



**AGENDA FOR THE WORK / STUDY MEETING
OF THE CITY COUNCIL
OF THE CITY OF SPRINGVILLE, UTAH
COUNCIL CHAMBERS, 110 SOUTH MAIN STREET
JULY 16, 2013 – 5:15 P.M.**

MAYOR AND COUNCIL DINNER – 4:45 P.M.

The Mayor and Council will meet in the Council Work Room for informal discussion and dinner. No action will be taken on any items.

CALL TO ORDER- 5:15 P.M.

COUNCIL BUSINESS

- 1) Minutes
- 2) Calendar
 - July 24 – Pioneer Day, City Offices Closed
 - July 29-August 3 – Springville World Folkfest
 - July 29-August 9 – Early Voting for the Primary, City Offices
 - August 6 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
 - August 13 – Primary Election Day (consider canceling Work/Study Meeting?)
 - August 20 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
 - August 27 – Board of Canvassers Meeting for the Primary Election
 - September 2 – Labor Day, City Offices Closed
 - September 3 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- 3) Discussion on this evening's Regular Meeting agenda items
 - a) Invocation – Cl. Packard
 - b) Pledge of Allegiance – Cl. Olsen
 - c) Consent Agenda
 1. Approval of all City purchase orders properly signed (Springville City Code §2-10-110(5))
 2. Approval of appointments to the Economic Advisory Committee – Mayor Clyde
 3. Approval of the Arts Commission grants – Charles Keeler, Recreation Director
 4. Approval of a Resolution appointing poll workers for the 2013 Primary Election – Venla Gubler, City Recorder
 5. Approval of a Resolution establishing the 2013 Municipal Voting Precincts and Polling Places for Springville City, Utah

This meeting was noticed in compliance with Utah Code 52-4-202 on July 11, 2013. Agendas and minutes are accessible through the Springville City website at www.springville.org/agendasminutes. Council Meeting agendas are available through the Utah Public Meeting Notice website at <http://www.utah.gov/pmn/index.html>. Email subscriptions to Utah Public Meeting Notices are available through their website.

In compliance with the Americans with Disabilities Act, the City will make reasonable accommodations to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Recorder at (801) 489-2700 at least three business days prior to the meeting.

THIS AGENDA IS SUBJECT TO CHANGE WITH A MINIMUM OF 24-HOURS NOTICE

4) **DISCUSSIONS/PRESENTATIONS**

- a) Parks
- b) Presentation of the Street Design Standards – Jeff Anderson

5) **MAYOR, COUNCIL, AND ADMINISTRATIVE REPORTS**

- a) Hardship Committee – Councilmember Dean Olsen, representative
- b) Springville World Folkfest Board – Councilmember Dean Olsen, representative

6) **CLOSED SESSION – TO BE ANNOUNCED IN MOTION**

The Springville City Council may temporarily recess the meeting and convene in a closed session to discuss pending or reasonably imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205

ADJOURNMENT

This meeting was noticed in compliance with Utah Code 52-4-202 on July 11, 2013. Agendas and minutes are accessible through the Springville City website at www.springville.org/agendasminutes. Council Meeting agendas are available through the Utah Public Meeting Notice website at <http://www.utah.gov/pmn/index.html>. Email subscriptions to Utah Public Meeting Notices are available through their website.

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**MINUTES FOR THE WORK/STUDY MEETING
OF THE CITY COUNCIL
OF THE CITY OF SPRINGVILLE, UTAH
MULTIPURPOSE ROOM, 110 SOUTH MAIN STREET
JUNE 11, 2013 – 5:15 PM**

6

8 The following are the minutes of the Work/Study Meeting of the Springville City
10 Council. The meeting was held on **Tuesday, June 11, 2013 at 5:15 p.m.** in the Springville City
12 Civic Center Multipurpose Room, 110 South Main Street, Springville, Utah. Adequate notice of
14 this meeting, as required by law, was posted in the Civic Center and on the City’s website, and
16 delivered to members of the Council, media, and interested citizens.

12

14 COUNCILMEMBER MARK PACKARD NOMINATED COUNCILMEMBER BEN
16 JOLLEY AS MAYOR PRO TEM. COUNCILMEMBER RICK CHILD SECONDED THE
18 MOTION, AND ALL PRESENT VOTED AYE.

16

18 Mayor Pro Tem Benjamin Jolley presided. In addition to Mayor Pro Tem Jolley, the
20 following were present: Councilmember Richard Child, Councilmember Mark Packard, City
22 Manager Troy Fitzgerald, Assistant City Administrator/Finance Director Bruce Riddle, Assistant
24 City Administrator/City Attorney John Penrod, and Administrative Assistant Jackie Nostrom.
26 Also present were: Golf Director Raymond “Sonny” Braun, Administrative Services Manager
28 Rod Oldroyd, Art Museum Director Dr. Rita Wright, Public Safety Director Scott Finlayson,
Building and Grounds Director Alex Roylance, Library Director Pamela Vaughn, Street
Superintendent Jason Riding, Recreation Director Chuck Keeler, Power Director Leon
Fredrickson, Community Development Director Fred Aegerter, Public Works Director Brad
Stapley, Assistant Librarian Ellen Wilson, and Assistant Librarian Hilary Smith. Mayor Wilford
Clyde, Councilmember Chris Creer, and Councilmember Dean Olsen were excused.

28

CALL TO ORDER

30

Mayor Pro Tem Jolley welcomed the Council, staff and audience as he called the meeting
to order at 5:15 p.m.

32

COUNCIL BUSINESS

34

1. Minutes

There were no minutes to approve.

36

2. Calendar

38

- June 18 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- July 2 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- July 4 – Independence Day, City Offices Closed

40

- July 9 – Work/Study Meeting 5:15 p.m.
- July 16 - Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- July 24 – Pioneer Day, City Offices Closed
- July 29-August 3 – Springville World Folkfest
- August 6 - Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.

Mayor Pro Tem Jolley noted the City Offices would be closed in observance of Independence Day.

DISCUSSIONS/PRESENTATIONS

a. Library

Assistant Librarian Ellen Wilson informed the Council that the Springville Library received a Mobile App Grant. She highlighted the features of the free app as she demonstrated how the mobile app functions. Some features include: scroll through books, download audio books, put books on hold, view due/past due books, renew books on the app, scan barcode at any bookstore and see the availability of the book at the Springville Library.

Mayor Pro Tem Jolley asked if the app was designed internally. Assistant Librarian Wilson indicated the app is through “Boopsie” because it was less expensive and the grant paid for the development of the app and that the Springville Library would be responsible for the \$1,300 annual maintenance charge. Mayor Pro Tem Jolley asked how long the app has been available. Assistant Librarian Wilson noted the app has been available for approximately one month. Councilmember Packard questioned the analytics. Assistant Librarian Wilson indicated there has been just over 100 downloads in the first month. Mayor Pro Tem Jolley suggested that information should be incorporated in the Library’s monthly report. Assistant City Administrator/City Attorney John Penrod recommended advertising the mobile app in the City Source.

Library Director Pam Vaughn informed the Council that Utah State awarded this grant to ten different libraries. Springville Library is the only applicant that followed through with the contract. Councilmember Mark Packard expressed his appreciation of the library and their achievement of creating the mobile app, as it will be a highly utilized feature.

Library Director Pam Vaughn compared the floor plans of the old and new library and noted where different services were offered for each. She indicated that staff had been analyzing the layout so the new location could serve the patrons effectively. Director Vaughn highlighted different systems and fixtures that were changed between the locations and showed a quick video comparing the librarians to “referees”. Mayor Pro Tem Jolley commended Director Vaughn on her usage of employees and thanked her for her presentation.

b. Solid Waste

Street Superintendent Riding gave a brief synopsis of the Garbage and Recycling staff and routes. He indicated that currently Springville City is servicing 822 residents with recycling services. He elaborated on the importance of having reliable and efficient trucks in the fleet.

2 Superintendent Riding noted significant service decreases because of snow, wind, cans being too
close together, cans being too close to vehicles, and especially when breakdowns occur. He
4 informed the Council of other services that the Solid Waste Department offers; “Spring Clean-
Up”, a Transfer Station coupon, as well as addressing garbage can issues on top of their regular
daily duties.

6 Street Superintendent Riding invited the Council to participate in operating a garbage
truck and emptying a garbage can properly. Mayor Pro Tem Jolley and Councilmember Packard
8 accepted the invitation.

10 3. **MAYOR, COUNCIL, ADMINISTRATIVE REPORTS**

12 a. **Discussion with Department Directors**

12 Councilmember Mark Packard expressed his concern with Art City Days Carnival being
so close to the bank, and extended his gratitude to the Arts Commission in granting his request to
14 relocate the carnival boundary line along 200 South. City Administrator Troy Fitzgerald
indicated that Councilmember Chris Creer wanted him to relay all of the positive comments he
16 received regarding Art City Days. Mayor Pro Tem Jolley added that a downtown business
owner commended the City on having Art City Days downtown. He noted it is hard for
18 business, but it is great as a Springville City resident.

City Administrator Troy Fitzgerald informed the Council that the Springville City Hall
20 Multipurpose room is the City’s Emergency Operations Center (EOC). The Room was
constructed for multiple phones and data ports in case of an emergency. He noted that any
22 employee can take their phone off their desk and plug it in anywhere in the building and the
computer system would recognize the phone. The multipurpose room was specifically designed
24 to be divided so the Mayor and Council would be in close proximity to the command center,
while having any necessary meetings.

26 City Administrator Troy Fitzgerald handed out the web analytics beginning June 1st and
ending June 11th. He highlighted that the Springville City website was viewed over 84,000 times
28 during that time period.

Councilmember Rick Child relayed a patron’s concern regarding the excessive parking
30 and the lack of supervision at the splash pad. City Administrator Troy Fitzgerald thanked the
Police Department’s efforts to help with incidents related to the splash pad. Public Safety
32 Director Scott Finlayson added that he has urged department staff to be extra cautious around the
splash pad. City Administrator Troy Fitzgerald observed more patrons have discovered the
34 parking lot at City Hall. Public Works Director Brad Stapley asked if cameras have been
installed. City Administrator Fitzgerald responded that the cameras were not currently
36 connected.

Mayor Pro Tem Jolley indicated that he has been approached by a neighbor in the “West
38 fields” who’s property connected to a detention basin. He shared his concern regarding the
astronomical cost relating to the watering and maintenance of the basin. He proposed looking at
40 subsidizing or changing their water rates to help the property owners because the basin is

essentially an empty lot. City Administrator Troy Fitzgerald indicated that detention basins were allowed as part of a development, and part of that included the stipulation that the basins would be privately owned and maintained. Councilmember Rick Child noted he would be willing to take a closer look at the situation, and asked how many parcels have a detention basin attached. City Administrator Fitzgerald estimated that there are less than a dozen.

Councilmember Mark Packard indicated he was open to looking into parcels, but compared the scenario to just purchasing a larger lot. Mayor Pro Tem Jolley asked if the basin was considered public property. City Administrator Troy Fitzgerald responded that the basin is considered private property and a fence could be constructed. This was verified. Assistant City Administrator/City Attorney John Penrod added that the detention basins would be abandoned once the regional basin is developed. City Administrator Fitzgerald added that money was allocated in the budget for this capital improvement. Mayor Pro Tem Jolley thanked the Council for their willingness to look further into the detention basin water rates.

Assistant City Administrator/City Attorney John Penrod informed the Council that the East Bay RV Park hearing is scheduled for June 28th at 10:00 a.m. and invited the Council to attend.

Mayor Pro Tem Jolley extended his gratitude to Recreation Director Chuck Keeler and Building and Grounds Director Alex Roylance on Art City Days being so successful. He also commended Public Safety Director Scott Finlayson on the police presence downtown. Recreation Director Chuck Keeler noted the carnival revenue went up 50% and the vendor's revenue increased significantly as well.

Public Works Director Brad Stapley informed the Council that the Street Department will start chip sealing on 400 South from Main Street heading East. He added that all major roads will be chip sealed. He noted that the 400 South compound will be paved soon. Crews have been actively relocating machinery to the Electrical Operations Center. Director Stapley informed the Council that paving is scheduled to start June 17th and will take four weeks to complete. City Administrator Troy Fitzgerald added that noise and dust is a concern for neighbors, and every effort needs to be made to help alleviate any of their concerns.

b. Commission, Board, and Committee Minutes

- i. Arts Commission minutes of April 9, 2013
- ii. Library Board of Trustees Minutes of April 11, 2013
- iii. Parks and Recreation Board minutes for April 25, 2013
- iv. Power Board minutes of April 10, 2013
- v. Spanish Fork/Springville Airport Board minutes of May 2, 2013
- vi. Water Board minutes for April 9, 2013

There was no discussion of the board minutes.

c. Mayor and Council Reports

- i. Utah County Council of Governments – Mayor Clyde, Representative

ii. Utah Valley Economic Development Commission

2

4 **4. CLOSED SESSION, IF NEEDED – TO BE ANNOUNCED IN MOTION**

6 *The Springville City Council may temporarily recess this meeting and convene in a*
6 *closed session to discuss pending or reasonably imminent litigation, and the purchase, exchange,*
8 *or lease of real property, as provided by Utah State Code Annotated §52-4-205*

8 There was no closed session.

10 **ADJOURNMENT**

12 COUNCILMEMBER CHILD MOVED TO ADJOURN THE WORK/STUDY
12 MEETING AT 6:36 P.M. COUNCILMEMBER PACKARD SECONDED THE MOTION,
AND ALL VOTED AYE



**AGENDA FOR THE REGULAR MEETING
OF THE CITY COUNCIL
OF THE CITY OF SPRINGVILLE, UTAH
COUNCIL CHAMBERS, 110 SOUTH MAIN STREET
JULY 16, 2013 – 7:00 P.M.**

CALL TO ORDER

INVOCATION AND PLEDGE

APPROVAL OF THE MEETING'S AGENDA

APPROVAL OF THE MINUTES

MAYOR'S COMMENTS

PUBLIC COMMENT: *Audience members may bring any item not on the agenda to the Mayor and Council's attention. Please complete and submit a "Request to Speak" form. Comments will be limited to two or three minutes, at the discretion of the Mayor. State Law prohibits the Council from acting on items that do not appear on the agenda.*

CONSENT AGENDA*

1. Approval of all City purchase orders properly signed (Springville City Code §2-10-110(5))
2. Approval of appointments to the Economic Advisory Committee – Mayor Clyde
3. Approval of the Arts Commission grants – Charles Keeler, Recreation Director
4. Approval of a Resolution appointing poll workers for the 2013 Primary Election – Venla Gubler, City Recorder
5. Approval of a Resolution establishing the 2013 Municipal Voting Precincts and Polling Places for Springville City, Utah

REGULAR AGENDA

6. Consideration of an Ordinance regarding the regulation of ground source heat pump installations within ground water protection zones – Brad Stapley, Public Works Director
7. Consideration of a contract for the 2014 Art City Days Fireworks – Charles Keeler, Recreation Director
8. Consideration of a bid award and contract for the construction of Phase IB, Springville Pressurized Irrigation project – Jeff Anderson, City Engineer

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- Venla Gubler, City Recorder

The next regular Council Meeting will be held on August 6, 2013 at 7:00 p.m. in the Civic Center Council Chambers, 110 South Main Street, Springville, unless otherwise noticed. In compliance with the Americans with Disabilities Act, the City will make reasonable accommodations to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Recorder at (801) 489-2700 at least three business days prior to the meeting.

*The Consent Agenda consists of items that are administrative actions where no additional discussion is needed. When approved, the recommendations in the staff reports become the action of the Council. The Agenda provides an opportunity for public comment. If after the public comment the Council removes an item from the consent agenda for discussion, the item will keep its agenda number and will be added to the regular agenda for discussion, unless placed otherwise by the Council.

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9. Consideration of an Interlocal Agreement for chip sealing between Elk Ridge, Goshen, Mapleton, Payson, Salem, Santaquin, Spanish Fork, and Springville for the purpose of roadway resurfacing – Brad Stapley, Public Works Director
10. Discussion and follow-up on additional natural gas hedges – Leon Fredrickson, Power Director and Matt Hancock, Generation Superintendent
11. Consideration of a policy that establishes a uniform development and approval process for City policies and procedures – Troy Fitzgerald, City Administrator

MAYOR, COUNCIL AND ADMINISTRATIVE REPORTS

CLOSED SESSION

12. *The Springville City Council may temporarily recess the regular meeting and convene in a closed session to discuss pending or reasonably imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205*

ADJOURNMENT

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STAFF REPORT

DATE: July 8, 2011
TO: Honorable Mayor and City Council
FROM: Venla Gubler, City Recorder
SUBJECT: DESIGNATION OF POLLING PLACES AND APPOINTMENT OF POLL WORKERS

RECOMMENDED MOTION

Motion to APPROVE RESOLUTION # _____ ESTABLISHING THE 2013 MUNICIPAL VOTING PRECINCTS AND POLLING PLACES FOR SPRINGVILLE CITY
Motion to APPROVE RESOLUTION # _____ DESIGNATING AND APPOINTING POLL WORKERS AND THEIR ALTERNATES TO SERVE IN THE MUNICIPAL PRIMARY ELECTION ON AUGUST 13, 2011 AND SETTING THE COMPENSATION FOR THEIR SERVICES

BACKGROUND

The Election Code of the Utah State Code authorizes the City Council to combine voting districts and designate polling places in those districts. It also requires the City Council to appoint the poll workers and to set their compensation at no less than the County pay level.

DISCUSSION

Utah County has designed several precincts to meet at certain schools to vote. The Springville City plan combines those districts into one combined district for the Primary Election. Turnout for the Primary is generally light. Combining districts allows one set of poll workers to serve in each combined district. It usually keeps the poll workers busier with not as much waiting for voters to show up.

Poll workers from previous years were contacted and a notice put in the City newsletter to solicit workers for this year. We received the applications and assigned them as near to their home district as possible. Please see the attached.

FISCAL IMPACT

The Election has been budgeted for in the current budget.

Venla Gubler
City Recorder

Attachments

CITY COUNCIL AGENDA
July 16, 2013

RESOLUTION NO. # _____

A RESOLUTION ESTABLISHING THE 2011 MUNICIPAL VOTING PRECINCTS AND POLLING PLACES FOR SPRINGVILLE CITY, UTAH.

WHEREAS, Section 20A-5-301(2), Utah State Code, provides that the City Council may combine one or more Utah County voting precincts into one municipal voting precinct if they designate the location and address of each precinct; and

WHEREAS, the State Code also provides that the polling place shall be as near as practical to the middle of the combined area of the precinct;

NOW THEREFORE, BE IT RESOLVED by the City Council of Springville City, Utah, that the attached document setting forth the voting precincts and polling places for Springville City is hereby adopted.

APPROVED this 16th day of July, 2013.

Wilford W. Clyde, Mayor

ATTEST:

Venla Gubler, City Recorder

Precinct	2013 Polling Location	County Precinct Number	# of Registered Voters
Consolidated Precinct A	Cherry Creek Elementary	SP01	1,180
Consolidated Precinct B	Westside Elementary	SP02, SP11, SP16, SP17	2,067
Consolidated Precinct C	Springville City Offices	SP03, SP13, SP15, SP18	1,491
Consolidated Precinct D	Art City Elementary	SP04, SP08, SP12	2,497
Consolidated Precinct E	Sage Creek Elementary	SP09	1,385
Consolidated Precinct F	Springville High School	SP06, SP07	1,993
Consolidated Precinct G	Springville Junior High School	SP05	810
Consolidated Precinct H	Brookside Elementary	SP10, SP14	1,761
		Total Voters in Springville as of November 2012 election	13,184
		# of Voters in last election	9,880

RESOLUTION #2013-_____

A RESOLUTION DESIGNATING AND APPOINTING POLL WORKERS AND THEIR ALTERNATES TO SERVE IN THE MUNICIPAL GENERAL ELECTION ON NOVEMBER 3, 2009; SETTING THE COMPENSATION FOR THEIR SERVICES AND PROVIDING FOR OTHER RELATED MATTERS.

WHEREAS, Section 20A-5-602, Utah State Code, sets forth the procedure for appointing poll workers and their alternates, designating their compensation and setting forth their duties; and

WHEREAS, the City Council of Springville City, Utah desires to make the appointments, set their compensation and provide for other matters relating to them.

NOW THEREFORE, BE IT RESOLVED by the City Council of Springville City, Utah as follows:

Section 1. Appointment of Poll Workers and Alternates. The persons named as poll workers and alternates on the list attached hereto are hereby appointed to serve in the Primary Election on August 13, 2013 and the Municipal General Election on November 5, 2013. The list contains the name, address, voting precinct, and telephone number of all such persons appointed.

Section 2. Availability of Election Judge List. The list attached hereto and a list of the name, address, voting precinct and telephone numbers of those individuals appointed by the City Recorder shall be available in the City Recorder's Office for inspection and examination during business hours by any voter of the City and any voter may make a copy of it.

Section 3. Compensation. The poll workers or alternates shall receive \$100.00 for serving during each Election Day. The poll worker from each precinct delivering the election returns, official register book, ballot boxes, and other election papers and supplies to the City Recorder's Office shall receive an additional \$10.00 for driving from the polling place to the Springville City Civic Center.

Section 4. Certificate and Acceptance of Appointment. The City Recorder is directed to issue to each poll worker and alternate a certificate under the City Recorder's official seal certifying the appointment. A certificate of appointment shall be mailed to each poll worker and alternate and they have seven days to sign the acceptance of appointment certificate and return it to the City Recorder.

APPROVED this 16th day of July, 2013.

Wilford W. Clyde, Mayor

ATTEST:

Venla Gubler, City Recorder

CONSOLIDATED PRECINCT A - Cherry Creek Elementary, SP01

Name

Leland Chapman	801-489-4747
Donna McKay	801-491-6046
Vickie Orton	801-489-5787

CONSOLIDATED PRECINCT B - Westside Elementary, SP02, SP11, SP16, SP17

Name

Joan Barnett	801-489-6117
* Nicholas Cronk	801-489-6238
Karalyn Cronk	801-489-6238

CONSOLIDATED PRECINCT C - CITY OFFICES, SP03, SP13, SP15, SP18

Name

LuAnn Hansen	801-376-6627
Jerriane Emory	385-201-9887
Wilma Roberts	801-709-9666

CONSOLIDATED PRECINCT D - Art City Elementary, SP04, SP08, SP12

Name

Marva Latimer	801-491-6026
Linda Hanson	801-491-5020
Mildred Eldridge	801-489-8158

CONSOLIDATED PRECINCT E - SAGE CREEK ELEMENTARY, SP09

Name

Don Harvey	801-489-5077
Jean Harvey	801-489-5077
Jeanine Franson	801-489-9054

CONSOLIDATED PRECINCT F - Springville High School, SP06, SP07

Name

* Karl Barton 801-489-5517
Lisa Pace 801-367-3094
Charmian Taylor 801-489-6676

CONSOLIDATED PRECINCT G - SPRINGVILLE JR HIGH, SP05

Name

Hazel Hulse 801-792-7442
Camille Cope 801-319-3788
Pauline Boyer 801-489-9362

CONSOLIDATED PRECINCT H - BROOKSIDE ELEMENTARY, SP10, SP14

Name

Deborah Fredrickson 801-489-3913
Douglas Bradford 801-830-0990
Loris Hayes 801-489-7457

ALTERNATES

Nanette Averett
David Decker
Sharon Decker

COUNTING JUDGES

Christine Oldroyd
Sara Anderson
Amy Dover
Karen Breau
Robert Haymond
Christine Baker



DATE: July 10, 2013
TO: Mayor and City Council
FROM: Bradley D. Stapley, Director of Public Works
SUBJECT: GROUND SOURCE HEAT PUMPS

RECOMMENDED ACTION

Adopt Ordinance _____ which restricts the drilling of and use of ground source heat pump technology within Springville City's culinary water well source protection zones.

GOALS, OBJECTIVES AND STRATEGIES AT ISSUE

The Springville City General Plan discusses "Community Services and Facilities" and contains the following goal:

To provide functionally effective community facilities and services to support a safe, healthy, and vibrant community life.

Objective 5 of this goal is to:

Provide a water system that is safe, economical, and meet the needs of Springville City now and in the future.

Strategy 5I within this objective encourages City staff to:

Consider ways to ensure water collection is kept free from either accidental or intentional contamination.

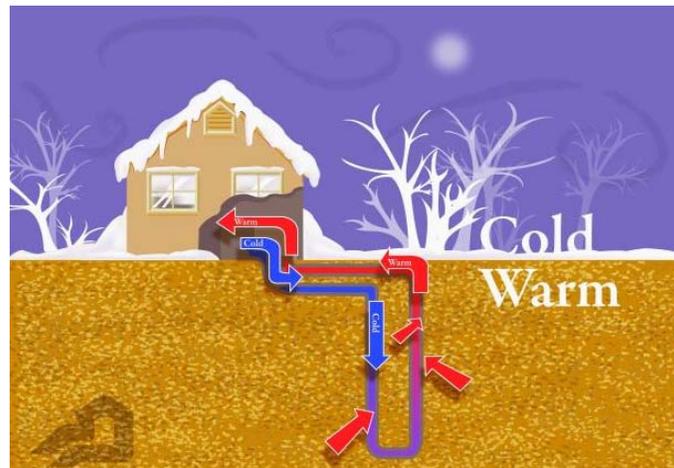
This ordinance establishes a written means to ensure the City's groundwater sources are kept free from accidental contamination from a ground source heat pump system failure.

DISCUSSION

On May 8, 2013 Springville City was approached by a local drilling company who requested permission to install a **Ground Source Heat Pump**¹ system in a residence in Mapleton. Ground Source

¹ Ground Source Heat Pumps are also known as *Geothermal Heat Pumps, Geo-Exchange Units, Ground Coupled Heat Pumps, and/or Ground Loop Heat Exchangers.*

Heat Pumps are electrically powered systems that use the earth's relatively constant temperature to provide heating, cooling, and hot water for homes and commercial buildings.



Fluid flows in a loop through pipes that extend underground. The fluid is either heated or cooled by the ambient underground temperature. It then travels back to the building where it cools or heats the air within.

If not located, installed and operated correctly, geothermal wells can contaminate drinking water aquifers, watershed areas, wetlands, streams, etc. This is due to the fact that the re-circulating fluid used in the pipes usually contains chemical additives such as methanol, ethanol, or propylene glycol. These chemicals pose a health risk if they come in contact with drinking water. If the underground pipes develop a leak, these chemicals can be released into the drinking water aquifer.

Ground Source Heat Pump systems must be maintained and pressure tested on a regular basis to ensure that leaks are not occurring.

The City of Salt Lake has been working on the Ground Source Heat Pump issue for over two years and has developed guidelines for the installation, operation and maintenance of Ground Source Heat Pump systems within their drinking water watershed (see Exhibit "B" attached). The City of Salt Lake prohibits the drilling of wells greater than 30 feet deep for Ground Source Heat Pump systems within Drinking Water Source Protection Zones 1 through 4.

AT-ISSUE

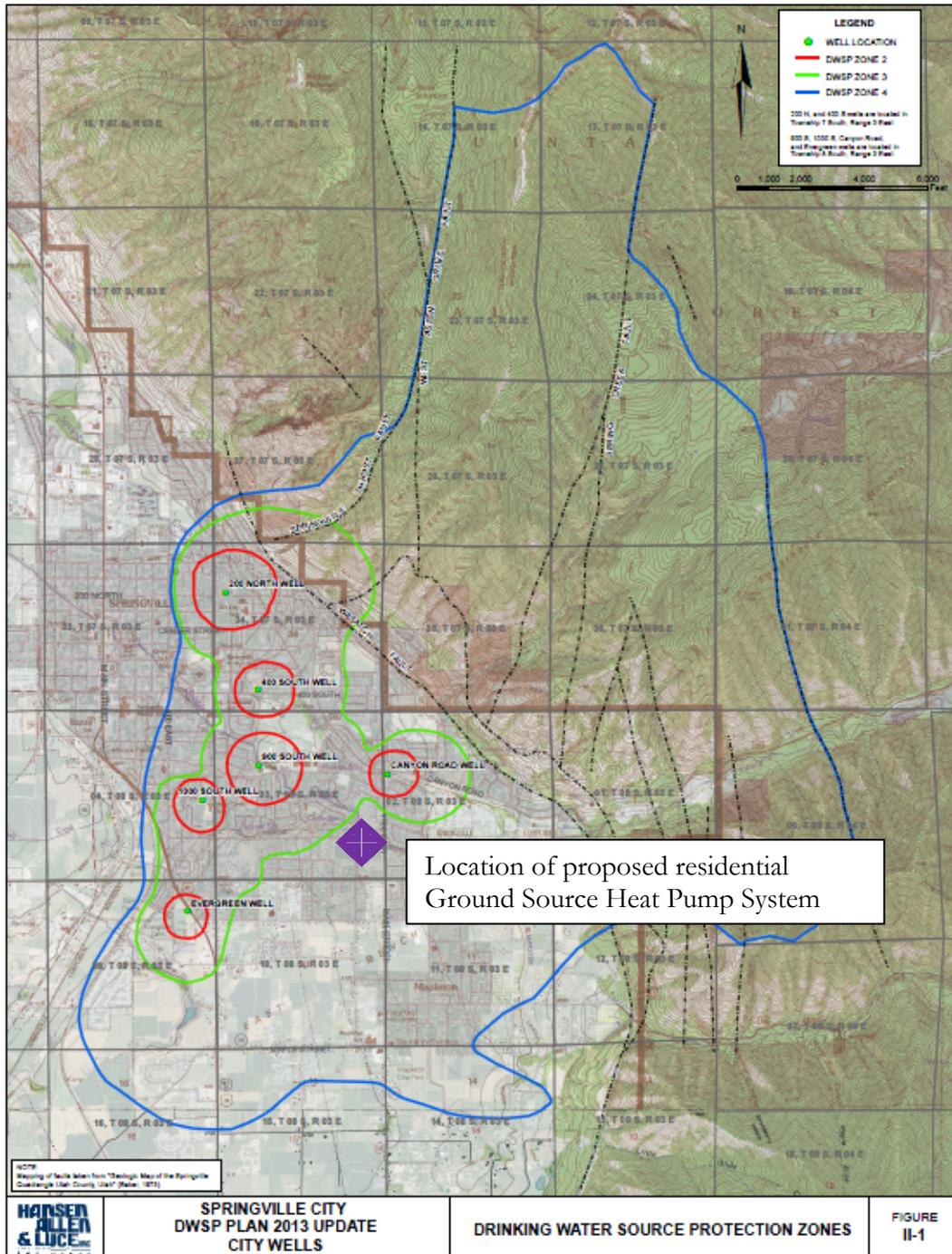
The local drilling company requesting to install the Ground Source Heat Pump system had planned to drill four (4) closed loop heat exchange wells a depth of 300 feet each at a residence in Mapleton. These wells would have been located within 4,570 feet of the City's Canyon Road culinary water well, and less than 6,000 feet from three additional City culinary water wells (Evergreen, 9th South and 10th South wells).

The proposed location of the closed loop heat exchange wells is within the Drinking Water Source Protection (DWSP) Zones of all of the above listed culinary water wells. A DWSP Zone is a defined geographic area that rings the point location of a culinary water well. The State Division of Drinking Water requires Zones 1 through 4 be physically defined based on the underground geology and the corresponding movement of groundwater through the geologic structure.

The Drinking Water Source Protection (DWSP) Zone extents are defined as follows:

- Zone 1: 100-foot radius around each well
- Zone 2: 250 day groundwater travel time
- Zone 3: 3 year groundwater travel time
- Zone 4: 15-year groundwater travel time

The City has defined the Source Protection Zones for all of its culinary water wells as shown below in Figure II-1. The proposed location of the closed-loop heat exchange wells is shown below as a purple diamond.



CITY CODE

Title 4, Chapter 10 of the Springville City Code discusses the ordinance known as the “Drinking Water Source Protection Ordinance.”

The purpose of this ordinance is:

“. . . to ensure the provision of a safe drinking water supply to the residents of the City of Springville by the establishment of drinking water source protection zones surrounding the wellheads and springs for all wells and springs used by public water systems and by the designation and regulation of property uses and conditions that may be maintained within such zones.”

Zone 4 is defined as:

“The area within a fifteen (15) year groundwater travel time or margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground-water source, or the groundwater divide, whichever is closer.”

Title 4, Chapter 10, Paragraph 106 New Uses, regulates “new uses” within the established DWSP zones. All “new uses” are to be reviewed by the City’s Design Review Committee under the following premise:

“Any use which, in the opinion of the City, cannot meet design standards or cannot develop a management plan to adequately protect the groundwater system from contamination shall be prohibited.”

PROPOSED CODE CHANGE

It is proposed that the following change be made to the ordinance with regard to Ground Source Heat Pumps (changes shown in bold and underlined):

4-10-102 Definitions.

When used in this ordinance the following words and phrases shall have the meanings given in this Section:

- (1) “City” means the City of Springville.
- (2) “Design Standard” means a control that is implemented by a potential contamination source to prevent discharges to the groundwater. Spill protection is an example of a design standard.
- (3) “Drinking Water Source Protection (DWSP) Zone” means the surface and subsurface area surrounding a groundwater source of drinking water supplying a public water system through which contaminants are reasonably likely to move toward and reach such groundwater source.

(4) "Groundwater Source" means any well, spring, tunnel, or other underground opening from or through which groundwater flows or is pumped from subsurface water-bearing formations.

(5) "Management Plan" means a City approved plan to manage existing contaminant sources which conforms with the City's adopted Drinking Water Source Protection plans.

(6) "Pollution source" means point and/or non-point source discharges of contaminants to ground water or potential discharges of the liquid forms of "extremely hazardous substances" which are stored in containers in excess of "applicable threshold planning quantities." Examples of possible pollution sources include, but are not limited to, the following: storage facilities that store the liquid forms of extremely hazardous substances, septic tanks, drain fields, class V underground injection wells, landfills, open dumps, landfilling of sludge and septage, manure piles, salt piles, pit privies, drain lines, and animal feeding operations with more than ten animal units.

(7) "Ground Source Heat Pump System" means a central heating and/or cooling system that pumps heat to or from the ground. It uses the earth as a heat source in the winter or a heat sink in the summer. These systems reduce operational costs of heating and cooling systems by taking advantage of moderate ground temperatures.

4-10-106 New Uses.

(1) All new uses within the established DWSP zones shall be reviewed by the City's Design Review Committee. Any use which, in the opinion of the City, cannot meet design standards or cannot develop a management plan to adequately protect the ground water system from contamination shall be prohibited.

a. Ground Source Heat Pump Systems are prohibited within DWSP zones 1 through 4.

ALTERNATIVES

(NOT RECOMMENDED) Allow Ground Source Heat Pump Systems within the City's Drinking Water Source Protection Zones.

FISCAL IMPACT

This ordinance change has no fiscal impact to the City.

ORDINANCE NO. _____

PROHIBITION OF GROUND SOURCE HEAT PUMP SYSTEMS

WHEREAS, the purpose of the Drinking Water Source Protection Ordinance is to ensure the provision of a safe drinking water supply to the residents of the City of Springville by the establishment of drinking water source protection zones surrounding the wellheads and springs for all wells and springs used by public water systems, and by the designation and regulation of property uses and conditions that may be maintained within such zones.

WHEREAS, if not located, installed and operated correctly, Ground Source Heat Pump Systems may contaminate drinking water aquifers, watershed areas, wetlands, streams, etc. This is due to the fact that the re-circulating fluid used in the pipes usually contains chemical additives such as methanol, ethanol, or propylene glycol. These chemicals pose a health risk if they come in contact with drinking water. If the underground pipes develop a leak, these chemicals can be released into the drinking water aquifer.

NOW THEREFORE, it is hereby ordained by the City Council of Springville City as follows:

Section I. The Springville City Code **§4-10-102 Definitions** and **§4-10-106 New Uses** are amended to read as follows:

4-10-102 Definitions.

When used in this ordinance the following words and phrases shall have the meanings given in this Section:

- (1) "City" means the City of Springville.
- (2) "Design Standard" means a control that is implemented by a potential contamination source to prevent discharges to the groundwater. Spill protection is an example of a design standard.
- (3) "Drinking Water Source Protection (DWSP) Zone" means the surface and subsurface area surrounding a groundwater source of drinking water supplying a public water system through which contaminants are reasonably likely to move toward and reach such groundwater source.
- (4) "Groundwater Source" means any well, spring, tunnel, or other underground opening from or through which groundwater flows or is pumped from subsurface water-bearing formations.
- (5) "Management Plan" means a City approved plan to manage existing contaminant sources which conforms with the City's adopted Drinking Water Source Protection plans.

(6) "Pollution source" means point and/or non-point source discharges of contaminants to ground water or potential discharges of the liquid forms of "extremely hazardous substances" which are stored in containers in excess of "applicable threshold planning quantities." Examples of possible pollution sources include, but are not limited to, the following: storage facilities that store the liquid forms of extremely hazardous substances, septic tanks, drain fields, class V underground injection wells, landfills, open dumps, landfilling of sludge and septage, manure piles, salt piles, pit privies, drain lines, and animal feeding operations with more than ten animal units.

(7) "Ground Source Heat Pump System" means a central heating and/or cooling system that pumps heat to or from the ground. It uses the earth as a heat source in the winter or a heat sink in the summer. These systems reduce operational costs of heating and cooling systems by taking advantage of moderate ground temperatures.

4-10-106 New Uses.

(1) All new uses within the established DWSP zones shall be reviewed by the City's Design Review Committee. Any use which, in the opinion of the City, cannot meet design standards or cannot develop a management plan to adequately protect the ground water system from contamination shall be prohibited.

a. Ground Source Heat Pump Systems are prohibited within DWSP zones 1 through 4.

Section II. All ordinances, resolutions, or parts thereof, in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

Section III. This ordinance shall become effective one day after publication hereof in the manner required by law.

Section IV. The City Recorder shall cause this ordinance or a short summary hereof, to be published in the *Daily Herald*, a newspaper published and of general circulation in the City.

Adopted by the City Council of Springville, Utah this _____ day of _____,
20_____,

Wilford W. Clyde, Mayor

Attest:

Venla Gubler, City Recorder

Salt Lake County Heat Pump Design and Installation Guideline

1. Introduction

Ground source heat pumps, also known as geothermal heat pumps or heat exchange units, can be a highly efficient renewable technology; however, they have the potential to irreversibly impair ground water drinking water sources in Salt Lake County.

Drinking water in Salt Lake County comes from a combination of surface and ground waters. Surface waters along the Wasatch Front include City Creek, Parleys Creek, Big Cottonwood Creek, and Little Cottonwood Creek. Stored surface waters include the Little Dell and Mountain Dell systems, as well as the Jordanelle and Deer Creek systems on the backside of the Wasatch Front.

Groundwater in Salt Lake County comes from a network of underground aquifers. Although it's difficult to see these aquifers, they underlie most of the valley and are a vital source of drinking water for Salt Lake County. Once these drinking water sources are contaminated, remediation is either very costly or unfeasible. It is the responsibility of the Salt Lake Valley Health Department and individual public water systems to protect these essential resources.

The purpose of this document is to provide Best Management Practices (BMP's) for the design, installation, location and maintenance of ground source heat pumps (GSHP) in order to protect the ground water sources of drinking water in Salt Lake County. These BMP's are designed to help prevent contamination of the deep aquifers, and cross contamination between the shallow and deep aquifers throughout Salt Lake County.

In August 2010 a drinking water well, located in Salt Lake County, was contaminated during an installation of a nearby GSHP system. As drilling operations concluded, an increase in sedimentation and iron levels in the drinking water resulted in closure of the well. If this event would have occurred earlier in the summer, temporary or permanent water use restrictions may have been placed on water users in the area. This type of contamination could have been avoided if Health Department and Planning ordinances and recommendations had been followed or if the contractor had contacted the local public water system.

2. Definitions

<i>Term</i>	<i>Definition</i>
ACS	American Chemical Society
AHWL	Annual high water level
Antifreeze	A water based solution with an additive to modify the freezing point of the liquid. Antifreeze solutions are used in the secondary loop of a geothermal heat pump system.
Applicant	The party seeking a permit for a GHSP system.
Aquifer	A geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

Aquitard	A geologic formation that limits the flow of ground water from one aquifer to another. An aquitard is generally composed of clay or non-porous rock with low hydraulic conductivity.
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASTM	American Society for Testing and Materials
Certified Geo-Exchange Designer (CGD)	Training and certification for installation personnel offered by IGSHPA.
Closed-loop	Utilizes two loops, a primary refrigerant loop contained in the appliance cabinet and a secondary loop buried in the ground. A re-circulating antifreeze solution exchanges heat through a heat exchanger with the secondary water loop that is buried underground. Closed loop systems can be installed vertically or horizontally.
Decommission	To take out of service. A formal, documented process by the State of Utah, Division of Water Rights is required to decommission a GSHP. GSHP systems that are not active, or are in a state of disrepair are required to be decommissioned.
Drinking Water Source Protection Zones (DWSP Zones)	Means the specified surface and subsurface area surrounding a groundwater source supplying a public water system, through which contaminants are reasonably likely to reach the groundwater source of drinking water. See Salt Lake County Water Source Protection Ordinance.
Drinking water well	A well installed to extract water from a zone of saturation below the ground surface that meets water quality standards for human consumption.
FCOZ	Salt Lake County Planning and Development Division's "Foothills and Canyons Overlay Zone"
Ground Source Heat Pump (GSHP), Geothermal heat pumps, Heat exchange units	A GSHP is a central heating and/or cooling system that pumps heat to or from the ground. It uses the earth as a heat source in the winter or a heat sink in the summer. These systems reduce operational costs of heating and cooling systems by taking advantage of moderate ground temperatures.
Groundwater source	Any well, spring, tunnel, adit, or other underground opening from or through which ground water flows or is pumped from subsurface water-bearing formations.
High purity	Meets American Chemical Society (ACS) reagent grade standards
Horizontal system	Horizontal systems are less than 30 feet below ground surface but below frost elevations. May be manifold or "slinky loop" configurations. These systems generally disturb a greater surface area and may not be suitable for areas where it is desirable to minimize ground disturbance.
IGSHPA	The International Ground Source Heat Pump Association
NSF	National Science Foundation. Often, for materials in contact with drinking water the NSF will combine with the American National Standards Institute (ANSI) to set standards.
Open-loop	Groundwater is extracted from one well and pumped through a heat exchanger inside the heat pump. Heat is either extracted or added by

	the primary refrigerant loop, and then the water is returned to a separate well and re-injected into the same aquifer.
P.E.	Licensed Professional Engineer
PE pipe	See polyethylene pipe
Perched aquifer	An aquifer that lies on top of another aquifer separated by an impermeable layer of substrate.
Polyethylene pipe	Polyethylene pipe (PE), suitable for secondary loop system for re-circulating solution in heat pump systems.
Primary loop	The refrigerant loop located in the appliance cabinet.
Public Water System (PWS)	A system, either publicly or privately owned, providing water through constructed conveyances for human consumption and other domestic uses, which has at least 15 service connections or serves an average of at least 25 individuals daily at least 60 days out of the year and includes collection, treatment, storage, or distribution facilities under the control of the operator and used primarily in connection with the system, or collection, pretreatment or storage facilities used primarily in connection with the system but not under the operator's control (see 19-4-102 of the Utah Code Annotated).
Reagent grade	Also known as the American Chemical Society (ACS) Reagent Grade—This designates a high purity chemical that meets minimum impurity specifications as determined by ACS. A Certificate of Analysis should be available from the supplier.
Re-circulating fluid	Generally refers to the antifreeze solution that is used in the secondary loop (ground to heat exchanger).
Riparian corridor	The active stream channel including the areas on both sides of the channel within 100 feet of the annual high water level.
Secondary loop	The re-circulating fluid loop that is buried in the ground.
Septic drain fields	Also known as a leach field, an arrangement of trenches with gravel and perforated pipe used to drain and provide some treatment for liquids from a septic tank. Includes required replacement drain field. See Utah Code R 317-4.
SLCPU	Salt Lake City Department of Public Utilities
SLVHD	Salt Lake Valley Health Department
Stormwater detention/retention ponds	A pond designed to protect a specific area against flooding by catching runoff water from higher elevation areas and storing it for a limited period of a time.
Superfund sites	An uncontrolled or abandoned place where hazardous waste is located, possibly affecting local ecosystems or people.
Surface water	All water which is open to the atmosphere and subject to surface runoff (see also section R309-515-5(1)). This includes conveyances such as ditches, canals and aqueducts, as well as natural features.
Tailings	Well drilling tailings is the material that is created by the drilling process. It typically contains a combination of native soil and rock as well as any drilling fluids to aid with the drilling operation.
Vertical system	Systems with wells extending more than 30 feet below ground surface. Vertical system can be either opened or closed loop configurations.

Watershed	Shall mean the entire area in any canyon above the intake of a waterworks system within which water drains into any stream, tributary, or aquifer within Salt Lake County, including the anti-degradation segments of each stream identified as such in the Utah State Water Quality Standards. These areas are subject to Source Water Protection rules and Salt Lake Valley Health Department – Health Regulation #14-Watershed Regulation and SLC Watershed Ordinance 17.04.
Wetlands	Those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands can be both natural or artificial, and perennial or ephemeral.

3. Recommended System Designs

Closed loop systems, both horizontal and vertical, are recommended in Salt Lake Valley. If installed and maintained correctly, these systems pose the least amount of risk to drinking water aquifers.

4. Non-recommended System Designs

- a. Open loop systems are strongly discouraged as there is a high potential for contaminants to be injected into drinking water aquifers and/or surface waters.
- b. Pond and river systems are not recommended due to the risk that the underwater portion of the system can leak re-circulating fluid into surface waters. The release of heat into a natural water body may also damage natural aquatic ecosystems.
- c. Direct exchange systems where the refrigeration loop is buried directly in the soil pose a significant risk of ground water contamination.

5. Drilling Location

- a. Salt Lake County restricts GSHP wells drilled in Source Protection Zones 1-4 as defined in the Salt Lake County Water Source Protection Ordinance 9.25. (See appendix B)
 - i. Wells less than 30 feet deep are prohibited in Zones 1 and 2 and restricted in zones 3 and 4.
 - ii. Wells greater than 30 feet deep are prohibited in Zones 1 through 4.
- b. **Contact SLVHD to determine if proposed wells sites are located in a source protection area. Phone number 385-468-3862, meferguson@slco.org or rlund@slco.org.**
- c. SLVHD and SLCPU strongly discourage GSHP wells from being installed or drilled to any depth:
 - i. In protected watershed areas as defined by SLCPU and SLVHD Watershed Regulation 14. Special mitigation measures may be required in watershed areas to reduce the risks of drinking water contamination.
 - ii. In wetland areas.
 - iii. In a delineated riparian corridor.
 - iv. In known superfund sites or through known contamination plumes.
 - v. Through an aquitard.
 - vi. In stormwater detention and retention ponds.
 - vii. In artesian areas.

- d. Restrictions may apply if any portion of the parcel is located in a SLCPU designated primary and/or secondary recharge area.
- e. **Contact SLCPU to determine if proposed wells sites are located in a SLCPU designated primary and/or secondary recharge area. Phone number 801-483-6750, tracie.kirkham@slcgov.com or brad.stewart@slcgov.com**

6. Vertical Well Depth

In areas where an aquitard is suspected, care should be taken not to drill through the impermeable layer that separates the shallow aquifer from the drinking water aquifer beneath. Because shallow aquifers are closer to the surface, they generally collect a variety of contaminants. Drilling through the aquitard that separates the two aquifers creates a pathway for these contaminants to enter the drinking water aquifer.

7. Required Permits

State Well Drilling Permit

- a. The applicant should first contact the State of Utah-Division of Water Rights to obtain a well drilling permit.
- b. The State will then contact SLVHD and SLCPU to receive recommendations regarding the location of GSHP wells. SLVHD and SLCPU will determine if the proposed wells are located in one of the DWSP Zones.
 - i. If wells are located in any of the a DWSP Zones, the applicant will receive a letter from the Division of Water Rights informing them that drilling in the proposed area to depths greater than 30 feet may be prohibited. In order to drill in the proposed area, the applicant should contact the PWS that is being affected to seek approval. The PWS may either decline the request or provide stipulations that should be met in order for wells to be approved. If the PWS is willing to consider GSHP wells contact should be made with SLVHD to receive information about acquiring a land use agreement. (See Salt Lake County Water Source Protection Ordinance 9.25.110.B)

SLCPU Permit

- c. If proposed GSHP wells are located within SLCPU service areas, source protection zones as defined under Salt Lake City Ordinance 21A.34.060, or in the protected watershed, permit applications should then be submitted to SLCPU. A permit application should include:
 - i. A site plan (Drawn to scale, preferably 1 to 20 feet).
 - 1. Show property lines, location of existing structures on the property, Show location and number of wells, equipment and piping. Any special property considerations, such as designated no disturb areas or non-buildable areas,
 - 2. Show required set-backs as identified in Appendix A.
 - ii. Documentation that GSHP systems meet IGSHPA standards. The design procedure should follow a recognized methodology such as presented in:
 - 1. Closed-Loop/Ground-Source Heat Pump Systems: Installation Guide, GSHPA Publication, Oklahoma State University.
 - 2. Data Design Manual for Closed-Loop/Ground-Source Heat Pump_Systems, ASHRAE.
 - iii. Soil thermal value and loop length calculations according to IGSHPA and ASHRAE standards.

- iv. Heating and cooling capacity of equipment including calculations used to determine heating and cooling needs.
- v. Operating pressures and flow rates.
- iv. Re-circulating fluids and chemical additives (Please see #11 Circulation System).

Other Applicable Permits

Permits may also be required from the local jurisdiction for installing mechanical equipment, which includes heating and cooling systems in a building, home, or other structure.

8. Installation Personnel and Training Required

- a. System designers should have the following qualifications:
 - i. Residential systems up to 20 tons require a P.E., a certified CGD, or an IGSHPA certified installer with current credentials.
 - ii. Commercial and large residential systems require a P.E., or a certified CGD, in addition, all designs must be stamped by a registered Utah P.E.
- b. The well driller should be a licensed well driller in the state of Utah.
- c. The loop contractor and ground heat exchanger fabricators should have certification, such as from IGSHPA, Certified Geo-exchange Designer (CGD) or similar training, experience and certification.

9. Ground Source Heat Pump Design and Materials

- a. The GSHP design should be clearly documented as complying with manufacturer's standards.
- b. The only acceptable pipe material for the underground buried portion of the ground heat exchanger is polyethylene (PE).
 - i. The pipe and fittings of the buried system should be warranted by the manufacturer for ground source heat pump service.
 - ii. Sufficient information should be permanently marked on the length of the pipe that allows the pipe to be properly identified.
 - iii. Specification of PE pipe will be by cell classification number and should meet the appropriate ASTM specifications.

10. Pipe Joining Methods

- a. When possible a continuous loop is recommended. This greatly reduces the risk of potential leaks and breaks.
- b. Only factory joints should be used on vertical piping.
- c. Acceptable methods for joining buried pipe systems are by socket, sidewall, electro, or butt fusion processes. Other methods are not acceptable. Follow manufactures specifications specifically for ground source heat pump systems.

11. Flushing, Purging, Pressure and Flow Testing

- a. All fusion joints and loop lengths shall be checked to verify that no leaks have occurred due to fusion joining or shipping damage.

- b. All loops will be pressure tested with culinary water before installation into the borehole (either a vertical bore [vertical loop] or horizontal bore [horizontal loop]) or into a trench (horizontal loop).
- c. Heat exchangers should be tested hydrostatically at 150% of the pipe design rating or 300% of the system operating pressure if this value is the smaller of the two.
- d. No visible leaks should occur within a 30 minute period. The Philips Hydrostatic Pressure Test II method is suggested.
- e. Each supply and return circuit shall be flushed and purged in the forward and reverse directions with water at a minimum velocity of 2 ft/sec (0.6096 m/sec) through each piping section. Flow must be maintained for a minimum of 15 minutes in each direction to remove all debris and air. To verify that all air is removed from the system, the return water valve to the tank shall be closed. A change in the level of fluid in the purge pump tank during pressurization indicates air still trapped in the system. The heat exchanger system purging shall be completed separately from the building system.
- f. Flow rates and pressure drops will be compared to calculated values to assure that there is no blockage or kinking of any pipe. If actual flow rate or pressure drop values differ from calculated design values by more than 10 percent, the problem shall be identified and corrected.
- g. Before connection (header) trenches are backfilled, heat exchangers shall be pressure tested with water at 100 psi for 1 hour with no observed drop in pressure (greater than 10 psi OR +/-10%). Site conditions may dictate backfilling prior to testing with water. A minimum air pressure of 45 psi shall be maintained on the ground heat exchanger during backfilling and until the final pressure test with water can be conducted.
- h. After the conclusion of the ground heat exchanger pressure test, the ground heat exchanger shall be left filled with clean water and maintained under pressure until final connection to the building system.

12. Post-Installation Report

Within 30 days of completed installation, provide the following to SLVHD:

- a. A copy of the well log. If the system has more than one well, provide a copy of the log for the deepest well and provide GPS coordinates for the final location of all wells.
- b. Results for pressure and flow testing.
- c. Results can be emailed to: meferguson@slco.org or rlund@slco.org

13. Pipe Placement and Backfilling

- a. Follow all applicable standards and rules as they pertain to buried pipe systems.
- b. Backfill in accordance with IGSHA guidelines and ASTM D 2774 "Underground Installation of Thermoplastic Pressure Pipe" and pipe manufacturer's specification.
 - i. Pipe should be placed a minimum of 6 inches from the edge of the trench.
 - ii. Bedding should be placed 6 inches below, on top of, and on the sides, surrounding the horizontal piping. Bedding should be free of rocks with sharp edges, debris and contamination. Sand or similar material is preferred (no pea gravel).
 - iii. The trench backfill material should be clean engineered fill, or other approved material. Rock greater than 2 inches is not recommended.
 - iv. Return beds in narrow trenches should be partially backfilled by hand to properly support the pipes and prevent kinking.
- c. All piping systems and materials placed in the well zone should be NSF approved.

- d. Tailings from well drilling operation should be properly disposed.
- e. Bentonite based full length grouting is required prior to pressure testing on vertical portion of the systems.
- f. It is recommended that horizontal portions of the system be flow and pressure tested before backfilling.
- g. Tracer wire and tracking tape should both be placed to mark the location of all horizontal pipes.

14. Circulation System

These recommendations are intended to cover corrosion-inhibited, biodegradable, liquid antifreeze materials as received at the job site.

- a. Acceptable re-circulating fluids include:
 - i. Potable Water (recommended)
 - ii. A blend of potable water and propylene glycol, typically a 20% solution
 - iii. A blend of potable water and 10% or less methanol
 - iv. A blend of potable water and 10% or less ethanol
- b. The solution type should meet the American Chemical Society's (ACS) high purity grade.
- c. In cases where the re-circulating fluid is considered flammable, the re-circulating fluid should be diluted with water to a point that it is nonflammable before it can be taken indoors.
- e. Manufacturer's recommendations should be followed when charging the secondary loop with re-circulating fluid.
- f. Any additional additives such as corrosion inhibitors should meet ASTM D1384 corrosion inhibition requirements and should biodegrade to less toxic compounds.
- g. The fluid should be at least 90% biodegradable.
- g. All systems should be labeled and identified at the service ports. The labels should be permanent and should include the following information:
 - i. Company name
 - ii. Company phone number and responsible party or person
 - iii. Service date
 - iv. Re-circulating fluid type
 - v. Concentration
 - vi. Pressure
 - vii. Direction of flow
 - viii. Any additives, if used

15. Recording, Operations and Maintenance

- a. The following information will be added to the property record kept by Salt Lake County:
 - i. Site plans showing well locations and depth
 - ii. Heating and cooling capacity of system
 - iii. Type and concentration of re-circulating fluid and refrigerant
 - iv. Year system was put into service
 - v. Location of buried piping
 - vi. Installation company name and contact information
- b. If extra fluid is added, submit the date and the amount of added fluid to the SLVHD.

16. Decommissioning well

Improperly decommissioned vertical loop piping can serve as an uncontrolled invasion point for ground water contaminants. This may constitute a hazard to public health, safety, welfare, and to the preservation of the ground water resource.

- a. Decommission a heat pump system by removing all re-circulating fluid, filling full length pipes and tubing with potable water or grout, and capping and sealing. Re-circulating fluid solution and refrigerants should be disposed of at a hazardous waste disposal facility.
- b. Decommissioning must comply with State Rule R655-4-14, Abandonment of Wells. Documentation of the decommissioning action will be added to the property records.

Appendix A

The following table describes the minimum recommended distances between components of the GSHP and pertinent ground features.

Setbacks	Feet
AHWL for any watercourse (<i>live or ephemeral stream, river, irrigation canal, subsurface drain canal, etc.</i>)	100*
Individual or nonpublic water source (grouted wells and springs)	100*
Septic drain field (primary and replacement)	100
Lake, pond, reservoir, stream	100*
Dry wash, gulch, gully	25*
Stormwater detention/retention pond (<i>underground or surface</i>) and rain garden from the high-water level	15
Culinary water supply line	10
Foundation of any building (<i>including garages and outbuildings</i>)	10
Swimming pool wall (<i>subsurface</i>)	10
Property line	5

*Ground features marked with an asterisk indicate that the setback also applies to the disturbance area created during installation.

Note: Exceptions to set backs listed in Table A will be reviewed on a case by case basis.

Appendix B

Regulations, standards, and specifications:

- a. Utah Code R 317-4
- a. Salt Lake Valley Health Department –Health Regulation #14-Watershed Regulation
- b. Salt Lake County Water Source Protection Ordinance
- c. Salt Lake County –Planning and Development Division -Foothill Canyon Overlay Zone (FCOZ)
- d. Salt Lake City Watershed Ordinance Chapter 17.04
- e. IGSHPA (http://www.igshpa.okstate.edu/pdf_files/Standards2009s.pdf)
- f. Closed-Loop/Ground-Source Heat Pump Systems: Installation Guide, GSHPA Publication, Oklahoma State University.
- g. ASTM specifications for PE pipe (hydraulic conductivity ASTM C-177)
- h. ANSI/NSF grouting material Standard 60
- i. NSF piping systems
- j. ACS standard
- k. ASHRAE standards (soil thermal value and loop length calculations)
- l. ASTM D1384 for re-circulating fluid additives

Appendix C

Contact Information:

- a. Utah State Division of Water Rights, 801-538-7240
- b. Salt Lake County Planning and Development, 801-468-2000
- c. Salt Lake Valley Health Department, Bureau of Water Quality and Hazardous Waste, 385-468-3862
- d. Salt Lake City Department of Public Utilities, 801-483-6750



STAFF REPORT

DATE: July 16, 2013
TO: Honorable Mayor and City Council
FROM: Chuck Keeler, Director of Recreation
SUBJECT: 2014 ART CITY DAYS FIREWORKS

RECOMMENDED MOTION

Move to approve payment to Fireworks West in the amount of \$13,000 for the 2013 Art City Days fireworks and enter into an agreement with Fireworks West to provide fireworks services for the Art City Days celebrations in 2014, 2015 and 2016.

SUMMARY OF ISSUES/FOCUS OF REPORT

The focus of this report is to:

1. Recommend early payment to Fireworks West for the 2014 Art City Days fireworks display.
2. Retain Fireworks West as the Art City Days Fireworks Provider through June, 2016.

BACKGROUND

On June 26, 2013 staff published "Request for Proposals" for fireworks services for the 2014, 2015 and 2016 Art City Days Fireworks displays. After reviewing the State Fire Marshal's list of authorized fireworks providers, staff sent RFPs to the 4 companies capable of providing the requested services. The four companies were: Lantis, Fireworks West, Vortex and Firestorm. In addition to insurance limits and other standard contractual requirements, each vendor was to:

1. State that the show budget would be \$13,000 each year but a 5% increase would be allowed for years 2 and three of the contract.
2. Indicate the "Shot Count" for each of the fireworks sizes ranging from 1.5 inches to 5.0 inches.
3. Give us a list of three references from other communities they serve with a similar show size and budget.

On July 9, 2013 the proposal period closed. Staff received three sealed proposals from the following companies.

	Shot Count	Annual Fee	References
a. Firestorm	2,580	\$25,000	3
b. Vortex	4,540	\$13,000	0
c. Fireworks West	6,157	\$13,000	3

*Payment required in (each July prior to the June show).

ALTERNATIVES

Council discretion.

Name	Chuck Keeler
Title	Recreation Director
Attachments	Proposals from Fireworks West, Firestorm and Vortex.

FIREWORKS WEST INTERNATIONALE

P.O. BOX 294 * Logan, UT 84323-0294 * (435) 753-2070 * Fax (435) 753-0833

Customer Name Springville 2014
 Buyer's Name Chuck Keeler 801-489-5181 Cell 801-420-1586
 Billing Address 50 South Main
 City, State, Zip Springville, Utah 84663
 Ship When Deliver day of display
 Date of Show TBD
 Contract Price \$13,000.00
 Terms Due July 15, 2013 discount reflected in above prices
 Phone 801-489-5181 cell 420-1289 Fax 801-489-7217
 Type of Show **Electrically Fired by Fireworks West**

ITEM DESCRIPTION QNTY

3" Display Shells

3" Assortment A 72-3" Shells, 36 Different Effects 3
 3" Assortment B 72-3" Shells, 36 Different Effects 3
 3" Shell 1-3" Shell 60
 3" Finale Chain(10) 3" Assorted Shells (10 per Chain) 10

4" Display Shells

4" Shell 1-4" Shell 125
 4" Finale Chain 4" Assorted Shells (5 per Chain) 3

5" Display Shells

5" Shell 1-5" Shell 70
 5" Finale Chain 5" Assorted Shells (5 per Chain) 5

1.5"& 2" Shells & Effects /MULTISHOT TUBE & CAKE ITEMS

600's Fan Shaped Color to Crackling 2
 300's Silver Whirl w/Report 1
 600's Four Seasons 3
 1000's "V" Color Stars 2

ADDITIONAL ITEMS

30- 3" comets 20
 Choreography 1

SUBTOTAL

PRE-PAY DISCOUNT Included %
 SHIPPING Included
 PYROTECHNICIANS FEE Included
 Choreography Included
 ELECTRIC MATCH Included
 DISPLAY INSURANCE \$5,000,000.00
 ADJUST TO BUDGET

TOTAL

Handwritten calculations:
 1
 216
 2160
 60
 100

 592
 140
 25 95
 1200
 300
 1800
 2000

 5300
 (622 circled)
 30

Your show will include the following:

Opening Salvo

Main Body:

5,300 - 1.5" & 2" Shells and Effects. These are Excellent Multi Shot Items.
 492 - 3" Assorted Colors and Special Effects
 125 - 4" Assorted Colors and Special Effects
 70 - 5" Assorted Colors and Special Effects

Grand Finale!

100 - 3" Assorted Finale Shells - Rapid Fire!
 15 - 4" Assorted Finale Shells - Rapid Fire!
 25 - 5" Assorted Finale Shells - Rapid Fire!

The product we have chosen to include in this bid is the very best available. You will find a great variety of shells and effects that may include rings, crackling, reports, color change, palms, pistils, shell of shells, whistles, comets, crossettes, bees, scattering, peonies, chrysanthemums, stars, dahlias, and other special effects that will make your show a memorable one.

TERMS AND CONDITIONS

Sponsor agrees to procure and furnish a suitable place to display the said fireworks, and to secure all police, fire, local and state permits, and to arrange for any security bonds as required by law in their community when necessary, and agrees to furnish necessary police, fire and sponsor's protection, for proper crowd control, auto parking and proper supervision in clearing of debris after the display. Buyer agrees to comply with NFPA safety standards. This order is subject to acceptance by Fireworks West Internationale. This merchandise is sold upon the condition that the buyer indemnify the seller from any civil action occasioned from the handling, storage, use or sale of the merchandise, including court costs and attorney fees. Late fees of 2% per month carrying charge, \$50 minimum, will be assessed on all past due accounts, buyer agrees to pay all collection costs.

AUTHORIZED SIGNATURE

DATE

BUYER

Authorized Signature

Dean Burch Seller Date 7/8/2013

Special Note: This is a 3 year contract and will be prepaid 1 year in advance with a 2.5 Percent increase each of the following two years.

FIREWORKS WEST *Internationale*

Mailing Address: P.O. Box 294 • Logan, Utah 84323-0294

Shipping Address: 910 North 3200 West • Logan, Utah 84321

435-753-2070 • Fax 435-753-0833

References

Randy Brailsford
Mayor- Salem, UT
801-423-2770 ext. 201

Dani Bills
City of Herriman Events
801-557-0345

Kent Allen
City of Orem Purchasing
801-229-7131

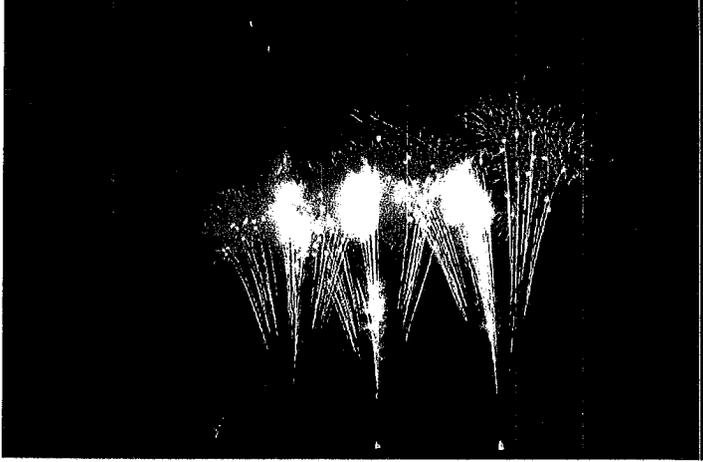
FIRESTORM

Pyrotechnics, Inc. Springville Utah

Fireworks PROPOSAL

We propose the following fireworks display

Moderate Field of View/Expanded Mortar Field and Fall-out Area - \$25,000

Effect	Qty	
3" Mortar	700	
4" Mortar	400	
5" Mortar	80	
6" Mortar	0	
8" Mortar	0	
Custom Cakes Under 3"	1400 Shots	
Total Effects	2580	
Finale Mortars	354	

We would be privileged to provide you a more detailed, customized firework display based on your desired outcomes. We also can suggest promotional features that can generate additional revenue and budget or off-set show costs. We can provide specific unique effects after a display site visit has been conducted.

Weather Delay

Firestorm will provide a 48 hour weather delay, if awarded the contract.

INSURANCE

Firestorm has a \$2,000,000.00 general liability insurance policy, with a \$2,000,000.00 general aggregate and a \$5,000,000.00 umbrella. Firestorm will provide a certificate of insured to the Sponsor, if awarded a contract.

EXPERIENCE AND QUALIFICATIONS

FIRESTORM

Pyrotechnics, Inc. Springville Utah

Fireworks PROPOSAL

Firestorm's President, Chief Pyrotechnic, and trainer of all employees, Mr. Steve Shriber, has 18 years of big and small show experience. He has been the head pyrotechnician in charge of many municipal and private shows like:

- FIS Freestyle Ski World Cup three times,
- Kearns Fire, Water, & Ice – 2006, 2012
- Houston, Texas -Freedom Over Texas Fourth of July
- Phoenix, Arizona -Phoenix Fabulous Fourth of July six times
- and many more

Mr. Shriber has also produced private, commercial shows for Stadium of Fire in Provo (6 years), Utah; The Disney Corporation, Walt Disney World, Florida; and the Pro Rodeo Association. He is the only pyrotechnician to have displayed in Lake Powell National Park and yearly delivers a charity show to the Boy Scouts of America in Uinta National Forest, Maple Dell camp.

REFERENCES

1. Brian Wall, Mayor Mapleton, Utah (801) 798-0722
2. Scott Spenser, Fire Chief Payson, Utah (801) 465-5252
3. Phil Brown, Chairman, Utah (Strawberry Days Rodeo 2011) (801)787-3824

TECHNICIANS AND SAFETY

Firestorm will provide one qualified and licensed Display Operator certified by the State of Utah responsible to oversee the safe setup and show delivery by a highly trained crew of operators.

Firestorm Display Operators are trained to NFPA 1123 standards as well as 27 CFR Subchapter C 555 and 49 CFR regarding safe shipping and handling of explosives and hazardous materials.

Firestorm will provide an experienced crew to assist in the setup and firing of the display. We will provide the names of crew members upon request. We are also happy to work with local, qualified and certified pyrotechnicians to support our program.

Firestorm is required by the Department of Transportation to have a strict drug and alcohol testing program as well as a strict hiring program. Firestorm employees must past these requirements and a background check.



July 8, 2013

Chuck Keeler
Springville Recreation Department
443 South 200 East
Springville, Utah 84663

Dear Chuck:

Thank you for giving us the opportunity to provide the fireworks display for your Springville Art City Days event. Held on the second Saturday of June 2014,2015,2016 It would be an honor to provide the fireworks display and and be a part of your celebration.

Included in this proposal will be: The necessary insurance, Federal and State licenses, transportation, fireworks, all of the product materials and equipment, crew and a State licensed Pyrotechnic Display Operator to manage, and fire the display. The display will be conducted in compliance with NFPA code 1123 for display fireworks and the local Authority having jurisdiction. The program listed in this proposal will be 100% electrically fired.

To take every advantage of the huge variety of effects included in your show we use innovative firing equipment that we have developed and produced exclusively for our company. Along with our specialized equipment we carefully hand select each size, color, and effect to give your show an artistic performance. These techniques keep the performance fresh and exciting, keeping the sky full and clear from smoke as possible getting the most from the effect of each shell.

For example, your show will include the following firing techniques:

1. Pairs shot in "X" and "V" patterns: Identical or complementary "tailed" aerial shells shot from a distance apart crossing in the middle of the air and then breaking in unison. "Tailed" aerial shells shot at opposing angles moving outward from each other then breaking in unison.
2. Larger shells are shot individually to get the most out of there more sophisticated performance.
3. Specials: Volleys of five or ten identical or complementary shells including either aerial star shells, mines, comets, or salutes widely spaced out from each other and launched simultaneously or in short cadence which fill the sky as they break in unison or short staccato for different and dazzling effects.
4. Multi shot battery: Sometimes called "cakes" or "low level barrages" These items produce a continuous ground up effect for an extended amount of time.
5. False Finales: Give the momentary illusion that the show is over. The viewers are surprised and pleased when the show continues as it gives the feeling that the show lasts longer.
6. The Finale: When the actual finale is fired, we spread the finale shells to the maximum distance allowable away from each other. We also "fan" the shells out which expands the width of the area in the sky that the shells break. By doing this each shell receives the largest individual portion of sky possible so the effect of each shell can be seen. Otherwise the shells "walk" on each other or get lost in the smoke of the previous shells diminishing their effect.

We will take into consideration: audience location, Fallout zone, and natural obstructions to provide the best visual display for the largest audience viewing area available at your particular location.

The following show is designed specifically for your event. With a budget of **\$13,000.00** (thirteen thousand dollars) per show.

Required fallout zone =350 feet in every direction or 700 feet diameter

MAIN SHOW :

1" to 2" shells and effects shot in 25 Multi Shot "Barrages or Cakes" =4,000

3 inch shells shot in pairs = 300

4 Inch shells shot individually = 150

5 Inch shells shot individually = 90

SPECIALS: (will be shot during the Main show)

3 inch shells = 10-10 Shot Specials = 100 shells

FINALE: (RAPID FIRE)

3 inch shells = 100

4 inch shells = 25

5 inch shells = 15

Multi 120, Shot Cake =1

TOTAL SHELL COUNT

3 Inch=500

4 Inch = 175

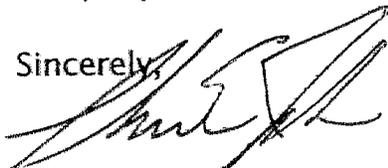
5 Inch = 105

Multi shot "Cakes" = 26 (1 TO 2 INCH SHELLS AND EFFECTS) 4,000

Please keep in mind that in that we can adjust the amount and size of the shells. We can also adjust to meet your artistic input.

Thank you once again for giving us the opportunity to be your fireworks company. Please call with any concerns, discussions, or questions.

Sincerely,



Chuck Johnson
President



STAFF REPORT

DATE: July 8, 2013

TO: Mayor and City Council

FROM: Jeffrey L. Anderson, City Engineer

SUBJECT: **SPRINGVILLE PRESSURIZED IRRIGATION SYSTEM,
PHASE 1B – INFILL LINES**

RECOMMENDED ACTION

Motion to:

- Award the Springville PI System, Phase 1B – Infill Lines project to the lowest responsible bidder, XXXXXXXXXX, in the amount of \$XXXXXXXX and authorize the Director of Public Works to issue a Notice to Proceed for the project, and
- Authorize the Director of Public Works to issue Change Orders or adjustments to quantities of the unit price items, as needed, not to exceed 10% of the contract amount.

SUMMARY OF ISSUES/FOCUS OF ACTION

On April 20, 2010, the City Council approved a motion to submit and have the Mayor sign an application for the Central Utah Water Conservancy District (CUWCD) Water Conservation Credit Program for the Springville City Pressurized Irrigation System. In that meeting the pressure irrigation system was discussed at length and the City Council determined that it was in the best interests of the City to proceed forward with the grant application. Since then the following milestones have occurred:

- September 30, 2010 – The City was notified that the CUWCD Prioritization Committees recommends that the City receive \$9 million in Section 207 grant funding contingent upon the dedication of 3,000 acre-feet of SUVMWA water to CUWCD for in-stream flows. The grant has typically been capped at \$5 million dollars per application but the committee recommended our application be funded for \$9 million provided the City dedicates the water.
- October 19, 2010 – City Council approves the dedication of 3,000 acre-feet of Springville allotted SUVMWA water to CUWCD in conjunction with the Water Conservation Credit Program grant.
- November 18, 2010 – SUVMWA Board approves the dedication of 3,000 acre-feet of Springville allotted SUVMWA water to CUWCD in conjunction with the Water Conservation Credit Program grant.
- July 5, 2011 - The City was notified that we had been approved for funding from the CUWCD Water Conservation Credit Program grant for the Springville City

CITY COUNCIL AGENDA

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Pressurized Irrigation System Project. The agreement was sent to the City and it specified that the City would receive \$9 million in Section 207 grant funding, with \$3 million being funded in FY2012, \$3million in FY 2013 and \$3 million in FY 2014.

- May 13, 2011 – Lee Wimmer, Program Manager with CUWCD, emailed the City and announced that the recent budget turmoil in Washington resulted in Springville’s \$3,000,000 being cut from the CUWCD budget for the 2012 fiscal year. Lee committed that CUWCD is standing behind their tentative agreement with us and they still anticipate getting the \$9,000,000 to Springville in calendar years 2013, 2014 and 2015.
- December 12, 2011 - CUWCD sends the City a revised contract/agreement between Springville City Corporation and the Central Utah Water Conservancy District to provide funding for the Springville City Secondary System Project as part of the Water Conservation Credit Program grant. The agreement has adjusted the funding dates to fund \$3 million dollars per fiscal year for years 2013, 2014 and 2015.
- May 1, 2012 – The Mayor signs the agreement between the City and CUWCD to provide funding for the Springville City Secondary Water System Project as part of the Water Conservation Credit Program grant.
- June 21, 2013 – City placed Springville PI System, Phase 1B – Infill Lines project out for bid.
- June 26, 2013 – CUWCD Board of Directors approves the FY 2013-14 budget which includes the first \$3 million of the grant funding.

SCOPE OF WORK

The full grant funded PI project includes the construction of a new 36” distribution line from the mouth of Hobbler Creek Canyon to 950 West. The proposed alignment of the pipeline would be River Bottom Road /800 South to 100 East. At 100 East it would move north to 700 South where it would continue west to 950 West. Some additional pipe runs are needed in the West Fields to connect existing subdivisions that already have PI lines installed. Additionally the project includes the construction of a 20 acre-foot storage pond at the City Bartholomew Park property and the installation of a 24” pipeline that will deliver water from the Highline Ditch to the pond. The City has proposed to phase the project into 3 Phases to coincide with the funding dates. The phases are described below:

- Phase 1A – Construction of the 20 acre-foot storage pond at the City Bartholomew Park property. Install the 24” pipeline form the Highline Ditch to the storage pond.
- Phase 1B - Various pipeline installations in the Westfield’s area to connect the pressurized irrigation systems of existing subdivisions.
- Phase 2 – Installation of the 36” distribution line from 950 West to 800 East along 700 South and 800 South.
- Phase 3 – Installation of the 36” distribution line from 800 East to the storage pond along 900 South/River Bottom Road.

Phase 1B has been designed and put out to bid first so that the pipe work and patching of the roadways will be completed in the 2013 building season, before the weather turns too cold to pave. The project consists of furnishing and installing approximately 8,050 LF of C-900 pressure irrigation pipe ranging from 6" to 12" in Springville City Streets. The project will connect existing pipes in the Westfields area in preparation for connection to

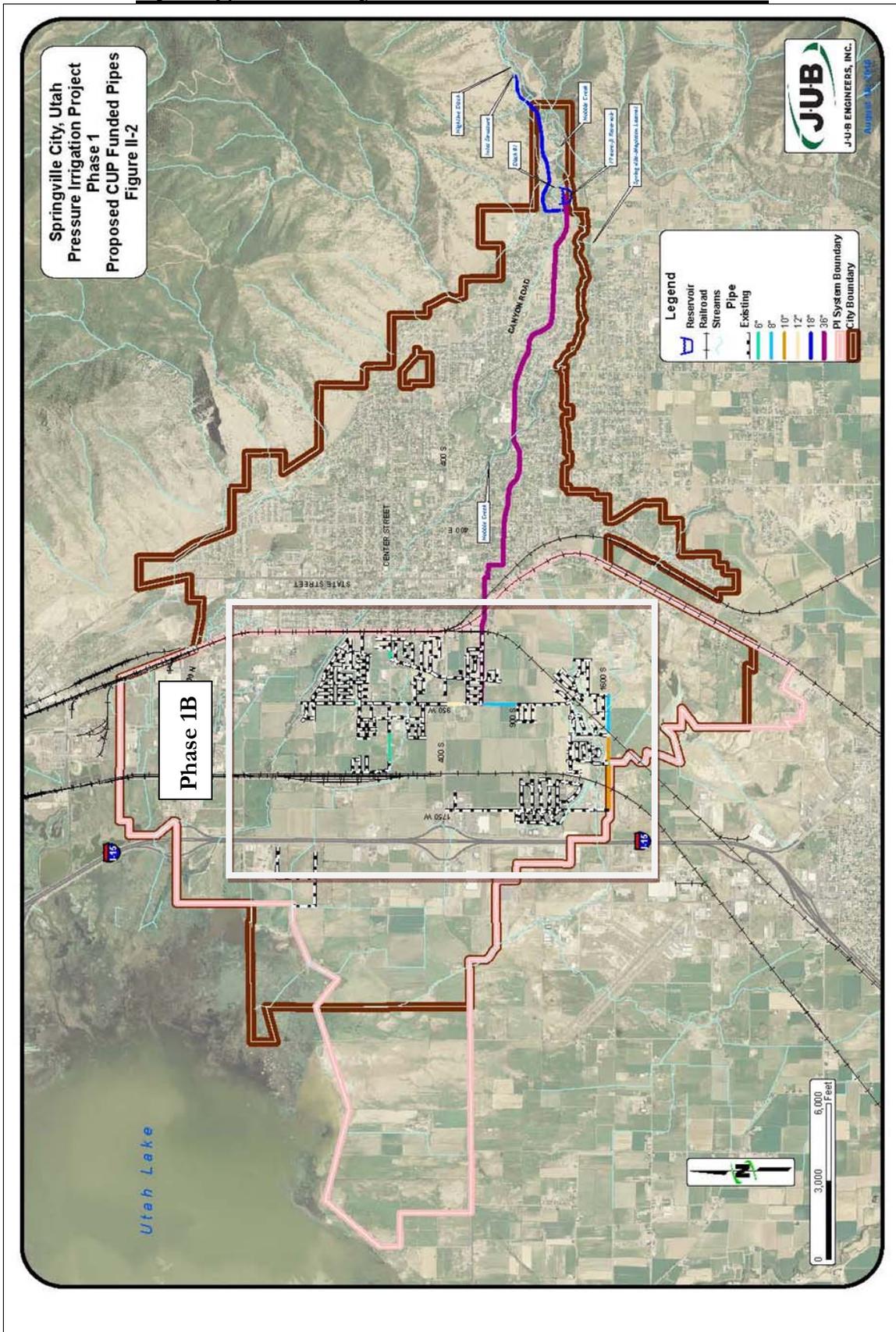
the pressure irrigation system. Work includes open trench excavation, valves, fittings, asphalt repair, two (2) 16" bores underneath existing railroads, and related work

FISCAL IMPACT

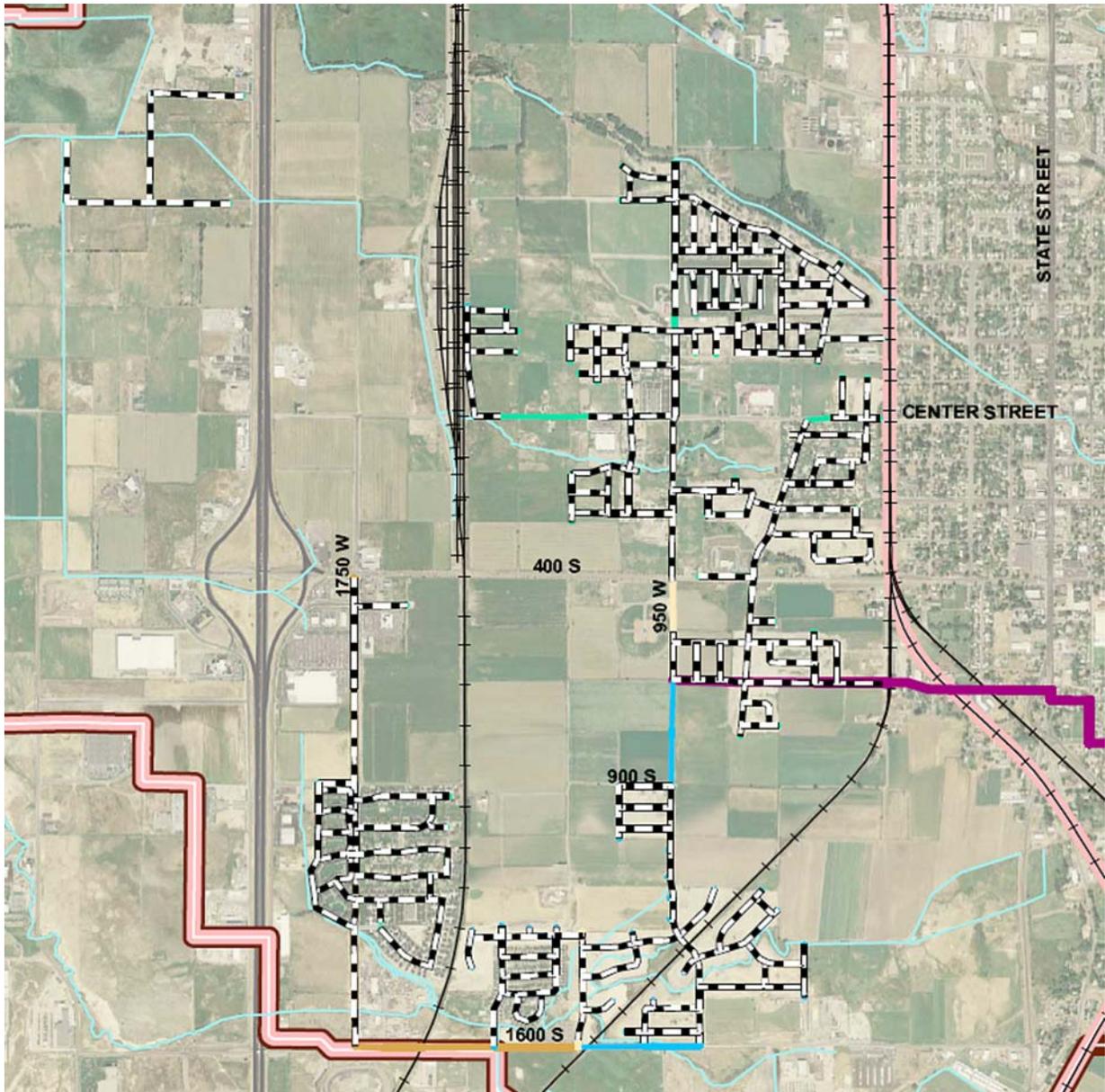
The total cost of the project (including the pond) comes to \$14 million with the grant covering 65% of the cost and the City matching 35%. The breakdown of costs is as follows:

- The CUWCD grant is being funded for \$9 million (65% of total project cost).
- The City's match \$4.85 million (35% of total project cost) per the requirements of the grant. The City's match will consist of:
 - \$4.16 million in existing infrastructure in the Westfields
 - \$860,000 to cover remaining balance (GL# 51-6800-033 West Side PI System)
 - \$410,000 was funded in the 2010-2011 budget with \$200,000 of that being covered by Secondary Impact Fees.
 - The remaining balance of \$450,000 was funded in the 2011-2012 and 2012-2013 fiscal years.
- The total grant funds of \$9 million will be available over a three year period starting with \$3 million in July 2013, \$3 million in July 2014, and \$3 million in July 2015.
- The City will utilize the \$3 million dollar grant, the credit for the cost of the previously installed PI infrastructure (\$4.16 million) and the funds in the water capital budget (GL# 51-6800-033 West Side PI System) to fund this project.

Springville PI System Phase 1B – Infill Lines



Springville PI System Phase 1B - Infill Lines (Detail)



July 10, 2013

Attached are the bid results for the Springville PI System Phase 1B – Infill Lines project:

Contractor	Bid Price	Notes
BD Bush Excavation	\$ 621,910.00	Low Bid
Johnston and Phillips	\$ 673,903.50	
Sunroc Corporation	\$ 724,470.95	Did not submit bid tab. Bid rejected.
Vancon	\$ 812,425.00	
Terry R. Brotherson Excavation, Inc.	\$ 820,146.78	

The engineers estimate for the project was \$599,239.00

Jeffrey L. Anderson, P.E.

City Engineer
110 S. Main St.
Springville, UT 84663
Phone: (801) 491-2780
Fax: (801) 489-2716





STAFF REPORT

DATE: July 9, 2013
TO: Mayor and City Council
FROM: Bradley D. Stapley, Director of Public Works
SUBJECT: **CHIP SEAL INTERLOCAL AGREEMENT**

RECOMMENDED ACTION

Motion to approve a Chip Seal Interlocal Agreement between Elk Ridge, Goshen, Mapleton, Payson, Salem, Santaquin, Spanish Fork, and Springville for the purpose of roadway resurfacing.

GOALS, OBJECTIVES AND STRATEGIES AT ISSUE

The Springville City General Plan's Transportation and Circulation section lists the following goal:

To provide and maintain a vibrant multi-modal transportation network that encourages flow, safety, and a consideration for the aesthetics of the community.

Objective 4 within this goal encourages continued efforts to improve maintenance of the City's streets, trails and paths with the following strategy:

Develop a street maintenance program combined with annual visual surveying of City streets to help determine annual plan.

The Streets Division of the Public Works department has a 7-year streets maintenance plan which is reviewed on an annual basis.

SUMMARY OF ISSUES/FOCUS OF ACTION

Springville City Streets personnel are responsible for the maintenance of the City's 136 miles of roadway. Roadway surface treatments provide a cost effective means of extending the life of the City's streets infrastructure. Chip sealing is one of various surface treatments used by the City, being used mainly on heavier traveled roadways.

The attached interlocal agreement outlines the responsibilities of each participating city, and provides a mechanism for appropriate cost-allocation based on the amount of surface treatment completed in each city.

CITY COUNCIL AGENDA

July 16, 2013

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DISCUSSION

Chip sealing has been shown to be a cost-effective means of extending the life of asphalt roadways. Studies have shown that a chip seal treatment can extend the life of a roadway surface for 5 to 7 years. Springville City regularly participates jointly with Spanish Fork, Payson, Mapleton, and other smaller cities in a chip seal program.

No single city has the equipment to complete such a project on its own, but with the combined effort of each city a cost-effective process has been developed to quickly and effectively apply the chip seal product to the selected street surface.

Each year, for a total of two (2) to four (4) weeks, the participating cities help one-another with man-power and equipment in the chip sealing process. Asphalt emulsion and crushed rock chips are purchased in large quantities at bulk prices at significant cost savings.

The Cities included above have participated in the chip seal program for over 20 years. This Interlocal agreement has been in place since the tenure of Mayor Delora Bertelsen.

FISCAL IMPACT

Funding for the Chip Seal program comes from the C-Roads Maintenance Budget. Springville City spends between \$150,000 and \$250,000 each year for asphalt emulsion and crushed rock chips as part of this interlocal agreement.

CHIP SEAL INTERLOCAL AGREEMENT

WHEREAS, the Utah Interlocal Cooperation Act (U.C.A. §11-13-1 et seq.) allows public entities, including municipalities, to enter into mutually advantageous agreements; and

WHEREAS, the cities of Elk Ridge, Goshen, Mapleton, Payson, Salem, Santaquin, Spanish Fork, and Springville have chip seal projects which will need to be completed as part of their road and street maintenance; and

WHEREAS, no single city has the equipment to complete such a project on its own; and

WHEREAS, the combined equipment resources of the cities would allow such a project to be completed if the equipment could be shared; and

WHEREAS, the necessary equipment is available from each city to complete the planned project in each of the cities; and

WHEREAS, by buying in larger quantities, the cities will also incur a savings on material costs;

NOW THEREFORE, Goshen, Mapleton, Payson, Salem, Santaquin, Spanish Fork, and Springville, hereby enter into this interlocal agreement and hereby contract, covenant, and agree as follows:

1. The cities will share equipment and personnel as set forth herein for the purpose of assisting each other with the chip seal projects to be completed in some or all of the cities.

2. Spanish Fork City will coordinate the bidding and obtaining of materials. Spanish Fork City will be responsible for collecting and disbursing funds pursuant to this agreement.

3. Spanish Fork City will provide a foreman for the project in each city. The foreman is responsible to keep track of the hours worked in each city. The time will commence each day when actual work on the project commences for that day.

4. The project will begin in Springville and proceed south through each city.

5. Each city will contribute as much equipment, shown on exhibit A, as may be needed, together with the personnel to operate the equipment.

6. Payson City will designate what equipment is needed as the project is ready to commence in each city. Each city will then be responsible to see that the designated equipment and personnel are ready and available.

7. Each city will be charged the hourly rate for the equipment and personnel used on the project within it's city, based on the rates shown on exhibit A. Each City will receive a credit against that charge for the value of its equipment and personnel used on the overall project. Excess monies owed or to be received will be distributed through Spanish Fork City, pursuant to paragraph two. Transportation and mobilization costs will be shared equally by the cities over the course of the entire project.

8. Each city will be responsible to load material for the portion of the project within its city and provide its own equipment and personnel, outside this contract, for that purpose.

9. Spanish Fork City will be responsible to notify each city twenty four hours in advance of the commencement of the project within that city.

10. Each city will be responsible for its own preparatory work, including, but not limited to, patching, washing or sweeping the day prior, tree trimming, man-hole covers, or any other type of preparatory work required. Each city will also be responsible for sweeping the road

or street after the project is completed.

11. Each city is responsible to notify its own residents of the project and any inconvenience that may entail. Each city is responsible to provide its own traffic control.

12. Each city will designate to Spanish Fork City by May 15th of each year, which streets it will complete, which total will not exceed the lane miles estimate, as shown in exhibit B, by more than ten percent.

13. Spanish Fork City will be responsible to bid out chip and emulsion such that it will be available by June of each year. Each city will pay to Spanish Fork City the estimated cost for materials as shown on exhibit C on or before July 3rd of each year.

14. Each city will provide a place to store its chip material from the date of delivery (expected to be early to mid-June) until their project is completed. Emulsion will be delivered as needed.

15. At the end of the total project, a “true up” of costs will occur such that each city is charged the actual amount of costs for equipment, personnel, and material used for its project, and given a full credit for its equipment and personnel used to benefit the other cities.

16. Any dispute of sums owed or credits due will be subject to binding arbitration. The arbiters shall be the public works directors (or equivalent position) in each city. The majority decision of the arbiters shall be final and non-appealable.

17. The agreement is valid for one year from the date hereof. The Agreement will be automatically renewed for successive one year periods, to a maximum of 50 years, unless terminated by the parties. Any city may withdraw from participation by giving thirty days written notice to each other city, provided that any cost or expenses incurred on behalf of such withdrawing city shall still be paid by said city.

18. Each city will designate a representative to serve on an oversight committee. The committee will meet as needed to plan, supervise, and give direction to the entire project.

19. The services performed and expenditures made under this agreement shall be deemed for public and governmental purposes. All immunities from liability enjoyed by any city to this agreement shall extend outside that city's established geographic boundaries when the city is rendering services pursuant to this agreement. Each city shall waive any and all claims against the other cities providing service under this agreement. Each city shall indemnify and hold harmless any other city from property damage or personal injury which may arise out of any negligent activity performed by that city pursuant to this agreement.

20. All the immunities from liability and exemptions from law, ordinances, and regulations which the various employees have in their own jurisdictions, shall be effect in the jurisdiction in which they are giving service.

21. All wages, benefits, workers compensation coverage and similar items for the personnel employed on this project shall be paid by the city who employs such individual on a full or part-time basis.

22. Each city is required to maintain insurance on all equipment and liability insurance covering all personnel during the course of this project.

23. This agreement shall not be deemed to create or establish a separate legal entity, but each city a party hereto shall maintain their own separate legal status.

24. This agreement shall be interpreted pursuant to the laws of the State of Utah.

25. In the event that any party should be required to retain an attorney because of the default or breach of any other party or to pursue any other remedy provided by law, then the non-breaching or non-defaulting party shall be entitled to a reasonable attorney's fee, whether or

not the matter is actually litigated. Such a fee can also be awarded as part of the arbitration award referred to in paragraph sixteen.

26. This agreement may not be modified or otherwise amended without a signed written document executed by all of the parties hereto.

27. The invalidity of any portion of this agreement shall not prevent the remainder from being carried into effect. Whenever the context of any provision shall require it, the singular shall be held to include the plural and vice-versa, and the use of any gender shall include any and all genders. The paragraph and section headings in this agreement are for convenience only and do not constitute a part of the provisions hereof.

28. Should any provision of this agreement require judicial interpretation, the court interpreting or construing the same shall not apply the presumption that the terms hereof shall be more strictly construed against one party, by reason of the rule of construction that a document is to be construed more strictly against the person who himself, or through his agents, prepared the same; it being acknowledged that all parties have participated in the preparation hereof.

29. This agreement is not assignable, it being specific to the parties hereto.

DATED this _____ day of _____, 2013.

ELK RIDGE CITY by:

HAL SHELLEY, Mayor

Attest:

Janice H. Davis, Recorder

Approved as to form:

City Attorney

TOWN OF GOSHEN by:

FRED JENSEN, Mayor

Attest:

LARRY BECK, Town Recorder

Approved as to form:

Goshen City Attorney

MAPLETON CITY by:

BRIAN WALL, Mayor

Attest:

CAMILLE BROWN, Recorder

Approved as to form:

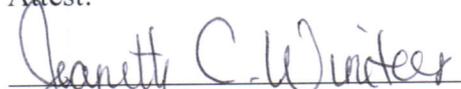
Mapleton City Attorney

PAYSON CITY by:



RICHARD D. MOORE, Mayor

Attest:



JEANETTE C. WINETEER, Recorder

Approved as to form:





MARK SORENSON
Payson City Attorney

SALEM CITY by:

RANDY BRAILSFORD, Mayor

Attest:

JEFFREY D. NIELSON Recorder

Approved as to form:

S. JUNIOR BAKER
Salem City Attorney

SANTAQUIN CITY by:

JAMES DEGRAFFENRIED, Mayor

Attest:

SUSAN FARNSWORTH, Recorder

Approved as to form:

BRET RICH
Santaquin City Attorney

SPANISH FORK CITY by:

G. WAYNE ANDERSEN, Mayor

Attest:

KENT R. CLARK, Recorder

Approved as to form:

S. JUNIOR BAKER
Spanish Fork City Attorney

SPRINGVILLE CITY by:

WILFORD W. CLYDE Mayor

Attest:

VENLA GUBLER, Recorder

Approved as to form:

JOHN PENROD
Springville City Attorney

Exhibit A: Chip Seal Equipment List

Hourly rate is without purchase price of unit

CITY	EQUIPMENT	QUANTITY	HOURLY RATE	HOURLY RATE W/ OPERATOR	FUEL P/HOUR	PRICE P/GALLON	TOTAL W/OPERATOR W/FUEL
SPRINGVILLE	Asphalt Roller	1	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Loader	2	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Street Sweeper	2	\$50.00	\$78.00	5.00	\$3.25	\$94.25
	Small Street Sweeper		\$15.00	\$43.00	3.00	\$3.25	\$52.75
	Ten Wheel Dump	3	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Personnel	8	\$28.00	n/a	n/a	n/a	n/a
MAPLETON	Loader	1	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Pnuematic Roller	1	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Ten Wheel Dump	1	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Personnel	3	\$28.00	n/a	n/a	n/a	n/a
SPANISH FORK	Chip Spreader	1	\$35.00	\$63.00	5.00	\$3.25	\$79.25
	Loader	2	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Street Sweeper	2	\$50.00	\$78.00	5.00	\$3.25	\$94.25
	Ten Wheel Dump	2	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Transport	1	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Personnel	6	\$28.00	n/a	n/a	n/a	n/a
	Foreman	1	\$30.00	n/a	n/a	n/a	n/a
SALEM	Ten Wheel Dump	1	\$30.00	\$58.00		\$3.25	\$58.00
	Personnel	6	\$28.00	n/a	n/a	n/a	n/a
PAYSON	Chip Spreader	1	\$35.00	\$63.00	5.00	\$3.25	\$79.25
	Loader	1	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Pnuematic Roller	3	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Ten Wheel Dump	1	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Transport	1	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Personnel	2	\$28.00	n/a	n/a	n/a	n/a
	Foreman	1	\$25.00	n/a	n/a	n/a	n/a
SANTAQUIN	Loader	1	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Six Wheel Dump	1	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Personnel	2	\$28.00	n/a	n/a	n/a	n/a
GOSHEN	Steel Wheel Roller	1	\$40.00	\$68.00	5.00	\$3.25	\$84.25
	Street Sweeper	1	\$50.00	\$78.00	5.00	\$3.25	\$94.25
	Ten Wheel Dump	1	\$30.00	\$58.00	7.00	\$3.25	\$80.75
	Personnel	1	\$28.00	n/a	n/a	n/a	n/a



STAFF REPORT

DATE: July 11, 2013
TO: Honorable Mayor and City Council
FROM: Troy Fitzgerald, City Administrator
SUBJECT: UPDATED POLICY ON POLICY

RECOMMENDED MOTION

A Motion to Approve the updated Policy on Policies.

SUMMARY OF ISSUES/FOCUS OF ACTION

The 2011 Springville City General Plan establishes a pattern of planning, and then implementation. The City Council adopts ordinances which are then carried out through policy.

DISCUSSION

Every organization has a set of written and unwritten rules and policies. Springville City is no exception. Over the past several years, the City has focused on updating the General Plan and then associated Master Plans. As Master Plan updates wind down, the focus is moving towards our operating procedures.

The City has had a long-standing policy on policies. Under the policy, new initiatives and changes in policy direction are to be noted and included in the City Policy Manual. This has not been effectively occurring. Instead, department policies have been created and maintained in differing fashions. For example, the Police Department has a several hundred page policy manual with very specific provisions. Other departments may not even have their policies written.

Administratively, I have noticed that not all of our policies simplify procedures, eliminate ambiguity and improve operations. Since the Mayor, Council and Administration are not seeing most of these daily, operational policies, it is possible that procedures are creeping into the organization that are not in harmony with the direction that the City Council would like to see us head.

I have also noticed that some policies are created without involving all necessary stakeholders. Perhaps a water policy is created which helps the Water Department but interferes with Power Department operations or Finance creates a rule to deposit money that can't work effectively at the Golf Course or Museum.

As I have reviewed the state and city laws and ordinances, the process and responsibility for this is not abundantly clear. The Council exercises legislative power through ordinances. Utah State Code §10-3-701. The Council exercises all administrative powers through resolutions. Utah State Code §10-3-717.

The Mayor is responsible to ensure that "all laws and ordinances and resolutions are faithfully executed and observed." Springville City Code §2-3-103(6). Likewise, the City Administrator is to "Faithfully enforce all applicable laws, ordinances, rules and regulations of the City" and "Work closely with the Mayor in handling all administrative affairs of the City, including any specific administrative affairs which have been delegated to the Administrator in writing and are allowed to be delegated by law." Springville City Code §2-5a-103. To complicate matters, the City Code requires to the City Administrator to "Carry out all policies and programs as established by the Mayor and City Council." Id.

As I understand it, policy is to put into effect the ordinances and resolutions established by the Governing Body (The Mayor and City Council.) The attached Policy on Policies will specifically require the City Administrator to authorize policy. It will not limit the ability of the Council or the Mayor to establish or change policy.

We will focus on daily operational policy to ensure that it is efficient and friendly to the citizens. The Policy will allow the organization to move a little more quickly in establishing policy. In addition, the Policy will formalize a process so that the Council will, in reality, have the ability to have more input into the current process.

The intent is NOT to create more red tape, written policy, rules and regulations. The intent of the policy is to have a central repository of how we are interpreting existing ordinances so that we all know what is happening within the organization. The rules will be available internally online.

ALTERNATIVES

Continue as we are currently operating.

FISCAL IMPACT

No direct fiscal impact.

Troy K. Fitzgerald

Troy K. Fitzgerald
City Administrator

Attachments

cc:

Policy on Policies

Administration

Effective: 6/16/2013

Revised:

Purpose of This Policy

This policy establishes a development and approval process for City Policies as defined below. By implementing this uniform process, the City seeks to enhance operational efficiencies, best practices, effective decision making and compliance with laws and regulations across the City. This policy also helps ensure that policies are easily accessible and understandable, widely disseminated, consistent and reviewed and approved in an appropriate way. The City aspires to develop a policy framework that best serves its mission and represents and supports excellence in all of its activities.

Policy

All City and Department policies should be approved prior to implementation or revision.

Procedure

I. Definitions

A. City Policy. A “City Policy” is a policy with broad application throughout the City which enhances the City’s mission, promotes operational efficiencies, reduces institutional risk, or helps ensure coordinated compliance with applicable laws and regulations, and is approved in accordance with the procedures stated herein. The City Administrator in conjunction with Assistant City Administrators (or such other group as the Mayor may designate) may develop criteria for distinguishing a City Policy to be approved under Section IV from a Department or Divisional Policy that may be issued under Section VI.

B. Department or Divisional Policy. A “Department or Divisional Policy” is a policy with broad application throughout any Department which enhances the Department’s mission, promotes operational efficiencies, reduces institutional risk, or helps ensure coordinated compliance with applicable laws and regulations, and is approved in accordance with the procedures stated herein.

C. Responsible Supervisor. Responsible Supervisor is any supervisor responsible to develop or oversee a City or Department Policy.

II. Initiation of a City Policy

A City Policy may be initiated by any Responsible Supervisor. The Responsible Supervisor should oversee the drafting and development process and may designate others to assist in this process. The Responsible Supervisor should also review and update the policy on a timely basis to ensure compliance with current laws, regulations, and best practices, and seek review and approval of any material changes to the policy.

III. Review and Approval of a City Policy

Getting Started: At the outset of the process, the Responsible Supervisor should consider three key aspects of the policy. These are:

- (1) Background,
- (2) Justification, and
- (3) Likely Impact.

The Responsible Supervisor should take care to consider ways to **simplify procedures, eliminate ambiguity and improve operations**. Following these considerations, the Responsible Supervisor should engage in the drafting process and **consult with relevant City stakeholders**. Stakeholders may include other departments, City Boards and Commissions or even the City Council. Responsible Supervisors should err on the side of getting more involvement rather than less in considering new or changed policies.

Policy Submittal and Approval: After appropriate consultation, the Responsible Supervisor must submit the proposed policy to the City Administrator's Office for approval. The City Administrator will approve policies in consultation with the Assistant City Administrators. Prior to final approval, the City Administrator will review the consultative process that has been undertaken and require such additional consultation as he or she may deem appropriate. Thus, **a brief summary of the process should accompany the policy in the form of a Staff Report**.

The City Administrator may, as warranted, submit a City or Department Policy to the City Council for approval. The City Administrator may develop criteria for deciding whether a City Policy should be reviewed with and/or approved by the City Council or by a Committee, Commission or Board of the City Council. Wherever practical, City Policies should be reviewed and approved in accordance with the procedures set out here, but nothing in this policy limits the authority of the Mayor or City Council to issue, amend or revoke a City Policy. This policy is intended as a set of guidelines and does not establish required procedures that must be followed for a policy to have legal effect.

Policy Implementation: Once a City or Department Policy is approved by the City Administrator, the Responsible Supervisor should provide a copy of the policy to the City Recorder for inclusion in the City

Policy Manual and on the City Intranet. The Responsible Supervisor is expected to publish the policy and distribute it to the City or Department as appropriate.

INDIVIDUALS MAY CONSULT WITH THE CITY ADMINISTRATOR'S OFFICE AT ANY STAGE IN THE DEVELOPMENT PROCESS AND IN INTERPRETING POLICIES THAT HAVE BEEN ADOPTED.

IV. City Policy Manual

All policies approved in accordance with Sections III and V are City Policies, and should be posted on the City's Policy Website.

VI. Department and Divisional Policies

Supervisors may promulgate other policies within the scope of their areas of responsibility, provided these Department and Divisional Policies do not conflict with City Policies. Currently, these policies should follow the same process as City Policies for approval.

VII. Transition

Policies should be reviewed and taken through the process established herein by December 31, 2013.

VIII. Writing Policy and Procedure

Policies are written in clear, concise, simple language. Policy statements address what is the rule rather than how to implement the rule. Departments may have written procedures included with the Policy that are consistent with the Policy. Procedures are tied to policies. Making explicit this relationship along with how the procedure helps the City achieve its mission, goals or strategic plan helps ensure understanding and compliance. Procedures are developed with the customer/user in mind. Well developed and thought out procedures provide benefits to the procedure user. The procedures should be understandable. Procedures should be written so that what needs to be done can be easily followed by all users. When feasible, procedures should offer the user options. Procedures which are unnecessarily restrictive may limit their usefulness.

IX. Form

The heading of each policy should include the Department and Division (if applicable,) effective date, revision date (if applicable,) and title of the policy. The policy will then include the purpose, policy and procedures (if included.) The accompanying staff report shall briefly detail the process followed in drafting the policy.