



**WORK/STUDY AGENDA  
SPRINGVILLE CITY COUNCIL MEETING  
DECEMBER 01, 2015 AT 7:00 P.M.**

City Council Chambers  
110 South Main Street  
Springville, Utah 84663

**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. Calendar

- December 08 – Work/Study Meeting 5:15 p.m.
- December 15 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- December 24 – Christmas Eve
- December 25 – Christmas Holiday (City Offices Closed)
- December 31 – New Year’s Eve

2. **DISCUSSION ON THIS EVENING’S REGULAR MEETING AGENDA ITEMS**

- a) Invocation – Councilmember Child
- b) Pledge of Allegiance – Councilmember Creer
- c) Consent Agenda
  2. Approval of City purchase orders required to be signed per Springville City Purchasing Code
  3. Approval of Minutes
  4. Approval of a bid award to Wheeler Machinery Co. for installation of two Natural Gas Engine Generators – Leon Fredrickson, Power Director
  5. Approval of a bid award to Souvall Brothers Construction Co. in the amount of \$94,928.00 for construction of a dry parts storage building for the Power Department – Leon Fredrickson, Power Director

3. **DISCUSSIONS/PRESENTATIONS**

- a) Whitehead Power Plant Project Presentation – Leon Fredrickson, Power Director

4. **MAYOR, COUNCIL, AND ADMINISTRATIVE REPORTS**

5. **CLOSED SESSION**

*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**

**CERTIFICATE OF POSTING**

The undersigned duly appointed City Recorder of Springville City, does hereby certify that the above notice and agenda was posted within the Springville City limits on November 24, 2015 at Springville City Hall, on the City Hall Notice Board, on the Springville City website at [www.springville.org/agendasminutes](http://www.springville.org/agendasminutes) on the Utah Public Notice Website at <http://www.utah.gov/pmn/index.html> and provided to at least one newspaper of general circulation within the geographic jurisdiction of the public body  
/s/ Kim Rayburn, City Recorder

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.



**REGULAR AGENDA  
SPRINGVILLE CITY COUNCIL MEETING  
DECEMBER 01, 2015 AT 7:00 P.M.**  
City Council Chambers  
110 South Main Street  
Springville, Utah 84663

**CALL TO ORDER**

**INVOCATION AND PLEDGE**

**APPROVAL OF THE MEETING'S AGENDA**

**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.*

**CEREMONIAL AGENDA**

1. Presentation to Outgoing Councilmember Dean Olsen – Troy Fitzgerald, City Administrator

**CONSENT AGENDA\***

2. Approval of City purchase orders required to be signed per Springville City Purchasing Code.
3. Approval of Minutes from the September 15, 2015 regular City Council meeting
4. Approval of a bid award to Wheeler Machinery Co. for installation of two Natural Gas Engine Generators – Leon Fredrickson, Power Director
5. Approval of a bid award to Souvall Brothers Construction Co. in the amount of \$94,928.00 for construction of a dry parts storage building for the Power Department – Leon Fredrickson, Power Director

**PUBLIC HEARING**

6. Public Hearing to receive input with respect to selling approximately 20 acres of property located at approximately 1300 North 1100 East, Spanish Fork, Utah – John Penrod, Assistant City Administrator/City Attorney **CONTINUED FROM SEPTEMBER 15, 2015**

**REGULAR AGENDA**

7. Consideration of approving an agreement with VCBO – John Penrod, Assistant City Administrator/City Attorney
8. Discussion of possible land exchange with Suburban Land Reserve (SLR) and Property Reserve Inc.(PRI) – Assistant City Administrator/City Attorney

**MAYOR, COUNCIL AND ADMINISTRATIVE REPORTS**

**CLOSED SESSION**

9. *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**

This meeting was noticed in compliance with Utah Code 52-4-202 on November 24, 2015. Agendas and minutes are accessible through the Springville City website at [www.springville.org/agendasminutes](http://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. s/s - Kim Rayburn, City Recorder

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.



MINUTES OF THE REGULAR MEETING OF THE SPRINGVILLE CITY COUNCIL HELD ON  
TUESDAY, SEPTEMBER 15, 2015, AT 7:00 P.M. AT THE CIVIC CENTER, 110 SOUTH MAIN  
STREET, SPRINGVILLE, UTAH.

Mayor Wilford W. Clyde presided. In addition to Mayor Clyde, the following were present:  
Councilmember Rick Child, Councilmember Craig Conover, Councilmember Christopher Creer,  
Councilmember Dean Olsen, Councilmember Chris Sorensen, City Administrator Troy Fitzgerald,  
Assistant City Administrator/City Attorney John Penrod, Assistant City Administrator/Finance Director  
Bruce Riddle and Deputy Recorder Jennifer Grigg.

Also present were: Public Safety Director Scott Finlayson, Administrative Services Manager  
Rod Oldroyd, Buildings and Grounds Director Alex Roylance, Public Works Director Brad Stapley,  
Community Development Director Fred Aegerter, Recreation Director Corey Merideth, Power  
Distribution Superintendent Brandon Graham, Library Director Pam Vaughn—and Museum of Art  
Director Dr. Rita Wright.

#### **CALL TO ORDER**

Mayor Clyde welcomed everyone and called the meeting to order at 7:08 p.m.

#### **INVOCATION AND PLEDGE**

Councilmember Child offered the invocation, and Councilmember Creer led the Pledge of  
Allegiance.

#### **APPROVAL OF THE MEETING'S AGENDA**

COUNCILMEMBER SORENSEN MOVED TO APPROVE THE MEETING'S AGENDA AS  
WRITTEN. COUNCILMEMBER CHILD SECONDED THE MOTION, AND ALL VOTED AYE.

#### **MAYOR'S COMMENTS**

Mayor Clyde welcomed the Council, staff and audience. He observed scouts in the audience and  
asked them to stand and introduce themselves. Scouts from Troop #122, #680, #685 were recognized  
including Alex Middlebrook, Eric Kallaker, Ben Carson, Ben Tenney and Peter Rose.

#### **PUBLIC COMMENT**

Mayor Clyde introduced the Public Comment section of the agenda. He asked if there were any  
requests to speak.

Alex Middlebrook asked for permission and funding to name the roads and create a map of the  
Springville History City Cemetery as part of his Eagle Project under the direction of Cemetery Sextant  
Larry Johnson. Buildings and Grounds Director Roylance arranged a meeting to discuss the project.

38 Alan Hughes 160 West 600 North, also a business owner, asked a favor to waive fees for using  
the Museum for the Art City Music Fest which includes local musician and writer, Lyle Hadlock and  
40 works with Art City Sound Recording Studio, on November 7<sup>th</sup>.

Museum Director Wright stated that these events are possibilities for revenue and that the  
42 museum receives frequent requests for charitable, interlocal museum rental.

Administrator Fitzgerald stated there is policy to collect fees which allows rebates/fee waivers in  
44 exchange for service hours.

Mayor Clyde stated the council needs to decide which groups the City wants to support. Let the  
46 Arts Commission decide who is allowed to use the fee waivers.

Councilman Sorensen suggested the Festival become part of Art City Days.

48 Alan Hughes emphasized the past 7 years, the Festival gives back to the community by offering  
a writer's festival for kids.

50 Administrator Fitzgerald will forward the policy document to Mr. Hughes and the Festival can  
apply for a waiver based on qualifications.

52 Mayor Clyde emphasized that Council is authorized to waive fees.

#### 54 **CONSENT AGENDA**

1. Approval of City purchase orders required to be signed per Springville City Code §2-10-110(5)
- 56 2. Approval of Minutes for the August 11, 2015 and September 01, 2015 Work Study and  
September 01, 2015 Regular meetings.
- 58 3. Approval of a contract between M&M Asphalt the low bidder and Springville City for the 2015-  
2016 Crack Seal Project for various Springville City Roads not to exceed \$151,709.00 for the  
60 total project – Brad Stapley, Public Works Director
4. Approval to authorize funding and distribution for the Arts Commission grant awards not to  
62 exceed \$25,000.00 – Corey Merideth, Recreation Director

64 COUNCILMEMBER CHILD MOVED TO APPROVE THE CONSENT AGENDA AS  
WRITTEN. COUNCILMEMBER CREER SECONDED THE MOTION. THE MOTION PASSED  
66 UNANIMOUSLY.

#### 68 **PUBLIC HEARING**

- 70 5. **Public Hearing to receive input with respect to (a) the issuance of up to \$11,195,000  
General Obligation Bonds, if approved by eligible voters at a special bond election to be  
72 held in the City on Tuesday, November 03, 2015 and (b) the potential economic impact that  
the improvements, facilities, or properties to be financed with the Bonds will have on the  
74 private sector** – John Penrod, Assistant City Administrator/City Attorney

76 Assistant Administrator Penrod explained the public hearing will allow anyone to speak for or  
against potential impact on the private sector. He provided the background information and stated a  
78 residential property valued at \$207,695 would be impacted at \$5.04 per month. A business valued at the  
same amount would be impacted at \$9.17 per month. The design and property location are the  
80 recommendations of an independent committee.

82 Mayor Clyde commented four years ago the City presented a similar aquatics center with a larger  
84 activities center at a cost of a \$25 million bond. The current suggested design keeps the bond affordable,  
86 with property large enough to expand. It includes an open leisure area for summer months with patio  
88 area. The Aquatic Activity Center Exploratory Committee vetted 12 locations and recommended the  
property west of the new elementary school. The property costs less and has improvements already in  
place. No team fields will be lost and has good access. The recommendations are not set in stone, but the  
committee worked hard to recommend the best possible plan.

88 Councilman Sorensen noted the location next to the elementary school doubles parking space  
available for swim meets.

90 Mayor Clyde stated Nebo School District is looking to commit \$2 million to two pools in the  
district, so high school teams can practice and have meets.

92

Mayor Clyde opened the public hearing for comment. There was no comment.

94

96 COUNCILMEMBER CREER MOVED TO CLOSE THE PUBLIC HEARING.  
98 COUNCILMEMBER CHILD SECONDED THE MOTION. ALL PRESENT VOTED IN FAVOR OF  
THE MOTION. THE MOTION PASSED UNANIMOUSLY.

98

100 **6. Public Hearing to receive input with respect to selling approximately 20 acres of property**  
located at approximately 1300 North 1100 East, Spanish Fork, Utah – John Penrod,  
Assistant City Administrator/City Attorney CONTINUED TO OCTOBER 20, 2015

102

## REGULAR AGENDA

104

106 **7. Consideration of waiving an option to purchase Nebo School District surplus property –**  
John Penrod, Assistant City Administrator/City Attorney

108 Assistant Administrator Penrod announced Nebo School District surplused two properties in  
Springville because developers are interested in the properties. The City has the right of first refusal with  
90 days to waive that right to purchase. One of the properties is the old Westside Elementary School,  
110 where the Advanced Learning Center has been located for a number of years. The other property is the  
old Grant Elementary, which City staff is interested in developing for City use. The School District  
112 noticed the surplus of both properties on August 20<sup>th</sup>. Within 90 days the City must provide a  
resolution of intent to purchase the property, at a price which is the average of two appraisals.

114 Councilman Child recommended waiving our right if developers are interested. Businesses are  
better than non-tax government property at the Westside location.

116 Councilman Conover noted City interest in the Grant property.

118 Mayor Clyde noted the agreement shows intent and isn't binding if we don't agree with  
appraisals.

120 COUNCILMEMBER SORENSEN MOVED TO APPROVE AUTHORIZING THE CITY  
ADMINISTRATOR TO SIGN A WRITTEN WAIVER OF THE CITY'S RIGHT TO PURCHASE  
122 8.624 ACRES OF NEBO SCHOOL DISTRICT SURPLUS PROPERTY LOCATED AT 570 SOUTH  
MAIN STREET, SPRINGVILLE, UTAH.

124 COUNCILMEMBER CHILD SECONDED THE MOTION. THE MOTION PASSED  
UNANIMOUSLY.

126

**MAYOR, COUNCIL AND ADMINISTRATIVE REPORTS**

128

**CLOSED SESSION**

130 7. *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,*  
132 *exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205*

134 COUNCILMEMBER CHILD MOVED TO ADJOURN THE CITY COUNCIL MEETING AT  
7:38 P.M. AND CONVEIN IN CLOSED SESSION TO DISCUSS REAL ESTATE.  
136 COUNCILMEMBER CREER SECOND THE MOTION AND THE VOTE IS RECORDED AS  
FOLLOWS:

138	COUNCILMEMBER CHILD	AYE
	COUNCILMEMBER CONOVER	AYE
140	COUNCILMEMBER CREER	EXCUSED
	COUNCILMEMBER OLSEN	EXCUSED
142	COUNCILMEMBER SORENSEN	AYE

THE MOTION PASSED UNANIMOUSLY.

144

**ADJOURNMENT**

146 COUNCILMEMBER CHILD MOVED TO ADJOURN THE CITY COUNCIL MEETING AT  
8:04 P.M. COUNCILMEMBER CREER SECONDED THE MOTION, AND ALL VOTED AYE.

148



## STAFF REPORT

**DATE:** December 1, 2015  
**TO:** Honorable Mayor and City Council  
**FROM:** Springville Electric Department  
**SUBJECT:** NATURAL GAS ENGINE GENERATORS

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### RECOMMENDED MOTION

Motion to award a contract to Wheeler Machinery Company to supply and install two Caterpillar G3520H engine generators for the sum of \$4,008,273. The engine generators will be installed at the White Head Power Plant in accordance with a properly signed and executed contract.

### GOALS, OBJECTIVES AND STRATEGIES AT ISSUE

Springville City operates a 27 megawatt natural gas power plant in Springville's White Head Utility Center, located at 450 West 600 North, Springville Utah. The power plant consists of four Enterprise DSRV16 reciprocating engine generators. The power plant also has space and infrastructure for three additional engine generators up to a capacity of 4.0 megawatts ("MW") each.

Springville Power has identified the need for intermediate power in the range of 2 to 4 MWs of capacity and energy. Springville power has determined that two natural gas engine generator will best meet this needs based on capacity size, cost and efficiency. In addition these power units will be utilizes for heat, energy and emergency backup power for the Waste Water Treatment plant.

Springville City Power ("SCP") has requested proposals for Engineering, Procurement and Construction Services to supply and install two natural gas engine generators capable of producing a minimum of 2.3 MW and up to a maximum of 4.0 MW of capacity and energy in the space and infrastructure provided.

Two qualified firms submitted successful estimates, Haskall Corporation representing Jenbacher and Wheeler Machinery Company representing Caterpillar. Both manufactures are excellent choices that meet all requirements for the Springville project. Each estimate submitted was well documented, informative and professional. Springville would like to thank both Haskell and Wheeler for their efforts and skill. The decision ultimately came down to price per installed KW.

Please see the following results.

Two Caterpillar 2.4 MW G3520H natural gas engine generators  
Wheeler Machinery Company: \$4,008,273  
Heat Rate: 7725  
Cost per install KW: \$811.72

Two Jenbacher 2.6 MW JMS 616 F01 natural gas engine generators  
Haskell Corporation: \$ 4,920,000  
Heat Rate: 7753  
Cost per installed KW: \$921.60

Based on a very competitive evaluation Springville is recommending to the City Council that we install two Caterpillar G3520H engines at the White Head Power plant.

## **DISCUSSION**

- Overall objective is to maintain a stable power rate. Springville Power's objective has been to maintain a stable power rate and has been successful in that goal over the past ten years. Springville Power employs a strategy of forward fuel purchase, locally controlled energy assets and power resources management to accomplish this objective. The natural gas engine generators proposed is a vital part of this strategy. The local control of energy and capacity provided by this project will enhance our ability to meet the power needs of Springville without raising rates.
- Additional base load Generation and Gas Purchase at the Whitehead Power Plant. The department has been investigating the purchase of additional fuel and generation assets at the Whitehead Power Plant. In addition to the capacity and energy provided by this project. These units will also provide heat for the White Head Power plant as well as for the digester at the Waste Water Treatment plant. These units can also serve as backup and emergency power if needed.
- Managing fuel for this project through the UAMPS Natural Gas Project will enhance our ability to bring fuel to and from the Nebo and Whitehead Power Plants. The power and fuel markets reacts very quickly to market demands, weather conditions and power resource operations. The ability to locally manage transmission and unbalanced power and fuel will significantly reduce losses in our power system.

### **ALTERNATIVES**

The alternatives to purchasing and installing additional generation at the plant is as follows

- Purchase additional needed power on the open market
- Participate in UAMPS Small Modular Nuclear Reactors (SMR) project
- Invest in more wind, solar and alternative power resources.
- Enter into power purchase agreements (PPA) with industry power marketers (Power X, Mogen Stanley ect.)

### **FISCAL IMPACT**

The fiscal impact of purchasing and installing the above engine generators is positive. Over the last three years the department has dedicated a portion of its reserves to purchasing these assets. The department has saved over 90% of the funding needed to complete the purchase and installation of two engine generators. The remaining 10% will be allocated from other reserves thereby eliminating any debt for this project.

Matt C. Hancock  
Power Generation Superintendent



4901 WEST 2100 SOUTH  
Salt Lake City, Utah 84120

## PROJECT CONTRACT

THIS AGREEMENT is made as of the \_\_\_\_\_ day of December, 2015:

Between the Project Developer: **Wheeler Machinery Co., Power Systems Division**  
**4901 West 2100 South**  
**Salt Lake City, Utah 84120**  
**Shane Minor**  
**801-978-1533 Office**  
**801-201-0929 Cell**

And Owner: **Springville City**  
**110 South Main**  
**Springville, Utah 84663**

For the Project: **Springville Power Plant Addition**  
**450 West 600 North**  
**Springville, Utah 84663**  
**Matt Hancock**  
**801-489-2750**

### ARTICLE 1. SCOPE OF WORK

1.1 Project Developer shall install for Owner two (2) Caterpillar G3520H according to the specifications set forth in the Proposal Number WPS2015-SCP1 attached hereto.

### ARTICLE 2. PAYMENT TERMS AND PAYMENT BOND

- 2.1 Owner agrees to pay Project Developer the Total Contract Amount within 30 days after commissioning.
- 2.2 The Total Contract Amount is \$ 4,008,273.00.
- 2.3 Project Developer shall obtain and deliver to the Owner a payment and performance bond, acceptable to the Owner, within ten days of the execution of this agreement.

### ARTICLE 3. TIME OF COMPLETION

3.1 Project Developer shall complete the project in accordance with the schedule listed as attachment #1.

**ARTICLE 4. CHANGE ORDERS**

4.1 No change orders or contract additions will be made unless agreed to in writing by Owner's representative, Matt Hancock, and Project Developer's representative, Shane Minor.

**ARTICLE 5. CLEAN-UP**

5.1 Project Developer will be responsible for cleaning up its work on the project on a daily basis.

**ARTICLE 6. TAXES AND PERMITS**

6.1 Project Developer understands and agrees that it shall be responsible for all taxes, fees, and expenses imposed directly or indirectly for work, labor, material, and services required to fulfill this contract. Owner will be responsible for all applicable permits.

**ARTICLE 7. INSURANCE**

7.1 Project Developer shall maintain liability and worker's comp insurance at all times during the Project.

**ARTICLE 8. WARRANTY**

8.1 Project Developer shall warranty all labor and materials furnished on the project for one year. As to the equipment, the manufacturer's 24 month warranty shall prevail.

**ARTICLE 9. HAZARDOUS MATERIALS**

9.1 Upon discovery of any hazardous materials, Project Developer shall cease work, notify Owner immediately, and allow Owner to contract with a properly licensed and a qualified hazardous material contractor to deal with such materials.

**ARTICLE 10. DISPUTE RESOLUTION**

10.1 Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be resolved in the state or federal courts located in Salt Lake City, Utah.

**ARTICLE 11. ATTORNEY FEES**

11.1 In the event of any litigation relating to the project, project performance or this contract, the prevailing party in such litigation shall be entitled to recover its reasonable attorney fees, costs, and expenses from the non-prevailing party.

**DATED THE DATE ABOVE WRITTEN:**

WHEELER MACHINERY CO. DBA WHEELER POWER SYSTEMS  
A UTAH CORPORATION

BY \_\_\_\_\_

ITS \_\_\_\_\_

SPRINGVILLE CITY  
A UTAH GOVERNMENTAL ENTITY

BY \_\_\_\_\_

ITS \_\_\_\_\_



4901 West 2100 South  
Salt Lake City, Utah 84120  
General Phone: 801-974-0511  
Power Systems Service: 801-978-1581

## Option 1: Quantity 2 of G3520H Natural Gas Generator Sets

### CATERPILLAR FACTORY BILL OF MATERIAL

<b>520GE2H</b>	<p><b>G3520H 2.5 MW HIGH RES HV 2H</b>  2469 eKW  Jacket Water Temperature: 99 C  Aftercooler Temperature 1<sup>st</sup>/2<sup>nd</sup>: 99C/48C With Pumps  Generator Arrangement: 424-7058  Frame = 3044 HR  Reverse Rotation  Pitch: 0.6667  Winding: Form Wound  No. of Leads: 6  No. of Bearings: 2  This configuration provides Standard Aftercooler with Engine-Driven Pumps.  This configuration provides improved Transient Response and is optimized for High Ambient Temperatures and High Altitude.  Ratings are without fan or radiator.</p>
<b>60H6900</b>	<p><b>VOLTAGE INDICATOR 6900V (Wye)</b>  60 HZ 6900 VOLTS</p>
<b>CONTINU</b>	<p><b>CONTINUOUS POWER APPLICATION</b></p>
<b>PARGRID</b>	<p><b>PARALLEL-TO-GRID MODE</b>  Caterpillar G3520H Gas Generator Set Transient Performance, document LEXE0815 included in this proposal, describes load and unload capability for this generator set at 60 Hz.</p>
<b>EMISS12</b>	<p><b>STANDARD LOW EMISSIONS - 60 HZ</b>  1.0 g/bhp hr NOx</p>
<b>WITHPMP</b>	<p><b>WITH ENGINE PUMPS</b>  This Engine configuration provides Jacket Water and Separate Circuit Aftercooler engine-driven pumps, including the Aftercooler Group.</p>



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Power Systems Service: 801-978-1581

**CATERPILLAR FACTORY BILL OF MATERIAL**  
(CONTINUED)

- JWH0128**                    **JACKET WATER HEATER 240V 60 HZ**  
Engine starting aid for operation down to 0 C (32 F).  
Heater: Single phase 12 kW, 240 V.  
Pump: 240 VAC, Single phase, 10 GPM, 97 W
- GENRTDA**                    **GENERATOR MONITORING PACKAGE**  
Provides generator RTD module to supply generator bearing and stator temperature monitoring capability for generators. Parameters are viewable on the EMCP 4.3 Generator Set Control Panel.
- CCT8717**                    **CROSS-CURRENT COMPENSATION TRANSFORMER, 300:5 RATIO**  
One CT installed on Phase B lead in generator terminal box.  
ANSI Class: T100, Knee Point: 100 V, Error @ 25 VA: 0.18%.  
Used for cross current compensation for parallel operation.
- CT87015**                    **CURRENT TRANSFORMER, 300:5 RATIO**  
8.7 kV Class  
Identical to installed Cross-Current Compensation Current Transformer or Differential Current Transformer having same ratio and voltage class. One transformer shipped loose.  
ANSI Class: T100, Knee Point: 100 V, Error @ 25VA: 0.18 %.
- DCT8715**                    **DIFFERENTIAL CURRENT TRANSFORMER, 300:5 RATIO**  
FLA 151-200  
Three sets of two Current Transformers, one of each set installed in generator terminal box and one shipped loose for customer installation.  
ANSI Class: T100, Knee Point: 100 V, Error @25 VA: 0.18%.  
Used for differential protection.
- HRNCN05**                    **INTERCONNECT HARNESS 25 FEET 8 METERS LONG**  
Shipped loose 8 M (25 foot) interconnect wiring harness  
from Engine Control Module to EMCP 4.3 (70 pin Deutsh ECM connector to 70 Deutsh panel connector.)



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Salt Lake City, Utah 84120  
General Phone: 801-974-0511  
Power Systems Service: 801-978-1581

**CATERPILLAR FACTORY BILL OF MATERIAL  
(CONTINUED)**

- TRSGEN7**                    **FACTORY POWER GENERATION SERVICE TEST REPORT  
AT 0.8 POWER FACTOR**
- TRSGEN1**                    **GENERATOR TEST REPORT**
- TVATRS1**                    **STANDARD GENSET TORSIONAL VALUE ANALYSIS REPORT**  
Provides Standard Generator Set Torsional Vibration Analysis (TVA) Report  
for a selected Caterpillar engine and Caterpillar generator combination. Not  
available for custom generators.
- TSP0002**                    **SPECIAL TEST CHARGE WITH GENERATOR SET**  
Testing with Caterpillar generator-mounted switchgear or when no  
switchgear ordered. Test will be performed in accordance with  
3L-0293 (electrical output (kW), current and voltage readings,  
engine speed, fuel rate, and specific fuel consumption are  
determined at 3 points at rated speed. (Full load, three quarters  
load, and half load.) Test must be requested prior to factory build.



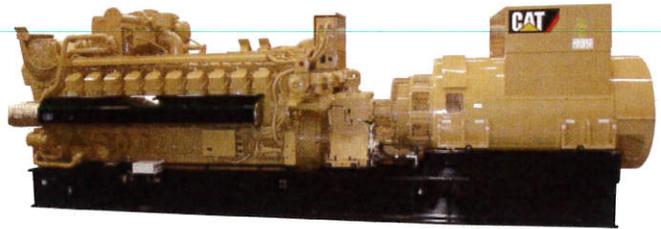
4901 West 2100 South  
Salt Lake City, Utah 84120  
General Phone: 801-974-0511  
Power Systems Service: 801-978-1581

**Our Springville City G3520H Generator Set Parts and Service Commitment**

- A. Any parts that Wheeler Machinery Co recommends to be stocked at site must be provided. Any maintenance, as well as minor repair parts (ie spark plugs, ignition transformers, sending units, pressure transducers etc.) that cannot be deliver to site in less than 24 hours, via non priority UPS delivery, must be included.
- B. All parts will be delivered within 48 hours of ordering.
- C. A 5% discount, per day, up to the value of the part, will be taken for any part that is not delivered within the 48 hours of ordering. This discount will apply for a period of not less than 10 years.
- D. Springville City Power shall have the ability to place parts orders directly to Wheeler Machinery Co via a web based internet interface. Springville City Power shall be able to see parts availability, estimated weights, estimated delivery, and pricing. The parts ordering system shall be serial number specific with the Springville City Power unit number identified.
- E. Springville City Power shall have on line web based access to parts, Operation & Maintenance, and Service Manuals included in the proposal pricing. Manuals shall be serial number specific with Springville City Power unit number identified.
- F. Wheeler Machinery Co will provide factory trained technicians available 24 hours a day, 7 days a week, 365 days a year.
- G. Wheeler Machinery Co has full parts and service operations within 50 miles of the proposed Springville City Power White Head site.



## G3520H Gas Generator Set Continuous 2469 kW\*



G3520H - 60Hz	
Power*	2469 kW <sub>at</sub>
Electrical Efficiency*	44.8% (HR), 44.5% (HA)
Thermal Efficiency	41.1% (HR), 41.4% (HA)
Service Interval	2,000 hrs
Major Overhaul	80,000 hrs
Electrical Frequency	60 Hz
Fuel	Natural Gas

### Top Tier Electrical Efficiency

#### Lowest Maintenance & Overhaul Costs

- Low Oil Consumption
- Extended Service Intervals
- Reduced Downtime

### Configurations:

**High Efficiency (HE)** - Optimized for fuel efficiency

**High Response (HR)** - Optimized for temperatures greater than 30 deg C with balanced performance and transient response

**High Altitude (HA)** - Optimized for balanced performance and transient response at higher altitudes

### Engine

#### High Power Density & Efficiency

- 20 Cylinder Long Stroke Design
- Steel Pistons
- 21 Bar BMEP
- ABB A140H-H66 Turbo

#### Low Maintenance Costs & Oil Consumption

- Cuffed Liners
- Hydraulic Valve Lash Adjusters
- 2,000 Hour Oil Change Interval
- 2,000 Hour Spark Plug Life
- Canister Oil Filter

#### Design for Durability

- Bolted Flange Manifolds
- Cold Actuator

### Generator

- High Efficiency Design
- Form Wound
- Permanent Magnet
- Space Heaters
- Bearing Temperature RTDs
- Stator Temperature RTDs

### Gas Train

- Includes Flanges & Counter Flanges
- Includes 600mm of Flexible Hose

#### Configurations:

- NFPA 37
- EN 746-2
- CSA B149.1
- AS 5601/AS 3814

### Air Cleaners

- Package Mounted
- Remote Mounted
- 4,000+ Hour Service Interval

### Controls & Electronics

- EMCP 4.3
- Wall Mounted Design
- Generator Set Control, Protection, & Monitoring
- Remote Monitoring & Control
- Integrated Load Feedback Signal
- 12 Programmable Digital Inputs
- 16 Programmable Digital Outputs
- Modbus TCP (10BT Ethernet)
- Modbus RTU (RS-485 Half Duplex)

### Engine Control (A4:E4)

- Electronic Ignition
- Speed Governing
- AFRC w/ NOx Sensor
- Turbo Bypass Control
- Improved Stability & Response
- Map Adjustment Feature

GENSET APPLICATION

ENGINE SPEED (rpm):	1500	RATING STRATEGY:	HIGH RESPONSE
COMPRESSION RATIO:	12.1:1	RATING LEVEL:	CONTINUOUS
AFTERCOOLER TYPE:	SCAC	FUEL SYSTEM:	CAT LOW PRESSURE
AFTERCOOLER - STAGE 2 INLET (°F):	118		WITH AIR FUEL RATIO CONTROL
AFTERCOOLER - STAGE 1 INLET (°F):	192	<b>SITE CONDITIONS:</b>	
JACKET WATER OUTLET (°F):	210	FUEL:	Nat Gas
ASPIRATION:	TA	FUEL PRESSURE RANGE(psig):	2.0-5.0
COOLING SYSTEM:	JW+OC+1AC, 2AC+GB	FUEL METHANE NUMBER:	84.7
CONTROL SYSTEM:	ADEM4 W/ IM	FUEL LHV (Btu/scf):	905
EXHAUST MANIFOLD:	DRY	ALTITUDE(ft):	4515
COMBUSTION:	LOW EMISSION	MAXIMUM INLET AIR TEMPERATURE(°F):	80
NOx EMISSION LEVEL (g/bhp-hr NOx):	1.0	STANDARD RATED POWER:	3448 bhp@1500rpm
SET POINT TIMING:	22	POWER FACTOR:	0.8
		VOLTAGE(V):	4160-13800

RATING	NOTES	LOAD	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE			
			100%	100%	75%	50%
GENSET POWER (WITH GEARBOX, WITHOUT FAN)	(1)(2)	ekW	2469	2456	1842	1228
GENSET POWER (WITH GEARBOX, WITHOUT FAN)	(1)(2)	kVA	3086	3070	2302	1535
ENGINE POWER (WITHOUT GEARBOX, WITHOUT FAN)	(2)	bhp	3448	3429	2577	1733
INLET AIR TEMPERATURE		°F	79	80	80	80
GENERATOR EFFICIENCY	(1)	%	96.8	96.8	96.6	95.8
GENSET EFFICIENCY (ISO 3046/1)	(3)(4)	%	44.2	44.2	43.1	40.8
THERMAL EFFICIENCY	(3)(5)	%	41.1	41.2	42.7	45.6
TOTAL EFFICIENCY	(3)(6)	%	85.3	85.4	85.8	86.4

ENGINE DATA							
GENSET FUEL CONSUMPTION (ISO 3046/1)	(7)	Btu/ekW-hr	7721	7725	7918	8357	
GENSET FUEL CONSUMPTION (NOMINAL)	(7)	Btu/ekW-hr	7987	7992	8192	8645	
ENGINE FUEL CONSUMPTION (NOMINAL)	(7)	Btu/bhp-hr	5720	5723	5854	6125	
AIR FLOW (@inlet air temp, 14.7 psia) (WET)	(8)	ft3/min	6357	6324	4698	3151	
AIR FLOW (WET)	(8)	lb/hr	28042	27887	20717	13892	
FUEL FLOW (60°F, 14.7 psia)		scfm	363	361	278	195	
INLET MANIFOLD PRESSURE	(9)	in Hg(abs)	135.0	134.3	100.6	68.6	
EXHAUST TEMPERATURE - ENGINE OUTLET	(10)	°F	735	737	799	901	
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia) (WET)	(11)	ft3/min	15141	15075	11805	8582	
EXHAUST GAS MASS FLOW (WET)	(11)	lb/hr	29036	28877	21478	14428	
MAX INLET RESTRICTION	(12)	in H2O	14.47	14.37	10.04	7.31	
EXHAUST RESTRICTION	(12)	in H2O	20.09	19.90	11.23	5.37	

EMISSIONS DATA - ENGINE OUT							
NOx (as NO2)	(13)(14)	g/bhp-hr	1.00	1.00	1.00	1.00	
CO	(13)(14)	g/bhp-hr	1.53	1.53	1.47	1.43	
THC (mol. wt. of 15.84)	(13)(14)	g/bhp-hr	2.28	2.28	2.38	2.30	
NMHC (mol. wt. of 15.84)	(13)(14)	g/bhp-hr	0.32	0.32	0.33	0.32	
NMNEHC (VOCs) (mol. wt. of 15.84)	(13)(14)(15)	g/bhp-hr	0.25	0.25	0.26	0.25	
HCHO (Formaldehyde)	(13)(14)	g/bhp-hr	0.21	0.21	0.22	0.22	
CO2	(13)(14)	g/bhp-hr	399	400	406	416	
EXHAUST OXYGEN	(13)(16)	% DRY	9.7	9.7	9.4	8.9	

HEAT REJECTION							
LHV INPUT	(17)	Btu/min	328658	327066	251438	176906	
HEAT REJ. TO JACKET WATER (JW)	(18)	Btu/min	33895	33825	29050	23893	
HEAT REJ. TO ATMOSPHERE	(18)	Btu/min	4321	4305	3594	2889	
HEAT REJ. TO LUBE OIL (OC)	(18)	Btu/min	12742	12717	11418	9825	
HEAT REJECTION TO EXHAUST (LHV TO 248°F)	(18)	Btu/min	62667	62491	52326	41982	
HEAT REJ. TO A/C - STAGE 1 (1AC)	(18)(20)	Btu/min	25753	25475	14218	4917	
HEAT REJ. TO A/C - STAGE 2 (2AC)	(18)(20)	Btu/min	16726	16611	11614	6312	
HEAT REJECTION FROM GEARBOX (GB)	(18)	Btu/min	1155	1149	863	581	
PUMP POWER	(19)	Btu/min	859	859	859	859	

COOLING SYSTEM SIZING CRITERIA							
TOTAL JACKET WATER CIRCUIT (JW+OC+1AC)	(21)	Btu/min	84838	84769			
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (2AC+GB)	(21)	Btu/min	20486	20492			
HEAT REJECTION TO EXHAUST (LHV TO 248°F)	(21)	Btu/min	68934	68740			
A cooling system safety factor of 0% has been added to the cooling system sizing criteria.							

MINIMUM HEAT RECOVERY							
TOTAL JACKET WATER CIRCUIT (JW+OC+1AC)	(22)	Btu/min	65165	64817			
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (2AC+GB)	(22)	Btu/min	16987	16872			
HEAT REJECTION TO EXHAUST(LHV TO 248°F)	(22)	Btu/min	50202	50054			

**CONDITIONS AND DEFINITIONS**

The rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Maximum rating is the maximum capability at the specified aftercooler inlet temperature for the specified fuel at site altitude and reduced inlet air temperature. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

**NOTES**

- Generator efficiencies, power factor, and voltage are based on specified generator. [Genset Power (ekW) is calculated as: (Engine Power (bkW) - Gearbox Power (bkW)) x Generator Efficiency], [Genset Power (kVA) is calculated as: (Engine Power (bkW) - Gearbox Power (bkW)) x Generator Efficiency / Power Factor]
2. Rating is with two engine driven water pumps. Tolerance is (+)3, (-)0% of full load. All derates are applied without pumps, then pump power is subtracted to obtain final rating.
  3. Efficiency represents a Closed Crankcase Ventilation (CCV) system installed on the engine.
  4. Genset Efficiency published in accordance with ISO 3046/1.
  5. Thermal Efficiency is calculated based on energy recovery from the jacket water, lube oil, 1st stage aftercooler, and exhaust to 248°F with engine operation at ISO 3046/1 Genset Efficiency, and assumes unburned fuel is converted in an oxidation catalyst.
  6. Total efficiency is calculated as: Genset Efficiency + Thermal Efficiency. Tolerance is ±10% of full load data.
  7. ISO 3046/1 Genset fuel consumption tolerance is (+)5, (-)0% at the specified power factor. Nominal genset and engine fuel consumption tolerance is ± 1.5% of full load data at the specified power factor.
  8. Air flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of ± 5 %.
  9. Inlet manifold pressure is a nominal value with a tolerance of ± 5 %.
  10. Exhaust temperature is a nominal value with a tolerance of (+)63°F, (-)54°F.
  11. Exhaust flow value is on a "wet" basis. Flow is a nominal value with a tolerance of ± 6 %.
  12. Inlet and Exhaust Restrictions are maximum allowed values at the corresponding loads. Increasing restrictions beyond what is specified will result in a significant engine derate.
  13. Emissions data is at engine exhaust flange prior to any after treatment.
  14. Emission values are based on engine operating at steady state conditions Fuel methane number cannot vary more than ± 3. NOx tolerances are ± 18 % of specified value. All other emission values listed are higher than nominal levels to allow for instrumentation, measurement, and engine-to-engine variations. They indicate "Not to Exceed" values. THC, NMHC, and NMNEHC do not include aldehydes.
  15. VOCs - Volatile organic compounds as defined in US EPA 40 CFR 60, subpart JJJJ
  16. Exhaust Oxygen level is the result of adjusting the engine to operate at the specified NOx level. Tolerance is ± 0.5.
  17. LHV rate tolerance is ± 1.5%.
- Heat rejection values are representative of site conditions. Tolerances, based on treated water, are ± 10% for jacket water circuit, ± 50% for atmosphere, ± 20% for lube oil circuit, ± 10% for exhaust, ± 5% for aftercooler circuit, and ± 5% for Gearbox.
19. Pump power includes engine driven jacket water and aftercooler water pumps. Engine brake power includes effects of pump power.
  20. Aftercooler heat rejection is nominal for site conditions and does not include an aftercooler heat rejection factor. Aftercooler heat rejection values at part load are for reference only.
  21. Cooling system sizing criteria represent the expected maximum circuit heat rejection for the ratings at site, with applied plus tolerances. Total circuit heat rejection is calculated using formulas referenced in the notes on the standard tech data sheet with the following qualifications. Aftercooler heat rejection data (1AC & 2AC) is based on the standard rating. Jacket Water (JW), Oil Cooler (OC), and Gearbox (GB) heat rejection values are based on the respective site or maximum column. Aftercooler heat rejection factors (ACHRF) are specific for the site elevation and inlet air temperature specified in the site or maximum column, referenced from the table on the standard data sheet
  22. Minimum heat recovery values represent the expected minimum heat recovery for the site, with applied minus tolerances. Do not use these values for cooling system sizing.

## FREE FIELD MECHANICAL &amp; EXHAUST NOISE

## MECHANICAL: Sound Power (1/3 Octave Frequencies)

Gen Power Without Fan	Percent Load	Engine Power	Overall	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz
ekW	%	bhp	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
2469	100	3448	121.9	84.9	96.4	96.1	98.4	100.7	106.8	105.2	105.9	106.3	107.5
1852	75	2591	119.1	84.1	94.8	94.8	96.3	97.6	105.0	103.1	104.2	104.3	106.1
1235	50	1742	116.8	81.3	91.7	92.2	94.3	96.6	103.2	100.9	102.6	103.4	107.0

## MECHANICAL: Sound Power (1/3 Octave Frequencies)

Gen Power Without Fan	Percent Load	Engine Power	1 kHz	1.25 kHz	1.6 kHz	2 kHz	2.5 kHz	3.15 kHz	4 kHz	5 kHz	6.3 kHz	8 kHz	10 kHz
ekW	%	bhp	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
2469	100	3448	105.3	107.8	108.0	106.6	106.9	105.9	105.4	112.9	117.9	111.7	105.6
1852	75	2591	103.7	106.5	107.0	105.2	105.8	105.9	106.5	114.5	104.8	107.8	101.0
1235	50	1742	102.6	105.6	106.3	104.3	105.1	105.2	108.8	104.6	101.7	104.0	94.4

## EXHAUST: Sound Power (1/3 Octave Frequencies)

Gen Power Without Fan	Percent Load	Engine Power	Overall	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz
ekW	%	bhp	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
2469	100	3448	129.3	92.5	104.2	113.3	114.1	108.4	111.3	117.7	115.4	118.0	116.3
1852	75	2591	126.2	90.2	108.1	113.5	113.1	103.5	105.5	110.3	110.1	110.5	109.0
1235	50	1742	123.3	87.8	105.6	114.5	112.7	99.2	101.5	104.5	102.8	101.7	102.9

## EXHAUST: Sound Power (1/3 Octave Frequencies)

Gen Power Without Fan	Percent Load	Engine Power	1 kHz	1.25 kHz	1.6 kHz	2 kHz	2.5 kHz	3.15 kHz	4 kHz	5 kHz	6.3 kHz	8 kHz	10 kHz
ekW	%	bhp	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
2469	100	3448	116.7	116.8	116.7	117.2	118.2	118.8	116.9	117.2	119.2	116.6	113.5
1852	75	2591	109.7	110.1	113.7	115.6	116.3	116.5	116.2	116.1	116.3	112.8	111.9
1235	50	1742	103.5	104.4	109.9	112.5	114.2	113.8	112.8	112.4	111.6	110.6	109.7

## SOUND PARAMETER DEFINITION:

Sound Power Level Data - DM8702-02

Sound power is defined as the total sound energy emanating from a source irrespective of direction or distance. Sound power level data is presented under two index headings:  
 Sound power level -- Mechanical  
 Sound power level -- Exhaust

Mechanical: Sound power level data is calculated in accordance with ISO 6798. The data is recorded with the exhaust sound source isolated.

Exhaust: Sound power level data is calculated in accordance with ISO 6798 Annex A. Exhaust data is post-catalyst on gas engine ratings labeled as "Integrated Catalyst".

Measurements made in accordance with ISO 6798 for engine and exhaust sound level only. No cooling system noise is included unless specifically indicated. Sound level data is indicative of noise levels recorded on one engine sample in a survey grade 3 environment.

How an engine is packaged, installed and the site acoustical environment will affect the site specific sound levels. For site specific sound level guarantees, sound data collection needs to be done on-site or under similar conditions.

Wheeler



4901 West 2100 South  
Salt Lake City, Utah 84120

October 28, 2015

Subject: Springville City G3520H Performance Guarantee

To:

Mr. Matt Hancock  
Springville City  
450 West 600 North  
Springville, UT 84663

Dear Mr. Hancock

At the request of Springville City Power, Wheeler Machinery Co. is providing the below performance guarantee between Springville City Power and Wheeler Machinery Co. for a natural gas distributed generation project and in accordance with the performance requirements listed below: Springville City

1. Performance Data sheet – EM0917-03-001, Appendix A
2. CSQ #: TBD
3. Fuel Sample: N/A, Based on Cat Natural Gas, Appendix B
4. Site Conditions: 4515ft, 80F

Springville City Power will provide site and product access to Wheeler/Caterpillar service personnel as required assuring the proper tuning and or modifications as needed to the Caterpillar supplied systems/components to meet the customer performance requirements.

#### Performance Guarantee

- A. Genset fuel consumption per ISO 3046/1: [BTU/ekW-hr] 8107 at 100% load  
Site Rating: 2469ekW
  - a. Per Caterpillar EM0917-03-001 (Appendix A), **Averaged across 2 units.**
  - b. Fuel consumption is based on gas LHV (Lower Heating Value) Lower calorific value: [BTU/scf] 905.
  - c. Unity power factor
  - d. All measurements will be taken every 30 min from the generator terminals.
  - e. Parasitic load of radiator or ancillary equipment will be 0ekW. The packages will not include engine driven fans.
  - f. Exhaust Backpressure and all other engine external conditions must comply with applicable Caterpillar technical datasheet values.
  - g. Fuel in accordance to attached fuel analysis and free of contaminants.

### Conditions

- A. Performance acceptance test will be no less than 1 hour and no more than 72 continuous hours, directly following commissioning and engine break in hours of 60 to 75 hours not to exceed 500 hr of accumulated run time.
- B. If the Caterpillar scope of supply does not meet the customer performance requirements on the first test, the customer/dealer will allow additional tests after generator set solution modifications and or generator set tuning to meet performance requirements.
- C. Caterpillar must approve all testing equipment and procedures for proper calibration.
  - a. The tolerances of all measurement devices including the fuel flow meter, fuel LHV analysis, and kW meter must be added to the guaranteed values.
  - b. Dealer/Customer must provide required instrumentation and personnel to conduct the performance.
- D. If the Caterpillar scope of supply cannot meet the performance requirements because of product deficiencies; Wheeler will compensate Springville City Power 1% of dealer net invoice (USD) per every 0.1% of deviation below the quoted rate after tolerance to a maximum of 1% of deviation. Based on the specified average electrical output and average fuel consumption of two generator sets combined. The compensation will only be paid once.
- E. Wheeler will compensate Springville City Power 1% of dealer net invoice (USD) per kW output deviation below the quoted kW output after tolerance to a maximum of 5% of dealer net of the Caterpillar scope of supply based on the specified average electrical output over four units. The compensation will only be paid once.
- F. Liquidated damage payment will be capped at no more than a total of 10% of dealer net invoice (USD) per Generator Set.
- G. The Caterpillar scope of supply must be installed and commissioned no later than 6 months after dealer receipt of the generator sets. If installation after 6 months, Springville City Power needs to request a guarantee extension from Wheeler.
- H. Springville City Power will have up to 3 months after testing is completed to claim liquidated damages.
- I. The customer site conditions and installations along with the above listed test must fall in compliance with appropriate Caterpillar Technical Circulars and Caterpillar Application and Installation requirements.
- J. Springville City Power accepts ownership that the site and application conditions comply with the site data submitted for datasheet in Appendix A.

Regards

(Authorized Wheeler Machinery Co. Signatory)

(TITLE)

Wheeler Machinery Co.

Cc: Shane Minor/Ken Green/Stephen Green/Nathan Munk/Jeff Forman

### Caterpillar G3520H Generator Set Emissions Data

	Measure	100%	75%	50%
NO <sub>x</sub> (as NO <sub>2</sub> )	g/bhp-hr	1.00	1.00	1.00
CO	g/bhp-hr	1.53	1.47	1.43
THC (Mol. Wt. of 1584)	g/bhp-hr	2.28	2.38	2.30
NMHC ( Mol. wt. of 15.84)	g/bhp-hr	0.32	0.33	0.32
NMNEHC (VOCs) (Mol. Wt. 15.84)	g/bhp-hr	0.25	0.26	0.25
HCHO (Formaldehyde)	g/bhp-hr	0.21	0.22	0.22
CO <sub>2</sub>	g/bhp-hr	400.00	406.00	416.00
Exhaust Oxygen	% Dry	9.70	9.40	8.90
PM 2.5		<b>See Attached Letter</b>		
PM10		<b>See Attached Letter</b>		

### Caterpillar G3520H Fuel Usage

BTU / eKW-Hr @ 1 eKW	7,725.00
BTU / eKW-Hr @ 2,456 eKW	18,972,600.00
Decatherm / Hr	18.97
Decatherm / 8,760 Hr	166,199.98



Caterpillar Inc.  
Lafayette Engine Center  
Lafayette, Indiana 47905

**Gas Engine Emissions Letter**

10/27/2015

**Project:** Wheeler Power Systems - G3520H

<b>Model:</b>	G3520H	<b>NOx ( g/bhp-hr)</b>	1.00
<b>Performance Data:</b>	EM0917	<b>Fuel LHV (Btu/ft3):</b>	905
<b>Compression Ratio:</b>	12.1:1	<b>Fuel MN:</b>	84.7
<b>J/W Outlet Temp.(°F):</b>	210	<b>Site Altitude (ft):</b>	4515
<b>A/C Inlet Temp. (°F):</b>	118	<b>Max. Ambient (°F):</b>	80

<b>Site Rating:</b>	3448	bhp @ 1500 rpm w/gearbox	<b>BSFC (Btu/bhp-hr):</b>	5720
<b>@ site temp:</b>	80	°F	<b>Up Time (hr/yr):</b>	8760

<u>Load</u>	<u>ekW</u>	<u>bhp</u>	<u>PM 10 tons/year</u>	<u>PM 2.5 tons/year</u>
Engine MAX Rating	2469	3448	0.007	0.007
Site Rating 100%	2456	3429	0.007	0.007
Site Rating 75%	1842	2577	0.005	0.005
Site Rating 50%	1228	1733	0.004	0.004

NOTES

PM10 and PM2.5 values provided above are calculated using EPA AP-42 procedures. They do not represent measured test data on a G3520H engine. The input values used for the calculation, to provide the numbers above, can be found on Caterpillar Datasheet EM0917. EM0917 is based on engine operation at steady state conditions adjusted to the NOx of 1.00g/bhp-hr. Reference the following EPA document:  
<http://www3.epa.gov/ttn/chieff/ap42/ch03/final/c03s02.pdf>, \*\*Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINESa (SCC 2-02-002-54).





## STAFF REPORT

**DATE:** December 1, 2015  
**TO:** Honorable Mayor and City Council  
**FROM:** Springville Electric Department  
**SUBJECT: DRY PARTS STORAGE BUILDING**

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### **RECOMMENDED MOTION**

Motion to award a contract to Souvall Brothers Construction Company to supply and install a 35' x 50' pre-engineered dry parts storage building for the sum of \$94,928.00. The building will be located on at the White Head Power Plant in accordance with a properly signed and executed contract.

### **GOALS, OBJECTIVES AND STRATEGIES AT ISSUE**

In conjunction with the installation of the two proposed engine generators at the White Head Power Plant; the generation department is in need of a dry parts storage building. This building will be used to store engine and generator parts for the new and existing generators units at the White Head Power Plant. Springville solicited bid estimates for a dry parts storage building and received seven qualified bids. The dry parts storage building will be located on the North central part of the power plant property. Through an extensive point evaluation process the Department recommends that award be presented to Souvall Brothers Construction for the procurement and installation of this building.

### **DISCUSSION**

Currently all engine generator parts for the existing generation equipment is stored in the space that is has been allocated for the new engine generators. The parts consist of cylinder heads, fuel pumps, pistons, rods, gaskets and a variety of small auxiliary parts. In addition the department has stored electrical motors and power boxes necessary for Art City Days, the Folk Fest and many other functions the City sponsors. The Dry parts storage building proposed will be used to house these existing engine parts as well as new inventory needed for the new Caterpillar engine generators.

The Cost for this small dry parts storage building came in at \$94,928.00. This equates to \$54.24/ per square foot installed. This is a very good and competitive price as compared to other construction projects of similar size and context.

### **ALTERNATIVES**

The alternatives to building a small dry parts storage building is as follows

- Move all parts out into the yard (not recommended because of the weather concerns)
- Rent multiple conex boxes to store parts and equipment on site
- Rent storage sheds within the city to store parts and equipment

### **FISCAL IMPACT**

The fiscal impact of purchasing and installing the dry parts storage building is positive. Over the last three years the department has dedicated a portion of its reserves to purchasing generation assets for the White Head Power Plant. The dry parts storage building was included in this planning and will be paid for out of these same funds. No debt will be incurred for this dry parts storage building.

Matt C. Hancock  
Power Generation Superintendent



October 29, 2015

Attention: City of Springville, Finance Department

Reference: Request for Proposal: BID#2015-20 Whpp Dry Parts Storage Building

Subject: Proposal Response, BID#2015-20 Whpp Dry Parts Storage Building

Dear Proposal Review Board:

Souvall Brothers Construction is pleased to submit the following firm fixed price proposal to the City of Springville for the level of effort associated with delivering a 35' X 50' Dry Parts Storage facility compliant to the requirements and specifications as identified within the subject RFP. The total price for the subject effort is \$94,998 as summarized in the table below. A detailed line item cost breakdown is provided within **Enclosure A**.

<b>Cost Breakdown Structure</b>	
<b>Labor - Cost Elements and Scope:</b>	<b>\$ 30,580.00</b>
Labor Summary: General Management; Excavation; Erection (35' X 50' pre-engineered structure)	
<b>Material - Cost Elements and Scope:</b>	<b>\$ 45,128.00</b>
Materials: Pre-Engineered Building (35' X 50"); Anchor Bolt and building assembly hardware; Concrete - Forms, Footings, Foundation, floor; Two (2) man doors; Two (2) man doors; Two (2) 14' x 14' Overhead doors (Openers provided); Gravel and Fill; Dumpster /Porta Jon Rental; Material Disposal	
<b>Professional Services and Engineering Requirements:</b>	<b>\$ 7,500.00</b>
Professional Services and Special Inspections (Inspections, Geo-Technical, Surveying, Engineering)	
<b>Overhead and General Administrative</b>	<b>\$ 7,320.00</b>
<b>Profit (Fee)</b>	<b>\$ 4,400.00</b>
<b>Total Price</b>	<b>\$ 94,928.00</b>

This Proposal is predicated on the following ground rules and assumptions:

- The building dimensions are: 35 feet wide by 50 feet long with a ceiling height no less than 16 feet.
- The building will be provided with:
  - Four (4) skylights in the roof for ambient light.
  - Two man doors
  - Two (2), 14 feet high by 14 feet wide insulated roll up garage doors with window inserts
  - Two power door openers installed
- The building will be purchased from American Standard Steel Building Systems
- Four (4) foot high concrete skirt on all four sides on which the building will be installed
- Building shell will match the existing Springville Operations Center building colors. Springville City to provide color match information to Souvall Brothers upon award.



- The building will meet all Springville City Building codes and Departments' requirements for wind and snow loading. Details of building specifications provided within **Enclosure B**
- The building will meet all specifications and requirements as identified within the RFP
- There will be no installation of electrical, water, gas, sewer or other utilities to this building by Souvall Brothers Construction.
- Building construction lead-time is 10 weeks ARO. Springville City must award by November 13, 2015 in order to achieve February 29, 2016 project completion.
  - No allowance has been made for any tenting of concrete should contract award be delayed past November 13, 2015.
  - Souvall Brothers Construction reserves the right to modify this proposal for the concrete and site work only should award not be made by November 13, 2015; as inclement weather require additional scope, such as concrete tenting which has not been accounted for in this proposal.
- Souvall Brothers is providing the following Bonding for this effort:
  - 100% Full performance Bond
  - 100% Material and Labor Full Payment Bond
- Souvall Brothers Constructions accepts the terms and conditions of this RFP as stated
- This proposal remains valid for 30day from date of submission

Souvall Brothers Construction is excited for the opportunity to work with Springville City, and is providing an overview of Souvall Brothers' resume, capabilities and qualification as **Enclosure C**. Please, should you have any questions concerning this proposal contact Bill Souvall, President, (801)-508-2888, or Justin Quillen, Director of Business Development (801)-573-9117.

Kind Regards,

Justin Quillen  
Souvall Brothers Construction  
Director, Business Development

Enclosures:

- A – Cost Breakdown
- B – Building Specifications
- C – Souvall Brothers Capability Statement

Enclosure A – Cost Breakdown

<b>Cost Breakdown Structure</b>	
<b>Labor - Cost Elements and Scope:</b>	\$ 30,580.00
Labor Summary: General Management; Excavation; Erection (35' X 50' pre-engineered structure)	
<b>Material - Cost Elements and Scope:</b>	\$ 45,128.00
Materials: Pre-Engineered Building (35' X 50"); Anchor Bolt and building assembly hardware; Concrete - Forms, Footings, Foundation, floor; Two (2) man doors; Two (2) man doors; Two (2) 14' x 14' Overhead doors (Openers provided); Gravel and Fill; Dumpster /Porta Jon Rental; Material Disposal	
<b>Professional Services and Engineering Requirements:</b>	\$ 7,500.00
Professional Services and Special Inspections (Inspections, Geo-Technical, Surveying, Engineering)	
<b>Overhead and General Administrative</b>	\$ 7,320.00
<b>Profit (Fee)</b>	\$ 4,400.00
<b>Total Price</b>	<b>\$ 94,928.00</b>

<b>Total Cost Element Breakdown</b>		<b>Cost Line</b>
1	Excavation	\$ 5,000.00
2	Rebar	\$ 4,360.00
3	Concrete - Floor	\$ 10,500.00
4	Concrete - Foundation, Footings and Skirt	\$ 8,500.00
5	Building Erection	\$ 10,000.00
6	Translucent Roof Panel Installation	\$ 2,400.00
7	Pre- Engineered Building (Includes, two man doors, two 14'x14' overhead doors and door openners) - American Standard Steel Building	\$ 24,500.00
8	Pre-Engineered Building Tax	\$ 1,715.00
9	Anchor Bolts and Fasteners	\$ 1,233.00
10	Dumpster and Fill Removal	\$ 2,000.00
11	Architecture and Engineering Services (James Derby Architect)	\$ 3,000.00
12	Temp Facility (on-site work trailer)	\$ 500.00
13	Porta Jon	\$ 500.00
14	Geo Technical Survey, Site Survey, Final Document Survey Special Inspections	\$ 3,000.00
15	Souvall Brothers Construction Project Management	\$ 6,000.00
16	Souvall Brother Construction Overhead / G&A	\$ 7,320.00
17	Souvall Brothers Fee (5%)	\$ 4,400.00
	<b>Total Price</b>	<b>\$ 94,928.00</b>

## Enclosure B – Building Specifications

### Building Codes and Loads

Basis of Design: IBC 2012      Wind Speed: 115mph       Ultimate Wind Speed       3 second gust      Exposure: C  
Ground snow: 30PSF      Roof Snow: 30PSF      Seismic: (Ss) .122      (S1) .044  
Live: 20PSF      Collateral: .5PSF      Building Occupancy: II

Building deflections:  Manufacture's Standard  
Custom deflections  required

Frames:      Wall girts:      Roof purlins:      Wall panel:      Roof panel:      Frame Horizontal:

### Building 1:

Width: 35'0"      Length: 50'0"      Height: 16'0"      Roof pitch: 2:12  
Sidewall bay spacing: 2@25'0"  
Left end wall bay spacing: 1@9'0", 1@26'0"  
Right end wall bay spacing: 1@26'0", 1@9'0"

Frame type: Symmetrical Gable       Clean Span       Multi-span      Interior columns spacing: N/A  
Roof purlin depth: 8"      Wall girt depth: 8"      Side wall girt Condition: Bypass  
End wall girt condition: 1" outset

Column Type: Tapered       Pre-galvanized secondary steel       Hot dipped galvanized frames

End wall condition: Bearing frame non-expandable

### Roof Panel

Roof Panel Profile: PBR      Panel Gauge: 26      Finish: Galvalume +  
Finish Warranty: 20 years      Weathertightness warranty: N/A       Seamer Rental Included

Notes:

### Wall Panel

Wall Panel Profile: AVP      Panel Gauge: 26      Finish: Signature 200 TBD  
Finish Warranty: 20 years       Sealed walls: eave, rake, base closures

Notes:

### Trims

Front and back side wall: Gutters/downspouts      Downspout quantity each wall: 2       Gutters have ice protection

Left end wall: Rake Trim      Right end wall: Rake Trim

Base Condition: Base Angle

## Enclosure B – Building Specifications

### Walk doors

(2) 3070 – 18ga steel door, insulated, wind rated, ADA compliant, lever handle, cylinder lockset.

Notes: Doors come pre-assembled

### Canopy/Overhang

N/A

### Additional Accessories

(2) 14'0" x 14'0" coiling overhead doors – 26ga steel curtain, wind rated, insulated, header seal, ½ HP motorized opener with wireless remote. Each doors has (3) 5" x 17" windows.

(4) 3'0" x 10'8" light transmitting roof panels



## Enclosure C Resumes and Capability Statement

Souvall Brothers Construction is uniquely positioned with a very low cost of operation; allowing us to accomplish your Ground-Up construction requirements at a superior value. There is never any compromise to quality or schedule. As you can verify through our customer testimonials, Souvall Brothers Construction delivers results, and does so at a great value to our clients.

Souvall Brothers Construction is an environmentally responsible company and recycles all eligible materials on every job

### Souvall Brothers Team and Bid #2015-20 Specifically:

Souvall Brothers Construction is very familiar with requirements and process of pre-engineered building site preparation and structure erection. Currently, Souvall Brothers is building two very similar structures. The first, a 65' x 75' pre-engineered building to be used by one of our return commercial customers as a warehouse, and second, a 40' x 60' pre-engineered structure to be used a garage and storage facility. Both of these projects will be complete prior to the commencement time-line of the Springville Dry Storage Building.

#### Jon Murdoch – Project Manager

Jon brings more than 20 years of construction management experience to the project. Jon is the principal project manager for Souvall Brother Construction and has operated in the site lead capacity on multimillion dollar construction projects, (Fox News, C-7 data Centers). Jon is a lead by example, get it done individual. Jon manages a very organized, efficient, clean and respectful construction project. Jon will directly manage the major aspect of this effort including the canopy erection, excavation and concrete work required. Jon's rapport with Ken Gardener, a concrete and excavation contractor of 25 years is impeccable, and these men will ensure that their crews perform the required tasks safely, while meeting all quality and schedule demands.

#### Justin Quillen – Business Development & Business Operations

Justin brings a unique perspective to construction coming from manufacturing. Justin has an extensive background in lean principals, process controls and project management, having managed production lines delivering ~\$50M in product each year, as well as having managed sophisticated customers, such as Lockheed Martin. Justin's perspective position Souvall Brothers to strategically offer the best value proposition, directly meeting the customers 'objective.

#### Bill Souvall – President

Bill, a native Utahan, has been in the construction business since graduating from the University of Utah in 1975. At this time, Bill was working for this father, Pete Souvall in the family construction business. Today, Bill proudly serves as President and Owner of Souvall Brothers Construction. Bill is still heavily involved in the day to day operation and meets with every customer personally. As President, Bill is reliable, accountable, trustworthy, and capable. These attributes are fundamental and represent the way in which Souvall Brothers Construction conducts business, navigates challenges and builds meaningful relationships. Bill's most prideful of having a business that has survived and thrived through numerous business cycles, ups and downs, and changing economic conditions and getting a call from a past client who has a need and thinks of calling Souvall Brothers Construction first.



## Enclosure C Resumes and Capability Statement

Thank you for requesting information on Souvall Brothers. Should you need anything beyond the information below, please contact Justin Quillen at 801-573-9117. Our Web-site, [www.souvallbrothers.com](http://www.souvallbrothers.com) is also a great reference, history of our company and resume.

### History:

Souvall Brothers Construction has been a business since 1983. The actual origination of the firm took place in 1945, with Bill Souvall's Grandfather, father (Pete) and uncles and is a proud family owned legacy. Today, the Corporation is solely owned by Bill Souvall, the firms' president. Bill is very much involved in all of the operations of Souvall Brothers Construction, and is an active participant in ensuring that the requirements of DFCM RFP: 15329480/15330480 were fulfilled prior to proposal submission to Intermountain Wind and Solar.

### Notable Clients:

The Souvall Brothers Construction team has vast capability, and a diverse resume. A small sample of our notable clients include: Utah's Fox 13, C-7 Data centers; Boeing Commercial Aerospace; Edo/ITT/Exelis/Harris Aerospace; Northrop Grumman; OC Tanner; Tunex; Alphagraphics; Federal Express; DHL; Bard Medical; Integra Medical; Teva Pharmaceuticals; Big O Tires; Hoyt – Easton Archery and Indico Distribution to name few. We pride ourselves on repeat business from firms like these and many others in the Salt Lake Valley.

### Services:

Souvall Brothers Construction is committed to bringing a customer focus and results driven approach to all of our projects. We're relationship oriented, take a genuine interest in getting to know our clients, and understanding their business' construction needs. This collaborative method allows us to most efficiently deliver a finished product.

Something else which differentiates Souvall Brothers from other commercial construction firms is our agility. We understand that changes is a part of business; scope and requirements can evolve, but schedules and deadlines often do not. - Our ability to react to change and partner with our customers in real-time enables us to continually deliver value, despite the challenge. We offer the best, with a dedicated and professional organization, and a strong family like partnership with subcontractors.

Souvall Brothers Construction is positioned to fulfill all your construction needs, with over 70 years of collective experience and capabilities including: Design Build, Ground-Up or Tenant Improvement/Optimization. We run lean and mean, bringing the best cost-value proposition to our clients.

### Design Build

Souvall Brothers Construction is dedicated to beginning the process of building or modifying your new structure by understanding your company's vision and needs. Here we make a point to get to know you (Owner/Developer) and demonstrate through effective communication and performance that your building is purposeful of intended utilization, delivered on-time, and cost responsible.

### Ground Up



# Capability Statement

Commitment to Exceed Expectations

Justin Quillen

Director of Business Development

Direct: (801) 508-2888

[Jquillen@souvallbrothers.com](mailto:Jquillen@souvallbrothers.com),

[www.souvallbrothers.com](http://www.souvallbrothers.com)

## Core Competencies

Souvall Brothers Construction provides the commercial, industrial and general contracting services required to support the continued economic growth of Utah. Souvall Brothers Construction is an experienced and qualified low cost General Contractor with the following expertise:

- Tenant Improvement
  - Allowing for facilitation, modernization and improvement of existing space without disrupting daily business operations of our clientele.
- Design - Build
  - Proving expertise to navigate through the entire construction process from cradle to grave. Optimizing client benefit, ensuring build is purposeful for intended use. Providing services of: — Engineering — Architecture — General Contracting — Subcontractor Management — Design Completion
- Ground-up
  - Warehouses — Pre-Engineered Buildings — Tilt-Up Structures — Storage Units — Manufacturing Facilities — Office, Retail Space and Industrial Space

## Past Performance

- Fox 13 News – Multi-year, state of the art facility renovation (FOX 13 News remained on-air throughout entire project)
- C-7 Data Centers – New 60,000 sqf facility
- Boeing Aerospace – Cleanroom
- Harris AeroStructures - Cleanroom
- Integra Medical – Cleanroom
- Jtech – Business office renovation
- Snaplock Industries – Manufacturing facility expansion and business park
- 401K advisors – Office modernization

## Differentiators

- Low Cost Provider
- 32 Years of proven General Contracting Experience
- Firm understanding of Government Contracting requirements
- Capable of project execution on \$250K - \$5M efforts
- Personable team, with owner involvement on every job
- Change Management expertise
- Safety focused with no OSHA reportable



## Corporate Profile Data

- Duns: 080015397 — Bonded: Yes — NAICS: 23621, 23622, 23811, 23813, 236210, 236220, 237130 — Souvall Brothers Construction is a Veteran Owned Small Business

[www.souvallbrothers.com](http://www.souvallbrothers.com)



## STAFF REPORT

**DATE:** November 30, 2015

**TO:** Honorable Mayor and City Council

**FROM:** J. Fred Aegerter, Community Development Director

**SUBJECT: PRELIMINARY PLAN APPROVAL FOR THE QUAIL VALLEY  
SUBDIVISION LOCATED IN THE AREA OF 300 NORTH 1500 WEST IN  
THE R1-8 AND R1-10 SINGLE-FAMILY RESIDENTIAL AND WF-1  
WESTFIELD OVERLAY ZONES.**

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### **RECOMMENDED MOTION**

Move to grant preliminary plan approval for the Quail Valley Subdivision located in the area of 300 North 1500 west in the R1-8 and R1-10 Single-Family Residential and WF-1 Westfield Overlay Zones.

### **SUMMARY OF ISSUES/FOCUS OF ACTION**

Does the proposed plat meet the requirements of Springville City Code, particularly the following sections?

11-4-4 Residential Development Regulations  
11-5-4 Westfield Overlay Regulations  
14-2-1 Application and Approval Process  
14-5-1 through 14-5-4, Subdivision Requirements

### **BACKGROUND**

The proposed development is located at approximately 1300 West on Center Street and 300 North 1500 West. The parcels fall within the R1-10 and R1-8 Single-Family Zones within the Westfields Overlay Zone.

In 2008, the subdivision was given approval in part under different ownership, with the name Amhurst Subdivision. Soon after final approval was given for the first phase, the market made a turn for the worst and the development was never recorded.

The current proposal is essentially the same as before, utilizing the density bonus program of the Westfields Overlay Zone, but includes an additional 10 acres that front along 1500 West.

### ***CITY COUNCIL AGENDA***

*Meeting Date*

*quail valley-preliminary*

In that 10 acre portion, the developer is also dedicating to the City a 2 acre parcel to be utilized as a regional detention basin that is shown in the Storm Water Master Plan for the overall area.

As part of the approval process when utilizing the density bonus program in the Westfields Overlay zone, the preliminary plan is also required to be approved by the City Council.



## DISCUSSION

The intent of the Westfields Overlay Zone is to help create attractive, diverse neighborhoods that include a wide variety of attached and detached quality housing. Densities in excess of the baseline density for the underlying zone may be considered for developments which comply with the density bonus program requirements up to a maximum of 40%. The Quail Valley development is seeking a 25.7% density bonus, which will allow for an additional 18 units above the allowed base density and the utilization of a mix of housing types.

### Density Calculations

Area zoned R1-10 = 14.98 acres x 3 units (net base density) = 44.94 units

Area zoned R1-8 = 7.08 acres x 3.8 units = 26.90 units

Total baseline density = 71 units + 18 density bonus units = Total 89 units

### Density Bonus Requirements

Developers requesting densities greater than the baseline density, must comply with two (2) or more of the bonus density requirements which are; at least one of the requirements of the “Parks, Open Space and Other Public Lands” and the “Building Materials” categories with a minimum participation of at least 3% in each category.

The following table shows the density bonus categories and percentages requested for the proposed development.

Density Bonus Category	Density Bonus Improvement	Bonus %
Parks and Open Space	A 0.7% density bonus for each 1% of land developed for a linear trail system within the development. The trail system shall become property of Springville City. Improvements shall include: grading improvements, 10-foot-wide hard-surfaced trail, benches every 1/8th mile and landscaping, including at least three trees per 100 linear feet. Other types of improvements may include trail heads.  (1.19 acres = 5.39% x 0.7%)	3.7%
Building Materials	Option C - A density bonus of 15% shall be given where 50% of the gross facade elevation includes brick or stone with 50% of the remainder in stucco, wood or fiber cement siding on detached single-family and attached two-family dwellings.	15%
<b>Design Features</b> Projecting Bays/or Dormer Windows	Projecting Bays at least two feet deep covering at least 15% of the front façade, based on materials and appropriateness of location or dormer windows.	2%
Window Accents	Window accents on all front façade windows, such as a window head (e.g., pediment or hooded) and a projecting sill (e.g., precast or brick) along with keystones, brick soldier coursing above the window, etc.	2%
Building Mix	Developments where over 50% of the multi-family dwellings are rowhouses.	3%
<b>TOTAL DENSITY BONUS</b>		<b>25.7%</b>

Housing Mix Requirements

A range of housing densities and types is an objective of Springville City for the Westfields. In order to help insure this mix occurs, developers participating in the density bonus program will be required to meet the following requirements listed on the table below. The percentages shown in bold parentheses are the proposed housing mix for the Quail Valley development.

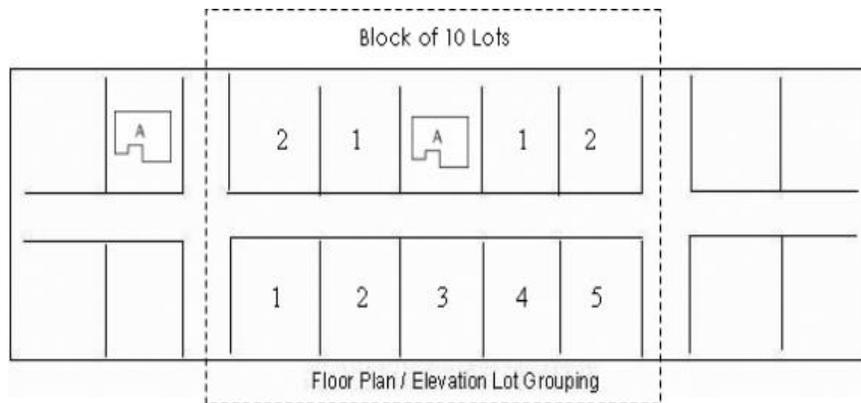
Zone	The % of land that must be developed at Base Zoning Designation	Additional % of land that must be developed as single-family detached dwellings	Maximum % of land that may be developed as duplexes or twin homes	Maximum % of land that may be developed under RMF-1 Development Standards	Maximum % of land that may be developed under RMF-2 Development Standards
R1-10	25% <b>(27.7%)</b>	45% <b>(43.7%)</b>	15%	30% <b>(28.6%)</b>	

R1-8	25%	<b>(25%)</b>	45%	<b>(45%)</b>	15%	<b>(15%)</b>		30%
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Minimum Performance Standards

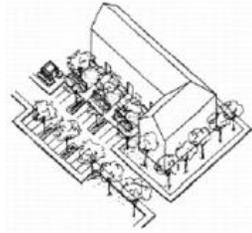
Section 11-5-404 of Springville City Code lists the minimum performance standards that every development in the Westfields Overlay Zone must meet, in addition to any density bonus improvements.

- 1) The following are minimum standards for single-family detached dwellings, twin homes or duplexes developed in the Westfields:
  - a) The same elevation may not be used on the adjacent two (2) lots on either side of the subject property or the five (5) lots across the street from the subject property on any block length, as illustrated below.



- b) No garage shall occupy more than forty percent (40%) of the total building frontage. This measurement does not apply to garages facing on a carriage way, or set back at least twenty feet (20') from the front of the house or that are side loaded.
  - c) In any lot with street frontage of sixty feet (60') or less that includes a carriage way, all required parking shall be accessed from the carriage way. The required parking shall be set back a minimum of five feet (5') from the rear property line.
  - d) Front loaded garages on lots with street frontage of sixty feet (60') or less must be set back a minimum of twenty feet (20') from the required front setback of the house.
  - e) Single-family detached houses may have a roof pitch of no less than five to twelve (5:12).
  - f) All walls which face a public street must contain at least twenty-five percent (25%) of the wall space in windows or doors. However, on homes that have side-loaded garages, all walls which face a public street must contain at least twenty percent (20%) of the wall space in windows or doors.
  - g) Primary entrances shall face the public street and sidewalk.
  - h) Windows shall not be flush with exterior walls. They shall be recessed or treated with a trim.
  - i) Building materials shall be applied in consistent amounts on the front and side wall elevations of houses on interior lots and all wall elevations of the houses on corner lots. In no case shall the percentage of building materials vary greater than ten percent (10%) on those elevations where consistent amounts are required.
- 2) The following are minimum standards for any multiple-unit residential buildings and lots, either for rental or ownership, developed in the Westfields:

- a) Parking for all multi-family dwelling units shall be located behind the principal building and may be accessed from a carriage way or driveway.
- b) Primary entries shall face a public street.



*Locate parking areas along non-street facing elevations with primary entries facing public street.*

- c) At least fifty percent (50%) of the block length shall have building facades within thirty feet (30') of the front property line.
- d) All front facades must include twenty-five percent (25%) of the wall space in windows or doors.
- e) The use of materials must be consistent on all sides of the building.
- f) Standards specific to large developments more than fifty (50) units.
  - I. Variation in building facades facing streets is encouraged to provide identity to buildings within multi-family projects. This may include a variety of building styles, massing, composition, and prominent architectural features, such as door and window openings, porches, and rooflines.
  - II. Building frontages greater than one hundred feet (100') shall include projections and recesses, balconies, arcades and other distinctive features to interrupt the length of any building facade facing a street.
- g) Windows shall not be flush with exterior walls. They shall be recessed or treated with a trim.

### DEVELOPMENT REVIEW COMMITTEE ISSUES

The Development Review Committee reviewed the preliminary plan on October 1, 2015 and provided the applicant with a copy of redlined comments on the submitted plans. Any items not addressed or any additional revisions needed are listed below in the “POST DRC COMMENTS” section.

### POST DRC COMMENTS

Most items have been addressed at this point. Drainage and irrigation issues are still being resolved and will be addressed prior to final plan approval.

### PLANNING COMMISSION CONSIDERATION

The Planning Commission considered the preliminary plan at the November 24, 2015 meeting as part of the “consent agenda” which was approved unanimously.

### COMMISSION ACTION:

Commissioner Clay moved to approve the consent agenda items. Commissioner Huff seconded the motion. Approval was unanimous.

**Commission Vote**

<u>Commissioner</u>	<u>Yes</u>	<u>No</u>
Craig Huff	X	
Frank Young	Excused	
Genevieve Baker	X	
Joyce Nolte	X	
Michael Clay	X	
Brad Mertz	Excused	
Carl Clyde	X	

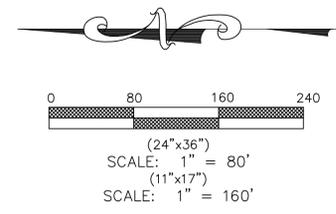
Laura Thompson  
City Planner

Attachments

cc: Andrade Christensen

**BOUNDARY DESCRIPTION PHASE 1**  
 COMMENCING AT A POINT WHICH IS NORTH 00°12'31" EAST ALONG THE SECTION LINE 170.31 FEET AND 327.95 FEET EAST FROM THE WEST QUARTER CORNER SECTION 32, TOWNSHIP 7 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 00°03'35" EAST 682.47 FEET; THENCE NORTH 00°09'49" WEST 1.19 FEET; THENCE NORTH 00°09'46" WEST 670.01 FEET; THENCE SOUTH 89°39'39" EAST 109.38 FEET; THENCE SOUTH 88°23'15" EAST 369.53 FEET; THENCE SOUTH 87°38'22" EAST 83.13 FEET; THENCE SOUTH 00°14'00" EAST 645.98 FEET; THENCE NORTH 89°23'00" WEST 150.30 FEET; THENCE SOUTH 00°24'00" WEST 684.58 FEET; THENCE NORTH 89°45'00" WEST 5.60 FEET; THENCE SOUTH 00°04'01" WEST 10.36 FEET; THENCE NORTH 89°59'37" WEST 16.51 FEET; THENCE SOUTH 00°01'06" WEST 1.82 FEET; THENCE NORTH 89°43'27" WEST 386.07 FEET TO THE POINT OF BEGINNING.  
 PARCEL CONTAINS 14.98 ACRES.

**BOUNDARY DESCRIPTION PHASE 2**  
 COMMENCING AT A POINT WHICH IS SOUTH 00°12'31" EAST ALONG THE SECTION LINE 483.19 FEET FROM THE NORTHWEST CORNER SECTION 32, TOWNSHIP 7 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE SOUTH 89°06'04" EAST 68.28 FEET; THENCE SOUTH 89°49'45" EAST 260.61 FEET; THENCE SOUTH 00°32'29" EAST 200.78 FEET; THENCE SOUTH 00°16'09" WEST 370.44 FEET; THENCE SOUTH 03°33'16" EAST 82.30 FEET; THENCE NORTH 85°11'10" WEST 29.96 FEET; THENCE NORTH 88°26'02" WEST 221.02 FEET; THENCE NORTH 88°57'43" WEST 257.34 FEET; THENCE NORTH 00°13'43" WEST 647.38 FEET; THENCE SOUTH 89°06'01" EAST 262.93 FEET TO THE POINT OF BEGINNING.  
 PARCEL CONTAINS 9.08 ACRES.

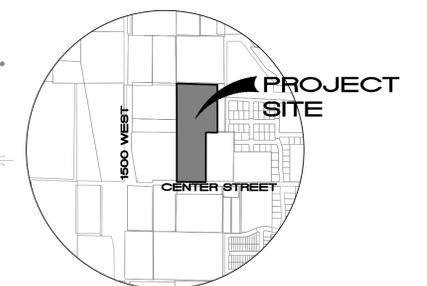


**LAND USE**

TOTAL ACREAGE = 24.06 ACRES	BASILENE DENSITY
OPEN SPACE/ DETENTION = 2 ACRES	BASILENE YIELD R-1-10 = (14.98 ACRES)(3.0 UNITS/ACRE) = 44 UNITS
LINEAR PARK OPEN SPACE = 1.19 ACRES (5.4%)	BASILENE YIELD R-1-8 = (7.08 ACRES)(3.8 UNITS/ACRE) = 26 UNITS
ZONING OF R-1-10 USABLE 12.04 ACRES	BONUS DENSITY
AREA OF TOWN HOMES = 3.33 ACRES (27.7%)	BUILDING MATERIALS OPTION C = 15%
UNITS = 57	5.4% LINEAR PARK OPEN SPACE = 3.7%
ZONING OF R-1-8 USABLE 7.08 ACRES	PROJECTING BAYS/DORMER WINDOWS = 2%
UNITS = 32	WINDOW ACCENTS = 2%
AREA OF TWIN HOMES = 1.78 ACRES (25%)	5% OR MORE MULTI FAMILY ROW HOUSES = 3%
	TOTAL = 25.5% OR 17.96
<b>TOTAL UNITS</b>	<b>TOTAL DENSITY</b>
89 UNITS	BASILENE YIELD = 71.84 UNITS+17.96 UNITS = 89 UNITS

**GENERAL NOTES:**  
 1) THIS AREA HAS HISTORICALLY HAD A HIGH WATER TABLE AND AS A RESULT NO BASEMENTS WILL BE ALLOWED IN THIS DEVELOPMENT.  
 2) THE DEVELOPMENT WILL BE PHASED AS SHOWN BELOW:  
 PHASE 1 = LOTS 1 - 57  
 PHASE 2 = LOTS 58 - 89

OWNER/DEVELOPER  
 CHRISTENSEN BROS./  
 ALBERT HARMER



VICINITY MAP  
 NTS

REVISIONS					
NO.	DATE	DESCRIPTION	BY	DESIGNED BY	TMT
1				DRAWN BY	VMS
2				CHECK BY	TGT
3				DATE	11/02/15
4				CDGD FILE	

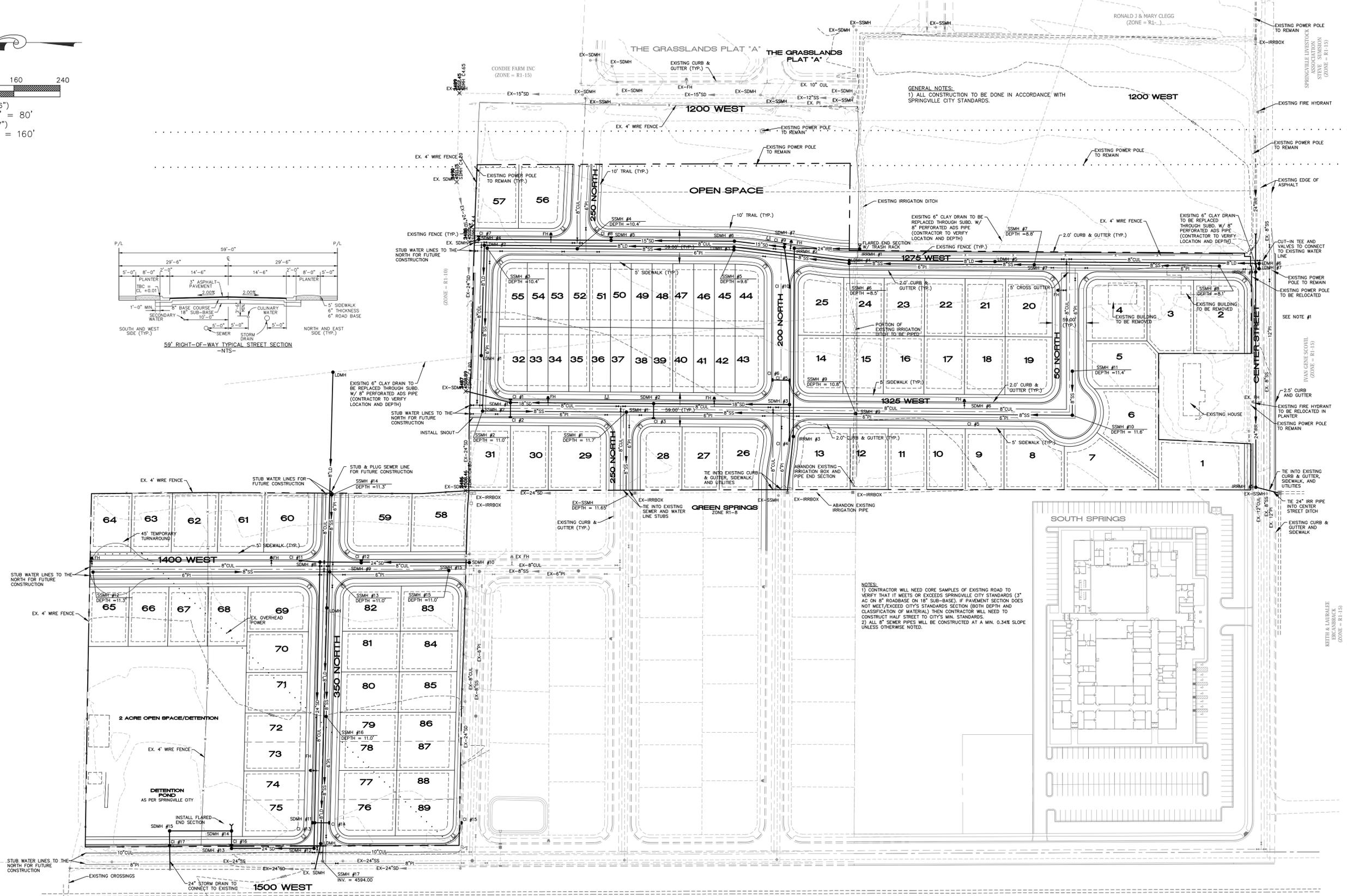
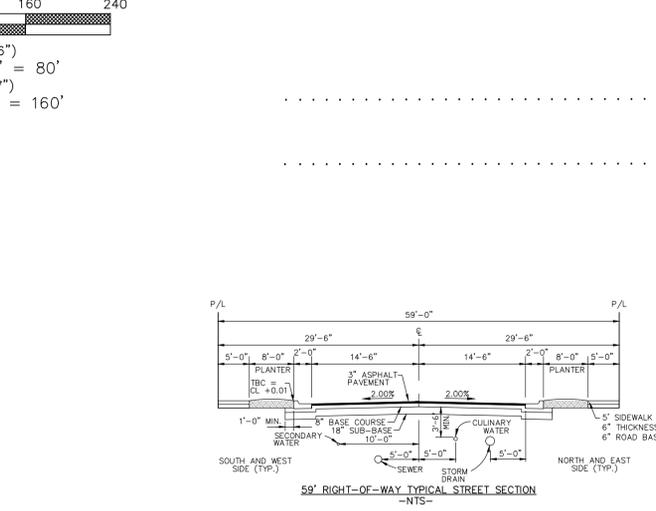
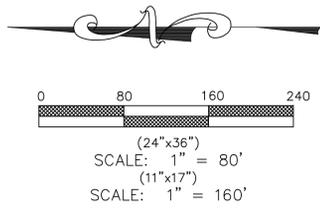
**TRANE ENGINEERING, P.C.**  
 CONSULTING ENGINEERS AND LAND SURVEYORS  
 27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

SPRINGVILLE,  
 UTAH

**QUAIL VALLEY**  
 A RESIDENTIAL SUBDIVISION

PRELIMINARY PLAT  
 SHEET NO.  
 1

J:\Christensen BRDs \Springville\dwg\PHASE1\Pre1Plat.dwg



NOTES:  
 1) CONTRACTOR WILL NEED CORE SAMPLES OF EXISTING ROAD TO VERIFY THAT IT MEETS OR EXCEEDS SPRINGVILLE CITY STANDARDS (3" AC ON 8" ROADBASE ON 18" SUB-BASE). IF PAVEMENT SECTION DOES NOT MEET/EXCEED CITY'S STANDARDS (BOTH DEPTH AND CLASSIFICATION OF MATERIAL) THEN CONTRACTOR WILL NEED TO CONSTRUCT HALF STREET TO CITY'S MIN. STANDARDS.  
 2) ALL 8" SEWER PIPES WILL BE CONSTRUCTED AT A MIN. 0.34% SLOPE UNLESS OTHERWISE NOTED.

REVISIONS				
NO.	DATE	DESCRIPTION	BY	DESIGNED BY
1				TMT
2				WMS
3				TGT
4				11/02/15
				CDGD FILE

**TRANE ENGINEERING, P.C.**  
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SPRINGVILLE, UTAH

**QUAIL VALLEY**  
 A RESIDENTIAL SUBDIVISION

PRELIMINARY UTILITY PLAN

JOB QV  
 SHEET NO. 2

CONDIE FARM INC  
(ZONE - R1-15)

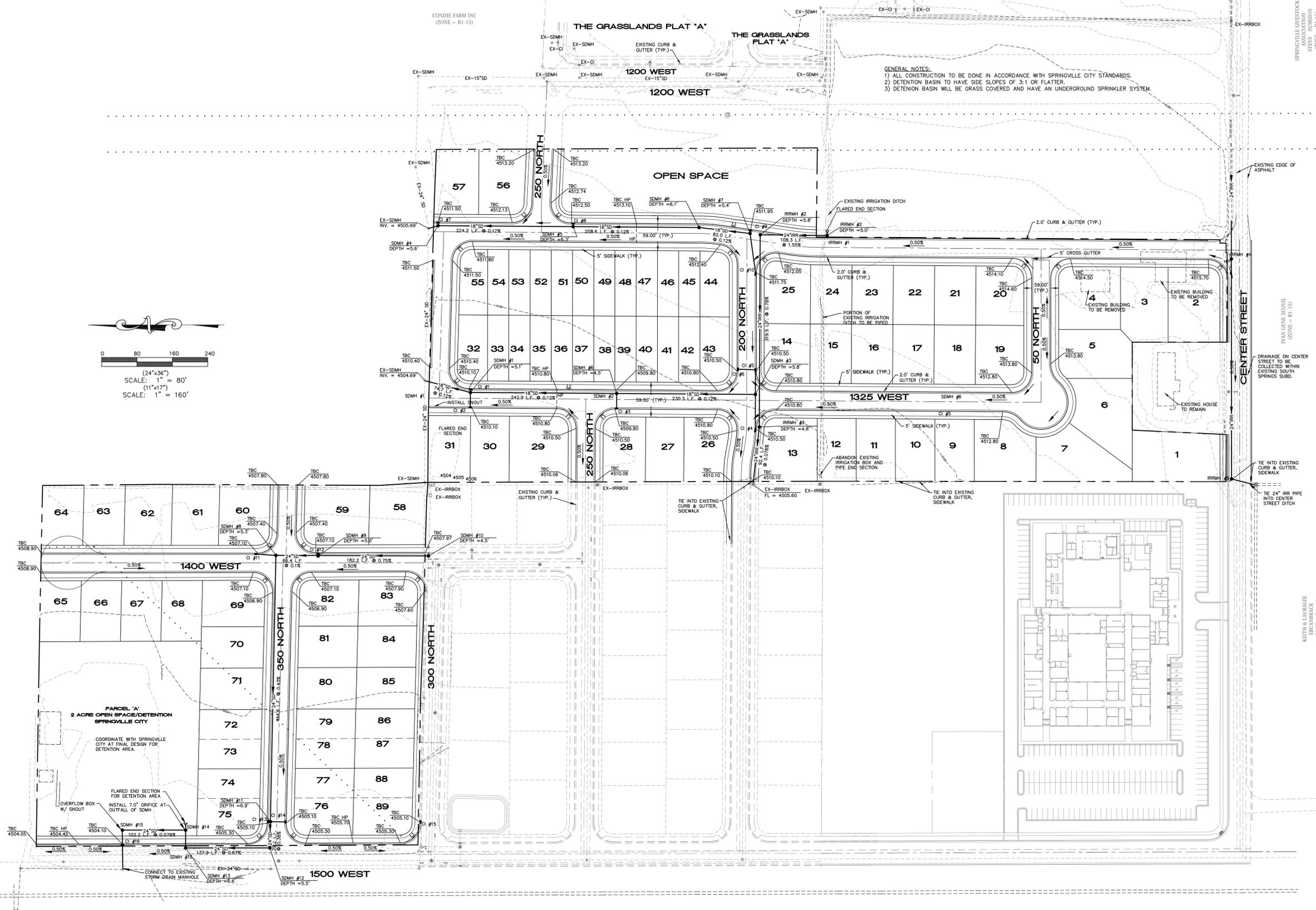
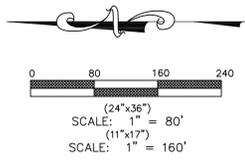
THE GRASSLANDS PLAT "A"  
THE GRASSLANDS PLAT "A"

- GENERAL NOTES:  
1) ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH SPRINGVILLE CITY STANDARDS.  
2) DETENTION BASIN TO HAVE SIDE SLOPES OF 3:1 OR FLATTER.  
3) DETENTION BASIN WILL BE GRASS COVERED AND HAVE AN UNDERGROUND SPRINKLER SYSTEM.

SPRINGVILLE LIFESTOCK  
STEVE SANSON  
(ZONE - R1-15)

IRAN GHAZI SOWMI  
(ZONE - R1-15)

KEITH & LAURALEE  
(ZONE - R1-15)



REVISIONS				
NO.	DATE	DESCRIPTION	BY	TMT
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3			CHECK BY:	TGT
4			DATE:	11/02/15
			CDGD FILE:	

**TRANE ENGINEERING, P.C.**  
CONSULTING ENGINEERS AND LAND SURVEYORS  
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

SPRINGVILLE,  
UTAH

**QUAIL VALLEY**  
A RESIDENTIAL SUBDIVISION

PRELIMINARY GRADING PLAN

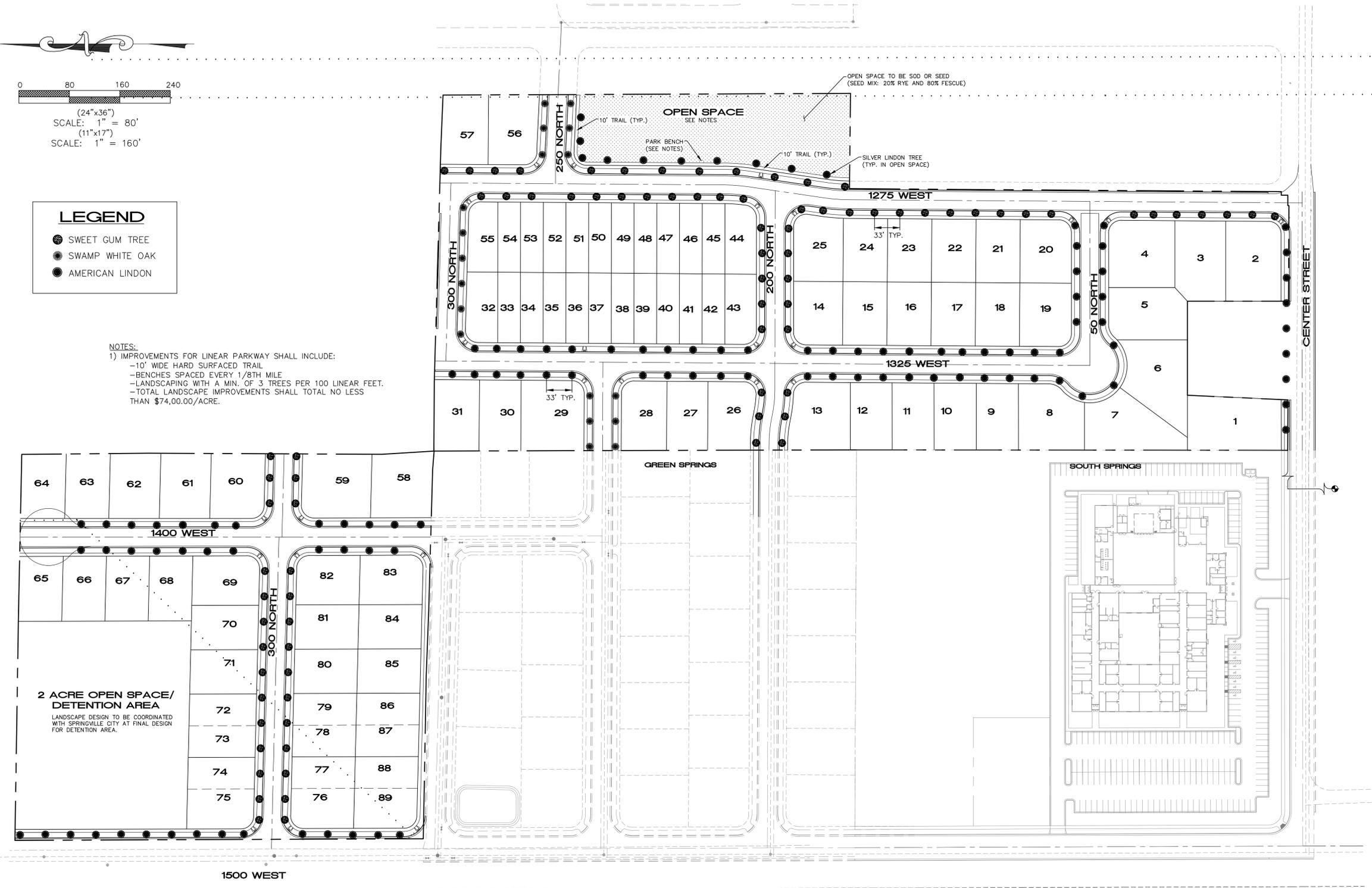
JOB  
QV  
SHEET NO.  
3



(24"x36")  
 SCALE: 1" = 80'  
 (11"x17")  
 SCALE: 1" = 160'

LEGEND	
	SWEET GUM TREE
	SWAMP WHITE OAK
	AMERICAN LINDEN

NOTES:  
 1) IMPROVEMENTS FOR LINEAR PARKWAY SHALL INCLUDE:  
 -10' WIDE HARD SURFACED TRAIL  
 -BENCHES SPACED EVERY 1/8TH MILE  
 -LANDSCAPING WITH A MIN. OF 3 TREES PER 100 LINEAR FEET.  
 -TOTAL LANDSCAPE IMPROVEMENTS SHALL TOTAL NO LESS THAN \$74,00.00/ACRE.



REVISIONS					
NO.	DATE	DESCRIPTION	BY	DESIGNED BY:	TMT
1				DRAWN BY:	WMS
2				CHECK BY:	TGT
3				DATE:	11/2/15
4				CDGD FILE:	

**TRANE ENGINEERING, P.C.**  
 CONSULTING ENGINEERS AND LAND SURVEYORS  
 27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

SPRINGVILLE,  
 UTAH

**QUAIL VALLEY**  
 A RESIDENTIAL SUBDIVISION

PRELIMINARY LANDSCAPE PLAN

JOB  
 QV  
 SHEET NO.  
 4



## STAFF REPORT

**DATE:** November 24, 2015

**TO:** The Honorable Mayor and City Council

**FROM:** John Penrod, City Attorney

**SUBJECT: CONSIDERATION OF ENTERING INTO AN OPTION AGREEMENT WITH SPANISH FORK WHEREIN SPRINGVILLE WILL SELL APPROXIMATELY 20 ACRES OF PROPERTY LOCATED AT APPROXIMATELY 1300 NORTH 1100 EAST IN SPANISH FORK, UTAH.**

### **RECOMMENDATION**

Motion to Approve/Disapprove an option agreement with Spanish Fork wherein Spanish Fork would be given the option to purchase Springville's 20 acre old landfill site located at approximately 1300 North 1100 East in Spanish Fork, Utah.

### **BACKGROUND:**

Several months ago, Spanish Fork contacted Springville wanting to purchase Springville's old landfill site located in Spanish Fork for the purpose of using the 20 acre site as park land. Through negotiations, Spanish Fork agreed to purchase the property for \$965,000, which appears to be within the appraised value based on uncertain remediation costs associated with the property. Springville tentatively agreed to sell the property for the \$965,000 offer based upon helping Spanish Fork expand its park facilities. However, Spanish Fork has recently told staff that Spanish Fork will not agree to a deed restriction that would restrict the use of the property to park purposes for any certain amount of time.

Spanish Fork has asked that they be allowed to enter into an option agreement, instead of a purchase agreement, because they want to purchase the property after new councilmembers are sworn in in January. The option agreement before the City Council for the Council's consideration contains the following provisions:

- Purchase price would be \$965,000, and Spanish Fork would tender an earnest money offer of \$1,000 to the City that the City would keep if Spanish Fork decides not to purchase the property.
- Spanish Fork would have the option to purchase the property until February 15, 2016.
- Property would be conveyed pursuant to a special warranty deed.

### ***CITY COUNCIL AGENDA***

- The property will be free and clear of all encumbrances except for easements, covenants, restrictions, and encumbrances that are of record or could be found through a survey or physical inspection of the property.
- Spanish Fork agrees to take the property “as is,” knowing that the property contains environmental hazards as an old landfill.

**ALTERNATIVES:**

The City Council could decide not approve the option agreement, approve the option agreement with revisions, or provide staff with direction on what to do with the property.

**FISCAL IMPACT:**

The City would receive \$965,000 for the property.

Attachments:     Proposed Option Agreement

## REAL ESTATE OPTION AGREEMENT

COME NOW the parties hereto, Spanish Fork City (Spanish Fork) and Springville City (Springville), and in consideration of the mutual promises made herein, hereby contract, covenant and agree as follows:

1. Springville owns real property in Spanish Fork City located in the northeast part of the City at approximately 1300 N. and 1000 E., more particularly described as follows:

Beginning North 11.08 Feet & East 1319.81 feet from the Northwest corner of Section 17, Township 8S, Range 3E, SLB&M.; thence South 671.05 Feet; thence West 1325.25 Feet; North 0° 28' 20" East 659.99 Feet; thence N 89° 31' 9" East 1319.86 Feet To the point of beginning.

Area 20.194 acres.

The parties acknowledge that the above legal description may not be the exact legal description of the property and agree to have final survey completed that is mutually acceptable to both parties.

2. Spanish Fork is desirous of obtaining an option to purchase the property upon the terms and conditions set forth herein.
3. The parties have agreed that the purchase price, if the option is exercised, is \$965,000.00. The sum of one thousand dollars (\$1000.00) is hereby tendered as earnest money and as consideration for the option to purchase, which shall be credited toward the purchase price, if the option is exercised. If the option is not exercised, Springville may retain the earnest money. The balance of the purchase price will be due at closing

4. Spanish Fork shall have until February 15<sup>th</sup>, 2016 to perform its due diligence and exercise its option. If the option is exercised, closing shall take place before the end of February, 2016. If executed, the parties agree to execute a purchase agreement in the form attached hereto as Exhibit "A."
5. The title to the property being conveyed shall be pursuant to a special warranty deed and shall be vested in the name of Spanish Fork City.
6. Within 10 days of the exercise of the option, the parties agree to cooperate to locate a mutually acceptable title insurance company to provide a commitment for standard coverage title insurance in the amount of the purchase price. The policy shall insure that Spanish Fork City shall be the fee simple owner of good and marketable title free and clear of all liens and encumbrances and subject to the standard exceptions as shown on the title policy and any easements, encroachments, boundary overlaps and gaps, covenants, assessments, and other matters of record or that could be discovered by a survey or physical inspection of the property, other than any mortgage, judgment or mechanic's lien created by, through or under Springville. Each party shall have 10 days after receipt of the commitment of title insurance and all relevant documents to notify the other in writing of any objections to the title. If no objection is made, all items shall be deemed permitted. If any exceptions to title are made, the other party shall have until closing to cure such exception. If exceptions are unable to be cured or if Springville City decides not to cure any exceptions, Spanish Fork may choose to void this agreement or to proceed with the exceptions. If voided, all obligations

of the parties shall cease and this agreement shall be void without further recourse to the parties hereto.

7. If Spanish Fork exercises the option, it accepts the property “as is.”
8. Springville warrants and represents as follows:
  - A. That no person or entity claiming under, by, or through Springville has any option or contract to purchase any or all of the property to be sold or any interest therein.
  - B. The property will be free and clear of any mechanics liens resulting from work performed on or with respect to the property prior to such conveyance.
  - C. In the event, at any time prior to closing, that any party learns that any of the aforesaid representations and warranties are no longer valid, such party shall immediately notify the other in writing. The party so notified shall then have the option to proceed with this agreement subject to the changed conditions, or to void this agreement and have no further obligation to the other party.
9. The parties acknowledge that the site is the old Springville City landfill and therefore, there may be hazardous materials, in addition to general garbage buried on the site. Spanish Fork agrees to accept the property “as is” with knowledge of the prior use as a landfill.
10. This document represents the entire agreement between the parties. All prior negotiations, representations, commitments, or understandings are merged herein

and superseded hereby. This agreement may only be amended by a written agreement entered into between the parties.

- 11. The obligations of the parties to this agreement shall survive the closing and shall not be merged into or become a part of any of the documents executed and delivered at closing.
- 12. If any action, suit, or proceeding is brought by a party with respect to a matter governed by this agreement, all costs and expenses of the prevailing party in such action, suit, or proceeding, including reasonable attorney's fees, shall be paid by the non-prevailing party.

DATED this \_\_ day of December, 2015.

SPANISH FORK CITY by:

\_\_\_\_\_  
STEVE LEIFSON, Mayor

Attest:

\_\_\_\_\_  
KENT R. CLARK, Recorder

SPRINGVILLE CITY by:

\_\_\_\_\_  
WILFORD W. CLYDE, Mayor

Attest:

\_\_\_\_\_  
KIM RAYBURN, Recorder



## STAFF REPORT

**DATE:** November 24, 2015

**TO:** The Honorable Mayor and City Council

**FROM:** John Penrod, City Attorney

**SUBJECT: CONSIDERATION OF ENTERING INTO AN AGREEMENT WITH VCBO TO PROVIDE ARCHITECTURAL SERVICES FOR THE AQUATIC CENTER.**

### **RECOMMENDATION**

Motion to Approve an agreement with VCBO to provide architectural services for Springville Aquatic and Activities Center.

### **BACKGROUND:**

Prior to the passing of the bond, Springville went through a Request for Proposals process to obtain architectural services for the Aquatic and Activities Center. The RFP asks for qualified architects to provide proposals for design services prior to the bond election and architectural services after the bond election should the bond pass. As part of the selection process, a committee of staff members and city council members reviewed and interviewed several qualified architectural firms that submitted proposals and selected VCBO. VCBO and the City entered into a contract for design services prior to the bond election, and as part of that contract, VCBO and the City agreed to consider an agreement for architectural services should the bond pass.

The proposed agreement before the City Council is the standard AIA agreement for architectural services. As part of the agreement, VCBO will provide the following services:

- Pre-design
- Schematic Design
- Design Development – develop site plan, floor plans, elevations, and all other plans needed for the aquatic center.
- Construction Documents – architectural, structural, mechanical, electrical, civil and pool construction plans.
- Obtain All Necessary Approvals
- Bidding/Negotiation with Contractors
- Construction Administration
- Project Closeout

***CITY COUNCIL AGENDA***

Under the agreement, Springville City will be responsible for geotechnical studies and the site survey.

The agreement will require the City to pay VCBO 6.6% of the estimated construction costs, which fee would amount to \$1,056,000 for \$16,000,000 construction costs. In addition, the City is required to pay reimbursable expenses for printing, copying and shipping expenses at a rate of actual costs plus 15%. If there are any additional services to be paid outside of the scope of services in the contract, the additional services will be paid at hourly rates, which rates are included in the contract.

**ALTERNATIVES:**

The City Council could decide not approve the agreement, approve the agreement with revisions, or provide staff with direction on how to move forward on this issue.

**FISCAL IMPACT:**

The City would pay \$1,056,000, plus reimbursable expenses.