M.**

### **Mayor**

Steve Nelson

### **Council Members**

Robert Cox  
Waldo D. Galan  
R. Scott Phillips  
Phil E. Schmidt  
Carter Wilkey

### **City Manager**

Paul Bittmenn

The City Council meeting will be held in the Council Chambers at the City Office, 10 North Main Street. The City Council Chambers may be an anchor location for participation by electronic means. The agenda will consist of the following items:

- I. Call to Order
- II. Agenda Order Approval
- III. Administration Agenda
  - Mayor and Council Business
  - Staff Comments
- IV. Public Agenda
  - Public Comments

### **Business Agenda**

#### **Public**

1. Continue discussions related to waiving a portion of a solid waste collection bill for Tink Holyoak. Tink Holyoak/Paul Bittmenn
2. Review traffic study reports for 1100 W / 600 S, Fiddlers Elementary, and Cedar Middle School – Hales Engineering
3. Consider change order #1 for Kimley-Horn & Associates for traffic signal design at 1100 W / 600 S – Kent Fugal/Shane Johnson

#### **Staff**

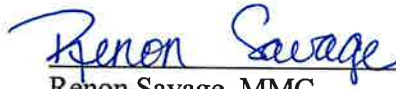
4. Consider change order #3 for Civil Science for the Cemetery Phase 6R design – Shane Johnson
5. Consider bids for the Heritage Theater Roofing project. Jason Clark/Jonathan Stathis
6. Discuss orders issued by the Utah Division of Drinking Water. Jonathan Stathis
7. Consider a Concessions Agreement at the Cedar City Regional Airport with Bristlecone. Tyler Galetka
8. Consider a Lease Agreement extension for the FAA Snow Cat Garage at the Airport. Tyler Galetka
9. Consider a BLM Standstill Agreement at the Airport. Tyler Galetka
10. Consider a contract for the public defense services. Randall McUne
11. Discuss 100 East chip seal. Phil Schmidt
- Public Comments on agenda related items

Dated this 5<sup>th</sup> day of January 2026.

Renon Savage, MMC  
Cedar City Recorder

CERTIFICATE OF DELIVERY:

The undersigned duly appointed and acting recorder for the municipality of Cedar City, Utah, hereby certifies that a copy of the foregoing Notice of Agenda was delivered to the Daily News, and each member of the governing body this 5<sup>th</sup> day of January 2026.



Renon Savage, MMC  
Cedar City Recorder

Cedar City Corporation does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.

If you are planning to attend this public meeting and, due to a disability, need assistance in accessing, understanding or participating in the meeting, please notify the city not later than the day before the meeting and we will try to provide whatever assistance may be required.

CEDAR CITY COUNCIL  
AGENDA ITEMS - I  
DECISION PAPER

**TO:** Mayor and City Council

**FROM:** City Manager

**DATE:** January 5, 2026

**SUBJECT:** Mr. Holyoak's garbage bill

During the City Council's November 19<sup>th</sup>, 2025 work meeting there was a public hearing to consider a request from Thomas Holyoak to waive a portion of his solid waste bill. You can review the relevant portion of that meeting by going to <https://www.youtube.com/watch?v=Br9Mos-0IGQ>. The time index where Mr. Holyoak's item is discussed is approximately 1:22:30. Mr. Holyoak claimed the City had been billing him for four (4) cans since 2015. Mr. Holyoak was requesting a refund covering two (2) cans going back to May 2015. Staff was prepared to refund charges for two (2) cans for the past three (3) years because we have records dating back three (3) years that show we were billing for four (4) cans. The council invited Mr. Holyoak to produce records dating back to 2015. These records were not received before the action meeting, and during the next action meeting the City went ahead with a refund in the amount of \$576.00 covering two (2) cans for the past three (3) years.

After the action meeting Mr. Holyoak came in with additional records. He produced the following billing statements:

- September 6, 2017
- January 1, 2020
- October 1, 2021
- April 1, 2022
- May 2, 2022
- June 1, 2022
- July 1, 2022
- August 1, 2022
- September 1, 2022
- November 1, 2022

There were additional statements provided covering dates after November 2022. The bills after November 2022 were covered by the initial refund. All of the bills Mr. Holyoak produced show the City billing him for four (4) cans at the applicable rate. Please note that in June of 2022 Cedar City increased its rates for solid waste.

Mr. Holyoak would like the Council to consider approving additional refund. If you were to consider a refund going back to September 6, 2017, it would cost an additional \$746.00.





## MEMORANDUM

Date: December 18, 2025

To: Cedar City

From: Hales Engineering



Subject: Cedar City 1100 West / 600 South Signal Warrant Analysis

UT25-3088

### Study Summary

Hales Engineering studied the intersection of 1100 West / 600 South in Cedar City, Utah to determine if a traffic signal is warranted. The study location is shown in Figure 1. Based on the signal warrant criteria outlined in the Utah MUTCD a traffic signal **IS** warranted with existing traffic volumes.

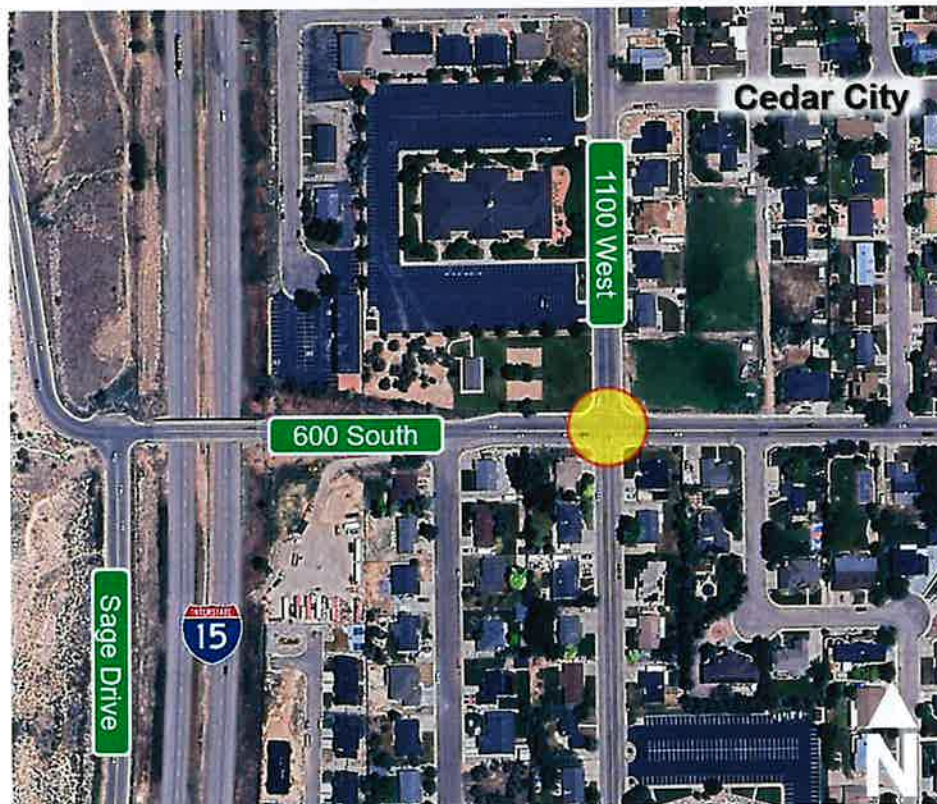


Figure 1. Study Location

### Intersection Characteristics

The study location is the 1100 West / 600 South intersection in Cedar City, Utah. The intersection is currently a 4-leg all-way stop-controlled intersection. 600 South has one westbound through lane and one eastbound through lane. The shoulders on 600 South are wide enough at the intersection that vehicles can use them as eastbound and westbound right-turn lanes. 1100 West to the north and south has one shared left-thru-right lane. The speed limit is 25 mph along both roads. Eastbound queues of approximately 1,400 feet were observed on Wednesday, September 17, 2025 (the first data collection date), and a reduced eastbound queue of 1,000 feet was observed on Tuesday, November 11, 2025 (after University Boulevard re-opened). Images of the study intersection are provided in Figures 2 through 5.



**Figure 2. Southbound Approach (1100 West)**



**Figure 3: Northbound Approach (1100 West)**





**Figure 4: Westbound Approach (600 South)**



**Figure 5: Eastbound Approach (600 South)**

### **Signal Warrant Analysis**

An analysis was performed using the procedure outlined in the Utah MUTCD Chapter 4C to determine if a traffic signal is warranted at the study location based on existing conditions. Traffic turning-movement count data was collected on Wednesday, September 17, 2025, from 7:00 AM to 7:00 PM (during University Boulevard closures) and on Tuesday, November 18, 2025 (after University Boulevard re-opened). The November counts had slightly lower eastbound and westbound volumes, but higher southbound volumes.

On the eastbound and westbound approaches, where vehicles can use the wide shoulder as a right-turn lane, the analyses did not include the right-turn volumes. See Appendix A for detailed traffic count data.

Signal warrants were evaluated using PC Warrants software for both the September and November counts. Printouts of the PC Warrants result summaries are provided in Appendix B. As presented below, warrants are met for a traffic signal at the study location based on existing conditions, and for both the September and November counts:

*Vehicular Volume (Warrants 1 through 3) - met*

The MUTCD vehicular volume warrants include evaluations of 8-hour (warrant 1), 4-hour (warrant 2), and peak-hour (warrant 3) periods. Traffic volumes at the intersection were high enough to meet warrants 1, 2, and 3 for a traffic signal for the September counts and warrants 1 and 2 for the November counts. Therefore, the volume warrants are met.

*Pedestrian Volume (Warrant 4) – not met*

The criteria for Warrant 4 would require at least 200 pedestrians crossing 600 South per hour for any four hours or approximately 350 pedestrians crossing 600 South per hour during the peak hour. With only 59 pedestrians observed crossing 600 South all day, neither criteria were met. Therefore, warrant 4 is not met.

*School Crossing (Warrant 5) – not met*

The criteria for warrant 5 would require a minimum of 20 school children crossing 600 South during the highest crossing hour. The hour with the highest number of crossings on 600 South was from 10:00 – 11:00 a.m. with 5 crossings. Therefore, warrant 5 is not met.

*Crash Experience (Warrant 7) - met*

Hales Engineering obtained crash data from the State of Utah's crash database to identify crashes that have occurred at each of the study intersections within the last five complete years (2018-2022). The State of Utah's database provides characteristics for each crash including the crash severity, weather conditions, road conditions, the date, and manner of collision. Crashes within 250 feet of the intersection were included for the analysis. Detailed crash data are included in Appendix C. Due to the use of crash data this report may be protected under 23 USC 407.

The crash data for each year is shown in Table 1. As shown, the crash data indicates 19 crashes were reported at this intersection from January 1, 2020, through October 7, 2025. 18 of those crashes were potentially correctable by signalization, and none of those crashes were severe.

**Table 1. Crash Data Summary**

Year	All Crashes		Crashes Correctable by Signal	
	Total	Severe	Total	Severe
2020	3	0	3	0
2021	5	0	5	0
2022	8	0	7	0
2023	1	0	1	0
2024	2	0	2	0
<b>Total</b>	<b>19</b>	<b>0</b>	<b>18</b>	<b>0</b>

The criteria for warrant 7 would require that all of the following are met:

- A. *An adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.*
  - There was a decrease in crashes after 2022, though two years of lower crashes may not be enough to identify a continuous trend. Therefore, it is assumed that warrant 7A is met.
- B. *Five or more crashes, potentially correctable by signalization in any 12-month period.*
  - From October 2021 through September 2022, there were eight crashes potentially correctable by signalization. Therefore, warrant 7B is met.
- C. *Volumes meet 80% of the requirements of warrant 1 or 4.*
  - Traffic volumes do meet 80% requirements of warrant 1 for both the September and November counts. Therefore, warrant 7C is met.

### Estimated Cost

Hales Engineering completed an approximate engineer's estimate of the cost to design and install the traffic signal based on the conditions of the site and recent comparable signal installation costs. The following are the key assumptions made within the estimate:

- Right-of-way will need to be acquired on each corner of the intersection in the form of a partial acquisition
- Signal equipment will be state-furnished
- No widening is required for the anticipated turn lanes; only re-striping will be needed

Based on the engineer's estimate, it is anticipated that the traffic signal improvement will cost between \$350,000 and \$450,000.

### Conclusions

Hales Engineering studied the 1100 West / 600 South intersection in Cedar City, Utah to determine if a traffic signal is warranted. The study location is shown in Figure 1. Based on the signal warrant criteria outlined in the Utah MUTCD a traffic signal is warranted with existing traffic volumes. This accounts for adjusted traffic volumes after the re-opening of University Boulevard for construction. Therefore, it is recommended that the City consider installing a traffic signal.

# APPENDIX A

## Traffic Count Data



All Vehicles	All	SBP	SBR	SBT	SBL	SBU		
	EBU	0	21	1,427	545	170	0	19
	EBL	1,357						241
	EBT	3,080	Vehicles 11,494					2,792
	EBR	396	% Trucks 0%					196
	EBP	40						0
		0	501	580	209	26		
		NBU	NBL	NBT	NBR	NBP		
	AM Peak Hour	SBP	SBR	SBT	SBL	SBU		
	EBU	0	1	140	65	25	0	1
	EBL	129	11:45 AM - 12:45 PM					27
	EBT	293	Vehicles 1,115					260
	EBR	32	PHF 0.91					16
	EBP	4	% Trucks 0%					0
		0	46	55	27	2		
		NBU	NBL	NBT	NBR	NBP		

Highest Peak Hour	SBP	SBR	SBT	SBL	SBU		
EBU	0	4	184	84	17	0	0
EBL	123	5:00 PM - 6:00 PM					26
EBT	324	Vehicles 1,376					347
EBR	99	PHF 0.96					43
EBP	0	% Trucks 0%					0
	0	63	45	21	1		
	NBU	NBL	NBT	NBR	NBP		

PM Peak Hour	SBP	SBR	SBT	SBL	SBU		
EBU	0	4	184	84	17	0	0
EBL	123	5:00 PM - 6:00 PM					26
EBT	324	Vehicles 1,376					347
EBR	99	PHF 0.96					43
EBP	0	% Trucks N/A					0
	0	63	45	21	1		
	NBU	NBL	NBT	NBR	NBP		

Time	Northbound					Southbound					Eastbound					Westbound				
	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped
7:00 AM	0	4	6	2	0	0	0	2	10	2	0	16	28	8	6	0	3	22	2	1
7:15 AM	0	3	7	2	0	0	0	4	5	0	0	5	51	2	0	0	1	22	1	3
7:30 AM	0	16	15	7	0	0	7	11	13	0	0	14	114	12	1	0	0	63	3	1
7:45 AM	0	27	19	6	1	0	2	19	23	0	0	39	83	15	3	0	8	67	3	0
8:00 AM	0	4	9	4	0	0	4	6	15	0	0	22	47	9	0	0	2	22	2	1
8:15 AM	0	7	11	2	2	0	0	8	13	0	0	19	58	5	1	0	2	21	1	2
8:30 AM	0	3	24	4	0	0	0	9	9	0	0	57	67	2	0	0	4	31	2	2
8:45 AM	0	5	37	7	2	0	2	12	18	0	0	69	60	4	0	0	10	73	2	1
9:00 AM	0	6	8	9	2	0	6	8	24	0	0	31	73	7	1	0	7	50	4	0
9:15 AM	0	7	5	2	0	0	0	6	12	0	0	19	42	7	0	0	1	36	1	1
9:30 AM	0	6	8	1	0	0	0	0	11	0	0	29	46	3	0	0	0	21	4	0
9:45 AM	0	2	13	1	1	0	4	9	20	0	0	34	64	2	0	0	3	36	2	2
10:00 AM	0	4	5	1	0	0	0	7	26	0	0	15	42	3	0	0	2	35	7	0
10:15 AM	0	4	7	3	2	0	3	7	13	0	0	13	54	4	1	0	1	23	2	0
10:30 AM	0	9	12	2	2	0	3	9	18	0	0	21	41	3	2	0	3	47	4	2
10:45 AM	0	7	17	2	1	0	8	4	35	0	0	25	32	4	0	0	4	38	4	0
11:00 AM	0	2	11	4	0	0	4	4	32	1	0	22	58	7	0	0	2	47	2	0
11:15 AM	0	5	9	2	0	0	1	9	22	0	0	23	57	7	0	0	1	41	2	0
11:30 AM	0	7	11	4	0	0	2	11	31	0	0	26	56	6	0	0	7	53	8	0
11:45 AM	0	21	12	13	0	0	2	20	39	0	0	32	83	2	2	0	4	65	6	0
12:00 PM	0	14	20	6	1	0	3	20	49	0	0	32	61	9	0	0	1	79	13	1
12:15 PM	0	6	8	2	0	0	4	5	25	0	0	28	70	9	0	0	5	56	3	0
12:30 PM	0	5	15	6	1	0	16	20	27	1	0	37	79	12	2	0	6	60	5	0
12:45 PM	0	16	13	4	1	0	4	15	41	1	0	31	81	8	0	0	10	69	7	0
1:00 PM	0	3	9	4	0	0	4	11	46	0	0	23	54	5	0	0	3	66	8	0
1:15 PM	0	5	21	1	0	0	3	5	23	1	0	24	66	10	0	0	3	43	3	0
1:30 PM	0	4	5	1	0	0	3	9	25	0	0	34	60	6	1	0	1	46	6	0
1:45 PM	0	8	11	4	0	0	6	12	45	0	0	28	56	8	1	0	1	48	7	0
2:00 PM	0	10	9	1	0	0	4	21	44	1	0	26	72	11	1	0	2	64	1	0
2:15 PM	0	48	9	4	1	0	2	6	27	2	0	18	72	4	4	0	2	87	10	0
2:30 PM	0	12	6	3	0	0	0	9	30	0	0	27	72	8	0	0	3	80	5	1
2:45 PM	0	21	22	5	2	0	6	19	49	0	0	26	80	5	1	0	2	77	9	0
3:00 PM	0	15	19	5	1	0	6	18	44	0	0	34	85	6	2	0	5	86	8	0
3:15 PM	0	9	12	2	0	0	4	12	23	1	0	33	68	4	0	0	2	64	6	0
3:30 PM	0	9	9	1	0	0	2	4	32	1	0	18	62	2	0	0	6	98	5	0
3:45 PM	0	6	8	5	0	0	6	14	42	2	0	35	64	5	0	0	3	52	8	0
4:00 PM	0	10	11	6	0	0	4	14	45	0	0	30	54	5	0	0	3	71	4	0
4:15 PM	0	3	6	1	1	0	3	10	42	0	0	25	78	2	0	0	2	62	3	1
4:30 PM	0	2	7	2	0	0	4	7	24	0	0	23	51	7	0	0	2	64	9	0
4:45 PM	0	9	10	8	1	0	2	11	29	0	0	28	60	21	4	0	12	88	7	0
5:00 PM	0	16	11	9	0	0	2	18	60	0	0	36	75	23	0	0	7	94	7	0
5:15 PM	0	15	14	5	1	0	4	16	39	1	0	34	80	24	0	0	9	86	5	0
5:30 PM	0	11	10	4	0	0	4	27	39	2	0	23	87	26	0	0	13	78	11	0
5:45 PM	0	21	10	3	0	0	7	23	46	1	0	30	82	26	0	0	14	89	3	0
6:00 PM	0	12	13	4	1	0	4	21	48	0	0	37	84	10	1	0	4	106	9	0
6:15 PM	0	10	14	3	2	0	4	10	35	0	0	41	72	11	2	0	6	77	8	0
6:30 PM	0	14	9	7	0	0	3	17	28	3	0	35	50	11	3	0	4	49	5	0
6:45 PM	0	38	23	25	0	0	4	6	31	1	0	30	49	6	1	0	0	40	4	0

Vehicle Total			Time
15-Min	Hour	PHF	
103	796	0.64	7:00 AM
107	839	0.67	7:15 AM
275	879	0.71	7:30 AM
311	816	0.66	7:45 AM
146	804	0.67	8:00 AM
147	891	0.74	8:15 AM
212	882	0.74	8:30 AM
299	799	0.67	8:45 AM
233	690	0.74	9:00 AM
138	604	0.79	9:15 AM
129	600	0.79	9:30 AM
190	643	0.85	9:45 AM
147	633	0.88	10:00 AM
134	681	0.87	10:15 AM
172	726	0.93	10:30 AM
180	776	0.87	10:45 AM
195	895	0.75	11:00 AM
179	1007	0.82	11:15 AM
222	1049	0.85	11:30 AM
299	1115	0.91	11:45 AM
307	1115	0.91	12:00 PM
221	1044	0.87	12:15 PM
288	1030	0.86	12:30 PM
299	942	0.79	12:45 PM
236	877	0.93	1:00 PM
207	906	0.85	1:15 PM
200	988	0.85	1:30 PM
234	1043	0.90	1:45 PM
265	1130	0.88	2:00 PM
289	1196	0.90	2:15 PM
255	1146	0.87	2:30 PM
321	1139	0.86	2:45 PM
331	1066	0.81	3:00 PM
239	992	0.96	3:15 PM
248	990	0.96	3:30 PM
248	944	0.92	3:45 PM
257	981	0.86	4:00 PM
237	1082	0.76	4:15 PM
202	1176	0.82	4:30 PM
285	1307	0.91	4:45 PM
358	1376	0.96	5:00 PM
331	1370	0.97	5:15 PM
333	1330	0.94	5:30 PM
354	1229	0.87	5:45 PM
352	1131	0.80	6:00 PM
291	779	0.67	6:15 PM
232	488	0.48	6:30 PM
256	256	0.25	6:45 PM

All Vehicles	All	SBP	SBR	SBT	SBL	SBU	
	EBU	4	22	1,135	616	569	1
	EBL	1,102					17 WBP
	EBT	2,582	Vehicles		10,497	2,400	WBR
	EBR	223	% Trucks		0%	141	WBT
	EBP	24				0	WBL
			1	380	638	158	WBU
			NBU	NBL	NBT	NBR	NBP
	AM Peak Hour	SBP	SBR	SBT	SBL	SBU	
	EBU	0	0	126	78	77	0
	EBL	119	11:45 AM - 12:45 PM			41	WBP
	EBT	312	Vehicles		1,214	262	WBR
	EBR	25	PHF		0.70	16	WBT
	EBP	0	% Trucks		N/A	0	WBL
			0	60	80	18	WBU
			NBU	NBL	NBT	NBR	NBP

Highest Peak Hour	SBP	SBR	SBT	SBL	SBU	
EBU	0	0	126	78	77	0
EBL	119	11:45 AM - 12:45 PM			41	WBP
EBT	312	Vehicles		1,214	262	WBR
EBR	25	PHF		0.70	16	WBT
EBP	0	% Trucks		0%	0	WBL
		0	60	80	18	1
		NBU	NBL	NBT	NBR	NBP

PM Peak Hour	SBP	SBR	SBT	SBL	SBU	
EBU	0	2	119	82	74	0
EBL	124	12:00 PM - 1:00 PM			38	WBP
EBT	313	Vehicles		1,182	244	WBR
EBR	32	PHF		0.69	18	WBL
EBP	2	% Trucks		0%	0	WBU
		0	40	80	18	0
		NBU	NBL	NBT	NBR	NBP

Time	Northbound					Southbound					Eastbound					Westbound				
	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped
7:00 AM	0	5	6	2	1	0	6	11	6	1	0	12	23	7	1	0	4	16	4	0
7:15 AM	0	2	4	1	0	0	26	5	9	3	0	8	44	2	2	0	1	37	2	3
7:30 AM	0	21	8	7	0	0	63	19	15	0	0	8	90	4	0	0	1	57	6	0
7:45 AM	0	21	24	1	1	0	21	14	19	0	0	22	66	11	1	0	1	50	9	0
8:00 AM	0	3	12	1	0	0	9	12	17	0	0	15	39	9	2	0	1	21	6	1
8:15 AM	0	1	14	2	1	0	5	9	9	1	0	24	48	5	1	0	1	24	2	0
8:30 AM	0	8	16	5	0	0	1	6	8	0	0	36	54	1	0	0	2	35	3	0
8:45 AM	0	6	21	2	2	0	4	13	18	0	0	33	57	2	1	0	6	65	1	0
9:00 AM	0	2	6	5	1	0	12	8	21	0	0	16	44	2	0	0	4	37	5	0
9:15 AM	0	2	5	3	1	0	8	10	20	0	0	9	27	7	0	0	7	30	8	0
9:30 AM	0	3	10	2	1	0	5	5	13	1	0	13	40	2	0	0	5	28	2	0
9:45 AM	0	3	25	1	1	0	9	4	18	1	0	24	35	1	0	0	0	42	3	0
10:00 AM	0	2	9	2	0	0	5	7	14	0	0	18	39	3	0	0	3	26	3	0
10:15 AM	0	8	13	9	0	0	7	6	10	0	0	10	26	2	2	0	1	39	3	0
10:30 AM	0	4	8	1	0	0	4	5	16	1	0	12	38	6	0	0	4	46	9	0
10:45 AM	0	4	9	1	0	0	5	9	17	0	0	26	42	3	0	0	1	43	5	0
11:00 AM	0	6	10	3	0	0	2	10	31	0	0	17	49	3	1	0	2	38	9	0
11:15 AM	0	3	8	1	0	0	8	16	26	0	1	26	53	5	0	0	1	40	6	0
11:30 AM	0	7	14	1	0	0	8	17	29	0	0	20	51	6	0	0	5	41	11	0
11:45 AM	0	27	17	3	1	0	13	13	36	0	0	22	56	4	0	0	4	60	17	0
12:00 PM	0	23	19	5	0	0	11	20	29	0	0	23	52	7	0	0	2	65	12	0
12:15 PM	0	6	18	4	0	0	10	18	29	0	0	29	64	4	0	0	5	49	7	0
12:30 PM	0	4	26	6	0	0	43	27	32	0	0	45	140	10	0	0	5	88	5	0
12:45 PM	0	7	17	3	0	0	10	17	29	2	0	27	57	11	2	0	6	42	14	0
1:00 PM	0	6	8	6	1	0	5	20	17	0	0	25	46	4	0	0	6	44	8	0
1:15 PM	0	9	13	3	0	0	5	15	27	0	0	18	43	4	0	0	2	40	5	0
1:30 PM	0	3	8	2	0	0	4	11	21	0	0	18	46	3	0	0	5	36	9	0
1:45 PM	0	3	11	7	1	0	7	10	20	0	0	14	57	3	0	0	1	43	11	0
2:00 PM	0	7	12	4	0	0	7	12	21	0	0	22	48	5	0	0	1	49	11	0
2:15 PM	0	38	20	0	1	0	10	15	21	0	1	28	44	4	0	0	1	95	18	1
2:30 PM	0	14	16	5	0	0	17	11	34	1	0	17	76	5	1	0	7	65	13	1
2:45 PM	0	19	21	5	1	0	16	20	24	0	1	29	81	7	1	0	2	75	24	0
3:00 PM	0	10	14	3	0	0	16	15	37	0	0	23	70	5	0	0	2	62	23	4
3:15 PM	0	7	21	13	0	0	11	9	31	5	0	51	67	8	0	0	1	58	15	1
3:30 PM	0	7	12	1	0	0	5	17	32	0	1	25	58	4	0	0	5	75	11	0
3:45 PM	0	5	10	3	0	0	9	11	46	0	0	19	52	3	0	0	2	73	7	1
4:00 PM	0	12	16	3	1	0	5	15	39	1	0	24	59	4	0	0	3	57	5	2
4:15 PM	0	0	10	3	0	0	13	18	35	0	0	23	42	2	0	0	2	47	10	0
4:30 PM	0	4	8	1	1	0	11	8	30	1	0	27	61	3	0	0	1	68	7	1
4:45 PM	0	11	9	9	2	0	8	17	25	0	0	27	52	4	0	0	1	53	7	0
5:00 PM	0	8	18	0	1	1	8	18	33	3	0	32	60	4	4	0	7	76	16	0
5:15 PM	0	11	14	1	0	0	16	18	28	0	0	25	77	7	3	0	7	78	17	0
5:30 PM	1	7	16	2	1	0	35	12	27	0	0	31	97	6	1	0	3	38	7	2
5:45 PM	0	5	14	4	0	0	35	15	21	0	0	15	114	7	0	0	3	44	9	0
6:00 PM	0	5	12	1	1	0	14	15	23	0	0	35	60	6	1	0	0	56	17	0
6:15 PM	0	6	14	5	0	0	2	15	29	0	0	28	50	1	0	0	1	57	15	0
6:30 PM	0	1	9	1	0	0	7	10	21	1	0	23	54	5	0	0	4	46	13	0
6:45 PM	0	4	13	5	0	0	8	8	22	0	0	28	34	2	0	0	2	46	17	0

Vehicle Total			Time
15-Min	Hour	PHF	
102	801	0.67	7:00 AM
141	844	0.71	7:15 AM
299	847	0.71	7:30 AM
259	723	0.70	7:45 AM
145	692	0.76	8:00 AM
144	709	0.78	8:15 AM
175	701	0.77	8:30 AM
228	654	0.72	8:45 AM
162	591	0.90	9:00 AM
136	560	0.85	9:15 AM
128	558	0.85	9:30 AM
165	583	0.88	9:45 AM
131	583	0.88	10:00 AM
134	632	0.88	10:15 AM
153	692	0.89	10:30 AM
165	749	0.89	10:45 AM
180	856	0.79	11:00 AM
194	944	0.87	11:15 AM
210	993	0.91	11:30 AM
272	1214	0.70	11:45 AM
268	1182	0.69	12:00 PM
243	1109	0.64	12:15 PM
431	1050	0.81	12:30 PM
240	785	0.82	12:45 PM
195	732	0.94	1:00 PM
184	736	0.92	1:15 PM
166	847	0.72	1:30 PM
187	961	0.81	1:45 PM
199	1098	0.85	2:00 PM
295	1179	0.91	2:15 PM
280	1176	0.91	2:30 PM
324	1149	0.89	2:45 PM
280	1065	0.91	3:00 PM
292	1027	0.88	3:15 PM
253	940	0.93	3:30 PM
240	916	0.95	3:45 PM
242	899	0.93	4:00 PM
205	938	0.83	4:15 PM
229	1032	0.86	4:30 PM
223	1085	0.91	4:45 PM
281	1148	0.96	5:00 PM
299	1111	0.93	5:15 PM
282	1035	0.90	5:30 PM
286	947	0.83	5:45 PM
244	850	0.87	6:00 PM
223	606	0.68	6:15 PM
194	383	0.49	6:30 PM
189	189	0.25	6:45 PM



# **APPENDIX B**

## **Traffic Signal Warrant Analysis**

**Cedar City**  
**1100 West / 600 South**  
**September Counts**

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

## Signal Warrants - Summary

---

### Major Street Approaches

Eastbound: 600 South  
Number of Lanes : 1

Total Approach Volume: 4,437

Westbound: 600 South  
Number of Lanes : 1

Total Approach Volume: 2,988

### Minor Street Approaches

Northbound: 1100 West  
Number of Lanes : 1

Total Approach Volume: 1,290

Southbound: 1100 West  
Number of Lanes : 1

Total Approach Volume: 2,142

---

### Warrant Summary (Urban Values Apply)

**Warrant 1 - Eight Hour Vehicular Volumes.....Satisfied**

**Warrant 1A - Minimum Vehicular Volume.....Satisfied**

Required volumes reached for 8 hours, 8 are needed

**Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied**

Required volumes reached for 3 hours, 8 are needed

**Warrant 1C - Combination of Warrants.....Satisfied**

Required 1A volumes reached for 10 hours, 8 are needed

Required 1B volumes reached for 8 hours, 8 are needed

**Warrant 2 - Four Hour Volumes.....Satisfied**

Number of hours (7) volumes exceed minimum  $\geq$  minimum required (4).

**Warrant 3 - Peak Hour.....Satisfied**

**Warrant 3A - Peak Hour Delay.....Satisfied**

Number of one hour periods (32) volumes exceed minimum  $\geq$  required (1). Delay data not evaluated.

**Warrant 3B - Peak Hour Volumes.....Satisfied**

Volumes exceed minimums for at least one hour period.

**Warrant 4 - Pedestrian Volumes.....Not Evaluated**

**Warrant 5 - School Crossing.....Not Evaluated**

**Warrant 6 - Coordinated Signal System.....Not Evaluated**

**Warrant 7 - Crash Experience.....Satisfied**

Number of accidents (8) is more than minimum (5) and volume requirements are met.

**Warrant 8 - Roadway Network.....Not Evaluated**

**Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated**

**Cedar City**  
**1100 West / 600 South**  
**September Counts**

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

**Warrant 1A - Minimum Volumes**

**Description**

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

**Summary**

8 one hour periods meet minimums.  
Warrant IS met.

**Site Data Required**

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

**Volume Requirements**

Veh/Hr Major = 500

Veh/Hr Minor = 150

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
17:00 - 18:00	447	+	390	=	837	129	285	Yes
15:00 - 16:00	399	+	316	=	715	100	207	Yes
14:00 - 15:00	393	+	317	=	710	150	217	Yes
12:00 - 13:00	419	+	286	=	705	115	229	Yes
18:00 - 19:00	398	+	286	=	684	172	211	Yes
16:00 - 17:00	349	+	304	=	653	75	195	Yes
11:00 - 12:00	357	+	220	=	577	101	177	Yes
13:00 - 14:00	345	+	211	=	556	76	192	Yes
08:15 - 09:15	434	+	198	=	632	123	109	No
08:30 - 09:30	418	+	212	=	630	117	106	No
07:30 - 08:30	396	+	185	=	581	127	121	No
08:45 - 09:45	369	+	198	=	567	101	99	No
08:00 - 09:00	399	+	165	=	564	117	96	No
07:15 - 08:15	375	+	185	=	560	119	113	No
07:45 - 08:45	392	+	157	=	549	120	108	No
07:00 - 08:00	350	+	186	=	536	114	100	No
09:00 - 10:00	338	+	154	=	492	68	100	No
10:45 - 11:45	299	+	193	=	492	81	163	No
10:30 - 11:30	279	+	183	=	462	82	149	No
09:45 - 10:45	284	+	150	=	434	63	119	No
10:15 - 11:15	266	+	165	=	431	80	140	No
09:15 - 10:15	291	+	134	=	425	55	95	No
09:30 - 10:30	297	+	121	=	418	55	100	No
10:00 - 11:00	243	+	153	=	396	73	133	No
06:45 - 07:45	228		111		339	62	56	No

**Cedar City**  
**1100 West / 600 South**  
**September Counts**

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

**Warrant 1B - Interruption of Continuous Traffic**

**Description**

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

**Summary**

Only 3 one hour periods meet minimums.  
Warrant is NOT met.

**Site Data Required**

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

**Volume Requirements**

Veh/Hr Major = 750

Veh/Hr Minor = 75

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
16:45 - 17:45	423	+	387	=	810	122	251	Yes
17:45 - 18:45	431	+	349	=	780	120	246	Yes
14:15 - 15:15	414	+	342	=	756	169	216	Yes
16:30 - 17:30	387	+	362	=	749	108	216	No
14:00 - 15:00	393	+	317	=	710	150	217	No
16:15 - 17:15	376	+	331	=	707	84	212	No
12:00 - 13:00	419	+	286	=	705	115	229	No
11:45 - 12:45	422	+	276	=	698	128	230	No
12:15 - 13:15	403	+	275	=	678	91	218	No
15:30 - 16:30	366	+	297	=	663	75	218	No
15:15 - 16:15	364	+	299	=	663	88	202	No
11:30 - 12:30	388	+	270	=	658	124	211	No
13:45 - 14:45	371	+	287	=	658	125	206	No
12:30 - 13:30	395	+	260	=	655	102	215	No
16:00 - 17:00	349	+	304	=	653	75	195	No
08:15 - 09:15	434	+	198	=	632	123	109	No
08:30 - 09:30	418	+	212	=	630	117	106	No
11:15 - 12:15	370	+	251	=	621	124	209	No
15:45 - 16:45	360	+	259	=	619	67	215	No
13:30 - 14:30	366	+	251	=	617	114	204	No
12:45 - 13:45	373	+	241	=	614	86	189	No
07:30 - 08:30	396	+	185	=	581	127	121	No
11:00 - 12:00	357	+	220	=	577	101	177	No
13:15 - 14:15	366	+	208	=	574	80	200	No
08:45 - 09:45	369		198		567	101	99	No

**Cedar City**  
**1100 West / 600 South**  
**September Counts**

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

**Warrant 1C Combination of Warrants**

**Description**

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

**Summary**

10 hours meet 1A minimums.  
8 hours meet 1B minimums.  
Warrant IS met.

**Site Data Required**

Rural Settings Apply = **False**  
Number of Major Lanes = **1**  
Number of Minor Lanes = **1**

**Volume Requirements**

Warrant 1A 1B  
Veh/Hr Major = **400 600**  
Veh/Hr Minor = **120 60**

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
17:15 - 18:15	457	+	399	=	856	122	278	Yes
14:15 - 15:15	414	+	342	=	756	169	216	Yes
16:15 - 17:15	376	+	331	=	707	84	212	Yes
12:15 - 13:15	403	+	275	=	678	91	218	Yes
15:15 - 16:15	364	+	299	=	663	88	202	Yes
11:15 - 12:15	370	+	251	=	621	124	209	Yes
07:30 - 08:30	396	+	185	=	581	127	121	Yes
13:15 - 14:15	366	+	208	=	574	80	200	Yes
18:15 - 19:15	277	+	176	=	453	143	138	Yes
10:15 - 11:15	266	+	165	=	431	80	140	Yes
08:30 - 09:30	418	+	212	=	630	117	106	No
08:45 - 09:45	369		198		567	101	99	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
17:30 - 18:30	456	+	387	=	843	115	268	Yes
16:30 - 17:30	387	+	362	=	749	108	216	Yes
14:30 - 15:30	425	+	319	=	744	131	220	Yes
12:15 - 13:15	403	+	275	=	678	91	218	Yes
15:30 - 16:30	366	+	297	=	663	75	218	Yes
08:15 - 09:15	434	+	198	=	632	123	109	Yes
11:15 - 12:15	370	+	251	=	621	124	209	Yes
13:30 - 14:30	366	+	251	=	617	114	204	Yes
07:30 - 08:30	396	+	185	=	581	127	121	No
11:00 - 12:00	357	+	220	=	577	101	177	No
13:15 - 14:15	366	+	208	=	574	80	200	No
08:00 - 09:00	399		165		564	117	96	No

# Cedar City

## 1100 West / 600 South

### September Counts

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

## Warrant 2 - Four Hour Volumes

### Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

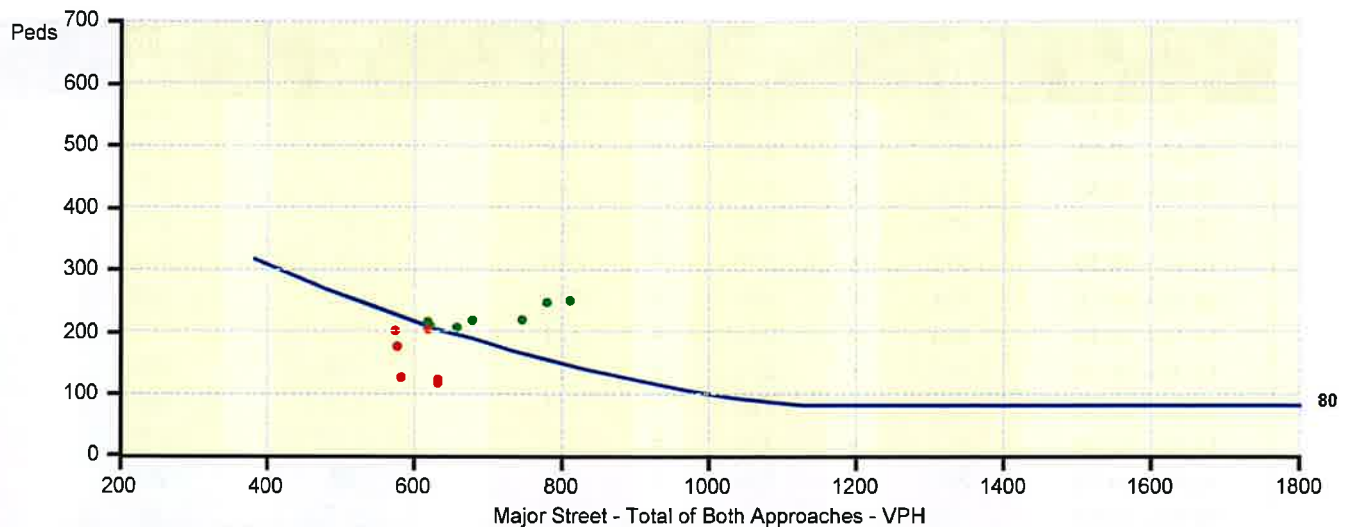
### Summary

7 one hour periods meet minimums.  
Warrant IS met.

### Site Data Required

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
16:45 - 17:45	423	+	387	=	810	122	251	Yes
17:45 - 18:45	431	+	349	=	780	120	246	Yes
14:45 - 15:45	406	+	340	=	746	129	219	Yes
12:15 - 13:15	403	+	275	=	678	91	218	Yes
13:45 - 14:45	371	+	287	=	658	125	206	Yes
11:15 - 12:15	370	+	251	=	621	124	209	Yes
15:45 - 16:45	360	+	259	=	619	67	215	Yes
08:15 - 09:15	434	+	198	=	632	123	109	No
08:30 - 09:30	418	+	212	=	630	117	106	No
13:30 - 14:30	366	+	251	=	617	114	204	No
07:30 - 08:30	396	+	185	=	581	127	121	No
11:00 - 12:00	357	+	220	=	577	101	177	No





# Cedar City

## 1100 West / 600 South

### September Counts

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

## Warrant 3B - Peak Hour Volumes

### Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

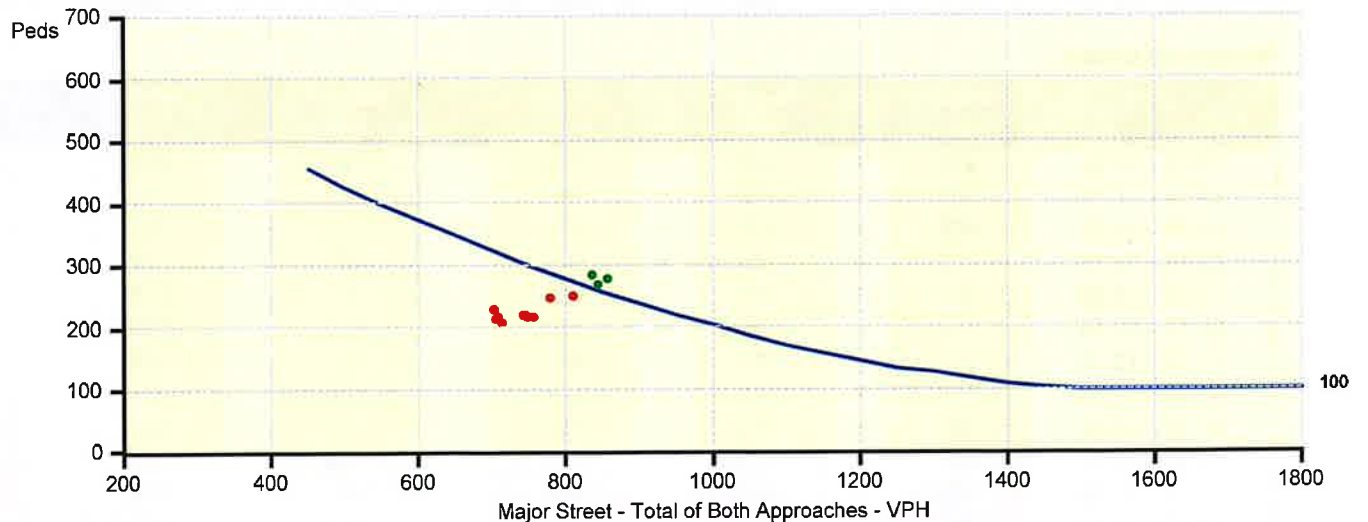
### Summary

3 one hour periods meet minimums.  
Warrant IS met.

### Site Data Required

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

Time	Major Road 600 South				Total	Minor Road 1100 West		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
17:15 - 18:15	457	+	399	=	856	122	278	Yes
17:30 - 18:30	456	+	387	=	843	115	268	Yes
17:00 - 18:00	447	+	390	=	837	129	285	Yes
16:45 - 17:45	423	+	387	=	810	122	251	No
17:45 - 18:45	431	+	349	=	780	120	246	No
14:15 - 15:15	414	+	342	=	756	169	216	No
16:30 - 17:30	387	+	362	=	749	108	216	No
14:45 - 15:45	406	+	340	=	746	129	219	No
14:30 - 15:30	425	+	319	=	744	131	220	No
15:00 - 16:00	399	+	316	=	715	100	207	No
14:00 - 15:00	393	+	317	=	710	150	217	No
16:15 - 17:15	376	+	331	=	707	84	212	No



# Cedar City

## 1100 West / 600 South

### September Counts

Study Name: 1100 West & 600 South Signal Warrants

Study Date : 9/26/2025

## Warrant 7 - Crash Experience

### Description

Intended for sites where the frequency of correctible crashes in the past 12 months is the primary motivation for installing a traffic signal.

### Summary

Number of crashes meet minimum.  
Pedestrian volumes do not meet the 80% criteria.  
War 1A or 1B volumes meet the 80% criteria.  
Warrant IS met.

### Site Data Required

Number of crashes in last 12 months = 8

Rural Settings Apply = **False**  
Number of Major Lanes = **1**  
Number of Minor Lanes = **1**

### Crash and Volume Requirements

Minimum number of crashes = 5

Veh/Hr Major: War 1A = **400**      War 1B = **600**

Veh/Hr Minor: War 1A = **120**      War 1B = **60**

### Volume and Pedestrian Data

Hours data meets 80% requirements of Warrant 1A (8 needed) **10**      Met? **Yes**

Hours data meets 80% requirements of Warrant 1B (8 needed) **8**      Met? **Yes**

Hours data meets 80% requirements of Warrant 4 (4,1 needed) **0**      Met? **No**

### Major Road

**600 South**

### Minor Road

**1100 West**

### Warrant 1A Details

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
17:15 - 18:15	457	+	399	=	856	122	278	Yes
14:15 - 15:15	414	+	342	=	756	169	216	Yes
16:15 - 17:15	376	+	331	=	707	84	212	Yes
12:15 - 13:15	403	+	275	=	678	91	218	Yes
15:15 - 16:15	364	+	299	=	663	88	202	Yes
11:15 - 12:15	370	+	251	=	621	124	209	Yes
07:30 - 08:30	396	+	185	=	581	127	121	Yes
13:15 - 14:15	366	+	208	=	574	80	200	Yes
18:15 - 19:15	277	+	176	=	453	143	138	Yes
10:15 - 11:15	266	+	165	=	431	80	140	Yes
08:30 - 09:30	418	+	212	=	630	117	106	No
08:45 - 09:45	369	+	198	=	567	101	99	No

### Warrant 1B Details

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
17:30 - 18:30	456	+	387	=	843	115	268	Yes
16:30 - 17:30	387	+	362	=	749	108	216	Yes
14:30 - 15:30	425	+	319	=	744	131	220	Yes
12:15 - 13:15	403	+	275	=	678	91	218	Yes
15:30 - 16:30	366	+	297	=	663	75	218	Yes
08:15 - 09:15	434	+	198	=	632	123	109	Yes
11:15 - 12:15	370	+	251	=	621	124	209	Yes
13:30 - 14:30	366	+	251	=	617	114	204	Yes
07:30 - 08:30	396	+	185	=	581	127	121	No
11:00 - 12:00	357	+	220	=	577	101	177	No
13:15 - 14:15	366	+	208	=	574	80	200	No
08:00 - 09:00	399	+	165	=	564	117	96	No



# Cedar City

## 1100 West / 600 South

### September Counts

Study Name: 1100 West & 600 South Signal Warrants

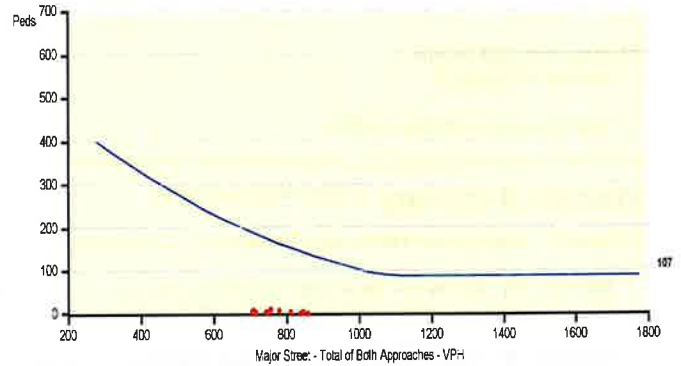
Study Date : 9/26/2025

## Warrant 7 - Crash Experience

### Major Road 600 South

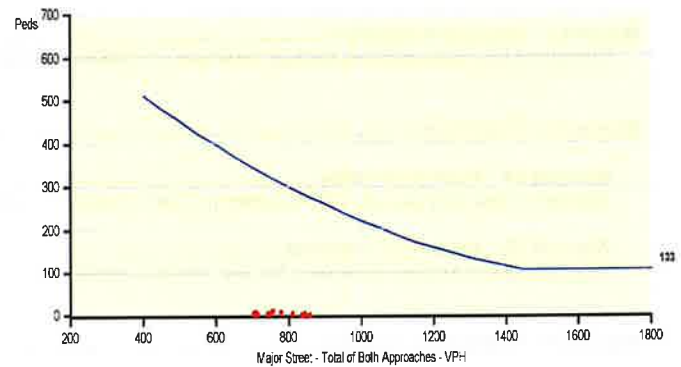
#### 80% of Warrant 4 - 4 Hr Pedestrian Data

Time	EB Vehs	+	WB Vehs	=	Total Vehs	EB Peds	+	WB Peds	=	Ped Total	Met?
17:15 - 18:15	457	+	399	=	856	1	+	0	=	1	No
17:30 - 18:30	456	+	387	=	843	3	+	0	=	3	No
17:00 - 18:00	447	+	390	=	837	0	+	0	=	0	No
16:45 - 17:45	423	+	387	=	810	4	+	0	=	4	No
17:45 - 18:45	431	+	349	=	780	6	+	0	=	6	No
14:15 - 15:15	414	+	342	=	756	7	+	1	=	8	No
16:30 - 17:30	387	+	362	=	749	4	+	0	=	4	No
14:45 - 15:45	406	+	340	=	746	3	+	0	=	3	No
14:30 - 15:30	425	+	319	=	744	3	+	1	=	4	No
15:00 - 16:00	399	+	316	=	715	2	+	0	=	2	No
14:00 - 15:00	393	+	317	=	710	6	+	1	=	7	No
16:15 - 17:15	376	+	331	=	707	4	+	1	=	5	No



#### 80% of Warrant 4 - 1 Hr Pedestrian Data

Time	EB Vehs	+	WB Vehs	=	Total Vehs	EB Peds	+	WB Peds	=	Ped Total	Met?
17:15 - 18:15	457	+	399	=	856	1	+	0	=	1	No
17:30 - 18:30	456	+	387	=	843	3	+	0	=	3	No
17:00 - 18:00	447	+	390	=	837	0	+	0	=	0	No
16:45 - 17:45	423	+	387	=	810	4	+	0	=	4	No
17:45 - 18:45	431	+	349	=	780	6	+	0	=	6	No
14:15 - 15:15	414	+	342	=	756	7	+	1	=	8	No
16:30 - 17:30	387	+	362	=	749	4	+	0	=	4	No
14:45 - 15:45	406	+	340	=	746	3	+	0	=	3	No
14:30 - 15:30	425	+	319	=	744	3	+	1	=	4	No
15:00 - 16:00	399	+	316	=	715	2	+	0	=	2	No
14:00 - 15:00	393	+	317	=	710	6	+	1	=	7	No
16:15 - 17:15	376	+	331	=	707	4	+	1	=	5	No



**Cedar City**  
**1100 West / 600 South**  
**November Counts**

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

## Signal Warrants - Summary

### Major Street Approaches

Eastbound: 600 South  
Number of Lanes : 1

Total Approach Volume: 4,011

Westbound: 600 South  
Number of Lanes : 1

Total Approach Volume: 2,988

### Minor Street Approaches

Northbound: 1100 West  
Number of Lanes : 1

Total Approach Volume: 1,177

Southbound: 1100 West  
Number of Lanes : 1

Total Approach Volume: 2,321

### Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Satisfied

Warrant 1A - Minimum Vehicular Volume.....Satisfied

Required volumes reached for 9 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 3 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Not Satisfied

Required 1A volumes reached for 11 hours, 8 are needed

Required 1B volumes reached for 7 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Satisfied

Number of hours (6) volumes exceed minimum  $\geq$  minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

Warrant 3A - Peak Hour Delay.....Satisfied

Number of one hour periods (29) volumes exceed minimum  $\geq$  required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Not Satisfied

Volumes do not exceed minimums for any one hour period.

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Satisfied

Number of accidents (8) is more than minimum (5) and volume requirements are met.

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

**Cedar City**  
**1100 West / 600 South**  
**November Counts**

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

**Warrant 1A - Minimum Volumes**

**Description**

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

**Summary**

9 one hour periods meet minimums.  
Warrant IS met.

**Site Data Required**

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

**Volume Requirements**

Veh/Hr Major = 500

Veh/Hr Minor = 150

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
14:45 - 15:45	430	+	353	=	783	133	233	Yes
11:45 - 12:45	456	+	319	=	775	158	281	Yes
16:45 - 17:45	422	+	310	=	732	107	246	Yes
17:45 - 18:45	398	+	265	=	663	77	207	Yes
13:45 - 14:45	324	+	315	=	639	137	185	Yes
15:45 - 16:45	319	+	282	=	601	75	240	Yes
12:45 - 13:45	302	+	217	=	519	85	181	Yes
07:15 - 08:15	318	+	192	=	510	105	229	Yes
10:45 - 11:45	302	+	202	=	504	67	178	Yes
08:15 - 09:15	322	+	185	=	507	88	114	No
08:30 - 09:30	288	+	203	=	491	81	129	No
07:00 - 08:00	297	+	188	=	485	102	214	No
10:30 - 11:30	281	+	204	=	485	58	149	No
08:45 - 09:45	252	+	198	=	450	67	137	No
10:15 - 11:15	234	+	200	=	434	76	122	No
10:00 - 11:00	225	+	183	=	408	70	105	No
09:45 - 10:45	214	+	179	=	393	85	105	No
09:00 - 10:00	220	+	171	=	391	67	133	No
09:15 - 10:15	218	+	157	=	375	67	118	No
09:30 - 10:30	213	+	155	=	368	87	103	No
06:45 - 07:45	198	+	128	=	326	56	160	No
06:30 - 07:30	96	+	64	=	160	20	63	No
18:45 - 19:45	64	+	65	=	129	22	38	No
06:15 - 07:15	42	+	24	=	66	13	23	No
00:00 - 01:00	0		0		0	0	0	No

**Cedar City**  
**1100 West / 600 South**  
**November Counts**

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

**Warrant 1B - Interruption of Continuous Traffic**

**Description**

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

**Summary**

Only 3 one hour periods meet minimums.  
Warrant is NOT met.

**Site Data Required**

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

**Volume Requirements**

Veh/Hr Major = 750

Veh/Hr Minor = 75

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
17:00 - 18:00	475	+	305	=	780	101	267	Yes
14:15 - 15:15	391	+	387	=	778	165	236	Yes
11:45 - 12:45	456	+	319	=	775	158	281	Yes
16:45 - 17:45	422	+	310	=	732	107	246	No
14:00 - 15:00	368	+	361	=	729	161	208	No
16:30 - 17:30	379	+	338	=	717	94	221	No
15:15 - 16:15	375	+	312	=	687	110	230	No
13:45 - 14:45	324	+	315	=	639	137	185	No
16:15 - 17:15	337	+	295	=	632	81	225	No
11:30 - 12:30	338	+	278	=	616	144	233	No
15:30 - 16:30	316	+	297	=	613	82	245	No
15:45 - 16:45	319	+	282	=	601	75	240	No
18:00 - 19:00	326	+	274	=	600	76	174	No
11:15 - 12:15	326	+	264	=	590	128	226	No
16:00 - 17:00	328	+	261	=	589	86	224	No
13:30 - 14:30	293	+	280	=	573	115	159	No
11:00 - 12:00	313	+	234	=	547	100	209	No
07:30 - 08:30	341	+	179	=	520	115	212	No
12:45 - 13:45	302	+	217	=	519	85	181	No
07:15 - 08:15	318	+	192	=	510	105	229	No
08:15 - 09:15	322	+	185	=	507	88	114	No
10:45 - 11:45	302	+	202	=	504	67	178	No
13:15 - 14:15	281	+	213	=	494	82	160	No
08:30 - 09:30	288	+	203	=	491	81	129	No
13:00 - 14:00	281		210		491	79	162	No

**Cedar City**  
**1100 West / 600 South**  
**November Counts**

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

**Warrant 1C Combination of Warrants**

**Description**

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

**Summary**

11 hours meet 1A minimums.  
 Only 7 hours meet 1B minimums.  
 Warrant is NOT met.

**Site Data Required**

Rural Settings Apply = False  
 Number of Major Lanes = 1  
 Number of Minor Lanes = 1

**Volume Requirements**

Warrant 1A 1B  
 Veh/Hr Major = 400 600  
 Veh/Hr Minor = 120 60

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
14:15 - 15:15	391	+	387	=	778	165	236	Yes
17:15 - 18:15	480	+	279	=	759	93	259	Yes
12:15 - 13:15	462	+	279	=	741	111	257	Yes
15:15 - 16:15	375	+	312	=	687	110	230	Yes
16:15 - 17:15	337	+	295	=	632	81	225	Yes
11:15 - 12:15	326	+	264	=	590	128	226	Yes
13:15 - 14:15	281	+	213	=	494	82	160	Yes
08:30 - 09:30	288	+	203	=	491	81	129	Yes
07:00 - 08:00	297	+	188	=	485	102	214	Yes
10:15 - 11:15	234	+	200	=	434	76	122	Yes
18:15 - 19:15	225	+	201	=	426	58	122	Yes
08:15 - 09:15	322		185		507	88	114	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
14:45 - 15:45	430	+	353	=	783	133	233	Yes
16:45 - 17:45	422	+	310	=	732	107	246	Yes
12:30 - 13:30	430	+	265	=	695	108	247	Yes
17:45 - 18:45	398	+	265	=	663	77	207	Yes
13:45 - 14:45	324	+	315	=	639	137	185	Yes
11:30 - 12:30	338	+	278	=	616	144	233	Yes
15:45 - 16:45	319	+	282	=	601	75	240	Yes
11:15 - 12:15	326	+	264	=	590	128	226	No
13:30 - 14:30	293	+	280	=	573	115	159	No
11:00 - 12:00	313	+	234	=	547	100	209	No
07:30 - 08:30	341	+	179	=	520	115	212	No
07:15 - 08:15	318		192		510	105	229	No



# Cedar City

## 1100 West / 600 South

### November Counts

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

## Warrant 2 - Four Hour Volumes

### Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

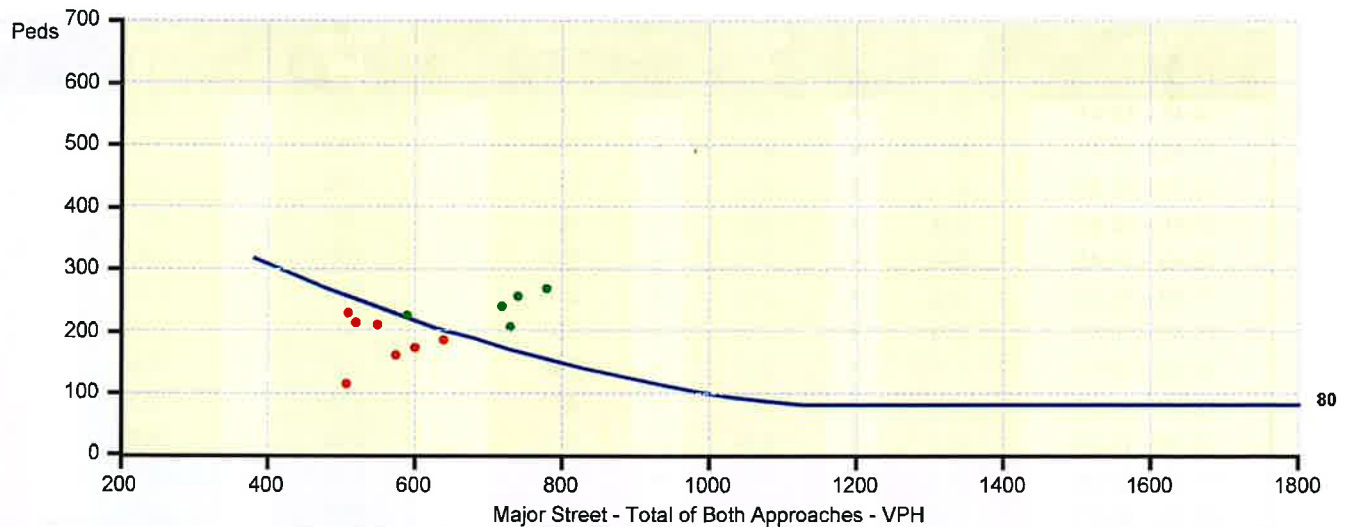
### Summary

6 one hour periods meet minimums.  
Warrant IS met.

### Site Data Required

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

Major Road 600 South						Minor Road 1100 West		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
17:00 - 18:00	475	+	305	=	780	101	267	Yes
12:15 - 13:15	462	+	279	=	741	111	257	Yes
14:00 - 15:00	368	+	361	=	729	161	208	Yes
15:00 - 16:00	386	+	334	=	720	106	239	Yes
11:15 - 12:15	326	+	264	=	590	128	226	Yes
16:00 - 17:00	328	+	261	=	589	86	224	Yes
13:45 - 14:45	324	+	315	=	639	137	185	No
18:00 - 19:00	326	+	274	=	600	76	174	No
13:30 - 14:30	293	+	280	=	573	115	159	No
11:00 - 12:00	313	+	234	=	547	100	209	No
07:30 - 08:30	341	+	179	=	520	115	212	No
07:15 - 08:15	318	+	192	=	510	105	229	No



# Cedar City

## 1100 West / 600 South

### November Counts

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

## Warrant 3B - Peak Hour Volumes

### Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

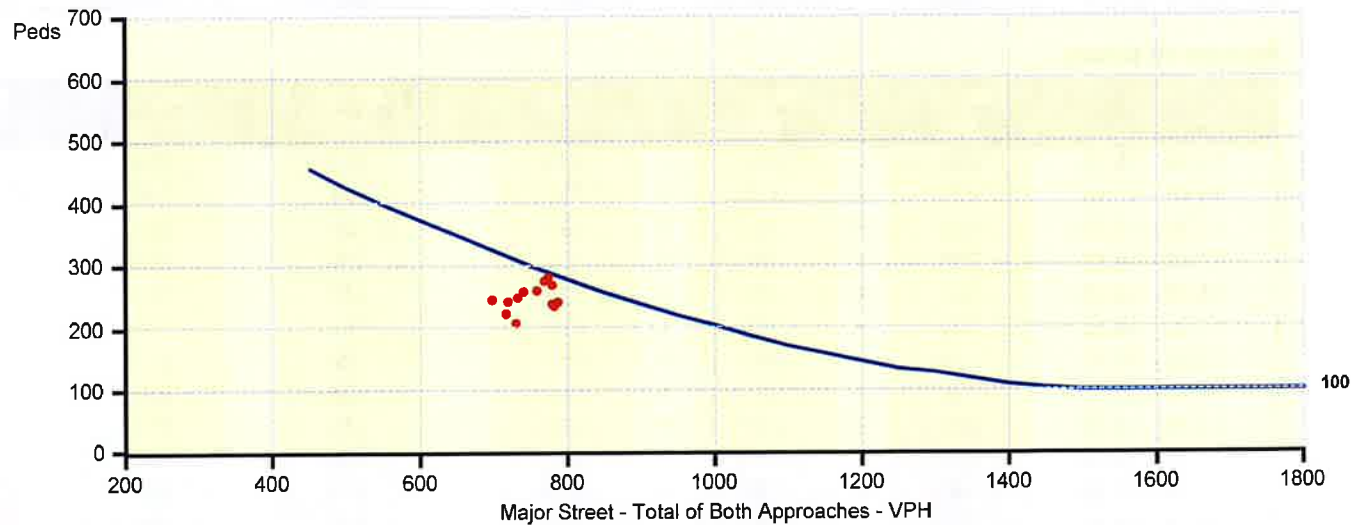
### Summary

Only 0 one hour periods meet minimums.  
Warrant is NOT met.

### Site Data Required

Rural Settings Apply = False  
Number of Major Lanes = 1  
Number of Minor Lanes = 1

Major Road 600 South					Minor Road 1100 West			Met?
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
14:30 - 15:30	440	+	347	=	787	148	241	No
14:45 - 15:45	430	+	353	=	783	133	233	No
17:00 - 18:00	475	+	305	=	780	101	267	No
14:15 - 15:15	391	+	387	=	778	165	236	No
11:45 - 12:45	456	+	319	=	775	158	281	No
12:00 - 13:00	469	+	300	=	769	138	275	No
17:15 - 18:15	480	+	279	=	759	93	259	No
12:15 - 13:15	462	+	279	=	741	111	257	No
16:45 - 17:45	422	+	310	=	732	107	246	No
14:00 - 15:00	368	+	361	=	729	161	208	No
15:00 - 16:00	386	+	334	=	720	106	239	No
16:30 - 17:30	379	+	338	=	717	94	221	No



# Cedar City

## 1100 West / 600 South

### November Counts

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

## Warrant 7 - Crash Experience

### Description

Intended for sites where the frequency of correctible crashes in the past 12 months is the primary motivation for installing a traffic signal.

### Site Data Required

Number of crashes in last 12 months = 8

Rural Settings Apply = **False**  
 Number of Major Lanes = 1  
 Number of Minor Lanes = 1

### Volume and Pedestrian Data

Hours data meets 80% requirements of Warrant 1A (8 needed) 11 Met? **Yes**  
 Hours data meets 80% requirements of Warrant 1B (8 needed) 7 Met? **No**  
 Hours data meets 80% requirements of Warrant 4 (4,1 needed) 0 0 Met? **No**

### Summary

Number of crashes meet minimum.  
 Pedestrian volumes do not meet the 80% criteria.

Warrant IS met.

### Crash and Volume Requirements

Minimum number of crashes = 5

Veh/Hr Major: War 1A = 400 War 1B = 600

Veh/Hr Minor: War 1A = 120 War 1B = 60

### Major Road

**600 South**

### Minor Road

**1100 West**

### Warrant 1A Details

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
14:15 - 15:15	391	+	387	=	778	165	236	Yes
17:15 - 18:15	480	+	279	=	759	93	259	Yes
12:15 - 13:15	462	+	279	=	741	111	257	Yes
15:15 - 16:15	375	+	312	=	687	110	230	Yes
16:15 - 17:15	337	+	295	=	632	81	225	Yes
11:15 - 12:15	326	+	264	=	590	128	226	Yes
13:15 - 14:15	281	+	213	=	494	82	160	Yes
08:30 - 09:30	288	+	203	=	491	81	129	Yes
07:00 - 08:00	297	+	188	=	485	102	214	Yes
10:15 - 11:15	234	+	200	=	434	76	122	Yes
18:15 - 19:15	225	+	201	=	426	58	122	Yes
08:15 - 09:15	322		185		507	88	114	No

### Warrant 1B Details

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
14:45 - 15:45	430	+	353	=	783	133	233	Yes
16:45 - 17:45	422	+	310	=	732	107	246	Yes
12:30 - 13:30	430	+	265	=	695	108	247	Yes
17:45 - 18:45	398	+	265	=	663	77	207	Yes
13:45 - 14:45	324	+	315	=	639	137	185	Yes
11:30 - 12:30	338	+	278	=	616	144	233	Yes
15:45 - 16:45	319	+	282	=	601	75	240	Yes
11:15 - 12:15	326	+	264	=	590	128	226	No
13:30 - 14:30	293	+	280	=	573	115	159	No
11:00 - 12:00	313	+	234	=	547	100	209	No
07:30 - 08:30	341	+	179	=	520	115	212	No
07:15 - 08:15	318		192		510	105	229	No



# Cedar City

## 1100 West / 600 South

### November Counts

Study Name: 1100 West & 600 South Signal Warrants - November Counts

Study Date : 11/25/2025

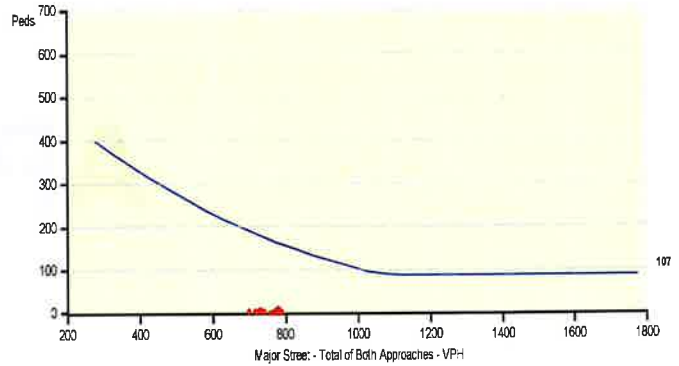
## Warrant 7 - Crash Experience

### Major Road

600 South

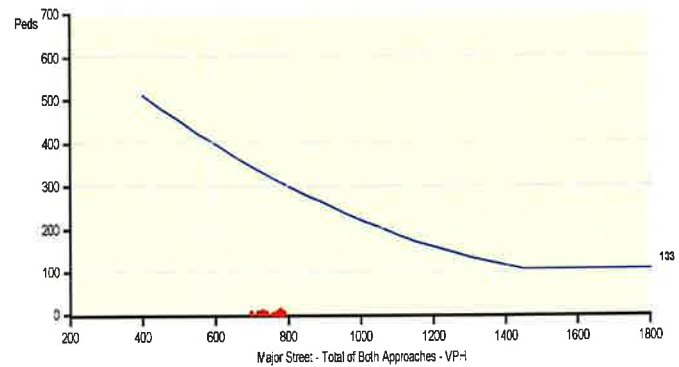
### 80% of Warrant 4 - 4 Hr Pedestrian Data

Time	EB Vehs	+	WB Vehs	=	Total Vehs	EB Peds	+	WB Peds	=	Ped Total	Met?
14:30 - 15:30	440	+	347	=	787	3	+	1	=	4	No
14:45 - 15:45	430	+	353	=	783	3	+	0	=	3	No
17:00 - 18:00	475	+	305	=	780	0	+	0	=	0	No
14:15 - 15:15	391	+	387	=	778	7	+	1	=	8	No
11:45 - 12:45	456	+	319	=	775	4	+	1	=	5	No
12:00 - 13:00	469	+	300	=	769	2	+	1	=	3	No
17:15 - 18:15	480	+	279	=	759	1	+	0	=	1	No
12:15 - 13:15	462	+	279	=	741	2	+	0	=	2	No
16:45 - 17:45	422	+	310	=	732	4	+	0	=	4	No
14:00 - 15:00	368	+	361	=	729	6	+	1	=	7	No
15:00 - 16:00	386	+	334	=	720	2	+	0	=	2	No
16:30 - 17:30	379	+	338	=	717	4	+	0	=	4	No



### 80% of Warrant 4 - 1 Hr Pedestrian Data

Time	EB Vehs	+	WB Vehs	=	Total Vehs	EB Peds	+	WB Peds	=	Ped Total	Met?
14:30 - 15:30	440	+	347	=	787	3	+	1	=	4	No
14:45 - 15:45	430	+	353	=	783	3	+	0	=	3	No
17:00 - 18:00	475	+	305	=	780	0	+	0	=	0	No
14:15 - 15:15	391	+	387	=	778	7	+	1	=	8	No
11:45 - 12:45	456	+	319	=	775	4	+	1	=	5	No
12:00 - 13:00	469	+	300	=	769	2	+	1	=	3	No
17:15 - 18:15	480	+	279	=	759	1	+	0	=	1	No
12:15 - 13:15	462	+	279	=	741	2	+	0	=	2	No
16:45 - 17:45	422	+	310	=	732	4	+	0	=	4	No
14:00 - 15:00	368	+	361	=	729	6	+	1	=	7	No
15:00 - 16:00	386	+	334	=	720	2	+	0	=	2	No
16:30 - 17:30	379	+	338	=	717	4	+	0	=	4	No



# APPENDIX C

## Crash Data

CRASH SUMMARY REPORT

1100 West / 600 South

Created on October 7, 2025

Created by Luke Maeser

Data extents: January 1, 2020 to October 7, 2025



Applied Filters

Shape: Circle 250 ft



Total Crashes	19	Fatal Crashes	0
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UDOT Crash Summary	Crash_View	
Total Crashes	19	100.00%
Intersection Related	17	89.47%
Distracted Driving	9	47.37%

Speed Related	1	5.26%
+ 8 more	0	0%
Crash Verified	Crash_View	
True	19	100.00%
False	0	0.00%
Crash Severity	Crash_View	
No injury/PDO	12	63.16%
Suspected Minor Injury	4	21.05%
Possible injury	3	15.79%
+ 2 more	0	0%
Manner of Collision	Crash_View	
Angle	13	68.42%
Front to Rear	6	31.58%
+ 10 more	0	0%
Crash Date Time (Year)	Crash_View	
2024	2	10.53%
2023	1	5.26%
2022	8	42.11%
2021	5	26.32%
2020	3	15.79%
+ 11 more	0	0%
V1 & V2 Movement & Direction (Crash Level Only)	Crash_View	
Straight Ahead (Southbound) & Straight Ahead (Eastbound)	4	21.05%
Straight Ahead (Eastbound) & Straight Ahead (Eastbound)	2	10.53%
Straight Ahead (Westbound) & Stopped in Traffic Lane (Westbound)	2	10.53%
Straight Ahead (Westbound) & Straight Ahead (Westbound)	2	10.53%
Turning Left (Eastbound) & Straight Ahead (Westbound)	2	10.53%
Straight Ahead (Eastbound) & Straight Ahead (Southbound)	1	5.26%
Straight Ahead (Eastbound) & Straight Ahead (Westbound)	1	5.26%
Straight Ahead (Southbound) & Straight Ahead (Westbound)	1	5.26%
+ 992 more	4	21.04%
Roadway Surface Condition	Crash_View	
Dry	15	78.95%

Wet	3	15.79%
Slush	1	5.26%
+ 12 more	0	0%

Weather Condition	Crash_View	
Clear	17	89.47%
Rain	1	5.26%
Sleet, Hail	1	5.26%
+ 10 more	0	0%

Light Condition	Crash_View	
Daylight	15	78.95%
Dark - Lighted	2	10.53%
Dusk	2	10.53%
+ 6 more	0	0%

Countermeasures	Crash_View	
Countermeasure: Roundabout or Signal	13	68.42%
Countermeasure: Left Turn Lane	3	15.79%
+ 13 more	0	0%





## MEMORANDUM

Date: December 18, 2025

To: Cedar City

From: Hales Engineering



**Subject: Cedar City - Fiddler's Canyon Elementary Traffic Study**

UT25-3088

### Introduction

Hales Engineering studied the intersections of Wedgewood Lane / Fiddlers Canyon Road, 1935 North / Wedgewood Lane, and 1935 North / Fiddlers Canyon Road in Cedar City, Utah to determine if all-way stop-controlled intersections are warranted. Additionally, school circulation and traffic operations at Fiddler's Canyon Elementary were also studied. The study location is shown in Figure 1.



**Figure 1: Study Location in Cedar City, Utah**

### Study Area Description

The study locations are three intersections surrounding Fiddler's Canyon Elementary: Wedgewood Lane / Fiddlers Canyon Road, 1935 North / Wedgewood Lane, and 1935 North / Fiddlers Canyon Road intersections in Cedar City, Utah. Wedgewood Lane and Fiddlers Canyon Road have one travel lane in each direction and shoulders wide enough to accommodate right turns at intersections. 1935 North has one travel lane in each direction. The posted speed limit is 25 mph on all study roadways. The intersections are currently two-way stop controlled. For the purposes of this analysis, 1935 North was designated as a minor road, and Wedgewood Lane was designated as the minor road at the Wedgewood Lane / Fiddlers Canyon Road intersection.

### Data Collection

An analysis was performed using the procedure outlined in the Utah MUTCD Section 2B.07 to determine if all-way stop control is warranted at the study locations. The procedure outlines criteria based on crash history and vehicle volumes. Vehicle turning movement count data were collected on Wednesday, September 17, 2025, from 7:00 AM to 7:00 PM. The highest peak hours for each intersection are listed in Table 1. Detailed count data are included in Appendix B.

**Table 1: Peak Hour by Intersection**

Intersection	Peak Hour
Wedgewood Lane / Fiddlers Canyon Road	3:00 – 4:00 P.M.
1935 North / Wedgewood Lane	2:45 – 3:45 P.M.
1935 North / Fiddlers Canyon Road	7:45 – 8:45 A.M.

Figures 2 and 3 show the existing morning and afternoon peak hour volumes as well as intersection geometry at the study intersections.

Speed data samples were collected on Wedgewood Lane and Fiddler's Canyon Road to determine the 85<sup>th</sup> percentile speeds. It was found that the 85<sup>th</sup> percentile speed on Wedgewood Lane was 31 mph in both northbound and southbound directions. On Fiddler's Canyon Road, the 85<sup>th</sup> percentile speeds were 31 mph in the eastbound direction and 33 mph in the westbound direction, respectively, with an overall 85<sup>th</sup> percentile speed of 33 mph.

### Level of Service (LOS) Analysis

Hales Engineering completed a Synchro / SimTraffic analysis for the study intersections based on the existing traffic volumes to determine delays during the morning and afternoon peak hour. Hales Engineering determined that the study intersections are currently operating at an acceptable LOS during the morning and afternoon peak hours, as shown in Table 2. Hales Engineering calculated the 95<sup>th</sup> percentile queue lengths for the study intersection. No significant queueing was observed at the study intersections during the peak hours. Detailed results are shown in Appendix A.





**Figure 2: Morning Peak Hour Volumes**



**Figure 3: Afternoon Peak Hour Volumes**

**Table 2: Existing (2025) Background Peak Hour LOS**

Intersection		LOS (Sec. Delay / Veh.) / Movement <sup>1</sup>	
Description	Control	Morning Peak	Afternoon Peak
Wedgewood Lane / Fiddlers Canyon Road	NB/SB Stop	a (8.7) / NBL	b (10.7) / SBT
1935 North / Wedgewood Lane	EB/WB Stop	a (6.2) / EBL	a (5.4) / WBL
1935 North / Fiddlers Canyon Road	EB/WB Stop	a (8.4) / SET	a (5.4) / SEL
<sup>1</sup> . Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc. <sup>2</sup> . Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.			
Source: Hales Engineering, 2025			

### Intersection Sight Distance Analysis

Hales Engineering analyzed intersection sight distance at the study intersections using Case B1 (left-turn from the minor road) and Case B2 (right-turn from the minor road) per AASHTO criteria. According to AASHTO criteria, Case B2 states that where left turns are also permitted, the time gaps for Case B1 apply. Therefore, Hales Engineering assumed the same time gap for both cases. Specifically, a time gap of 7.5 seconds for passenger vehicles was used. Based on this information and a design speed of 30 mph, the minimum required intersection sight distance for left- and right-turns from the minor road is 335 feet at each intersection.

Based on measurements from a site visit, all of the approaches have a sufficient intersection sight distance for a left-turn maneuver with the exception of the southbound approach at the Wedgewood Lane / Fiddlers Canyon Road intersection, which has an available sight distance of approximately 300 feet when looking to the east. The sight distance for this direction is limited by the curvature of Fiddlers Canyon Road and could also be blocked by parked vehicles or landscaping.

It was observed that vehicles traveling westbound would slow down when approaching the intersection due to a deep cross pan on the west side. Since "Dip ahead" pavement markings, and a dip sign with an advisory 15 mph speed are in place to warn drivers, a lower design speed could potentially be used to calculate intersection sight distance. Using a lower design speed of 25 mph would require a sight distance of 280 feet, in which case there would be sufficient sight distance. However, if vehicles are parked on the north side of the road, sight distance may be further limited. Therefore, the City could consider restricting parking on the north side of Fiddlers Canyon Road, east of the Wedgewood Lane / Fiddlers Canyon Road intersection or converting the intersection to be all-way stop controlled.



## Multi-Way Stop Control Analysis

### Crash History Analysis

Crash data were obtained from UDOT's crash database for the State of Utah. Due to the use of Utah crash data, this report may be protected under 23 USC 407. Crash reports show one crash at Wedgewood Lane / Fiddlers Canyon Road and one at 1935 North / Wedgewood Lane since January 1, 2020. Only the Wedgewood Lane / Fiddlers Canyon Road crash could possibly have been prevented by all-way stop control. However, each intersection needs at least five such crashes to satisfy this criterion. Therefore, the criterion is **not** met for either location.

### Minimum Volumes

Per the Utah MUTCD, the major street volume needs to average at least 300 vehicles per hour for any 8 hours in the day, and the minor street volume needs to average at least 200 vehicles or pedestrians during the same 8 hours to meet warrants for an all-way stop. The average traffic volumes on the major and minor streets are shown in Table 3 for each of the study intersections. As shown, the traffic volumes at each of the intersection were **not** high enough to meet the criteria for all-way stop control.

**Table 3: Average Volumes at the Study Intersections**

Intersection (Minor Street / Major Street)	Minor Street Avg. Volume	Major Street Avg. Volume
<b>Criterion:</b>	<b>200</b>	<b>300</b>
Wedgewood Lane / Fiddlers Canyon Road	138	<u>324</u>
1935 North / Wedgewood Lane	52	133
1935 North / Fiddlers Canyon Road	32	215
Source: Hales Engineering, 2025		

### Other Considerations

Per the Utah MUTCD, there are other criteria that can be considered when exploring the installation of an all-way stop control. The following are the four other criteria that could be considered, as well as a note if the criteria apply at the study intersection:

- The need to control left-turn conflicts.
  - Application: No significant skew exists at either of the intersections; the approaches line up and left-turn conflicts do not appear to be an issue. Therefore, this criterion does **not** apply.
- The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes.
  - Application: Fiddlers Canyon Elementary School is a nearby pedestrian generator for all of the intersections. Therefore, this criterion **does** apply at the Wedgewood Lane / Fiddlers Canyon Road intersection, which had the highest pedestrian activity where there was a total of 263 pedestrians observed throughout the day.

- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.
  - *Application: As mentioned previously, when assuming a 30 mph design speed, the sight distance is insufficient for the southbound approach looking east at the Wedgewood Lane / Fiddlers Canyon Road intersection. Therefore, this criterion **does** apply to the Wedgewood Lane / Fiddlers Canyon Road intersection.*
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.
  - *Application: Wedgewood Lane and Fiddlers Canyon Road have similar widths and are both collector type streets carrying traffic from smaller local roads to larger arterials like Main Street. Therefore, this criterion **does** apply to the Wedgewood Lane / Fiddlers Canyon Road intersection. 1935 North, however, is a smaller local road primarily used to provide direct access to the school and adjacent homes.*

Based on the above analysis, an all-way stop control is **not** recommended for the 1935 North / Wedgewood Lane or 1935 North / Fiddlers Canyon Road intersections. However, an all-way stop control **could be considered** at the Wedgewood Lane / Fiddlers Canyon Road intersection based on limited sight distance looking east from the southbound approach, and the potential vehicle/pedestrian conflicts for school children.

If an all-way stop control is implemented, it is recommended that temporary VMS signs be placed warning drivers of the upcoming change at least two weeks prior to implementation and after implementation. A "NEW" (W16-15P) plaque could be considered for an interim period, in addition to a "stop ahead" pavement marking on Fiddlers Canyon Road. Stop bars should be striped on each approach.

### **School Zone Analysis**

An analysis was performed using the guidelines outlined in the Utah MUTCD Section 7 to determine if school crosswalks, reduced speed school zones, overhead school speed limit assemblies, adult crossing guards, or overhead school-pedestrian assemblies should be implemented at each of the study intersections.

#### *School Crosswalk Zone*

According to section 7A.03 of the Utah MUTCD, there needs to be a minimum of 10 schoolchildren that will use a proposed crosswalk during the before-school or after-school periods. The before-school period is defined as 45 minutes prior to the start of school to 15 minutes after the start of school. The after-school period is defined as 15 minutes prior to the end of school to 45 minutes after school.

On the day of data collection, the before-school period was from 8:05 to 9:05 A.M. and the after-school period was from 3:15 to 4:15 P.M. During these periods it was observed that there were 10 or more schoolchildren crossing Fiddlers Canyon Road at Wedgewood Lane and at 1935

North. While there were not 10 school children observed crossing Wedgewood Lane at the 1935 North intersection, there were more than 10 schoolchildren observed crossing Wedgewood Lane between 1935 North and 2015 North who would likely use a crosswalk if there were one. Therefore, the minimum pedestrian volume requirement is met for each location.

The following are additional considerations for the study locations:

- The AADT exceeds 500 vehicles per day at all of the study locations
- There is a crosswalk on the south leg of the 2015 North / Wedgewood Lane intersection which is less than 600 feet away from the 1935 North / Wedgewood Lane intersection, which is typically the minimum distance between crosswalks. However, this required distance may be reduced to 300 feet if:
  - School pedestrian flow patterns support crosswalk spacing less than 600 feet, as determined by an engineering study and,
  - Signing for the crosswalk is able to be placed with a minimum of 100 foot spacing between the signs of each crosswalk and,
  - Only one of the crosswalks can be a reduced speed school zone crosswalk.
- According to the AASHTO A Policy on Geometric Design of Highways and Streets ("Green Book"), 7th Edition, 2018, a stopping sight distance (SSD) of 200 feet is required based on a design speed of 30 MPH, which SSD is available throughout the study area
- It was observed that kids cross Wedgewood Lane at the bus drop-off area to get to parked cars on the west side of the road or at the church for parents/guardians to pick-up the kids. Therefore, the crosswalk at this location is only needed if this non-conforming pick-up condition continues.

Based on the above considerations, school crosswalk zones would meet the MUTCD guidelines and could be considered at Wedgewood Lane (north of 1935 North) and Fiddlers Canyon Road (north of 1935 North and east of Wedgewood Lane). Additionally, it is recommended that a crosswalk be striped through the south parking lot leading to the south sidewalk based on observed kids and parents walking through the parking lot. It is recommended that the school consider wayfinding signage to direct pedestrians to the bus pick-up zones or the crosswalk on Wedgewood Lane. Recommended locations for crosswalks are shown in the exhibit in Appendix D.

#### *Reduced Speed School Zone (RSSZ)*

According to section 7A.03 of the Utah MUTCD, the first requirements to install a reduced speed school zone (RSSZ) is that a school crosswalk zone be warranted and that the posted speed limit is 50 MPH or less. Both requirements are met at all study locations. The following are additional considerations for a RSSZ based on the flow chart in Appendix B2r and Appendix C of the Utah MUTCD:

- The crosswalk zone is for an elementary school zone
- The posted speed limit is less than 30 mph
- Where there are more than one crosswalk on the same road, only one can be a reduced speed school zone crosswalk.



Additional gap data is needed to determine whether each location meets the minimum points specified in Appendix C of the Utah MUTCD. However, it is not anticipated that warrants will be with the gap data. If crosswalks are installed on Wedgewood Lane and Fiddlers Canyon Road, there could be an increase in school children crossing which would influence an RSSZ being warranted in the future based on the warranting point system in the Appendix to the Utah MUTCD.

#### *Overhead School Speed Limit Assembly (OSSLA)*

According to Section 7B.15 of the Utah MUTCD, an overhead school speed limit assembly (OSSLA) may be warranted at a RSSZ based on various factors such as lane count, shoulder width, posted speed limit, and safety concerns. The following is a summary of these considerations based on MUTCD Section 7B.15 and Appendix B3r (see appendix):

- Neither of the study areas have adjacent streets with more than 2 lanes in each direction.
- The right shoulder is wider than 12 feet only on Fiddlers Canyon Road near the 1935 North intersection. Because of this criteria, OSSLA is not warranted at the other locations.
- RSSZ would not be at a signalized intersection since there are no signalized intersections in the area.
- The posted speed limit is 25 MPH on Fiddlers Canyon Road. (0 points)
- There is one lane in either direction on Fiddlers Canyon Road (1 point)
- The east shoulder is more than 12 feet wide on Fiddlers Canyon Road (1 point)
- On Fiddlers Canyon Road from Wedgewood Lane to 2015 North, there is approximately a 4% grade. However, there is a sufficient sight distance and no patterns of crashes along the road.

Based on the above considerations, the requirements for an OSSLA would not be met at any of the study locations.

#### *Adult Crossing Guard*

If a new school crosswalk or a reduced speed school zone are implemented, an adult crossing guard should be considered as well. According to section 7D.02 of the Utah MUTCD, adult crossing guards shall be used at school crosswalks for elementary schools in reduced speed school zones, school crosswalk zones at signalized intersections where the speed limit is 30 mph or higher, and at roundabouts. Crossing guards are optional at any school crosswalks that are not in a reduced speed school zone.

#### **Site Circulation**

A site visit was conducted on the day of the data collection to observe the school's operation during the morning drop off and afternoon pick-up periods. The following general observations were made during the site visit:

- Parents appear to use the on-site pick-up/drop-off area effectively, but it is not sufficient for the demand, resulting in some westbound queuing into the 1935 N / Fiddler's Canyon Road intersection and large amounts of parking off-site.
- Some parents were observed using 2015 North for pick-up, though not many

- Vehicles were observed parking on both sides of 1935 N and in the Trinity Lutheran Church parking lot.
  - Vehicles were observed parking between pick-up ingress driveway and 1935 North / Fiddler's Canyon Road intersection creating a pinch point for queued traffic entering driveway
  - Pedestrians were observed crossing the school pick-up lanes, the parking area, and 1935 North
- Parents were observed parking on east side of Wedgewood Lane, in "bus parking only" zone, others parked on the west side of the road or in the LDS church parking lot creating pedestrian crossing demand
- Parents were observed parking on west side of Fiddlers Canyon Road. This is less impactful due to the generous shoulder and sidewalk connecting the road to the school

The after-school pick-up period was observed to have the highest traffic congestion. At the busiest moment, there were approximately 20 vehicles parked in the pick-up lane on-site. At that time, there were approximately 64 vehicles parked off site, including 23 vehicles parked across a street from the school either on the south side of 1935 North, in the Trinity Lutheran Church lot, or on the west side of Wedgewood Lane.

Various changes are recommended to improve the school's site circulation and student safety based on observations made during a site visit. These improvements are illustrated in Appendix D. The school may also consider adding additional on-site pick-up storage to reduce pedestrian demand crossing the adjacent public streets.

Regardless of whether the on-site improvements are made, the following changes are recommended:

- Keep 1935 North **as a two-way road**. 1935 North is wide and one-way flow could encourage parents to park along both sides of the road, thus encouraging unsafe crossings. Instead, it is recommended that the road be striped with two 12' travel lanes, and an 8' shoulder on the north side to allow for pick-up and drop-off on the north but not the south. Additional "no parking" signs could also be installed on the south side of the road. Eliminating parking on the south side of 1935 North will give traffic enough room to maneuver in both directions on the road and also reduce the number of children crossing 1935 North.
- It is recommended that parking also be restricted on the southeast corner of the property, between the pickup zone entrance and the 1935 North / Fiddler Canyon Road intersection.

As mentioned previously, during the peak afternoon pick-up period, 64 vehicles were observed to be parked off site picking-up children, including 23 vehicles that were parked across a road from the school. Ideally, parents should pick up and drop off children on-site or on adjacent sidewalks to avoid road crossings. To fit the 23 vehicles parked across the road, the school would need to add approximately 575 more feet of storage. There may be capacity to add additional pick-up zones on the north or west sides of the school property. This may be considered at the discretion of the school district.

It is anticipated that off-site pick-up/drop-off demand will reduce with increased storage on-site. This would reduce the need for a crosswalk at Wedgewood Lane. Signage indicating no pick-up and drop-off is allowed can be displayed on the west side of Wedgewood Lane to encourage parents not to park there.

### **Estimated Cost**

Hales Engineering completed an approximate engineer's estimate of the cost for the recommended improvements. The following are the key assumptions made within the estimate:

- Standard school crosswalks to be installed at the following locations:
  - Wedgewood Lane / Fiddler's Canyon Road, east side of intersection
  - 1935 North / Wedgewood Lane, north side of intersection
  - 1935 North / Fiddlers Canyon Road, northeast side of intersection
- Pavement striping and signage costs were taken from a bid tabulation for pavement marking projects in Cedar City during fiscal year 2025.

Based on the engineer's estimate, it is anticipated that the recommended improvements will cost between \$10,000 and \$15,000.

### **Conclusions and Recommendations**

Exhibits showing the study conclusions and recommendations are provided in Appendix D. Two exhibits are provided as it is anticipated that if the on-site improvements are made, fewer off-site changes may be necessary.

The following are the key findings and recommendations based on the multi-way stop control analysis portion of the study:

- An all-way stop control could be considered at the Wedgewood Lane / Fiddlers Canyon Road intersection based on sight distance and potential pedestrian conflicts.
  - Sight distance is not available for the southbound approach when looking east. Sight distance could be acceptable if some street parking is restricted.
- All-way stop control is not recommended at the 1935 North / Wedgewood Lane or 1935 North / Fiddlers Canyon Road intersections.

The following are the key findings and recommendations based on the school zone analysis portion of the study:

- School crosswalk zones are warranted per MUTCD guidelines and could be considered at the following study locations:
  - Wedgewood Lane / Fiddlers Canyon Road (east leg)
  - Wedgewood Lane (north of 1935 North, at bus drop-off)
    - A high number of school children and parents were observed crossing Wedgewood Lane between 1935 North and 2015 North
    - If on-site circulation improvements are made, this crosswalk may not be needed.
  - 1935 North / Fiddlers Canyon Road (north leg)

- Consider on-site improvements for additional pick-up storage on the west and north sides of the property to reduce the perceived need for parents to park across Wedgewood Lane or 1935 North

Regardless of whether the on-site improvements are made, the following changes are recommended:

- Keep 1935 North **as a two-way road** and stripe two 12' travel lanes and an 8' shoulder to allow parking only on the north side so that fewer students cross 1935 North.
- Install additional "no parking" signs on the south side of 1935 North.
- Restrict parking on the southeast corner of the property, between the pickup zone entrance and the 1935 North / Fiddler Canyon Road intersection.

If you have any questions regarding this memorandum, please contact us at 801.766.4343.

# APPENDIX A

## LOS & Queueing Results



## SimTraffic LOS Report

**Project:** Cedar City Fiddler's Canyon Elementary

**Analysis Period:** Existing (2025) Background

**Time Period:** Morning Peak Hour

**Project #:** UT25-3088

**Intersection:** Wedgewood Lane & Fiddlers Canyon Road

**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	<b>L</b>	<b>10</b>	<b>10</b>	<b>98</b>	<b>8.7</b>	<b>A</b>
	T	12	11	94	8.0	A
	R	5	5	105	3.6	A
	Subtotal	27	26	96	7.4	A
<b>SB</b>	<b>L</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6.4</b>	<b>A</b>
	T	21	24	114	4.4	A
	R	157	156	100	4.4	A
	Subtotal	179	180	101	4.7	A
<b>EB</b>	<b>L</b>	<b>82</b>	<b>83</b>	<b>101</b>	<b>2.5</b>	<b>A</b>
	T	105	108	103	0.8	A
	R	35	38	108	0.3	A
	Subtotal	222	229	103	1.3	A
<b>WB</b>	<b>L</b>	<b>11</b>	<b>9</b>	<b>84</b>	<b>2.9</b>	<b>A</b>
	T	114	115	101	0.4	A
	R	5	6	126	0.1	A
	Subtotal	130	130	100	0.6	A
<b>Total</b>		<b>557</b>	<b>565</b>	<b>101</b>	<b>2.5</b>	<b>A</b>

**Intersection:** Wedgewood Lane & 1935 North

**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	<b>L</b>	<b>4</b>	<b>3</b>	<b>80</b>	<b>2.0</b>	<b>A</b>
	T	50	48	96	0.6	A
	R	47	50	107	0.5	A
	Subtotal	101	101	100	0.6	A
<b>SB</b>	<b>L</b>	<b>32</b>	<b>30</b>	<b>94</b>	<b>2.0</b>	<b>A</b>
	T	66	62	94	0.4	A
	R	1	1	80	0.2	A
	Subtotal	99	93	94	0.9	A
<b>EB</b>	<b>L</b>	<b>1</b>	<b>1</b>	<b>80</b>	<b>6.2</b>	<b>A</b>
	T	1	2	160	5.0	A
	R	3	3	109	3.4	A
	Subtotal	5	6	120	4.4	A
<b>WB</b>	<b>L</b>	<b>106</b>	<b>110</b>	<b>104</b>	<b>6.1</b>	<b>A</b>
	T	1	2	160	5.2	A
	R	34	37	108	3.9	A
	Subtotal	141	149	106	5.5	A
<b>Total</b>		<b>346</b>	<b>349</b>	<b>101</b>	<b>2.9</b>	<b>A</b>

## SimTraffic LOS Report

Project: Cedar City Fiddler's Canyon Elementary  
 Analysis Period: Existing (2025) Background  
 Time Period: Morning Peak Hour Project #: UT25-3088

Intersection: Fiddlers Canyon Road & 1935 North  
 Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NW	L	20	21	104	5.6	A
	T	1	1	80	7.0	A
	Subtotal	21	22	105	5.7	A
SE	L	7	5	69	6.4	A
	T	1	1	80	8.4	A
	R	6	6	100	3.0	A
	Subtotal	14	12	86	4.9	A
NE	L	54	55	101	2.2	A
	T	38	35	93	0.4	A
	R	10	10	103	0.1	A
	Subtotal	102	100	98	1.4	A
SW	L	1	1	80	1.1	A
	T	132	126	96	0.2	A
	R	46	44	96	0.1	A
	Subtotal	179	171	96	0.2	A
Total		317	305	96	1.1	A

## SimTraffic LOS Report

**Project:** Cedar City Fiddler's Canyon Elementary

**Analysis Period:** Existing (2025) Background

**Time Period:** Afternoon Peak Hour

**Project #:** UT25-3088

**Intersection:** Wedgewood Lane & Fiddlers Canyon Road

**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	28	24	86	8.1	A
	T	19	17	91	8.1	A
	R	23	26	113	3.5	A
	Subtotal	70	67	96	6.3	A
SB	T	12	13	108	10.7	B
	R	123	129	105	4.6	A
	Subtotal	135	142	105	5.2	A
EB	L	109	106	97	2.7	A
	T	142	149	105	0.9	A
	R	19	20	107	0.3	A
	Subtotal	270	275	102	1.6	A
WB	L	9	8	89	2.4	A
	T	149	150	101	0.5	A
	R	2	2	89	0.2	A
	Subtotal	160	160	100	0.6	A
<b>Total</b>		635	644	101	2.6	A

**Intersection:** Wedgewood Lane & 1935 North

**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	4	3	71	2.2	A
	T	87	84	97	0.7	A
	R	39	38	97	0.6	A
	Subtotal	130	125	96	0.7	A
SB	L	14	13	93	2.6	A
	T	72	76	105	0.2	A
	Subtotal	86	89	103	0.6	A
EB	L	1	0	0	2.7	A
	T	1	1	100	3.5	A
	R	4	4	94	2.9	A
	Subtotal	6	5	83	3.0	A
WB	L	51	53	104	5.4	A
	T	1	1	100	3.3	A
	R	24	26	109	3.8	A
	Subtotal	76	80	105	4.9	A
<b>Total</b>		298	299	100	1.8	A

## SimTraffic LOS Report

Project: Cedar City Fiddler's Canyon Elementary  
 Analysis Period: Existing (2025) Background  
 Time Period: Afternoon Peak Hour Project #: UT25-3088

Intersection: Fiddlers Canyon Road & 1935 North  
 Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NW	L	16	13	83	5.2	A
	T	1	2	200	4.2	A
	Subtotal	17	15	88	5.1	A
SE	L	5	4	84	5.4	A
	R	20	20	99	3.1	A
	Subtotal	25	24	96	3.5	A
NE	L	30	30	99	1.9	A
	T	133	136	102	0.3	A
	R	17	18	106	0.1	A
	Subtotal	180	184	102	0.5	A
SW	L	1	1	100	2.8	A
	T	87	91	105	0.2	A
	R	13	12	91	0.0	A
	Subtotal	101	104	103	0.2	A
Total		323	327	101	0.8	A







# **APPENDIX B**

## Turning Movement Counts



TRAFFIC  
COUNT  
SOLUTIONS

Count City: Cedar City  
Count Location: Wedgewood Lane / Fiddlers Canyon Rd  
Count Date: Wednesday, September 17, 2025

All Vehicles	All	SBP	SBR	SBT	SBL	SBU		
		40	809	84	1	1		
	EBU	0					40	WBP
	EBL	566					19	WBR
	EBT	1,279	Vehicles		4,780		1,334	WBT
	EBR	178	% Trucks		N/A		70	WBL
	EBP	105					0	WBU
			3	234	88	114	78	
			NBU	NBL	NBT	NBR	NBP	
All Vehicles	AM Peak Hour	SBP	SBR	SBT	SBL	SBU		
		8	157	14	1	0		
	EBU	0					2	WBP
	EBL	82	8:15 AM - 9:15 AM				5	WBR
	EBT	105	Vehicles		551		114	WBT
	EBR	35	PHF		0.69		11	WBL
	EBP	66	% Trucks		N/A		0	WBU
			0	10	12	5	13	
			NBU	NBL	NBT	NBR	NBP	

Highest Peak Hour	SBP	SBR	SBT	SBL	SBU		
	10	123	12	0	0		
EBU	0					7	WBP
EBL	109	3:00 PM - 4:00 PM				2	WBR
EBT	142	Vehicles		635		149	WBT
EBR	19	PHF		0.78		9	WBL
EBP	10	% Trucks		N/A		0	WBU
		0	28	19	23	30	
		NBU	NBL	NBT	NBR	NBP	

PM Peak Hour	SBP	SBR	SBT	SBL	SBU		
	10	123	12	0	0		
EBU	0					7	WBP
EBL	109	3:00 PM - 4:00 PM				2	WBR
EBT	142	Vehicles		635		149	WBT
EBR	19	PHF		0.78		9	WBL
EBP	10	% Trucks		N/A		0	WBU
		0	28	19	23	30	
		NBU	NBL	NBT	NBR	NBP	

Time	Northbound					Southbound					Eastbound					Westbound				
	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	2	1	0	0	0	8	1	0	3	11	0	0	0	1	27	0	2
7:15 AM	0	0	0	0	2	0	0	0	8	0	0	3	9	1	1	0	1	30	0	2
7:30 AM	0	8	1	0	1	0	0	0	26	0	0	7	20	2	1	0	3	58	0	2
7:45 AM	0	3	3	1	3	0	0	0	21	0	0	16	20	4	1	0	7	63	2	0
8:00 AM	0	4	3	2	4	0	0	3	13	1	0	7	13	1	3	0	2	26	0	0
8:15 AM	0	0	6	3	5	0	1	4	27	2	0	30	29	3	0	0	7	25	1	1
8:30 AM	0	2	3	2	4	0	0	5	74	0	0	35	35	2	2	0	2	38	2	0
8:45 AM	0	6	3	0	2	0	0	3	46	2	0	9	16	23	64	0	1	30	0	0
9:00 AM	0	2	0	0	2	0	0	2	10	4	0	8	25	7	0	0	1	21	2	1
9:15 AM	0	4	0	1	0	0	0	1	13	2	0	5	15	4	0	0	1	28	0	3
9:30 AM	0	3	0	2	1	0	0	1	12	2	0	2	10	1	0	0	2	14	0	0
9:45 AM	0	7	2	0	1	0	0	1	10	0	0	2	16	4	0	0	0	22	0	0
10:00 AM	0	2	1	1	0	0	0	1	8	0	0	6	20	2	0	0	0	20	1	0
10:15 AM	0	2	0	0	0	0	0	0	7	0	0	4	20	0	0	0	0	16	0	0
10:30 AM	0	4	2	1	0	0	0	2	7	0	0	3	9	5	0	0	0	21	0	1

Vehicle Total			Time
15-Min	Hour	PHF	
-	-	-	12:00 AM
-	-	-	12:15 AM
-	-	-	12:30 AM
-	-	-	12:45 AM
-	-	-	1:00 AM
-	-	-	1:15 AM
-	-	-	1:30 AM
-	-	-	1:45 AM
-	-	-	2:00 AM
-	-	-	2:15 AM
-	-	-	2:30 AM
-	-	-	2:45 AM
-	-	-	3:00 AM
-	-	-	3:15 AM
-	-	-	3:30 AM
-	-	-	3:45 AM
-	-	-	4:00 AM
-	-	-	4:15 AM
-	-	-	4:30 AM
-	-	-	4:45 AM
-	-	-	5:00 AM
-	-	-	5:15 AM
-	-	-	5:30 AM
-	-	-	5:45 AM
-	-	-	6:00 AM
-	53	0.25	6:15 AM
-	105	0.50	6:30 AM
-	230	0.46	6:45 AM
53	370	0.66	7:00 AM
52	391	0.70	7:15 AM
125	475	0.85	7:30 AM
140	550	0.69	7:45 AM
74	547	0.68	8:00 AM
136	551	0.69	8:15 AM
200	487	0.61	8:30 AM
137	334	0.61	8:45 AM
78	261	0.84	9:00 AM
72	245	0.85	9:15 AM
47	222	0.87	9:30 AM
64	229	0.89	9:45 AM
62	221	0.89	10:00 AM
49	222	0.88	10:15 AM
54	250	0.81	10:30 AM

10:45 AM	0	4	0	0	2	0	0	1	8	0	0	2	17	3	0	0	2	19	0	3
11:00 AM	0	2	2	1	0	0	0	2	12	1	0	8	15	3	1	0	2	16	0	1
11:15 AM	0	4	1	2	0	0	0	3	15	0	0	6	17	1	0	0	0	27	1	0
11:30 AM	0	14	0	2	0	0	0	3	14	0	0	9	28	8	0	0	0	35	0	0
11:45 AM	1	7	3	0	0	0	0	2	13	0	0	9	28	4	0	0	2	22	0	1
12:00 PM	0	8	3	3	0	0	0	2	9	1	0	16	34	5	0	0	1	23	0	0
12:15 PM	0	2	1	3	0	0	0	1	16	1	0	9	18	6	1	0	3	30	0	0
12:30 PM	1	3	2	2	1	0	0	1	13	0	0	5	26	4	0	0	0	18	0	0
12:45 PM	0	9	2	3	1	0	0	4	12	0	0	8	21	4	3	0	2	21	0	0
1:00 PM	0	7	2	3	2	0	0	1	9	0	0	13	36	3	0	0	2	23	0	5
1:15 PM	0	5	1	5	0	0	0	1	9	0	0	13	26	2	0	0	1	21	1	0
1:30 PM	0	5	0	3	0	0	0	0	10	0	0	6	26	3	0	0	2	29	1	0
1:45 PM	0	2	0	4	0	0	0	2	10	0	0	3	23	0	0	0	4	25	0	0
2:00 PM	0	7	1	4	0	0	0	5	14	0	0	9	24	4	0	0	1	18	0	0
2:15 PM	0	3	1	0	1	1	0	0	13	0	0	14	14	1	3	0	1	24	0	2
2:30 PM	0	3	2	5	0	0	0	0	15	0	0	5	29	0	2	0	2	27	0	0
2:45 PM	0	11	3	3	4	0	0	4	17	4	0	17	46	5	3	0	0	30	0	5
3:00 PM	0	4	6	7	0	0	0	3	21	2	0	35	40	5	0	0	1	21	0	0
3:15 PM	0	9	4	4	8	0	0	1	14	7	0	35	40	7	4	0	0	15	1	3
3:30 PM	0	7	3	4	22	0	0	5	59	0	0	25	34	1	6	0	6	59	1	4
3:45 PM	0	8	6	8	0	0	0	3	29	1	0	14	28	6	0	0	2	54	0	0
4:00 PM	0	6	1	3	1	0	0	2	14	0	0	9	44	4	0	0	0	25	1	0
4:15 PM	0	3	4	2	0	0	0	2	18	1	0	14	35	5	0	0	1	27	0	1
4:30 PM	1	6	2	3	0	0	0	4	17	1	0	8	38	2	0	0	1	30	0	0
4:45 PM	0	9	2	4	0	0	0	2	17	0	0	14	42	7	0	0	2	35	0	0
5:00 PM	0	9	4	5	0	0	0	0	21	3	0	25	41	5	1	0	2	19	1	0
5:15 PM	0	5	2	5	0	0	0	1	15	0	0	17	45	4	1	0	0	30	0	0
5:30 PM	0	2	1	6	2	0	0	2	23	0	0	13	34	4	3	0	1	29	0	0
5:45 PM	0	9	1	1	4	0	0	0	15	1	0	7	38	1	2	0	0	30	0	0
6:00 PM	0	7	2	1	4	0	0	0	13	0	0	13	43	4	1	0	0	30	2	1
6:15 PM	0	3	1	0	0	0	0	0	5	0	0	16	34	4	2	0	1	32	1	0
6:30 PM	0	3	0	1	0	0	0	1	9	3	0	11	26	3	0	0	0	25	1	2
6:45 PM	0	1	0	2	0	0	0	3	20	0	0	18	21	1	0	0	0	26	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	234	88	114	78	1	1	84	809	40	0	566	1,279	178	105	0	70	1,334	19	40

56	309	0.68	10:45 AM
63	344	0.76	11:00 AM
77	385	0.85	11:15 AM
113	397	0.88	11:30 AM
91	359	0.86	11:45 AM
104	354	0.85	12:00 PM
89	349	0.88	12:15 PM
75	345	0.87	12:30 PM
86	355	0.90	12:45 PM
99	342	0.86	1:00 PM
85	330	0.95	1:15 PM
85	317	0.91	1:30 PM
73	320	0.91	1:45 PM
87	383	0.70	2:00 PM
72	439	0.77	2:15 PM
88	497	0.87	2:30 PM
136	613	0.75	2:45 PM
143	635	0.78	3:00 PM
130	601	0.74	3:15 PM
204	582	0.71	3:30 PM
158	490	0.78	3:45 PM
109	466	0.87	4:00 PM
111	489	0.91	4:15 PM
112	502	0.94	4:30 PM
134	505	0.94	4:45 PM
132	473	0.90	5:00 PM
124	456	0.92	5:15 PM
115	429	0.93	5:30 PM
102	394	0.86	5:45 PM
115	384	0.83	6:00 PM
97	269	0.69	6:15 PM
80	172	0.47	6:30 PM
92	92	0.25	6:45 PM
-	-	-	7:00 PM
-	-	-	7:15 PM
-	-	-	7:30 PM
-	-	-	7:45 PM
-	-	-	8:00 PM
-	-	-	8:15 PM
-	-	-	8:30 PM
-	-	-	8:45 PM
-	-	-	9:00 PM
-	-	-	9:15 PM
-	-	-	9:30 PM
-	-	-	9:45 PM
-	-	-	10:00 PM
-	-	-	10:15 PM
-	-	-	10:30 PM
-	-	-	10:45 PM
-	-	-	11:00 PM
-	-	-	11:15 PM
-	-	-	11:30 PM
-	-	-	11:45 PM

Counter Notes:



All Vehicles	All	SBP	SBR	SBT	SBL	SBU		
		55	21	626	70	1		
	EBU	0					17	WBP
	EBL	25					82	WBR
	EBT	5					5	WBT
	EBR	21					219	WBL
	EBP	7					0	WBU
AM Peak Hour								
	EBU	0					4	WBP
	EBL	1					34	WBR
	EBT	1					1	WBT
	EBR	3					106	WBL
	EBP	2					0	WBU

Highest Peak Hour	SBP	SBR	SBT	SBL	SBU		
	11	1	66	32	0		
EBU	0					4	WBP
EBL	1					34	WBR
EBT	1					1	WBT
EBR	3					106	WBL
EBP	2					0	WBU

PM Peak Hour	SBP	SBR	SBT	SBL	SBU		
	5	0	72	14	0		
EBU	0					11	WBP
EBL	1					24	WBR
EBT	1					1	WBT
EBR	4					51	WBL
EBP	0					0	WBU

Time	Northbound					Southbound					Eastbound					Westbound				
	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Total			Time
15-Min	Hour	PHF	
-	-	-	12:00 AM
-	-	-	12:05 AM
-	-	-	12:10 AM
-	-	-	12:15 AM
-	-	-	12:20 AM
-	-	-	12:25 AM
-	-	-	12:30 AM
-	-	-	12:35 AM
-	-	-	12:40 AM
-	-	-	12:45 AM
-	-	-	12:50 AM
-	-	-	12:55 AM
-	-	-	1:00 AM
-	-	-	1:05 AM
-	-	-	1:10 AM
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-	-	-	1:30 AM
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-	-	-	1:40 AM
-	-	-	1:45 AM
-	-	-	1:50 AM
-	-	-	1:55 AM
-	-	-	2:00 AM
-	-	-	2:05 AM
-	-	-	2:10 AM
-	-	-	2:15 AM
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-	-	-	2:50 AM
-	-	-	2:55 AM
-	-	-	3:00 AM
-	-	-	3:05 AM
-	-	-	3:10 AM
-	-	-	3:15 AM
-	-	-	3:20 AM
-	-	-	3:25 AM
-	-	-	3:30 AM



3:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	2	0	2	6	0	0	0	2	0	0	0	0	0	0	0	0
7:05 AM	0	0	2	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0
7:10 AM	0	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	4	0	1	0	1	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	1	0	0	0	0
7:35 AM	0	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
7:40 AM	0	0	6	0	0	0	0	4	0	1	0	0	0	1	0	0	0	0	0	0
7:45 AM	0	0	5	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	7	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
7:55 AM	0	0	6	2	0	0	1	7	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	0	2	0	2	0	0	5	2	0	0	0	0	2	1	0	0	0	0	0
8:05 AM	0	1	1	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	2	5	1	0	1	2	0	1	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	0	2	2	6	0	0	3	0	1	0	0	0	1	0	0	5	0	0	0
8:20 AM	0	0	5	5	3	0	1	2	0	2	0	1	0	0	2	0	5	0	2	0
8:25 AM	0	0	9	10	3	0	6	3	0	0	0	0	0	0	0	15	0	4	1	0
8:30 AM	0	1	6	6	0	0	5	9	0	2	0	0	1	0	0	0	18	0	8	0
8:35 AM	0	0	6	4	2	0	6	8	0	2	0	0	0	0	0	21	1	5	0	0
8:40 AM	0	1	5	6	1	0	3	6	0	0	0	0	0	0	0	16	0	9	2	0
8:45 AM	0	0	2	3	1	0	3	9	0	1	0	0	0	0	0	16	0	3	0	0
8:50 AM	0	0	2	0	0	0	3	6	0	0	0	0	0	0	0	7	0	1	0	0
8:55 AM	0	0	1	3	2	0	1	7	0	0	0	0	0	2	0	0	2	0	1	0
9:00 AM	0	1	3	2	1	0	3	6	1	2	0	0	0	0	0	0	0	1	1	0
9:05 AM	0	0	1	0	1	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0
9:10 AM	0	0	3	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	1	0	0	0	0	2	0	2	0	0	0	0	0	2	0	0	0	0

-	-	-	3:35 AM
-	-	-	3:40 AM
-	-	-	3:45 AM
-	-	-	3:50 AM
-	-	-	3:55 AM
-	-	-	4:00 AM
-	-	-	4:05 AM
-	-	-	4:10 AM
-	-	-	4:15 AM
-	-	-	4:20 AM
-	-	-	4:25 AM
-	-	-	4:30 AM
-	-	-	4:35 AM
-	-	-	4:40 AM
-	-	-	4:45 AM
-	-	-	4:50 AM
-	-	-	4:55 AM
-	-	-	5:00 AM
-	-	-	5:05 AM
-	-	-	5:10 AM
-	-	-	5:15 AM
-	-	-	5:20 AM
-	-	-	5:25 AM
-	-	-	5:30 AM
-	-	-	5:35 AM
-	-	-	5:40 AM
-	-	-	5:45 AM
-	-	-	5:50 AM
-	-	-	5:55 AM
-	-	-	6:00 AM
-	10	0.25	6:05 AM
-	15	0.25	6:10 AM
-	20	0.25	6:15 AM
-	25	0.42	6:20 AM
-	29	0.48	6:25 AM
-	33	0.41	6:30 AM
-	44	0.58	6:35 AM
-	53	0.55	6:40 AM
-	64	0.52	6:45 AM
10	77	0.58	6:50 AM
15	90	0.61	6:55 AM
20	107	0.62	7:00 AM
15	108	0.66	7:05 AM
14	111	0.75	7:10 AM
13	117	0.68	7:15 AM
19	125	0.76	7:20 AM
24	142	0.79	7:25 AM
31	185	0.57	7:30 AM
33	228	0.47	7:35 AM
37	270	0.44	7:40 AM
43	305	0.50	7:45 AM
41	328	0.62	7:50 AM
36	334	0.55	7:55 AM
30	334	0.55	8:00 AM
32	340	0.64	8:05 AM
45	337	0.55	8:10 AM
81	330	0.55	8:15 AM
122	322	0.61	8:20 AM
152	309	0.51	8:25 AM
151	268	0.44	8:30 AM
133	221	0.42	8:35 AM
101	174	0.43	8:40 AM
72	132	0.46	8:45 AM
53	104	0.49	8:50 AM
39	91	0.58	8:55 AM
26	77	0.74	9:00 AM
14	63	0.75	9:05 AM
17	66	0.92	9:10 AM
19	65	0.86	9:15 AM

9:20 AM	0	0	3	0	0	0	1	4	0	1	0	0	0	0	0	0	0	0	0
9:25 AM	0	0	1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	3	0	0
9:35 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
9:40 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
9:50 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
9:55 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	2	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
10:05 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0
10:10 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
10:20 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:25 AM	0	0	3	1	0	0	0	3	0	1	0	1	0	0	0	0	0	0	0
10:30 AM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
10:35 AM	0	0	1	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0
10:40 AM	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	1	0	1
10:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0
10:50 AM	0	0	1	0	1	0	0	2	0	0	0	0	0	0	1	0	0	0	1
10:55 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1
11:00 AM	0	0	1	1	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0
11:05 AM	0	0	2	1	0	0	0	5	0	1	0	0	0	0	0	0	1	0	0
11:10 AM	0	1	2	1	0	0	0	5	0	0	0	1	0	0	0	0	1	0	1
11:15 AM	0	0	3	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1
11:20 AM	0	0	2	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0
11:25 AM	0	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	1
11:30 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1
11:35 AM	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	1	0	1
11:40 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	7	1	1	0	0	0	0	0	0	0	0	0
11:50 AM	0	0	5	1	0	0	1	1	0	2	0	1	0	0	0	0	0	0	0
11:55 AM	0	0	4	1	0	0	0	5	0	2	0	0	0	0	1	0	1	0	2
12:00 PM	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
12:05 PM	0	0	5	1	0	0	1	2	0	1	0	0	0	0	0	0	2	0	1
12:10 PM	0	0	5	1	0	0	1	3	0	0	0	1	0	0	0	0	0	0	0
12:15 PM	0	0	3	1	0	0	0	4	0	1	0	0	0	0	0	0	1	0	0
12:20 PM	0	0	0	1	0	0	0	6	0	1	0	0	0	0	0	0	1	0	1
12:25 PM	0	0	3	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	1
12:30 PM	0	1	2	0	0	0	1	4	0	0	0	0	0	0	0	0	2	0	0
12:35 PM	0	0	2	0	0	0	1	4	0	1	0	0	1	0	0	0	0	0	1
12:40 PM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0
12:45 PM	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
12:50 PM	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0
12:55 PM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0
1:00 PM	0	0	7	1	0	0	0	2	1	2	0	0	0	0	0	0	0	1	1
1:05 PM	0	0	2	0	0	1	0	3	0	0	0	0	0	0	0	0	1	0	0
1:10 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
1:15 PM	0	0	1	2	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0
1:20 PM	0	0	1	1	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0
1:25 PM	0	0	4	1	0	0	0	3	0	0	0	0	0	0	1	0	0	1	0
1:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	1	0	0	1	0	0
1:35 PM	0	0	1	1	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0
1:40 PM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
1:45 PM	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0
1:50 PM	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0
1:55 PM	0	0	2	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	4	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
2:05 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
2:10 PM	0	0	2	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
2:20 PM	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	2	0	0
2:25 PM	0	0	8	4	3	0	0	8	0	0	0	0	0	0	0	0	4	0	0
2:30 PM	0	0	2	0	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0
2:35 PM	0	0	0	1	0	0	0	5	0	0	0	1	0	1	0	0	0	0	0
2:40 PM	0	0	2	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	5	0	0	0	0	4	0	1	0	0	0	2	0	0	2	0	1
2:50 PM	0	0	4	2	2	0	0	5	0	0	0	0	0	0	0	0	1	0	0
2:55 PM	0	0	6	0	3	0	0	6	0	3	0	0	0	1	0	0	1	0	0
3:00 PM	0	1	8	2	1	0	0	9	0	0	0	0	0	0	0	0	0	0	2

21	62	0.74	9:20 AM
17	54	0.75	9:25 AM
15	56	0.82	9:30 AM
16	54	0.84	9:35 AM
18	53	0.74	9:40 AM
17	55	0.81	9:45 AM
12	50	0.96	9:50 AM
14	48	0.75	9:55 AM
14	49	0.88	10:00 AM
13	52	0.93	10:05 AM
5	53	0.70	10:10 AM
10	62	0.57	10:15 AM
13	68	0.59	10:20 AM
16	77	0.66	10:25 AM
14	77	0.71	10:30 AM
12	77	0.66	10:35 AM
13	80	0.69	10:40 AM
11	80	0.74	10:45 AM
14	86	0.74	10:50 AM
19	91	0.78	10:55 AM
27	100	0.81	11:00 AM
29	104	0.81	11:05 AM
29	107	0.76	11:10 AM
25	106	0.80	11:15 AM
22	107	0.84	11:20 AM
19	107	0.76	11:25 AM
17	107	0.81	11:30 AM
21	112	0.88	11:35 AM
24	115	0.82	11:40 AM
31	114	0.86	11:45 AM
32	110	0.86	11:50 AM
35	108	0.77	11:55 AM
33	107	0.81	12:00 PM
32	110	0.86	12:05 PM
29	105	0.82	12:10 PM
26	98	0.94	12:15 PM
27	95	0.74	12:20 PM
27	91	0.71	12:25 PM
24	93	0.97	12:30 PM
19	90	0.70	12:35 PM
17	87	0.68	12:40 PM
24	90	0.94	12:45 PM
32	87	0.68	12:50 PM
32	87	0.68	12:55 PM
24	82	0.85	1:00 PM
17	82	0.76	1:05 PM
15	82	0.76	1:10 PM
21	86	0.77	1:15 PM
22	87	0.81	1:20 PM
23	90	0.83	1:25 PM
21	104	0.67	1:30 PM
16	107	0.64	1:35 PM
17	109	0.65	1:40 PM
16	106	0.68	1:45 PM
27	118	0.70	1:50 PM
27	123	0.73	1:55 PM
28	130	0.81	2:00 PM
22	137	0.74	2:05 PM
23	153	0.67	2:10 PM
39	176	0.59	2:15 PM
42	184	0.67	2:20 PM
42	195	0.75	2:25 PM
23	198	0.67	2:30 PM
27	231	0.65	2:35 PM
31	269	0.58	2:40 PM
40	291	0.63	2:45 PM
46	292	0.82	2:50 PM
57	289	0.62	2:55 PM
74	291	0.63	3:00 PM

3:05 PM	0	0	7	5	0	0	3	6	0	1	0	0	0	0	0	1	0	1	0
3:10 PM	0	0	10	8	0	0	2	5	0	0	0	1	0	1	0	2	0	2	0
3:15 PM	0	0	5	4	0	0	1	4	0	1	0	0	0	0	0	1	0	0	0
3:20 PM	0	0	6	5	2	0	2	3	0	0	0	0	1	0	0	1	0	1	0
3:25 PM	0	0	13	4	5	0	4	5	0	0	0	0	0	0	0	1	0	0	0
3:30 PM	0	0	9	4	3	0	0	9	0	0	0	0	0	0	0	13	1	7	2
3:35 PM	0	1	6	2	12	0	2	7	0	0	0	0	0	0	0	17	0	11	5
3:40 PM	0	1	5	2	3	0	0	8	0	0	0	0	0	1	0	0	9	0	1
3:45 PM	0	1	3	0	0	0	0	5	0	0	0	0	0	1	0	0	4	0	1
3:50 PM	0	0	2	0	0	0	1	5	0	0	0	0	0	0	0	0	0	1	0
3:55 PM	0	0	7	0	0	0	0	6	0	1	0	0	0	0	0	2	0	1	0
4:00 PM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0
4:05 PM	0	0	1	2	0	0	0	3	2	1	0	1	0	0	0	0	0	1	0
4:10 PM	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	2	0	0	0
4:15 PM	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	1	0	0	0
4:20 PM	0	2	4	0	1	0	0	6	0	0	0	1	0	0	0	1	0	0	0
4:25 PM	0	1	6	2	0	0	0	5	0	1	0	1	0	0	0	2	0	0	0
4:30 PM	0	0	3	0	0	0	1	8	1	1	0	0	0	0	0	1	0	1	0
4:35 PM	0	0	1	0	0	0	1	6	1	1	0	0	0	0	0	1	0	0	0
4:40 PM	0	0	4	0	0	0	0	4	0	0	0	0	0	1	0	0	1	0	0
4:45 PM	0	1	4	1	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	2	0	0	0	0	5	0	0	0	0	0	1	0	0	1	0	2
4:55 PM	0	0	8	0	1	0	0	2	0	0	0	0	0	1	0	0	1	0	0
5:00 PM	0	0	4	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	14	1	0	0	0	5	1	0	0	0	0	0	0	1	0	0	0
5:10 PM	0	1	5	1	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	6	1	0	0	0	4	0	2	0	0	1	0	0	0	0	0	0
5:20 PM	0	0	6	1	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0
5:25 PM	0	0	3	0	0	0	1	5	1	0	0	0	0	0	0	1	0	0	0
5:30 PM	0	0	5	1	0	0	0	10	0	0	0	0	0	1	0	0	0	0	0
5:35 PM	0	0	4	0	2	0	0	9	0	0	0	0	0	1	1	0	0	0	0
5:40 PM	0	1	4	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0
5:45 PM	0	0	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	1	1	0	2	0	2	6	0	1	0	1	0	0	0	0	0	0	0
5:55 PM	0	0	1	1	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0
6:00 PM	0	0	7	1	1	0	0	6	1	0	0	1	0	0	0	0	0	0	0
6:05 PM	0	0	3	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
6:10 PM	0	0	2	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
6:20 PM	0	0	7	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
6:25 PM	0	0	5	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
6:30 PM	0	1	2	1	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0
6:35 PM	0	0	2	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
6:40 PM	0	0	5	0	1	0	0	3	0	0	0	1	0	0	0	0	0	0	0
6:45 PM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
6:50 PM	0	0	5	1	0	0	0	9	0	0	0	0	0	0	0	1	0	0	0
6:55 PM	0	0	5	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

69	280	0.79	3:05 PM
65	267	0.58	3:10 PM
61	246	0.53	3:15 PM
89	238	0.67	3:20 PM
116	233	0.50	3:25 PM
116	223	0.48	3:30 PM
88	195	0.55	3:35 PM
51	159	0.78	3:40 PM
40	142	0.89	3:45 PM
34	140	0.76	3:50 PM
35	142	0.85	3:55 PM
29	138	0.91	4:00 PM
27	141	0.77	4:05 PM
31	153	0.83	4:10 PM
38	159	0.80	4:15 PM
46	165	0.81	4:20 PM
42	167	0.91	4:25 PM
35	161	0.81	4:30 PM
33	163	0.80	4:35 PM
34	167	0.91	4:40 PM
36	167	0.84	4:45 PM
35	162	0.79	4:50 PM
46	162	0.88	4:55 PM
50	155	0.78	5:00 PM
51	159	0.78	5:05 PM
45	142	0.79	5:10 PM
40	135	0.82	5:15 PM
44	129	0.73	5:20 PM
42	123	0.73	5:25 PM
41	119	0.73	5:30 PM
32	111	0.87	5:35 PM
29	102	0.88	5:40 PM
24	101	0.84	5:45 PM
32	104	0.81	5:50 PM
26	109	0.76	5:55 PM
30	115	0.76	6:00 PM
21	99	0.92	6:05 PM
26	94	0.65	6:10 PM
24	85	0.56	6:15 PM
26	78	0.72	6:20 PM
21	68	0.47	6:25 PM
23	61	0.40	6:30 PM
25	52	0.48	6:35 PM
36	47	0.33	6:40 PM
38	38	0.25	6:45 PM
27	27	0.25	6:50 PM
11	11	0.25	6:55 PM
-	-	-	7:00 PM
-	-	-	7:05 PM
-	-	-	7:10 PM
-	-	-	7:15 PM
-	-	-	7:20 PM
-	-	-	7:25 PM
-	-	-	7:30 PM
-	-	-	7:35 PM
-	-	-	7:40 PM
-	-	-	7:45 PM
-	-	-	7:50 PM
-	-	-	7:55 PM
-	-	-	8:00 PM
-	-	-	8:05 PM
-	-	-	8:10 PM
-	-	-	8:15 PM
-	-	-	8:20 PM
-	-	-	8:25 PM
-	-	-	8:30 PM
-	-	-	8:35 PM
-	-	-	8:40 PM
-	-	-	8:45 PM

8:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	0	20	455	135	78	1	70	626	21	55	0	25	5	21	7	0	219	5	82	17

-	-	-	8:50 PM
-	-	-	8:55 PM
-	-	-	9:00 PM
-	-	-	9:05 PM
-	-	-	9:10 PM
-	-	-	9:15 PM
-	-	-	9:20 PM
-	-	-	9:25 PM
-	-	-	9:30 PM
-	-	-	9:35 PM
-	-	-	9:40 PM
-	-	-	9:45 PM
-	-	-	9:50 PM
-	-	-	9:55 PM
-	-	-	10:00 PM
-	-	-	10:05 PM
-	-	-	10:10 PM
-	-	-	10:15 PM
-	-	-	10:20 PM
-	-	-	10:25 PM
-	-	-	10:30 PM
-	-	-	10:35 PM
-	-	-	10:40 PM
-	-	-	10:45 PM
-	-	-	10:50 PM
-	-	-	10:55 PM
-	-	-	11:00 PM
-	-	-	11:05 PM
-	-	-	11:10 PM
-	-	-	11:15 PM
-	-	-	11:20 PM
-	-	-	11:25 PM
-	-	-	11:30 PM
-	-	-	11:35 PM
-	-	-	11:40 PM
-	-	-	11:45 PM
			11:50 PM
			11:55 PM

Counter Notes:

All Vehicles	All	SBP	SBR	SBT	SBL	SBU		
		21	76	1,018	8	1		
	EBU	0					13	WBP
	EBL	32					8	WBR
	EBT	10					7	WBT
	EBR	42					248	WBL
	EBP	15					1	WBU
				Vehicles	2,765			
				% Trucks	N/A			
		1	113	986	214	7		
AM Peak Hour	Hour	SBP	SBR	SBT	SBL	SBU		
		1	46	132	1	0		
	EBU	0					6	WBP
	EBL	7					0	WBR
	EBT	1					1	WBT
	EBR	6					20	WBL
	EBP	0					0	WBU
				Vehicles	316			
				PHF	0.66			
				% Trucks	N/A			
PM Peak Hour	Hour	SBP	SBR	SBT	SBL	SBU		
		1	46	132	1	0		
	EBU	0					6	WBP
	EBL	7					0	WBR
	EBT	1					1	WBT
	EBR	6					20	WBL
	EBP	0					0	WBU
				Vehicles	316			
				PHF	0.66			
				% Trucks	N/A			

Highest Peak Hour	SBP	SBR	SBT	SBL	SBU		
	5	13	87	1	0		
EBU	0					0	WBP
EBL	5					0	WBR
EBT	0					1	WBT
EBR	20					16	WBL
EBP	4					0	WBU
			Vehicles	323			
			PHF	0.75			
			% Trucks	N/A			
	0	30	133	17	1		
	NBU	NBL	NBT	NBR	NBP		

PM Peak Hour	SBP	SBR	SBT	SBL	SBU		
	5	13	87	1	0		
EBU	0					0	WBP
EBL	5					0	WBR
EBT	0					1	WBT
EBR	20					16	WBL
EBP	4					0	WBU
			Vehicles	323			
			PHF	0.75			
			% Trucks	N/A			
	0	30	133	17	1		
	NBU	NBL	NBT	NBR	NBP		

Time	Northbound					Southbound					Eastbound					Westbound				
	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped	U-T	LT	TH	RT	Ped
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Total			Time
15-Min	Hour	PHF	
-	-	-	12:00 AM
-	-	-	12:05 AM
-	-	-	12:10 AM
-	-	-	12:15 AM
-	-	-	12:20 AM
-	-	-	12:25 AM
-	-	-	12:30 AM
-	-	-	12:35 AM
-	-	-	12:40 AM
-	-	-	12:45 AM
-	-	-	12:50 AM
-	-	-	12:55 AM
-	-	-	1:00 AM
-	-	-	1:05 AM
-	-	-	1:10 AM
-	-	-	1:15 AM
-	-	-	1:20 AM
-	-	-	1:25 AM
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-	-	-	1:45 AM
-	-	-	1:50 AM
-	-	-	1:55 AM
-	-	-	2:00 AM
-	-	-	2:05 AM
-	-	-	2:10 AM
-	-	-	2:15 AM
-	-	-	2:20 AM
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-	-	-	2:45 AM
-	-	-	2:50 AM
-	-	-	2:55 AM
-	-	-	3:00 AM
-	-	-	3:05 AM
-	-	-	3:10 AM
-	-	-	3:15 AM
-	-	-	3:20 AM
-	-	-	3:25 AM
-	-	-	3:30 AM



3:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	3	0	0	0	11	0	0	0	0	1	0	0	0	2	0	0
7:05 AM	0	0	2	3	0	0	0	4	0	0	0	0	1	0	0	0	2	0	0
7:10 AM	0	0	4	1	0	0	0	4	0	1	0	0	0	0	1	0	2	0	0
7:15 AM	0	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0	1	0	0
7:20 AM	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	2	0	0
7:25 AM	0	0	4	2	0	0	0	7	0	1	0	0	0	0	0	0	3	0	1
7:30 AM	0	0	5	1	0	0	0	14	0	2	0	0	0	0	0	0	5	0	1
7:35 AM	0	0	4	0	0	0	0	20	0	2	0	0	0	0	0	0	3	0	0
7:40 AM	0	0	10	0	0	0	0	16	0	0	0	0	0	0	0	0	3	0	0
7:45 AM	0	0	2	1	0	0	0	30	0	0	0	0	0	0	0	0	3	0	0
7:50 AM	0	1	1	1	0	0	0	17	0	0	0	0	0	0	0	0	3	0	0
7:55 AM	0	0	9	2	0	0	0	6	0	0	0	0	1	1	0	0	1	0	0
8:00 AM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	2	0	0
8:05 AM	0	0	2	1	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0
8:10 AM	0	4	3	1	0	0	0	6	3	0	0	0	0	0	0	0	2	0	1
8:15 AM	0	1	2	1	0	0	0	5	2	0	0	0	0	0	0	0	3	0	1
8:20 AM	0	5	1	0	0	0	0	14	7	0	0	0	0	0	0	0	1	0	0
8:25 AM	0	12	4	2	0	0	0	4	6	0	0	1	0	2	0	0	1	0	1
8:30 AM	0	8	1	0	0	0	0	14	8	0	0	0	0	1	0	0	2	1	2
8:35 AM	0	14	4	1	0	0	0	9	12	1	0	4	0	1	0	0	0	0	0
8:40 AM	0	9	4	0	0	0	1	13	8	0	0	2	0	1	0	0	1	0	1
8:45 AM	0	7	1	0	0	0	0	9	3	0	0	3	0	0	0	0	2	0	3
8:50 AM	0	1	1	0	0	0	0	7	0	2	0	1	0	1	1	0	4	0	0
8:55 AM	0	0	4	2	0	0	0	6	1	0	0	0	0	0	0	0	1	0	0
9:00 AM	0	1	6	1	0	0	0	10	1	0	0	1	0	0	0	0	1	0	0
9:05 AM	0	0	4	1	0	0	0	5	1	0	0	0	0	0	0	0	1	0	0
9:10 AM	0	0	8	1	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0
9:15 AM	0	0	5	3	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0

-	-	-	3:35 AM
-	-	-	3:40 AM
-	-	-	3:45 AM
-	-	-	3:50 AM
-	-	-	3:55 AM
-	-	-	4:00 AM
-	-	-	4:05 AM
-	-	-	4:10 AM
-	-	-	4:15 AM
-	-	-	4:20 AM
-	-	-	4:25 AM
-	-	-	4:30 AM
-	-	-	4:35 AM
-	-	-	4:40 AM
-	-	-	4:45 AM
-	-	-	4:50 AM
-	-	-	4:55 AM
-	-	-	5:00 AM
-	-	-	5:05 AM
-	-	-	5:10 AM
-	-	-	5:15 AM
-	-	-	5:20 AM
-	-	-	5:25 AM
-	-	-	5:30 AM
-	-	-	5:35 AM
-	-	-	5:40 AM
-	-	-	5:45 AM
-	-	-	5:50 AM
-	-	-	5:55 AM
-	-	-	6:00 AM
-	18	0.25	6:05 AM
-	30	0.25	6:10 AM
-	41	0.25	6:15 AM
-	52	0.38	6:20 AM
-	63	0.48	6:25 AM
-	79	0.48	6:30 AM
-	105	0.50	6:35 AM
-	132	0.48	6:40 AM
-	161	0.49	6:45 AM
18	197	0.54	6:50 AM
30	220	0.63	6:55 AM
41	240	0.73	7:00 AM
34	235	0.64	7:05 AM
33	235	0.67	7:10 AM
38	243	0.74	7:15 AM
53	246	0.67	7:20 AM
69	263	0.75	7:25 AM
82	279	0.85	7:30 AM
92	288	0.76	7:35 AM
88	306	0.68	7:40 AM
79	316	0.66	7:45 AM
56	305	0.70	7:50 AM
45	297	0.66	7:55 AM
44	291	0.61	8:00 AM
45	299	0.69	8:05 AM
61	299	0.67	8:10 AM
74	294	0.62	8:15 AM
95	296	0.68	8:20 AM
112	280	0.63	8:25 AM
119	265	0.56	8:30 AM
109	236	0.54	8:35 AM
79	201	0.64	8:40 AM
54	176	0.81	8:45 AM
50	158	0.79	8:50 AM
47	159	0.85	8:55 AM
47	156	0.83	9:00 AM
42	152	0.86	9:05 AM
42	155	0.90	9:10 AM
45	151	0.84	9:15 AM

9:20 AM	0	0	4	0	0	0	0	7	0	0	0	0	0	0	2	0	1	0	0	0
9:25 AM	0	1	3	1	0	0	0	8	1	0	0	0	0	0	0	0	3	0	0	0
9:30 AM	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
9:35 AM	0	0	2	1	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0	0
9:40 AM	0	0	4	2	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0
9:45 AM	0	0	3	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
9:50 AM	0	0	5	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
9:55 AM	0	1	6	0	0	0	0	3	0	1	0	0	0	0	0	0	1	0	0	0
10:00 AM	0	0	5	1	0	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0
10:05 AM	0	2	7	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0
10:10 AM	0	0	4	0	0	0	1	2	0	0	0	0	1	0	0	0	2	0	0	0
10:15 AM	0	0	6	1	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0
10:20 AM	0	1	7	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0
10:25 AM	0	0	4	0	0	0	1	7	0	0	0	0	0	0	0	0	2	0	0	0
10:30 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
10:35 AM	0	1	2	2	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0
10:40 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0
10:45 AM	0	1	4	1	0	0	0	7	0	1	0	0	0	0	0	0	2	0	0	0
10:50 AM	0	0	1	2	0	0	0	5	1	0	0	0	0	0	0	0	2	0	0	0
10:55 AM	0	1	3	3	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	5	1	0	0	0	5	0	0	0	1	0	0	0	0	1	0	0	0
11:05 AM	0	0	3	1	1	0	0	1	0	0	0	1	0	0	0	0	2	0	0	0
11:10 AM	0	0	4	1	0	0	0	10	0	0	0	0	0	0	0	0	2	0	0	0
11:15 AM	0	0	7	1	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0
11:20 AM	0	0	4	4	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	0
11:25 AM	0	1	2	0	0	0	0	7	0	0	0	1	0	0	0	0	1	0	0	0
11:30 AM	0	0	5	0	0	0	0	7	1	1	0	0	0	0	0	0	2	0	0	0
11:35 AM	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
11:40 AM	0	0	6	0	0	0	0	9	1	0	0	0	0	0	0	0	1	0	0	0
11:45 AM	0	0	7	5	0	0	0	6	1	0	0	0	0	0	0	0	1	0	0	0
11:50 AM	0	0	2	0	0	0	0	7	0	0	0	1	0	1	0	0	4	0	0	0
11:55 AM	0	0	10	1	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0
12:00 PM	0	1	8	7	0	0	0	3	0	0	0	0	0	1	0	0	3	0	0	0
12:05 PM	0	0	7	3	0	0	0	4	0	0	0	0	0	0	0	0	3	1	0	0
12:10 PM	0	1	10	1	0	0	0	8	0	0	0	0	1	0	0	0	1	0	0	0
12:15 PM	0	0	5	0	0	0	0	9	0	0	0	0	0	0	0	0	2	0	0	0
12:20 PM	0	2	4	0	0	0	0	4	0	0	0	0	0	1	0	0	1	0	0	0
12:25 PM	0	1	5	2	0	0	0	9	1	0	0	0	0	0	0	0	2	0	0	0
12:30 PM	0	0	7	2	1	0	0	2	1	0	0	0	0	0	0	0	2	0	0	0
12:35 PM	0	0	11	2	0	0	0	5	0	0	0	0	1	0	0	0	3	0	0	0
12:40 PM	0	0	4	1	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0
12:45 PM	0	0	8	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
12:50 PM	0	0	5	0	1	0	0	4	1	0	0	0	0	0	0	0	2	0	0	0
12:55 PM	0	1	6	2	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0
1:00 PM	0	0	9	2	0	0	0	2	4	0	0	0	0	0	0	0	1	2	0	0
1:05 PM	0	1	3	3	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0
1:10 PM	0	1	8	3	0	0	0	9	0	0	0	1	0	0	0	0	2	0	0	0
1:15 PM	0	0	3	1	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0
1:20 PM	0	0	8	2	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0
1:25 PM	1	0	6	3	0	0	0	6	0	0	0	0	0	0	0	0	2	0	0	0
1:30 PM	0	0	9	1	0	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0
1:35 PM	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0	4	0	1	0
1:40 PM	0	0	8	1	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	8	2	0	0	0	13	0	0	0	0	0	0	0	0	2	0	1	0
1:50 PM	0	0	8	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0
1:55 PM	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0
2:00 PM	0	0	4	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
2:05 PM	0	1	11	1	0	0	0	8	0	0	0	0	1	0	0	0	2	0	0	0
2:10 PM	0	0	11	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0
2:15 PM	0	0	2	1	0	0	0	6	0	1	0	0	0	0	0	0	2	0	0	0
2:20 PM	0	0	3	1	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0
2:25 PM	0	0	5	2	0	0	0	7	1	0	0	0	0	1	0	0	0	0	0	0
2:30 PM	0	0	7	2	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0
2:35 PM	0	0	6	0	0	0	0	8	0	0	0	1	0	0	0	0	2	0	0	0
2:40 PM	0	2	14	0	0	0	0	7	0	0	0	0	0	0	0	0	3	0	0	0
2:45 PM	0	0	12	1	1	0	0	11	1	0	0	0	0	0	0	0	0	0	0	0
2:50 PM	0	0	19	2	0	0	0	7	0	1	0	0	0	0	1	0	1	0	0	0
2:55 PM	0	0	13	1	0	0	1	6	0	0	0	0	0	1	0	0	1	0	0	0
3:00 PM	0	1	9	3	0	0	0	5	0	0	0	0	0	1	2	0	2	0	0	0

35	147	0.84	9:20 AM
33	146	0.85	9:25 AM
30	143	0.85	9:30 AM
31	143	0.81	9:35 AM
37	146	0.85	9:40 AM
34	141	0.84	9:45 AM
44	149	0.85	9:50 AM
43	144	0.84	9:55 AM
42	142	0.85	10:00 AM
37	138	0.93	10:05 AM
33	131	0.94	10:10 AM
37	138	0.91	10:15 AM
31	140	0.90	10:20 AM
33	145	0.77	10:25 AM
28	143	0.85	10:30 AM
37	152	0.88	10:35 AM
35	151	0.80	10:40 AM
35	159	0.90	10:45 AM
33	164	0.84	10:50 AM
30	168	0.81	10:55 AM
38	174	0.87	11:00 AM
39	184	0.87	11:05 AM
47	194	0.87	11:10 AM
42	199	0.79	11:15 AM
43	201	0.90	11:20 AM
39	197	0.88	11:25 AM
44	205	0.81	11:30 AM
49	204	0.91	11:35 AM
52	214	0.96	11:40 AM
50	206	0.82	11:45 AM
53	202	0.90	11:50 AM
56	199	0.89	11:55 AM
63	201	0.80	12:00 PM
56	198	0.88	12:05 PM
50	191	0.85	12:10 PM
48	193	0.88	12:15 PM
46	189	0.96	12:20 PM
56	192	0.86	12:25 PM
45	190	0.86	12:30 PM
47	193	0.97	12:35 PM
37	196	0.82	12:40 PM
45	203	0.88	12:45 PM
49	213	0.79	12:50 PM
48	216	0.90	12:55 PM
55	214	0.92	1:00 PM
47	201	0.75	1:05 PM
51	214	0.89	1:10 PM
45	204	0.88	1:15 PM
50	203	0.76	1:20 PM
60	200	0.83	1:25 PM
58	198	0.85	1:30 PM
67	198	0.74	1:35 PM
57	190	0.83	1:40 PM
56	200	0.83	1:45 PM
37	199	0.73	1:50 PM
46	213	0.67	1:55 PM
45	221	0.72	2:00 PM
49	235	0.80	2:05 PM
37	237	0.74	2:10 PM
39	244	0.79	2:15 PM
45	256	0.88	2:20 PM
50	266	0.83	2:25 PM
60	273	0.89	2:30 PM
68	292	0.90	2:35 PM
80	323	0.75	2:40 PM
77	319	0.75	2:45 PM
73	318	0.85	2:50 PM
70	313	0.73	2:55 PM
68	311	0.73	3:00 PM

3:05 PM	0	3	16	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
3:10 PM	0	0	9	2	0	0	0	6	2	0	0	0	0	0	0	0	2	0	0
3:15 PM	0	2	13	1	0	0	0	4	2	0	0	0	0	0	0	0	1	0	0
3:20 PM	0	9	6	1	0	0	0	2	3	0	0	0	0	0	0	0	1	0	0
3:25 PM	0	7	4	0	0	0	0	6	3	1	0	0	0	0	0	0	3	0	0
3:30 PM	0	2	9	4	0	0	0	11	2	3	0	4	0	3	1	0	1	0	0
3:35 PM	0	4	9	0	0	0	0	17	0	0	0	1	0	15	0	0	1	1	0
3:40 PM	0	1	6	1	0	0	0	8	0	0	0	1	1	2	4	0	2	0	0
3:45 PM	0	0	6	1	0	0	0	16	0	0	0	0	0	0	0	0	1	0	0
3:50 PM	0	0	6	3	0	1	0	11	0	1	0	0	0	0	0	0	3	0	0
3:55 PM	0	0	12	3	0	0	0	4	1	0	0	0	0	0	0	0	1	0	0
4:00 PM	0	0	10	1	0	0	0	7	0	0	0	1	1	1	0	0	2	0	0
4:05 PM	0	0	21	1	0	0	0	6	0	0	0	0	0	1	1	0	2	1	0
4:10 PM	0	0	8	1	0	0	0	6	0	0	0	0	0	0	0	0	3	0	0
4:15 PM	0	0	5	1	0	0	0	8	0	0	0	0	0	0	0	0	4	0	0
4:20 PM	0	0	11	3	0	0	0	7	0	1	0	0	0	0	0	0	1	0	1
4:25 PM	0	0	9	3	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
4:30 PM	0	0	11	2	0	0	0	10	0	0	0	2	0	0	0	0	2	0	0
4:35 PM	0	0	8	1	0	0	0	6	0	0	0	0	0	0	0	0	5	0	0
4:40 PM	0	0	16	3	0	0	0	8	0	0	0	1	0	0	0	0	2	0	0
4:45 PM	0	0	8	1	0	0	0	10	0	0	0	0	0	0	0	0	4	0	0
4:50 PM	0	0	12	3	0	0	0	9	0	0	0	0	0	0	0	0	1	0	0
4:55 PM	0	0	15	2	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	9	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	11	2	0	0	0	8	0	0	0	0	0	1	0	0	0	0	0
5:10 PM	0	0	16	2	1	0	0	10	0	0	0	0	1	0	1	0	1	0	0
5:15 PM	0	0	6	3	0	0	0	8	0	0	0	2	0	0	0	0	2	0	0
5:20 PM	0	0	22	4	0	0	0	12	0	0	0	0	0	0	0	0	1	0	0
5:25 PM	0	0	12	2	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0
5:30 PM	0	0	13	2	1	0	0	6	0	0	0	0	0	0	0	0	5	0	0
5:35 PM	0	0	12	2	0	0	0	4	0	0	0	1	0	0	1	0	2	0	2
5:40 PM	0	0	9	3	0	0	1	8	0	0	0	0	0	0	0	0	3	0	0
5:45 PM	0	0	11	2	0	0	0	4	0	0	0	0	1	0	0	0	2	0	0
5:50 PM	0	0	6	2	0	0	0	12	0	0	0	0	0	0	0	1	4	0	0
5:55 PM	0	0	12	4	0	0	0	6	0	0	0	0	0	0	0	0	3	0	0
6:00 PM	0	0	10	2	0	0	0	9	0	0	0	0	0	1	0	0	2	0	0
6:05 PM	0	0	17	4	1	0	0	6	0	0	0	0	0	0	0	0	1	0	1
6:10 PM	0	0	12	1	0	0	0	5	0	0	0	0	0	1	0	0	6	0	0
6:15 PM	0	0	12	3	0	0	0	9	0	0	0	0	0	0	0	0	2	0	0
6:20 PM	0	0	5	3	0	0	0	9	0	0	0	0	0	1	0	0	2	0	0
6:25 PM	0	0	8	4	0	0	0	8	0	0	0	0	0	0	0	0	4	0	0
6:30 PM	0	0	3	3	0	0	0	10	0	0	0	0	0	0	0	0	1	0	0
6:35 PM	0	0	9	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
6:40 PM	0	0	7	2	0	0	0	3	0	0	0	0	0	1	0	0	2	0	1
6:45 PM	0	0	4	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
6:50 PM	0	1	8	1	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0
6:55 PM	0	0	5	1	0	0	0	8	0	0	0	0	0	0	0	0	3	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

70	313	0.83	3:05 PM
66	319	0.75	3:10 PM
68	316	0.75	3:15 PM
81	311	0.83	3:20 PM
107	312	0.73	3:25 PM
106	305	0.72	3:30 PM
94	296	0.79	3:35 PM
70	268	0.88	3:40 PM
69	276	0.90	3:45 PM
68	275	0.94	3:50 PM
76	276	0.88	3:55 PM
73	281	0.91	4:00 PM
68	274	0.94	4:05 PM
59	264	0.85	4:10 PM
57	276	0.90	4:15 PM
66	279	0.96	4:20 PM
63	295	0.82	4:25 PM
77	298	0.94	4:30 PM
73	297	0.88	4:35 PM
78	300	0.83	4:40 PM
74	294	0.93	4:45 PM
67	291	0.87	4:50 PM
64	291	0.81	4:55 PM
68	290	0.92	5:00 PM
73	298	0.89	5:05 PM
90	305	0.85	5:10 PM
79	300	0.95	5:15 PM
84	305	0.91	5:20 PM
68	286	0.92	5:25 PM
73	291	0.93	5:30 PM
67	282	0.88	5:35 PM
69	274	0.88	5:40 PM
70	266	0.85	5:45 PM
74	260	0.81	5:50 PM
78	252	0.81	5:55 PM
78	244	0.78	6:00 PM
80	220	0.69	6:05 PM
71	191	0.67	6:10 PM
70	166	0.59	6:15 PM
61	140	0.57	6:20 PM
56	120	0.54	6:25 PM
48	96	0.50	6:30 PM
45	79	0.44	6:35 PM
47	64	0.34	6:40 PM
48	48	0.25	6:45 PM
34	34	0.25	6:50 PM
17	17	0.25	6:55 PM
-	-	-	7:00 PM
-	-	-	7:05 PM
-	-	-	7:10 PM
-	-	-	7:15 PM
-	-	-	7:20 PM
-	-	-	7:25 PM
-	-	-	7:30 PM
-	-	-	7:35 PM
-	-	-	7:40 PM
-	-	-	7:45 PM
-	-	-	7:50 PM
-	-	-	7:55 PM
-	-	-	8:00 PM
-	-	-	8:05 PM
-	-	-	8:10 PM
-	-	-	8:15 PM
-	-	-	8:20 PM
-	-	-	8:25 PM
-	-	-	8:30 PM
-	-	-	8:35 PM
-	-	-	8:40 PM
-	-	-	8:45 PM



# APPENDIX C

## PC Warrants



# Cedar City, Wedgewood Lane / Fiddlers Canyon Road

## All-Way Stop Warrant Study

Study Name: Cedar City TS - Wedgewood & Fiddlers

Study Date : 11/4/2025

### Multiway Stop Warrants - Summary

#### Major Street Approaches

Eastbound: Fiddlers Canyon Road

Number of Lanes : 1

Total Approach Volume: 2,023

Westbound: Fiddlers Canyon Road

Number of Lanes : 1

Total Approach Volume: 1,423

#### Minor Street Approaches

Northbound: Wedgewood Lane

Number of Lanes : 1

Total Approach Volume: 534

Southbound: Wedgewood Lane

Number of Lanes : 1

Total Approach Volume: 895

#### Warrant Summary (Urban Values Apply)

<b>Criteria A - Interim Measure</b> .....	Not Evaluated
If traffic signals are justified, stop signs can be installed as an interim measure.	
<b>Criteria B - Crash Experience</b> .....	Not Satisfied
Number of crashes (1) is less than minimum required (5).	
<b>Criteria C - Minimum Volumes and Delays</b> .....	Not Satisfied
Average Delay Per Vehicle (05.0) is less than minimum required (30).	
Average of 8 highest hours is less than volume criteria.	
<b>Criteria D - 80% of Volumes, Delays, and Crashes</b> .....	Not Satisfied
Average Delay Per Vehicle (05.0) is less than minimum required (24).	
Number of crashes (1) is less than minimum required (4).	
Average of 8 highest hours is less than volume criteria.	

#### Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:00 - 16:00	430	324.3	222	137.5	300	200	No
08:15 - 09:15	352		216				
16:45 - 17:45	370		140				
17:45 - 18:45	322		80				
07:15 - 08:15	295		107				
11:30 - 12:30	290		109				
14:00 - 15:00	271		127				
12:45 - 13:45	264		99				
10:30 - 11:30	177		79				
09:15 - 10:15	175		73				
18:45 - 19:45	66		26				
06:15 - 07:15	42		13				

#### Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:00 - 16:00	430	324.3	222	137.5	240	160	No
08:15 - 09:15	352		216				
16:45 - 17:45	370		140				
17:45 - 18:45	322		80				
07:15 - 08:15	295		107				
11:30 - 12:30	290		109				
14:00 - 15:00	271		127				
12:45 - 13:45	264		99				
10:30 - 11:30	177		79				
09:15 - 10:15	175		73				
18:45 - 19:45	66		26				
06:15 - 07:15	42		13				

# Cedar City, 1935 North / Wedgewood Lane

## All-Way Stop Warrant Study

Study Name: 1935 North & Wedgewood Lane

Study Date : 10/23/2025

### Multiway Stop Warrants - Summary

#### Major Street Approaches

Northbound: Wedgewood Lane

Number of Lanes : 1

Total Approach Volume: 610

Southbound: Wedgewood Lane

Number of Lanes : 1

Total Approach Volume: 717

#### Minor Street Approaches

Eastbound: 1935 North

Number of Lanes : 1

Total Approach Volume: 184

Westbound: 1935 North

Number of Lanes : 1

Total Approach Volume: 306

#### Warrant Summary (Urban Values Apply)

**Criteria A - Interim Measure**..... Not Evaluated  
If traffic signals are justified, stop signs can be installed as an interim measure.

**Criteria B - Crash Experience**..... **Not Satisfied**  
Number of crashes (0) is less than minimum required (5).

**Criteria C - Minimum Volumes and Delays**..... **Not Satisfied**  
Average Delay Per Vehicle (05.0) is less than minimum required (30).  
Average of 8 highest hours is less than volume criteria.

**Criteria D - 80% of Volumes, Delays, and Crashes**..... **Not Satisfied**  
Average Delay Per Vehicle (05.0) is less than minimum required (24).  
Number of crashes (0) is less than minimum required (4).  
Average of 8 highest hours is less than volume criteria.

#### Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
14:45 - 15:45	210	133.3	118	52.1	300	200	No
08:00 - 09:00	187		177				
16:45 - 17:45	152		21				
15:45 - 16:45	116		35				
18:00 - 19:00	110		9				
07:00 - 08:00	100		13				
13:45 - 14:45	96		16				
11:45 - 12:45	95		28				
12:45 - 13:45	74		19				
09:00 - 10:00	67		20				
10:45 - 11:45	65		19				
06:15 - 07:15	-1		-1				

#### Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
14:45 - 15:45	210	133.3	118	52.1	240	160	No
08:00 - 09:00	187		177				
16:45 - 17:45	152		21				
15:45 - 16:45	116		35				
18:00 - 19:00	110		9				
07:00 - 08:00	100		13				
13:45 - 14:45	96		16				
11:45 - 12:45	95		28				
12:45 - 13:45	74		19				
09:00 - 10:00	67		20				
10:45 - 11:45	65		19				
06:15 - 07:15	-1		-1				

# Cedar City, 1935 North / Fiddlers Canyon Road

## All-Way Stop Warrant Study

Study Name: 1935 North & Fiddlers Canyon Rd

Study Date : 10/24/2025

### Multiway Stop Warrants - Summary

#### Major Street Approaches

**Northbound: Fiddlers Canyon Rd**

Number of Lanes : 1

Total Approach Volume: 1,313

**Southbound: Fiddlers Canyon Rd**

Number of Lanes : 1

Total Approach Volume: 1,102

#### Minor Street Approaches

**Eastbound: 1935 North**

Number of Lanes : 1

Total Approach Volume: 84

**Westbound: 1935 North**

Number of Lanes : 1

Total Approach Volume: 263

#### Warrant Summary (Urban Values Apply)

<b>Criteria A - Interim Measure</b> .....	Not Evaluated
If traffic signals are justified, stop signs can be installed as an interim measure.	
<b>Criteria B - Crash Experience</b> .....	<b>Not Satisfied</b>
Number of crashes (0) is less than minimum required (5).	
<b>Criteria C - Minimum Volumes and Delays</b> .....	<b>Not Satisfied</b>
Average Delay Per Vehicle (05.0) is less than minimum required (30).	
Average of 8 highest hours is less than volume criteria.	
<b>Criteria D - 80% of Volumes, Delays, and Crashes</b> .....	<b>Not Satisfied</b>
Average Delay Per Vehicle (05.0) is less than minimum required (24).	
Number of crashes (0) is less than minimum required (4).	
Average of 8 highest hours is less than volume criteria.	

#### Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
07:45 - 08:45	281	214.9	35	32.1	300	200	No
14:45 - 15:45	274		45				
17:15 - 18:15	258		41				
16:00 - 17:00	245		36				
13:00 - 14:00	190		23				
11:45 - 12:45	173		33				
08:45 - 09:45	150		26				
18:15 - 19:15	148		18				
10:45 - 11:45	138		21				
06:45 - 07:45	135		26				
09:45 - 10:45	124		17				
06:15 - 07:15	-1		-1				

#### Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
07:45 - 08:45	281	214.9	35	32.1	240	160	No
14:45 - 15:45	274		45				
17:15 - 18:15	258		41				
16:00 - 17:00	245		36				
13:00 - 14:00	190		23				
11:45 - 12:45	173		33				
08:45 - 09:45	150		26				
18:15 - 19:15	148		18				
10:45 - 11:45	138		21				
06:45 - 07:45	135		26				
09:45 - 10:45	124		17				
06:15 - 07:15	-1		-1				

# APPENDIX D

## Improvement Exhibits





DATE 12/19/2025  
PROJECT UT25-3088  
Figure D1

## Fiddlers Canyon Elementary Recommended Improvements





## MEMORANDUM

Date: December 18, 2025

To: Cedar City

From: Hales Engineering



Subject: Cedar City - Cedar Middle School Crossing Evaluation

UT25-3088

### Introduction

As part of the Cedar City 2025 Traffic Studies, Hales Engineering evaluated the existing school crossing for Cedar Middle School on Royal Hunte Drive. The purpose of this memorandum is to record observations made at the school crossing, evaluate the crossing for safety enhancements, and provide recommended solutions for pedestrian safety at Cedar Middle School.

### Location Description

The crosswalk is located on Royal Hunte Drive between the west and central accesses to Cedar Middle School. Royal Hunte Drive has one travel lane in each direction separated by a center two-way left-turn lane (TWLTL) as well as bike lanes on both sides of the roadway. The posted speed limit is 25 mph in the study area. School crosswalk signs are currently located at the crosswalk as well as at locations approximately 600 feet to the west and 550 feet to the east of the crosswalk. The crosswalk is located within a 20-mph reduced speed school zone (RSSZ) that is activated during the before- and after-school periods.

### Site Observations

Hales Engineering visited the school crosswalk before and after school on Wednesday, September 17, 2025, from 7:15 AM to 8:00 AM and from 2:00 PM to 2:45 PM to observe the pedestrian and vehicular activity at the site. The general observations from the site visit are recorded as follows:

- A significant number of parents are using the Hills Recreation Complex parking lot on the north side of Royal Hunte Drive to park and wait for their children to cross the street.
- On-street parking was observed all along both sides of Royal Hunte Drive adjacent to school and to the northwest along the curve. Parents are often parking in red curbed areas, including right next to the existing crosswalk, restricting sight distance at the crosswalk.
- Westbound left-turn queuing occurs on Royal Hunte Drive at the east school access as parents enter the site, particularly during the morning drop-off period. During the afternoon

it seems more parents are parking off-site rather than using the designated pick-up area, which does not have a bypass lane and is blocked with parents parking on both sides of the internal driveway.

- Due to delay in exiting the Hills Recreation Complex parking lot, many vehicles route to the northwest along a dirt path to turn onto Cove Drive/Royal Hunte Drive.
- Parents were also observed parking on all sides of the Rudd Road / Royal Hunte Drive intersection during the afternoon pick-up period, often narrowing the available travel width on Rudd Road.

## Data Collection

### Traffic Counts

Vehicle and pedestrian count data were collected on Wednesday, September 17, 2025, from 7:00 AM to 7:00 PM. The pedestrian peak hour was identified to be from 2:10 PM to 3:10 PM. A summary of the pedestrian count data at the study location is provided in Table 1. As shown, a total of 228 pedestrians were observed during the count period, including 160 pedestrians during the pedestrian peak hour. Peak hour traffic counts for the pedestrian peak hour are provided in Table 2. Detailed count data are provided in Appendix A of the report.

**Table 1: Pedestrian Counts**

Date	Time Period	Pedestrian Volume
9/17/2025	2:10 PM – 3:10 PM	160
	7:00 AM – 7:00 PM	228

**Table 2. Vehicular Volumes – Pedestrian Peak Hour**

Pedestrian Peak Hour	Royal Hunte Drive		Total
	Eastbound	Westbound	
2:10 PM - 3:10 PM	199	255	454

### Speed Data

Speed samples were collected on Royal Hunte Drive at the crosswalk location outside of peak hours. The 85<sup>th</sup> percentile speeds were determined to be 30 mph for eastbound vehicles and 37 mph for westbound vehicles with the overall 85<sup>th</sup> percentile speed being 34 mph. These high speeds, compared with the 25-mph posted speed are likely due to the wide cross-section on Royal Hunte Drive. Traffic calming and speed management measures could be considered here to better align the posted and observed travel speeds.

## **Analysis**

### *Pedestrian Hybrid Beacon (PHB)*

A warrant analysis for a PHB was performed following the process described in Section 4F of the Utah Manual on Uniform Traffic Control Devices (MUTCD). Figures 4F-1 and 4F-2 of the Utah MUTCD (provided in Appendix B) outlines the guidelines for warranting a PHB. A minimum pedestrian volume of 20 pedestrians is required to install a PHB. 160 pedestrians were observed crossing during the pedestrian peak hour. The following items were considered based on MUTCD Section 4F:

- As identified previously, the crossing distance is approximately 74 feet
- The maximum pedestrian hourly volume at the location was 160 pedestrians between 2:10 and 3:10 PM
- The corresponding vehicle hourly volume (total of both directions) was 454 vehicles per hour

Based on these considerations, the pedestrian and vehicle volumes meet the minimum threshold for a PHB. Therefore, installing a PHB at the proposed location could be considered. While a PHB is currently warranted at the school crossing, it may not be with a slight decrease in pedestrian volumes if on-site circulation improvements were to be explored. Therefore, improvements to on-site circulation should be considered prior to installing a PHB or other crosswalk enhancements.

### **On-Site Circulation**

Changes to on-site circulation may help to reduce the perceived need for off-site parking. This would reduce the pedestrian demand at the existing crosswalk so that parents would have less of a need to park along Royal Hunte Drive or in the Hills Recreation Complex parking lot. This decrease in demand may result in a PHB no longer being needed. For example, the school could consider swapping the bus and parent pick-up/drop-off locations or adding additional pick-up drop-off zones elsewhere on the property.

### **Other Considerations**

Some additional considerations for the crosswalk include the following items:

- Based on a design speed of 35 mph, drivers need 250 feet of stopping sight distance available to them as they approach the crosswalk. This sight distance was observed to be obstructed by vehicles parking near the crosswalk, particularly on the north side of Royal Hunte Drive. It is recommended that red curb parking restrictions be enforced at the school site as multiple violations to this restriction were observed during the afternoon pick-up time.
- To improve sight distance at the crosswalk, the following may be considered:

- Relocate the crosswalk eastward to be located on the west side of the central (egress) access. This would also be a better connection to sidewalks on the school property so that students are not encouraged to walk through the parking lot.
  - Add pedestrian bulb-outs on both sides of the crosswalk. These can be temporary (striping and bollards) or permanent curb extensions with and without a center refuge isle.
  - Install pedestrian crossing enhancements, such as rectangular rapid flashing beacons (RRFBs) that can be activated to alert drivers to when pedestrians are crossing. A concept of this configuration in addition to on-site improvements is provided in Figure 1.
- Parking restrictions are recommended on Royale Hunte Drive near the Rudd Road / Royal Hunte Drive intersection to increase safety, prevent blocking of movement on Royal Hunte Drive, and prevent obstructions in sight distance for vehicles navigating the intersection during pick-up time.

### **Estimated Cost**

Hales Engineering completed an approximate engineer's estimate of the cost to relocate the pedestrian crosswalk and install rectangular RRFBs and a bulb-outs on the north and south sides of Royal Hunte Drive along with the other recommended improvements. The following are the key assumptions made within the estimate:

- Old curb and gutter to be removed and replaced with new curb and gutter for bulb-outs
- New sidewalk connecting to the proposed crosswalk location to be added on-site at Cedar Middle School
- RRFBs to be solar-powered units that do not need added utility connections
- Pavement/red curb striping and signage costs were taken from a bid tabulation for pavement marking projects in Cedar City during fiscal year 2025.

Based on the engineer's estimate, it is anticipated that the recommended improvements will cost between \$45,000 and \$50,000.

### **Conclusions**

The findings of this study are as follows:

- A PHB is warranted at the Cedar Middle School crosswalk but may no longer be warranted if on-site improvements are made. It is recommended that on-site improvements alternate crosswalk enhancements be considered prior to implementing a PHB.
- The following improvements are recommended:
  - Increase enforcement on the restricted parking areas adjacent to the crosswalk to maintain safe stopping sight distance
  - Relocate the pedestrian crossing eastward on Royal Hunte Drive, just west of the center access driveway.
  - Add pedestrian bulb-outs to the crosswalk



- Install a RRFB or other enhanced pedestrian crossing
  - Consider changes to on-site circulation to bring more vehicles on-site so that fewer students cross Royal Hunte Drive.
- Parking restrictions are recommended on Royal Hunte Drive at the Rudd Road / Royal Hunte Drive intersection to prevent obstructions to intersection sight distance for vehicles making left-turn movements.

If you have any questions regarding this memorandum, please contact us at 801.766.4343.



DATE	12/18/2025
PROJECT	UT25-3068
Figure 1	

# Cedar Middle School Site Recommendations Cedar City Traffic Studies 2025

# APPENDIX A

## Turning Movement Counts



All Vehicles	All	SBP	SBR	SBT	SBL	SBU		
		64	0	0	0	0		
	EBU	2					11	WBP
	EBL	0					0	WBR
	EBT	1,629	Vehicles 3,858			2,225		WBT
	EBR	0	% Trucks N/A			0		WBL
	EBP	0				2		WBU
		0	0	0	0	164		
		NBU	NBL	NBT	NBR	NBP		
AM Peak Hour	AM Peak Hour	SBP	SBR	SBT	SBL	SBU		
		15	0	0	0	0		
	EBU	0					3	WBP
	EBL	0					0	WBR
	EBT	87	7:25 AM - 8:25 AM			138		WBT
	EBR	0	Vehicles 525			0		WBL
	EBP	0	PHF 0.68			0		WBU
		0	% Trucks N/A					
		0	0	0	0	0		
		NBU	NBL	NBT	NBR	NBP		

Highest Peak Hour	SBP	SBR	SBT	SBL	SBU		
	15	0	0	0	0		
EBU	0					4	WBP
EBL	0					0	WBR
EBT	96	7:25 AM - 8:25 AM				146	WBT
EBR	0	Vehicles 525				0	WBL
EBP	0	PHF 0.68				0	WBU
		% Trucks N/A					
	0	0	0	0	0		
	NBU	NBL	NBT	NBR	NBP		

PM Peak Hour	SBP	SBR	SBT	SBL	SBU		
	0	0	0	0	0		
EBU	0					0	WBP
EBL	0					0	WBR
EBT	62	2:10 PM - 3:10 PM				79	WBT
EBR	0	Vehicles 457				0	WBL
EBP	0	PHF 0.76				1	WBU
		% Trucks N/A					
	0	0	0	0	76		
	NBU	NBL	NBT	NBR	NBP		

Time	Northbound					Southbound					Eastbound					Westbound				
	U-T	LT	TH	RT	Bike	U-T	LT	TH	RT	Bike	U-T	LT	TH	RT	Bike	U-T	LT	TH	RT	Bike
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Total			Time
15-Min	Hour	PHF	
-	-	-	12:00 AM
-	-	-	12:05 AM
-	-	-	12:10 AM
-	-	-	12:15 AM
-	-	-	12:20 AM
-	-	-	12:25 AM
-	-	-	12:30 AM
-	-	-	12:35 AM
-	-	-	12:40 AM
-	-	-	12:45 AM
-	-	-	12:50 AM
-	-	-	12:55 AM
-	-	-	1:00 AM
-	-	-	1:05 AM
-	-	-	1:10 AM
-	-	-	1:15 AM
-	-	-	1:20 AM
-	-	-	1:25 AM
-	-	-	1:30 AM
-	-	-	1:35 AM
-	-	-	1:40 AM
-	-	-	1:45 AM
-	-	-	1:50 AM
-	-	-	1:55 AM
-	-	-	2:00 AM
-	-	-	2:05 AM
-	-	-	2:10 AM
-	-	-	2:15 AM
-	-	-	2:20 AM
-	-	-	2:25 AM
-	-	-	2:30 AM
-	-	-	2:35 AM
-	-	-	2:40 AM
-	-	-	2:45 AM
-	-	-	2:50 AM
-	-	-	2:55 AM
-	-	-	3:00 AM
-	-	-	3:05 AM
-	-	-	3:10 AM
-	-	-	3:15 AM
-	-	-	3:20 AM
-	-	-	3:25 AM
-	-	-	3:30 AM





9:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	12	0	2
9:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	11	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	9	0	0	0	9	0	0
9:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	15	0	0
9:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	6	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	6	0	0	0	9	0	0
9:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	6	0	0
9:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	8	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	12	0	0
10:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	12	0	0
10:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	7	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	8	0	0
10:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	5	0	0
10:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	8	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	8	0	0
10:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	17	0	0
10:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	5	0	0
10:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	9	0	0
10:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	12	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	11	0	0
11:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	10	0	0
11:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	9	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	14	0	0
11:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	13	0	0
11:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	17	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	14	0	0
11:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	14	0	0
11:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	9	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	16	0	0
11:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	13	0	0
11:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	13	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	17	0	0
12:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	18	0	0
12:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	17	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	15	0	0
12:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	15	0	0
12:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	16	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	7	0	0
12:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	12	0	0
12:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	16	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	11	0	0
12:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	13	0	0
12:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	15	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	20	0	0
1:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	15	0	0
1:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	19	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	11	0	0
1:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	18	0	0
1:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	8	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	10	0	0
1:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	36	0	0
1:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	16	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	11	0	0
1:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	16	0	0
1:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	10	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	9	0	0
2:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	6	0	0
2:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	12	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	13	0	0
2:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	0	0
2:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	25	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	11	0	0	0	0	24	0	0
2:35 PM	0	0	0	0	61	0	0	0	0	0	0	0	24	0	0	0	0	23	0	0
2:40 PM	0	0	0	0	76	0	0	0	0	0	0	0	28	0	0	0	0	26	0	0
2:45 PM	0	0	0	0	16	0	0	0	0	0	0	0	26	0	0	0	0	32	0	0
2:50 PM	0	0	0	0	7	0	0	0	0	0	0	0	16	0	0	0	0	22	0	0
2:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	1	0	16	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	16	0	0

49	190	0.90	9:20 AM
52	191	0.92	9:25 AM
56	196	0.88	9:30 AM
53	199	0.86	9:35 AM
48	205	0.78	9:40 AM
45	201	0.82	9:45 AM
46	206	0.86	9:50 AM
49	207	0.78	9:55 AM
45	220	0.86	10:00 AM
42	221	0.91	10:05 AM
42	227	0.82	10:10 AM
50	239	0.93	10:15 AM
58	247	0.91	10:20 AM
66	260	0.87	10:25 AM
61	269	0.84	10:30 AM
60	269	0.84	10:35 AM
50	275	0.85	10:40 AM
64	286	0.89	10:45 AM
61	296	0.85	10:50 AM
69	301	0.93	10:55 AM
64	292	0.91	11:00 AM
68	302	0.87	11:05 AM
75	300	0.93	11:10 AM
80	299	0.93	11:15 AM
80	301	0.86	11:20 AM
81	293	0.90	11:25 AM
78	288	0.92	11:30 AM
87	282	0.81	11:35 AM
76	268	0.88	11:40 AM
70	268	0.94	11:45 AM
67	258	0.96	11:50 AM
68	256	0.94	11:55 AM
71	259	0.91	12:00 PM
67	264	0.90	12:05 PM
68	267	0.84	12:10 PM
69	271	0.82	12:15 PM
61	268	0.92	12:20 PM
56	272	0.86	12:25 PM
58	267	0.80	12:30 PM
63	277	0.95	12:35 PM
64	326	0.74	12:40 PM
61	324	0.70	12:45 PM
73	324	0.74	12:50 PM
79	327	0.74	12:55 PM
83	322	0.70	1:00 PM
71	306	0.70	1:05 PM
73	299	0.68	1:10 PM
65	295	0.64	1:15 PM
70	299	0.68	1:20 PM
110	304	0.69	1:25 PM
115	325	0.71	1:30 PM
110	337	0.77	1:35 PM
65	317	0.64	1:40 PM
59	348	0.63	1:45 PM
55	386	0.61	1:50 PM
51	402	0.67	1:55 PM
56	412	0.75	2:00 PM
64	423	0.67	2:05 PM
78	457	0.76	2:10 PM
95	450	0.82	2:15 PM
108	451	0.71	2:20 PM
123	442	0.74	2:25 PM
138	418	0.76	2:30 PM
159	403	0.63	2:35 PM
150	381	0.64	2:40 PM
123	349	0.71	2:45 PM
92	310	0.84	2:50 PM
106	297	0.70	2:55 PM
94	296	0.79	3:00 PM

3:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	30	0	0
3:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	11	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	13	0	0
3:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	13	0	0
3:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	9	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	13	0	0
3:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	10	0	0
3:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	12	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	15	0	0
3:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	16	0	0
3:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	11	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	9	0	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	18	0	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	15	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	14	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	12	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	17	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	14	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	12	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	19	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	18	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	17	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	24	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	24	0	0
5:10 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	18	0	0	0	0	64	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	9	0	0	0	0	23	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	13	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	16	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	20	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	18	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	16	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	13	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	16	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	10	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	16	0	0
6:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	20	0	0
6:10 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	0	0	20	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	24	0	0
6:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	21	0	0
6:25 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	13	0	0	1	0	21	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	21	0	0
6:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	38	0	0
6:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	13	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	15	0	0
6:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	0	0
6:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	17	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

92	291	0.79	3:05 PM
63	266	0.89	3:10 PM
63	278	0.91	3:15 PM
60	278	0.88	3:20 PM
62	274	0.91	3:25 PM
69	275	0.90	3:30 PM
66	281	0.89	3:35 PM
66	277	0.92	3:40 PM
70	273	0.90	3:45 PM
73	280	0.89	3:50 PM
75	281	0.94	3:55 PM
76	279	0.92	4:00 PM
79	287	0.90	4:05 PM
71	287	0.89	4:10 PM
60	342	0.62	4:15 PM
63	349	0.62	4:20 PM
65	353	0.64	4:25 PM
67	364	0.65	4:30 PM
65	373	0.66	4:35 PM
70	379	0.69	4:40 PM
76	387	0.70	4:45 PM
80	391	0.69	4:50 PM
81	390	0.71	4:55 PM
139	393	0.71	5:00 PM
141	391	0.69	5:05 PM
137	400	0.73	5:10 PM
82	345	0.95	5:15 PM
87	350	0.88	5:20 PM
91	362	0.91	5:25 PM
90	370	0.86	5:30 PM
83	363	0.91	5:35 PM
81	400	0.78	5:40 PM
82	404	0.81	5:45 PM
80	401	0.83	5:50 PM
91	404	0.78	5:55 PM
91	406	0.82	6:00 PM
100	378	0.78	6:05 PM
99	342	0.66	6:10 PM
107	315	0.64	6:15 PM
100	278	0.57	6:20 PM
129	243	0.47	6:25 PM
124	208	0.42	6:30 PM
121	178	0.37	6:35 PM
85	114	0.34	6:40 PM
84	84	0.25	6:45 PM
57	57	0.25	6:50 PM
29	29	0.25	6:55 PM
-	-	-	7:00 PM
-	-	-	7:05 PM
-	-	-	7:10 PM
-	-	-	7:15 PM
-	-	-	7:20 PM
-	-	-	7:25 PM
-	-	-	7:30 PM
-	-	-	7:35 PM
-	-	-	7:40 PM
-	-	-	7:45 PM
-	-	-	7:50 PM
-	-	-	7:55 PM
-	-	-	8:00 PM
-	-	-	8:05 PM
-	-	-	8:10 PM
-	-	-	8:15 PM
-	-	-	8:20 PM
-	-	-	8:25 PM
-	-	-	8:30 PM
-	-	-	8:35 PM
-	-	-	8:40 PM
-	-	-	8:45 PM

8:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	164	0	0	0	0	64	2	0	1,629	0	0	2	0	2,225	11

-	-	-	8:50 PM
-	-	-	8:55 PM
-	-	-	9:00 PM
-	-	-	9:05 PM
-	-	-	9:10 PM
-	-	-	9:15 PM
-	-	-	9:20 PM
-	-	-	9:25 PM
-	-	-	9:30 PM
-	-	-	9:35 PM
-	-	-	9:40 PM
-	-	-	9:45 PM
-	-	-	9:50 PM
-	-	-	9:55 PM
-	-	-	10:00 PM
-	-	-	10:05 PM
-	-	-	10:10 PM
-	-	-	10:15 PM
-	-	-	10:20 PM
-	-	-	10:25 PM
-	-	-	10:30 PM
-	-	-	10:35 PM
-	-	-	10:40 PM
-	-	-	10:45 PM
-	-	-	10:50 PM
-	-	-	10:55 PM
-	-	-	11:00 PM
-	-	-	11:05 PM
-	-	-	11:10 PM
-	-	-	11:15 PM
-	-	-	11:20 PM
-	-	-	11:25 PM
-	-	-	11:30 PM
-	-	-	11:35 PM
-	-	-	11:40 PM
-	-	-	11:45 PM
-	-	-	11:50 PM
-	-	-	11:55 PM

# APPENDIX B

## MUTCD PHB Criteria

## CHAPTER 4F. PEDESTRIAN HYBRID BEACONS

### Section 4F.01 Application of Pedestrian Hybrid Beacons

#### Support:

- 01 A pedestrian hybrid beacon is a special type of hybrid beacon used to warn and control traffic at an unsignalized location to assist pedestrians in crossing a street or highway at a marked crosswalk.

#### Option:

- 02 A pedestrian hybrid beacon may be considered for installation to facilitate pedestrian crossings at a location that does not meet traffic signal warrants (see Chapter 4C), or at a location that meets traffic signal warrants under Sections 4C.05 and/or 4C.06 but a decision is made to not install a traffic control signal.

#### Standard:

- 03 If used, pedestrian hybrid beacons shall be used in conjunction with signs and pavement markings to warn and control traffic at locations where pedestrians enter or cross a street or highway. A pedestrian hybrid beacon shall only be installed at a marked crosswalk.

#### Guidance:

- 04 *If one of the signal warrants of Chapter 4C is met and a traffic control signal is justified by an engineering study, and if a decision is made to install a traffic control signal, it should be installed based upon the provisions of Chapters 4D and 4E.*
- 05 *If a traffic control signal is not justified under the signal warrants of Chapter 4C and if gaps in traffic are not adequate to permit pedestrians to cross, or if the speed for vehicles approaching on the major street is too high to permit pedestrians to cross, or if pedestrian delay is excessive, the need for a pedestrian hybrid beacon should be considered on the basis of an engineering study that considers major-street volumes, speeds, widths, and gaps in conjunction with pedestrian volumes, walking speeds, and delay.*
- 06 *For a major street where the posted or statutory speed limit or the 85th-percentile speed is 35 mph or less, the need for a pedestrian hybrid beacon should be considered if the engineering study finds that the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding total of all pedestrians crossing the major street for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4F-1 for the length of the crosswalk.*
- 07 *For a major street where the posted or statutory speed limit or the 85th-percentile speed exceeds 35 mph, the need for a pedestrian hybrid beacon should be considered if the engineering study finds that the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding total of all pedestrians crossing the major street for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4F-2 for the length of the crosswalk.*
- 08 *For crosswalks that have lengths other than the four that are specifically shown in Figures 4F-1 and 4F-2, the values should be interpolated between the curves.*

### Section 4F.02 Design of Pedestrian Hybrid Beacons

#### Standard:

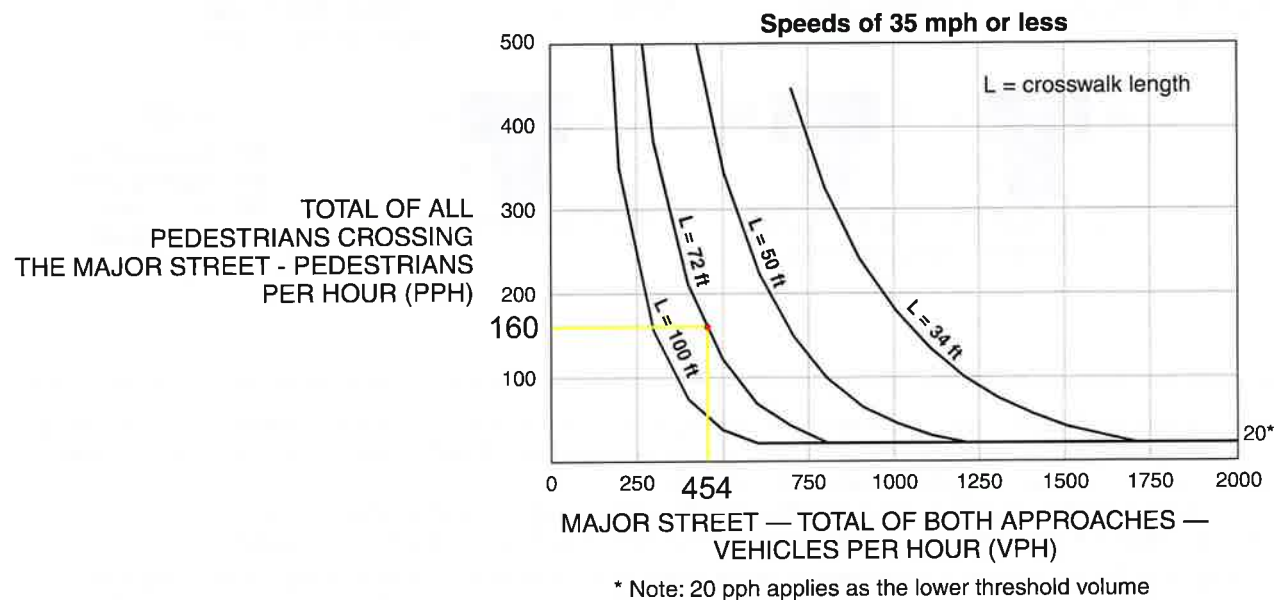
- 01 Except as otherwise provided in this Section, a pedestrian hybrid beacon shall meet the provisions of Chapters 4D and 4E.
- 02 A pedestrian hybrid beacon face shall consist of three signal sections, with a CIRCULAR YELLOW signal indication centered below two horizontally aligned CIRCULAR RED signal indications (see Figure 4F-3).
- 03 When an engineering study finds that installation of a pedestrian hybrid beacon is justified, then:
- A. At least two pedestrian hybrid beacon faces shall be installed for each approach of the major street,
  - B. A stop line shall be installed for each approach to the crosswalk,
  - C. A pedestrian signal head conforming to the provisions set forth in Chapter 4E shall be installed at each end of the marked crosswalk, and
  - D. The pedestrian hybrid beacon shall be pedestrian actuated.

#### Guidance:

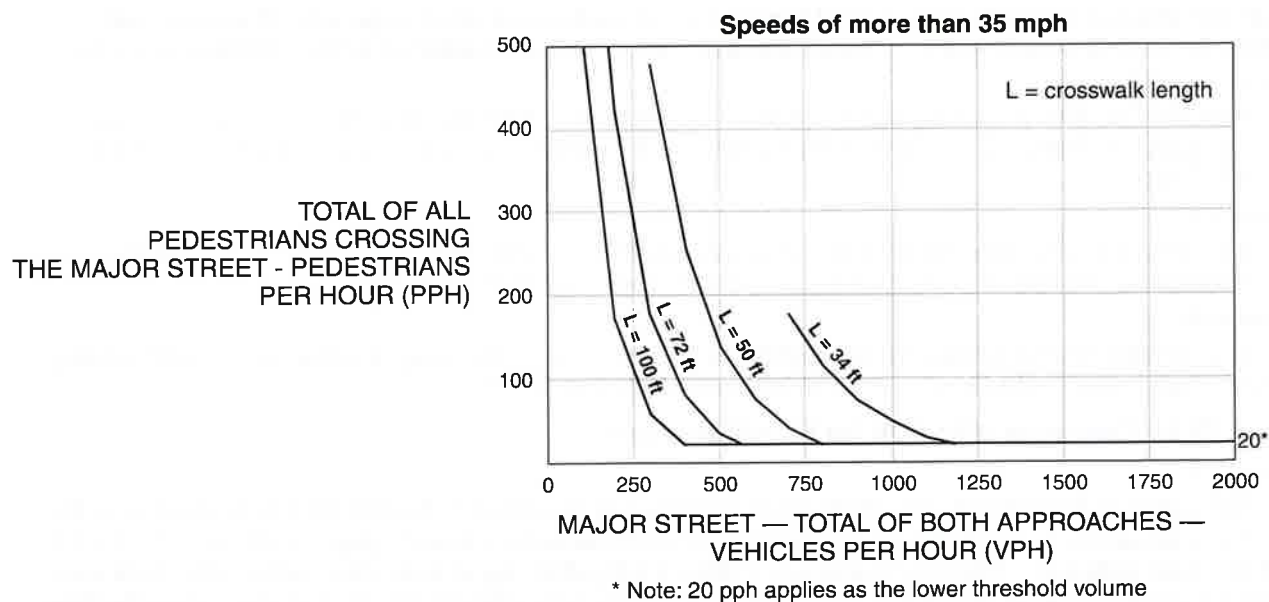
- 04 When an engineering study finds that installation of a pedestrian hybrid beacon is justified, then:
- A. The pedestrian hybrid beacon should be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs,

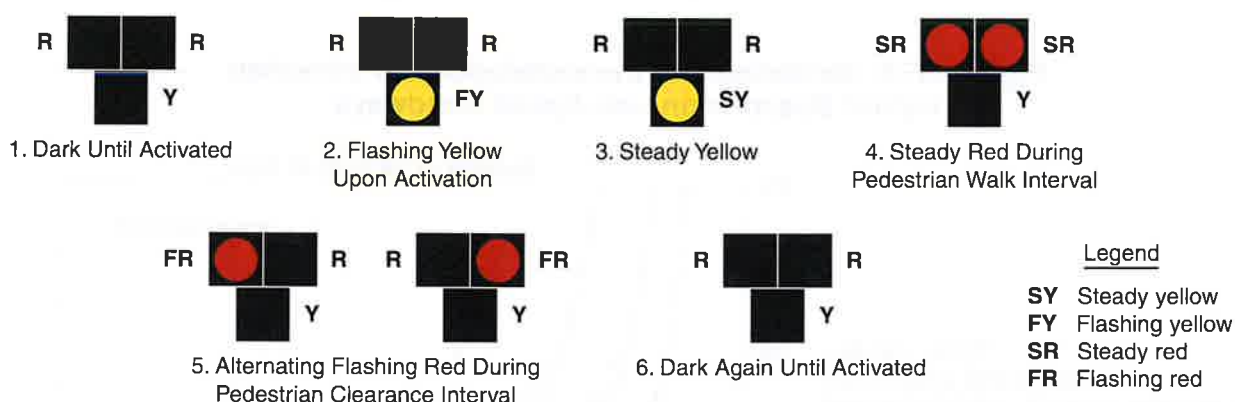


**Figure 4F-1. Guidelines for the Installation of Pedestrian Hybrid Beacons on Low-Speed Roadways**



**Figure 4F-2. Guidelines for the Installation of Pedestrian Hybrid Beacons on High-Speed Roadways**



**Figure 4F-3. Sequence for a Pedestrian Hybrid Beacon**

B. Parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the marked crosswalk, or site accommodations should be made through curb extensions or other techniques to provide adequate sight distance,

C. The installation should include suitable standard signs and pavement markings, and

D. If installed within a signal system, the pedestrian hybrid beacon should be coordinated.

05 On approaches having posted or statutory speed limits or 85th-percentile speeds in excess of 35 mph and on approaches having traffic or operating conditions that would tend to obscure visibility of roadside hybrid beacon face locations, both of the minimum of two pedestrian hybrid beacon faces should be installed over the roadway.

06 On multi-lane approaches having a posted or statutory speed limits or 85th-percentile speeds of 35 mph or less, either a pedestrian hybrid beacon face should be installed on each side of the approach (if a median of sufficient width exists) or at least one of the pedestrian hybrid beacon faces should be installed over the roadway.

07 A pedestrian hybrid beacon should comply with the signal face location provisions described in Sections 4D.11 through 4D.16.

**Standard:**

08 A CROSSWALK STOP ON RED (symbolic circular red) (R10-23) sign (see Section 2B.53) shall be mounted adjacent to a pedestrian hybrid beacon face on each major street approach. If an overhead pedestrian hybrid beacon face is provided, the sign shall be mounted adjacent to the overhead signal face.

**Option:**

09 A Pedestrian (W11-2) warning sign (see Section 2C.50) with an AHEAD (W16-9P) supplemental plaque may be placed in advance of a pedestrian hybrid beacon. A warning beacon may be installed to supplement the W11-2 sign.

**Guidance:**

10 If a warning beacon supplements a W11-2 sign in advance of a pedestrian hybrid beacon, it should be programmed to flash only when the pedestrian hybrid beacon is not in the dark mode.

**Standard:**

11 If a warning beacon is installed to supplement the W11-2 sign, the design and location of the warning beacon shall comply with the provisions of Sections 4L.01 and 4L.03.

### **Section 4F.03 Operation of Pedestrian Hybrid Beacons**

**Standard:**

01 Pedestrian hybrid beacon indications shall be dark (not illuminated) during periods between actuations.

02 Upon actuation by a pedestrian, a pedestrian hybrid beacon face shall display a flashing CIRCULAR yellow signal indication, followed by a steady CIRCULAR yellow signal indication, followed by both steady CIRCULAR RED signal indications during the pedestrian walk interval, followed by alternating flashing CIRCULAR RED signal indications during the pedestrian clearance interval (see Figure 4F-3). Upon termination of the pedestrian clearance interval, the pedestrian hybrid beacon faces shall revert to a dark (not illuminated) condition.

03 Except as provided in Paragraph 4, the pedestrian signal heads shall continue to display a steady **UPRAISED HAND** (symbolizing **DONT WALK**) signal indication when the pedestrian hybrid beacon faces are either dark or displaying flashing or steady **CIRCULAR** yellow signal indications. The pedestrian signal heads shall display a **WALKING PERSON** (symbolizing **WALK**) signal indication when the pedestrian hybrid beacon faces are displaying steady **CIRCULAR RED** signal indications. The pedestrian signal heads shall display a flashing **UPRAISED HAND** (symbolizing **DONT WALK**) signal indication when the pedestrian hybrid beacon faces are displaying alternating flashing **CIRCULAR RED** signal indications. Upon termination of the pedestrian clearance interval, the pedestrian signal heads shall revert to a steady **UPRAISED HAND** (symbolizing **DONT WALK**) signal indication.

Option:

04 Where the pedestrian hybrid beacon is installed adjacent to a roundabout to facilitate crossings by pedestrians with visual disabilities and an engineering study determines that pedestrians without visual disabilities can be allowed to cross the roadway without actuating the pedestrian hybrid beacon, the pedestrian signal heads may be dark (not illuminated) when the pedestrian hybrid beacon faces are dark.

*Guidance:*

05 *The duration of the flashing yellow interval should be determined by engineering judgment.*

**Standard:**

06 **The duration of the steady yellow change interval shall be determined using engineering practices.**

*Guidance:*

07 *The steady yellow interval should have a minimum duration of 3 seconds and a maximum duration of 6 seconds (see Section 4D.26). The longer intervals should be reserved for use on approaches with higher speeds.*



**CEDAR CITY  
CITY COUNCIL AGENDA ITEM 3  
STAFF INFORMATION SHEET**

**To:** Mayor and City Council

**From:** Shane Johnson

**Council Meeting Date:** January 7, 2026

**Subject:** **Consider a change order for the design of the traffic signal at 1100 W & 600 S.**

**Discussion:** The 1100 West and 600 South intersection traffic study was recently completed by Hales Engineering. The result of the study was that a traffic signal is warranted based on traffic volumes and crash experience. This study will be discussed as part of another item on this City Council meeting agenda.

This intersection sees peak traffic volumes in the AM and PM times that correspond to Cedar High School's drop-off and pick-up. It would be ideal for the new signal to be constructed outside of the school year and functional prior to the beginning 2026 school year in August. To meet this timeline the signal design would need to begin immediately. Cedar City is currently working with Kimley-Horn on the signal design at Kitty Hawk Dr and Bulldog Road. Staff have been very satisfied with their performance to date and have reached out to them to prepare a proposal.

Kimley-Horn believes they will be able to fit this intersection design into their schedule and meet the proposed timeline. Their cost is \$42,500.00; this is proposed to be funded from the 100 East Project which is anticipated to be under budget from the awarded bid. Funds could be expended from the 100 East Project for now, and then funds could be moved into a new project as part of the next Budget Revision. Sufficient funding is available in the 100 East Project to cover both the design and construction of the new traffic signal at 1100 W. and 600 S.

The following items are included with this Information Sheet:

1. Proposal from Kimley-Horn & Associates
2. Change Order #1 for the design of the traffic signal.
3. Intersection study from Hales Engineering

The following table provides a summary of the proposed budget for this project:



**Project Funding  
100 East Roadway Improvements Project  
and  
Proposed 1100 West/600 South Traffic Signal Project**

	<u>Funding</u>	<u>Expenses</u>	<u>Balance</u>
<u>Funding in FY26 -</u>			
Streets (10-79-731)	\$1,000,000		
100 E. from 600 N. to 900 N.			
Streets (10-79-731)	\$188,443		
100 E. from 900 N. to Knoll St.			
Streets (10-70-731)	\$350,000		
Driving Range Netting			
Water (51-40-735)	\$173,367		
100 E. Water Expenses			
Sewer (52-55-731)	\$39,574		
100 E. Sewer Expenses			
<u>Expenses -</u>			
Construction Contract with Inntalex		(\$900,215)	
100 E. Roadway Improvements			
Savings at Jay Smith property		+\$59,440	
Materials Testing (0.5% of construction)		(\$4,500)	
Contingency/Miscellaneous		(\$50,000)	
Driving Range Netting		(\$350,000)	
1100 W./600 S. Signal Engineering		(\$42,500)	
Change Order #1 to Kimley-Horn			
1100 W./600 S. Signal Construction		(\$450,000)	
<b>Totals -</b>	<b>\$1,751,384</b>	<b>(\$1,737,775)</b>	<b>\$13,609</b>

Please consider whether to approve Change Order #1 for Kimley-Horn & Associates to begin the design of the traffic signal at the intersection of 1100 West and 600 South. Thank you for your consideration.

## CHANGE ORDER

Order No. 1  
Date: \_\_\_\_\_  
Agreement Date: September 1, 2025

NAME OF PROJECT: Traffic Signal Design at Kitty Hawk Drive & Bulldog Road

OWNER: Cedar City Corporation

CONSULTANT: Kimley-Horn & Associates, Inc.

The following changes are hereby made to the ENGINEERING SERVICES AGREEMENT:

### Description:

1. Complete the design of the traffic signal at 1100 West and 600 North based on the attached proposal from Kimley-Horn & Associates, Inc.

### Justification:

1. Necessary prerequisite to traffic signal installation.

### Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 48,600.00.

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 48,600.00.

The CONTRACT PRICE due to this CHANGE ORDER will be increased by: \$ 42,500.00.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 91,100.00.

### Change to CONTRACT TIME:

The CONTRACT TIME will be increased by 93 calendar days.

The date for completion of all work will be 4/1/2026 (Date).

Ordered by: \_\_\_\_\_  
(City)

Accepted by: \_\_\_\_\_  
(Consultant)

12/19/2025

## **Project Understanding**

Cedar City has completed a traffic signal warrant analysis for the intersection of 1100 West and 600 South. Based on the Utah MUTCD criteria, the study concludes that a traffic signal is warranted under existing traffic conditions, including Vehicular Volume and Crash Experience warrants

Kimley-Horn will provide survey, traffic signal design, and associated ADA pedestrian ramp improvements for this intersection as an extension of the existing Kitty Hawk Drive & Bulldog Road Traffic Signal Design Agreement (Dated: September 1, 2025). The services described herein are intended to advance the project through final design suitable for City approval and construction.

The scope assumes no roadway widening and no new traffic analysis but does include removal and replacement of existing pedestrian curb ramps at the intersection.

## **Assumptions**

Kimley-Horn's scope and fee are based on the following assumptions:

- Traffic signal warrants have been completed by others and are accepted by Cedar City
- No additional traffic counts, modeling, or warrant analyses are required
- Roadway improvements are limited to traffic signal infrastructure and ADA ramp replacement
- Signal equipment will be state-furnished, consistent with City practice
- Two (2) rounds of City review comments are included
- Utility locations are based on surface observations, available records, and survey
- Survey limits are confined to the intersection and immediate pedestrian facilities
- No Right-of-Acquisition will be required
- Construction Phase services are not included in this amendment

If any of these assumptions are not correct, then the scope and fee will change.

## **Scope of Services**

Kimley-Horn will provide the services specifically set forth below.

### **Task 1 – Survey**

Survey services will be provided to support traffic signal design and ADA ramp improvements.

Survey services for this Project will be provided by Ensign Engineering, a survey subconsultant.

Kimley-Horn and Survey Subconsultant will provide the following:

#### **Task 1.1 - Topographic Survey.**

Survey Subconsultant will provide a topographic survey of the parcels to verify site conditions and collect site information. will locate the hard surface improvements and underground utilities that are

accessible from the ground surface. The information collected will be input into Autocad and utilized for design.

### **Task 1.2 – Boundary Survey**

Survey Subconsultant will perform boundary survey services necessary to define existing right-of-way and property lines within the survey limits. Boundary research will include review of available recorded plats, deeds, right-of-way records, and UDOT mapping necessary to establish boundary control for design.

Boundary information will be incorporated into the survey base files used for roadway and traffic signal design.

### **Task 1.3 – Record of Survey**

Survey Subconsultant will prepare a Record of Survey documenting boundary and right-of-way information for the Project. The Record of Survey will be prepared in accordance with applicable Utah surveying standards.

#### **Deliverables:**

- Topographic survey in CAD (Civil3D) format suitable for roadway, intersection, and traffic signal design and will contain the appropriate coordinate system embedded.
- Boundary survey information incorporated into the base mapping
- Record of Survey prepared for incorporation into the final plans.

## **Task 2 – Data Review and Project Coordination**

Kimley-Horn will:

- Review the City-provided traffic signal warrant analysis and supporting exhibits
- Confirm design assumptions, intersection control strategy, and ADA limits with Cedar City
- Perform one (1) virtual site visit to verify existing conditions, pedestrian facilities, and utility constraints
- Coordinate with City staff regarding submittal requirements, review procedures, and schedule

#### **Deliverables**

- Meeting notes and confirmation of design criteria

## **Task 3 – Traffic Signal and ADA Design (PS&E)**

Kimley-Horn will prepare construction documents in accordance with Cedar City standards, the Utah MUTCD, PROWAG, and applicable UDOT Signal Design Manual requirements.

### **Task 3.1 – Coordination and Field Verification**

Kimley-Horn will:

- Review survey and base mapping prepared under Task 1 to verify compatibility with traffic signal and ADA design requirements
- Coordinate with Cedar City to confirm:
  - Signal phasing assumptions
  - Pedestrian crossing requirements
  - State-Furnished Materials (SFM) expectations
- Perform internal QA review of base information prior to initiating final signal layout

**Deliverables**

- Field verification and coordination documentation (as applicable)

**Task 3.2 – Traffic Signal Plan Sheets**

Kimley-Horn will prepare a complete traffic signal plan set for City approval and bidding.

Services include:

- Preparation of signal layout and plan views showing:
  - Signal poles, mast arms, and foundations
  - Conduit routing and pull boxes
  - Vehicle detection zones
  - Pedestrian signal equipment
  - Controller cabinet placement
  - Service panel location
  - Electrical service routing.
- Preparation of general notes, legends, and standard details
- Identification of State-Furnished and Contractor-Furnished signal materials
- Coordination of plan sheet layout and numbering for City submittal
- Formatting of plans for PDF and CAD delivery

**Deliverables**

- Traffic signal plan sheets (PDF and CAD)

**Task 3.3 – Electrical Power Service Application (Rocky Mountain Power)**

Kimley-Horn will:

- Prepare and submit a new permanent electrical service application to Rocky Mountain Power for the traffic signal
- Coordinate with Rocky Mountain Power to:
  - Confirm service size requirements
  - Confirm point of connection
  - Respond to utility review comments or requests for clarification
- Coordinate electrical service requirements with Cedar City to ensure compatibility with City standards and construction sequencing



#### **Deliverables**

- Rocky Mountain Power service application documentation
- Confirmation of service application submittal

#### **Task 3.4 – ADA Pedestrian Ramp Design**

Kimley-Horn will design pedestrian facilities within the intersection limits to meet applicable accessibility requirements.

Services include:

- Evaluation of existing pedestrian ramps and crossings
- Removal of existing pedestrian curb ramps that do not meet current accessibility standards
- Design of new ADA- and PROWAG-compliant curb ramps, including:
  - Ramp geometry and grades
  - Landings
  - Detectable warning surfaces
  - Cross slopes and running slopes
- Coordination of pedestrian crossing locations with traffic signal phasing and equipment

#### **Deliverables**

- ADA-compliant pedestrian ramp details and layouts incorporated into the plan set

#### **Task 3.5 – State-Furnished Materials (SFM) and Procurement Coordination**

Kimley-Horn will:

- Prepare UDOT signal materials documentation, including:
  - SG-S02 – Signal Pole and Mast Arm Summary
  - SG-S03 – State-Furnished Materials (SFM) Order Form
  - Contractor-Furnished Materials (CFM) list
- Compile and submit the SFM order form to the State-Furnished Materials warehouse
- Coordinate with Cedar City to:
  - Facilitate issuance of the purchase order between the City and the State-Furnished Materials warehouse
  - Confirm quantities, lead times, and delivery coordination
- Perform QA review to ensure consistency between plans, SFM forms, and CFM lists

#### **Deliverables**

- SG-S02 and SG-S03 forms
- Confirmation of SFM submittal
- Contractor-Furnished Materials list

#### **Task 3.6 – Engineer's Opinion of Probable Cost**

Kimley-Horn will:

- Prepare an Engineer's Opinion of Probable Cost for traffic signal and ADA improvements using City and UDOT bid item structure
- Coordinate quantities between plans, SFM documentation, and cost estimate

#### **Deliverables**

- Engineer's Opinion of Probable Cost (PDF and Excel)

### **Task 4 – Agency Review Support and Final Documents**

Kimley-Horn will:

- Submit plans for City review
- Respond to two (2) consolidated rounds of City comments
- Prepare final signed and sealed plans suitable for construction

#### **Deliverables**

- Comment response log
- Final signed and sealed traffic signal and ADA plans

#### **Services Not Included**

Any other services, including but not limited to the following, are not included in this Agreement:

- Traffic impact studies or updated signal warrant analysis
- Roadway widening, lane reconfiguration, or corridor restriping
- Right-of-way acquisition or property coordination
- Utility relocation design or subsurface utility engineering (SUE)
- Construction inspection or construction administration
- Maintenance of Traffic (MOT) plans
- Signal timing plans, coordination plans, or interconnect design
- Permitting fees or contractor means and methods

#### **Additional Services**

Any services not specifically provided for in the above scope will be billed as additional services and performed at Kimley-Horn's then-current hourly rates.

#### **Information Provided By Client**

Kimley-Horn shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives.

#### **Schedule**

Kimley-Horn will perform the services as expeditiously as practicable with the goal of meeting a mutually

agreed upon schedule.

### Fee and Expenses

Kimley-Horn will perform the services in Tasks 1 - 4 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task Number & Name		Fee	Type
1	Survey	\$6,500	Lump Sum
2	Data Review and Project Coordination	\$3,500	Lump Sum
3	Traffic Signal and ADA Design (PS&E)	\$29,500	Lump Sum
4	Agency Review Support and Final Documents	\$3,000	Lump Sum
Total		\$42,500	

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.



**CEDAR CITY  
CITY COUNCIL AGENDA ITEM 4  
STAFF INFORMATION SHEET**

**To:** Mayor and City Council

**From:** Shane Johnson

**Council Meeting Date:** January 7, 2026

**Subject:** **Consider a change order for the design of the Cemetery Renovation project Phase 6R.**

**Discussion:** Construction of Phase 1 of the expansion and renovation of the City Cemetery was substantially completed late 2023. Phase 2 Renovation (2R) was completed spring of 2025. Phase 3 Renovation (3R) is nearly complete.

Funding is currently available to move forward with the design of the next phase (6R). Funding for construction of this next phase will be requested in the upcoming FY27 budget.

Civil Science prepared the master plan and performed the design for Phases 1, 2R, and 3R. City staff has been very pleased with Civil Science's performance so far. We would like to continue working with Civil Science since they are most familiar with the Cemetery and the work that needs to be done. It is proposed that a change order be issued to increase the fee by \$40,000 in order to complete the design of Phase 6R. The total design fee for Phases 1, 2R, and 3R was \$148,600.

The following items are included with this Information Sheet:

1. Overall master plan of the Cemetery expansion and renovation.
2. Change Order #3 for the design of Phase 6R.
3. Proposal from Civil Science for the design of Phase 6R.

The following table provides a summary of the proposed budget for this project:



**Project Funding  
Cemetery Renovation  
(Account #10-83-732)**

	<u>Funding</u>	<u>Expenses</u>	<u>Balance</u>
<u>Funding in FY26 –</u>			
Cemetery Renovation (10-83-732)		\$400,000	
<u>Expenses –</u>			
Engineering for Phase 3R – Civil Science		(\$30,000)	
Construction of Phase 3R – (Estimate)		(\$287,000)	
Engineering for Phase 6R -- Civil Science		(\$40,000)	
Materials Testing/Misc./Contingency		(\$43,000)	
 Totals –	 \$400,000	 (\$400,000)	 \$0

Please consider whether to approve the change order for Civil Science to begin design of Phase 6R for the Cemetery Renovation project. Thank you for your consideration.

# Cedar City Cemetery

Phasing Plan | Cedar City, Utah | April 2023



900 North

Main Street

Iron Mission Parkway

Memorial Grove

Bicentennial Soccer Complex

Parking Expansion

## Legend

- 10" Irrigation Mainline
- 6" Irrigation Mainline
- Ex. 6" Irrigation Mainline
- Cemetery Expansion
- Cemetery Expansion Phase #
- Cemetery Renovation
- Cemetery Renovation Phase #

1E

1R



CivilScience



## CHANGE ORDER

Order No. 3

Date: \_\_\_\_\_

Agreement Date: June 7, 2022

NAME OF PROJECT: Cemetery Expansion and Cemetery Irrigation & Roads Project 2022

OWNER: Cedar City Corporation

CONTRACTOR: Civil Science

The following changes are hereby made to the CONTRACT DOCUMENTS:

### Description:

1. Complete the design of Cemetery Renovation Phase 6R based on the attached proposal from Civil Science.

### Justification:

1. The design needs to be completed for Phase 6R.

### Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 83,600.00.

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 148,600.00.

The CONTRACT PRICE due to this CHANGE ORDER will be increased by: \$ 40,000.00.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 188,600.00.

### Change to CONTRACT TIME:

The CONTRACT TIME will be increased by the necessary calendar days.

The date for completion of all work will be 12/31/2026 (Date).

Ordered by: \_\_\_\_\_  
(City)

Accepted by: \_\_\_\_\_  
(Contractor)





3160 W. Clubhouse Drive, Ste. A  
Lehi, UT 84043  
P] (801) 768-7200 | F] (801) 768-7201

1453 S. Dixie Drive, Ste. 150  
St. George, UT 84770  
P] (435) 986-0100

405 Main Street, Ste. 975  
Salt Lake City, UT 84111  
P] (801) 768-7200



December 17, 2025

Shane Johnson  
Project Engineer  
Cedar City Corporation  
10 N. Main Street  
Cedar City, Utah 84720

## PROFESSIONAL SERVICES PROPOSAL

### CEDAR CITY CEMETERY RENOVATION - PHASE 6R

Dear Mr. Johnson,

We're excited to submit this proposal for professional services for the project referenced above. We are excited to partner with Cedar City on this meaningful project, and we're committed to providing thoughtful, high-quality work that aligns with your goals. Our team is eager to bring its expertise and dedication to ensure the project is completed successfully and on time.

At Civil Science, we prioritize collaboration and open communication, and we're ready to work closely with your team to make this project a success. If you have any questions or need further information, don't hesitate to reach out to me directly at 435-705-1862 or via email at [jpeay@civilscience.com](mailto:jpeay@civilscience.com).

Thank you again for considering us for this opportunity. We look forward to the possibility of working together and building a strong partnership.

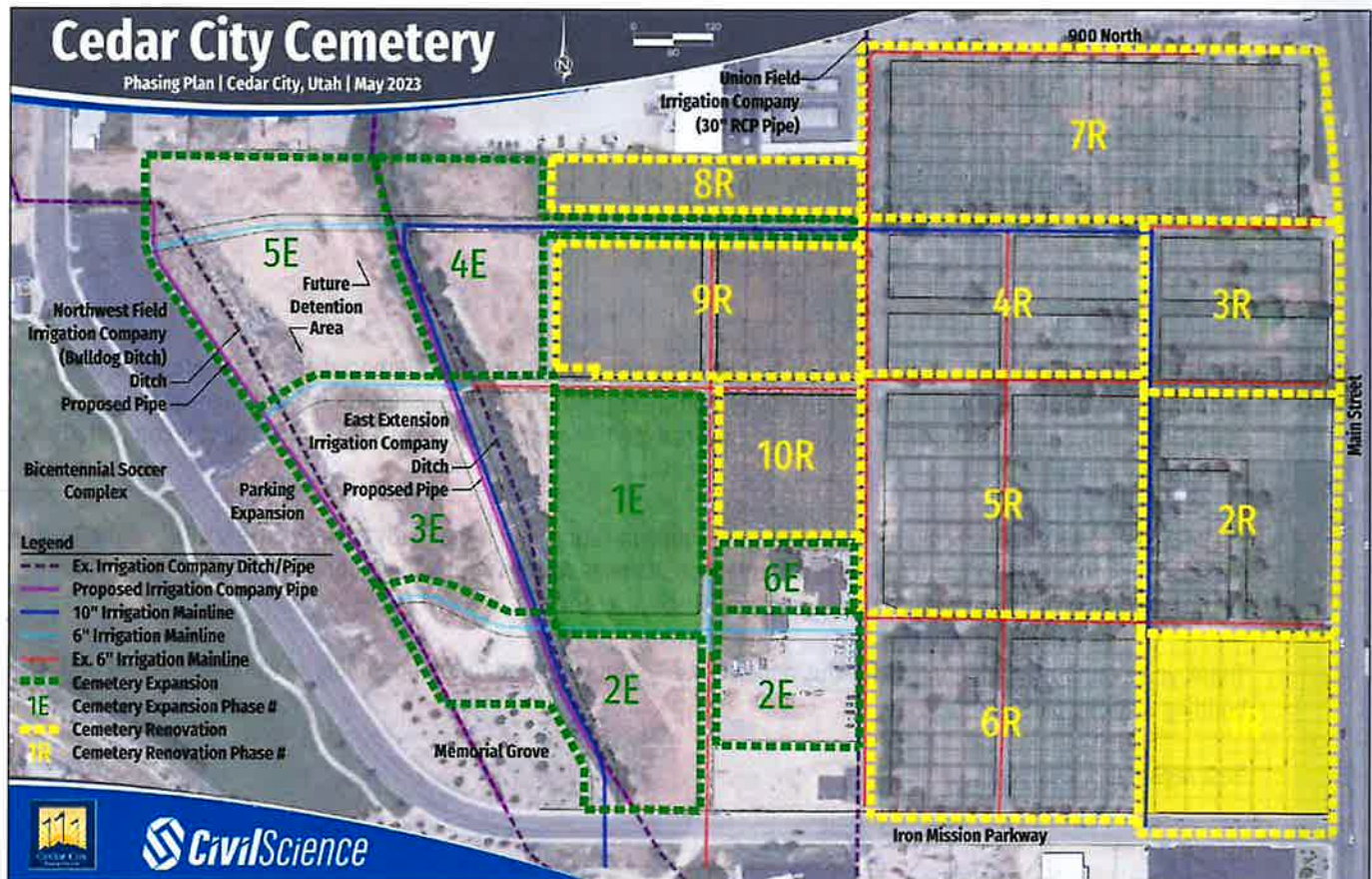
Best regards,

Jeff Peay, PLA  
Senior Landscape Architect



## PROJECT UNDERSTANDING

Cedar City is seeking to further renovate and improve the existing city cemetery located on the corner of Main Street and Iron Mission Parkway. This phase of the project will include the areas identified in the Cedar City Cemetery Phasing Plan dated May 2023 as Phase 6R. Our team is committed to delivering tailored solutions that align with your objectives, ensuring high-quality outcomes within your timeline and resources



The project will include detailed design for Lane 3, Lane 4, and Lane D as shown within Phase 6R. Laneway redesign, rollover curb and gutter, parallel parking areas, a new irrigation system, and new tree planting will be included within the project scope and design related to Phase 6R. There are a significant number of established trees adjacent to the laneway. The city is planning to remove many of the existing trees along the roadways which are to be improved. If any are intended to remain, protective measures should be incorporated to minimize root and tree damage during the design and construction process. This is one of the oldest sections of the cemetery and therefore some undocumented burial plots and other unforeseen issues may arise on site that will require special consideration and flexibility during design and construction process.



## SCOPE OF WORK

Based on the Project Understanding outlined above, Civil Science proposes to deliver the following services and tasks to support the successful execution of the project. Our approach focuses on providing comprehensive, high-quality solutions tailored to meet the project's specific goals and requirements. The proposed scope of work ensures that the design survey, engineering design, and construction documents are addressed effectively. Below, we have outlined the key tasks, deliverables and assumptions we will provide as part of this engagement.

### DESIGN PHASE SERVICES

Design Phase services will be provided in sufficient detail to assemble construction documents for issuance of public bid. Specific tasks will include:

#### DESIGN SURVEY & BASE MAPPING

1. We will complete design-level topographical mapping and survey of the site at locations, which may include:
  - a. For the project, we will utilize GPS equipment for collection of tops and toes of slopes, natural ground points, existing site features, and edge of asphalt.
  - b. Mapping of utilities based upon Cedar City's information and supplemented with apparent points collected in the field with GPS equipment, as needed.
  - c. Collection of flowlines and inverts for gravity utility systems (sewer, storm drain, etc.)
2. Mapping of utilities with apparent points collected in the field with GPS equipment
3. Prepare base map for the Project
4. Provide surface, contours, and mapping of the site
5. Prepare a base map including basic linework, symbols, spot elevations, and contours
6. Install control points for future use during the design and construction phases of the Project

#### ENGINEERING DESIGN & CONSTRUCTION DOCUMENTS

1. Meet with the City as required to review goals, objectives, scope and schedule for the Project
2. Collect and review data pertinent to the design
3. Coordinate and plan for connections to existing hardscape, utilities, and surrounding infrastructure
4. Provide Civil Engineering & Landscape Architecture design, which may include:
  - a. Engineering calculations, investigation report and design criteria documents
  - b. Construction drawings based on 60% and final completion, and technical specifications indicating the scope, extent, and character of the work to be performed and furnished by the Contractor
  - c. Bid schedules, bid item quantities, and measurement and payment
  - d. Engineer's opinion of cost at 60% and final design
  - e. Other items as necessary for completion of the contract documents and final inclusion in the bid package
5. Provide As-Built Drawings for the finished and constructed works on site based on the contractor's handwritten redlined plans and notes. These plans will be prepared and completed using the original construction design plans prepared by CS. These plans will be provided as pdfs to the City.

#### DELIVERABLES

- Construction Drawings
- Bidding Documents
- Technical Specifications
- Engineer's Opinion of Cost

## ASSUMPTIONS

- A Geotechnical investigation and report are excluded from the CS's scope of work. If required, the City will provide a geotechnical report for the Project.
- All temporary construction permits (if required) such as UPDES, encroachment permits, building permits, etc. shall be completed by the Contractor and shall be part of the final bid package and construction cost.
- No drainage study or detention facilities are required based on the fact that the site is adjacent to existing open space and a natural drainage and all storm water will be captured and conveyed to existing drainages.
- CS may use sub-consultants and others as may be required to complete a portion of the Scope of Work outlined above upon approval from the City.
- Boundary survey and easement research is excluded from the Scope of Work and it is assumed the City owns all the property within the project boundary and there are no easements that will impact the design.
- The Scope of Work does not include transfer, negotiation, or acquisition of real property and their pertaining survey legal documents.
- As-Builts will be prepared and completed using the contractor's handwritten redlines and will not be confirmed on site with survey equipment or other means of proving their accuracy.
- Irrigation plans will be developed based on existing irrigation information provided by the City (line sizes, locations, etc.). The proposed irrigation line locations and infrastructure shown on the plans will be schematic in nature.

## FEE PROPOSAL

Civil Science proposes to complete the above outlined Scope of Work as follows:

PHASE	TASK DESCRIPTION	FEE	FEE TYPE	COMMENTS
DESIGN	Design Survey & Base Mapping	\$6,000	Lump Sum	
	Design & Construction Documents (Phase 6R)	\$34,000	Lump Sum	Includes civil and landscape architecture, & as-built drawings
	<b>SUBTOTAL</b>	<b>40,000</b>	<b>Lump Sum</b>	

Professional fees shown are not to exceed unless upon written authorization from the City. Professional services rendered for the Hourly Fee Type will be completed by Civil Science at the current hourly rates and fees which can be provided upon request.

## ADDITIONAL SERVICES

The City may authorize Civil Science to furnish or obtain from others additional services of the types listed below, which are not included in the basic Scope of Work. If such additional services are authorized by the City, then Civil Science shall be entitled to an equitable increase in compensation for such additional services.

1. Geotechnical Phase Services: Geotechnical investigations or analyses beyond the City's provided Geotechnical investigation and report, including additional borings, test pits, geophysical surveys, laboratory testing, trenchless specific geotechnical evaluations, settlement or liquefaction modeling, scour analysis, and construction phase geotechnical support such as compaction testing or excavation verification.
2. Survey Phase Services: Collection of topographic, boundary, control, or easement surveys beyond included scope of work, as well as additional SUE Level C, B, or A investigations, construction staking, as built surveys, or supplemental survey required due to alignment adjustments, ROW changes, or field discrepancies.

3. Bid Phase Services: Preparation of bid phase documents or support beyond standard design deliverables, including responses to bidder questions, preparation of addenda, evaluation of contractor bids or alternates, and participation in pre bid meetings or procurement workshops at the City's request.
4. Construction Phase Services: Support required after issuance of construction documents, including attendance at pre construction meetings, field coordination, responses to RFIs, review of contractor submittals, evaluation of change orders, preparation of record drawings, and support for shutdown planning, sequencing, or commissioning activities.
5. Utility and Site Coordination Beyond Design Scope: Additional effort required for unanticipated utility conflicts or unexpected site conditions discovered after milestone submittals, including redesign, trenchless design beyond feasibility level, protective measures required by utility owners, or additional coordination due to inaccurate or incomplete third party information.
6. Scope Modifications and Design Changes: Redesign or revisions driven by changes in project scope, design criteria, alignment, schedule, regulatory requirements, or stakeholder input beyond Civil Science's control, including rework caused by delayed data, new external requirements, or changes made after milestone approval.
7. Program or Multi Phase Coordination: Expanded coordination efforts required if the City divides the project into multiple construction contracts, adds additional consultants or design segments, or adjusts Program phasing, including supplemental tie in coordination, multi segment constructability support, and additional integration with updated schedules or Program wide requirements.



**CEDAR CITY  
CITY COUNCIL AGENDA ITEM 5  
STAFF INFORMATION SHEET**

**To:** Mayor and City Council

**From:** Jonathan Stathis

**Council Meeting Date:** January 7, 2026

**Subject:** Consider bids for the Heritage Theater Roofing project.

**Discussion:** The existing roof membrane on the Heritage Theater has reached the end of its useful life and is in need of replacement. This project involves removing and replacing the existing roof membrane on the Heritage Theater building.

Contractors and others were notified of this project via email, advertisement in the Spectrum newspaper, and on the City's website. The bid documents were requested by 17 contractors, 1 supplier, and 3 plan rooms. Cedar City received 5 bids for the project.

The following table shows a summary of the bids that were received:

**Bid Summary – Heritage Theater Roofing Project**

<b>Name of Contractor</b>	<b>Office Location</b>	<b>Total Bid Amount</b>
All Weather Waterproofing	Murray, UT	\$209,230.00
JTS Roofing Inc.	Ogden, UT	\$261,492.00
Stout Roofing	St. George, UT	\$286,680.00
Advanced Systems Construction	Highland, UT	\$328,997.00
Conwest Inc.	Draper, UT	\$367,845.00



If this bid is awarded it would be on the condition that the Contractor provide the required executed bonding, insurance documents, immigration status verification, and that the Mayor be authorized to sign the agreement with the Contractor.

The following table provides a summary of the proposed budget for this project:

<b>Project Funding Heritage Theater Roofing Project (Account #10-92-730)</b>			
	<u>Funding</u>	<u>Expenses</u>	<u>Balance</u>
<u>Funding in FY26</u> –			
Heritage Center Cap. Outlay (10-92-730)	\$275,000		
<u>Expenses</u> –			
Construction contract		(\$209,230)	
Miscellaneous/Contingency		(\$20,000)	
Totals –	<b>\$275,000</b>	<b>(\$229,230)</b>	<b>\$45,770</b>

Please consider whether to award the bid for the Heritage Theater Roofing project. Thank you for your consideration.

**CEDAR CITY  
CITY COUNCIL AGENDA ITEM 6  
STAFF INFORMATION SHEET**

**To:** Mayor and City Council

**From:** Jonathan Stathis

**Council Meeting Date:** January 7, 2026

**Subject:** Discuss orders issued by the Utah Division of Drinking Water.

**Discussion:** The Cedar City culinary water system is currently under one order issued by the Utah Division of Drinking Water (DDW) and another order is pending from DDW. The following information describes the orders, provides information regarding the deadlines for meeting DDW requirements, and gives cost estimates for completing the necessary projects.

**1. Stipulated Order to Disinfect the entire drinking water distribution system.**

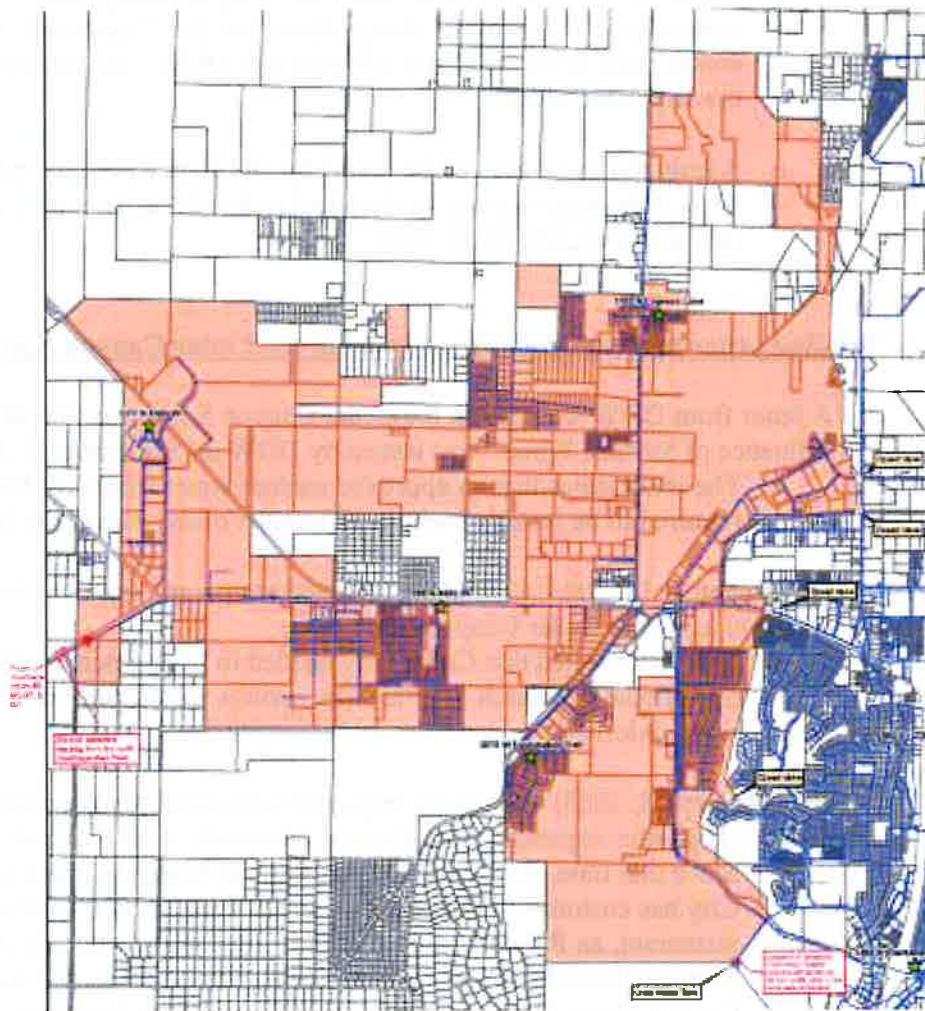
- The original Stipulated Order to Disinfect was issued by DDW in a letter dated September 20, 2024.
- An Amended Stipulated Order to Disinfect was issued by DDW on August 5, 2025.
  - o Per the Amended Order, Cedar City is required to have disinfection (chlorination) equipment installed to disinfect the entire drinking water system by May 31, 2029.
    - System pressure needs to be reduced in the west part of the culinary water system in order to inject chlorine into the system. Existing pressure in the pipeline coming in from the north Quichapa Well Field along SR-56 can be as high as 375 psi.
    - Work has been moving forward on planning and preparing cost estimates for lowering the pressure in the water system coming in from the north Quichapa wells.
    - There has been discussion regarding coordination with the Central Iron County Water Conservancy District (CICWCD) to utilize their new 4-million-gallon tank and provide connection points to the CICWCD system. This will also allow for use of water rights in Basin 71.
    - Per the Amended Order, the deadline to submit construction drawings to DDW for approval of this project is: November 1, 2026. This is the date that construction drawings need to be completed and ready to submit to DDW for review. In order to meet this deadline, work needs to move forward to select an

engineering consultant and begin the design of the project as soon as possible.

- Projects that need to be designed and constructed in order to comply with the Stipulated Order include the following:
    - Well rehabilitation and re-equipping at Quichapa Wells #5, #6, #7, and #8.
    - Chlorination building (near the “Y”, or west of the “Y”).
    - Additional piping to loop the system and make connections to the CICWCD system, as needed.
    - Pump Station #1 to establish a boundary for a new pressure zone on the valley floor (pressure zone 7) and boost water up to Pump Station #2.
    - Pump Station #2 at 800 S./Cross Hollow Road (across from Silver Silo) will act as an intermediate pump station to boost water up to the Cross Hollow Tank. (Note: This project could be phased in later, but it would require an additional \$1 million in the future to modify Pump Station #1.)
    - 800 South Water Tank, 2 million gallons. This tank would provide storage for Pump Station #2 and provide storage for a new pressure zone at the north end of Cross Hollow Road and around the Airport (pressure zone 6). (Note: This project could be phased in later.)
  - Ensign Engineering has been working on a cost estimate for the project. Ensign is estimating a cost of \$10.3 million for 2 pump stations, connections to CICWCD system, additional piping to loop the system, and a chlorination building. If we add the work to rehabilitate the wells (\$2.5 million) and a 2 million gallon tank (\$3 million), then the total cost estimate would be: \$15.8 million.
  - The original cost estimate for all phases of the project from Hansen, Allen & Luce (HAL) was \$17.3 million.
    - We are at a point now where the next steps would be to: complete the final water modeling, finalize the scope of the project, hire a consulting engineering firm to start working on the design, and continue refining the cost estimates during the design process.
  - As stated above, the entire project needs to be completed by May 31, 2029 with documentation being submitted to DDW showing that the system has effectively installed disinfection to the entire system. By June 1, 2029, Cedar City must submit information to DDW to obtain an Operating Permit for the project.
- Per the Amended Order, a temporary chlorination system at the Cross Hollows Tank is required to be completed by March 1, 2026.

- This project will allow all areas in the City's culinary water system to be disinfected east of the Sunset Canyon/Crescent Hills area and east of Airport Road.
- The construction drawings for the project have been approved by DDW, materials are being ordered, and this project is currently under construction.
- Figure 1 below shows the highlighted areas of the City's water distribution system that will still not be disinfected after the temporary chlorination is installed at the Cross Hollow Tank.

**Figure 1:**  
Area that will still not be disinfected after the Temporary Chlorination System is installed at the Cross Hollow Tank



- Shurtz Canyon Spring has the proper equipment in service to meet the DDW disinfection requirements.
- Enoch Wells have the proper equipment in service to meet the DDW disinfection requirements.
- South Quichapa Wells and Spilsbury Springs have the proper equipment in service to meet the DDW disinfection requirements.
- Cedar Canyon Springs has the proper equipment in service for chlorination; however, there are additional requirements for surface water treatment that still need to be met. This will be discussed later in this document.
- Under the Stipulated Order, the Cedar City drinking water system maintains its “Approved” status. However, the “Approved” rating is conditioned upon the City’s adherence to DDW’s requirements listed in the stipulated order.
- Administrative fines can be levied by DDW on a per-day, per-violation basis if the requirements in the stipulated order are not met. The dollar amounts are listed in the order.

2. **Pending order to treat drinking water from the Cedar Canyon Springs.**

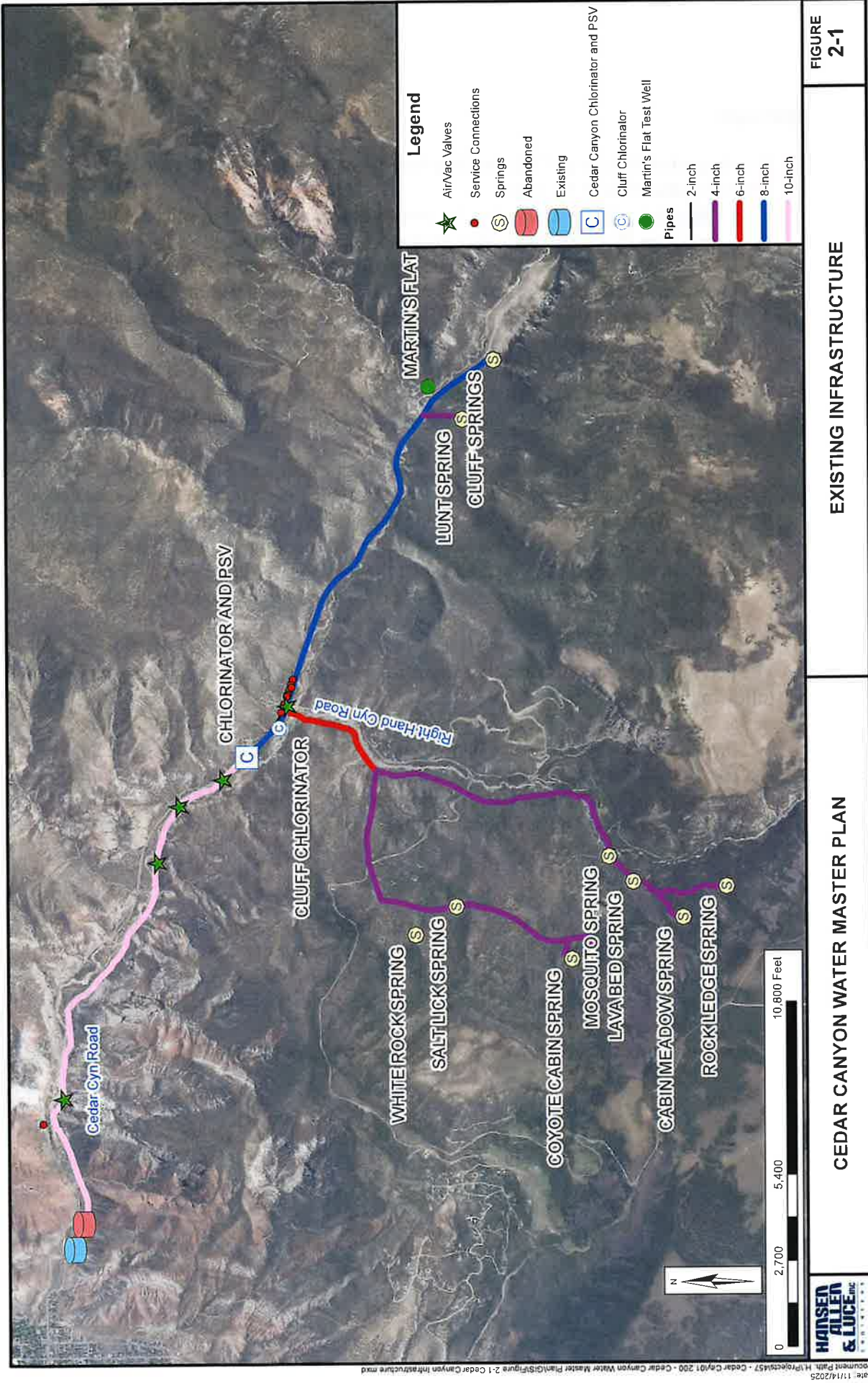
- A letter from DDW stating that the Cedar Canyon Springs is “Under the Direct Influence of Surface Water” was issued by DDW on September 5, 2023.
  - The letter states that an approved surface water treatment facility was required to be installed within 18 months of the date of the letter.
- On December 13, 2023, Cedar City received temporary approval from DDW to continue using the Cedar Canyon Springs.
  - This letter stated that Cedar City needed to have a permanent solution operational by March 5, 2025. The springs would continue to be treated using chlorination.
- On February 18, 2025, Cedar City requested additional time to complete the project. The letter requested an additional 18 months until September 5, 2026.
  - Since that time, the Cedar Canyon Springs have continued to be used. The City has customers in the Cedar Canyon area, such as Milt’s Stage Stop restaurant, an RV park, and residential customers who rely on the water supplied from the Cedar Canyon Springs. In addition, the water from Cedar Canyon Springs flows to the City’s Square Mountain Tank to supply water to the City’s culinary system.



- The average flowrate from the Cedar Canyon Springs in 2024 was 324 gallons per minute (gpm). The peak day in 2024 was 514 gpm. HAL reports that the reliable yield from the Cedar Canyon Springs is 341 gpm, or 550 acre-feet/year.
- Cedar City has conducted a “pilot study” to look at potential treatment options for the Cedar Canyon Springs. The pilot study ran for a period of 12 months and ended in September 2025. The pilot study showed that there would need to be at least three levels of treatment in order to treat all of the springs in the Cedar Canyon Springs group, which would include:
  - (1) multi-media pre-filters to filter larger particulates (mainly for Cluff Springs);
  - (2) a series of cartridge filters – pre-filters, intermediate, and final cartridge filters; and
  - (3) chlorination of the filtered water.
- In December 2025, City staff was contacted by DDW regarding the Cedar Canyon Springs. DDW expressed concern that progress had not been made to start the engineering design of a surface water treatment facility for the Cedar Canyon Springs. Their initial response was that the City would have to cease using the springs as soon as possible.
  - In a subsequent meeting between City Staff and DDW, and a follow-up email from DDW, they agreed to allow Cedar City to have until March 1, 2026 to submit a decision and timeline for actions that will be taken to address the Cedar Canyon Springs.
  - In an email on December 8, 2025, DDW said that they were in the process of issuing an official order regarding the Cedar Canyon Springs. The order will have a deadline of March 1, 2026 for Cedar City to submit a decision and timeline to DDW regarding the springs. However, the official order has not been received yet from DDW.
- The following are some options available to address the issues with Cedar Canyon Springs as follows:
  - Option 1: Discontinue use of the Cedar Canyon Springs entirely. This option would completely cease use of the springs. It would cut off existing customers in the Cedar Canyon area that rely on the use of City water such as Milt’s restaurant, etc.
  - Option 2: Design and construct a surface water treatment facility for the Cedar Canyon Springs. The estimated cost of this project is \$4.2 million. There is currently \$2.2 million budgeted for the project in the current fiscal year budget. The additional \$2 million needed has been proposed to be acquired through bonding (debt issuance).
  - Option 3: Re-develop the existing springs. The existing Cedar Canyon Springs could be re-developed to try to eliminate the problems created by surface water infiltration. This option would be very difficult, expensive, and it’s not guaranteed that it would solve the problem. The springs are located in remote areas of Cedar Canyon where it would be difficult, if not

impossible, to get the proper equipment into the locations. DDW also discourages this option because they have seen that it often does not work in the long term. This option would need further investigation.

- Another item to consider is that the Martins Flat Test Well project is still underway. The drilling process has been quite slow. The driller is currently at about 1,747 feet deep, and they have not hit the Navajo Sandstone yet. If the Martins Flat Well turns out to be a productive well, then it could be combined with the Cedar Canyon Springs.
  - o The current capacity of the 10-inch diameter Cedar Canyon pipeline is 1,100 gpm. HAL has proposed that with modifications to the destination of the pipeline to feed into the Cedar Canyon Tank, the flowrate could be increased to 2,000 gpm.
  - o HAL estimates that if the Martins Flat Well is successful, it could produce about 1,000 gpm.
  - o The Martins Flat Well could either replace the Cedar Canyon Springs, or the two sources could be combined together in the existing Cedar Canyon pipeline. Refer to Figure 2-1 on the next page prepared by HAL.
- If it is determined to move forward with construction of the Cedar Canyon Springs Treatment Plant, a proposed timeline for the project could be as follows:
  - o March - April 2026: Consultant selection process for engineering design of the treatment plant.
  - o May 2026: Begin engineering design.
  - o October 2026: Complete the design and submit to DDW for review.
  - o December 2026 – January 2027: Bidding process and contractor award.
  - o February 2027 – Begin construction of the treatment plant.
  - o September 2027 – Complete construction of the project.



**Summary:**

1. The Amended Stipulated Order to disinfect the entire water system requires the following deadlines to be met:
  - March 1, 2026 – Complete the installation of a temporary chlorination system at Cross Hollows Tank. This project is already underway.
  - November 1, 2026 – Submit construction drawings to DDW for review of the project to lower the pressure along SR-56 and install a chlorination system. In order to meet this deadline, the scope of the project needs to be finalized, and the engineering design needs to begin as soon as possible.
  - May 31, 2029 – Submit documentation to DDW showing that the system has effectively installed disinfection to the entire water distribution system.
  - June 1, 2029 – Submit information to DDW to obtain an Operating Permit for the project.
  - The original cost estimate from HAL for this project was \$17.3 million. The estimated cost from Ensign Engineering for the chlorination building, connection to CICWCD, additional piping to loop the system, and 2 pump stations is \$10.3 million. If cost estimates are added for the well re-equipping (\$2.5 million) and a 2 million gallon tank (\$3 million), then the total cost estimate is: \$15.8 million.
  - Funding for this project is proposed to be acquired through bonding (debt issuance).
2. The pending order to treat drinking water from the Cedar Canyon Springs requires the following deadline to be met:
  - March 1, 2026 – Cedar City needs to submit a decision and timeline for actions that will be taken to address the Cedar Canyon Springs.
  - The cost estimate for this project is \$4.2 million. There is currently \$2.2 million budgeted in the FY26 budget. An additional \$2 million would be needed to complete project. The additional funding is proposed to be acquired through bonding (debt issuance).

The following documents are included as an attachment to this Information Sheet:

- Stipulated Order to Disinfect, letter dated September 20, 2024.
- Amended Stipulated Order to Disinfect, letter dated August 5, 2025.
- Cedar Canyon Spring Under the Direct Influence of Surface Water (UDI), letter dated September 5, 2023.
- Temporary Approval to use Cedar Canyon Spring, letter dated December 13, 2023.



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF DRINKING WATER  
Nathan Lunstad, Ph.D., P.E.  
Director

September 20, 2024

Cedar City Corporation  
% Randall McUne, City Attorney  
10 North Main Street  
Cedar City, UT 84720

**Subject: Stipulated Order to Disinfect Cedar City Waterworks UTAH110002**

Dear Randall McUne:

We are writing to provide you, on behalf of Cedar City Corporation, with a draft of the Division's proposed Stipulated Order to Disinfect (SOTD) that addresses the drinking water compliance issues currently affecting the Cedar City Waterworks (System).

The SOTD includes milestones the Supplier responsible for the System must meet to comply with the applicable regulations. It also references stipulated penalties that will be assessed if the System does not meet the requirements and/or the deadlines. The SOTD is broken down into the following key sections:

**STATUTORY AND REGULATORY AUTHORITY:** This section describes the basis for the authority of the Director of the Division of Drinking Water to issue the SOTD.

**FINDINGS:** This section provides basic background information about the System, including its inventory and legal ownership. It also briefly explains the facts underlying the Director's decision to require disinfection.

**ORDER:** The Order Section states requirements for the System and incorporates the Stipulated Order to Disinfect Schedule as part of the Order.

**GENERAL PROVISIONS:** This section outlines conditions agreed to by the System and the Division of Drinking Water, including potential penalties and system ratings.

**COMPLIANCE NOTICE:** This section states that compliance with this order is mandatory and falls under the authority of the Utah Safe Drinking Water Act.

Please carefully review the enclosed SOTD. If it is acceptable, it should be signed by an authorized person and returned to the Director. Once the Director issues the SOTD, a copy will be returned for

195 North 1950 West • Salt Lake City, UT  
Mailing Address: P.O. Box 144830 • Salt Lake City, UT 84114-4830  
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Cedar City Waterworks

Page 2 of 2

September 20, 2024

your records. The effective date is the date of issuance by the Director. Failure to return a signed copy within 30 days of this letter may result in a unilateral administrative order issued by the Director to ensure progress toward compliance.

I encourage you to continue to work closely with our Division staff. Your primary contact is Sarah Page at [sepage@utah.gov](mailto:sepage@utah.gov) or 385-272-5778.

Sincerely,



Nathan Lunstad Ph.D., P.E.

Director

Division of Drinking Water

cc: Kim Shelley, Utah Department of Environmental Quality, [kshelley@utah.gov](mailto:kshelley@utah.gov)  
Paul Wright, P.E., Utah Department of Environmental Quality, [pwright@utah.gov](mailto:pwright@utah.gov)  
Jeremy Roberts, Southwest Utah Health Department, [jroberts@swuhealth.org](mailto:jroberts@swuhealth.org)  
Bret Randall, Utah Attorney General's Office, [bfrandall@agutah.gov](mailto:bfrandall@agutah.gov)-or-  
David McKnight, Utah Attorney General's Office, [dmcknight@agutah.gov](mailto:dmcknight@agutah.gov)  
Christopher Brown, Environmental Protection Agency-Region 8, [brown.christopher.t@epa.gov](mailto:brown.christopher.t@epa.gov)  
Robbie Dean Mitchell, Cedar City Waterworks, [mrobbie@cedarcity.org](mailto:mrobbie@cedarcity.org)  
EQDWMonitoring, EQDWCOA, EQDWVSA, and EQDWFS

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF DRINKING WATER**

<b>In the Matter of:</b>  <b>Cedar City Corporation Public Water System</b>	<b>Stipulated Order to Disinfect</b>  <b>Docket No. UTAH11002-2024001</b>
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This **Stipulated Order to Disinfect** ("SOTD") has been issued by the Director of the Utah Division of Drinking Water ("Director"), under the Director's legal authorities described below. This SOTD has been agreed to by Cedar City Corporation, a Utah municipal corporation, in its capacity as the "Supplier" who is legally responsible for the System.

**STATUTORY AND REGULATORY AUTHORITY**

1. In 1974, Congress enacted the federal Safe Drinking Water Act, codified at 42 U.S.C. § 300f *et seq.*, as amended. 42 U.S.C. § 300g-2 allows states to achieve primary enforcement responsibility after the Environmental Protection Agency ("EPA") has determined that the state has adopted and can implement a state program that is no less stringent than the federal public drinking water program ("Primacy").
2. The Utah legislature has enacted the Utah Safe Drinking Water Act, codified at Utah Code § 19-4-101 (the "Act"), with the intent of achieving Primacy.
3. Utah Code § 19-4-104 authorizes the Utah Drinking Water Board (the "Board"), among other things, to make rules regulating public water systems in the state of Utah. Utah Code § 19-4-104(1)(c)(vi) charges the Board to "meet the requirements of federal law related or pertaining to drinking water." The Board has promulgated the Utah Public Drinking Water Rules, codified at Utah Administrative Code ("UAC") R309.
4. In 1980, the EPA Administrator determined, in accordance with 40 C.F.R. § 142.11, that the Utah public drinking water program met the federal requirements for Primacy. See 45 Fed. Reg. 6647 (January 29, 1980). In accordance with 40 C.F.R. § 142.17, the EPA Administrator has reviewed and continues to review annually, the Utah public drinking water program to evaluate its continuing compliance with the requirements set forth in 40 C.F.R. Part 142.
5. The Board has defined public water systems under the Utah Public Drinking Water Rules, UAC R309-110-4.
6. UAC R309-100-7 directs the Director to "assign a rating to each public water supply in order to provide a concise indication of its condition and performance" in accordance with R309-400. This rule is generally known as the Improvement Priority System ("IPS") rating system.

7. The IPS rating system “is a point system used by the division to evaluate a public water system’s performance and compliance with the drinking water rules in Title 309, Environmental Quality, Drinking Water.” UAC R309-400-3(1). Under the IPS rating system, each public water system is assigned a rating “to characterize the water system’s compliance with drinking water rules and overall operation and performance.” UAC R309-400-3(2). The IPS rating system is used by the Division to assign compliance ratings to public water systems and to prioritize enforcement action based on points assessed for noncompliance with drinking water rules.” UAC R309-400-1(1).
8. UAC R309-400-4(1)(a)(ii) directs the Director to establish “the point thresholds for assigning an Approved or Not Approved rating for each type of water system.” The Director may issue a “Not Approved” rating for systems exceeding the point threshold. The thresholds are as follows: (i) for community water systems, 150 points; (ii) for non-transient, non-community water systems, 120 points; and (iii) for non-community water systems, 100 points.
9. UAC R309-400-4(4) allows the Director to assess points against public water systems upon their failure to comply with Division directives and orders.
10. UAC R309-400-5(1)(b)(ii) allows the Director to rate any public water system as “Not Approved” at any time if an immediate threat to public health exists: -----
11. UAC R309-400-5(1)(c) provides that a public water system may qualify for a “Corrective Action” rating for its public water system “based on a current, written agreement with the division to resolve underlying noncompliance according to a compliance schedule.”
12. Pursuant to Utah Code § 19-4-106(d), the Director may enforce rules promulgated by the Board by issuing orders. *See also* UAC R309-100-8.
13. Utah Code § 19-4-107 provides that upon discovery of any violation of the Act or a rule of the Board, the Director shall promptly notify the supplier of the violation, state the nature of the violation and issue an order requiring correction of that violation.
14. Utah Code § 19-4-109 provides that any person who violates the Act or a rule or order made or issued pursuant to the Act may be subject to an administrative penalty of up to \$1,000 per day of violation or a civil penalty of up to \$5,000 per day of violation.

### **FINDINGS**

The Director makes the following Findings for purposes of this SOTD:

15. There exists a drinking water system in Iron County, Utah, known as Cedar City Waterworks (the “System”) that serves a population of approximately 37,760 persons. The System generally includes eight active wells, one proposed well, four springs, three active pump stations, one proposed pump station, twelve ten active storage tanks, two proposed storage tanks, four chlorinators, and an independent distribution system supplying approximately 10,139 service connections.

16. The Supplier (defined above) is the owner and/or operator of the System and is therefore legally responsible for the System and for compliance with applicable laws, rules, and regulations.
17. The System is a public drinking water system within the meaning of the Utah Safe Drinking Water Act and the Utah Public Drinking Water Rules.
18. The System qualifies as a community under the Utah Public Drinking Water Rules. The maximum number of IPS points allowed for this type of system is 150.
19. The Master IPS Report attached hereto as Exhibit A describes several violations and deficiencies associated with the System, which form the basis of this SOTD (the "Violations and Deficiencies"). Supplier agrees and stipulates that the information contained in the attached IPS Report is true and correct as of the date shown on the Master IPS Report.
20. In August 2021 and June, July, August, and November 2022, Cedar City Waterworks had several total coliform positive sample results, triggering five Level 2 Assessments.
21. Cedar City Waterworks does not reliably meet bacteriological standards in the distribution system. Based on your sample history, Cedar City Waterworks is required to provide continuous secondary disinfection throughout the distribution system. These requirements were initially detailed in a letter from the Director dated January 31, 2023. Cedar City Waterworks may be subject to additional treatment requirements if water quality sampling results indicate any of the water system's sources require primary disinfection.
22. In August of 2024, a total of six samples were taken at Shurtz Canyon Spring (WS001), four samples were total coliform present and *E. coli* absent. The other two samples were total coliform present and *E. coli* present. With confirmed *E. coli* primary disinfection is required at Shurtz Canyon Spring (WS001).

### **ORDER**

Based on the foregoing Findings, the agreement of the Supplier, and good cause appearing, **IT IS HEREBY ORDERED** as follows:

23. Attached hereto as the Enforcement Order Schedule – UTAH11002 ("Stipulated Order to Disinfect Schedule") listing the violations and deficiencies associated with the System as well as a description of specific corrective actions and other measures that are required for the System to comply with the Safe Drinking Water Act and the Board's rules, including the dates by which such corrective actions and other measures shall be completed. The Supplier is hereby ordered to complete all corrective actions and other measures described in the Stipulated Order to Disinfect Schedule, to the satisfaction of the Director, on or before the due dates identified in the Stipulated Order to Disinfect Schedule.
24. The Supplier agrees to collect all samples required by the Safe Drinking Water Act and the Board's rules and to report the sample results to the Director within the timeframe mandated by the rule.

25. Within 60 days after the issuance of this Order, the Supplier shall provide the Division of Drinking Water with a schedule for the System to address the requirements for secondary disinfection throughout the entire distribution system. The plan shall include proposed modifications to the System, estimated costs of modifications, a proposed plan, and a schedule for project completion. The plan shall also include specific milestone dates and a final compliance date (to be within six months from the date of DDW approval of the plan). The Director must approve the schedule before construction or modifications can begin.
26. Within 60 days after the issuance of this Order, the Supplier shall provide the Division of Drinking Water with a schedule for the System to address the requirements for primary disinfection for the Shurtz Canyon Spring (WS001). The plan shall include proposed modifications to the System, estimated costs of modifications, a proposed plan, and a schedule for project completion. The plan shall also include specific milestone dates and a final compliance date (to be within six months from the date of DDW approval of the plan). The Director must approve the schedule before construction or modifications can begin.
27. The Supplier agrees to send all reporting and notifications required by this Order in writing to:

Utah Division of Drinking Water  
P.O. Box 144830  
Salt Lake City, Utah  
84114-4830  
Email: [eqdwvsa@utah.gov](mailto:eqdwvsa@utah.gov)

28. The Distribution System (DS001) is hereby rated "Unapproved" as outlined in R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3). This is a Significant Deficiency (S100), and 200 Improvement Priority System points were assessed.
29. The Shurtz Canyon Spring (WS001) is hereby rated "Unapproved" as outlined in R309-515-6(5), R309-515-7(4), R309-500-9(2), and (3). This is a Significant Deficiency (S100), and 200 Improvement Priority System points were assessed.
30. The Supplier agrees to install and operate Division-approved permanent disinfection for the entire distribution system (DS001). **The Supplier agrees to complete Division Plan Approval prior to construction of any disinfection facilities.**
31. The Supplier agrees to install and operate Division-approved permanent primary disinfection for the Shurtz Canyon Spring (WS001). **The Supplier agrees to complete Division Plan Approval prior to construction of any disinfection facilities.**

#### **Primary Disinfection Requirements**

32. **To meet primary disinfection requirements, the Supplier agrees to continuously maintain a minimum of 0.2 mg/L free chlorine residual at the Point(s) of Entry**



**(POE) into the distribution system, continuously demonstrate a CT that achieves 4-log inactivation for viruses at the POE for the Shurtz Canyon Chlorinator (TP001), demonstrate a detectable chlorine residual in the entire distribution system, and comply with associated reporting requirements.**

33. The Supplier agrees to a Microscopic Particulate Analysis (MPA) test for the Shurtz Canyon Spring (WS001) taken by an approved Division of Drinking Water representative following Division-approved MPA protocols. This test will be completed by July 1, 2025.

- (a) This testing is essential to determine whether the source may be considered Groundwater Under the Direct Influence of Surface Water (UDI). The MPA test results will help assess the source's quality and determine whether primary disinfection is necessary to protect public health.
- (b) If needed, the Supplier agrees to subsequent MPA samples at the Shurtz Canyon Spring (WS001) consistent with the Division of Drinking Water Vulnerable Source Assessment (VSA) Policy (attached).

34. **Chlorine Residual – Point(s) of Entry (POE) to Distribution System (EP001)**

- (a) The Supplier agrees to submit a POE sample location to the Division for Shurtz Canyon Spring (WS001).
  - (i) The POE sampling location will be identified as EP001 in the Division's database.
- (b) Maintain a minimum of 0.2 mg/L residual (measured as free chlorine) at the POE sampling location. [UAC R309-215-16(3)(b)(iii)(A)(I) and (II)].
- (c) The chlorine residual concentration measured at the POE sampling location shall not exceed the Maximum Residual Disinfectant Level (MRDL) of 4.0 mg/L (measured as free chlorine). [R309-200-5(3)(c)(iv)].
- (d) Record and report the lowest daily chlorine residual concentration, measured as free chlorine, at the chlorinator POE sampling location (EP001) a minimum of daily. [R309-210- 8(3)(a)(ii)]
  - (i) Our records show that your water system serves XXX people. Be aware that R309-215-16(3)(b)(iii)(A)(I) requires water systems serving greater than 3,300 people to continuously monitor the POE chlorine residuals. Therefore, an online analyzer to continuously monitor the POE chlorine residuals entering the distribution system is needed.

35. **Primary Disinfection and Reporting Requirements**

- (a) The water system must operate a treatment facility capable of providing sufficient disinfection CT to achieve 4-log<sub>10</sub> virus inactivation of the water from the Shurtz Canyon Chlorinator (TP001). [R309-215-16(1)(a)(iii); R309-520-6(4)(c)]
- (b) The water system must demonstrate sufficient disinfection CT by monitoring and reporting the actual CT achieved during operation using a monitoring sheet provided by the Division (Monthly Report for Primary Disinfection Compliance). The monitoring and reporting will include chlorine residuals measured at the POE to the distribution system and other parameters for calculating CT. [R309-520-6(4); R309-215-16(3)(b)(iii)(A)]
- (c) The water system must submit Primary Disinfection Reports monthly. The reports are due to the Division by the 10th day following the end of each reporting month. [R309-215-10]

**36. Chlorine Residual – Distribution System (DS001)**

- (a) This water system must maintain a detectable residual throughout the entire distribution system. Maintaining the chlorine residual above 0.1 ppm in the distribution system is recommended. [R309-520-5]
- (b) The chlorine residual measured in the distribution system shall not exceed the maximum residual disinfectant level (MRDL) of 4.0 mg/L (measured as free chlorine). [R309-200-5(3)(c)(iv)]
- (c) Take a minimum of three (3) chlorine residual samples per week at varying locations throughout its distribution system. [UAC R309-105-10(1)(c)]
- (d) Distribution system chlorine residuals must be taken in conjunction with total coliform sampling. [R309-215-10(3)]

**Secondary Disinfection Requirements**

- 37. To meet secondary disinfection requirements, the Supplier agrees to continuously maintain a minimum of 0.2 mg/L free chlorine residual at the Points of Entry (POE) into the distribution system and demonstrate a detectable chlorine residual in the entire distribution system.**

**38. Chlorine Residual – Points of Entry (POE) to Distribution System**

- a. The POE sampling locations for each of the system's chlorinators will be identified in the Division's database. These specific locations shall be provided to the Division by the system.
- b. Maintain a minimum of 0.2 mg/L residual (measured as free chlorine) at the POE sampling locations. [UAC R309-215-16(3)(b)(iii)(A)(I) and (II)]

- c. The chlorine residual concentration measured at the POE sampling locations shall not exceed the Maximum Residual Disinfectant Level (MRDL) of 4.0 mg/L (measured as free chlorine). [UAC R309-200-5(3)(c)(iv)]
- d. Record and report the lowest daily chlorine residual concentration, measured as free chlorine, at the chlorinator POE sampling locations **a minimum of daily**. [R309-215-10(1)]
  - o Our records show that your water system serves 37,760 people. Please be aware that R309-215-16(3)(b)(iii)(A)(I) requires water systems serving greater than 3,300 people to continuously monitor the POE chlorine residuals. Therefore, an online analyzer to continuously monitor the POE chlorine residuals entering the distribution system will be needed at each chlorinator.

**39. Chlorine Residual – Distribution System (DS001)**

- a. This water system must **maintain a detectable residual throughout the entire distribution system**. Maintaining the chlorine residual above 0.1 ppm in the distribution system is recommended. [R309-520-5]
- b. The chlorine residual measured in the distribution system shall not exceed the maximum residual disinfectant level (MRDL) of 4.0 mg/L (measured as free chlorine). [R309-200-5(3)(c)(iv)]
- c. Take **a minimum of three (3) chlorine residual samples per week at varying locations throughout its distribution system** UAC R309-105-10(1)(c).
- d. Distribution system chlorine residuals must be taken in conjunction with total coliform sampling. [R309-215-10(3)]

- 40. The Supplier must notify the Division by telephone at (801) 560-8456 within eight hours of the malfunction of any disinfection facility such that a detectable residual cannot be maintained at all points in the distribution system per R309-105-18(1)(a).**

**GENERAL PROVISIONS**

- 41. Based on this, the Director hereby determines that the System maintains its rating as “Approved” status. The “Approved” rating is conditioned upon the Supplier’s adherence to the requirements of this SOTD, the Act, and the Public Drinking Water Rules. The Director may re-rate the System as “Not Approved” at any time based on any violation of this SOTD, the Act, or the Public Drinking Water Rules.
- 42. Upon satisfactory compliance with the Stipulated Order to Disinfect Schedule requirements, the Director shall issue a subsequent administrative order closing out this SOTD as defined in UAC R309-400. Pursuant to such subsequent order, the Director may also take other appropriate actions or impose appropriate conditions based on the facts presented.

43. The Supplier hereby stipulates and agrees to pay, within 30 days of demand by the Director, administrative penalties in the following amounts arising from any and all violations of this SOTD, on a per-day, per-violation basis:

<b>Penalty Per Violation Per Day</b>	<b>Period of Noncompliance</b>
\$ 250	1st through 14th day
\$ 500	15th through 30th day
\$1,000	31st day and beyond

44. In the event of any violation of this SOTD with criminal negligence, within the meaning of Utah Code § 19-4-109(7)(b), the Director reserves the right, in the Director's sole discretion, to seek the imposition of fines and civil penalties under that section in addition to stipulated administrative penalties under this SOTD.
45. Nothing in this SOTD shall be construed as prohibiting, altering, or in any way limiting the ability of the Director to seek injunctive relief pursuant to Utah Code § 19-4-107(2) arising from violations of this SOTD, the Act, or the Utah Public Drinking Water Rules.
46. This SOTD does not in any way relieve the Supplier from any other obligation imposed under the Act or any other state, federal, or local law, rule, or regulation. The Director reserves that this SOTD is without prejudice to all rights against the Supplier that the Director may have pertaining to matters not addressed in this SOTD, including (a) violations of this SOTD; (b) future violations of the Act or the Utah Public Drinking Water Rules; and (c) criminal liability.
47. The Director has the jurisdiction and authority to make the findings set forth in this SOTD and to otherwise enforce the terms of this SOTD.
48. The date of issuance shall be the date that this SOTD is executed by the Director.
49. As of the date of issuance, this SOTD shall constitute a final administrative order under the Act and shall operate as a final adjudication upon the merits of the matters addressed herein. In the Director's sole discretion, violations of this SOTD may result in the commencement of an action for civil enforcement in state district court, by the attorney general, as provided in Utah Code Section 19-4-107. Such actions may seek injunctive or other relief, including the imposition and collection of civil penalties as allowed by law. The Supplier agrees that in any enforcement action, it shall not contest the finality or validity of this SOTD or the Director's authority to enter it as a final administrative order under the Act.
50. The dates set forth in the Stipulated Order to Disinfect Schedule may be extended in writing by the Director, in the Director's sole discretion, based on the Supplier's showing of good cause. Good cause for an extension generally means events outside of the reasonable control of the Supplier, such as force majeure, inclement weather, contractor or supplier delays, and similar circumstances. However, the Director expects the Supplier to employ reasonable means to limit foreseeable causes of delay. The timeliness of the Supplier's request for an extension shall constitute an important factor in the Director's evaluation.

51. In partial or full satisfaction of the Stipulated Order to Disinfect Schedule, the Supplier may (a) obtain a variance or exception as allowed by the Act and the Public Drinking Water Rules; or (b) propose to the Director an alternate method for compliance with the Act and the Public Drinking Water Rules. No such alternate means of compliance with the Enforcement Order Schedule shall be accepted unless approved by the Director in writing.
52. The person signing this SOTD on behalf of the Supplier hereby represents to the Director that he or she has the full legal authorization to do so and agrees that the Director may rely on this representation.

### **COMPLIANCE NOTICE**

Compliance with the provisions of this SOTD is mandatory. All violations of the Utah Safe Drinking Water Act, the Drinking Water Rules, and this SOTD shall be strictly enforced during the time that this SOTD remains in effect.

**IT IS SO ORDERED AND AGREED.**

#### **DIVISION OF DRINKING WATER**

By: Nathan Lunstad  
Nathan Lunstad Ph.D., P.E.  
Director

DATE: 11/13/2024

#### **CEDAR CITY CORPORATION**

By: Garth O. Green  
Garth O. Green (Nov 12, 2024 14:10 MST)

Name: Garth O. Green

Title: Mayor

DATE: 11/12/2024



## Stipulated Order to Disinfect Schedule UTAH11002

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**System Name:** Cedar City Waterworks  
**System Number:** UTAH11002  
**Administrative Contact:** Robbie Dean Mitchell  
**Email:** [mrobbie@cedarcity.org](mailto:mrobbie@cedarcity.org)  
**Phone Number:** 435-233-0067

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### Corrective Action Requirements and Due Dates

**Date of Issuance:** 11/13/2024

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#### Distribution System, DS001

Item #1	Code	Facility	Deficiency	Rule Citation
	S001	DS001	Unapproved Source In Service	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation of the plan to install secondary disinfection as required in 25 of this Order.			Within 60 days of the Date of Issuance of this Order.

#### Shurtz Canyon Spring, WS001

Item #2	Code	Facility	Deficiency	Rule Citation
	S001	WS001	Unapproved Source In Service	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation of the plan to install primary disinfection for the Shurtz Canyon Spring (WS001) as required in 26 of this Order.			Within 60 days of the Date of Issuance of this Order.

Item #3	Code	Facility	Deficiency	Rule Citation
	S001	WS001	Unapproved Source In Service	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Microscopic Particulate Analysis (MPA) test will be conducted for the Shurtz Canyon Spring (WS001) as required in item 33 of this order.			By July 1, 2025

Item #4	Code	Facility	Deficiency	Rule Citation
	S001	WS001	Unapproved Source In Service	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	Corrective Action			Completion Due Date
	Submit a Point of Entry Point (POE) sample location for the Shurtz Canyon Spring (WS001) as required in item 34(a) of this Order.			Within 60 days of the Date of Issuance of this Order.

**IT IS SO ORDERED AND AGREED.**

DIVISION OF DRINKING WATER

By: *Nathan Lunstad*  
Nathan Lunstad (Nov 13, 2024 10:36 MST)  
 Nathan Lunstad P.E.  
 Director

DATE: 11/13/2024

CEDAR CITY CORPORATION

By: *Garth O. Green*  
Garth O. Green (Nov 12, 2024 14:10 MST)

Name: Garth O. Green

Title: Mayor

DATE: 11/12/2024



State of Utah

SPENCER J. COX  
*Governor*

DEIDRE HENDERSON  
*Lieutenant Governor*

Department of  
Environmental Quality

Tim Davis  
*Executive Director*

DIVISION OF DRINKING WATER  
Nathan Lunstad, Ph.D., P.E.  
*Director*

August 5, 2025

Cedar City Corporation  
% Randall McUne, City Attorney  
10 North Main Street  
Cedar City, UT 84720

**Subject: Amended Stipulated Order to Disinfect Schedule – Cedar City Waterworks  
UTAH11002**

Dear Randall McUne,

According to the Stipulated Order to Disinfect issued on November 13, 2024, the Division of Drinking Water (DDW) has reviewed the plan submitted by Cedar City Corporation on January 10, 2025 to address the requirements for primary and secondary disinfection at Shurtz Canyon Spring (WS001) and Cedar City Distribution System (UTAH11002 Distribution System DS001). Based on this review, DDW approves the submitted plan and, in accordance with the terms of the Order, hereby issues the attached **Amended Enforcement Order Schedule**.

This amended schedule reflects the modifications, milestone dates, and final compliance date as proposed in the approved plan. As stipulated in the Order, this **Amended Enforcement Order Schedule supersedes and replaces all previous schedules** but does not alter the terms or obligations outlined in the original Order, which remains in full force and effect.

Please review the attached schedule and ensure that all required actions are completed in accordance with the specified deadlines. If you have any questions or require further clarification, please contact Sarah Page at [sepage@utah.gov](mailto:sepage@utah.gov) or 385-272-5778.

Thank you for cooperating to ensure continued safety for the Cedar City Waterworks drinking water system and its residents.

Sincerely,

A handwritten signature in blue ink that reads "Nathan Lunstad". The signature is fluid and cursive, with the first name "Nathan" and last name "Lunstad" clearly distinguishable.

Nathan Lunstad, Ph.D., P.E.  
Director  
Division of Drinking Water

Enclosures: November 12, 2024, Stipulated Order to Disinfect  
Cedar City Master Report  
Amended Enforcement Order Schedule

cc: Tim Davis, Utah Department of Environmental Quality, [tim.davis@utah.gov](mailto:tim.davis@utah.gov)  
Paul Wright, P.E., Utah Department of Environmental Quality, [pwright@utah.gov](mailto:pwright@utah.gov)  
Jeremy Roberts, Southwest Utah Health Department, [jroberts@swuhealth.org](mailto:jroberts@swuhealth.org)  
Bret Randall, Utah Attorney General's Office, [bfrandall@utahag.gov](mailto:bfrandall@utahag.gov)  
Christopher Brown, Environmental Protection Agency-Region 8,  
[brown.christopher.t@epa.gov](mailto:brown.christopher.t@epa.gov)  
Matthew R. Baker, Cedar City Waterworks, [mbaker@cedarcityut.gov](mailto:mbaker@cedarcityut.gov)  
Randall McCune, Cedar City Attorney, [randallm@cedarcityut.gov](mailto:randallm@cedarcityut.gov)  
EQDWMonitoring, EQDWCOA, EQDWVSA, and EQDWFS

## Amended Stipulated Order to Treat Schedule UTAH11002

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**System Name:** Cedar City Waterworks  
**System Number:** UTAH11002  
**Administrative Contact:** Matthew R. Baker  
**Email:** mbaker@cedarcityut.gov  
**Phone Number:** 435-586-2912

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### Corrective Action Requirements and Due Dates

**Date of Issuance:** \_\_\_\_\_ August 5, 2025 \_\_\_\_\_

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#### Distribution System, DS001

Item #1	Code	Facility	Deficiency	Rule Citation
	S001	DS001	Unapproved Source In Service	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
<b>Corrective Action</b>				<b>Completion Due Date</b>
Submit documentation showing the system has effectively installed secondary disinfection to the entire distribution system.				May 31, 2029

Item #2	Code	Facility	Deficiency	Rule Citation
	S001	DS001	Unapproved Source In Service	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
<b>Corrective Action</b>				<b>Completion Due Date</b>
Install Temporary Chlorination to the Cross Hollow Tank				March 1, 2026

#### Shurtz Canyon Spring, WS001

Item #3	Code	Facility	Required Action	Rule Citation
	S001	WS001	Required to Install Primary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
<b>Corrective Action</b>				<b>Completion Due Date</b>
Submit information to DDW to demonstrate primary disinfection has been achieved.				Within 30 days of the Date of Issuance of this Order.



Item #4	Code	Facility	Required Action	Rule Citation
	S001	WS001	Required to Install Primary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit showing an approved Microscopic Particulate Analysis has been completed.			July 1, 2025

Item #5	Code	Facility	Required Action	Rule Citation
	S001	WS001	Required to Install Primary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation showing the installation of an adequate chlorine analyzer.			Within 30 days of the Date of Issuance of this Order.

**Enoch Well #1, WS003**

Item #6	Code	Facility	Required Action	Rule Citation
	S001	WS003	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit construction drawings to DDW for plan approval.			Within 30 days of the Date of Issuance of this Order.

Item #7	Code	Facility	Required Action	Rule Citation
	S001	WS003	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit information to DDW to obtain an Operating Permit.			Within 180 days of the Date of Issuance of this Order.

**Enoch Well #3, WS015**

Item #8	Code	Facility	Required Action	Rule Citation
	S001	WS015	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit construction drawings to DDW for plan approval.			Within 30 days of the Date of Issuance of this Order.

Item #9	Code	Facility	Required Action	Rule Citation
	S001	WS015	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit information to DDW to obtain an Operating Permit.			Within 180 days of the Date of Issuance of this Order.

**Cedar Canyon Spring, WS002**

Item #10	Code	Facility	Required Action	Rule Citation
	S001	WS002	Required to Install 3-log <i>Giardia</i> Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation showing installation of an adequate chlorine analyzer and monthly reporting for 3-log <i>Giardia</i> inactivation for WS002 feed to Milt's Restaurant and residences.			Within 45 days of the Date of Issuance of this Order.

**Left Quichapa Spring WS009 (Spilsbury Springs)**

Item #11	Code	Facility	Required Action	Rule Citation
	S001	WS009	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation showing installation of an adequate chlorine analyzer.			Within 90 days of the Date of Issuance of this Order.

**Right Quichapa Spring WS010 (Spilsbury Springs)**

Item #12	Code	Facility	Required Action	Rule Citation
	S001	WS010	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation showing installation of an adequate chlorine analyzer.			Within 90 days of the Date of Issuance of this Order.

**Quichapa Wells #1, WS018**

Item #13	Code	Facility	Required Action	Rule Citation
	S001	WS018	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation showing installation of an adequate chlorine analyzer.			Within 90 days of the Date of Issuance of this Order.

**Quichapa Wells #3**

Item #14	Code	Facility	Required Action	Rule Citation
	S001	WS005	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit documentation showing installation of an adequate chlorine analyzer.			Within 90 days of the Date of Issuance of this Order.

**Quichapa Wells #5, WS008**

Item #15	Code	Facility	Required Action	Rule Citation
	S001	WS008	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit construction drawings to DDW for plan approval.			November 1, 2026

Item #16	Code	Facility	Required Action	Rule Citation
	S001	WS008	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit information to DDW to obtain an Operating Permit.			June 1, 2029

**Quichapa Wells #6, WS013**

Item #17	Code	Facility	Required Action	Rule Citation
	S001	WS013	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit construction drawings to DDW for plan approval.			November 1, 2026

Item #18	Code	Facility	Required Action	Rule Citation
	S001	WS013	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit information to DDW to obtain an Operating Permit.			June 1, 2029

**Quichapa Wells #7, WS014**

Item #19	Code	Facility	Required Action	Rule Citation
	S001	WS014	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit construction drawings to DDW for plan approval.			November 1, 2026

Item #20	Code	Facility	Required Action	Rule Citation
	S001	WS014	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit information to DDW to obtain an Operating Permit.			June 1, 2029

**Quichapa Wells #8, WS017**

Item #21	Code	Facility	Required Action	Rule Citation
	S001	WS017	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit construction drawings to DDW for plan approval.			November 1, 2026

Item #22	Code	Facility	Required Action	Rule Citation
	S001	WS017	Required to Install Secondary Disinfection	R309-515-6(5), R309-515-7(4), R309-500-9(2) and (3)
	<b>Corrective Action</b>			<b>Completion Due Date</b>
	Submit information to DDW to obtain an Operating Permit.			June 1, 2029

**IT IS SO ORDERED AND AGREED.**

DIVISION OF DRINKING WATER

By: 

Nathan Lunstad, Ph.D., P.E.  
Director

DATE: August 5, 2025



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF DRINKING WATER  
Tim Davis  
Director

September 5, 2023

Robbie Dean Mitchell  
Cedar City Waterworks  
10 N Main Street  
Cedar City, UT 84720

Subject: **Cedar Canyon Spring (WS002) Under the Direct Influence of Surface Water (UDI);**  
Cedar City Waterworks, System #11002, File #13233

Dear Robbie Mitchell:

The Division of Drinking Water ("the Division") has determined that **Cedar Canyon Spring (WS002)** is under the direct influence of surface water (UDI). The Division designated the source as UDI for the following reasons:

- Confirmed *E. coli* positive samples at the source in July 2020 and August of 2021.
- An initial Microscopic Particulate Analysis (MPA) sample collected on April 20, 2022 which scored 16, indicating a moderate risk for being UDI.
- A follow-up MPA sample collected on June 28, 2023 which scored 20, indicating a high risk for being UDI. The disturbance of a section of spring transmission line in one of the three collection areas upstream of the MPA sample location may have affected this result. However, the MPA test results were very similar to those from the sample collected on April 20, 2022.

Given the historic indication of bacteriological issues and the moderate and high risk MPA samples, **as of the date of this letter, Cedar Canyon Spring** (identified as WS002 in the Division's database) **is classified as being under the direct influence (UDI) of surface water.**

For more details about this designation, what it means, and its consequences see the attached *UDI Definition and Possible Causes*.

This water system is required to take the following actions within the following time frames due to this drinking water source being classified as UDI and posing significant risks to public health.



**Required Immediate Actions**

Cedar City has already conducted public notification to its water users, and Cedar Canyon Spring (WS002) has been turned out of the system. No further action is required immediately.

The following are options for temporary measures that can be implemented for the spring until a permanent solution is implemented.

- a. Turn the source out of the drinking water system.
- b. Issue a boil order or supply bottled water to your customers.
- c. Install and operate disinfection facilities to achieve **3-log inactivation of *Giardia lamblia*** per federal Surface Water Treatment Rule (40 CFR §141.72).

If this water system currently does not have the ability to achieve the treatment goal of 3-log *Giardia lamblia* inactivation, this option would require submittal of plans and specifications of a proposed disinfection facility to the Division for review and approval. The design must be signed and stamped by a professional engineer. The proposed design must identify the degree of disinfection in terms of disinfection CT (Disinfectant Residual Concentration in ppm × Contact Time in minutes) and inactivation log credit.

For example, to achieve 3-log inactivation of *Giardia* cysts at free chlorine residual of 0.5 ppm, water pH of 7 and temperature at 0.5 °C, the required disinfection CT is 210, which would require at least 420 minutes of contact time. Such significant contact time sometimes cannot be achieved with a water system's existing configuration. In such case, a water system may need to make costly modifications in order to achieve the required 3-log *Giardia* inactivation. Please note that modifications to existing drinking water facilities also need to go through the Division's engineering review process. The implementation time of this temporary option (Option c) may be similar to that of a permanent solution.

Please contact Paul Wright at (435) 986-2590 for questions related to engineering review.

Based on an initial review conducted by the Division, Cedar Canyon Spring could be treated to achieve 3-log inactivation of *Giardia lamblia* if flows are decreased and chlorine residuals are increased. Additionally, an online chlorine analyzer would be required at the point of entry.

**Required Action within 30 Days**

Notify the Division in writing **within 30 days of the date of this letter** what your decisions are regarding this water source.

**If an acceptable course of action is not agreed upon by October 15, 2023, the Cedar Canyon Spring will become an unapproved source of drinking water. Subsequently, this**

water system would be assessed 200 deficiency points for using an unapproved source, and this water system's rating will become "Not Approved."

If your decision is to continue using Cedar Canyon Spring (WS002) for drinking water, you will be required to immediately comply with the following requirements:

1. Begin collecting water samples from this source prior to any treatment for enumerated *Escherichia coli* (*E. coli*) analysis. The *E. coli* sampling shall be done either once a month for two years or once every two weeks for one year. A total of twenty four (24) *E. coli* samples are required per the federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). These samples will be used to determine the bin classification of the source water and the degree of required treatment for *Cryptosporidium*.
2. Take monthly bacteriological samples from a representative site in the distribution system.
3. Take nitrate samples on a quarterly basis from this source.
4. Submit monthly disinfection reports to the Division.
5. You may also be required to monitor for disinfection by-products (DBPs). Please contact Mark Berger at (801) 641-6457 or [mberger@utah.gov](mailto:mberger@utah.gov) for DBPs questions.

#### **Required Actions within 18 Months**

**Within 18 months of the date of this letter, you must implement one of the following permanent solutions:**

1. Abandon Cedar Canyon Spring (WS002) as a drinking water source permanently by physically disconnecting it from your water system.
2. Have installed and be operating an approved surface water treatment facility that successfully treats this source and meets the surface water treatment requirements.
3. Complete remediation of the source to eliminate the surface water influence. In some cases, geological conditions might make it impossible to exclude surface water influence and the expense of the remediation could be futile. We recommend that you consult with a hydrogeologist first before pursuing this option.

Options 2 and 3 must go through the Division's Plan Approval process including issuance of an Operating Permit. Additional drinking water source protection requirements will apply if Option 2 is implemented, in accordance with R309-600-3(3) and R309-605-8.

We appreciate your immediate attention to this matter. Please notify the Division in writing, within 30 days of the date of this letter, what your decisions are regarding this source. This communication should be addressed to the VSA Team at [eqdwvsa@utah.gov](mailto:eqdwvsa@utah.gov). If you have any questions regarding this letter, please contact Sarah Page at (385) 272-5778 or Brian Pattee at (385) 270-7272.

Robbie Mitchell  
Page 4 of 4  
September 5, 2023

Sincerely,



Mark Berger  
Monitoring and Standards Section Manager

Enclosures — UDI Public Notice Template  
UDI Definition and Possible Causes  
Laboratory Report of MPA Sample Taken on 04/20/2022  
Laboratory Report of MPA Sample Taken on 06/28/2023

cc: Jeremy Roberts, Southwest Utah Health Department, jroberts@swuhealth.org  
Robbie Mitchell, Cedar City Waterworks, mrobbie@cedarcity.org  
Division of Drinking Water VSA Team, EQDWVSA@utah.gov  
Paul Wright, P.E., DEQ Southwest District, pwright@utah.gov  
Deidre Beck, DDW Source Protection, dbeck@utah.gov  
David Kruse, Division of Drinking Water, dbkruse@utah.gov  
Jennifer Yee, Division of Drinking Water, jyee@utah.gov  
Michelle Deras, Division of Drinking Water, mderas@utah.gov

DDW-2023-037010



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF DRINKING WATER  
Nathan Lunstad, P.E.  
Interim Director

December 13, 2023

Robbie Mitchell  
Cedar City Waterworks  
10 North Main Street  
Cedar City, Utah 84720

Subject: **Temporary Approval to use Cedar Canyon Spring (WS002)**, Disinfection CT  
Evaluation for 3-log *Giardia* Inactivation by Cedar Canyon Chlorinator (TP002);  
Cedar City Waterworks, System #11002, File #13525

**This temporary approval expires on March 5, 2025**

Dear Robbie Mitchell:

On December 7, 2023, the Division of Drinking Water (the Division) received your request to utilize the Cedar Canyon Spring in the Cedar City Waterworks water system by completing monitoring improvements and making operational changes to achieve and demonstrate 3-log *Giardia* inactivation through disinfection using the existing Cedar Canyon Chlorinator.

The Cedar Canyon Spring (identified as WS002 in the Division's database) was determined to be under the direct influence of surface water (UDI) by the Division and you were notified in a letter dated September 5, 2023. The UDI designation was based on historic bacteriological issues and the results of microscopic particulate analysis (MPA) tests conducted on April 20, 2022, and June 20, 2023. The test scored 16 in 2022, indicating moderate risk, and scored 20 in 2023, indicating a high risk of Cedar Canyon Spring (WS002) being UDI. The Division required Cedar City Waterworks to issue a boil order (or supply bottled water) and either turn out the spring from the system or install and operate disinfection facilities to achieve a 3-log inactivation of *Giardia* as a temporary solution.

It is our understanding that you are requesting approval for use of the Cedar Canyon Spring (WS002) as a drinking water source in your system by operating the existing Cedar Canyon Chlorinator (TP002) to achieve 3-log *Giardia* inactivation temporarily, until a **permanent solution is implemented, which must be reviewed, approved and operational by March 5, 2025**. The proposal includes increasing the chlorine dose, reducing the spring flows and monitoring and reporting daily pH and temperature data to accurately evaluate the disinfection CT (CT = Concentration × Contact Time) daily.

#### **Cedar Canyon Chlorinator (TP002) Disinfection CT Review**

The Division received from you information on the estimated worst-case scenario disinfection CT, which is described in the Addendum to this letter. **The estimated worst-case scenario disinfection CT before the chlorinated water reaches the point-of-entry to distribution system (POE) is 164, which is anticipated to meet the 3-log *Giardia* inactivation goal.**

**The Division hereby grants temporary approval to allow the use of Cedar Canyon Spring (WS002) as a drinking water source in your system based on adequate disinfection CT being achieved to provide 3-log inactivation of *Giardia* by the Cedar Canyon Chlorinator (TP002) while a permanent solution is explored and implemented by March 5, 2025. This temporary approval is contingent upon the following conditions:**

1. **This temporary approval expires on March 5, 2025.**
2. The Cedar Canyon Chlorinator (TP002) shall **provide continuous disinfection with a minimum chlorine residual of 1.0 ppm** at the point of entry into the distribution system.
3. The water system shall submit the Temporary Groundwater UDI 3-log *Giardia* Inactivation Report monthly to the Division, which will include the following information recorded daily:
  - a. **Minimum daily chlorine residual level and daily pH and temperature data** taken from the POE (target of 1.0 mg/l).
  - b. Peak flow will be 350 gallons per minute (gpm) which will be controlled by a valve.
  - c. The volume in the transmission line before the first connection is 57,279 gallons.
4. The water system shall continue to submit **monthly chlorine reports showing the chlorine residual level at the entry point of the distribution system.**
5. The water system shall **provide public notice for temporarily using Cedar Canyon Spring (WS002) using the attached public notice template.**
6. If Cedar City Waterworks intends to install surface water treatment for Cedar Canyon Spring (WS002), Cedar City Waterworks shall begin **collecting water samples from Cedar Canyon Spring (WS002) prior to any treatment for *E. coli* enumeration analysis.** If this is the case, please contact Sarah Page at [sepage@utah.gov](mailto:sepage@utah.gov). A sampling plan template will be provided to the system and the plan developed by the system must be approved by the Division. The *E. coli* sampling will occur once every two weeks for one year. A total of twenty-four (24) *E. coli* samples are required per the federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). These samples will be used to determine the bin classification of the source water and the degree of required treatment for *Cryptosporidium*.
7. The water system shall **take quarterly nitrate samples** at the Cedar Canyon Spring (WS002) prior to treatment.

#### **Primary and Secondary Disinfection Requirements**

Cedar City Waterworks will be required to demonstrate ongoing compliance with the following **primary and secondary disinfection** requirements while the Cedar Canyon Chlorinator (TP002) is in operation:



- **Primary Disinfection**

1. The Cedar Canyon Chlorinator (TP002) will be required to operate **continuously**. [R309-520-6(1)]
2. The operation of the Cedar Canyon Chlorinator (TP006) will be required to provide sufficient disinfection CT and achieve **primary disinfection** of the water from Cedar Canyon Spring (WS002), i.e., a minimum of 3-log<sub>10</sub> *Giardia* inactivation for temporary approval to use UDI groundwater sources. [R309-200-5(7); R309-505-7(2)(b)]
3. This water system will be required to conduct compliance monitoring to demonstrate treatment effectiveness, i.e., to **monitor and report the actual CT achieved during operation**, including chlorine residuals measured at the point of entry to distribution system and other parameters for calculating CT. [R309-520-6(4); R309-215-16(3)(b)(iii)(A)]
4. **Chlorine Residual – Point of Entry to Distribution System (EP002)**
  - a. The Point of Entry (POE) sampling location for the Cedar Canyon Chlorinator (TP002) is the continuous analyzer located at the first connection (restaurant) approximately 14,040 feet from the chlorinator. This POE sampling location will be identified as **EP002** in the Division's database.
  - b. This water system will be required to **maintain a minimum of 1.0 mg/L residual** (measured as free chlorine) at the POE sampling location in order to achieve 3-log *Giardia* inactivation based on the operational scenarios provided.
  - c. The chlorine residual measured at the POE sampling location must not exceed the maximum residual disinfectant level (MRDL) of 4.0 mg/L (measured as free chlorine). [R309-200-5(3)(c)(iv)]
  - a. This water system will be required to **record and report** the lowest daily value of chlorine residual measured as free chlorine, at the **Cedar Canyon Chlorinator (TP002) POE sampling location (EP002)**. [R309-210-8(3)(a)(ii)]

- **Secondary Disinfection**

1. **Chlorine Residual – Distribution System (DS001)**
  - a. This water system will be required to maintain a detectable residual throughout the distribution system. It is recommended to maintain the chlorine residual above 0.1 ppm in the distribution system. [R309-520-5]
  - b. The chlorine residual measured in the distribution system must not exceed the maximum residual disinfectant level (MRDL) of 4.0 mg/L (measured as free chlorine). [R309-200-5(3)(c)(iv)]
  - c. This water system will be required to continue taking **a minimum of three (3) chlorine residual samples per week at varying locations throughout the distribution system (DS001)**. [R309-105-10(1)(c)]
  - d. Take distribution system chlorine residuals in conjunction with total coliform sampling. [R309-215-10(3) and (4)]

For questions regarding monitoring and reporting requirements, please contact Sarah Page, of this office, at (385) 272-5778 or [sepage@utah.gov](mailto:sepage@utah.gov).

Robbie Mitchell  
Page 4 of 4  
December 13, 2023

The issuance of this temporary approval will make the S150, GWUDI or surface water source lacks surface water treatment, deficiency dormant on the IPS report. This deficiency will be used to track the expiration date of this approval. An updated IPS report is available at <https://waterlink.utah.gov>. Please contact Jennifer Yee at (385) 515-1501 or [jyee@utah.gov](mailto:jyee@utah.gov) for questions related to your water system's IPS report or deficiencies.

**Drinking Water Source Protection Requirement**

**An updated Drinking Water Source Protection (DWSP) plan is required for this source within 180 days of the date of issuance of this letter.** If you have questions about the source protection requirements, please contact Deidre Beck at (385) 271-7046 or via email at [dbeck@utah.gov](mailto:dbeck@utah.gov).

If you have any questions regarding this temporary approval, please contact Julie Cobleigh, of this office, at (385) 214-9770, or me at (385) 515-1464.

Sincerely,



Nathan Lunstad, P.E.  
Interim Director

JJC/DLB/mm/mdb

Enclosures – Addendum – Estimated Disinfection CT, UDI public notice template, and  
UDI Definition and Possible Causes

cc: Jeremy Roberts, Southwest Utah Health Department, [jroberts@swuhealth.org](mailto:jroberts@swuhealth.org)  
Robbie Mitchell, Cedar City Waterworks, [mrobbie@cedarcity.org](mailto:mrobbie@cedarcity.org)  
Julie Cobleigh, Division of Drinking Water, [jjcobleigh@utah.gov](mailto:jjcobleigh@utah.gov)  
Luke Treutel, Division of Drinking Water, [ltreutel@utah.gov](mailto:ltreutel@utah.gov)  
David Kruse, Division of Drinking Water, [dbkruse@utah.gov](mailto:dbkruse@utah.gov)  
Sarah Page, Division of Drinking Water, [sepage@utah.gov](mailto:sepage@utah.gov)  
Jennifer Yee, Division of Drinking Water, [jyee@utah.gov](mailto:jyee@utah.gov)  
Sitara Federico, Division of Drinking Water, [sfederico@utah.gov](mailto:sfederico@utah.gov)  
Deidre Beck, Division of Drinking Water, [dbeck@utah.gov](mailto:dbeck@utah.gov)  
Paul Wright, District Engineer, [pwright@utah.gov](mailto:pwright@utah.gov)  
Division of Drinking Water VSA Team, [EQDWVSA@utah.gov](mailto:EQDWVSA@utah.gov)

DDW-2023-043697

**ADDENDUM**  
**Estimated Disinfection CT**  
Cedar City Waterworks (UTAH #11002)  
Cedar Canyon Chlorinator (TP002, File #13525)

It is our understanding that Cedar City Waterworks intends to temporarily operate the Cedar Canyon Chlorinator (TP002) to achieve **3-log inactivation of *Giardia lamblia*** per federal Surface Water Treatment Rule (40 CFR §141.72), until a permanent solution is implemented by March 5, 2023. The level of inactivation by disinfection is calculated by taking the disinfection residual (Concentration) multiplied by the contact Time, or is referred to in terms of **CT**.

The Division's review of estimated CT information is limited to the disinfection CT that may be achieved in a **worst-case scenario** based on the proposed system configuration. The estimated worst-case scenario disinfect CT value may not reflect the actual CT that will be achieved when the chlorinator is used for ongoing operation in the future. The Cedar City Waterworks water system will be required to monitor and report the actual CT achieved when Cedar Canyon Chlorinator (TP002) is in operation. At that time, the actual CT values will be compared to the CT associated with the required log treatment to determine compliance.

The Division received the following information of the worst-case scenario disinfection CT estimated by you during the plan review phase.

1. The worst-case scenario disinfection CT before the chlorinated water reaches the point of entry to distribution system (POE) sampling location is **estimated to be 164**, which is anticipated to meet the 3-log *Giardia* inactivation.
2. **POE Sampling Location:** The POE sampling location is described as the continuous analyzer located at the first connection (restaurant) approximately 14,040 feet from the chlorinator.
3. **Chlorine Residual at POE:** The CT estimate is based on a chlorine residual at POE at 1.0 mg/L (measured as free chlorine) as the operational design goal.
4. **pH:** The CT estimate is based on water pH of 7.5, which is the anticipated high level based current data available.
5. **Temperature:** The CT estimate is based on the worst-case scenario of winter water temperature of 7.0°C based on current data available.
6. **Disinfection CT:** The estimated worst-case scenario disinfection CT of 164 encompasses one CT segment which includes 14,040 feet of 10-inch water line to the POE. The following parameters were used to calculate the disinfection CT:
  - The pipe volume is 57,279 gallons.
  - Peak flow of 350 gallons per minute (gpm).
  - Baffling factor of 1.

## DRINKING WATER WARNING

### Cedar City Waterworks has a source designated as Under the Direct Influence of Surface Water

The Division of Drinking Water has designated a source that is used by this water system as Under the Direct Influence (UDI) of surface water. Because of the surface water influence to this source, there is an increased chance that the water may contain disease-causing organisms.

#### **What happened? What is being done?**

The Cedar Canyon Spring has become under the direct influence of surface water. Water from this source services Cedar City Waterworks drinking water system. We are working with the State of Utah Division of Drinking Water and a professional engineer on plans to implement a permanent solution. In the meantime, we have the approval to operate the disinfection facilities to achieve a 3-Log inactivation of *Giardia lamblia* per State and Federal requirements. Final construction and operating permit for a permanent solution need to be obtained within 18 months.

#### **What should I do?**

- *No additional action is needed – no boiling is required.*
- *Sources under the direct influence of surface water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.*
- *The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.*

We will inform you when we are no longer chlorinating at the level for 3-Log inactivation of *Giardia lamblia*.

For more information, please contact [name of contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1(800) 426-4791.

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by Cedar City Waterworks

Water System ID#: 11002

Date distributed:

## Attachment: UDI Definition and Possible Causes – Fact Sheet

### UDI Definition – A device is a UDI if it is a medical device and it has a unique identifier.

A medical device is a device that is used to diagnose, cure, mitigate, treat, or prevent a disease, injury, or condition, or to improve a person's health. A device is a medical device if it is a device that is used to diagnose, cure, mitigate, treat, or prevent a disease, injury, or condition, or to improve a person's health. A device is a medical device if it is a device that is used to diagnose, cure, mitigate, treat, or prevent a disease, injury, or condition, or to improve a person's health.

A unique identifier is a number or code that is used to identify a device. A unique identifier is a number or code that is used to identify a device. A unique identifier is a number or code that is used to identify a device. A unique identifier is a number or code that is used to identify a device.

A device is a medical device if it is a device that is used to diagnose, cure, mitigate, treat, or prevent a disease, injury, or condition, or to improve a person's health. A device is a medical device if it is a device that is used to diagnose, cure, mitigate, treat, or prevent a disease, injury, or condition, or to improve a person's health. A device is a medical device if it is a device that is used to diagnose, cure, mitigate, treat, or prevent a disease, injury, or condition, or to improve a person's health.

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## **UDI Definition and Possible Causes – Fact Sheet**

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A groundwater source that is Under the Direct Influence of surface water (UDI) is vulnerable to contamination by pathogens found in surface water. This vulnerability could be because the sub-surface formation is not sufficiently filtering water as it percolates through the formation or because the groundwater collection device is poorly constructed and permits surface water to directly contaminate the ground water. The Division of Drinking Water determines and classifies a ground water source as UDI based on one or more of the following factors:

1. Geology and water flow conditions of the sub-surface formation
2. Construction of the groundwater collection device
3. Physical evidence of surface water intrusion or persistent water quality problems
4. Results of a microscopic particulate analysis (MPA) test

An MPA test (Item #4) consists of running the source water through a spiral-wound filter for a period of time. Particles collected by the filter are extracted in a laboratory, examined under a microscope, and identified. The particles indicate the risk that the water is contaminated by surface water. Particles that are expected to be found only above ground or in surface water indicate a risk of surface water contamination. Such indicators include chlorophyll-bearing algae, parts of flying insects, plant debris, *Cryptosporidium*, *Giardia*, etc. Some of these indicators are not pathogens, but their presence in the source water means it is susceptible to contamination by pathogens found in surface water.

An MPA sample is rated as having a low, moderate, or high risk of UDI if the score is 0-9, 10-19, or 20 and above, respectively. When basing the classification of a ground water source on MPA results, the Division classifies a source as UDI if any MPA sample is high risk or if any two MPA samples are moderate risk or above.

The path that surface water takes as it flows to a ground water source can and usually does vary with season and hydrological conditions. It is common for the flow path to be directly influenced by surface water under some conditions, such as during a high surface runoff during spring, but not to be directly influenced under others. So a surface-influenced source may have MPA sample results of various risk levels, depending on the timing of the sampling. A true ground water source that is not under the direct influence of surface water will always have only low-risk MPA samples.

CEDAR CITY COUNCIL

AGENDA ITEM - 7

TO: Mayor and City Council  
FROM: Tyler Galetka, Airport Manager  
DATE: January 7, 2025  
SUBJECT: Bristlecone Concessions Agreement at the Cedar City Regional Airport

DISCUSSION:

Approve Concession Agreement with Bristlecone in the Cedar City Regional Airport Terminal Building:

On September 12, 2025, the airport posted a Request for Proposals (RFP) for airport concession services in the new airport terminal expansion area located beyond the security screening checkpoint. No RFPs were received on the September 26<sup>th</sup> deadline. The airport then contacted the Bristlecone coffee shop directly to negotiate a contract to provide services at the airport.

The proposed agreement is for Bristlecone to provide food and beverage services on a 12-month trial basis, providing for only the first flight of each day of the week. Food and beverage options are to include hot and cold coffees, teas, bottled beverages and assorted pastry items. The airport has agreed to install cabinets and countertops in the employee workspace of the concession area. The concessionaire has agreed to provide a mobile counterspace for customer transactions.

The attached contract received a positive recommendation from the airport advisory board.

Please consider the approval of this contract with Bristlecone.



## AIRPORT CONCESSIONAIRE AGREEMENT

This agreement is entered into on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, between Cedar City Corporation, a municipal corporation and political subdivision of the state of Utah, hereinafter referred to as CITY; and Bristlecone, LLC, hereinafter referred to as CONCESSIONAIRE.

**WHEREAS**, CITY owns the Cedar City Regional Airport, which includes the Airport Commercial Terminal and parking areas. The Airport provides scheduled commercial airline service and general aviation operations, serving as a key gateway to southern Utah. The Airport is seeking concession solutions that meet passenger needs while aligning with the Airport's commitment to safety, cleanliness, and customer service. The airport's commercial service currently includes one airline: SkyWest Airlines, a Delta Connection to Salt Lake International Airport; and

**WHEREAS**, CITY is in need of a private party to sell food and beverages to the public in the secured gate seating area in the airport commercial terminal; and

**WHEREAS**, CITY pursued CONCESSIONAIRE to provide said services once a formal request for proposals failed to attract any responses. This agreement is in furtherance of the request for proposal process.

**NOW THEREFORE** it is hereby agreed between CITY and CONCESSIONAIRE that adequate consideration exists to support this agreement, and both agree as follows:

**1. Scope of Services:** Except as provided herein, CONCESSIONAIRE shall provide the following services;

- A. Install, operate, and maintain concession equipment in designated gate area(s).
- B. Offer a variety of food and beverage options with a level of service that meets the needs of the airport's customers, providing quality, value for money, and choices that vary with changing trends and customer wants and needs as generally known and understood in this business sector to satisfy the traveling public; Items may include but not limited to:
  - a. Cold beverages (soft drinks, water, juices, energy drinks, coffee etc.)
  - b. Warm beverages (coffee, hot chocolate, tea, etc.)
  - c. Pre-Prepared Bakery and other food items (pastries, muffins, cakes, etc.)
- C. Provide designs that are attractive to the customers and enhance the terminal experience
- D. Provide exceptional service to the airport's customers, tenants and employees

- E. Offer competitive pricing
- F. Provide optimal operating hours that are flexible to adjust around the first flight of each day
- G. Provide a capital investment for a build-out of necessary improvements to allow for on-site transactions of food and beverage items while creating an open, welcoming, and relaxing space
- H. Provide technology or other innovative service concepts to expand offerings and convenience
- I. Provide employee uniform standards and training that include knowledge of the airport, including other services available at the airport and surrounding area as each concession employee is an ambassador for the airport and the community
- J. Ensure multiple payment methods are accepted (cash, credit/debit, contactless)
- K. Maintain equipment in clean, sanitary, and fully operational condition and meet all applicable health and safety laws and standards
- L. Provide adequate products to meet passenger demand

The exact composition of the menu shall be at the reasonable discretion of CONCESSIONAIRE. CITY may make requests for specific product, but it will be up to CONCESSIONAIRE to determine if a product will be sold. CONCESSIONAIRE shall be responsible to purchase all of the food and drink it will sell during operating hours.

CONCESSIONAIRE will be required to provide the necessary facility build-outs, including materials, supplies, labor, to ensure all the concessions are designed and finished in a manner that complies with all applicable building regulations and standards. CITY may assist in installation of cabinetry, countertops, sinks, and the relocation of existing utilities and power receptacles at the discretion of CITY.

**2. When services are to be provided:** CONCESSIONAIRE shall provide services seven (7) days per week in the commercial terminal gate area. CONCESSIONAIRE shall provide staffing for the hours during the first commercial flight of each day beginning at the opening of the security checkpoint and ending when the boarding gate closes. CONCESSIONAIRE shall have reasonable flexibility for delayed flights. CITY shall provide CONCESSIONAIRE notice of any flight schedule changes at least ten (10) business days prior to the change and of any other opportunities for CONCESSIONAIRE to provide services within the commercial terminal.

CONCESSIONAIRE acknowledges that the security screening checkpoint typically opens one (1) hour and fifteen (15) minutes before each flight departure.

**3. Cleaning:** CONCESSIONAIRE shall clean the indoor eating area and all concession



areas used during the operating hours immediately after operating hours, daily. This cleaning shall consist of trash removal, cleaning all tables, chairs, counter surfaces, cupboards, bins, fridges, walls, and any other surface that may have been dirtied during the operating hours. One time per calendar month, CONCESSIONAIRE shall conduct a deep cleaning. This deep cleaning shall include cleaning inside, underneath, and behind all appliances as well as cleaning all of the surface items that are required to be cleaned after each event. CITY shall be responsible for cleaning the restrooms, gate seating, carpet as well as maintaining the rest of the Cedar City Airport Terminal. CONCESSIONAIRE shall provide all of its own cleaning supplies, trash bags and paper products.

**4. Revenue and Compensation:** CONCESSIONAIRE shall pay City a concession fee of ten (10) percent of gross sales. Payment shall be made on the tenth (10<sup>th</sup>) day of the following month. Gross sales shall be reported to the airport each month.

**5. Utility services and liability limitation:** CITY will provide and pay for utility service to the concession areas. CONCESSIONAIRE will be permitted to store its product in the concession area, but this will be at CONCESSIONAIRE's own risk. CITY will not be liable for damage to or loss of CONCESSIONAIRE's product due to utility failure, fire, flood, theft, act of God, or any other cause that may lead to damage to CONCESSIONAIRE's product. This limitation on liability for loss includes negligent acts, gross negligent acts, and intentional acts committed by CITY, its agents, employees, volunteers, and assigns. CONCESSIONAIRE may seek recovery from those individuals responsible for damaging their product, but CITY shall not have any liability.

**6. Equipment:** The existing concession area has equipment belonging to CITY such as cabinetry, countertops, etc. CONCESSIONAIRE will have access and use of CITY's equipment located in the vending area. CONCESSIONAIRE will be responsible to repair or replace any equipment that is damaged, beyond normal wear and tear, or destroyed during CONCESSIONAIRE's use. As of signing this agreement CONCESSIONAIRE has inspected the equipment in the vending area and confirmed that it is in good working order. Any other equipment needed by CONCESSIONAIRE will have to be provided by CONCESSIONAIRE.

**7. Contracted Concessionaire:** With the exception of current, or future, vending machines located at the Cedar City Airport Terminal, the CONCESSIONAIRE has the right to provide concession services at the Cedar City Airport Terminal Gate Area. CONCESSIONAIRE may not allow other groups to sell food and drink at the Cedar City Regional Airport at any time during the term of this contract. Any other group wishing to provide concession services will need the written consent of CITY. For purposes of this paragraph granting CONCESSIONAIRE, the exclusive right to the concessions at the Cedar City Airport Terminal Gate Area only. CONCESSIONAIRE shall have a non-exclusive right to display its logo or insignia at all times when it is operating.

**8. Customer Service:** The CONCESSIONAIRE's service to the customer will

reflect on CITY. CONCESSIONAIRE's agents, employees, and volunteers shall exhibit attitudes and actions toward the public that exemplify customer service. All of CONCESSIONAIRE's agents, employees, or volunteers shall be working if they are present at the facility and in the concession area. All employees, volunteers, or agents for CONCESSIONAIRE shall be eighteen (18) years of age or older. CONCESSIONAIRE shall comply with all provisions of State and Federal labor laws. CONCESSIONAIRE, its employees, agents, and assigns shall not exhibit any signs of alcohol, tobacco, or illegal drug use while working in the capacity of selling product during an event under this agreement.

**9. Special Conditions:** CONCESSIONAIRE understand that the airport operating environment presents to the operator a set of unique challenges that do not exist in a typical restaurant or shopping center setting. Listed below are some of the key factors that affect concession operations at an airport:

- A. Customers have a limited amount of time to spend in the boarding area and therefore must be served quickly.
- B. Airport customers are primarily airline passengers traveling with carry-on luggage and in some cases wheelchairs and strollers. Any facility changes must be designed to accommodate passengers and their luggage
- C. Deliveries must be made in accordance with City directives, policies, procedures and meet TSA requirements.

CONCESSIONAIRE understands that airline passenger activity and distribution are subject to change due to a variety of reasons outside of the Airport's control, including but not limited to public health emergencies, airport construction and reconfiguration, changes in airline traffic, airport security requirements, and other economic factors impacting airline travel patterns.

**10. Security Considerations:** CONCESSIONAIRE shall comply with all City and airport related security regulations as prescribed by 49 CFR Part 1542, and agree to employ such measures as are necessary to prevent or deter the unauthorized access of persons or vehicles into the secure area of the airport. CONCESSIONAIRE shall comply with Transportation Security Regulation Part 1542 and City security policies as presently outlined in the Airport Security Plan, as such Plan may be amended from time-to-time. CONCESSIONAIRE shall pay any forfeitures or fines levied upon it, or the Airport through enforcement of Part 1542, or any other applicable federal, state, or local regulation, due to acts or omissions of the CONCESSIONAIRE, its employees, agents, suppliers, invitees, or guests and for any attorney fees or related costs paid by the CITY because of any such violation. CONCESSIONAIRE shall comply with all current and future airport and FAA rules and regulations and policies and procedures in place for the airport. CONCESSIONAIRE will be responsible for obtaining all necessary Airport ID badges during the term of the Lease and Concession Agreement. All costs for complying with security regulations shall be the sole responsibility of the CONCESSIONAIRE. Any fines imposed by the CITY because of the CONCESSIONAIRE's actions or non-

compliance with rules, regulations, policies, or laws shall immediately be paid to the CITY by Concessionaire. The cost of obtaining an Airport ID badge shall be the sole responsibility of the applicant. The CITY shall have complete control over granting, denying, withholding, or terminating security clearance for CONCESSIONAIRE's employees. Clearance is required for all employees upon being hired or assigned to the airport. CONCESSIONAIRE shall not permit any employee to begin work until the CITY clears the employee through the airport's vetting process and issued the necessary documents, ID badges and credentials in order to enter sterile area.

**11. Airport Concession Disadvantaged Business Enterprise (ACDBE):** The requirements of 49 CFR Part 23, regulations of the U.S. Department of Transportation, applies to this concession. It is the policy of the Cedar City Regional Airport to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. These requirements apply to all concession firms and suppliers, including those who qualify as an ACDBE. An ACDBE concession specific goal of 0.37 percent of purchases of goods and services has been established for this concession. CONCESSIONAIRE shall make good faith efforts, as defined in Appendix A of 49 CFR Part 26 to meet the concession specific goal for ACDBE participation in the performance of this concession. CONCESSIONAIRE shall submit the following information: (1) the names and addresses of ACDBE firms and suppliers that will participate in the concession; (2) A description of the work that each ACDBE will perform; (3) The dollar amount of the participation of each ACDBE firm participating; (4) Written and signed documentation of commitment to use a ACDBE whose participation it submits to meet a contract goal; (5) Written and signed confirmation from the ACDBE that it is participating in the concession as provided in the prime concessionaire's commitment; and (6) If the contract goal is not met, evidence of good faith efforts. Sample documents that may be used are provided in **Attachment 4**.

**12. Title VI – Civil Rights:** CITY, as Sponsor of the Cedar City Regional Airport, assures that no person shall on the grounds of race, color, national origin (including limited English proficiency (LEP), sex (including sexual orientation and gender identity), creed, or age, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987 (PL 100-259), Section 520 of the Airport and Airway Improvement Act of 1982, and related authorities (hereafter, "Title VI and related requirements"), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives U.S. Department of Transportation (DOT) funding. Title VI also prohibits retaliation for asserting or otherwise participating in claims of discrimination. The CITY requires nondiscrimination assurances, as prescribed by Federal Aviation Administration ("FAA"), from each tenant, contractor, and concessionaire providing an activity, service, or facility at the Airport. Assurances must be included in any related lease, contract, or franchise agreement between the City and each tenant, contractor, and concessionaire, as well as in any similar agreements with their own subtenants and sub-contractors. CONCESSIONAIRE shall

**13. Compliance with Law:** All of CONCESSIONAIRE's operations shall comply with current or future state and federal law as well as all CITY ordinances and airport regulations.

**14. Term:** This agreement shall be effective upon being signed by both parties and for an initial period of one (1) year. If after the initial one (1) year term of this agreement is complete CITY and CONCESSIONAIRE wish to continue to operate under the same terms and conditions on a year to year basis, then parties may do so under the terms of this agreement without the necessity of entering into formal written extensions of this agreement.

**15. Independent Contractors:** At all times, CONCESSIONAIRE, its agents, employees, and assigns shall be independent contractors and not employees of CITY. CONCESSIONAIRE its agents, employees, and assigns are not entitled to any benefits from CITY, they are not volunteers of CITY, and they are not covered by any of the CITY's insurance policies. CONCESSIONAIRE shall be responsible for all expenses incurred by CONCESSIONAIRE in the performance of *its* services pursuant to this agreement including but not limited to workers compensation, unemployment, and long-term disability coverage for CONCESSIONAIRE's employees, agents, and assigns.

**16. Termination:** Either party shall have the right to terminate this agreement with or without cause upon giving **sixty (60) days** advance written notice of its intent to terminate. Upon termination CONCESSIONAIRE agrees to turn over to CITY all keys to the facility and return all equipment belonging to CITY in such a condition so that it is clean and in good working order.

**17. Hold harmless, indemnification, and required insurance:** In addition to any other limitations on liability contained herein, CONCESSIONAIRE agrees to indemnify and hold CITY, its elected and appointed officials, its employees, representatives, agents, and assigns harmless and agrees to indemnify them from any and all injuries or damages incurred as a result of CONCESSIONAIRES's acts and/or omissions in performing its services pursuant to this agreement

CONCESSIONAIRE shall obtain and maintain adequate public liability insurance from a reputable insurance company in amounts satisfactory to CITY and shall cause CITY to be named as additional insured on such policies. CONCESSIONAIRE agrees that CITY may adjust the required insurance amount on a yearly basis in order to maintain insurance that exceeds the liability caps contained in the Utah Governmental Immunity Act. CONCESSIONAIRE shall also be responsible to provide such workers' compensation insurance, unemployment insurance, and long-term disability insurance as may be required by State law.

**18. Integration and amendment:** This agreement contains the entire agreement and understanding of the parties with respect to the subject matter hereof. This is an integrated agreement; any reviewing authority shall look only to the four corners of the agreement in an effort to determine the intention of the parties when entering the

agreement. Unless otherwise specifically provided herein, this agreement may only be amended by a writing duly signed by authorized representatives of both CITY and CONCESSIONAIRE.

**19. Authority to bind respective parties:** The persons signing this agreement have been duly authorized by their respective entities to enter into this agreement and bind their respective entities to the terms of this agreement.

**20. Notices:** Notices required pursuant to the terms of this agreement shall be sent to:

Cedar City Corporation  
c/o Airport Manager  
2560 Aviation Way  
Cedar City, Utah 84721

CONCESSIONAIRE

Electronic correspondence may be sent for items required under this agreement. Electronic correspondence may be sent to: ([gtTyler@cedarcityut.gov](mailto:gtTyler@cedarcityut.gov)) and (insert **CONCESSIONAIRE's email address**). If either party changes their physical address or their electronic mail address they shall notify the other party of the change within thirty (30) days.

**21. CONCESSIONAIRE's restrictions and requirements:** During the course of the performance of this agreement and while occupying and using CITY's facilities CONCESSIONAIRE agrees to abide by the following restrictions:

- a. CITY shall not in any way be considered an agent, partner, or joint user with or for **CONCESSIONAIRE**;
- b. **CONCESSIONAIRE** shall not use the Cedar City Airport Terminal for any nuisance, offensive, noisy, or dangerous trade, business, or occupation;
- c. **CONCESSIONAIRE** shall not use the Cedar City Airport Terminal for any activity that violates City ordinances;
- d. **CONCESSIONAIRE** shall not use the Cedar City Airport Terminal for any auction, liquidation, fire or bankruptcy sale;
- e. **CONCESSIONAIRE** shall not permit or suffer any waste to the premises;
- f. **CONCESSIONAIRE** shall not display any posters, brochures, or written material within the Cedar City Airport Terminal that would advertise anything other than the items provided;
- g. **CONCESSIONAIRE** shall obtain and maintain a valid Cedar City business license;
- h. **CONCESSIONAIRE** shall obtain and maintain a valid and appropriate food handler's permit from the Southwest Utah Public Health Department; and
- i. **CONCESSIONAIRE** shall exemplify excellent customer service skills.



CONCESSIONAIRE'S inability to satisfactorily resolve customer complaints shall constitute grounds for termination of this agreement.

- j. I understand that CITY maintains a harassment free workplace and has a current policy on Harassment and Discrimination. I understand that if I am found in violation of this policy it will result in the termination of this agreement.

**22. Choice of Law, Jurisdiction, and Venue:** This agreement is subject to and shall be interpreted with the laws of the State of Utah. Jurisdiction is vested in the Utah District Court and venue is vested in the 5<sup>th</sup> Judicial District Court in and for Iron County, State of Utah.

**23. Conflict of Interest:** CONCESSIONAIRE represents that none of its officers or employees are officers or employees of the City unless disclosure has been properly made.

**24. Force Majeure:** Neither party to this Agreement will be held responsible for delay or default caused by fire, riot, acts of God, and/or war, which is beyond the party's reasonable control. CITY may terminate this Agreement after determining that such delay or default will reasonably prevent successful performance of the Agreement.

**25. Headings:** The paragraph headings contained herein are not intended to be substantive provisions of the agreement; they are a convenient guide for the reader. When interpreting the intent of the parties the paragraph headings shall not be binding on the parties. The substance the agreement as a whole shall be interpreted as the intent of the parties.

**26. Agreement not to be interpreted against the author:** CITY and CONCESSIONAIRE have had an opportunity to negotiate this agreement and consult with legal counsel as to the provisions contained therein. This agreement may not be interpreted against the author thereof. Rather the agreement shall be interpreted in a manner so that the intentions of the parties shall be fulfilled.

CITY's signature page.

[SEAL] ATTEST:

RECORDER

This is to certify that on the \_\_\_\_ day of \_\_\_\_\_, 2026, before me, the undersigned, a Notary Public, in and for the State of Utah, duly commissioned and sworn as such, personally appeared Steve Neilson, known to me to be the Mayor of Cedar City Corporation, and Renon Savage, known to me to be the City Recorder of Cedar City Corporation, and acknowledged to me that he the said Steve Neilson and she the said Renon Savage executed the foregoing instrument as a free and voluntary act and deed of said corporation, for the uses and purposes therein, and on oath state that they were authorized to execute said instrument, and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year hereinabove written.



CEDAR CITY COUNCIL

AGENDA ITEM – 8

TO: Mayor and City Council  
FROM: Tyler Galetka, Airport Manager  
DATE: January 7, 2025  
SUBJECT: Lease Agreement extension for the FAA Snow Cat Garage

DISCUSSION:

Approve Lease Agreement extension for the FAA Snow Cat Garage:

The Federal Aviation Administration (FAA) has requested to extend their rental lease agreement for the FAA Snow Cat Garage Building that is located adjacent to the FAA Flight Service Station Building located on Kittyhawk Drive.

The current agreement expired in September 2020 in which the FAA requested to exercise their first of three, five-year extensions. With change of staff and shortfalls of negotiation with the FAA, the agreements have finally been written by the FAA real estate division in 2025. This proposed extension includes exercising all three five-year extensions until 2035. The FAA has a need to occupy this building to store snow cat equipment for FAA Technical Operations staff to access the radar site located on Cedar Mountain.

The attached contract received a positive recommendation from the airport advisory board.

Please consider the approval of this lease extension with the FAA.





<p align="center"><b>U.S. Department of Transportation Federal Aviation Administration</b></p> <p align="center"><b>SUPPLEMENTAL AGREEMENT</b></p>	<p align="center">SUPPLEMENTAL AGREEMENT NO. 1 TO FAA CONTRACT NO. DTFAWN-15-L-00021</p>
<p>DESCRIPTION or ADDRESS OF PREMISES:</p> <p>CDC SSC: Approximately 1,728 rentable square feet for Sno-Cat garage and maintenance shop, and adjacent fenced yard area located at 2246 Kittyhawk Drive, Cedar City, Utah 84780</p>	
<p>THIS AGREEMENT, made and entered into this date by and between CEDAR CITY CORPORATION hereinafter called the Lessor, and the UNITED STATES OF AMERICA, hereinafter called the Government:</p> <p>WHEREAS, on February 16, 2016, the parties hereto entered into Lease No. DTFAWN-15-L-00021; and</p> <p>WHEREAS, said lease expired on September 30, 2020, and the Government has a continuing need to occupy the leased Premises; and</p> <p>WHEREAS, Clause 5. CONSIDERATION (COST) (AUG-02) is updated to add current Fair Market Value; and</p> <p>WHEREAS, in accordance with Clause 16. RENEWAL OPTIONS (JUL-07), this Supplemental Agreement No. 1, serves as notification that the Government intends to exercise Option Period I, Option Period II, and Option Period III, for a total additional 15-year period, beginning October 1, 2020, through September 30, 2035; and</p> <p>WHEREAS, the Government has requirement to add three (3) new clauses regarding prohibition of certain telecommunications and video surveillance services or equipment that includes Lessor shall complete the applicable Representations; and</p> <p>WHEREAS, the Government has requirement to add three (3) new security clauses as protection for sensitive information in possession of FAA and that Lessor does not provide or use source prohibited in applicable FASCA orders; and</p> <p>WHEREAS, the parties hereto desire to amend the above Lease effective as of October 1, 2025.</p>	
<p>NOW THEREFORE, these parties for the considerations hereinafter mentioned covenant and agree that the said real estate contract is amended, as follows:</p> <p><b>Amend Clause 5. CONSIDERATION and replace with the following:</b></p> <p><b>5. CONSIDERATION (07/2023)</b></p> <p>A. The Government shall pay annual rent for the premises, payable in MONTHLY installments in arrears, as outlined in the below table:</p>	

<u>Effective Date</u>	<u>Approximate Rental Rate per rentable square feet</u>	<u>Monthly Rent</u>	<u>Annual Rent</u>
10/1/2020 - 9/30/2025	\$5.40	\$777.60	\$9,331.20
10/1/2025 - 9/30/2030	\$5.67	\$816.48	\$9,797.76
10/1/2030 - 9/30/2035	\$5.95	\$856.80	\$10,281.60

B. Payments shall be made in arrears without the submission of invoices or vouchers. Payments are due on the first business day following the end of the payment period and are subject to available appropriations. The payments shall be directly deposited in accordance with the "Payment by Electronic Funds Transfer" clause in the lease. Payments shall be considered paid on the day an electronic funds transfer is made.

C. MONTHLY payment shall be made in full to: CEDAR CITY CORPORATION

D. The parties acknowledge that the Government has paid rent for the premises under prior Lease No. DTFAWN-15-L-00021 at the monthly amount of \$777.60 while in holdover status.

**Amend** Clause 16. RENEWAL OPTIONS and replace with the following:

**16 Option(s) to Extend Term (09/2021)** The contract may, at the option of the Government, be extended beyond September 2020 at the rental rate established in the "Consideration" clause herein. The extension shall be upon the terms and conditions herein specified and no extension shall extend beyond September 30, 2035. The Government shall notify the contractor in writing, no later than 30 days before the expiration of the Lease term including all options exercised, of its intent to exercise the option(s) or of its intent to vacate the premises at the end of said term. Any extension exercised by the Government pursuant to this clause shall be subject to the availability of adequate appropriations from year to year for the payment of rentals

**Add** six (6) new Clauses for compliance with statutory requirements as follows:

**18. Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (07/2023)**

(a) Definitions. As used in this clause--

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou

Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means—

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled—

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening.

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or

(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in AMS T3.8.9C.1.c(5).

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020 from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in AMS T3.8.9C.1.c(5). This prohibition applies to an entity that uses covered telecommunications equipment or services, including use not in support of the Government.

(c) Exceptions. This clause does not prohibit contractors from providing—

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(d) Reporting requirement.

(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor must report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information. For indefinite delivery contracts, the Contractor must report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order.

(2) The Contractor must report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor must describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor must insert the substance of this clause, including this paragraph

(e), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

**19-1 Covered Telecommunications Equipment or Services- Representations (09/2021)**

(a) Definitions. As used in this provision, "covered telecommunications equipment or services" has the meaning per the "Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment" clause in this contract.

(b) Procedures. The offeror must review the list of excluded parties in the System for Award Management

(SAM) (<https://www.sam.gov>) for entities excluded from receiving federal awards for covered telecommunications equipment or services.

(c) Representations.

1. The offeror represents that it \_\_\_\_ does, X does not **provide** covered telecommunications equipment or services as part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

2. After conducting a reasonable inquiry for purposes of this representation, the offeror represents that it \_\_\_\_ does, X does not **use** covered telecommunications equipment or services, or any equipment, system, or service that uses telecommunications equipment or services.

**19-2 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment**

PROVISION/CLAUSE:

(a) Definitions. As used in this provision--

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the meanings provided in the clause AMS clause 6.9.5, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Prohibitions.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.  
Nothing in this prohibition will be construed to—

- (i) Prohibit the head of the agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020 from entering into a contract or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential part of any system or as critical technology as part of any system. This prohibition applies to any entity that uses covered telecommunications equipment or services, including uses not in support of the Government.

Nothing in this prohibition will be construed to-

- (i) Prohibit the head of the agency from procuring with an entity to provide a service that connects

to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or  
(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) Procedures: The offeror must review the list of excluded parties in the System for Award Management (SAM) (<https://www.sam.gov>) for entities excluded from Federal awards for covered telecommunications equipment or services.

(d) Representations.

(1) The Offeror represents that it ☐ will, ☒ will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation.

(2) After conducting a reasonable inquiry for purposes of this representation, the Offeror represents that that it ☐ does, ☒ does not USE covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror must provide the additional disclosure information required at paragraph (e) if the Offeror indicates "does".

(e) Disclosures. Disclosure for the representation in paragraph (d) (1) of this provision-  
If the Offeror has responded "will" in the representation in paragraph (d) (1) of this provision, the Offeror must provide the following information as part of the offer—

(1) For covered equipment

(i) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known;

(ii) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(iii) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b) (1) of this provision;

(2) For covered services-

(i) If the service is related to item maintenance, a description of all covered telecommunications services offered (include on the item being maintained: brand, model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable; or  
(ii) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed uses of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

Disclosure for representation in paragraph (d) (2) of this provision. If the Offeror has responded "does" to paragraph (d)(2) of this provision, the offeror must provide the following information as part of the offer—

(3) For covered equipment

(i) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known;

(ii) A description of all covered telecommunications equipment offered (include brand; model



number, such as original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(iii) Explanation of the proposed use of covered telecommunications equipment and services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b) (2) of this provision.

(4) For covered services-

(i) If the service is related to item maintenance, a description of all covered telecommunications services offered (include on the item being maintained: brand, model number, such as OEM

number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(ii) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed uses of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

## **20 Cooperation with Defensive Counterintelligence Program Requirements (DCIP) (09/2021)**

a. The FAA's Defensive Counterintelligence Program (DCIP) (AXI-310) detects, deters, and denies illicit human and technical intelligence collection activities as well as addressing other national security concerns. Such activities and concerns include, but are not limited to, activities conducted by, on behalf of, or otherwise supporting, foreign governments or elements thereof; entities or individuals that meet the definition of "foreign power" or "agent of a foreign power" in 50 U.S.C. § 1801; foreign organizations; foreign persons; international terrorist organizations or activities; or agents of any of the foregoing; or any other individuals or entities acting on behalf of, or otherwise in support of, any of the foregoing, against the FAA, its employees, facilities, equipment, systems, networks, operations, and information.

b. Consistent with FAA Order 1600.84 FAA Defensive Counterintelligence Program, the contractor is required to cooperate to the fullest extent possible in the following requirements:

1) Any authorized DCIP inquiry or Counterintelligence (CI) investigation connected with this contract requested by the FAA Office of Security and Hazardous Materials Safety (ASH) to include granting authorized ASH or outside investigative department or agency personnel access to contract information, records or contractor personnel;

2) All applicable FAA security requirements as required under the contract consistent with FAA policy and applicable Federal law;

3) When requested by the DCIP, and necessary to protect Controlled National Security Information (CNSI), Sensitive Unclassified Information (SUI), or otherwise protected information, contractor employees must sign a Defensive Counterintelligence Program Non-Disclosure Agreement (NDA) prior to being briefed on any information pertaining to a DCIP inquiry, CI investigation by another Department or Agency, or any other matter related to the DCIP. The NDA is located in Appendix C of the Order and in AMS Procurement Forms. Contractor employees are exempt from acknowledging any language in the NDA associated with unauthorized disclosure of received information that subjects FAA employees to personnel actions specified in the Human Resources Policy Manual (HRPM) Volume 4: Employee Relations ER-4.1 (4) and applicable collective bargaining agreements.

4) Contractors must first coordinate with the DCIP at ASH-CI-Notify@faa.gov before contacting any law enforcement or investigative agencies on any known or suspected counterintelligence or other national security concern described in Paragraph 1 of FAA Order 1600.84.

5) Contractors must notify the DCIP as soon as possible if any law enforcement or investigative agency contacts them directly on any matter covered by FAA Order 1600.84. If an employee receives a direct request from an outside law enforcement or investigative agency for evidence related to a counterintelligence or other national security concern as described in Paragraph 1 of

FAA Order 1600.84, the employee will refer the law enforcement or investigative agency to AXI-310.

6) Contractors must immediately notify the DCIP at [ASH-CI-Notify@faa.gov](mailto:ASH-CI-Notify@faa.gov), and the CO or their designee if their employees observe any of the following-

- a) Suspected or known acts of foreign intelligence collection activity against the FAA or its employees, systems, networks, operations, facilities, equipment, or information;
- b) Suspected or known espionage (See Appendix A of FAA Order 1600.84 for definition);
- c) Suspected or known unauthorized disclosure of CNSI, SUI, or otherwise protected information in the possession of the FAA by a FAA employee to a foreign government or element thereof, a foreign organization, an entity or individual that meets the definition of "foreign power" or "agent of a foreign power" in 50 U.S.C. § 1801, a foreign person, an international terrorist organization or activity, an agent of any of the foregoing, or any other individual or entity acting on behalf of or otherwise supporting any of the foregoing; or
- d) Suspected or known theft, unauthorized disclosure, or unauthorized amassing of CNSI, SUI, or otherwise protected information in the possession of the FAA known or suspected to be for the purpose of conveying it to a foreign government or element thereof, an entity or individual that meets the definition of "foreign power" or "agent of a foreign power" in 50 U.S.C. § 1801, a foreign organization, a foreign person, an international terrorist organization or activity, an agent of any of the foregoing, any other individual or entity acting on behalf of or otherwise supporting any of the foregoing, or an unknown recipient, or statements of intent by an FAA employee to engage in any such actions. SUI or otherwise protected unclassified information whose theft, unauthorized disclosure, or unauthorized amassing, for the purposes described in the preceding sentence, is of concern includes, but is not limited to:
  - i. Non-public information from an official FAA data network or information;
  - ii. Imagery;
  - iii. Technical specifications;
  - iv. Trade secrets;
  - v. Proprietary information;
  - vi. Sensitive Security Information (SSI); and
  - vii. Any other SUI
- e) Activities similar to those described in paragraphs b(6)(a)-(d) by, on behalf of, or otherwise supporting, potential lone wolf actors, malicious insiders, or transnational organizations of a national security concern.

If notification of the CO or their designee is not feasible owing to the CO and/or their designee being one of the suspicious actor(s), the contractor must notify the DCIP directly at the above email address if they observe any of the above activities.

7) Elicitation attempts. Elicitation is the strategic use of conversation to extract information from people without giving them the feeling they are being interrogated. It is a technique used to discreetly gather information. It is a conversation with a specific purpose: collect information that is not readily available and do so without raising suspicion that specific facts are being sought. The conversation can be in person, over the phone, or in writing.

Contractors must immediately notify the DCIP at [ASH-CI-Notify@faa.gov](mailto:ASH-CI-Notify@faa.gov), and the CO and/or their designee if their employees experience any known or suspected direct (e.g., personal encounter or telephone) or indirect (e.g., electronic or written communication) elicitation or attempted elicitation of CNSI, SUI, or otherwise protected information in the possession of the FAA by any suspicious entity or person, regardless of ethnicity, nationality, or FAA employment status, as soon as possible, but no later than 12 hours after the time of the incident, initial detection, or receipt of report, as applicable, or the next business day if the incident, initial detection, or receipt of report,

as applicable, occurs on a weekend or holiday. Contractors must report these incidents regardless of where, when, or how the contact took place, or whether the employee was on or off duty.

Suspicious activities include, but are not limited to:

- a) Direct or indirect contact or communication with a known or suspected foreign or foreign-affiliated person, or an unknown or unfamiliar person, seeking access to or disclosure of any CNSI, SUI, or otherwise protected information in the possession of the FAA for which such person does not meet the applicable access requirements, or that is outside the scope of their official duties;
- b) Direct or indirect contact or communication with a known or suspected foreign or foreign-affiliated person, or an unknown or unfamiliar person, seeking specific information about an FAA employee's official duty responsibilities, work projects, access to information, security clearance, travel plans, coworkers' identities, or Information Technology (IT) system credentials for which such person does not meet the applicable access requirements, or that is outside the scope of their official duties;
- c) Direct or indirect contact, communication, or observance of a known or suspected foreign or foreign-affiliated person, or an unknown or unfamiliar person, seeking unauthorized access to FAA employees, equipment, operations, systems, information, facilities, or networks, including through a Personal Electronic Device (PED);
- d) Direct or indirect contact, communication, or observance of a known or suspected foreign or foreign-affiliated person, or an unknown or unfamiliar person, introducing, or seeking to introduce, unauthorized digital media or software into any FAA equipment, facilities, systems, or networks, including through a PED;
- e) Offers of compensation, gifts, or favors in exchange for FAA information or access to such information, regardless of medium; or access to FAA employees, equipment, operations, facilities, systems, or networks;
- f) Threats, attempts to coerce, or attempts to exploit any FAA employee by a known or suspected foreign or foreign-affiliated person, or by an unknown or unfamiliar person, in order to illicitly acquire FAA information or access to FAA employees, equipment, operations, facilities, systems, information, or networks;
- g) Solicitation by any person of FAA information for which they do not meet the applicable access requirements or that is outside the scope of their official duties;
- h) A request by any person for access to FAA employees, facilities, equipment, operations, systems, information, or networks for which they do not meet the applicable access requirements or that is outside the scope of their official duties; and
- i) Suspicious or unexplained contact by any person with an FAA employee, where the person has suspicious or unexplained knowledge of the employee.

Unless requested by ASH, contractors must not disclose an elicitation attempt of the nature described above, in any other manner than to report the attempt to the CO or their designee and request that they report it to the DCIP. If that is not feasible, or if the CO or their designee are the suspicious actor(s), contractors may make these reports directly to the DCIP at the above email address. Contractors must not take any actions on their own initiative, as doing so may interfere with a DCIP inquiry or CI investigation.

c. Failure to cooperate with any of the activities under section (b) above may be considered by the FAA to be a material breach of the contract.

d. The Contractor is responsible for ensuring that the provisions of this clause flow down to its subsidiaries, subcontractors, and consultants performing this contract.

## **21 Federal Acquisition Supply Chain Security Act Orders—Representation and Disclosures (04/2024)**

(a) Definitions. As used in this provision, Covered article, FASCSA order, Intelligence community,

National security system, Reasonable inquiry, Sensitive compartmented information, Sensitive compartmented information system, and Source have the meaning provided in the AMS Real Property Clause 6.9.8-1, Federal Acquisition Supply Chain Security Act Orders—Prohibition.

(b) Prohibition. Contractors are prohibited from providing or using as part of the performance of the contract any covered article, or any products or services produced or provided by a source, if the prohibition is set out in an applicable Federal Acquisition Supply Chain Security Act (FASCSA) order, as described in paragraph (b)(1) of AMS Real Property Clause 6.9.8-1, Federal Acquisition Supply Chain Security Act Orders—Prohibition.

(c) Procedures.

(1) The Offeror must search for applicable FASCSA orders of the type identified in paragraph (b)(1) of AMS Real Property Clause 6.9.8-1 in the System for Award Management (SAM). Issued FASCSA Orders may be identified by selecting the “View FASCSA Orders” button from the SAM homepage (<https://www.sam.gov>) and viewing or downloading FASCSA orders from the Supply Chain Security Orders webpage.

(2) The Offeror must review the SIR for any FASCSA orders that are not in SAM but are effective and do apply to the SIR and resultant contract (see AMS Guidance T3.8.9.C.4.c.(2)(A)(ii)).

(3) FASCSA orders issued after the publication date of the SIR do not apply unless the order is subsequently added to the SIR via amendment.

(d) Representation. By submission of this offer, the offeror represents that it has conducted a “reasonable inquiry” (as defined in AMS Real Property Clause 6.9.8-1), and that the offeror does not propose to provide or use in response to this SIR any covered article, or any products or services produced or provided by a source, if the covered article or the source is prohibited by an applicable FASCSA order in effect on the date the SIR was issued, except as waived by the SIR, or as disclosed in paragraph (e) Disclosures, below.

(e) Disclosures. The purpose for this disclosure is so the FAA may decide whether to issue a waiver. For any covered article, or any products or services produced or provided by a source, if the covered article or the source is subject to an applicable FASCSA order, and the Offeror is unable to represent compliance, then the Offeror must provide the following information as part of the offer:

- (1) Name of the product or service provided to the Government;
- (2) Name of the covered article or source subject to a FASCSA order;
- (3) If applicable, name of the vendor, including the Commercial and Government Entity code and unique entity identifier (if known), that supplied the covered article or the product or service to the Offeror;
- (4) Brand;
- (5) Model number (original equipment manufacturer number, manufacturer part number, or wholesaler number);
- (6) Item description; and
- (7) Reason why the applicable covered article or the product or service is being provided or used.

(f) FAA review of disclosures. The Contracting Officer will review disclosures provided in paragraph (e) Disclosures, to determine if any waiver may be sought. A Contracting Officer may choose not to pursue a waiver for covered articles or sources otherwise subject to a FASCSA order and may instead make an award to an offeror that does not require a waiver.

## **22 Federal Acquisition Supply Chain Security Act Orders—Prohibition (04/2024)**

(a) Definitions. As used in this clause—

Covered article, as defined in 41 U.S.C. 4713(k), means—

- (1) "Information technology," as defined in 40 U.S.C. 11101, including cloud computing services of all types;
- (2) "Telecommunications equipment" or "telecommunications service," as those terms are defined in section 3 of the Communications Act of 1934 (47 U.S.C. 153);
- (3) The processing of information on a Federal or non-Federal information system, subject to the requirements of the Controlled Unclassified Information program (see 32 CFR part 2002); or
- (4) Hardware, systems, devices, software, or services that include embedded or incidental information technology.

FASCSA order means any of the following orders issued under the Federal Acquisition Supply Chain Security Act (FASCSA) requiring the removal of covered articles from executive agency information systems or the exclusion of one or more named sources or named covered articles from executive agency procurement actions, as described in 41 CFR 201–1.303(d) and (e):

- (1) The Secretary of Homeland Security may issue FASCSA orders applicable to civilian agencies, to the extent not covered by paragraph (2) or (3) of this definition. This type of FASCSA order may be referred to as a Department of Homeland Security (DHS) FASCSA order.
- (2) The Secretary of Defense may issue FASCSA orders applicable to the Department of Defense (DoD) and national security systems other than sensitive compartmented information systems. This type of FASCSA order may be referred to as a DoD FASCSA order.
- (3) The Director of National Intelligence (DNI) may issue FASCSA orders applicable to the intelligence community and sensitive compartmented information systems, to the extent not covered by paragraph (2) of this definition. This type of FASCSA order may be referred to as a DNI FASCSA order.

Intelligence community, as defined by 50 U.S.C. 3003(4), means the following—

- (1) The Office of the Director of National Intelligence;
- (2) The Central Intelligence Agency;
- (3) The National Security Agency;
- (4) The Defense Intelligence Agency;
- (5) The National Geospatial-Intelligence Agency;
- (6) The National Reconnaissance Office;
- (7) Other offices within the Department of Defense for the collection of specialized national intelligence through reconnaissance programs;
- (8) The intelligence elements of the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the Federal Bureau of Investigation, the Drug Enforcement Administration, and the Department of Energy;
- (9) The Bureau of Intelligence and Research of the Department of State;
- (10) The Office of Intelligence and Analysis of the Department of the Treasury;
- (11) The Office of Intelligence and Analysis of the Department of Homeland Security; or
- (12) Such other elements of any department or agency as may be designated by the President, or designated jointly by the Director of National Intelligence and the head of the department or agency concerned, as an element of the intelligence community.

National security system, as defined in 44 U.S.C. 3552, means any information system (including any telecommunications system) used or operated by an agency or by a contractor of an agency, or other organization on behalf of an agency—

- (1) The function, operation, or use of which involves intelligence activities; involves cryptologic activities related to national security; involves command and control of military forces; involves equipment that is an integral part of a weapon or weapons system; or is critical to the direct fulfillment of military or intelligence missions, but does not include a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel

management applications); or

(2) Is protected at all times by procedures established for information that have been specifically authorized under criteria established by an Executive order or an Act of Congress to be kept classified in the interest of national defense or foreign policy.

Reasonable Inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of any covered articles, or any products or services produced or provided by a source. This applies when the covered article or the source is subject to an applicable FASCSA order. A reasonable inquiry excludes the need to include an internal or third-party audit.

Sensitive compartmented information means classified information concerning or derived from intelligence sources, methods, or analytical processes, which is required to be handled within formal access control systems established by the Director of National Intelligence.

Sensitive compartmented information system means a national security system authorized to process or store sensitive compartmented information.

Source means a non-Federal supplier, or potential supplier, of products or services, at any tier.

(b) Prohibition.

(1) Unless an applicable waiver has been issued by the issuing official, Contractors are prohibited from providing or using as part of the performance of the contract any covered article, or any products or services produced or provided by a source, if the covered article or the source is prohibited by any applicable FASCSA orders identified by the checkbox(es) in this paragraph (b)(1).

Yes ☒ No ☐ DHS FASCSA orders

Yes ☐ No ☒ DoD FASCSA orders

Yes ☐ No ☒ DNI FASCSA orders

(2) The Contractor must search for applicable FASCSA orders of the type identified in paragraph (b)(1) of this clause in the System for Award Management (SAM). Issued FASCSA Orders may be identified by selecting the "View FASCSA Orders" button from the SAM homepage (<https://www.sam.gov>) and viewing or downloading FASCSA orders from the Supply Chain Security Orders webpage.

(3) The FAA may identify in the SIR additional FASCSA orders that are not in SAM, which are effective and apply to the SIR and resultant contract.

(4) A FASCSA order issued after the publication date of the SIR applies to this contract only if added by an amendment to the SIR or by modification to the contract. However, see paragraph (c) of this clause.

(5) Contractor request for waivers.

(i) Required disclosures. If the contractor wishes to ask for a waiver of the requirements of an existing order identified in a SIR or contract for a waiver of the requirements of a new FASCSA order being applied through modification, then the Contractor must disclose the following:

(A) Name of the product or service provided to the Government;

(B) Name of the covered article or source subject to a FASCSA order;

(C) If applicable, name of the vendor, including the Commercial and Government Entity code and unique entity identifier (if known), that supplied or supplies the covered article or the product or service to the Offeror;

(D) Brand;

(E) Model number (original equipment manufacturer number, manufacturer part number, or wholesaler number);

(F) Item Description;

(G) Reason why the applicable covered article or the product or service is being provided or used;



(ii) FAA review of disclosures. The Contracting Officer will review disclosures provided in paragraph (b)(5)(i) to determine if any waiver is warranted. A Contracting Officer may choose not to pursue a waiver for covered articles or sources otherwise covered by a FASCSA order and to instead pursue other appropriate action.

(c) Notice and reporting requirement.

(1) During contract performance, the Contractor is required to:

(i) Comply with all FASCSA orders identified under paragraph (b) of this clause; and

(ii) Review SAM.gov at least once every three months, or as advised by the Contracting Officer, to check for covered articles subject to FASCSA order(s), or for products or services produced by a source subject to FASCSA order(s) not currently identified under paragraph (b) of this clause.

(2) If the Contractor identifies a new FASCSA order(s) that could impact their supply chain, then the Contractor must conduct a reasonable inquiry to identify whether a covered article or product or service produced or provided by a source subject to the FASCSA order(s) was provided to the Government or used during contract performance.

(3) If the Contractor identifies, including through any notification by a subcontractor at any tier, that a covered article or product or service produced or provided by a covered source was provided to the Government or used during contract performance and is subject to a FASCSA order(s) identified in paragraph (b) of this clause, or a new FASCSA order identified in paragraph (c)(2) of this clause, the Contractor must submit a report to the Contracting Officer.

(4) The Contractor must report the following information for each covered article or each product or service produced or provided by a source, where the covered article or source is subject to a FASCSA order, pursuant to paragraph (c) of this clause:

(i) Within 3 business days from the date of such identification or notification:

(A) Contract number;

(B) Order number(s), if applicable;

(C) Name of the product or service provided to the Government or used during performance of the contract;

(D) Name of the covered article or source subject to a FASCSA order;

(E) If applicable, name of the vendor, including the Commercial and Government Entity code and unique entity identifier (if known), that supplied the covered article or the product or service to the Contractor;

(F) Brand;

(G) Model number (original equipment manufacturer number, manufacturer part number, or wholesaler number);

(H) Item description; and

(I) Any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (c)(4)(i) of this clause:

(A) Any further available information about mitigation actions undertaken or recommended.

(B) In addition, the Contractor must describe the efforts it undertook to prevent submission or use of the covered article or the product or service produced or provided by a source subject to an applicable FASCSA order, and any additional efforts that will be incorporated to prevent future submission or use of the covered article or the product or service produced or provided by a source that is subject to an applicable FASCSA order.

(d) Removal. Upon notification from the contracting officer, during the performance of the contract, the Contractor must promptly make any necessary changes or modifications to remove any covered article or any product or service produced or provided by a source that is subject to an applicable Governmentwide FASCSA order.

(e) Subcontracts.

(1) The Contractor must insert the substance of this clause, including this paragraph (e) and excluding paragraph (c)(1) of this clause, in all subcontracts and other contractual instruments,

including subcontracts for the acquisition of commercial products and commercial services.

(2) The Government may identify in the SIR additional FASCSA orders that are not in SAM, which are effective and apply to the contract and any subcontracts and other contractual instruments under the contract. The Contractor or higher-tier subcontractor must notify their subcontractors, and suppliers under other contractual instruments, that the FASCSA orders in the SIR that are not in SAM apply to the contract and all subcontracts.

**All other terms and conditions of the real estate contract shall remain in full force and effect.**

☒ Lessor is required to sign this document and return 1 copy to the issuing office.

☐ Lessor is NOT required to sign this document.

IN WITNESS WHEREOF, the parties subscribed their names and date.

Lessor

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**UNITED STATES OF AMERICA**

\_\_\_\_\_  
Real Estate Contracting Officer

\_\_\_\_\_  
Date

## CERTIFICATE OF AUTHORIZATION

I, the undersigned, hereby certify that \_\_\_\_\_, who signed this  
 \_\_\_\_\_  
 Insert Name of Individual who signed the contract  
 instrument on of behalf of \_\_\_\_\_ is in fact authorized to sign on behalf  
 \_\_\_\_\_  
 Insert Contractor Name  
 of \_\_\_\_\_ by authority of its governing resolution, and is within the  
 \_\_\_\_\_  
 Insert Contractor Name  
 scope of its powers.

Print Name\*: \_\_\_\_\_

Print Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

*\*Note: the individual signing this certification cannot be the same person who signed the contract.*



CEDAR CITY COUNCIL

AGENDA ITEM – 9

TO: Mayor and City Council  
FROM: Tyler Galetka, Airport Manager  
DATE: January 7, 2026  
SUBJECT: BLM Lease Standstill Agreement

DISCUSSION:

The BLM Air Resource Center lease agreement expired on November 30, 2024. Before this expiration, the BLM contacted the airport and requested to extend this lease agreement for the next renewal period. Due to delays from the BLM real estate management division, they requested a delay in negotiations until spring of 2025 with an initial standstill agreement which expired on April 30, 2025. The BLM then requested an additional Standstill Agreement with a new date of November 30, 2025, which has now expired due to delays from the government shutdown.

The BLM has now provided an initial draft of the lease agreement for negotiations and is requesting an additional standstill agreement effective until May 2026 during negotiations and in the event of an additional government shutdown.

Please consider approving this standstill agreement.





## STANDSTILL AGREEMENT

THIS STANDSTILL AGREEMENT (Agreement) is made by and between **CEDAR CITY CORPORATION**, (Lessor)

whose address is: **10 North Main Street, Cedar City, UT 84720** and the United States of America (Government), acting by and through the authorized Bureau of Land Management representatives (BLM). Each Lessor and Government may be referred to individually as a Party and collectively as the Parties.

### RECITALS

1. Lessor owns certain improved real property located at the Cedar City Regional Airport, Cedar City, UT (Premises).

The Government currently occupies approximately 10.6 acres, more or less, pursuant to Lease No. L04PL00322 (Lease), as amended.

The Lease expires on **November 30, 2024**.

The Government has not obtained alternative space and Lessor and Government have not consummated a lease extension agreement to date.

2. The Parties do not want an unnecessary condemnation lawsuit and the Government does not want its operations, services, or tenancy interrupted or disturbed. Neither Party wants a lease holdover. The Parties prefer their negotiations to end with a new long-term lease agreement at an agreed upon rental rate to be retroactively effective from **December 1, 2024**.
3. By this Agreement, the Parties seek to preserve the *status quo* pending the completion of a leasehold acquisition procedure that could result in a mutually acceptable lease extension, and by the terms of which Government could continue to lease the Premises from Lessor.
4. The Parties believe this Agreement will facilitate settlement negotiations. As evidenced by their signatures to this Agreement, the Parties agree that no right, action, or claim either Party may otherwise have against the other Party will be prejudiced or waived by this Agreement.

**NOW THEREFORE**, in consideration of the foregoing recitals and the mutual covenants set forth herein, the adequacy of which is hereby acknowledged by the undersigned, the Parties agree as follows:

During the term of this Agreement:

1. The Parties agree to negotiate, actively and in good faith, a lease extension for the Premises.
2. The Government will not condemn the Premises by the power of eminent domain and will not file a Declaration of Taking with respect to the Premises.
3. Lessor will not initiate an "inverse condemnation" or breach of lease action in any United States Court or tribunal with respect to the Premises.
4. Lessor will not:

- A. Undertake to evict the Government from the Premises.
  - B. Interfere with the use or occupancy of the Premises by the Government.
  - C. Interrupt the operations, building services, or utilities of the Government from what they were while the Lease was in effect.
  - D. Market the space to potential tenants if the Government is planning to remain in the Premises; or
  - E. Threaten to do any of the acts referenced in A, B, C, or D above.
5. Each Party agrees not to take any action to alter its position to the detriment of the other Party in any condemnation type action arising out of these facts.
6. At all times after this Agreement becomes effective:
- A. The Government will receive full credit for money paid to Lessor during the term of this Agreement in accordance with the Lease whether there is a Lease extension, other legal action, or settlement.
  - B. Neither Party will seek or accept severance damages or attorney's fees from the other Party for the period this Agreement is in effect.
  - C. In the event a Lease extension, with respect to the Premises, is not executed by the Parties during the course of this Agreement, or this Agreement is otherwise terminated, then any legal proceeding arising therefrom is stipulated by the Parties to be deemed to have commenced on **December 1, 2024**.
7. Termination of Agreement: The Parties agree that all terms and conditions of the Lease will remain in full force and effect during the term of this Agreement. This Agreement will terminate on the earlier of **May 31, 2026** or on the date a Lease extension agreement is signed by the Parties. This termination provision may be amended to extend the termination date of this Agreement by the mutual written consent of the Parties.
8. Successors in Interest: All of the terms, covenants, and provisions herein contained will bind and inure to the benefit of the Parties, their heirs, executors, administrators, personal representatives, successors, trustees, receivers, and assigns as applicable, except as otherwise provided herein.
9. Merger Clause: All prior understandings and agreements with respect to the subject matter of this Agreement, written or oral, are merged into this Agreement. This Agreement represents the final agreement between the Parties with respect to such subject matter, and may not be superseded, except by a separate written agreement signed and agreed to by the Parties.
10. Amendments: Neither this Agreement, nor any terms hereof, may be changed, waived, discharged or terminated orally, but only by an instrument in writing signed by the Party against whom the enforcement of a change, waiver, discharge, or termination is sought.
11. Construction: Any provision contained in this Agreement which is prohibited or unenforceable will be ineffective to the extent of such prohibition or enforceability without invalidating the

remaining provisions hereof. A waiver by a Party of any right, covenant, condition, or remedy in any instance hereunder will not operate as a waiver of such right, covenant, condition, or remedy in any other instance, and waiver by a Party of any breach of the terms hereof will not be a waiver of any additional or subsequent breach. This Agreement will be governed by, and construed in accordance with, the laws of the United States of America.

12. Counterparts: This Agreement may be executed in photocopied counterparts that, when taken together, will constitute a single agreement.

13. Effective Date: This Agreement is effective and enforceable only after having been first signed by Lessor, and second, accepted and signed by the Government.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement as the last date executed.

**FOR THE LESSOR:**

**FOR THE GOVERNMENT:**

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**CEDAR CITY CORPORATION**

Date: \_\_\_\_\_

\_\_\_\_\_  
Barbra A. Burns-Fink

Lease Contracting Officer

**Bureau of Land Management**

Date: *See digital stamp above*

**WITNESSED FOR THE LESSOR BY:**

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



CEDAR CITY COUNCIL

AGENDA ITEMS – 10

DECISION PAPER

TO: Mayor and City Council

FROM: City Attorney

DATE: January 5, 2026

SUBJECT: Public Defense Contract

DISCUSSION:

The City's public defender, Candace Reid, submitted the contract-required notice to terminate her contract with the City. We published an RFP as required by policy and sent it directly to dozens of criminal defense attorneys in the area. Two responses were received, one from Troy Sundquist and one from Geoffrey Chesnut. I asked four individuals, including three City staff, to review the responses. The result was a recommendation that we select Troy Sundquist due to his greater criminal defense experience and lower cost. I extend that same recommendation to you as the Council.

Mr. Sundquist currently holds a public defense contract with Kane County and previously held a similar contract with Iron County. The cost to the City is \$75,000 per year, which is a decrease of \$13,000 from what the City is paying our current public defender and \$12,000 less than Mr. Chesnut's proposal.

I've included the current draft of the public defense contract, which is only slightly changed from the contract with our current public defender. Mr. Sundquist states he is satisfied with the draft.

Please consider approving the proposed contract for the public defender.

## **PUBLIC DEFENDER AGREEMENT**

This agreement is made and entered into on this \_\_\_\_ day of \_\_\_\_\_, 2026, by and between Cedar City Corporation, a municipal corporation and political subdivision of the State of Utah, hereinafter referred to as "City"; and Troy A Sundquist, attorney at law, hereinafter collectively referred to as "Public Defender."

**WHEREAS**, pursuant to the laws of the State of Utah (UCA §78B-22-101 *et. seq.*), City is obligated to provide legal counsel and services for individuals found indigent and accused of committing misdemeanors within Cedar City, State of Utah, who are apprehended, charged, and prosecuted by Cedar City; and

**WHEREAS**, City has sent out a request seeking proposals from qualified attorneys to represent indigent defendants; and

**WHEREAS**, in compliance with state and federal law, City does hereby enter into a contract with Public Defender to provide services and counsel for indigent defendants who are accused of committing misdemeanors within City and who are being prosecuted by City.

**NOW THEREFORE**, in consideration of the mutual covenants herein contained, the parties agree as follows:

1. Public Defender agrees that from the 22<sup>nd</sup> day of January, 2026, until the first day of July, 2029, he will represent indigent defendants accused of misdemeanors committed in City and prosecuted by City. Indigent persons who are unable to employ counsel as determined by the Cedar City Justice Court and the Fifth District Court, and who are so situated that representation by Public Defender does not present a conflict of interest. Public Defender shall represent indigent defendants through trial and any appeal of right. Representation shall commence upon notice from the appointing Judge to Public Defender that such a person has requested legal counsel and has been found indigent and shall continue until the matter has been legally completed. The question of full legal completion is to be made at the sole discretion of Public Defender, with the consent and permission of the Judge of competent jurisdiction.
2. Public Defender acknowledges that a part of the contract price includes the cost of finding limited conflict counsel. City and Public Defender agree that it is Public Defender's responsibility to provide for representation for up to two (2) co-defendants in each case with Public Defender finding and paying the conflict



attorney(s). Thereafter additional representation shall be at City's expense. In the event that a conflict of interest exists which prevents Public Defender from representing either one or two (2) clients, it shall be the duty and responsibility of Public Defender to obtain conflict counsel to handle the conflict case with Public Defender being responsible for the legal fees, if any, for the conflict counsel for representation for those conflicted defendants.

3. As consideration for Public Defender's services City agrees to pay Public Defender the sum of seventy-five thousand dollars (\$75,000). Payment of said sum shall be on a monthly basis at the rate of six thousand two hundred and fifty dollars (\$6,250.00) per month. Payment at this rate shall commence in February 2026 and continue each month as long as this agreement is in effect. Payment for the partial month (January 2026) shall be prorated at the same monthly rate rounded up to the nearest dollar. The consideration for Public Defender's services may be increased by up to five percent (5%) after each term of service upon request of either party at least sixty (60) days prior to the deadline for an extension agreement. This increased amount shall remain the consideration for the remaining years of this agreement.
4. Public Defender will take over representation for any cases held by the current public defender when her contract expires. It is further understood and agreed that Public Defender will not be required to conclude any case commenced but not concluded during the term of this agreement.
5. Public Defender will provide email and telephone contact information to the Courts and City so Public Defender's clients may be informed as to the means to contact Public Defender. Public Defender agrees to maintain at least three (3) set pre-announced and open-door office hours per week in a location Public Defender will make known to the Court. The office hours will allow time for Public Defender to meet and discuss matters with his individual clients. In addition, Public Defender agrees to be available for additional appointments with clients as necessary.
6. Public Defender agrees to receive electronic discovery from City. Public Defender shall provide City with email information where City may send discovery within a reasonable time upon learning of a Public Defender's appointment. If Public Defender does not receive discovery in a timely manner, Public Defender may serve a written request on City for Discovery. If there are discoverable items that cannot be transmitted electronically to Public Defender, City shall send discovery to Public Defender via mail. Public Defender acknowledges that information contained with discovery may be private, protected, and/or controlled as those terms are defined under the State of Utah Government Records Access Management Act. Public Defender agrees to use the information in discovery for purposes related to the scope of their representation as Public Defender and to protect and safeguard information from otherwise being disclosed. An alternative method of discovery may be used if mutually agreed to by Public Defender and the City Attorney's office or ordered by a Court of competent Jurisdiction.

7. Public Defender shall be responsible for maintaining his license with the Utah State Bar Association. Public Defender shall be responsible for maintaining a current Cedar City Business Licenses. A lapse in either licensure shall constitute a breach of this agreement.
8. This agreement shall have an initial term as stated in paragraph (1) above. City and Public Defender have the option to extend this contract for two (2) additional three (3) year terms, upon the same conditions contained herein. In order to exercise this option, City and Public Defender shall sign an extension agreement no less than sixty (60) days prior to the expiration of the then existing term.
9. This agreement may be terminated by either party without cause after giving the other party ninety (90) days' written notice.
10. This agreement represents the entire agreement between the parties. It is an integrated agreement. No prior or subsequent written or oral statements related to the subject matter of this agreement shall be used to interpret this agreement.
11. This agreement may only be amended by a written document duly executed by both parties.
12. In the event of a dispute City and Public Defender are not able to resolve through negotiation, jurisdiction is vested in the Utah District Courts. Venue is vested in the 5<sup>th</sup> Judicial District Court in and for Iron County, Utah.
13. This agreement shall be interpreted in accordance with the laws of the State of Utah.

*Remainder of page intentionally left blank.*

CITY'S SIGNATURE PAGE.

Dated this \_\_\_\_ day of January, 2026.

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STEVEN NELSON  
MAYOR

[SEAL]

ATTEST:

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RENON SAVAGE  
RECORDER

STATE OF UTAH    )

:ss.

COUNTY OF IRON    )

This is to certify that on the \_\_\_\_ day of \_\_\_\_\_, 2026, before me, the undersigned, a Notary Public, in and for the State of Utah, duly commissioned and sworn as such, personally appeared Steven Nelson, known to me to be the Mayor of Cedar City Corporation, and Renon Savage, known to me to be the City Recorder of Cedar City Corporation, and acknowledged to me that he the said Steven Nelson and she the said Renon Savage executed the foregoing instrument as a free and voluntary act and deed of said corporation, for the uses and purposes therein, and on oath state that they were authorized to execute said instrument, and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year hereinabove written.



PUBLIC DEFENDER'S SIGNATURE PAGE.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2026.

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TROY A SUNDQUIST  
ATTORNEY AT LAW

STATE OF UTAH    )

:ss.

COUNTY OF IRON   )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2026, personally appeared before me TROY A SUNDQUIST who duly acknowledged to me that he signed the above and foregoing document.

NOTARY PUBLIC

