



ALPINE CITY COUNCIL MEETING AGENDA

NOTICE is hereby given that the **CITY COUNCIL** of Alpine City, Utah will hold a Public Meeting on **Tuesday, April 10, 2018 at 7:00 pm** at Alpine City Hall, 20 North Main, Alpine, Utah as follows:

I. CALL MEETING TO ORDER *Council Members may participate electronically by phone.

- A. Roll Call:** Mayor Troy Stout
- B. Prayer:** Kimberly Bryant
- C. Pledge of Allegiance:** By invitation

II. CONSENT CALENDAR

- A. Minutes of the City Council Meeting of March 27, 2018**
- B. Bond Release #3 – Three Falls Phase 3 - \$329,512.66**

III. PUBLIC COMMENT

IV. REPORTS and PRESENTATIONS

- A. ULGT: Presentation of TAP Award – Brent Oakeson**
- B. Emergency Plan for Schools – Chief Brian Gwilliam**

V. ACTION/DISCUSSION ITEMS

- A. General Plan Review:** The City Council will review the updated General Plan which the Planning Commission has been working on.
- B. Lambert Park:** The Council will discuss the future use of motorized vehicles in Lambert Park.
- C. Speed Control Discussion:** The City Council will discuss methods of speed control used in other communities
- D. Tentative, Tentative Budget Review:** The Council review the tentative budget for fiscal year 2018-2019
- E. Smooth Canyon Park Improvements:** The Council will review and consider approving improvements for a playground in Smooth Canyon Park.
- F. Fire Restriction Map:** The City Council will consider approving the map for 2018 which restricts areas where fireworks and fires may be lit.

VI. STAFF REPORTS

VII. COUNCIL COMMUNICATION

VIII. EXECUTIVE SESSION: Discuss litigation, property acquisition or the professional character, conduct or competency of personnel.

ADJOURN

Mayor Troy Stout
April 6, 2018

THE PUBLIC IS INVITED TO PARTICIPATE IN ALL CITY COUNCIL MEETINGS. If you need a special accommodation to participate, please call the City Recorder's Office at (801) 756-6347 x 4.
CERTIFICATE OF POSTING. The undersigned duly appointed recorder does hereby certify that the above agenda notice was on the bulletin board located inside City Hall at 20 North Main and sent by e-mail to The Daily Herald located in Provo, UT, a local newspaper circulated in Alpine, UT. This agenda is also available on our web site at www.alpinecity.org and on the Utah Public Meeting Notices website at www.utah.gov/pmn/index.html

PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE

Please remember all public meetings and public hearings are now recorded.

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- When speaking to the Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, beepers, pagers or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length, and avoiding repetition of what has already been said. Individuals may be limited to two minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the lobby area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

Public Hearing vs. Public Meeting

If the meeting is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

ALPINE CITY COUNCIL MEETING
Alpine City Hall, 20 N. Main, Alpine, UT
March 27, 2018

I. CALL MEETING TO ORDER: The meeting was called to order at 7:00 pm by Mayor Troy Stout

A. Roll Call: The following were present and constituted a quorum:

Mayor Troy Stout

Council Members: Jason Thelin, Ramon Beck, Carla Merrill, Lon Lott

Council Members not present: Kimberly Bryant was excused

Staff: Shane Sorensen – City Administrator, Charmayne Warnock – City Recorder, David Church – City Attorney,

Austin Roy – City Planner, Reed Thompson – Lone Peak Fire Chief

Others: Sullivan Love, Lane Franks, Tara Franks, Loraine Lott, Addie Erickson, Dale Irhke, Ed Bush, Will Jones,

Jessica Smuin, Sawyer Bartlett, Sam Pehrson, Steve de Ello, Savannah Ostler, Jamie Ostler, John McKay, Robert

Shelley, Dave Cutler, Richard James

B. Prayer: Lon Lott

C. Pledge of Allegiance: Sawyer Bartlett

II. CONSENT CALENDAR

A. Minutes of City Council meeting of March 13, 2018

B. Resolution No. R2018-05, Wastewater Management Plan

C. Approve contract with The Tennis Company for Burgess Park basketball court replacement

D. Payment Request – 100 South road project – Red Pine Construction - \$114,464.55

MOTION: Lon Lott moved to approve the Consent Calendar with a few grammatical changes in the minutes. Ramon Beck seconded. Ayes: 4 Nays: 0. Lon Lott, Carla Merrill, Ramon Beck, Jason Thelin.

III. PUBLIC COMMENT

Sam Roy Pehrson said he was currently staying with his folks on Mountainville Drive. He had two issues. First, he had gone up the Alpine City Cemetery to visit the grave of a friend and noticed that the flag and the Veteran's Memorial were not lit. He expressed his sincere gratitude to the City for taking care of the problem and making sure the flag and the Veteran's Memorial were lit. His second issue was that, without meaning to, the City had handed him a multimillion dollar lawsuit on grounds of discrimination against the mentally ill and illegal search and seizure. He said he was willing to settle out of court. Mayor Stout referred him to David Church, the City Attorney, who gave him his phone number and said to call him anytime.

Steve de Ello, Savannah Ostler and Jaime Ostler approached the Council requesting a permit to film a portion of a family friendly movie they were making in the Alpine Cemetery. Savannah Oster said she had grown up in Alpine and had a sentimental attachment to the cemetery. She said she was the writer/director of the film and briefly reviewed the storyline. They planned to film it on Saturday, May 19th between the hours of 8 am to 3 pm.

The Mayor and Council discussed the request and said they appreciated that she asked for permission rather than just doing it. However, they hesitated to approve such an event in the cemetery. It was a sacred place and they did not want to risk offending the families of people who were buried there.

Will Jones proposed the Council begin a discussion on the situation of senior citizens who came back to Alpine after spending the winter months in a warmer location. They came back to Alpine for the summer and had to move into their homes which were much too large, but they wanted to stay in Alpine. He suggested the Council consider allowing senior housing in different areas of Alpine that was more accommodating to people who wanted a smaller home but still wanted to live in a regular neighborhood. Senior citizens were great tax payer and quiet neighbors. Usually they had only one car so the traffic impact was minimal.

IV. REPORTS AND PRESENTATIONS

A. Financial Report – February 2018. Shane Sorensen reviewed the financial report for February. They were 66.6% of the way through the fiscal year. Overall things looked good. There was a question about the budget for elections. Shane Sorensen said the County was handling and paying for the 2018 election.

V. ACTION DISCUSSION ITEMS

A. Bertha's Place Subdivision – Concept Review – Will Jones: Austin Roy said the proposed four-lot subdivision was located at 723 No. Grove Drive on 1.41 acres in the TR 10,000 zone. The Planning Commission had reviewed it at their meeting of March 20th and granted concept approval. This was for information only. Shane Sorensen said that if the Council had any concerns they should let the developer know before they turned in the preliminary plat.

B. Planning Commission Appointment: Troy Stout said that one of the privileges he had as mayor was to interview citizens who wanted to be involved. Serving on the Planning Commission took a lot of time and not much was given back. He said he appreciated the willingness of people to serve. He'd made two appointments in January and would need other to fill the seat vacated by Jason Thelin. He nominated John McKay.

John McKay said he lived on Pfeifferhorn Drive on the northwest corner of town. He'd moved to Alpine eight years ago from Richmond, Virginia to support his business which was KT Tape for muscle and joint support. It was used by athletes and people may have seen it during the Olympics. He said he looked forward to contributing what he had to offer to the City. He had experience in land development and owned commercial real estate in Orem. He was married and had five children but was now an empty nester.

MOTION: Lon Lott moved to approve the appointment of John McKay to the Planning Commission. Ramon Beck seconded. Ayes: 4 Nays: 0. Lon Lott, Ramon Beck, Carla Merrill, Jason Thelin voted aye. Motion passed.

C. PUBLIC HEARING – Ban on Motorized Vehicles in Lambert Park: Troy Stout said this had been a topic of discussion for the last year or two. In July of 2017, the Council voted to close down the park to motorized vehicles following a fire caused by gun fire. People in cars were traveling up to the shooting area on forest service land and were leaving a lot of trash such as couches, etc. It was not being kept as a wilderness area. The City closed it down and cleaned up the trash. It stayed that way until the ban on vehicles expired in December. During that two-week period between the end of December and the first meeting in January, people again began to haul trash into the park. He said gun fire was one reason for shutting down the park to motorized vehicles. Another reason was preservation of the park as a wild space. Providing access for the elderly or disabled was another issue they needed to consider. On January 9, 2018, the Council voted to reinstate the ban on motorized vehicles until May 1st. At that time, they hoped to make a final decision.

Mayor Stout opened the Hearing to public comment and asked people to limit their comments to three or four minutes and state their name and address.

Robert Shelley – Country Manor Lane. He said he had been resident of Alpine for about 23 years. He'd seen a lot of changes. One of the things his grandchildren liked to do when they came for a visit was to go up into Lambert Park and ride the motorcycle peacefully on the road. They used roads that were not attractive for hiking or mountain biking. He said he hated seeing that freedom taken away with more and more restrictions. He said he loved it when the park was bordered with orchards. Now there were houses there. When those people built there, they knew the park was open to motorized vehicles. He said he understood the problem with trash and shooting, but people could walk or ride or horse up there to shoot. He said vehicles had been allowed in the park for years and years and he hated to see it taken away. He'd like to see the park left open to more than mountain bikers.

Sullivan Love – Scenic Drive. He said most everyone wanted to see Lambert Park maintained as a pristine area and enjoy the beauty of it. He said his first question was if the park had always been shut down to motorized vehicles except on designated roads. David Church said that the ordinance, which was adopted years ago, stated that unless a road was specifically designated and signed to allow motorized vehicle use, the road was closed to use by motorized vehicles. Mayor Stout said the challenge was enforcement.

Sullivan Love said he knew enforcement was difficult. Immediately after the closure, the police department reported that they were able to increase the patrol in the park and do some education. He believed the police department felt they had more support from the City after that. If they had permanent prohibition, how would they enforce it. If the City had laws currently on the books that they couldn't enforce, how would more laws be helpful. He said they needed more help from volunteers. New residents may not be as aware of the problems. He said he would like to see the park remain open to motorized vehicles with restricted access.

David Cutler – Ridge Lane. He said he'd lived in Alpine for six years and loved to go four-wheeling with his kids in Lambert Park. He was sad to see the prohibition. He understood the fire danger and was disappointed to hear about the trash situation. Maybe they needed some signs so new residents were aware of the situation.

Tara Franks – Country Manor Lane. She said she'd lived in Alpine for 23 years. She'd heard from a lot of people that they didn't want to see Alpine change, but Alpine had changed. The population had grown. She said the ban on motorized vehicles was strictly for safety, not just for bikers and hikers and homeowners who lived by the park. How many homes had almost burned to the ground last year because of the fires? Sparks from guns and vehicles could cause fires that could be avoided. She said the park was right behind her house. She loved seeing the bikers and hikers using the park. But there were safety issues with the motorized vehicles. Two days ago, she saw a motorcyclist rip through the park. He was not staying on the trail. He went over a jump and almost hit a biker. Usually the young people in the park were not accompanied by an adult. She wondered what the City was going to do when a death occurred or a home burned to the ground. She felt they were headed in that direction. She wanted the park closed to motorized vehicles for safety reasons.

Ed Bush – Box Elder. He said a couple of people had said they didn't want to lose the right to have a motorized vehicle in the park. It was a loss of freedom. He pointed out that having a motorized vehicle in the park was not an inherent right. There were enough areas in the Wasatch area where people could ride their ATVS. He agreed with the lady who just spoke. They liked to think that Alpine was a rural community, but with all the growth, it was difficult to accommodate rural uses. There was not a great solution for problems between bikes, vehicles, and horses. He'd never seen anyone drive 15 mph in the park, which was the posted speed limit, unless it was a car going to the poppies. ATVs and motorcycles never went that slow. He said there was some park access for motorized vehicles to the Bowery and the rodeo grounds. He suggested they consider a path or two with a hard surface for wheelchairs in the area of the rodeo ground or Bowery for people who wanted to have a view. With some strategic gates, they could have access to the poppies. He said enforcement was easier when the police knew the whole park was off-limits for motorized vehicles. He said he was in favor of continuing the ban with access to the Bowery and rodeo grounds.

Lane Franks – Country Manor Lane. He said he had toys and would love to go into the park and use them but when you weighed the fun factor against the safety factor and personal property, the fun factor paled in comparison to a serious accident or a home burning down. He said there was also a peace factor. The park was in a much better state without the vehicles. He said they couldn't underestimate the late-night activities in the park. He'd seen campfires in the past, but since the ban, he hadn't seen one campfire. Usually it was underage kids who were in the park. In regard to the poppies, he'd seen a caravan of cars going up there. He felt it would preserve the poppies better if they created a parking place and people walked the rest of the way. He said every park had rules. There were rules about skateboarding, dogs, etc. Equal access didn't mean everyone could do anything they wanted. It meant everyone had access under the same rules. People in vehicles did not go 15 mph. He said that since they had directed parking to another location in the park, he'd seen fewer cars in the church parking lot.

Richard James – Ranch Drive: He said he saw people on motorcycles racing up and down his street day and night. They were not usually adults. Sometimes they had to protect themselves from themselves. He had raced motorcycles since he was six. He'd lived in California and loved coming to Utah where there were no restrictions. He could ride wherever he wanted. But the City had changed. He had two ATVs that he never took off his property because it was illegal to drive them on the street. He had a relative who was severely injured from riding on trails. He lived next to the Bonneville Shoreline Trail which went all the way to Draper. Motorized vehicles were not allowed on the trail, but it had been taken over by kids on motorcycle. He wouldn't dare ride a horse on it. It was difficult to control a motorcycle without laying it down. The last time he was in Lambert Park, people were not driving 15 mph. If you

were on a horse or a mule and had a motorcycle come down on you, it would be very dangerous. There was a reason motorcycles were not allowed in national parks. The ban would not be popular, but it might save a life.

Troy Stout said a resident had asked him to represent her because she could not be present. She gave horse riding lessons in Lambert Park. Since the motorized vehicle ban, she felt much safer. She would like to see the ban continue.

Ramon Beck said one of the problems was that it was not just people from Alpine that used the park. People were coming in from all over.

Richard James said that if people wanted to ride motorcycles, there were plenty of clubs that did that. They required proper gear and equipment so it was safer.

There was a question about fire potential this summer. Fire Chief Reed Thompson said the snowpack was less than normal. They would see what the spring brought but they expected the summer would be dryer than normal.

Jason Thelin commented that three residents from his neighborhood said they had seen people out there on ATVs that were not street legal, which meant they were breaking the law to get there. He added that the road in Lambert Park was not even a half-mile long. It didn't make sense that someone would want to ride on a straight bumpy road. Up American Fork Canyon there was a wonderful trail that was much longer.

Mayor Stout said the two major fires in the last few years had been caused by motorized equipment and shooting. He identified the private land south of the park that would possibly be developed. If the forest service banned shooting on their land, the City could build a fence along the road on the south that would allow vehicles access to that area of the park. If that happened, he would like to plow up and reseed some of the roads that were no longer needed.

Mayor Stout closed the public hearing, stating that they would continue the discussion for six more weeks. He would like to schedule one more public hearing on the issue.

D. Fireworks Discussion: Troy Stout asked if fireworks were a right or a privilege. He had addressed some of those questions in his Mayors Message in the April *Newsline*. They needed to give serious thought to regulating fireworks.

David Church said that in the last legislative session there a couple of bills that were friendly to cities. Because of the number of fires started by fireworks throughout the state, a bill was passed limiting the number of days around July 4th and July 24th when fireworks could be lit and giving cities more discretion area where fireworks could be banned. Dry grasslands were added and the area along waterways was expanded from 100 feet to 200 feet. There were also some changes to the process of identifying areas where fireworks were restricted. Cities could ban fireworks in parks because they owned them.

Fire Chief Reed Thompson encouraged the Council to take a proactive approach to fireworks as a fire-wise endeavor. Signage should plentiful and clear so people would know if they were in an area where fireworks were banned. He said most people would be compliant. There were a few who would not comply at all and others who would watch to see if people were compliant and could be swayed one way or another. As far as enforcement, he said the fire department was present to stop people and educate them but did not issue citations. That would be done by the police department. The challenge would be issuing a penalty. There was a possible fine of \$1,000 plus damages. He suggested they use social media to get the word out and have volunteers deliver flyers.

David Church said the Council would need to agree on a map showing where fireworks were banned so they could get it published well before the time people starting using fireworks. He regard to compliance, he agreement with Chief Thompson. Studies showed 80% would be compliant. 5% would defy the ban. The remaining 15% would wait to see what happened, and if it looked like it wasn't enforced, the 15% would grow. He said that in Alpine no one had ever been charged. If only one person was charged, everyone in town would know about it.

Ed Bush suggested a proactive approach would be keeping the beauty of Alpine intact since everyone wanted to protect the hillsides. Troy Stout said they should look at the cost of door hangers in the banned areas. Sullivan Love said it didn't cost anything to send out the phone calls.

Troy Stout said that they would have a map of Alpine showing restricted area for the next meeting as an action item.

E. Deer Control: Troy Stout said that he and Shane Sorensen had been working with the Division of Natural Resources on a three-step plan to control the deer. Alpine City had conducted two surveys on the question of controlling deer and the results were split down the middle. One group wanted to get rid of the deer and one group wanted to save the deer. It was a challenge because the resident deer population was growing.

Shane Sorensen reviewed the deer trap and release program which typically began at the end of November. It was easier to trap then when food was scarce. They would use trail cameras to see if deer were in the trap before people were sent to capture them. Provo and Herriman were participating in the nonlethal deer removal program and adding Alpine would be more challenging for DNR, which already had a small staff. Trapping deer in the summer was more difficult but the outcome for the deer was better because the deer weren't as stressed and the likelihood of finding feed was higher when they were transported to the new location. The DNR recommended between 15 to 20 traps. Shane Sorensen said he was going to look at the traps and see if it was something the public works department could build. They would need a list of the hot spot areas. The program went for three years, then they reviewed the progress. They estimated Alpine's deer population was about 500. They would be asking for volunteers from the city.

Troy Stout said there would be line items in the budget for traps and cameras. They would have a list of volunteers to monitor the traps and assist in the capture.

F. Preliminary Budget Discussion – Fiscal Year 2018-2019: Shane Sorensen reviewed highlights of the proposed budget. In the next few weeks the Councilmembers could meet individually with Shane Sorensen and the finance officer to go over the budget and ask questions. On April 10th they would review the tentative budget and on May 8th it would be accepted. June 12th they would hold a public hearing on the final budget and adopt it.

VI. STAFF REPORTS

Shane Sorensen reported on the following:

- Plans for Smooth Canyon Park would be coming to the Council for review.
- The street lights installed in Heritage Hills by the developer were very visible. They may need to require a different type of light.
- There were speed limit signs on Canyon Crest Road. A resident had paid part of the cost.
- The ULCT Convention would be in St. George on April 5th. If they were planning on going, they needed to sign up soon.

VII. COUNCIL COMMUNICATION

Lon Lott reported on the Utah Lake Commission meeting. The big concern this year was water. Several years ago, the lake was down by eight feet, then they had some good years that brought it up. They were still 2.75 feet below full. They were moving ahead on lake restoration.

Sullivan Love asked if the Council had received the emails sent by the TSSD about the lake study on phosphorous content. He said Professor Merrill at BYU had studied the conditions of the lake for a long time and he was concerned that the proposed restoration could actually destroy the lake. He said he would forward the information to them.

Carla Merrill asked if the roads in Three Falls were public. Signs were posted that said "No Walking." David Church said the roads were public but were closed during the construction phase. Shane Sorensen said he would check on it.

Ramon Beck said the parking by the junior high was a mess during the ball games. Someone wanted to paint the curbs on Long Drive.

Jason Thelin said the online Development Code wasn't working very well. It wouldn't allow him to open up all the sections.

Troy Stout reported on the following:

- The parking lot by Burgess Park seemed illogically designed. Shane Sorensen explained that it was designed before the adjacent subdivision was built. Easier access to the parking lot from Canyon Crest Road would make it better.
- Robin Towle was just named Mrs. Utah.
- UDOT was planning some major changes in the area of SR-92/I-15 interchange. There would be development on both the west and east sides of the freeway. They were planning on major growth in Utah County. The projection for Utah County was that the population would double by 2035. By 2050, they expected the population of Utah County to exceed that of Salt Lake County. With most of the growth happening in other areas of the county, it will be a challenge for smaller towns with finite growth projections to obtain funding. They were looking at an east/west corridor south of the lake. A causeway across the lake was a possibility.

VIII. EXECUTIVE SESSION

MOTION: Ramon Beck moved to go into executive session for the purpose of discussing litigation. Lon Lott seconded. Ayes: 4 Nays: 0. Jason Thelin, Ramon Beck, Carla Merrill, Lon Lott voted aye. Motion passed.

The Council went into closed session at 10:15 pm.

The Council returned to open meeting at 10:50 pm.

MOTION: Lon Lot moved to adjourn. Carla Merrill seconded. Ayes: 4 Nays: 0. Jason Thelin, Ramon Beck, Carla Merrill, Lon Lott voted aye. Motion passed.

The meeting was adjourned at 10:50 pm.

ALPINE CITY
ESCROW BOND RELEASE FORM
Release No. 3

Thru Period Ending: April 5, 2018

Three Falls Phase 3
Location: Three Falls Drive

BOND HOLDER

Description	Quantity	Units	Unit Price		Total Cost	% Completed This Period**	% Completed To Date**	Total This Period
PHASE 3 - SWPPP								
Silt Fence	1700	LF	@	\$ 3.00	\$ 5,100.00	0.0%	52.0%	\$ -
Inlet Protection	10	EACH	@	\$ 60.00	\$ 600.00	0.0%	52.0%	\$ -
Toilet Rental	8	EACH	@	\$ 100.00	\$ 800.00	0.0%	52.0%	\$ -
Toilet Pad Install	1	EACH	@	\$ 250.00	\$ 250.00	0.0%	52.0%	\$ -
Concrete Washout	1	EACH	@	\$ 500.00	\$ 500.00	0.0%	52.0%	\$ -
Trackout Pad	1	LS	@	\$ 3,000.00	\$ 3,000.00	0.0%	52.0%	\$ -
3D Modeling of Project	1	LS	@	\$ 1,000.00	\$ 1,000.00	0.0%	100.0%	\$ -
PHASE 3 - DIRT WORK								
Grubbing	1	LS	@	\$ 30,000.00	\$ 30,000.00	0.0%	85.0%	\$ -
Fill	30143	CY	@	\$ 5.50	\$ 165,786.50	0.0%	90.0%	\$ -
Cut	15265	CY	@	\$ 5.50	\$ 83,957.50	0.0%	91.0%	\$ -
PHASE 3 - SEWER								
8" Sewer Main	960	LF	@	\$ 30.00	\$ 28,800.00	5.0%	95.4%	\$ 1,440.00
6" Sewer Lateral	3	EACH	@	\$ 2,500.00	\$ 7,500.00	9.0%	92.3%	\$ 675.00
48" Dia Sewer Manhole	10	EACH	@	\$ 3,000.00	\$ 30,000.00	5.5%	95.5%	\$ 1,650.00
4" Sewer Lateral	3	EACH	@	\$ 2,200.00	\$ 6,600.00	5.0%	71.7%	\$ 330.00
8" HDPE Sewer Main	260	LF	@	\$ 50.00	\$ 13,000.00	8.0%	83.0%	\$ 1,040.00
Bedding	2000	TON	@	\$ 18.00	\$ 36,000.00	9.8%	91.8%	\$ 3,528.00
Air & Deflection Testing	11	EACH	@	\$ 325.00	\$ 3,575.00	20.0%	71.0%	\$ 715.00
Video & Flush	1150	LF	@	\$ 3.25	\$ 3,737.50	20.0%	71.0%	\$ 747.50
PHASE 3 - CULINARY WATER								
10" DIP Main	360	LF	@	\$ 39.52	\$ 14,227.20	80.0%	80.0%	\$ 11,381.76
10" MJ Bend	4	EACH	@	\$ 460.00	\$ 1,840.00	80.0%	80.0%	\$ 1,472.00
10"x6" MJxFLG Tees	1	EACH	@	\$ 827.00	\$ 827.00	80.0%	80.0%	\$ 661.60
10"x8" MJ Reducer	1	EACH	@	\$ 645.00	\$ 645.00	80.0%	80.0%	\$ 516.00
10" Sure Lock Gaskets	22	EACH	@	\$ 218.40	\$ 4,804.80	80.0%	80.0%	\$ 3,843.84
8" DIP Main	2800	LF	@	\$ 32.60	\$ 91,280.00	80.0%	80.0%	\$ 73,024.00
8" Sure Lock Gaskets	74	EACH	@	\$ 157.20	\$ 11,632.80	80.0%	80.0%	\$ 9,306.24
8" MJ 45 Bend	42	EACH	@	\$ 300.00	\$ 12,600.00	80.0%	80.0%	\$ 10,080.00
Fire Hydrant 7' Bury Depth	4	EACH	@	\$ 3,910.00	\$ 15,640.00	80.0%	80.0%	\$ 12,512.00
8" Flg 45 Bend	1	EACH	@	\$ 340.00	\$ 340.00	80.0%	80.0%	\$ 272.00
8" Flg 905 Bend	1	EACH	@	\$ 360.00	\$ 360.00	80.0%	80.0%	\$ 288.00
1" Services	6	EACH	@	\$ 1,590.00	\$ 9,540.00	80.0%	80.0%	\$ 7,632.00
8" Blow Off	1	EACH	@	\$ 750.00	\$ 750.00	80.0%	80.0%	\$ 600.00
8"x6" MJxFlg Tee	3	EACH	@	\$ 607.65	\$ 1,822.95	75.0%	75.0%	\$ 1,367.21
Locate Wire	3600	LF	@	\$ 0.50	\$ 1,800.00	75.0%	75.0%	\$ 1,350.00
Valve Boxes	9	EACH	@	\$ 90.00	\$ 810.00	75.0%	75.0%	\$ 607.50
8" MJ Gate Valve	2	EACH	@	\$ 1,275.00	\$ 2,550.00	75.0%	75.0%	\$ 1,912.50
10" Mega Lugs	12	EACH	@	\$ 105.00	\$ 1,260.00	75.0%	75.0%	\$ 945.00
8" Mega Lugs	100	EACH	@	\$ 68.75	\$ 6,875.00	75.0%	75.0%	\$ 5,156.25
6" Mega Lugs	14	EACH	@	\$ 55.00	\$ 770.00	75.0%	75.0%	\$ 577.50
6" Flg Packs	7	EACH	@	\$ 15.00	\$ 105.00	75.0%	75.0%	\$ 78.75
8" Water Loop	3	EACH	@	\$ 17,305.47	\$ 51,916.41	75.0%	75.0%	\$ 38,937.31
Thrust Blocks	54	EACH	@	\$ 185.00	\$ 9,990.00	75.0%	75.0%	\$ 7,492.50
Bedding	3940	TON	@	\$ 18.00	\$ 70,920.00	72.0%	72.0%	\$ 51,062.40
Testing & Flushing	1	LS	@	\$ 7,500.00	\$ 7,500.00	0.0%	0.0%	\$ -
6" DIP Main	90	LF	@	\$ 25.60	\$ 2,304.00	70.0%	70.0%	\$ 1,612.80
6" FlgxMJ Gate Valve	5	EACH	@	\$ 900.00	\$ 4,500.00	70.0%	70.0%	\$ 3,150.00
PHASE 3 - STORM DRAIN								
15" RCP Storm Drain	1160	LF	@	\$ 30.00	\$ 34,800.00	41.0%	41.0%	\$ 14,268.00
48" SD Manhole	11	EACH	@	\$ 2,700.00	\$ 29,700.00	40.0%	40.0%	\$ 11,880.00
2x3x5 Curb Inlet Boxes	2	EACH	@	\$ 2,700.00	\$ 5,400.00	40.0%	40.0%	\$ 2,160.00
16" HDPE Storm Drain	640	LF	@	\$ 68.00	\$ 43,520.00	50.0%	50.0%	\$ 21,760.00
2x3x4 Curb Inlet Boxes	7	EACH	@	\$ 2,500.00	\$ 17,500.00	40.0%	40.0%	\$ 7,000.00
3x3x4 Area Drain Boxes	2	EACH	@	\$ 2,700.00	\$ 5,400.00	40.0%	40.0%	\$ 2,160.00
42" RCP Storm Drain #1	104	LF	@	\$ 110.00	\$ 11,440.00	0.0%	100.0%	\$ -
42" RCP Storm Drain #2	72	LF	@	\$ 110.00	\$ 7,920.00	0.0%	100.0%	\$ -
FES (Flaired end section) 42"	4	EACH	@	\$ 1,500.00	\$ 6,000.00	0.0%	100.0%	\$ -
Bedding	1400	TON	@	\$ 18.00	\$ 25,200.00	50.0%	50.0%	\$ 12,600.00
Rip Rap	4	EACH	@	\$ 1,000.00	\$ 4,000.00	0.0%	100.0%	\$ -
Pipe Collars	43	EACH	@	\$ 80.00	\$ 3,440.00	50.0%	50.0%	\$ 1,720.00
PHASE 3 - CONCRETE								
24" Curb and Gutter	3984	LF	@	\$ 17.00	\$ 67,728.00	0.0%	0.0%	\$ -
Curb Tie-ins	9	EACH	@	\$ 450.00	\$ 4,050.00	0.0%	0.0%	\$ -
Curb Cut	70	LF	@	\$ 7.00	\$ 490.00	0.0%	0.0%	\$ -
Mobilization	2	EACH	@	\$ 750.00	\$ 1,500.00	0.0%	0.0%	\$ -
Manhole Collars	21	EACH	@	\$ 600.00	\$ 12,600.00	0.0%	0.0%	\$ -
Water Valve Collars	8	EACH	@	\$ 400.00	\$ 3,200.00	0.0%	0.0%	\$ -
PHASE 3 - ROADWAY IMPROVEMENTS								
3" Asphalt - Main Roadways	59500	SF	@	\$ 1.30	\$ 77,350.00	0.0%	0.0%	\$ -
8" Roadbase - Main Roadways	59500	SF	@	\$ 0.90	\$ 53,550.00	0.0%	0.0%	\$ -
12" Subbase - Main Roadways	74000	SF	@	\$ 0.90	\$ 66,600.00	0.0%	0.0%	\$ -
PHASE 3 - CONDUIT								
Conduit - Dry Utilities	1	L.S.	@	\$ 57,600.00	\$ 57,600.00	0.0%	0.0%	\$ -
BASE BID TOTAL					\$ 1,286,804.66	Previously Released: \$ 393,488.55		
10% Warranty Amount					\$ 128,680.47			
TOTAL BOND AMOUNT					\$ 1,415,485.13	This Release: \$ 329,512.66		

Total Released to Date
TOTAL BOND REMAINING

\$ 723,001.21
\$ 692,483.92

At the discretion of the city, up to 95% of the Base Bid Total may be released as partial payments and 100% of the Base Bid Total will be released at final inspection. The 10% Warranty Amount will be held for the one year warranty period.

Will Jones
Developer

Date

Troy Stout
Mayor

Date

Jed Muhlestein, P.E.
City Engineer

4.6.18
Date

City Council
(by Charmayne Warnock - City Recorder)

Date

ALPINE CITY COUNCIL AGENDA

SUBJECT: Emergency Plan for Schools

FOR CONSIDERATION ON: April 10, 2018

PETITIONEER: Mayor Stout

ACTION REQUESTED BY PETITIONER: Review Emergency Plan for Schools

APPLICABLE STATUTE OR ORDINANCE:

PETITION IN COMPLIANCE WITH ORDINANCE: N/A

INFORMATION: Chief Gwilliam will provide information regarding the plan for emergency situations at schools.

<p>RECOMMENDATION: The City Council review the emergency plan for schools.</p>

ALPINE CITY COUNCIL AGENDA

SUBJECT: General Plan Review

FOR CONSIDERATION ON: 10 April 2018

PETITIONER: Staff

ACTION REQUESTED BY PETITIONER: Review Draft of the General Plan

BACKGROUND INFORMATION:

The Planning Commission has completed a draft of the General Plan which is now ready for City Council review. The updated General Plan was written with a few goals in mind: make it simple, make it concise, and provide a clear list of the City's goals and policies. By implementing the above goals, the Planning Commission has attempted to make a document that is easy to read and which can be useful as a quick reference.

STAFF RECOMMENDATION:

Review the elements of the General Plan and suggest changes, corrections, and/or updates that may be needed.

Memo



To: Mayor Stout and City Council
From: Shane L. Sorensen, P.E., City Administrator/Public Works Director
Date: April 5, 2018
Subject: General Plan Update Comments

Much like most of the City Council, I have not been involved with the General Plan Update that was worked on by some of the City Staff and the Planning Commission. I have now reviewed the document and feel that they have done a great job making the plan simple and concise.

Following are my review comments:

- It feels like the plan needs some statement of purpose, executive summary or introduction. It doesn't need to be long, but I think it would help those reading it know what we are trying accomplish with the document.
- Page 6, Goal #2: The two sentences included with this goal seem to conflict. Possibly re-write them for clarification.
- Page 6, Section 2.2 Land Zoned as MU (Mixed Use): As written, the plan seems to infer that we have a Mixed Use zone, but we don't. I don't know of any other place in our ordinances or plans where an MU zone is mentioned. I like the idea, but think it should be written as "Consider creating a MU zone...". If the Council is sure that they want to go this direction, it could read "Create a MU zone".
- Alpine City Land Use Map, Page 11: Reference the map as "Figure 1" or something similar in the Land Use section. The map also should be updated to reflect the current City boundary, including Alpine Cove, Oberee and the Cocolalla areas.
- Alpine City Street Improvement Plan, page 15: Reference this page as Table 1 in the Transportation & Traffic Circulation section. The table should also be update to reflect projects that have been completed or changes that have been made since this document was created. I believe the document came out of the 2005 Transportation Master Plan.
- Alpine City Transportation Master Plan, page 17: Reference this page as Figure 2 in the Transportation & Traffic Circulation section. The figure should also be update to reflect projects that have been completed or changes that have been made since this document was created. I believe the document came out of the 2005 Transportation Master Plan as well.

Alpine City
20 North Main • Alpine, Utah 84004
Phone: (801) 763-6347
E-mail: ssorensen@alpinecity.org

- Moderate Income Housing, Section 1.3, page 19: Accessory Dwelling Units (ADU) have been discussed in the past, but the ordinance has never been changed to allow them. If the Council is committed to allowing them, the way this section is written is fine. If they are something that are just being considered but a decision has not been made, this wording could be changed to reflect this.
- Parks, Recreation, Trails and Open Space, page 21: I would recommend rather than referencing appendages (or appendices) A, B and C, that they be referenced as figures 3, 4 and 5. Appendices are typically at the end of a document. Each of these figures are only one page, so it seems appropriate to include them in this section as figures.
- Parks, Recreation, Trails & Open Space – Lambert Park:
 - Section 1.7: include Lambert ruins.
 - Reference the Lambert Park Master Plan as figure 6.
 - On the Lambert Park Master Plan, show trail connections to Box Elder South. I believe this was the intent.
- General Formatting: make change to minimize blank pages.

These are just suggested changes from my point of view.



**ALPINE CITY
GENERAL PLAN
DRAFT
APRIL
2018**

GENERAL PLAN



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GENERAL PLAN



ELEMENTS

Land Use

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Appendix A – Land Use Map	11

Transportation & Traffic Circulation

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Appendix B – Street Improvement Plan	15
Appendix C – Street Master Plan	17

Moderate Income Housing

Goals & Policies	19
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Parks, Recreation, Trails & Open Space

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Economic Development

Goals & Policies	35
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GENERAL PLAN



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LAND USE



GOAL #1

Maintain and promote a historic small-town, rural atmosphere that embraces agricultural uses, open spaces and the mountainous surroundings of the City.



POLICIES

- 1.1 Promote and preserve both natural and developed open spaces around the City with a preference towards public open spaces. The City prefers that this is done through Planned Residential Developments (PRD) or by the public purchase of land.
- 1.2 Encourage, develop and/or maintain venues that enhance a sense of community and provide residents an opportunity to congregate.
- 1.3 Preserve animal rights and maintain a lenient level of regulations.
- 1.4 Encourage and maintain a safe, convenient and inviting atmosphere for pedestrians within commercial areas by applying the Gateway Historic District Design Guidelines.
- 1.5 Preserve and beautify the three gateways into the City and do so in a way so that it is clear that you are entering Alpine.
- 1.6 Encourage beautifying streetscapes while protecting City sidewalks and infrastructure through the implementation of Street Tree Guidelines.

LAND USE



GOAL #2

Provide clearly defined land zones to support the vision for a low density, rural atmosphere. Provide zoning that will allow a variety of lot sizes and housing types to meet the needs of varying ages of residents.



POLICIES

- 2.1 Land zoned as B-C (Business Commercial) shall consist of professional office, retail and other commercial uses serving the community and situated within an environment which is safe and aesthetically pleasing.
- 2.2 Land zoned as MU (Mixed Use) shall consist of a mixture of business commercial and higher density residential type uses that reflect a historic small-town, rural atmosphere.
- 2.3 Land zoned as TR-10,000 (Town Residential – 10,000 square foot minimum lot size) shall include, but is not exclusive to, the area generally located within the originally settled town center of Alpine that is considered appropriate for higher density residential development.
- 2.4 Land zoned as CR-20,000 (Country Residential – 20,000 square foot minimum lot size) shall include, but is not exclusive to, traditional agricultural land and land located at a lower elevation that is considered appropriate for medium density residential development. These areas should provide for the perpetuation of the rural and open space image of the City.

LAND USE



- 2.5 Land zoned as CR-40,000 (Country Residential – 40,000 square foot minimum lot size) shall include, but is not exclusive to, land generally located around the periphery of the City center considered appropriate for low density residential development. These areas should provide for the perpetuation of the rural and open space image of the City.
- 2.6 Land zoned as CE-5 (Critical Environment – 5 acre minimum lot size) shall consist of areas primarily located in mountainous areas of the City considered appropriate for very low density residential development. These areas, as a result of the presence of steep slope, adverse soil characteristics, flood hazard, mudflow, earthquake potential, wildfire hazard or similar critical and sensitive natural conditions are considered environmentally fragile. As a result of the large amount of area that is considered environmentally fragile, development will be clustered and interspersed with large and undisturbed open space areas.
- 2.7 Follow the Alpine City Annexation Policy Plan.

LAND USE



GOAL #3

Preserve and protect specific community characteristics such as hillsides, scenic views, critical lands and a historic small-town, rural atmosphere by using overlay zones which build on an underlying zone by setting additional and strict standards, and applying the standards of both zones.



POLICIES

- 3.1 The Gateway Historic District Overlay Zone should maintain a high character of community development by regulating the exterior architecture characteristics of structures that are developed in the center of Alpine City (See Gateway Historic District Design Guidelines).
- 3.2 The Sensitive Lands Overlay Zones are to provide for safe, orderly and beneficial development of areas characterized by sensitive and hazardous conditions as shown on the official Sensitive and Hazard Area Maps (floodplain, urban/wildland, geologic hazards and hillside) and to limit alteration to topography and reduce encroachment upon, or alteration of, such areas.
 - 3.2.1 The Geologic Hazards Overlay Zone is to minimize the adverse effects of geologic hazards including surface fault ruptures, landslides, debris flows, rock fall and soil liquefaction.
 - 3.2.2 The Urban/Wildland Interface Overlay Zone is to establish standards for development and fire prevention in areas bordering on wildlands.

LAND USE



- 3.2.3 The Flood Damage Prevention Overlay Zone is to minimize public and private losses due to flood conditions in specific areas.
- 3.2.4 The Hillside Protection Overlay Zone is to establish standards for developments of certain hillsides located in the City to minimize soil and slope instability, to minimize erosion and to preserve the character of the hillsides.
- 3.3 The Senior Housing Overlay Zone is to provide for increased land use flexibility and specialized types of senior housing that recognizes and accommodates varied housing needs and desires of the community's senior housing population while promoting independence and a high quality of life.
- 3.4 The Assisted Living and Nursing Care Overlay Zone is to provide for increased land use flexibility to assure that health and human services are appropriately located in the community to meet the needs of aging residents.

GENERAL PLAN



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GENERAL PLAN



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TRANSPORTATION & TRAFFIC CIRCULATION



GOAL #1

Create and maintain a multi-modal transportation system that is pedestrian friendly, safe and efficient.



POLICIES

- 1.1 Promote safe and efficient traffic circulation by following the Street Master Plan.
- 1.2 Connect neighborhoods and open spaces of the City with appropriate trails, sidewalks and bike lanes that support alternate forms of local transportation and recreation.
- 1.3 Work with adjacent communities and other agencies to acquire financial aid for transportation improvements and regional integration.
- 1.4 Emphasize the maintenance of roads to ensure a high quality road system.
- 1.5 Promote the use of roundabouts or other traffic flow options to prevent the need for stop lights therefore maintaining the historic small-town rural atmosphere.

GENERAL PLAN



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TRANSPORTATION & TRAFFIC CIRCULATION



Alpine City Street Improvement Plan

Project Number	Recommended Improvements		Planning Level Cost Estimate	Potential Funding Source*
	Project	Limits		
	0-5 Year Improvements			
1	Canyon Crest Road (west)	Canyon Crest Road to Westfield Road	\$165,600	C, O
2	Blue Spruce Road	Complete between Sunrise Drive and Lupine Drive	\$193,200	C, O
3	Ranch Drive & Dry Creek Bridge	Ranch Circle to Main Street	\$155,400 \$300,000	S, C, O
4	Country Manor Lane (South)	Oakwood Circle to Wintergreen Court	\$303,600	C, O
5	Elk Ridge Lane	East View Lane to Grove Drive		C, O
6	Three Falls Secondary Access	Three Falls Drive to Alpine Cove Drive		C, O
	5-10 Year Improvements			
7	Smooth Canyon	Healey Boulevard to Highland City		C, O
	10-20 Year Improvements			
8	Westfield Road	200 North to Pioneer Drive	\$441,600	C, O
9	Long Drive	Ranch Circle to Westfield Road	\$110,400	C, O
10	North Bald Mountain Drive	North of Bald Mountain Circle to Alpine Boulevard	\$400,200	C, O
11	Moyle Drive	Lambert Park to Box Elder Circle	\$345,000	C, O
12	1000 East (Lambert Park)	Moyle Drive to Box Elder Drive / Grove Drive	\$207,000	C, O
13	GPS System (street portion)		\$8,000	C, O
14	Intersection Improvements w/ ROW		\$1,020,000	S, C, O
15	TMP Update in 5 years		\$20,000	C, O
	Total Costs		\$3,670,000	

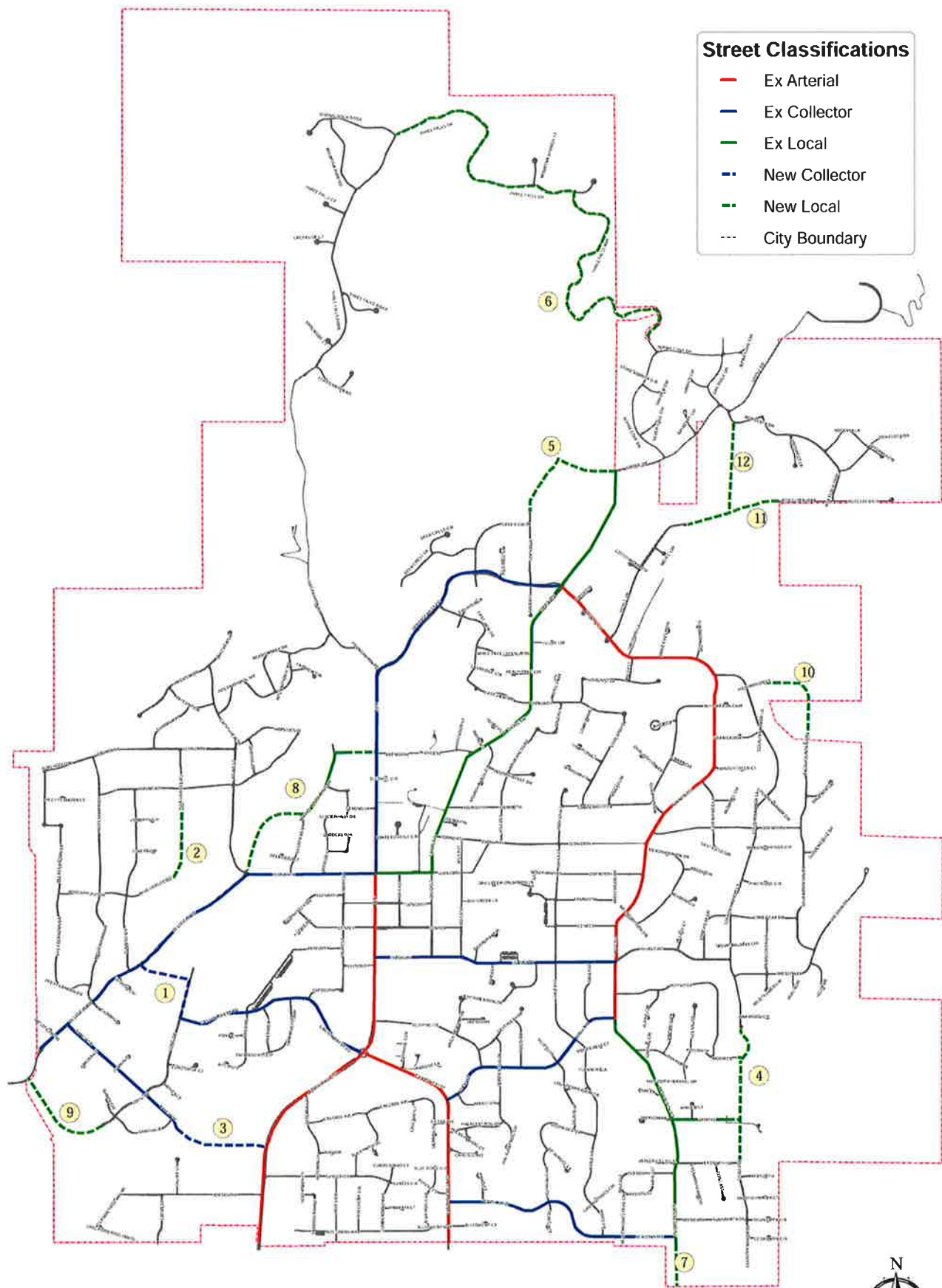
*Potential Funding Sources: F-Federal, S-State, C-City, and O-Other.

**Miscellaneous local roads are scattered throughout the various different implementation time frames but have not been included since they will most likely be built by developers as part of their development

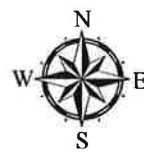
GENERAL PLAN



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Alpine City Transportation Master Plan



Proposed 2016

GENERAL PLAN



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MODERATE INCOME HOUSING



GOAL #1

Promote moderate income housing that meets the needs of those desiring to live in Alpine.



POLICIES

- 1.1 Allow accessory apartments within owner-occupied dwellings throughout the City
- 1.2 Allow senior housing units to be built in more dense clusters to reduce costs of living.
- 1.3 Allow detached accessory dwelling units (ADU) and regulate them in order to maintain the character of Alpine City.

GENERAL PLAN



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PARKS, RECREATION, TRAILS & OPEN SPACE



GOAL #1

Plan and maintain a sustainable high-quality parks and trails network within the community.



POLICIES

- 1.1 Work closely with neighboring municipalities and the appropriate entities to coordinate recreation opportunities and designate specific parks for the use of organized recreational activities.
- 1.2 Work closely with neighboring municipalities and the appropriate entities to coordinate the trails between cities and plan connections.
- 1.3 Organize volunteer efforts to periodically cleanup trails on a staggered annual basis in accordance with the US Forest Service Trail Standards.
- 1.4 Designate trails for specific uses where needed (i.e. equestrian, hiking, biking, OHV/ATV).
- 1.5 Implement and promote the Bonneville Shoreline Trail.

APPENDAGE:	A	Moyle Park Master Plan
	B	Dry Creek Corridor Master Plan
	C	Trail Master Plan

PARKS, RECREATION, TRAILS & OPEN SPACE



GOAL #2

Identify and categorize city parks according to primary use and function.

POLICIES

2.1 Parks are classified under three main categories: Sports Parks, Family Parks, and Open Space Parks.

2.1.1 Sports Parks are dedicated primarily to facilitating organized sports and sporting events. Sports Parks include:

Burgess Park

Healey/Smooth Canyon Parks

Rachel McTeer Park

2.1.2 Family Parks are dedicated primarily to community and family leisure activities, no organized sports allowed. Family Parks include:

Beck's Hill Park

Creekside Park

Legacy Park

Moyle Park

Petersen Park

Silver Leaf Park

2.1.3 Open Space Parks are areas of generally undisturbed land and vegetation allowing for recreational activity in a natural environment. Open Space Parks include:

Dry Creek Corridor

Hog Hollow Trailhead

Lambert Park

PARKS, RECREATION, TRAILS & OPEN SPACE



Rodeo Grounds

Three Falls Open Space

GENERAL PLAN



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Moyle Park Master Plan

Adopted January 27, 2015



GENERAL PLAN

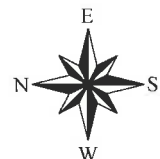


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The Corridor Master Plan

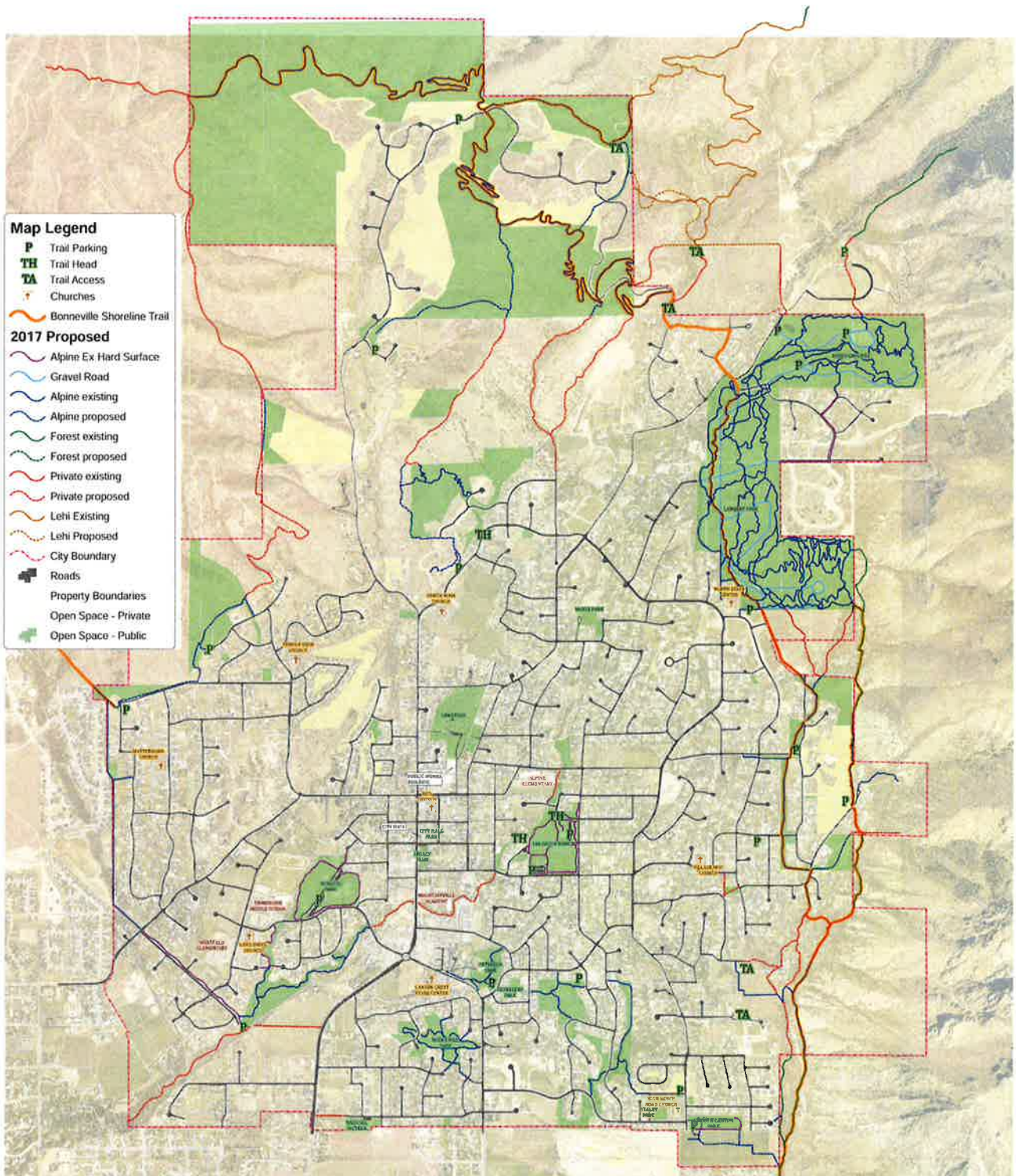
Adopted June 13, 2017



GENERAL PLAN



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Trail Master Plan

0 0.125 0.25 0.5 0.75 1 Miles



Proposed Oct 2017

GENERAL PLAN



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PARKS, RECREATION, TRAILS & OPEN SPACE – LAMBERT PARK



GOAL #1

Plan and maintain a sustainable high quality natural trails park for multiple uses.



POLICIES

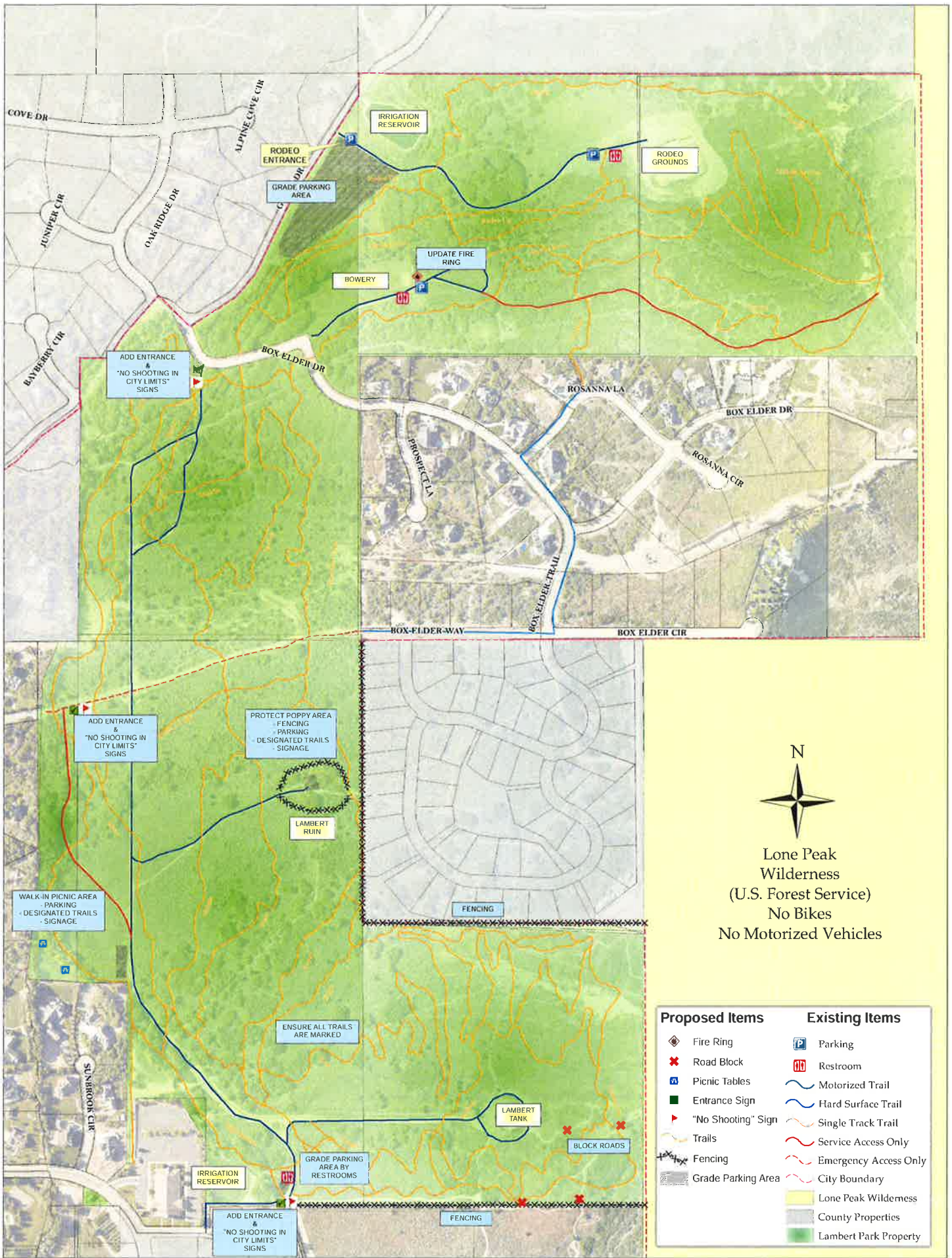
- 1.1 Clearly define park boundaries and entrances.
- 1.2 Designate developed vs undeveloped areas of the park. Developed areas to include improvements such as parking lots, restrooms, cell tower, or city infrastructure. Undeveloped areas are generally left as natural and open as possible.
- 1.3 Clearly define and sign trails and roads and their appropriate uses.
- 1.4 Designate Lambert Park as a non-motorized park except as permitted by the City.
- 1.5 Work with neighboring property owners to allow for the connection and continuity of trails between the park and surrounding areas, this includes the Bonneville Shoreline Trail.
- 1.6 Organize volunteer efforts for the general maintenance, cleanup, weed control, and other needs of the park.
- 1.7 Protect and preserve the poppy area.
- 1.8 Implement use policies to preserve and protect park resources for public use, enjoyment, and safety.
- 1.9 Implement policies to preserve the ecology and enhance environmental stewardship of the park.

ATTACHED: Lambert Park Master Plan

GENERAL PLAN



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N

Lone Peak
Wilderness
(U.S. Forest Service)
No Bikes
No Motorized Vehicles

Proposed Items

- Fire Ring
- Road Block
- Picnic Tables
- Entrance Sign
- "No Shooting" Sign
- Trails
- Fencing
- Grade Parking Area

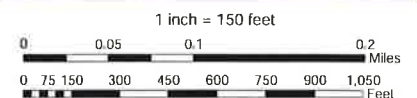
Existing Items

- Parking
- Restroom
- Motorized Trail
- Hard Surface Trail
- Single Track Trail
- Service Access Only
- Emergency Access Only
- City Boundary
- Lone Peak Wilderness
- County Properties
- Lambert Park Property

SEPTEMBER 2017



Lambert Park Master Plan



GENERAL PLAN



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ECONOMIC DEVELOPMENT



GOAL #1

To promote economic growth and commercial development that attracts local resident spending in the community, while still preserving the City's small town historic feel.



POLICIES

- 1.1 Seek to attract a stable flagship business that will stimulate economic growth and attract other likeminded businesses to the community.
- 1.2 Seek to expand and retain existing businesses in the community.
- 1.3 Seek to attract new low-impact businesses that fit the character and scale of Alpine City.
- 1.4 Promote patronage of local businesses from the citizens of Alpine and neighboring communities.
- 1.5 Actively work with developers to influence and encourage the best possible designs and outcomes for the community.
- 1.6 Seek to enhance parks, trails, and open space near the business commercial zone to compliment commercial development and thus create an area that is ideal for local leisure activity, shopping, and recreation.

ALPINE CITY COUNCIL AGENDA

SUBJECT: Speed Control Discussion

FOR CONSIDERATION ON: April 10, 2018

PETITIONEER: City Staff

ACTION REQUESTED BY PETITIONER: Review speed control information

APPLICABLE STATUTE OR ORDINANCE:

PETITION IN COMPLIANCE WITH ORDINANCE: N/A

INFORMATION: At the last City Council meeting a packet was provided to each City Council member with speed control information. Jed Muhlestein gathered information from several cities regarding how they address speed control. Our intent with providing this information in advance was to give the Council adequate time to review the material so we can discuss how the City would like to handle speed control issues.

<p>RECOMMENDATION: The City Council review the options for speed control.</p>
--

Memo



To: Alpine City Council
From: Jed Muhlestein, P.E.
City Engineer
Date: March 12, 2018
Subject: Traffic Speeding Survey Report

Alpine recently polled all Utah City Engineers for their thoughts on speeding complaints, speed bumps, and the process they follow when these complaints come in. Twenty-two (22) cities responded, the results can be summarized as thus:

- 91% have a process they follow (written or non-written) to process the complaint;
- 27% have an actual committee that specifically addresses speeding concerns;
- 32% have adopted a Neighborhood Traffic Management Program (NTMP);
- 73% own a traffic counting device and city employees conduct traffic studies;
- 42% specifically mentioned a non-speed bump policy and 18% have passed a non-speed bump resolution;
- 95% (all but one city) discouraged the use of speed bumps whether they had a written policy on the issue or not. One city did mention the use of speed bumps in parking lots to discourage cut-through traffic.;
- 68% responded that the first line of defense should be increased enforcement.

We can learn from these responses and incorporate a similar program for Alpine. This can be a discussion topic for council, but Staff would recommend Alpine do the following:

1. Buy a traffic counting/speed collecting device such as the Gen 1 Radar Recorder, \$3,600 (<https://www.jamartech.com/radarrecorder.html>).
2. Come up with a simple process to follow when speeding complaints are received, such as:
 - a. Do a week-long traffic study with the above recommended device
 - i. Keep track of all traffic studies
 - b. Determine if a speeding problem exists. The Federal Highway Administration (FHWA) sets the standards for setting speed limits. For roads 30 feet and wider, if the 85th percentile speed is 11 mph greater than the posted speed, the speed limit should be adjusted.
 - i. If a problem exists:
 1. Does the speed limit need adjusted?
 2. Does more enforcement need to occur? The results of the survey point towards enforcement first, then other alternatives such as electronic feedback signs.
 3. Consider other options for traffic calming measures such as painting narrow travel lanes, center islands, etc.
 - ii. If a problem does not exist, then it may simply be a perception of the citizen that could be mitigated by more enforcement during times of perceived speeding.
3. Adopt a No Speed Bump Policy. See attached responses for the many reasons why these do not work and are unsafe.

Staff does not feel like a comprehensive program needs to be put in place for a smaller town like

Alpine City Engineering
20 North Main • Alpine, Utah 84004
Phone/Fax: (801) 763-9862
E-mail: ssorensen@alpinecity.org

Alpine. Speeding complaints are common on a few roads but in general, most of the city is comprised of slower residential roads that Staff has received no complaints about.

Attached is a summary of the responses from other cities. Also attached are all the responses with corresponding documentation that was sent.

Speed Study Results

	Traffic Committee	Have written policies to follow	Have a written NTMP "Neighborhood Traffic Management Program"	City Owned Speed Collector	Traffic Study	Rank Streets based on results	Localized Issue Enforcement 2 weeks effective	Chronic Issue Enforcement Sign 3 month effective	No Study Other measures taken	No Speed Bump Resolution	Use Speed Bump on City Street?
1	Draper	X	X	X	X		X	X		X	
2	Sandy	X		X	X	X		X	X		
3	Salt Lake	X		X	X	X	X	X	X	X	
4	Uindon	X		X	X						
5	Warman	X		X	X						
6	*Aqua Engineering	X	X	X	X	X	X		X	X	
7	Park City	X	X	X	X		X				No
8	Payson				X		X				No
9	Pleasant Grove			in process of getting one			X				
10	Blanding	X		X							
11	North Logan										No
12	*Gibson Engineering	X	X	X	X	X	X	X	X		No
13	Georgetown	X		X	X		X	X			
14	S. Salt Lake	X		X	X		X	X			
15	Mapleton	X		X	X		X	X			
16	Salem	X		X	X		X				
17	South Jordan	X	X	X	X		X	X			
18	*Lance Houser	X		X	X			X			
19	Saratoga Springs	X	X	X	X		X	X			
20	Millcreek	X									
21	Summit County		X	X	X	X	X	X		X	
22	West Jordan		X	X	X		X	X	X		Yes

* Engineering Firm acts as City Engineer for many cities both in and outside Utah

Notable Comments from responses

"The purpose of stop signs and traffic signals is not to slow down traffic but to provide safety at intersections while maximizing the traffic flow"

"Flashing speed limit signs are only effective if there is enforcement."

"In order (for speed bumps) to be effective, humps should be installed every 200 feet. This is not feasible.."

"After deploying traffic counters for about a week most streets in our city have an 85th percentile speed of about 27mph. " - "Outliers can be dissuaded by increased enforcement."

"Increased random enforcement has the best success."

"Speeding is a local problem (you and your neighbors)"

From one of the NTMP's, "If the volume is below 800 vpd, the NTMP shall not be applied"

Traffic calming measures mentioned

Narrow Lane striping, 10 or 11 feet

Roadway bulb-outs (Drem, 800 East)

Painting double yellow center strips, striping the shoulder

Speed feedback signs

Jed Muhlestein

From: Glade Robbins <gladerobb@gmail.com>
Sent: Friday, February 09, 2018 1:34 PM
To: Jed Muhlestein
Subject: Speeding Complaints

Jed,

Speeding complaints account for over 60% of our traffic related complaints received in Draper City. All complaints are discussed in our Traffic Committee. Once a speeding complaint is received we install a black block on a utility pole or sign with a radar speed detector device that collects all vehicles speed data for a week time period. We then evaluate the data. If in fact there is speeding, we know when it happens and to what extent. We then send police enforcement out at those times. After a few citations, it usually slows traffic for a couple of weeks. In areas of chronic speeding, we have installed driver feedback speed signs that flash the driver's speed and shows the speed limit below. These are effective for about 3 months so we mount them so that we can rotate them around the City to keep them fresh. The City Council has passed a resolution not to install speed bumps because they just divert the traffic to a nearby street. Hope that helps. If you have questions, please let me know. Tell Shane Hi.

Sincerely,
Glade J. Robbins
Draper City Public Works

Jed Muhlestein

From: Britney Ward <BWard@SANDY.UTAH.GOV>
Sent: Tuesday, February 06, 2018 12:29 PM
To: Jed Muhlestein
Subject: Re: Fwd: UCEA Members -- Information Request
Attachments: JPEG image.jpeg

Jed-

Your inquiry was forwarded to me by our city engineer. We do have a process to address concerns of speeding and requests for traffic calming devices. I left you a voice mail, thinking it would be easier for me to explain our process over the phone. However, I will summarize them for you in this email.

We receive many requests for traffic calming measures in residential areas. The first step we take is to quantify the problem with a traffic study. We use tubes, pucks, and radar equipment to obtain speed, volume, and other relevant data. The study provides 24-hour traffic volume and speed data. Based on the volumes, average speeds, and the speeds of 85% of the motorists, the street will be ranked. I keep an ongoing spreadsheet that calculates these ranks, comparing every street in Sandy. The most severe streets are given priority for traffic calming measures. If the data shows that there is not an issue with speeding on the street, I can explain it with surety and show them the data. I will then explain that if they notice an increase in traffic volume or speeds over the next few years, they can call and I will take new counts and compare the data.

For the streets that do see speed issues, Sandy City has found that driver feedback signs (radar boards) are a very effective tool in reducing vehicle speeds. These signs display the speed limit and the speed of passing motorists. Existing signs have been placed at locations determined by severity after reviewing the traffic studies. After the signs have been installed, updated studies have shown a marked decrease in average speeds. Each year, additional signs have been placed on the most severe ranking streets as funding becomes available.

Another frequent request is for the placement of warning signs to warn motorists to slow down. Sandy City does not use any signage that indicates 'Children at Play', 'Deaf Child', 'Blind Child', 'Autistic Child', or any other similar type sign. These signs are not recognized by the Federal Highway Administration (MUTCD) as official traffic control devices. Drivers should always expect the presence of children in residential areas, not just when signs are posted. Signs that attempt to warn motorists of normal conditions, or conditions that are not always present, fail to achieve the desired safety benefits. There is no evidence that these signs prevent accidents or reduce the speed of vehicles. For example, "Children at Play" signs create a false sense of security for parents and children who believe the signs provide an added degree of protection when motorists actually pay little or no attention to them.

In addition, many citizens inquire about the installation of speed humps on their neighborhood streets. While speed humps slow down vehicles immediately at the hump, drivers will still travel at a higher rate of speed in-between the humps. In order to be effective, humps should be installed every 200 feet. This is not feasible, since the humps will then significantly slow emergency response times. A single hump can increase response time by 4 to 8 seconds. Multiple humps have the potential to add minutes to overall response. A report was presented to the City of Austin, Texas, in 2000 that showed an additional 37 cardiac arrest patients would die each year if emergency vehicles were delayed just 30 seconds by traffic-calming efforts such as speed humps. Also, speed humps can be problematic for snow removal. There are numerous cases across the country, including Salt Lake City, where speed humps have been installed and later removed as the desired effect was not obtained.

I often explain to residents that there are only so many effective traffic calming treatments to reduce speeds. Overall, the best way for them to reduce pedestrian and vehicle conflicts is for all of us to pay attention to our surroundings, the speeds at which we drive, and encourage our family and neighbors to do the same. As a community, the solution starts

with our own driving behaviors. Effective traffic calming treatments will not force vehicles to obey the law. Law enforcement should come from the police. If a resident continues to feel like there is an issue on their street, or as an interim before driver feedback signs are installed, they are invited to contact police to request patrol of the area.

If you have additional questions, I would be glad to help. Feel free to give me a call. The only times I am not available this week are today from 2p-3p, tomorrow between 8a-10a and 2:30p-3pm, and Friday between 1:30p and 3:30p. Other than that, I am here between 8am and 5pm. Good luck, it is always an ongoing issue.



Britney Ward, PE

Transportation Engineer

8775 S 700 West | Sandy, UT 84070

o: 801.568.2991 | c: 801.376.3401

bward@sandy.utah.gov

>>> Ryan Kump 2/6/2018 11:20 AM >>>

I'll let you send an official Sandy response

>>> Lloyd Cheney <lcheney@bountifulutah.gov> 2/6/2018 9:02 AM >>>

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

Speeding is a complaint I believe all cities get. We get it too. Recently the complaint has made its way to our new Mayor who would like to have a discussion about it at an upcoming City Council meeting. Speed bumps, flashing speed limit signs, more police patrol – these are all requests we get rather frequently. The only one we are rather hesitant to start implementing is speed bumps due to various reasons.

My question is, what are other cities doing in response to the speeding complaints that come in?

Jed's contact information is:

Jed Muhlestein, P.E.

City Engineer

Office (801) 756-6347x118

Cell (801) 473-0076

jed@alpinecity.org



Thanks-

Jed Muhlestein

From: Noah Gordon <ngordon@lindoncity.org>
Sent: Thursday, February 22, 2018 9:57 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

Jed,

Sorry, your request got buried in my email inbox and I just saw it again, so this info may be too little too late, but maybe it will help you in a future discussion.

I'm new here at Lindon City (been here 6 months) but we just purchased a radar traffic counter that measures not only traffic volumes but also speeds. I used the same device when I was at Springville City and found it very helpful to help address citizen complaints about speeding issues. I just set ours up here a couple of week ago and pulled the data off yesterday. For the price of a speed study or two by consultant, we can now do our own instead whenever we'd like.

This is the unit we purchased – cost \$3200:

<https://www.jamartech.com/radarrecorder.html>

I will warn you, however, that if you get one of these you will find that it gets used a lot, both for engineering studies as well as by the police dept.

Noah D. Gordon, P.E.

City Engineer, Lindon City
ngordon@lindoncity.org

From: Lloyd Cheney [mailto:lcheney@bountifulutah.gov]
Sent: Tuesday, February 6, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

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Jed's contact information is:

Jed Muhlestein, P.E.

City Engineer

Office (801) 756-6347x118

Cell (801) 473-0076

jed@alpinecity.org

Jed Muhlestein

From: Blake Thomas <bthomas@herriman.org>
Sent: Tuesday, February 06, 2018 11:43 AM
To: Jed Muhlestein
Subject: Speeding Concerns - UCEA Info Request
Attachments: Newsletter Article-Nov 2017.docx

Jed,

I wrote a short newsletter article, which is attached to this email, that is related to your request regarding speeding problems. The article kind of explains some of the options available to us to help with speeding problems and how we handle the concerns as a city. Hopefully you find this information helpful. Also, I'm glad to hear I'm not the only one with speeding problems in the city I work for ;)



Blake J. Thomas, P.E.
City Engineer

5355 W. Herriman Main Street
Herriman, UT 84096
www.herriman.org

(801) 446-5323 Office
(801) 727-0910 Direct
(801) 891-8644
bthomas@herriman.org



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Traffic Concerns and Opportunities for Improvement

Sometimes it seems we are experiencing an epidemic of cars speeding along Herriman's roadways. Often it seems that many drivers are in too big of a hurry to stop for the red light or are distracted and miss the stop sign at a busy intersection. The Herriman City Engineering Department fields multiple calls and emails weekly asking what can be done to address these concerns. The most frequent requests include the installation of new stop signs or implementation of speed bumps to help curb the problem. There are several options available to use in the engineering toolbox to help address poor driver behavior and sometimes a simple remedy can be put in place that makes all the difference needed. We understand that our residents are concerned with the safety of their children and pets and Herriman City strives to provide the utmost level of safety. Let's discuss some of the items in our toolbox and why or how we can implement a change to make our roads safer.

Speed Bumps can be effective in certain situations, such as in parking lots. Studies across the county have found that speed bumps in roadways tend to be ineffective and dangerous in some cases. Some findings in published studies show that drivers actually speed up between the bumps to make up for lost time, drivers often make erratic maneuvers to avoid bumps causing an unsafe situation, and cities have been litigated for damage to resident's vehicles caused by speed bumps. Due to study findings such as these, Herriman City has taken the position that speed bumps are not a desirable tool to use to control speed on public roads.

Stop signs and traffic signals are a very effective tool to enhance the safety of a roadway and control the overall flow of traffic. There is a defined process, commonly called a warrant study, which Herriman City uses to determine whether or not to install a stop sign or traffic signal at an intersection. The warrant study process resides in the Federal Highway Administration's Manual of Uniform Traffic Control Devices, which is a broadly adopted publication used by municipalities that defines standards for roadway signage and traffic control. A warrant study analyzes various factors including traffic volumes over a certain period of time and the number of accidents that have occurred and certain thresholds must be met to move forward with the installation of the traffic control measure. The purpose of stop signs and traffic signals is not to slow down traffic but to provide safety at intersections while maximizing the traffic flow. However, there are options available to mitigate speeding concerns. Alternatives in the engineering toolbox to address speeding issues include chicanes, bulb outs, neck downs, lane striping, and signage.

The Herriman City Traffic Committee reviews all reported traffic concerns. The traffic committee is made up of city staff from the engineering, streets, GIS, and planning departments as well as representatives from the Unified Police Department and the Unified Fire Authority. This committee meets monthly to review all traffic concerns that have been reported and determine what items in their toolbox to implement to address the traffic concern. The traffic committee also discusses the effectiveness of decisions that have been implemented in previous traffic committee meetings and determines if adjustments are necessary. If you have traffic safety concerns, we encourage you to contact the engineering department so that we can work on making our roads safer together.

Blake Thomas, P.E., City Engineer
Augusto Robles, EIT, Staff Engineer

Jed Muhlestein

From: Robert Rousselle <robertr@aquaeng.com>
Sent: Tuesday, February 06, 2018 9:56 AM
To: Jed Muhlestein
Subject: RE: UCEA Members -- Information Request

Jed,

As you mentioned in your email, I'd strongly recommend against speed bumps due to emergency vehicles, snow plow issues, and honestly sometimes they just are not effective as people try to drive around them if they can. Flashing speed limit signs are only effective if there is enforcement. We installed them on a street improvement project out in West Wendover, Nevada and people continue to speed on this street because the police do not patrol and write tickets. Roundabouts are effective at intersections, but they do require some adjustment time for citizens.

One of the most physically effective ways to slow down traffic is to have narrower lanes or permanent traffic control devices that temporarily narrows a travel lane. Ultimately, the most effective deterrent is enforcement and writing tickets in areas where speeding is a concern. It does not take long for word to reach other people that speed limits need to be obeyed on certain streets.

ROBERT ROUSSELLE, P.E. - PROJECT ENGINEER

Construction Documents Technologist

LEED Accredited Professional

AQUA ENGINEERING

CELL (801) 865-4844 DIRECT (801) 683-3733

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From: Lloyd Cheney [mailto:lcheney@bountifulutah.gov]

Sent: Tuesday, February 6, 2018 9:03 AM

Subject: UCEA Members -- Information Request

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

Speeding is a complaint I believe all cities get. We get it too. Recently the complaint has made its way to our new Mayor who would like to have a discussion about it at an upcoming City Council meeting. Speed bumps, flashing speed limit signs, more police patrol – these are all requests we get rather frequently. The only one we are rather hesitant to start implementing is speed bumps due to various reasons.

My question is, what are other cities doing in response to the speeding complaints that come in?

Jed's contact information is:

Jed Muhlestein, P.E.
City Engineer
Office (801) 756-6347x118
Cell (801) 473-0076
jed@alpinecity.org



Thanks-

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



Jed Muhlestein

From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Tuesday, February 06, 2018 11:02 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

Here's another one.

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



From: Matt Cassel [<mailto:matt.cassel@parkcity.org>]
Sent: Tuesday, February 06, 2018 9:33 AM
To: Lloyd Cheney
Subject: RE: UCEA Members -- Information Request

Lloyd:

Park City created a Neighborhood Traffic Management Program (NTMP) Committee to address complaints for speeding and other traffic issues. The process is relatively simple and PC finds it very useful especially when investigating speed complaints (many of our complaints go away after we collect speed data).

If Alpine is interested, we can share the program.

Matthew Cassel, P.E., ENV-SP
City Engineer
435-615-5075



From: Lloyd Cheney [<mailto:lcheney@bountifulutah.gov>]
Sent: Tuesday, February 06, 2018 9:03 AM
Subject: UCEA Members -- Information Request

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Jed's contact information is:

Jed Muhlestein, P.E.

City Engineer

Office (801) 756-6347x118

Cell (801) 473-0076

jed@alpinecity.org



Thanks-

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer

Bountiful City | 790 South 100 East, Bountiful, Utah 84010

O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



Jed Muhlestein

From: Travis Jockumsen <travisj@payson.org>
Sent: Tuesday, February 06, 2018 10:51 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

Jed,

I am not in favor of speed bumps in any way. They make it difficult to plow the roads when they are in and ultimately then people complain that they have to slow down and we do not have any. Our police department is and has put up some of the flashing speed signs and according to them they have helped slow some people down. That was at the direction of our Police Chief that these signs have been put in. We have tried to raise speed limits on a few roads about three years ago and our Council shot it down, even though we had data showing they are already driving the speed we suggested raising the limit to.

Hopefully this is somewhat helpful.

Travis Jockumsen, P.E.

Payson City

Payson City Development Services Director, Public Works Director, & City Engineer

439 West Utah Avenue

Payson, UT 84651

travisj@payson.org

801-465-5235



From: Lloyd Cheney [mailto:lcheney@bountifulutah.gov]
Sent: Tuesday, February 06, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

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My question is, what are other cities doing in response to the speeding complaints that come in?

Jed's contact information is:
Jed Muhlestein, P.E.

Jed Muhlestein

From: Marty Beaumont <MBeaumont@pgcity.org>
Sent: Tuesday, February 06, 2018 10:46 AM
To: Jed Muhlestein
Subject: Speed issues

We also receive a lot of these requests. We also are very hesitant to put in speed bumps as a solution. We generally ask the PD to increase patrols in the area which only has a short term impact. Recently we discussed purchasing a mobile speed sign that not only displays the speeds but also collects individual speeds and data to determine the 85th percentile speeds so we can see how big of an issue we really have. Haven't heard if this has been purchased yet but I believe the police chief indicated it would be around \$5,000. We are hopeful that having more specific information as to the actual speeds will help in determining speed issues and then formulate solutions.

Recently we had an issue on a road at a pretty good grade and decided to stripe the travel lanes at 10' wide. I think it has helped people to realize that it isn't as open as when it wasn't striped. I haven't heard any complaints yet, but I'm sure eventually it will become a problem again.

Good luck.

Thanks,

Marty Beaumont, P.E.
Public Works Director/City Engineer
P: [\(801\)-785-2941](tel:801-785-2941)
Email: mbeaumont@pgcity.org



Jed Muhlestein

From: Terry Ekker <tekker@blanding-ut.gov>
Sent: Tuesday, February 06, 2018 9:48 AM
To: Jed Muhlestein
Subject: speeding

Jed,

We have a pretty good solution to the problem here in Blanding. We have a couple speed limit signs with the radar on them that flashes when you are exceeding the speed limit. These are programmable for any speed. We move them around every month or two. When we get specific complaints, we will usually put one up in the area. I am not sure how much it helps with speeding, but it sure does make the complainers happier and makes the elected officials feel like we are meeting the needs of the citizens.

It might work for you guys. We bought our stuff from Safety Supply and Sign up on Redwood Road.

Terry K. Ekker, P.E.
City Engineer



50 West 100 South Blanding, UT 84511
p | 435-250-3487 c | 435-459-1532
tekker@blanding-ut.gov

Jed Muhlestein

From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Tuesday, February 06, 2018 2:43 PM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

And another..

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



From: Jeff Jorgensen [mailto:jeffjorg2@gmail.com]
Sent: Tuesday, February 06, 2018 2:14 PM
To: Lloyd Cheney
Subject: Re: UCEA Members -- Information Request

I would stay away from speed bumps on any public road.
Are there opportunities to use other traffic calming things like narrowing the roadway with bulbouts or even narrowing the striped lanes. Interesting how that works. People drive the speed they feel comfortable with. Narrow lanes has them focused on staying in the lane. We have a very wide road and once we narrowed the painted lanes people slowed down.

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From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Tuesday, February 6, 2018 9:02:36 AM
Subject: UCEA Members -- Information Request

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

Speeding is a complaint I believe all cities get. We get it too. Recently the complaint has made its way to our new Mayor who would like to have a discussion about it at an upcoming City Council meeting. Speed bumps, flashing speed limit signs, more police patrol – these are all requests we get rather frequently. The only one we are rather hesitant to start implementing is speed bumps due to various reasons.

My question is, what are other cities doing in response to the speeding complaints that come in?

Jed's contact information is:
Jed Muhlestein, P.E.
City Engineer

Jed Muhlestein

From: Brad Gilson <Brad@GilsonEngineering.com>
Sent: Tuesday, February 06, 2018 9:23 AM
To: Jed Muhlestein
Cc: Lloyd Cheney
Subject: RE: Speeding (UCEA)

Jed,

We created a traffic calming manual for Cottonwood Heights that creates a process (if they are serious), that identifies the most appropriate context sensitive solution based on consensus from the neighborhood. Our goal is to present alternative traffic calming solutions to speed bumps due to emergency access, maintenance and plowing, but the process is still open to that solution. See the flow chart on page 25 in the manual. It puts a lot of responsibility back on the residents since the process may have a big impact to their neighborhood. Everyone wants a speed bump until you put it in front of their house, or invite the neighboring streets to the public meeting. And, sometimes the loudest complainers get the first traffic ticket.

This is a really big issue. People are very passionate about traffic calming.

I'll e-mail you our manual if you can take a 13mb file.

Sincerely,

Brad Gilson, P.E.

Telephone – 801-571-9414

Cell Phone – 801-694-7770

Text I-phone – 801-712-4066

PLEASE DO NOT INCLUDE PHONE NUMBERS IN THE BODY OF THE EMAIL

Celebrating 70 years in business

Jed Muhlestein

From: Michael Fazio <mfazio@bluffdale.com>
Sent: Tuesday, February 06, 2018 9:22 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

Hi Jed,

This is my experience after receiving speed complaints.

We have reviewed our speed limits in the city to verify that we have complied with the national standards. I have also place traffic tubes that detect speed to verify the complaint and notice that in the majority of the cases speeding in the location was more a perception than a reality. The radar speed limit display work for a while, the mobile one with the police logo works best. In many cases enforcement is the key. In our city we noticed that some of the people who complained the most were the same people who were caught speeding.

*I hope this helps,
Michael*

Michael Fazio, P.E.
City Engineer



BLUFFDALE

2222 West 14400 South Redwood Road
Bluffdale, Utah 84065
Direct: 801-849-9430

From: Lloyd Cheney [mailto:lcheney@bountifulutah.gov]
Sent: Tuesday, February 06, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

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Jed's contact information is:

Jed Muhlestein, P.E.
City Engineer
Office (801) 756-6347x118

Jed Muhlestein

From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Tuesday, February 06, 2018 9:17 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



From: Dennis Pay [mailto:dpay@southsaltlakecity.com]
Sent: Tuesday, February 06, 2018 9:15 AM
To: Lloyd Cheney
Subject: Re: UCEA Members -- Information Request

We have had success on some streets by just painting a double yellow line in the center, or striping the shoulder. Drivers feel more constricted and tend to drive slower. It has not been 100% effective, but it is a fairly inexpensive method we've used as a first step.

Putting out traffic counters that can measure vehicle speed is also effective. So much of speeding is the perception of the observer. After deploying traffic counters for about a week most streets in our city have an 85th percentile speed of about 27 mph. This indicates that speeding probably isn't a problem. Outliers can be dissuaded by increased enforcement.

Speed humps and bumps are our last resort after everything else has failed.

Dennis Pay, P.E.
City of South Salt Lake
City Engineer
220 East Morris Avenue
South Salt Lake City, UT 84115
801.483.6038
dpay@southsaltlakecity.com

On Tue, Feb 6, 2018 at 9:02 AM, Lloyd Cheney <lcheney@bountifulutah.gov> wrote:

UCEA Members-

Jed Muhlestein

From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Tuesday, February 06, 2018 9:05 AM
To: Steve Lord
Cc: Jed Muhlestein
Subject: RE: UCEA Members -- Information Request

I've forwarded your response to Jed.

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



From: Steve Lord [mailto:slord@mapleton.org]
Sent: Tuesday, February 06, 2018 9:04 AM
To: Lloyd Cheney
Subject: Re: UCEA Members -- Information Request

We have an unwritten policy which includes a speed study and then a process through which we determine the most appropriate action if we find the speeding complaint to be valid.

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From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Tuesday, February 6, 2018 9:02:36 AM
Subject: UCEA Members -- Information Request

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City Engineer
Office (801) 756-6347x118
Cell (801) 473-0076
jed@alpinecity.org

Jed Muhlestein

From: Bruce <brucew@salemcity.org>
Sent: Tuesday, February 06, 2018 5:19 PM
To: Jed Muhlestein
Subject: RE: UCEA Members -- Information Request

Jed,

We have generally requested more police patrolling, but we are still small.

We have also employed about 6 driver feedback speed signs and these have been very effective but they cost about \$3 to \$4K (I think).

In very, very limited locations we have used speed tables (only 2 places so far in the whole town). I don't plan on doing this every again.

Hope this helps.

Thanks

Bruce Ward

Bruce Ward, P.E.

Salem City Engineering Director
120 West 100 South, PO Box 501
Salem, Utah 84656
Fax (801) 277-6000 ext. 107 Office
(801) 368-6297 Cell



From: Lloyd Cheney [mailto:lcheney@bountifulutah.gov]
Sent: Tuesday, February 06, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

Speeding is a complaint I believe all cities get. We get it too. Recently the complaint has made its way to our new Mayor who would like to have a discussion about it at an upcoming City Council meeting. Speed bumps, flashing speed limit signs, more police patrol – these are all requests we get rather frequently. The only one we are rather hesitant to start implementing is speed bumps due to various reasons.

My question is, what are other cities doing in response to the speeding complaints that come in?

Jed's contact information is:

Jed Muhlestein, P.E.

City Engineer

Office (801) 756-6347x118

Cell (801) 473-0076

Jed Muhlestein

From: Brad Klavano <BKlavano@sjc.utah.gov>
Sent: Friday, February 09, 2018 8:05 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

Jed

Here at the City of South Jordan some years ago I formed a traffic committee made up of City Staff (Myself as Chair, Assistant City Engineer, Police Lieutenant, Assistant Fire Chief, Public Works Director, and Economic/Commerce Director). When issues such as speeding come in we review with the committee. We almost always do a speed study using traffic counters (both speed and volume). We bring this to the committee and decide what to do from there if there is an issue, however once the study is done I would say that 70% of the time there is not really a speeding issue that it is just perception. It seems to go along way when we have the data and the committee signs a report stating the facts and what are the recommendations. When there is an actual speeding issue we have mostly been installing the radar speed feedback signs in those locations. There have been a few other traffic calming measures that we have implemented also but we do not do speed humps.

If you have any other questions please call me at the number below.

Thanks

Brad Klavano | Director of Development Services/City Engineer | City of South Jordan
1600 W. Towne Center Drive | South Jordan, UT 84095
Office: 801.254.3742 | Fax: 801.253.5235 | Direct: 801.253.5203 ext 1239



From: Lloyd Cheney [mailto:lcheney@bountifulutah.gov]
Sent: Tuesday, February 06, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

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My question is, what are other cities doing in response to the speeding complaints that come in?

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City Engineer
Office (801) 756-6347x118
Cell (801) 473-0076

Jed Muhlestein

From: Lloyd Cheney <lcheney@bountifulutah.gov>
Sent: Wednesday, February 07, 2018 2:28 PM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request

And another..

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



From: Lance Houser [<mailto:lhouser@fransoncivil.com>]
Sent: Wednesday, February 07, 2018 2:24 PM
To: Lloyd Cheney
Subject: RE: UCEA Members -- Information Request

Signs and flashing lights haven't worked, since those speeding don't pay attention to the signs anyway. Increased random enforcement has the best success, but is challenge to law enforcement who already stretched thin.

PS. Snow plows and speed bumps are a very bad combination!

From: Lloyd Cheney [<mailto:lcheney@bountifulutah.gov>]
Sent: Tuesday, February 6, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

Speeding is a complaint I believe all cities get. We get it too. Recently the complaint has made its way to our new Mayor who would like to have a discussion about it at an upcoming City Council meeting. Speed bumps, flashing speed limit signs, more police patrol – these are all requests we get rather frequently. The only one we are rather hesitant to start implementing is speed bumps due to various reasons.

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Jed's contact information is:

Jed Muhlestein, P.E.

City Engineer

Office (801) 756-6347x118

Cell (801) 473-0076

jed@alpinecity.org

Jed Muhlestein

From: Jeremy Lapin <JLapin@saratogaspringscity.com>
Sent: Wednesday, February 07, 2018 8:22 AM
To: Jed Muhlestein
Subject: RE: UCEA Members -- Information Request
Attachments: Traffic Calming Policy 05-22-2017.pub

Jed

We have adopted a traffic calming policy to filter complaints/concerns so that staff can focus on those that merit the most consideration.

<https://www.saratogaspringscity.com/269/Traffic-Studies>

Jeremy D. Lapin, CFM, PE

Public Works Director
Public Works | Saratoga Springs

Office: 801.766.6506 x171
Cell: 801.694.8829
Fax: 801.766.9872
1307 N. Commerce Dr. #200
Saratoga Springs, UT 84045
www.saratogaspringscity.com

From: Lloyd Cheney [<mailto:lcheney@bountifulutah.gov>]
Sent: Tuesday, February 6, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

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City Engineer
Office (801) 756-6347x118
Cell (801) 473-0076

jed@alpinecity.org



Thanks-

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer
Bountiful City | 790 South 100 East, Bountiful, Utah 84010
O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov





City of Saratoga Springs

Neighborhood Traffic Calming Policy



June 2017



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Neighborhood Traffic Calming Policy

"Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicles, alter driver behavior and improve conditions for non-motorized street users."

-Adopted by ITE International, 1997

BACKGROUND

The City of Saratoga Springs (City) is often approached by residents about traffic in their residential neighborhoods. Until now, there has not been a policy by which these concerns can be methodically addressed.

This Traffic Calming Policy (Policy) was developed with input from the City Development Review Committee and references from other government agencies.

This Policy represents the City's attempt to produce an objective and methodical approach to traffic calming throughout the City.

GENERAL PURPOSE

The purpose of this Policy is to mitigate vehicle traffic in a particular area in order to improve the safety for pedestrians, bicyclists, and residents. This Policy is designed to reduce the negative impacts from traffic such as excessive speeds, excessive volumes, and accidents.

This Policy is a process rather than an instantaneous solution. It facilitates the development of a plan to physically improve or modify a street to enhance the community. Continuous communication and assessment between residents and City staff are needed for this Policy to succeed.

In order to promote safety and address traffic problems, residents will work with City staff to implement the three "E's" of transportation engineering.

- **Education:** Increase awareness of residents in neighborhoods where there are traffic-related concerns, such as excessive speed, cut-through traffic, and accidents.
- **Engineering:** Evaluate the affected street for speeding, traffic volume, and accidents to determine if traffic calming measures should be considered.
- **Enforcement:** Encourage compliance with existing speed limits. Enlist the assistance of the Police Department.



GOALS

The general goal of this Policy is to improve safety, quality of life, and overall livability for residents, bicyclists, and motorists in our neighborhoods, where deemed appropriate. This goal will be accomplished by influencing driver behavior while not hindering quick response times for emergency service vehicles. This Policy seeks to achieve this general goal by focusing on the following specific goals:

- Increase the safety of residents, bicyclists, and motorists;
- Reduce excessive motorist speed in residential areas;
- Reduce neighborhood cut-through traffic (volume of vehicles);
- Reduce the number and severity of accidents;
- Maximize street life;
- Increase pedestrian activity and overall livability of the neighborhoods;
- Establish a process to address requests for traffic calming
- Encourage a working relationship between residents and City staff for the good of the whole community.

GENERAL CRITERIA

Due to the high demand for traffic calming measures and the fact that limited resources are available, requests for traffic calming measures will be screened for eligibility according to the following general criteria:

- The roadway must be either a local road or a collector road. Collector roads, due to higher traffic volumes, are eligible for Level 1 traffic calming measures (described later) only.
- Cul-de-sac streets or other dead-end streets are not eligible.
- Composite threshold: speed, traffic volume, accident history, the presence and continuity of sidewalks, and nearby sensitive facilities must be met.
- The subject street must be accommodating to traffic calming devices.
- Traffic calming devices must have no major adverse effect on motorists, pedestrians, or emergency vehicles.

PROCESS

The following process helps to ensure that there is an objective and effective



consideration at minimal taxpayer expense for all situations. This Policy encourages residents to work with City staff throughout the entire process. Projects that are being considered under this Policy must follow the process outlined below. A flowchart that summarizes this process is provided in Appendix A.

INITIAL SCREENING

The process begins when a resident submits a completed Traffic Calming Application to the City. The Application is provided in Appendix B.

Upon receipt of the Application, City staff will screen the application for initial eligibility for traffic calming measures. The evaluation may include a site visit, installing temporary traffic counters, and data collection. The following table shows the criteria that will be evaluated by the City Engineer to prioritize the subject street relative to other streets, and to aid in determining which traffic calming measure(s) might be recommended.

Criteria for Prioritization Scoring	
Speed	85th percentile speed from traffic study
Volume	Average daily traffic volume and peak-hour volume
Accident History	Number of reported accidents in the last 3 years
Sidewalks	The presence and continuity of sidewalks
Sensitive Facilities	The presence of parks, schools, bus stops, etc. along the
Funding	Neighborhood participation in costs of selected traffic-calming measures

The Scoresheet for Prioritization is provided in Appendix C.

INITIAL REPORT

After the initial screening is completed, City staff will provide a report to the resident applicant which will include traffic counts, speed distributions, and a prioritization score. Projects with prioritization scores less than 40 points will not be considered further for traffic calming. If the initial screening of the Application indicates that traffic calming measures can be considered, then the City Engineer will select a measure or measures and include it or them as a recommendation in the report. Traffic calming measures will be selected to achieve effectiveness while minimizing cost and invasiveness.

LEVELS OF TRAFFIC CALMING MEASURES

Generally, traffic calming measures fall into two categories or "Levels". Level 1 traffic calming measures involve non-invasive techniques such as signage, striping, and law enforcement. Examples of Level 1 traffic calming measures are pro-



vided in Appendix D. Level 2 traffic calming measures involve invasive techniques that force traffic to slow down by constructing vertical or horizontal deflections. Examples of Level 2 traffic calming measures are also provided in Appendix E.

TRIAL IMPLEMENTATION

The prescribed Phase 1 traffic calming measure or measures will be implemented on a trial basis for 90-180 days. Following the trial period, City staff will conduct a follow-up study to determine the effectiveness of the prescribed measure(s).

If the prescribed traffic calming measures prove effective, the improvements will stay in place or permanent devices will be installed. If the Level 1 measures prove to be ineffective, escalation to Level 2 traffic calming measures might be considered.

LEVEL 2 MEASURES

Phase 2 measures will be considered only if Phase 1 measures are not effective. All projects that reach this point will be re-scored for prioritization and will be considered on that basis. Having a limited budget, the City may choose to fund whichever project has the highest priority, or whichever project for which there is sufficient funding. A project may be implemented faster if the neighborhood volunteers to pay all or part of the implementation costs.

MODIFICATION OR REMOVAL

The City reserves the right to modify or remove any traffic calming device.

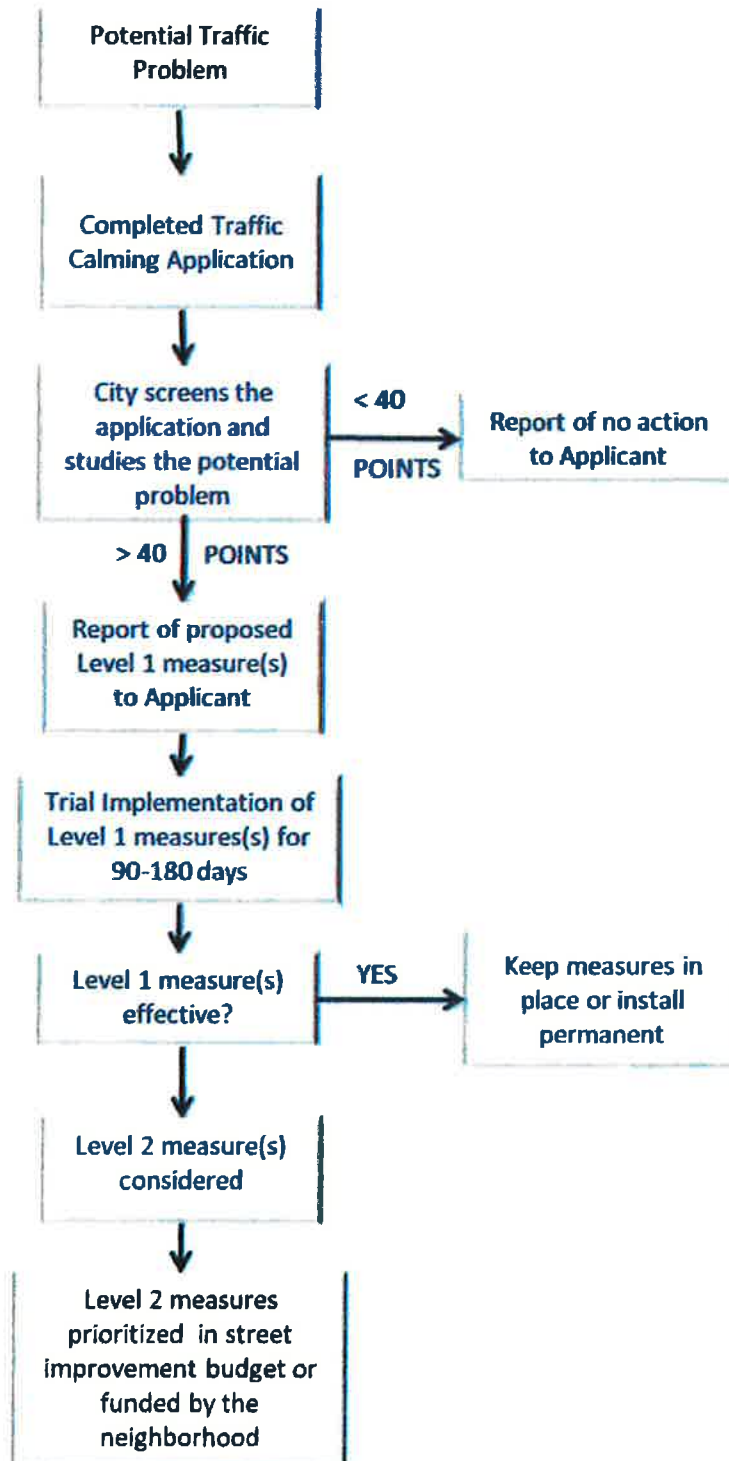


Appendix A

Process Flow Chart



Saratoga Springs Traffic Calming Policy Flow Chart





Appendix B

Application



Traffic Calming Application

City of Saratoga Springs

1307 N Commerce Dr. Ste 200

Saratoga Springs, UT 84045

(801) 766-9793, ext.137

Name: _____ Date: _____

Applicant Street Address: _____

Phone: _____ Email: _____

1. Please provide the approximate address to be considered. Indicate the name of the street to be considered and the boundaries of the street segment by identifying nearby intersecting streets (from and to). Attach a separate drawing if needed.

Requested Location: _____

Street Name: _____

From: _____ To: _____

2. Please answer the following questions. Attach additional sheets if needed.
 - A. Of the items below, which best describes the traffic problem (circle all that apply)?

Speeding

High traffic volumes

Cut-through traffic

Traffic noise

Accidents

Pedestrian Safety (including bicyclists)

Parking

Other (please explain)



- B. Of the traffic problems identified in part A, how have these problems been observed ?
- C. How often (instances per day) have you observed unsafe instances of pedestrian or bicyclist conditions due to traffic?
- D. What day(s) of the week and time(s) does the problem appear to be the worst?
- E. How long has this traffic problem existed?
- F. Has anything changed in the neighborhood recently (i.e. new schools, developments, etc.)?
3. Have you contacted the City before about your concerns? If yes, please explain.
4. Is there any additional information or data that might be useful to the City to characterize your concern?

I understand that submitting this application does not guarantee approval for the Traffic Calming Program and ultimately it is the decision of the City of Saratoga Springs.

Applicant's Signature

Date



Appendix C

Scoring Sheet for Prioritization



Appendix D

Example Level 1 Measures



Example Level 1 Traffic Calming Measures

Signage



Note

A common request to address speeding is to install STOP signs. While this might seem like a logical solution, it can actually be counterproductive. Drivers go faster between the signs to make up for "lost" time. In addition to speeding, drivers accelerate and decelerate for each sign. A constant vehicle speed is generally safer for both vehicles and other users along a street. So, STOP signs are not used for speed control.

Pavement Markings



Striping reduces the apparent width of existing lanes and creates a feeling of constraint for drivers, which causes them to slow down.



Targeted Law Enforcement

Law enforcement is effective at reducing speeds. But, it is labor intensive.



Radar Speed Trailer

A portable trailer equipped with radar detects the speed of passing vehicles and displays it on a digital display, showing drivers their actual speed versus the posted speed limit. This real-time information promotes compliance with the posted speed limit.





Appendix E

Example Level 2 Measures



Example Level 2 Traffic Calming Measures

Raised Intersections

Flat raised areas covering entire intersections, with ramps on all approaches and often with brick or other textured materials on the flat section and ramps.



Center Island Narrowing

Raised islands located along the centerline of a street that narrow the travel lanes at that location.





Choker

Curb extensions at midblock or intersection corners that narrow a street by extending the sidewalk or widening the planting strip.



Chicane

A series of narrowings or curb extensions that alternate from one side of the street to the other forming S-shaped curves.





Neighborhood Traffic Circle

Raised islands, placed in intersections, around which traffic circulates.





Appendix F

Frequently Asked Questions



Frequently Asked Questions

Q: What is traffic calming?

A: Traffic calming is the use of roadway geometrics and other physical measures to reduce unwanted effects of vehicular traffic, including excessive speeds, volumes, and noise.

Q: How do I request traffic calming for my street?

A: Complete a Traffic Calming Application and submit it to the City. The application may be printed from the City website or obtained at the City offices.

Q: Why is there such a long process? Can't the City just come and install these devices?

A: The City has an established Policy under which these requests can be evaluated. The City has limited funding available for traffic calming and prioritizes projects accordingly. A neighborhood can elect to pay the costs to construct a prescribed measure on streets that score at least 40 prioritization points.

Q: Do residents who do not live on a roadway in question, but who use that same street to get to and from their house, get a "say" in whether traffic-calming measures are implemented?

A: No. People who regularly use the street, but don't live on it, are far less likely to favor traffic-calming measures. On the other hand, people who live on the subject street have to live with the adverse effects of traffic problems .

Q: Are certain traffic calming measures better than others?

A: There isn't one best measure. Each has its pros and cons. Each situation will be evaluated and the best measure for the area, desired outcome, and feasibility will be considered.

Q: What is the 85th percentile speed?

The speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a monitored point.

Jed Muhlestein

From: John Miller <johnmiller@millcreek.utah.gov>
Sent: Tuesday, February 06, 2018 9:44 AM
To: Lloyd Cheney; Jed Muhlestein
Subject: Re: UCEA Members -- Information Request

Jed,

Millcreek gets this question all the time as well.

A couple years back, I was in a community meeting and a resident brought the speeding issues up. The UPD Chief who was there mentioned the 3 E's of safety, Excessive speeds being the main concern. I have heard it as 5 E's previously but I can only remember 3E's: Enforcement, Education, and (my favorite) Engineering. The UPD Chief took the time to explain each E with the benefits and shortcomings. He also emphasized that speeding is a local problem (you and your neighbors). After he was done educating, all the constituent in attendance understood that there wasn't a silver bullet to fix speeding and that they all could do something to help. I have since made it a point to talk about the 3E's every time I can.

Just last month at a School PTA meeting to discuss the drop off zone safety, the PTA president started attaching engineering regarding speeding and we needed to fix the problem, etc. I took the opportunity to talk about the 3E's and how they all together would help solve the problem. A brainstorming session occurred and the next thing you know we have ideas like the school kids drawing pictures that will be posted on the orange cones thanking parent for slowing down in the drop off zone - ideas to hand out treats to kids getting out of the cars that are caught following the drop off rules etc. All engineering committed to was some fresh paint next spring.

A comprehensive program that I like is Summit County's (see link below).

<http://www.co.summit.ut.us/DocumentCenter/Home/View/193>

I think it documents a clear standard for when traffic calming is appropriate from an engineering perspective. I hope to copy it for a formal policy in Millcreek.

Let me know how your council meeting goes. The key will be educating your new mayor. I hope you have any great lessons learned

Good Luck,

John

John E. Miller, P.E.
Millcreek City Engineer
(801) 214-2700



SUMMIT COUNTY
TRAFFIC CALMING PROGRAM



SUMMIT COUNTY DEPARTMENT OF PUBLIC WORKS

ENGINEERING DIVISION

ADOPTED FEBRUARY 2004
REVISED MARCH 2016

Prepared By: Brandon Brady, PE
Summit County Traffic Engineer
Reviewed By: Gary Horton, PE
Summit County Engineer
Derrick Radke, PE
Public Works Director

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SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

1. Introduction

- a. In response to numerous complaints about speeding problems in neighborhoods, and requests to implement Traffic Calming Devices or other Speed Reduction Programs, the Summit County Engineering Division has studied several different physical devices, information/education methods and the programs of other jurisdictions to address the complaints. Some of the devices and methods are as follows:

i. Physical Devices

- (1) Speed Humps
- (2) Traffic Circles
- (3) Street Narrowing
- (4) Street Medians
- (5) Traffic Bulb-Outs (small/short street medians)
- (6) Raised Intersections
- (7) Raised Crosswalks

ii. Non-Physical and Information/Education Methods

- (1) Increased Enforcement
- (2) Mail Out Program
- (3) Neighborhood Pace Car Program
- (4) Pavement Marking
- (5) Signage

It is necessary for each neighborhood requesting a traffic calming program to try non-physical measures first before a commitment to physical traffic calming features will be considered. This could include the use of police speed trailers, commitment to the Neighborhood Pace Car Program, increased speed enforcement, neighborhood speed sandwich boards, or other educational and non-physical measures.

- b. It is apparent from the studies conducted, that communities approach Traffic Calming in a different way. Some Communities use only Speed Humps, some use Traffic Circles, some use a combination of devices and others do nothing at all. Summit County's program will involve the residents of the neighborhood to develop a Traffic Calming Plan that works for the majority of the neighborhood and will utilize several different devices and methods to combat the speeding problems in our local neighborhoods.
- c. If physical devices are chosen by the neighborhood as the method of Traffic Calming, the installation of these physical devices will be per nationally published information by the Institute of Transportation Engineers, the Federal Highway Administration, State Transportation Officials, and other local Transportation Officials. In keeping with the general recommendation of the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration, uniformity aids in the recognition and understanding of traffic control devices. Strict adherence to the standards and guidelines outlined in this

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

program and the MUTCD will help ensure that the physical devices installed will be equally recognizable and require the same action on the part of the traveling public regardless of where in the County it is encountered.

- d. The use of Stop Signs and multi-way Stop Signs will not be used as a means for controlling speed. The MUTCD and the Traffic Engineers Handbook have established specific warrants for installation of Stop Signs, and multi-way Stop Signs. These warrants were developed to assist in determining whether or not Stop Signs could help assign right-of-way at higher volume intersections, reduce an accident problem, or fill in as an interim measure until traffic signals could be installed (in the case of a multi-way Stop Sign installation). Considerations outside established warrants are restricted intersection sight distances, and school crossings. Many national studies have shown that Stop Signs are not an effective technique for controlling speeds and should not be used to reduce traffic volumes, or simply to satisfy citizen demands. It should be remembered that stop signs constitute one of the most significant means of separating and controlling traffic movements and should be carefully considered.
- e. Given that there is a limited amount of money budgeted and limited County staff time allocated for the implementation of the Traffic Calming Program, the Program will establish a process for determining where and when Traffic Calming devices will be constructed. All Neighborhood Traffic Calming Plans which included physical devices will receive final approval from the Summit County Council before it is implemented.
- f. For the purposes of the Traffic Calming Program, an "affected neighborhood" shall be defined as all properties located within one-thousand (1000) feet of any Traffic Calming Device.

2. Qualifications for Traffic Calming Plan Development

- a. To be eligible for the development of a physical Traffic Calming Plan, the road or street segment must meet the following qualifications:
 - i. It must be classified as a Local Road or Street as defined in the Development Code or County Road Inventory. Collector Roads may be eligible but are limited to raised crosswalks, raised intersections, and medians for physical devices. Freeway Frontage Roads are not eligible.
 - ii. It may not have more than two travel lanes.
 - iii. Traffic volumes must be between 400 and 2000 vehicles per day.
 - iv. The total number of units in the neighborhood or subdivision must be at least 50% occupied.
 - v. A Traffic Speed Study must show that speeding is a problem based on the standard of an 85th percentile speed of at least 6 mph over the posted speed for minor local roads and streets (road widths of less than 30 feet), and 11

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

mph over the posted speed limit for major local roads and streets (road widths of 30 feet or more). (A waiver of the Traffic Speed Study may be granted by the Summit County Council if 90% of the residents in the "affected neighborhood" as defined in Section 1(f) request, via petition, that a Traffic Calming Plan be developed. Such a waiver would receive the lowest priority for funding.)

- vi. It must meet the design criteria for the construction of the Traffic Calming Device.
- b. Road or Street segments that do not meet these qualifications cannot be considered for the development of a physical Traffic Calming Plan. The Engineering Division and the Sheriff's Office will assist with educational and enforcement methods of reducing speed to the best of their ability.
- c. The Summit County Engineering Department will perform an accident study to look at any speed related crashes, crash patterns, and severity of crashes within five hundred (500) feet and the last five (5) years of the speed study area. If there are "fatal" or a number of "serious" injuries related to high speeds then action will be taken.

3. Application Process

- a. The Summit County Engineering Division will collect existing Traffic Data on County Roads and Streets when 1) requested in writing by a local Home Owners Association Board; 2) when requested in writing via petition by at least 51% of an "affected neighborhood" (defined in Section 1(f)) of any County Road or Street Segment as defined in the County Road Inventory; 3) when requested by the Summit County Council, the Public Works Director, or the County Sheriff. The written request should identify a contact person, their address and phone number.
- b. Upon receipt of a qualifying written request to develop a Traffic Calming Plan, the Summit County Engineering Division will conduct a Traffic Study of the Road or Street Segment(s) to determine if the Road or Street segment meets the qualifications for physical Traffic Calming devices. Written notice of the results of the Traffic Study will be forwarded to the contact person. If the project meets the qualification criteria, a request will be made by the Engineering Division to the contact person to form a group of people willing to be an Advisory Committee for developing the Traffic Calming Plan in partnership with the Engineering Division. The group should represent between five and ten percent (5% - 10%) of the "affected neighborhood" ("affected neighborhood" is defined in Section 1(f)).
- c. Once the Advisory Committee is formed, a meeting will be scheduled to review the non-physical and physical Traffic Calming options available, and an initial phased Plan, including non-physical and physical elements will be formulated. The implementation of the non-physical elements may require the neighborhood committee to assist the County Sheriff's Office, and the Engineering Division with its implementation. After a 6 month period of evaluation of the non-physical measures, another speed survey will be conducted of the "affected

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

neighborhood". If the speed criteria noted in Section 2(a)(v) is still being exceeded, the Engineering Division will prepare preliminary drawings of the physical Traffic Calming measures previously developed by the neighborhood committee including proposed devices, locations, and preliminary detail drawings of the devices. The Plan will then be reviewed and/or revised by the Committee until a consensus on the Plan is reached.

- d. The Engineering Division will solicit comments on the Plan from the County Sheriff's Office, and the local Fire District.
- e. Each property within the "affected neighborhood" will receive written notice of an Open House to discuss the Traffic Calming Plan developed. The Plan will then be presented to the "affected neighborhood" at the Open House for comment. Revisions to the Plan can be made based on comments received at the Open House, and concurrence of the Advisory Committee. The revisions recommended by the Committee, if any, will constitute the Final Traffic Calming Plan.
- f. Upon completion of the Final Plan, the Engineering Division will solicit a vote on the implementation of the Traffic Calming Plan via a postcard ballot mailed to each property owner located within the "affected neighborhood". The property owner shall be as shown on the Summit County Tax Rolls at the time of the mailing. Each property owner listed on the Tax Roll is entitled to one vote. In order for the Traffic Calming Plan to be forwarded to the Summit County Council for final approval of the Plan, 67% of the returned ballots must be in the affirmative. Ballots not received in the Office of the Engineering Division within twenty (20) days of the initial mailing date shall not be counted.

4. Traffic Calming Plan Ranking

- a. Given that there is a limited amount of money budgeted and County staff time allocated to the implementation of the Traffic Calming Program, Road and Street segments that qualify for Traffic Calming Plan Development are scored based on Traffic Calming Plans for the Scoring Chart shown below, and given a ranking for prioritizing the project. Road and Street segments that have the highest ranking will be developed first. The ranking also establishes a priority for funding Plans which receive approval of the "affected neighborhood".

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

Scoring Chart

Criteria	Points	Basis for Point Assignment
Speed	0 to 40	Five (5) points given for each mph over the 85 th percentile plus 6 mph for minor local roads, and 11 mph for major local roads
Volume	0 to 20	One (1) point assigned for every 40 vehicles over 400 for Traffic Volumes between 400 and 1,400 ADT; for volumes over 1,400 ADT, 30 points assigned
Sidewalks	0 to 10	Zero (0) points assigned if sidewalks on both sides of the road segment; Five (5) points assigned for sidewalk on one side of the road segment; Ten (10) points assigned for no sidewalks along road segment
Crash History	0 to 30	Five (5) points given per speed related accident within 500 feet of the speed study area and within the past 5 years

5. Traffic Calming Project Selection

- a. Proposed Traffic Calming Projects which receive a 67% or greater approval from the "affected neighborhood" are presented to the Summit County Council (Council) during one of their regularly scheduled meetings as an Agenda item for their consideration. The proposed Plan is presented to the Council along with the scored ranking, an estimated cost for construction, and comments received on the proposed project by the County Sheriff's Office, and local Fire District. The Council will consider the information presented and make the Final Project Selection.
- b. Neighborhoods which are approved for a traffic calming program based on the neighborhood vote and the Council's approval shall first have the installation of a temporary test measure of the proposed features for a period of one month. During the testing period, informational signage notifying motorists of the effort to develop a calming plan for the subject streets will remain in place to encourage street users to provide comments on the measures being tested. The intent of the test period is to allow the neighborhood to experience the traffic calming measures and their effectiveness prior to their permanent installation. Before and after speed studies will be conducted and shared with the neighborhood at a follow-up meeting. The affected neighborhood must again have a 67% or greater approval from the "affected neighborhood" prior to proceeding to the installation of permanent traffic calming features.
- c. Proposed Traffic Calming Projects which meet the qualifications and have at least 67% approval of the "affected neighborhood" but are not selected because of budget constraints, may 1) request that the County place the project on the list for consideration for the next budget cycle; 2) pay the cost to construct the Traffic Calming Plan. The "cost" to construct the Project will include a 10%

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

contingency.

- d. If the “affected neighborhood” chooses the option to pay the cost to construct the Traffic Calming Plan, the County must receive a 50% deposit of the estimated construction cost prior to beginning the Construction Plans and Specifications. Once the Project is designed and ready for advertisement, the Final Plan will need to be reviewed and approved by the Committee, and the balance of the cost of the Project will need to be deposited with the County.
- e. Any money left over at the conclusion of the Project will be returned to the payees on a prorated basis.
- f. The “affected neighborhood” must determine how to collect the money needed to construct the Project. Special Service Districts will not be considered.

6. Project Evaluation

- a. Six months (\pm depending on weather conditions) after construction is complete, the Engineering Division will evaluate the effects of the project with a follow-up Traffic Study, and an evaluation of any complaints, or compliments received. If any unacceptable or un-mitigatable impacts are identified, corrective measures will be reviewed with the Advisory Committee and recommended to the Summit County Council.
- b. The Traffic Calming Devices can be recommended for removal if 1) the County Engineer determines that they are ineffective or unsafe, or if they have created a negative impact that cannot be corrected; 2) the “affected neighborhood” presents a petition to the County with 67% of the property owners requesting the device removal. The final decision to remove the Traffic Calming Devices will be by the Summit County Council.

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

Appendix A - Petition Cover Letter

SUMMIT COUNTY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
P.O. BOX 128
COALVILLE, UTAH 84017

PETITION FOR TRAFFIC CALMING PLAN DEVELOPMENT

We the undersigned, all being Property Owners of the "affected neighborhood", do hereby petition for the development of a Traffic Calming Plan for our "affected neighborhood".

Each of us does hereby pledge that we read and fully understand all information concerning the Traffic Calming Program, and each Owner as shown on the Tax Records has affirmatively signed this petition or their indication for disapproval is noted herein.

STATE OF UTAH)
 : ss.
County of Summit)

On the ____ day of _____, 20__, Personally appeared before me, a Notary Public, the undersigned affiant, who says an oath that _____ is one of the subscribing witness to the within instrument; that each of said witnesses saw the execution and delivery of the same by each grantor therein for the purpose set forth; and that each of said witnesses signed the same as purported.

Sworn to and Subscribed before me
this ____ day of _____, 20__

Subscribing Witness

Notary Public

Residing at: _____

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

Appendix B - Petition Form

SUMMIT COUNTY TRAFFIC CALMING PROGRAM:

Page 1 of ____

Subdivision: _____

The objective of the Summit County Traffic Calming Program is to provide property owners a process to develop a Traffic Calming Plan on County maintained neighborhood roads, where engineering studies indicate that their use would meet the desired results of reducing neighborhood speeds and their installation is favored by at least 51% of the property owners in the "affected neighborhood". An "affected neighborhood" is defined as all properties located within one-thousand (1000) feet of any Traffic Calming Device.

In order to begin the process of developing a Traffic Calming Plan, a petition must be submitted to the Office of the County Engineer. All of the property owners in the Subdivisions "affected neighborhood" should be contacted and given an opportunity to sign the petition, indicating their "yes" or "no" concerning the development of a Traffic Calming Plan.

All owners must sign individually. This includes owners of undeveloped lots; renting tenants are not an acceptable substitute for the legal owner of the property. No signature will be withdrawn from the petition after it is filed with the Engineering Division. The purpose of the witness' signature is to verify the signatures of the property owners, if in question. The percentages will be calculated, based on individual lots where owners sign in the affirmative, divided by the total lots contained in the "affected neighborhood". At least 51% of the property owners must vote in favor of developing the Traffic Calming Program.

The completed petition must be signed, notarized and then returned to the Engineering Division Office where it will be checked against tax records and property ownership plats to insure that it meets all requirements. It will be returned to the sender if it does not meet the requirements. Petitions which do meet the requirements will cause the Engineering Division to begin the process outlined in the Traffic Calming Program to be initiated.

The hereinafter signers of this petition have been informed of the Traffic Calming Program and indicate their "yes" or "no" to the petition: (Signature must appear as on the Tax Rolls)

	<u>Property Owner</u>	<u>Yes</u>	<u>No</u>	<u>Witness/Lot #</u>
1.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
2.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
3.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

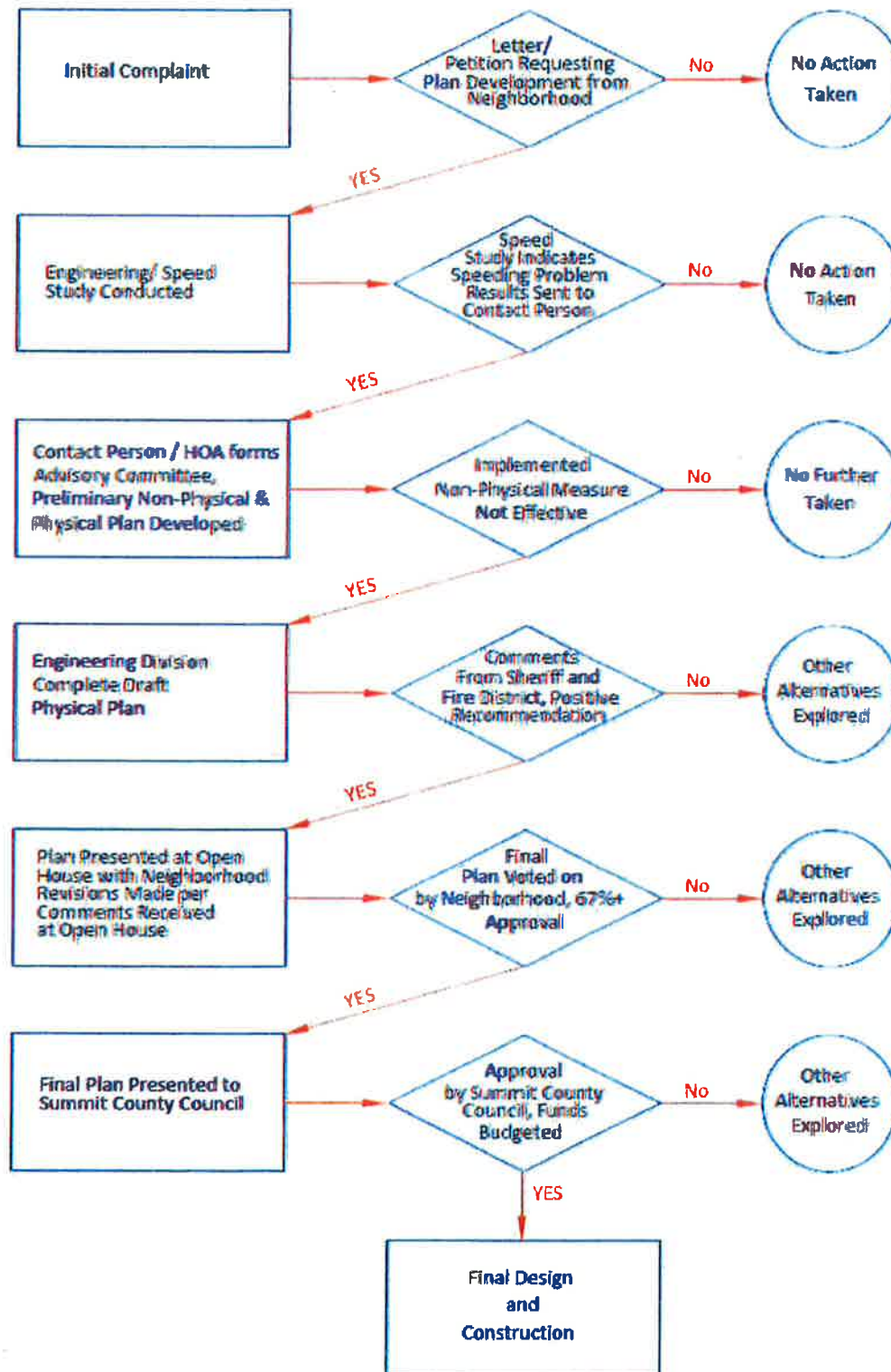
Page __ of __

The hereinafter signers of this petition have been informed of the Traffic Calming Program and indicate their "yes" or "no" to the petition: (Signature must appear as on the Tax Rolls)

	<u>Property Owner</u>	<u>Yes</u>	<u>No</u>	<u>Witness/Lot #</u>
1.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
2.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
3.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
4.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
5.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
6.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			
7.	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Print Name (First, Last)			Witness
	_____			Lot #: _____
	Signature			

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

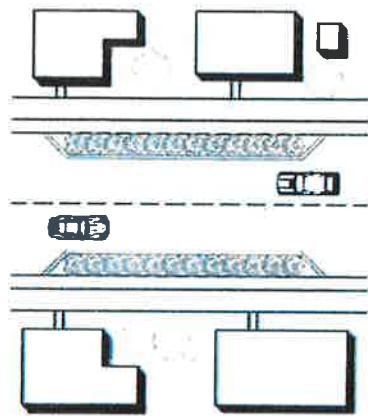
Appendix C – Program Flow Chart



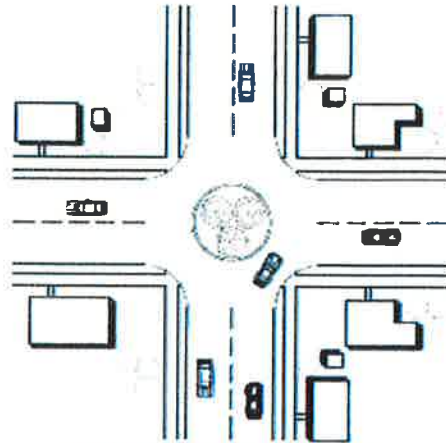
Revised, March 2016

SUMMIT COUNTY, TRAFFIC CALMING PROGRAM

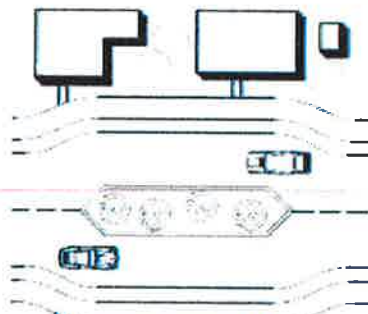
Appendix D – Typical Traffic Calming Devices



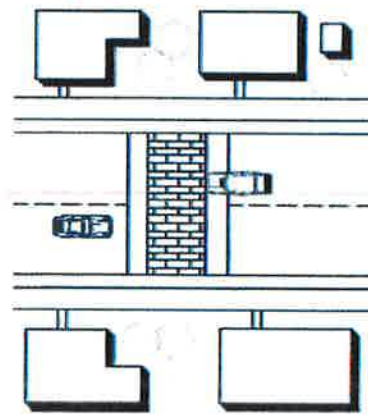
13(a) Street Narrowing



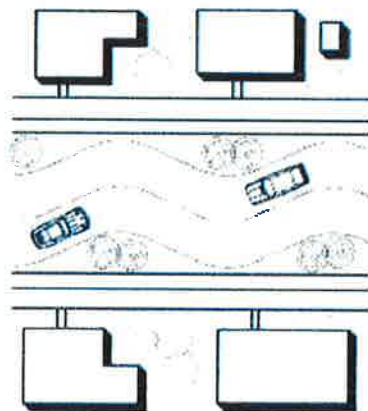
13(b) Traffic Circle



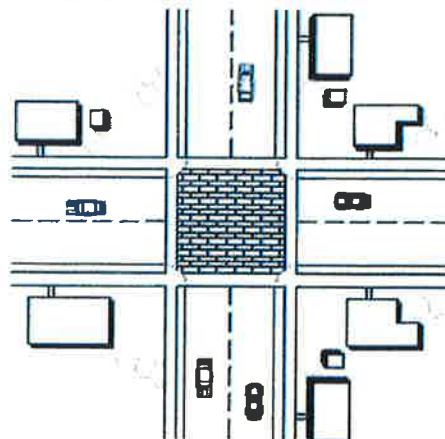
13(c) Median Bulb-Outs



13(d) Speed Humps



13(e) Curvilinear Re-Construction



13(f) Raised Intersection

Jed Muhlestein

From: Bill Baranowski <billba@wjordan.com>
Sent: Tuesday, February 06, 2018 10:02 AM
To: Jed Muhlestein
Subject: FW: UCEA Members -- Information Request
Attachments: NTMP.pdf; Old Creek Rd Mtg Agenda.doc; Old Creek Road Traffic Calming Plan.pdf; Survey Vote Form Old Creek Road.doc; Old Creek Road 5090 West Feb 2016.pdf

Jed:

We do have one of the few active speed bump programs on the Wasatch Front. See attached NTMP.

Also, we have installed several speed feedback signs on our collector roads. We have experimented with narrower travel lanes/wider bike lanes on a street.

I made a presentation at the City Engineers conference about 5 years back that I could update and post on-line.

- When a complaint comes into the City we send them our NTMP form and commit to conduct a traffic study to see if there is a problem once they return the application form.
- If they qualify for a traffic calming plan we meet with the neighborhood at City Hall on a Thursday night and come up with a plan.
- Then we mail out the plan to the people living on the street and they vote yes or no for the plan.
- When they vote yes we install the traffic calming plan.

-sometimes we add striping of bike lanes, etc. to help with an issue. Not always bumps.

See attached example: application, meeting agenda, traffic plan, and survey vote.

Bill Baranowski, PE
City Traffic Engineer
billba@wjordan.com
8000 South Redwood Road
West Jordan, UT 84088
Office: 801-569-5047
Cell: 385-214-5673

From: Mark Atencio [<mailto:marka@horrocks.com>]
Sent: Tuesday, February 06, 2018 9:12 AM
To: Bill Baranowski
Subject: FW: UCEA Members -- Information Request

Hey Bill,
If you have nothing else to do I'll bet you have answers to Lloyd's question you could share with him.
Mark

From: Lloyd Cheney [<mailto:lcheney@bountifulutah.gov>]
Sent: Tuesday, February 6, 2018 9:03 AM
Subject: UCEA Members -- Information Request

UCEA Members-

Jed Muhlestein of Alpine City is asking for your input on dealing with speeding complaints and solutions. Please see his explanation, below.

Speeding is a complaint I believe all cities get. We get it too. Recently the complaint has made its way to our new Mayor who would like to have a discussion about it at an upcoming City Council meeting. Speed bumps, flashing speed limit signs, more police patrol – these are all requests we get rather frequently. The only one we are rather hesitant to start implementing is speed bumps due to various reasons.

My question is, what are other cities doing in response to the speeding complaints that come in?

Jed's contact information is:

Jed Muhlestein, P.E.

City Engineer

Office (801) 756-6347x118

Cell (801) 473-0076

jed@alpinecity.org



Thanks-

Lloyd N. Cheney, P.E., P.L.S. | Assistant City Engineer

Bountiful City | 790 South 100 East, Bountiful, Utah 84010

O: 801-298-6125 | M: 801-643-1140 | E: lcheney@bountifulutah.gov



Neighborhood Traffic Management Program



Neighborhood Traffic Management For Residential Streets

*A Neighborhood Traffic Management Program
for The City of West Jordan
September 2014*

The Neighborhood Traffic Management Program (NTMP) for local residential streets represents the commitment of the City of West Jordan to the safety and livability of residential neighborhoods. The program provides a process for identifying and addressing problems related to speeding, excessive volumes and safety on streets classified as "local residential streets." Under the program, the engineering department will work with residents within neighborhoods to evaluate the type and severity of traffic problems. If the required approval by residents and the City Council is obtained, the city will install traffic management devices, such as traffic circles, diverters and speed humps, to manage the pattern and flow of neighborhood traffic.

As population and employment in the City continue to grow, city streets are experiencing increased traffic pressure. City policy calls for accommodating growth in a way that can protect neighborhoods from the negative impacts of traffic. The traffic program puts into practice the goals and policies contained in the City's Master Transportation Plan (MTP).

The City of West Jordan places a high value on neighborhood livability, as reflected in these policies. Although livability has no precise definition, it can be thought of as encompassing the following characteristics:

- The ability of residents to feel safe and secure in their neighborhood.
- The opportunity to interact socially with neighbors without distractions or threats.
- The ability to experience a sense of home and privacy.
- A sense of community and neighborhood identity.

A balanced relationship between the multiple uses and needs of a neighborhood.

Traffic management plays a vital role in promoting these characteristics. The program recognizes that vehicular traffic is only one element of a neighborhood, and that other residential needs must be given careful consideration. Through the program, residents can evaluate the various requirements, benefits and trade-offs of projects within their neighborhood and can actively be involved in the decision-making process. This policy document provides information and guidelines to help them participate in that process.

Neighborhood Traffic Management Objectives

The overall objectives of the Neighborhood Traffic Management Program (NTMP) are derived from existing City policy and the mission of the Community Services Department.

They are:

- Improve neighborhood livability by mitigating the impact of vehicular traffic on residential neighborhoods.
- Promote safe and pleasant conditions for motorists, bicyclists, pedestrians, and residents on neighborhood streets.
- Encourage citizen involvement in all phases of neighborhood traffic management activities.
- Make efficient use of City resources by prioritizing traffic management requests.
- Support the policies contained in the City's Master Transportation Plan (MTP).

Neighborhood Traffic Management Policies

The following policies are established as part of the Neighborhood Traffic Management Program (NTMP) for local residential streets:

1. Through traffic should be routed to arterial streets, as designated in the Master Transportation Plan. Arterial streets are typically marked for 4 or more travel lanes.
2. Adequate emergency vehicle access must be preserved.
3. Reasonable automobile access should be maintained. NTMP projects should encourage and enhance pedestrian, bicycle, and transit access to neighborhood destinations.
4. Application of the NTMP shall be limited to local, public residential streets, herein defined as streets with 60 feet or less of right-of-way, except as arterial treatments contribute to improvement of conditions on local residential streets.
5. The City shall typically employ traffic management devices to achieve the NTMP's objectives. Traffic management devices (including but not limited to traffic circles, speed humps, diverters, medians, curb extensions and others) are roadway features and shall be planned and designed in keeping with sound engineering and planning practices. The City Traffic Engineer shall direct the installation of traffic control devices (signs, signals, and markings) as needed to accomplish the project, in compliance with the municipal code and pertinent state and federal regulations.
6. To implement the NTMP, certain procedures shall be followed by the City Traffic Engineer in processing traffic management requests according to applicable codes and related policies and within the limits of available resources. At a minimum, the procedures shall provide for submittal of project proposals, evaluation of proposals by City staff, citizen participation in plan development and evaluation, and communication of any test results and specific findings to area residents and affected neighborhood organizations before installation of permanent traffic management devices.

Neighborhood Traffic Management Projects

The NTMP includes two types of projects:

1. local residential street projects, and
2. neighborhood area studies. These studies would be conducted by the Traffic Engineer.

Local residential street projects are intended to respond to traffic issues related to speeding and excessive cut-through traffic on local streets in a residential neighborhood. Solutions may include revisions to the local street to slow traffic or to completely or partially divert traffic off the street.

Neighborhood area studies respond to excessive cut-through traffic and speeding traffic on multiple streets in one or more neighborhoods. These plans are required to respond to traffic problems that are symptomatic of wider problems, such as congestion or lack of capacity on the arterial system. The problems may be similar to those addressed by local street projects, but are more pervasive, with high volumes of cut-through traffic on more than one adjacent street. Neighborhood area studies are developed primarily through the Traffic Engineer, with the involvement of other City Departments. They are scheduled based on available resources, and given priority by factors that include, but are not limited to, the following:

- Previous efforts and requests in the area
- Intensity and extent of the problems
- Degree of conflict between traffic conditions and land uses
- Availability of data
- Arterial improvement projects scheduled or planned

Neighborhood Traffic Management Typical Process

Step 1. Project Applications and Preliminary Review

Neighborhood Traffic Management Program (NTMP) projects can be requested by individual citizens or by neighborhood associations. To demonstrate neighborhood support and agreement for a traffic management request, a complete application must contain signatures from ten households living in the area where the perceived traffic problem exists.

Applications may be submitted anytime during the year but a deadline of July 15 will be in effect for new projects to be prioritized and ranked the following September/October. Applications from previous years will be included in the ranking. (An application is provided at the end of this document.)

The City staff will gather preliminary data about the traffic request, including volume, speed and accident information. The City staff reviews the information and assigns points to the request, as detailed in the section, "Neighborhood Traffic Management Program Point Assignment for Requests." A minimum of 40 points is required for a project to be eligible for this program.

Requests are also reviewed by the Traffic Engineer for other possible solutions. If the preliminary review shows that an immediate hazard to the public exists, the City may choose to address the problem separately from the NTMP.

Step 2. Priority Ranking

Projects are ranked citywide, based on the point score from Step 1. The highest-ranking projects will be undertaken first. The number of projects initiated each year will depend on City resources. At any time, a neighborhood may request approval to proceed with the development and implementation of an NTMP that does not involve City funding. The approval processes would remain the same. The City notifies all project requestors of the status of their request after either Step 1 or Step 2, as appropriate.

Step 3. Plan Development

The City will hold a neighborhood meeting in the neighborhood to inform residents of the pending project, to describe the NTMP process, and to gather additional information about the traffic problems and related neighborhood needs.

A citizen traffic committee of no more than 6 individuals is formed at this stage. The traffic committee works with City staff to determine its membership criteria and meeting procedures, and continues to work closely with staff throughout the remainder of the project.

Plan development consists of the following steps:

- Assessment of problems and needs
- Identification of project goals and objectives
- Identification of evaluation criteria
- Development of alternative plans/solutions
- Selection of a proposed plan

The first two steps are accomplished through neighborhood meetings. The City proposes solutions based on the citizen responses and sound engineering principles. Possible solutions and their impacts are evaluated by the Traffic Engineer and Fire Department.

Step 4. Test Installation/Ballot

Once a plan is agreed to by the Traffic Engineer and City staff, the City prepares a petition describing the proposed project and calling for a temporary test installation. A second meeting is held with the neighborhood group. Positive votes representing a majority (51%) of the households and businesses within the petition-to-test area are required for the test to begin. Each household and business is entitled to one vote. The approval from households, businesses and non-resident property owners within a defined ballot area must be obtained through a confidential mail ballot administered by the City.

If the vote is successful, the test will be installed for between 4 and 12 months. If the City Traffic Engineer finds that an unforeseen hazard is created by the test, the test installation will be revised or removed.

Step 5. Project Evaluation

Following the test period, the City evaluates how well the test has performed in terms of the previously defined problems and objectives. The evaluation includes the subject street and streets affected by the project, and is based on before-and-after speeds and volumes, impacts on emergency vehicles or commercial uses, and other evaluation criteria determined by the traffic committee during step 3.

The final test results will be reviewed with the Traffic Engineer, area residents, and relevant City staff, and the information is distributed during the final balloting stage. The City will not forward a project to a ballot if the test results show it may be unsafe or it violates NTMP policy or other City policies or regulations.

Step 6. Final Ballot

To forward the project to the stage where permanent implementation is approved (step 7), approval from households, businesses and non-resident property owners within a defined ballot area must be obtained through a confidential mail ballot administered by the City.

Signatures representing a majority (51%) of the households and businesses within the petition-to-install area are required for the permanent installation. Each household and business is entitled to one vote.

Step 7. City Council Action

Based on the project evaluation and a positive ballot (i.e. a majority of the returned ballots are in favor of the project), City staff members prepare a report and recommendations for the City Council. The report outlines the process followed, includes the project findings, and states the reasons for the recommendations. If the proposed traffic management program includes the vacation of streets, the request must be forwarded to the Planning Commission and all state law requirements must be met before action by the City Council.

If the project does not obtain a positive ballot it is not forwarded to the City Council.

Step 8. Design and Construction

Final design and construction are administered by the City and are generally completed within 12 months after approval by the City Council.

Step 9. Monitoring

The City will monitor constructed traffic management devices. The City will be responsible for the maintenance of the physical features of the devices.

Step 10. Project Removal Procedure

Traffic calming projects shall be studied sometime after one full year of operation. If residents petition to have the traffic calming devices removed Signatures representing a majority (51%) of the households and businesses within the petition-to-test area are required for the removal. Each household and business is entitled to one vote.

Neighborhood Traffic Management Typical Project Time Frame

This describes the estimated duration of the various steps for a typical NTMP project, under best case conditions. Generally, four to five projects are undertaken concurrently. Plan development (step 4) and test installation (step 5) may take longer than estimated.

- Project Requests Ongoing
- Preliminary Review Within 4 months of project request
- Priority Ranking September/October
- Petition-to-Study 2 months
- Plan Development 4 months
- Test Installation and Test Period 12 months
- Project Evaluation 1 month
- Ballot 1 month
- City Council Action 2 months
- Design 2 months
- Construction including bidding process 3 to 4 months
- Monitoring Ongoing one year after installation

Neighborhood Traffic Management Point Assessment for Requests

The following information is used to develop a numerical ranking score for each Neighborhood Traffic Management Program (NTMP) project request. Scores will be used to rank requests on a citywide basis. A high-ranking, available budget and other factors are used to determine which projects will continue to the petition-to-study stage.

1. Traffic Volume

Average daily traffic volume (on the segment of the project street having the highest volume), divided by 100.

30 points maximum score

[Note: if the volume is below 800 vpd, the NTMP shall not be applied, regardless of other "scores"]

2. Speed (Violation Rate)

Percent of vehicles traveling at more than 5 mph over the speed limit, divided by 4.

20 points maximum score

[Note: if the violation rate is below 15%, the NTMP shall not be applied, regardless of other "scores"]

3. Accidents

Accident rate over 3 consecutive years (accidents per million vehicle miles traveled).

20 points maximum score

4. Elementary Schools

10 points for each private or public elementary school on or within 200 feet of the subject street

5. Other Extraordinary Circumstances

Up to 5 points for each individual pedestrian-oriented facility, such as elderly housing or a park on or within 200 feet of the subject street

1 point for each school bus stop along the street segment

Up to 5 points for each public project external to the neighborhood which will significantly increase the traffic cutting through the neighborhood

1 point for each side street which has sight visibility below 25 mph

10 points maximum score

6. Designated Pedestrian Routes

5 points whenever a designated Safe-Route-To-School route crosses the subject street if the crossing occurs where traffic on the subject street is not controlled by either a stop sign or a traffic signal.

Neighborhood Traffic Management Traffic Management Devices

This section provides a brief description of commonly used traffic management devices. A chart (Table 1) summarizes the effects of these and other possible devices.

1. Mini-roundabouts are raised central rotary islands placed in an existing intersection. The primary purpose of a mini-roundabout is to slow high-speed traffic. Mini-roundabouts are most effective when constructed in a series on a local residential street. An additional benefit is that they reduce the number and severity of reported accidents. (Reported accidents tend to be more severe than unreported accidents.)

2. Closures of streets, either mid-block or at an intersection, may be used to block traffic from entering a neighborhood. As outlined in the City Policy on the use of Street Closures, minimum criteria must be met in order for the closure to occur. By doing so, major reductions in speed and volume result. A cul-de-sac installed on a street may create problems for emergency vehicle access. This problem can usually be overcome if an adequate turnaround is provided or the cul-de-sac is constructed with mountable curbs. Residents may be required to access their property by a less direct route if access is blocked by a cul-de-sac.

3. Chokers or curb extensions narrow the street by widening the sidewalk or the landscaped parking strip. These devices are employed to make pedestrian crossings easier and to narrow the roadway. They also provide a visual cue to motorists that they are on a non-arterial route.

4. Semi-diverters limit access to a street from one direction by blocking half the street. They must also be constructed to limit certain movements at an intersection. Semi-diverters are generally effective in reducing volumes, especially if the predominant direction of travel on a street is the one where access is reduced. They allow a higher degree of emergency vehicle access than cul-de-sacs or diagonal diverters. Semi-diverters are intended to be mountable by emergency response vehicles.

5. Diagonal diverters place a barrier diagonally across an intersection, disconnecting the legs of the intersection. These devices are effective in reducing volume. They allow more freedom of circulation within the neighborhood than cul-de-sacs. Diagonal diverters may have to be designed and installed to provide for emergency vehicle access.

6. Intersection channelizations are designed to limit certain movements, narrow the intersection, or otherwise direct traffic. They are unique to each intersection and can take a variety of forms. An example is a median island that restricts through movements.

7. Raised Crosswalks/Speed Humps are passive speed reduction devices that work 24 hours per day without a need to enforce them. As outlined in the City Policy on the use of Speed Humps, in some situations they may be effective in slowing traffic going through a neighborhood. As opposed to speed bumps, which are often used in commercial parking lots to slow traffic, a speed hump would extend from curb to curb, be about 5 inches tall, and be 14 to 22 feet deep.

STOP Signs

Residents involved in NTMP projects often ask why stop signs are not used as a traffic management device.

STOP signs are used to assign right-of-way at an intersection. They are installed at intersections where an accident problem is identified, where unremovable visibility restrictions exist (such as buildings or topography), and/or where volumes are high enough that the normal right-of-way rule is unduly hazardous.

STOP signs are generally not installed to divert traffic or reduce speeding. City of West Jordan studies and studies from other jurisdictions show that such use of STOP signs rarely has the intended effect. In fact, the use of STOP signs solely to regulate speed typically causes negative traffic safety impacts (non-compliance with the signs and increased accidents).

Neighborhood Traffic Management Policy on Speed Humps

The City of West Jordan is committed to preserving neighborhood integrity. One of the issues in the maintenance of livable communities is traffic and the need to minimize non-essential vehicular traffic on residential streets and the need to ensure that those vehicles using those streets do so at an appropriate rate of speed. A technique that has been used successfully to manage this situation is the installation of speed humps.

ADMINISTRATIVE PROCEDURES

A Neighborhood Traffic Management Program (NTMP) project includes issues of excessive speeds, and the Traffic Engineer finds that a speed hump installation may be appropriate.

Staff evaluates the site based on Minimum Criteria. Evaluation would include recommended locations on both the requested street and adjacent streets where installation may be required to mitigate the impact of installation.

Following the procedures contained in the NTMP, public comment and approval are received. Action by City Council to approve installation.

MINIMUM CRITERIA

To effectively use speed humps for neighborhood traffic control, specific minimum criteria must be met before the installation. They are:

West Jordan Neighborhood Traffic Management Program

- Posted Street speed limit must be 25 mph.
- Average daily volumes must be between 800 and 3,000.
- The speed limit violation rate must be at least 20%.
- Street is not classified higher than neighborhood collector, with no more than 1 lane in each direction.
- Installation location must be visible from 200 feet.
- Street grades cannot be higher than 8%.
- Street cannot be a major emergency response route.
- Hump installation should not cause diversion of traffic to other residential streets.
- Street cannot be a Utah Transit Authority (UTA) bus route.

PLACEMENT OF SPEED HUMPS

The following guidelines should be used to determine the number and placement of speed humps for various street lengths:

- Single short blocks (less than 400 feet) with speed control problems are unusual. Where such blocks must be treated, a single hump positioned near mid-block would likely provide satisfactory speed control over the entire block.
- Where control is required on single block segments of moderate length, a two-hump configuration should be satisfactory.
- On very long blocks, 3 or more humps may be necessary.
- On lengthy continuous segments or on control segments composed of a number of blocks, it is desirable to space interior humps 500 feet apart, although they should be no closer than 300 feet apart. At least one hump should be placed in each block of a control segment.
- The first hump that is approached in a system may be located within 100 feet of the street entry but 200 to 300 feet is adequate.

SIGNS AND MARKINGS

It is essential to warn roadway users of a speed hump's presence and guide their subsequent action.

Signs The most common warning sign will be the MUTCD W8-1 "BUMP" warning sign. The sign should be located based on MUTCD Table II-1, "A Guide for Advance Warning Sign Placement Distance."

Markings The speed humps will be marked with distinctive painted markings, so as to be visible to the approaching traffic.

IMPLEMENTATION

Installation Angle Speed humps should be installed exactly at a right angle to the vehicular travel path.

Drainage and Utilities Speed humps should be installed with appropriate provisions made for roadway drainage and utility access. Humps should generally not be located over or contain maintenance access holes, or be located next to fire hydrants.

Ideally, a hump should be installed at a location immediately on the downside of an existing drain inlet. If this is not feasible, the construction of a bypass drain or other treatment to route water around the hump should be considered.

Roadway Edge Treatments On roadways with "L" curbs, humps should ideally extend fully across the road from curb to curb. If tapering is necessary for drainage or other reasons, the edge taper should be accomplished at an angle that will not affect the down stroke of bicycle pedals or subject vehicles to undercarriage damage.

A phenomenon known as "gutter running" may be encouraged with the tapered hump edges since drivers can drive with one wheel in the gutter, thereby reducing the humps' ability to slow vehicles. If humps are installed with tapers, or used on non-curbed roadways (not recommended), raised pavement markings, delineator posts, or other treatments should be considered to eliminate or reduce the possibility of vehicles attempting to partially or totally avoid the hump. It should be recognized, however, that these devices may have an impact on maintenance. If installed on roadways with paved shoulders, the hump should ideally extend across the shoulder to discourage vehicles from attempting to avoid the hump.

Coordination with Traffic Operations Speed humps should not be installed within an intersection or driveway or within 250 feet of a traffic signal. This suggestion is not intended to apply to the use of a raised intersection as a valid traffic management technique.

On-Street Parking Care should be taken to ensure the vehicles parked on streets do not diminish the effectiveness of the signing and marking for speed humps. Should parking be removed adjacent to or before the hump, the ability of vehicles to avoid tapered humps by "gutter running" will be enhanced. Each hump installation should be evaluated independently for site-specific parking considerations.

Street Lighting To improve nighttime visibility, especially where sight distance is less than desirable, coordination of hump locations with existing or planned street lighting should be considered.

Construction Materials The construction of the hump can be pre-cast concrete sections, concrete cast in place, asphalt or brick/concrete pavers. Experience has shown the use of soft material will result in deformations as the top of the hump is pushed in the direction of the traffic stream.

Construction Procedures It is recommended that a template be constructed to verify the accuracy of the hump profile and to ensure that the desired dimensions are attained within the reasonable tolerances (normally one-half inch or less). If the profile is incorrect, hump characteristics will be changed, which may result in vehicle damage or ineffective speed control.

If the hump is constructed in place, it is recommended that the road surface be excavated at the tapering edges to prevent spalling.

MONITORING AND EVALUATION

The type, number and extent of studies performed to determine the effectiveness and impacts of speed humps will vary based upon the particular circumstances of each installation. However, some review should be performed after installation to ascertain if the humps have achieved the desired results without creating unexpected problems.

On-Site Observations Immediately after the speed humps' installation and at selected times thereafter, observations will be made to determine motorists' behavior patterns and any unusual operating conditions (such as gutter running).

Speed Studies Speed studies should be performed before hump installation. After installation, speed studies should normally be performed before, at and beyond each speed hump to determine its impact on vehicle operating speeds.

Volume Studies Traffic volume counts should be made on the subject street and on those streets where traffic diversion may be expected. These counts should be made before installation and after traffic patterns have stabilized to determine the magnitude and specific location of this diversion.

Stop Sign Obedience Studies may be desirable before and after hump installation to determine if the speed humps have impacted the compliance rate of affected stop sign locations. Increased violation rates should be considered in speed hump evaluations, and selective enforcement may be necessary to address the problem.

Travel Time Studies Based on the particular requirements of the installation, it may be desirable to perform detailed travel time studies before and after hump installation to determine the effect on overall travel time along the subject street or through the area.

LIABILITY CONCERNS

Speed humps and other pavement undulations are not traffic control devices as defined by the Manual on Uniform Traffic Control Devices. They are, however, geometric design features of the roadway and should be designed, installed, operated and maintained using accepted engineering principles and prudent engineering judgment.

Vehicle and Cargo Damage Where streets with speed humps are expected to carry substantial numbers of long wheel-base vehicles or other special vehicle types such as motorcycles and bicycles, a special attempt should be made to warn and notify drivers of these vehicles that speed humps exist and how they should be driven to minimize problems. It may also be desirable to modify the standard hump design to further minimize impacts to these users.

OTHER CONSIDERATIONS

Coordination with Pedestrian Crossings If mid-block pedestrian crossings exist or are planned, it may be desirable to coordinate them with the speed humps, since vehicular speeds will generally be lowest at speed hump crossings. In fact, it may be desirable to install a hump directly adjacent to or on the pedestrian crossing. Pedestrian access can be encouraged by paving any grassed area connecting the hump to nearby sidewalks.

Aesthetic Considerations It is possible that speed humps can be constructed of special materials such as brick pavers or specially treated concrete to enhance their appearance. However, consideration should be given to street maintenance requirements in the area and whether special materials can be properly maintained by the responsible agency.

Incorporation in New Street Design It is desirable in the planning of new residential subdivisions to configure and design local streets to minimize excessive speed, excessive volumes and cut-through traffic from outside the immediate neighborhood. Adequate signs, markings and other devices should also be provided to support their installation.

Enforcement Needs During the initial stages of speed hump experience; it will generally be desirable to employ special police assignment to enforce traffic violations occurring at or near speed humps and along routes experiencing diversion.

Maintenance Issues Care should be taken in the initial installation and monitoring of speed humps to ensure that edge raveling and profile deformation do not exceed established tolerances. Regularly scheduled inspections and maintenance should be performed to maintain the appropriate design relationship between the hump and the street, so the hump continues to perform its intended purpose within allowable tolerances. If pavement maintenance activities result in speed hump markings being reduced or eliminated, they should be promptly replaced or supplemented with temporary signs providing the same warning to motorists.

Policy for Closure of Residential Streets

The City of West Jordan is committed to preserving neighborhood integrity. One of the issues in the maintenance of livable communities is traffic and the need to minimize non-essential vehicular traffic on residential streets and the need to ensure that those vehicles using those streets are not using them to bypass arterial streets. A technique that has been used successfully is the closure of the street to normal traffic.

The purpose of this policy shall be to set forth the process and criteria by which modification of traffic flow or closure of public streets may be considered by the City's staff and elected officials and to identify the conditions under which closures or modifications may be enacted. This policy should only apply to the closure or modification of traffic flow on public streets initiated by citizens. This policy should not apply when initiated by a local agency to address specific traffic safety issues or to comply with state and Federal standards and warrants. The policy also does not apply to temporary changes in traffic that are needed to stage construction/maintenance activities or special events.

1.0 ADMINISTRATIVE PROCEDURES

1. Neighborhood Traffic Management Program (NTMP) project includes issues of excessive volumes of traffic and the project engineer finds that a street closure may be appropriate.
2. Staff evaluates site based on Minimum Criteria. Evaluation would include recommending a location on both the requested street and adjacent streets where a closure or other mitigating measures may be required to mitigate impact of the closure.
3. Following the procedures contained in state law and the NTMP, public comment and approval are received.
4. Action by City Council to approve installation.

2.0 MINIMUM CRITERIA

To effectively use street closures for neighborhood traffic control, specific minimum criteria must be met before the installation. They are:

1. Street speed limit must be 25 mph.
2. The street should be primarily residential in nature.
3. Average daily volumes should be more than 2,000 vehicles per day for complete closures or 1,000 vehicles per day for partial closure.
4. Street should not be classified higher than neighborhood collector, with no more than 1 lane in each direction.
5. Street cannot be a major emergency response route.
6. Closure should not cause diversion of traffic to other residential streets.
7. Street cannot be a Utah Transit Authority (UTA) bus route.

3.0 PLACEMENT OF STREET CLOSURE

The following guidelines should be used to determine the placement of the street closure:

1. The street closure should be made on the perimeter of the neighborhood.
2. Street closures should not be made in such a way as to interrupt internal neighborhood travel patterns. For example, the closure should not separate elementary school students from their school.
3. The closure of a street by a neighborhood association or other group of individuals will require the vacation of the street right-of-way. The application for the vacation of the street is submitted to the Planning Commission through the Community Planning and Development Department. Once state law requirements have been met and the street has been vacated, the City will not have fee title to the property. However, the City may retain easements for utilities, drainage or emergency access through the vacated right-of-way. The Neighborhood Association will be responsible for the maintenance of the vacated street.
4. Unless otherwise approved by the Fire Chief, all closures will have to be constructed with an emergency access per Fire Services Department standards.
5. The street closure will require the construction of a cul-de-sac to terminate the street sections. A mid-block closure would require that both stub streets be terminated with cul-de-sacs. The radius of the cul-de-sac will be dependent on parking restrictions. If parking is prohibited, a smaller radius will be allowed. If the resultant stub street contains frontage for four or fewer homes, the Traffic Engineer, with the concurrence of the City Engineer and the Fire Chief, may waive the cul-de-sac requirement.

4.0 SIGNS AND MARKINGS

It is essential to warn roadway users of the street closure and guide their subsequent action. All signs and markings shall be in conformance with the Manual of Uniform Traffic Control Devices (MUTCD).

Funding Options

An approved TMP project will likely have funding implications. Funding for all TMP projects must be obtained before engineering design and construction begins. The following is a list of funding options available for NTMP projects:

1. **Traffic Management Plan Funds:** Each year the City Council will consider funding a “pool” of funds, as recommended by the City Administration, in the City’s Capital Improvement Program for implementing approved NTMP projects. When available, these funds will be utilized to fund NTMP projects.
2. **Neighborhood Matching Grant Funds:** Neighborhoods may apply for partial funding of approved TMP projects through the Neighborhood Matching Grant program. Under this program up to \$5,000 of matching funds are available per project and require a match of 50 percent match in cash or labor. Each funding application will compete with other projects throughout the city for available funding. The City Council considers and approves funding for projects as part of the annual budget process.
3. **100 Percent Neighborhood Funding:** Any approved NTMP project can be funded 100 percent through neighborhood funding sources. Neighborhoods may collect monies in any manner they deem equitable to pay for the cost of the project.

Resident Participation/Education

1. **Speed Trailers:** The speed trailer program uses radar to educate the public about speeding. This program uses fully automated trailers and a large digital sign to display and log the speed of approaching vehicles. Speeding vehicles see their speed and are reminded they could have been ticketed. City police can arrange the use of the speed trailer and follow-up speed enforcement.

Physical Modifications:

2. **Traffic Calming:** In conjunction with resident participation and education, physical changes may be made to roadways to influence driver behavior. Although most physical changes will have effects on both speed and volume, Traffic Calming measures are intended to have the dominant effect of reducing traffic speed. Typical traffic calming tools include speed humps, traffic circles, entrance medians, and raised crosswalks.
3. **Street Reconfigurations and Traffic Modifications:** Street reconfigurations and traffic modifications are dramatic measures used to reduce through the traffic in neighborhoods by eliminating or reducing traffic movements. Street modifications include measures such as cul-de-sacs, medians, road closures, and diverters. Traffic control modifications may include No Left/Right Turn signs, changes in signal timing, and one-way streets.

4. **Pedestrian Safety:** Some of these tools may include pedestrian actuated overhead or in-pavement flashing lights at crosswalks, pedestrian countdown clocks at traffic signals and orange flag crosswalks. These tools are used at location with pedestrian safety problems.
5. **Bicycle Facilities & Safety:** Tools for bicycle facilities may include striping and signing of bicycle routes, or recommendations for on street parking removal.

Pavement Markings

The use of pavement markings can be a simple, low cost influence to change the pattern of driver behavior on a roadway. Pavement markings can be used to guide motorists, delineate on-street parking, or create the impression of a narrowed roadway

West Jordan Neighborhood Traffic Management Program

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM REQUEST FORM

We, the undersigned, request a traffic study at the location listed below. These signatures indicate our commitment to work with West Jordan City staff in creating safer neighborhood streets.

	Signature	Address	Phone (daytime)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Neighborhood Contact: _____

Mailing Address, Email and Phone: _____

Location of Concern: _____

What particular concerns do you have at this location?

Application Date: _____ Posted Speed Limit: _____ mph

Is this a designated bus route?

Yes ____ No ____

Is this a designated safe school walking route?

Yes ____ No ____

Is this a designated bike route?

Yes ____ No ____

Is there a park, school, or other pedestrian destination on this street?

Yes ____ No ____

Are sidewalks constructed on this street?

Yes ____ No ____

Thank you for taking the time to complete this form. Please mail it to Bill Baranowski, City Traffic Engineer, 8000 South Redwood Road West Jordan, Utah 84088. After it is received by the City you will notified of the study schedule. **Application deadline for consideration in the following fiscal year is July 15th.**



Old Creek Rd Traffic Calming Plan

 Speed Bump





Old Creek Road - Neighborhood Traffic Calming Meeting Agenda/Invitation

Date and Time: Thursday June 9, 2016 6:30 PM

Location: West Jordan School Gallery 3rd Floor City Hall, 8000 South Redwood Road

1. Introductions

- a. Saundi Wayman: 801-784-0084 Local Contact.
- b. Bill Baranowski: West Jordan Traffic Engineer.
- c. David Cottle: West Jordan City Engineering.
- d. West Jordan City Police.

2. Outline Traffic Concerns & Review Traffic Study Data

- a. Traffic Volumes – Weekday Average is 979 vehicles/day
- b. Traffic Speeds – Violation Rate of 15% (percentage above 30 MPH).
 - i. Percentage above 25 MPH is 52%
- c. AM Peak Hour=149 veh/hr (7:00-8:00 AM)
- d. PM Peak Hour=90 veh/hr (2:30-3:30 PM)
- e. 85th % Speed= 29.8 MPH
- f. List other concerns about traffic, parking, etc.

3. Develop a Neighborhood Traffic Calming Plan

- a. Review traffic calming options – Speed Tables.
- b. Develop a plan
- c. Review the plan

4. Plan Implementation

- a. How many steps does the process take?
- b. Speed Table installation, test vote, final vote.



Vote to Proceed with the Traffic Calming Plan

Old Creek Road between Grizzly Way and McGinnis Lane

To: The Residents of Old Creek Road and McGinnis Lane (Sent August 2016)

Old Creek Road has been identified to have speeding vehicles between Grizzly Way and McGinnis Lane. The attached materials were developed by your neighborhood traffic calming committee. These materials have been sent to the houses on the street where traffic calming is planned. Six (6) asphalt "Speed Tables" are proposed to be installed at the locations shown on the map included in this mailing four on Old Creek Road and two on McGinnis Lane. A detail of one speed table is shown on the back of the map. Please review the materials attached, vote your preference on the ballot below and return it in the attached envelope before August 31, 2016.

Traffic Study (April 2016) and Neighborhood Meeting (June 9, 2016).

A traffic study was performed by City Staff including traffic volumes and speeds collected in April 2016 along Old Creek Road between Grizzly Way and McGinnis Lane. Vehicles were counted and speed data collected. The average daily traffic was 979 vehicles/day. The study found that 52 percent of drivers were driving above the posted speed limit of 25 MPH. Residents along Old Creek Road were invited to a meeting held at West Jordan City Hall with City staff to discuss the traffic study and the traffic calming options. The plan developed by the residents includes the 6-speed tables shown in the attached map. The plan shown was developed by the residents attending the meeting.

Vote Required Before Proceeding with Installing the Speed Tables

This is your opportunity to vote on the proposed traffic calming plan. The Neighborhood Traffic Management Program (NTMP) for local residential streets represents the commitment of the City of West Jordan to the safety and livability of residential neighborhoods. The program provides a process for identifying and addressing problems related to speeding, excessive volumes and safety on streets classified as "local residential streets." If the required votes are returned from a majority of residents living on Old Creek Road and McGinnis Lane, the city will proceed to install the proposed traffic calming plan either in Fall of 2016 or Spring of 2017 depending on available funding.

Please review the attached drawing of the six (6) speed tables on Old Creek Road and McGinnis Lane and vote below:

✂ Cut your ballot here

☒ **Mark Your Preferred Box! Your Vote is Important.**

☐ **NO.** I do not wish the traffic calming plan to be installed by the City.

☐ **YES.** I would like the traffic calming plan to be installed by the City.

Please return this form in the attached envelope to:
West Jordan City Traffic Engineering Dept., 2nd Floor
8000 South Redwood Road
West Jordan, UT 84088



Traffic Calming Plan

No. _____

West Jordan Neighborhood Traffic Management Program

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM REQUEST FORM

We, the undersigned, request a traffic study at the location listed below. These signatures indicate our commitment to work with West Jordan City staff in creating safer neighborhood streets.

	Signature	Address	Phone (daytime)
1.	<i>[Signature]</i>	87535 5090W WJ, UT	801-784-0084
2.	<i>[Signature]</i>	5134 OLD CREEK ROAD West Jordan UT	801-634-4803
3.	<i>[Signature]</i>	8754 S 5090 W WJ	801-280-0674
4.	Melanie Carrera	5094 Old Creek Rd WJ	801-703-3583
5.	<i>[Signature]</i>	5082 Old Creek Rd	(801) 835-9209
6.	<i>[Signature]</i>	8752 So. Redwood Rd West Jordan, UT 84081	801-680-7711
7.	<i>[Signature]</i>	8732 S 5170 W West Jordan UT 84081	801-282-5498
8.	<i>[Signature]</i>	5162 OLD CREEK RD	801-495-3348
9.	<i>[Signature]</i>	8752 S 5090 W	801-232-8762
10.	<i>[Signature]</i>	5064 OLD Creek Rd	801-232-8762

Neighborhood Contact: Sandra Wayman Daytime Phone: 801-784-0084 *mail*

Location of Concern: Old Creek Rd or 8740S Address: ADVERSE

What particular concerns do you have at this location?

Damage to my property & everyone else's property & COS.

SPEED and ACCIDENTS

I live in fear for me & my family's life while in the front yard of my house. I also don't let them play in the back on the half of my yard

The Wayman's
8753 S 5090 W.
WJ, UT 84081

Application Date: 1/29/16 Posted Speed Limit: 25 mph

Is this a designated bus route?

Yes ☐ No ☒

Is this a designated safe school walking route?

Yes ☒ No ☐

Is this a designated bike route?

Yes ☐ No ☒

Is there a park, school, or other pedestrian destination on this street?

Yes ☐ No ☒

Are sidewalks constructed on this street?

Yes ☒ No ☐

Thank you for taking the time to complete this form. Please mail it to City Traffic Engineer, 8000 South Redwood Road West Jordan, Utah 84084. After it is received by the City you will be notified of the study schedule. **Application deadline for consideration in the following fiscal year is May 31.**

We shouldn't have to live in fear to play in our own yard.
One of these days someone will die & I hope it doesn't have to
come to that for you to do something I would love to see the west
side of the street closed off. Then there will be less traffic & lower speed →

September 2009

ALPINE CITY COUNCIL AGENDA

SUBJECT: Presentation of Tentative, Tentative Budget

FOR CONSIDERATION ON: April 10, 2018

PETITIONEER: City Staff

ACTION REQUESTED BY PETITIONER: Review Tentative, Tentative Budget

APPLICABLE STATUTE OR ORDINANCE:

PETITION IN COMPLIANCE WITH ORDINANCE: N/A

INFORMATION: City Staff will present the tentative, tentative budget. Information and handouts will be provided at the meeting.

<p>RECOMMENDATION: The City Council review the tentative, tentative budget.</p>
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ALPINE CITY COUNCIL AGENDA

SUBJECT: Smooth Canyon Park Improvements

FOR CONSIDERATION ON: April 10, 2018

PETITIONEER: City Staff

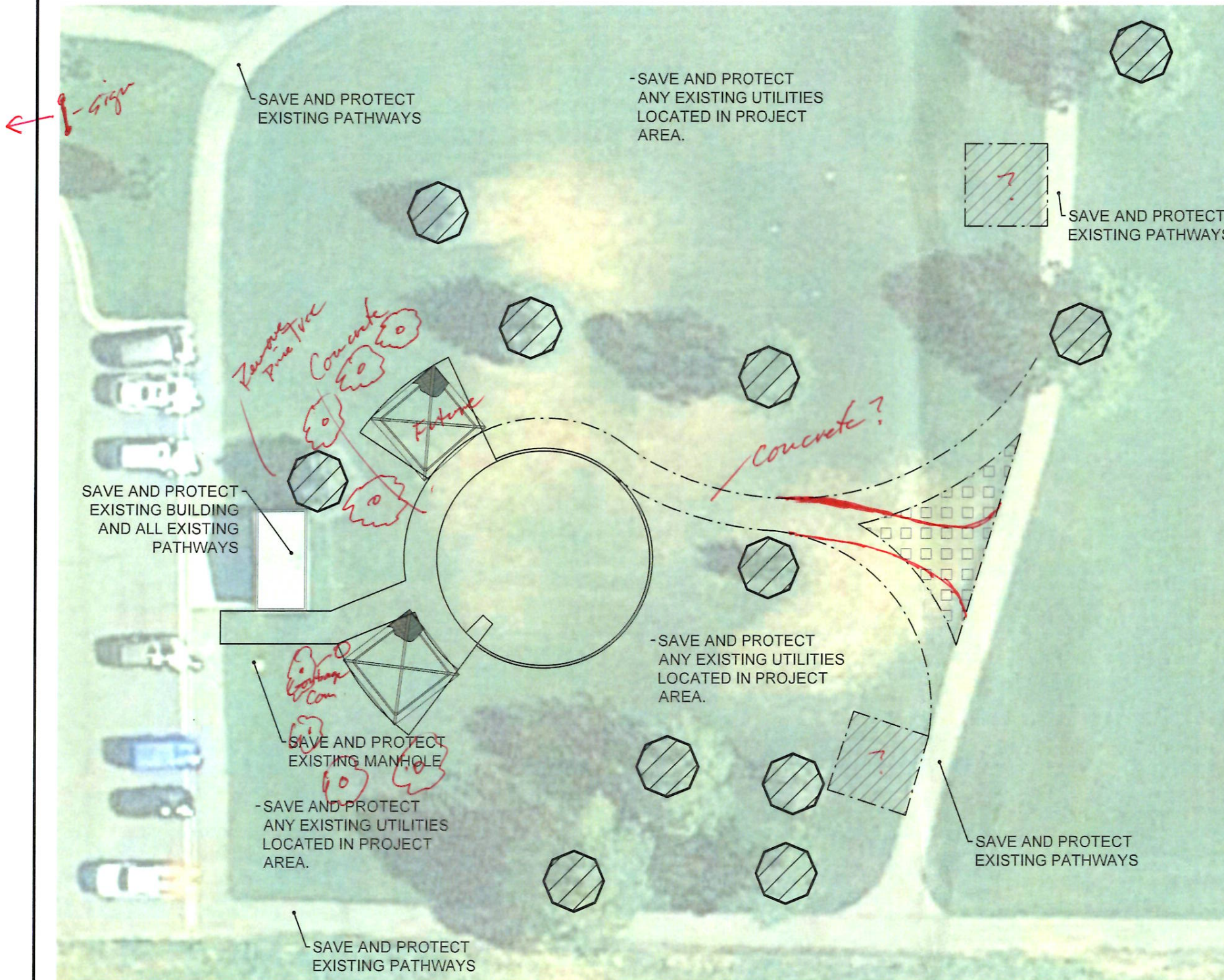
ACTION REQUESTED BY PETITIONER: Review the proposed plan for improvements to Smooth Canyon Park

APPLICABLE STATUTE OR ORDINANCE:

PETITION IN COMPLIANCE WITH ORDINANCE: N/A

INFORMATION: Included in the FY2018 budget was \$50,000 allocated from Recreation Impact Fees to construct a playground. After working with a landscape architect to prepare plans for the project, we would like to add some additional features including a 20'x20' pavilion with picnic tables, trees to shade the pavilion and playground areas and a sign designating the park name. The sign would be similar to the sign in front of City Hall. This project is estimated to be approximately \$125,000. The funds would come from recreation impact fees. A budget opening would be held at the end of the year to allocate the additional funds to this year's budget from the fund balance. If the additional features are approved, the landscape architect will finalize the plans and we will put the project out for bid. We anticipate the project being completed by June 30, 2018.

<p>RECOMMENDATION: The City Council review the proposed plans for improvements in Smooth Canyon Park and determine if additional funds can be allocated to the project.</p>
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EXISTING AND NEW LANDSCAPE AREA

SYMBOL SITE MATERIAL



EXISTING TREES TO REMAIN AND TO PROTECT
EXISTING TREES TO BE REMOVED (NONE)

EXISTING TREE NOTES

TREE PROTECTION AND PRESERVATION

INTRODUCTION: THIS IS INTENDED TO GUIDE THE GENERAL CONTRACTOR AND SUB-CONTRACTORS CREWS AND OWNER IN THE PROTECTION OF TREES LOCATED ON PROJECT SITE. AND SHALL BE IN COMPLIANCE WITH FOLLOWING SPECIFICATIONS. ALL PEOPLE THAT WORK AROUND TREES ARE RESPONSIBLE TO PROTECT THE TREES FROM UNNECESSARY INJURY THAT WOULD DECREASE THEIR VALUE. TREE ROOTS OFTEN SPREAD 2-3 TIMES WIDER THAN THE DRIP-LINE OF THE CANOPY AND 90% OF A TREE'S ROOTS ARE FOUND IN THE TOP 2 FEET OF SOIL. THESE FACTS ILLUSTRATE WHY IT IS SO IMPORTANT TO USE CARE WHEN WORKING NEAR EXISTING TREES.

A. TREE PROTECTION GUIDELINES FOR CONSTRUCTION SITES

PRIOR TO INITIATION OF DEMOLITION AND CONSTRUCTION WORK THAT WILL AFFECT TREES ON PROPERTY, THE FOLLOWING TREE PROTECTION PLAN SHOULD BE IMPLEMENTED, WHICH PROVIDES FOR THE FOLLOWING INFORMATION:

1. TREE PROTECTION PRACTICES MAY INCLUDE, BUT ARE NOT LIMITED TO: PRUNING BRANCHES AND ROOTS, TEMPORARILY FENCING OFF AREA AROUND THE ROOTING ZONE, WRAPPING TRUNKS TO PREVENT WOUNDS, SPREADING WOOD CHIPS OR GRAVEL TO REDUCE SOIL COMPACTION, ENSURING PROPER TREE IRRIGATION IS PROVIDED THROUGHOUT THE TERM OF THE PROJECT, AND ADDING WELL-COMPOSTED ORGANIC MATTER TO THE TREE'S GROWING LOCATION FOLLOWING CONSTRUCTION.
2. TREE PLANTING WORK SHALL BE DONE IN ACCORDANCE WITH LATEST LOCAL CODES, IE. BEST MANAGEMENT PRACTICES (BMP), ANSI Z133.1, AND ANSI A300. DIRECTIONS PROVIDED IN AUTHORIZING PERMITS SHALL BE FOLLOWED.
3. ANY TREE TO REMAIN THAT IS IRREPARABLY DAMAGED DUE TO CONSTRUCTION ACTIVITIES SHALL BE REMUNERATED AT COST TO CONTRACTOR RESPONSIBLE FOR DAMAGES. THE VALUE OF ALL TREES TO REMAIN SHALL BE ESTABLISHED IN WRITING AND AGREED UPON BY ALL PARTIES INVOLVED PRIOR TO CONSTRUCTION ACTIVITIES.
4. ANY TREES TO REMAIN ON-SITE AND ON ADJACENT PROPERTIES THAT ARE DAMAGED DUE TO CONSTRUCTION ACTIVITIES THAT ARE REPLACEABLE SHALL BE REPLACED WITH TREE OF SAME SPECIES, CALIPER SIZE AND SIMILAR SHAPE AT THE EXPENSE OF CONTRACTOR RESPONSIBLE FOR DAMAGE.
5. TREES TO BE PRESERVED DURING ALL CONSTRUCTION ACTIVITIES SHALL HAVE A TREE PROTECTION ZONE (TPZ) WHICH IS NO LESS THAN THE WIDTH OF THE DRIP LINE OF THE TREES CANOPY, CLEARLY MARKED WITH A CONTINUOUS CHAIN LINK PROTECTIVE FENCE OR OWNER APPROVED EQUAL PRIOR TO ANY DEMOLITION, CLEARING, TRENCHING OR TUNNELING PROJECTS COMMENCING.
6. HEAVY EQUIPMENT SHALL NOT BE ALLOWED INSIDE THE TREE PROTECTION ZONE. ALL HEAVY EXCAVATIONS SHALL BE MADE BY EQUIPMENT FROM OUTSIDE OF THIS ZONE.
7. BUILDING MATERIAL, TOPSOIL, CHEMICALS, OR FILL SHALL NOT BE STOCKPILED IN THE TREE PROTECTION ZONE OR IN THE DRIP-LINE OF ANY TREE THAT IS SCHEDULED FOR PRESERVATION.
8. PRIOR TO CONSTRUCTION, THE TREE PROTECTION ZONE WILL BE DESIGNATED BY PLAN AND IN COORDINATION WITH BLUE STAKES, OWNER, LANDSCAPE ARCHITECT AND/OR CITY URBAN FORESTER. THE SIZE AND SHAPE OF THE ZONE WILL DEPEND ON THE TREE SPECIES SENSITIVITY TO IMPACT, THE HEALTH AND AGE OF THE TREE, AND ROOT AND CROWN CONFORMATION AND DEVELOPMENT CONSTRAINTS.
9. TRENCHING SHOULD BE PERFORMED IN ACCORDANCE WITH THE STANDARDS LISTED ABOVE. WHEN LARGE SCAFFOLD ROOTS ARE ENCOUNTERED WHILE TRENCHING, HAND DIGGING AND BRIDGING OF THE ROOTS SHALL BE DONE. IN SITUATIONS WHERE A ROOT HAS BEEN DAMAGED, A CLEAN CUT SHALL BE MADE ON THE ROOT AT THE EDGE OF THE TRENCH CLOSEST TO THE TREE TRUNK.
10. TUNNELING OR BORING SHOULD BE DONE WHENEVER WORK MUST BE DONE WITHIN THE TREE PROTECTION ZONE. TUNNELING OR BORING IN THE TREE PROTECTION ZONE MUST BE AT LEAST 2 FEET DEEP.
11. EXCAVATION INVOLVING ROOT CUTS SHOULD BE DONE RAPIDLY. CUTS ON TREE ROOTS SHALL BE SMOOTH AND CLEAN. THE TRENCH SHOULD BE BACKFILLED AS QUICKLY AS POSSIBLE TO PREVENT THE EXPOSED ROOTS FROM DRYING OUT AND THE TREE SHOULD BE WATERED IMMEDIATELY. IF TREES ARE TO REMAIN EXPOSED FOR MORE THAN FOUR TO SIX HOURS, THEY MUST BE COVERED WITH BURLAP AND KEPT MOIST AT ALL TIMES.
12. FOR TREES WITH A TRUNK DIAMETER IN EXCESS OF SIX INCHES, TUNNELING OR BORING SHOULD REPLACE TRENCHING ACCORDING TO THE FOLLOWING MINIMUM DISTANCES FROM THE FACE OF THE TREE TRUNK IN ANY DIRECTION.
13. THE BOOKLET "TRENCHING AND TUNNELING NEAR TREES" THAT IS PRODUCED BY THE NATIONAL ARBOR DAY FOUNDATION SHALL BE USED AS A GUIDE FOR ALL CONSTRUCTION AND EXCAVATION WORK AROUND TREES. THIS BOOKLET MAY BE OBTAINED BY CONTACTING THE NATIONAL ARBOR DAY FOUNDATION.
14. TREE CARE CONTRACTOR PROVIDING SERVICES SHOULD BE CURRENTLY LICENSED TO DO BUSINESS IN ALPINE, AND BE REGISTERED WITH THE UTAH DIVISION OF COMMERCIAL CODE, INSURED AGAINST PERSONAL INJURY AND PROPERTY DAMAGE, AND CERTIFIED AS AN ARBORIST WITH THE INTERNATIONAL SOCIETY OF ARBORICULTURE, PRIOR TO BEGINNING WORK ON TREE(S). THE TREE CARE CONTRACTOR SHALL CONTACT THE CITY'S URBAN FORESTRY DIVISION TO RECEIVE AN AUTHORIZING PERMIT IF REQUIRED.
15. TREES SHALL NOT BE USED TO SUPPORT ANY SCAFFOLDING, SIGNS, TEMPORARY UTILITY, OR ANY OTHER DEVICE. SIDEWALKS AND PAVING LEVELS SHOULD BE CONTOURED WHENEVER POSSIBLE TO AVOID ROOT CUTTING. IF DAMAGE OCCURS TO A PROTECTED TREE, IMMEDIATE CONTACT SHALL BE MADE WITH THE CITY FORESTER IN ORDER THAT WOUNDS CAN BE TREATED.
16. NO ELEVATION OR GRADE CHANGES CAN BE MADE AROUND THE DRIP ZONE OF THE TREES UNLESS WRITTEN APPROVAL IS GIVEN BY THE OWNER, LANDSCAPE ARCHITECT AND RECEPTION OF A ELEVATION/GRADE CHANGE PLAN.
17. EXCEPTIONS TO THE ABOVE GUIDELINES SHALL BE REVIEWED AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION.
18. TREES SHALL BE WATERED ACCORDING TO THE FOLLOWING GUIDELINES:
 - a. ESTABLISHED TREES NEED DEEP WATERING ONCE A WEEK WITH LOW PRESSURE TO ENSURE THAT THE GROUND IS SOAKED TO A DEPTH OF AT LEAST 12 INCHES.
 - b. YOUNG OR NEWLY PLANTED TREES NEED TO BE WATERED EVERY 3-4 DAYS.
 - c. TO KEEP WATER FROM EVAPORATING FROM THE SOIL AROUND THE TREE, APPLY AT LEAST TWO OR MORE INCHES OF ORGANIC MULCH (WOOD CHIPS OR MULCH) AROUND THE BASE OF THE TREES UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.

B. UNDERGROUND UTILITY WORK

1. TRENCHING SHOULD BE PERFORMED IN A MANNER AND LOCATION LEAST DAMAGING TO TREE ROOTS.
2. TUNNELING OR BORING SHOULD BE DONE WHENEVER POSSIBLE WHERE LARGE SCAFFOLD ROOTS ARE ENCOUNTERED, HAND DIGGING AND BRIDGING OF ROOTS SHALL BE DONE.
3. ANY CUTTING OF TREE ROOTS, OTHER THAN WHEN IN THE PROCESS OF TREE REMOVAL, SHALL GIVE DUE CONSIDERATION TO FUTURE WELFARE OF THE TREE. PROPER ACTION SHALL BE TAKEN SO AS TO PROTECT, PRESERVE, OR CORRECT THE ROOT PROBLEM.
4. THE "TRENCHING AND TUNNELING NEAR TREES" BOOK BY THE NATIONAL ARBOR DAY FOUNDATION SHALL BE USED AS A GUIDE FOR ALL CONSTRUCTION AND EXCAVATION WORK AROUND PROTECTED TREES.
5. EXCAVATION INVOLVING ROOT CUTS SHOULD BE DONE RAPIDLY. CUTS ON TREE ROOTS SHALL BE SMOOTH AND CLEAN. BACKFILL BEFORE THE ROOTS HAVE A CHANCE TO DRY OUT, AND WATER TREE IMMEDIATELY. IF TREE ROOTS ARE TO REMAIN EXPOSED FOR ANY EXTENDED PERIOD OF TIME, THEY MUST BE COVERED WITH BURLAP AND KEPT MOIST AT ALL TIMES.

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP																								
12-16-2016	UT16058	 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC. 1-800-662-4111 www.bluestakes.org	<h1>SMOOTH CANYON PARK PLAYGROUND</h1> <p>ALPINE, UTAH</p>	 ALPINE CITY 20 NORTH MAIN ALPINE, UTAH 84004	 PKJ DESIGN GROUP L.L.C. 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com	 EXISTING PROTECTION PLAN PRELIMINARY PLANS NOT FOR CONSTRUCTION LP-EXISTING																								
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ALPINE CITY COUNCIL AGENDA

SUBJECT: Fireworks Ban Map

FOR CONSIDERATION ON: April 10, 2018

PETITIONEER: Staff

ACTION REQUESTED BY PETITIONER: Approve the map for 2018

APPLICABLE STATUTE OR ORDINANCE: Recent state legislation HB 38

PETITION IN COMPLIANCE WITH ORDINANCE: Yes

INFORMATION: At the meeting of March 27th, David Church discussed recent legislation that changed where cities could ban fireworks. It expended the area around waterway from 100 feet to 200 feet. That change is reflected on the 2018 Fireworks Restriction map.

Also attached is the map from 2017.

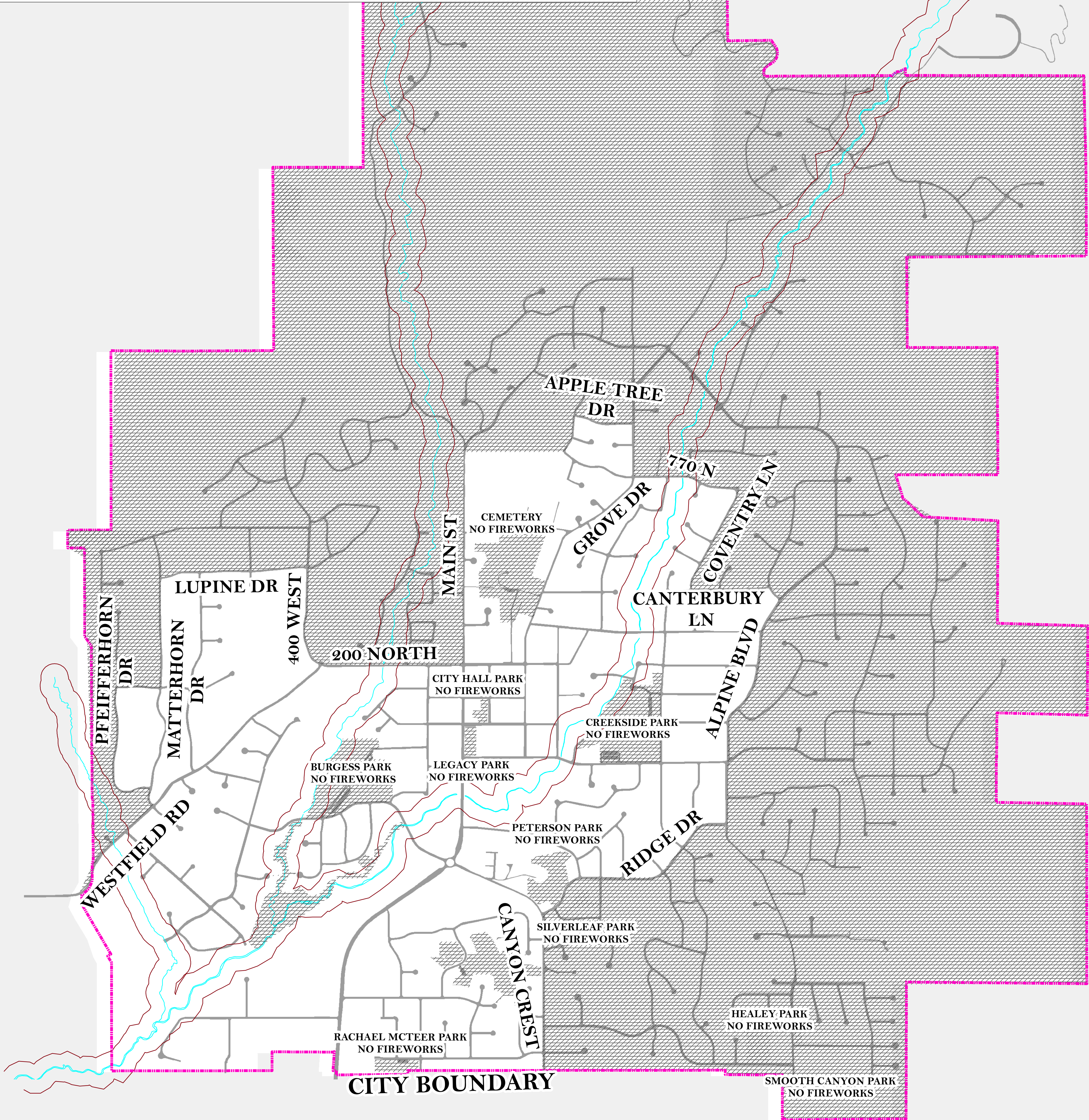
<p>RECOMMENDATION: Consider approving the updated Fire Restriction map for 2018.</p>

FIRE RESTRICTIONS EFFECTIVE 4/10/2018:

- NO FIREWORKS IN CITY PARKS
- NO FIREWORKS WITHIN 200' OF ANY STREAM BED
- ALL FIREWORKS ARE PROHIBITED IN THE AREAS DESIGNATED "FIREWORKS BAN 2018" AS SHOWN ON THIS MAP
- FOR THE UNMARKED AREA WITHIN CITY LIMITS, FOLLOW STATE LAWS REGARDING FIREWORKS
- FOR AREAS OUTSIDE THE CITY LIMITS, PLEASE REFER TO THE APPROPRIATE GOVERNING BODY FOR FIRE / FIREWORKS REGULATIONS

Legend

- Streams - Fort & Dry Creek
- 200' Stream Buffer
- Fireworks Ban 2018
- Other / County / F.S. Lands



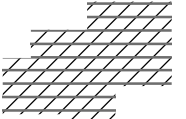




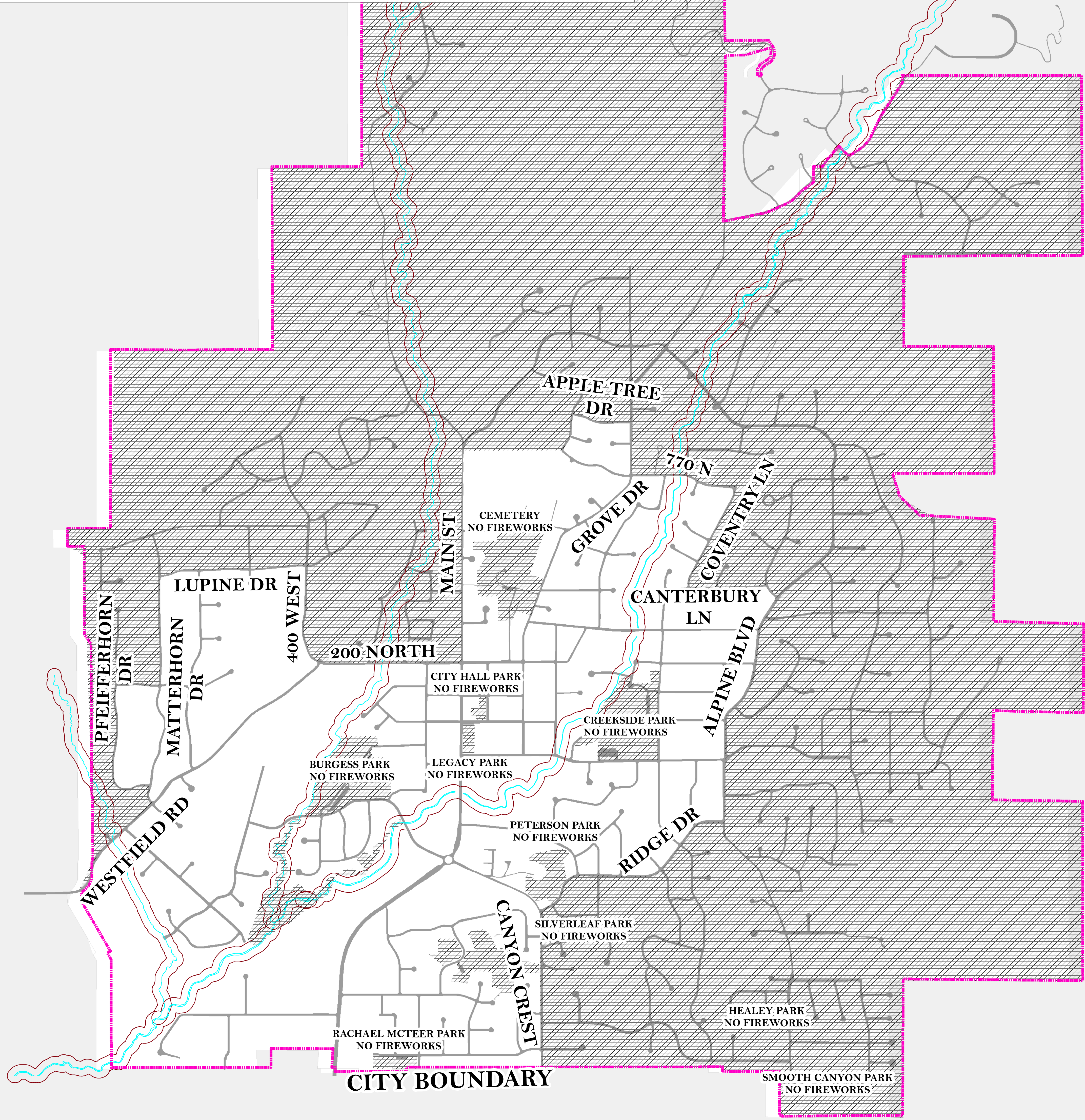
Alpine City FIRE RESTRICTIONS 2018

FIRE RESTRICTIONS EFFECTIVE 6/27/2017:

- NO FIREWORKS IN CITY PARKS
- NO FIREWORKS WITHIN 100' OF ANY STREAM BED
- ALL FIREWORKS ARE PROHIBITED IN THE AREAS DESIGNATED "FIREWORKS BAN 2017" AS SHOWN ON THIS MAP
- FOR THE UNMARKED AREA WITHIN CITY LIMITS, FOLLOW STATE LAWS REGARDING FIREWORKS
- FOR AREAS OUTSIDE THE CITY LIMITS, PLEASE REFER TO THE APPROPRIATE GOVERNING BODY FOR FIRE / FIREWORKS REGULATIONS

Legend

-  Streams - Fort & Dry Creek
-  100' Stream Buffer
-  Fireworks Ban 2017
- CITY**
-  Alpine
-  Other / County / F.S. Lands



UPDATED

Alpine City FIRE RESTRICTIONS 2017