

## SOUTH WEBER CITY COUNCIL AGENDA

PUBLIC NOTICE is hereby given that the City Council of SOUTH WEBER CITY, Utah, will meet in a regular public meeting on Tuesday, 10 January 2017 at the City Council Chambers, 1600 E. South Weber Dr., commencing at 6:00 p.m.

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### WORK MEETING:

5:00 p.m. Discussion of agenda items, correspondence, and/or future agenda items

### COUNCIL MEETING:

6:00 p.m. PLEDGE OF ALLEGIANCE – Council Member Sjoblom  
PRAYER - Council Member Casas  
APPROVAL OF AGENDA  
DECLARATION OF CONFLICT OF INTEREST

#### 1. CONSENT AGENDA:

- ◆ Approval of December 13, 2016 Work Meeting Minutes
- ◆ Approval of December 13, 2016 Meeting Minutes
- ◆ Approval of December 20, 2016 Meeting Minutes
- ◆ Approval of November 2016 Budget to Actual
- ◆ Approval of December 2016 Check Register
- ◆ RES 17-01 Appointment of Mayor Pro Tempore

Fire Department Oaths of Office – Chief Derek Tolman and Officers

6:10 p.m.

#### 2. ACTION ITEMS:

- a. **Public Hearing on Sale of SWC Real Property:** 3.9 acres located at approx. 2071 E. South Weber Dr. (Parcel 13-033- 0077); and .58 acres located at approx. 2068 E. South Weber Dr. (Parcel 13-033- 0078)

6:30 p.m.

#### 3. DISCUSSION ITEMS:

- a. Cost of Job Valuation and Compensation Study Approximately \$8,000
- b. 6650 S. Open House Follow Up
- c. Fire Engine Purchase for Approximately \$411,785
- d. Snow Removal Service Level

7:30 p.m.

#### 4. CITY COUNCIL REPORT(S) ON DESIGNATED RESPONSIBILITIES

7:40 p.m.

5. PUBLIC COMMENT: Please keep public comments to 3 minutes or less per person (no action to be taken)

7:50 p.m.

#### 6. Break

8:00 p.m.

7. CLOSED MEETING - as per UCA § Section 52-4-205(1)(a): Discussion of the character, professional competence, or physical, or mental health of an individual.

8:30 p.m.

#### 8. ADJOURN

THE UNDERSIGNED DULY APPOINTED CITY RECORDER FOR THE MUNICIPALITY OF SOUTH WEBER CITY HEREBY CERTIFIES THAT A COPY OF THE FOREGOING NOTICE WAS MAILED, EMAILED, OR POSTED TO:

CITY OFFICE BUILDING

EACH MEMBER OF THE GOVERNING BODY

UTAH PUBLIC NOTICE WEBSITE

CITY WEBSITE [www.southwebercity.com](http://www.southwebercity.com)

THOSE LISTED ON THE AGENDA

[www.pmn.utah.gov](http://www.pmn.utah.gov)

**DATE: January 5, 2017**

**CITY RECORDER: Elyse Greiner**

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IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, INDIVIDUALS NEEDING SPECIAL ACCOMMODATIONS DURING THIS MEETING SHOULD NOTIFY THE CITY RECORDER, 1600 EAST SOUTH WEBER DRIVE, SOUTH WEBER, UTAH 84405 (801-479-3177) AT LEAST TWO DAYS PRIOR TO THE MEETING.

\*Agenda times are approximate and may be moved in order, sequence and time to meet the needs of the Council\*

# SOUTH WEBER CITY CITY COUNCIL MEETING

**DATE OF MEETING:** 13 December 2016

**TIME COMMENCED:** 6:05 p.m.

**PRESENT: MAYOR:** Tammy Long

**COUNCILMEMBERS:** Scott Casas  
Kent Hyer  
Marlene Poore  
Merv Taylor  
Jo Sjoblom

**CITY RECORDER:** Elyse Greiner

**CITY MANAGER:** Tom Smith

**CITY ATTORNEY:** Doug Ahlstrom

**Transcriber:** Minutes transcribed by Michelle Clark

**VISITORS:** Bryan Wageman, Mark Larsen, Paul Laprevote, Jason Tubbs, Zach McFarland, Mark McRae, Diane & Mike Ford, Mark & Natalie Dayton, Linda Poll, Layne & Jill Kap, Rhett Weaver, Bill Petty, Rhett Weaver, Cymbre Rowser, Natalie Dayton, Cole Fessler, Lyle Jorgensen, and Louise Cash.

Mayor Long called the meeting to order and welcomed those in attendance.

**PLEDGE OF ALLEGIANCE:** Council Member Casas

**PRAYER:** Council Member Sjoblom

**AGENDA:** Council Member Hyer moved to approve the agenda as written. Council Member Sjoblom seconded the motion. Elyse called for the vote. Council Members Hyer, Poore, Taylor, and, Sjoblom voted yes. Council Member Casas voted no. The motion carried 4 to 1.

**CONFLICT OF INTEREST:** None

## CONSENT AGENDA:

- Approval of November 15, 2016 Meeting Minutes
- Approval of November 22, 2016 Meeting Minutes
- Approval of November 22, 2016 Work Meeting Minutes
- Approval of October 2016 Budget to Actual

- **Approval of November 2016 Check Register**
- **2017 Meeting Schedule**
- **RES 16-36: Amendments to the Procurement Policy**
- **RES 16-37: Appointment of Fire Chief**

Council Member Sjoblom moved to approve the consent agenda with the 2017 meeting schedule being changed with the Council holding a work meeting on the third Tuesday of every month. Council Member Casas seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.

**ACTION ITEMS:**

Council Member Sjoblom moved to open the public hearing for Resolution 16-35. Council Member Hyer seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.

**\*\*\*\*\* PUBLIC HEARING \*\*\*\*\***

**Public Hearing on Resolution 16-35: FY 2016-2017 Budget:**

Mark McRae explained the proposed amendments to the budget for FY 2016-17 which are as follows:

Increase Sales Tax Revenue in the General Fund by	\$6,000
Increase Transfer to CFD in the Admin. Dept. of the General Fund by	\$6,000
Increase the Transfer from General Fund revenue in CFD by	\$6,000
Increase the Transfer to Fund Balance expense in CFD by	\$6,000

Mayor Long asked if there were any public comments. There was no comment.

Council Member Hyer moved to close the public hearing for Resolution 16-35. Council Member Sjoblom seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.

**\*\*\*\*\* PUBLIC HEARING \*\*\*\*\***

Council Member Hyer moved to approve Resolution 16-35: FY 2016-2017 Budget. Council Member Sjoblom seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.

**Ordinance 16-23: Repealing Code Section 3.01.090 B4 Inspection; Right of Entry:**

Tom said the City staff has reviewed City Code Section 3.01.090 B.4. and found inspections of rental units to be unnecessary as rentals are no longer a type of regulated business.

Council Member Casas moved to approve Ordinance 16-23: Repealing Code Section 3.01.090 B4 Inspection; Right of Entry. Council Member Poore seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.

**Public Works Operations and Management Plan:** Tom said this item was discussed in the last Council meeting. He was asked to develop a Public Works Operation and Management Plan by the City Council. He began with re-writing job descriptions. He also provided assignments of each employee. He then identified items that the Public Works Department is falling behind on. Tom said Mark Larsen has a spreadsheet that includes tracking how employee's time is spent on a day to day basis, employee certification, fleet services schedules, tracking inspection for water valves, etc. Tom then reviewed the outline that indicates the employment of South Weber City personnel from 2004 to 2016. He said in the last ten years the Public Works Department has had six full-time employees. Right now the department has five full-time employees. He said the City is providing more services, but having difficulty maintaining those services with the growth of the City. He understands the Council wanting to save money, but feels the City saves money in operations and maintenance. He said right now inspections for water valves and sewer lids are being dropped. He said as part of this plan, he would ask the Council to suspend the hiring freeze. He said the Public Works Director has been spending more time out in the field and needs to be able to fulfill administrative duties. He said the director will be required to attend development, City Council, and business meetings. Also, his employment status will change from hourly to salary in January 2017. Tom said he is asking the Council to approve the hiring of a Public Works Department employee. He said there is currently \$54,000 in the budget to hire a full-time Public Works Department employee. Council Member Poore is concerned about the time being allocated to SWPPP management plan and inspections. She contacted the City Engineer's Office to get more information. She is not feeling the justification for another full-time employee. She is also concerned about parks as she added up all the time spent on parks, which is for only eight months out of the year. She would like better numbers for the actual time use. Tom said there are Winter priorities that have not been brought up yet. They are as follows: 1. Snow removal is top priority. 2. Facility maintenance and upkeep (painting, roof repair, automatic doors, etc. 3. Organize Shop 4. Inventory Parts; parks, signs, sewer, water etc. 5. Attend Training: CEU's for licensing, 6. Preventative Maintenance for: water, sewer, storm drain systems 7. Snow Plow and Truck maintenance: blades, hydraulics, salt distributors, etc. 8. Rehab pumps 9. Check for black ice and snow drifts 10. GIS and mapping. 12. Replace old signs 13. Clear roads of dead animals 14. Study to take state tests for certification 15. Repair playground equipment 16. Respond to citizen/council complaints 17. Blues stake 18. Metering 19. Water samples 20. Minor truck repair 21. Parks fleet repair 22. Dig out storm ponds 23. Dig out fire hydrants 24. Daily list. Mark said there is always something coming up and it is difficult to identify what happens on a daily basis.

Council Member Casas said the Council received the packet for this meeting and no where in there does it discuss \$54,000 for a full-time Public Works Department employee. He said the budget to actual shows the revenue not correlating with income and expenses. He said we just increased the budget for the Fire Department. Council Member Poore would like to see the bid for building inspections and contracting out park duties before hiring someone. Tom said he does have the parks information. Council Member Casas feels the Council needs time to review that information. Council Member Poore asked the Council if they are interested in getting bids for building inspections. Tom said we have already hired someone for building inspections. Council Member Hyer said that was a key duty that should be an in-house person. He felt that was clear when Tom went ahead with hiring the last individual. Council Member Hyer said he did ask Tom to identify the current roles and he did identify areas where the City is currently

falling short. He said we did talk about the part-time employees at the Fire Department helping with some of these tasks. Tom explained the Water Superintendent responsibilities. Tom said he does want to see the Fire Department conduct more public education and work on emergency preparedness. He said as the City grows the single best thing the Council can have is the personnel. He said they are the City's number one resource in accomplishing your goals. Council Member Hyer said the City is falling short in getting things done. Council Member Taylor asked where the \$54,000 will come from. Tom said it would come from the general fund. Council Member Taylor is in favor of hiring another full-time employee for Public Works. He said the Council was voted in office to take care of the City and he feels it is critical to hire another employee. Mayor Long said she noticed there is no itemized list of duties for Mark Larsen in the packet. Elyse brought Mark's task up on the presentation screen. Council Member Sjoblom said she spoke to Salt Lake County Parks and Recreation concerning contracting out parks. She was told the quality of the jobs done by contract would decrease and there would be more citizen complaints. She said it didn't sound like a wise choice to be contracting out for these services. Mark discussed training summer help and the difficulty that goes along with it. Tom said he did contact Layton City's Parks and Recreation about contracting with them and they are not interested in doing that. Mayor Long doesn't feel the hiring of another employee should be part of the motion since it was not included on the agenda.

**Council Member Hyer moved to approve the Public Works Operation Management Plan including the hiring of an additional full-time Public Works employee. Council Member Taylor seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Taylor, and Sjoblom voted yes. Council Member Poore voted no. The motion carried 4 to 1.**

**Bid Award for Park and Ride Snow Removal Service:** Tom said in November he asked Mark Larsen to look at what bids needed to go out for snow removal. At that time, they could not find an awarded bid for the park and ride snow removal service. He said after reviewing the minutes, he found that there was a contract for one year. He wrote up the bid and only one person responded because the RFP did not go out to landscapers. He said the contact information was also inaccurate and needs to be updated. He suggested coming up with a policy as to how we are going to handle bids. Council Member Poore said there is an informal bid policy. Council Member Casas read the informal bid procedures. He said he is uncomfortable with one bid. He is also concerned because the Council was not notified nor did they see how the bid was written. Council Member Casas is not in favor of awarding this bid based on how it went out. Mayor Long said she discussed this with the City Attorney and said if the City was satisfied with the contract, they can renew the contract. Tom read the bid that went out last year and this year. Council Member Casas said when he first became a member of this Council, he noticed the contract, and he was concerned about the pricing per inches. His primary objection was the fact that there weren't three bids received for this service. He proposed sending out the bid again and in the meantime, having the Public Works Department handle the snow removal until a bid is awarded. Mark said the priority for the park and ride would be similar to what it is for cul-de-sacs.

Zach, with Greencastle, said he didn't receive a formal written contract. He was awarded the contract verbally by Duncan Murray. He never received a copy of the contract, but he has never had a complaint. He understands it is hard to determine the inches. He said most of the time he didn't bill for over 2 inches. He was under the understanding that the contract was for three

years. He said it wasn't until recently that he received an email from Mark Larsen and told that the project was re-bid. Zach said he charged \$170 for the 2" push. Council Member Sjoblom appreciated the job that Greencastle did as she drove her son to the park and ride every day last year and never had a problem.

**Council Member Hyer moved to re issue the bid and ensure that Greencastle is on the bid list and has every opportunity to continue that service. He would suggest continuing with Greencastle until a new bid is awarded. Council Member Poore seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.**

**Council Member Hyer moved to amend his first motion to continue out this year with Greencastle for snow removal at the park and ride with a contract to include one price for salt and one price for plow and then send this project out to bid next fall. The next contract will be for three to five years. Council Member Poore seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.**

**FY 2015-2016 Audit Report by Keddington & Christensen, LLC:** Gary Keddington, of Keddington & Christensen, LLC, approached the Council and those in attendance. He said the audit was conducted on the financials. He said they looked at internal controls. They also looked at fraud procedures. He said they asked a lot of inquiries concerning any weaknesses in internal control. They did ask members of the staff and council. He said they did not receive any reason to believe there was any fraud as they reviewed journal entries. He said the State Auditor's Office requires them to look at budget, court systems, and areas that they dictate to them. He said the audit went very smoothly. The staff was very cooperative. The financial statements are materially correct and unmodified by the State Auditors. He asked the Council if they have any questions. Council Member Casas said he has some concerns. He said this is the first year for Keddington & Christensen, LLC conducting an audit in South Weber City. Mr. Keddington said they did not conduct a full internal audit. He said the approximate cost to do that would be \$15,000 to \$20,000. He said they do look at internal controls but they don't give an opinion. Council Member Casas said it is the Council's responsibility to oversee the financial well being of the City. He said he hasn't had a chance to talk to the City staff to see how they felt about it. Mr. Keddington said we didn't do an efficiency audit, but a financial audit. He said those can be done, if the Council would like. Council Member Casas said he isn't aware that there are so many different kinds of audits.

Mr. Keddington said they had two findings. He said concerning utility billing he would suggest someone double check any kind of adjustments to utility billings. He said the other finding is that not all the Council has attended the open and public meetings act training. He said this should happen every year. He said there needs to be actual proof that the Council attended the training. He said they usually get a certificate for attending. He said the City Attorney can also conduct the training. Mr. Keddington thanked the Council.

**Council Member Hyer moved to accept the FY 2015-2016 audit report by Keddington & Christensen, LLC. Council Member Taylor seconded the motion. Elyse called for a roll**

**call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion**

**Weaver Estates Approval Review:** Tom said in the last Council meeting the Weaver Estates Subdivision came before the Council and received approval. He said it was brought to his attention that a check was overlooked. The egress was overlooked by Sketch Plan Committee, developer, Planning Commission, City staff, etc. He said this requirement is outlined for fire protection. He said 1160 East was looked at verses 1250 East (being the egress). He is concerned that a mistake was made. He said this is a one lot subdivision. He is concerned about the precedent. He said in the future, a checklist will be used so that this mistake is not made again. Tom said if someone else comes in, they will state a mistake was made, and we don't intend to ever repeat it.

Council Member Hyer is concerned about future development. Council Member Casas asked Layne Kap if he can change the direction of the egress. Layne explained the history of the area with Lester Street. He said for Lester Street to go through property would need to be purchased from Daytons and DeLongs. Layne said he has a 25' right of way that goes out 1200 East. He feels the 30 lots ordinance was directed at him. He said 1160 East can't line up with 1200 East unless he purchases Eddy Shaw's property, Stauffer' home, etc. which is not cost prohibited. Council Member Casas feels the Council needs to either adhere to the ordinance or change the ordinance. Layne said City ordinance does allow for the City Council to use their discretion. Council Member Hyer said most people complain about new developments creating more traffic through existing neighborhoods. He said this one lot subdivision isn't going to create more traffic in the existing subdivision. Council Member Poore said this is the only road that goes past the school. Layne said he actually has 13 more lots that can be developed on his property. He has presented options to the City but none of them are perfect. Layne said he spoke with Joe DeLong and he is willing to sell. He said the City made a mistake. Tom said he understands that but there is no problem without this development. Council Member Casas said by approving this, we violate City ordinance. Mayor Long said the universal fire code does state 30 units.

**Cole Fessler, 7233 S. 1700 E.,** said the international fire code does state 30 units. He said the number of dwellings shall not be increased unless there is a possibility of future development.

The Council agreed to open this up for public comment. Mark Larsen said he is nervous about changing an ordinance to fix an oversight. Mark said there is a way out on 1200 East to South Weber Drive. He said this would be a fix for an oversight. Layne discussed the house facing Lester Street but accessing 1200 East. Tom said the City Engineer needs to review this new plan.

**Diane Ford, 1110 East South Weber Drive,** said they are developing Easton Village. She said we were told no exception and 30 lots was it. She doesn't understand why it should change for 31 when they wanted 32.

**Mark Dayton, 7420 S. 1025 E.,** said he put his property up for sale. In talking to his realtor, he was told he could only put five homes on his property and if the City is going to allow one then you need to allow five more. He wanted Layne Kap to know, for the record, he did not send any letter.



**Cymbre Rowser, 985 E. 7375 S.**, said at some point in time the City needs to hold the developer to what needs to be done. She said there are issues with water and things that break that were never replaced and they need to be responsible.

**Natalie Dayton, 7420 S. 1025 E.**, said they tried to build a few years ago on their property and went through so much. She would suggest the Council get to know the ordinances.

Layne Kap asked the Council to waive the ordinance and allow this home to go in. He would love to sit down with the City, DeLongs, and Daytons to see if another egress can be developed. He said this would take traffic off of Lester as well.

Mayor Long asked if UDOT gave approval to access SR 60. Layne said after meeting with the City Manager (at the time), Brandon Jones, etc. They were told yes.

**Jill Kap, 8085 S. Juniper Ct.**, said when they purchased the property of Weaver Estates. This didn't have anything to do with the existing subdivision. She asked if anybody along Lester Drive that wants to develop will need another egress.

Council Member Casas referred City Ordinance 13-08 from 2013.

Jill said a public hearing was held on the subdivision and no one said it was a problem and then the City approves it and then people go ahead with engineered plans and financial costs put out, and at some point, there were plenty of notices and no one complained about the development.

Council Member Casas proposed going back to the City Engineer and waive all fees so that this can be looked at again. Council Member Poore said she is against it.

Roni Ketts said if we allow this one and say this home needs to be sprinkled, they then meet the international code. He said the reason for the code is for fire.

Diane Ford said Layne Kap knew that this couldn't be built on because he has been involved with the subdivision. Jill Kap said we didn't know because this was a different parcel.

Rhett Weaver said the issue is that this subdivision has been approved. He said a lot of money has been spent already because it was approved.

Mark Larsen said if the house was sprinkled and followed the exact plan, they would meet the fire code and technically, other people could do the same thing.

Layne Kap said he thought this affected his subdivision and not the Daytons etc. He said the Council has the ability in the ordinance to waive that. He said this will not affect the school. He said there is a crossing guard. He said in his opinion the way the K-2 building has been set up it is well orchestrated. Tom said there is a plan to put another possible crossing guard at 1160 East.

**Council Member Hyer moved to close the public comment. Council Member Taylor seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.**

Council Member Casas moved to deny this request and send it back to the City Engineer with the City picking up \$5,000 in expenses incurred. The motion died due to lack of second.

Council Member Poore moved to rescind the approval of Weaver Estates. The motion died due to lack of a second.

Council Member Hyer moved to grant the waiver as requested by the Kaps that they meet with the Daytons to discuss any potential options so that everyone can develop their land to the west and do it with the appropriate egress for future development. The motion died due to lack of a second.

Council Member Taylor moved to table for one week and meet on 20 December 2016 at 6:00 p.m. Council Member Casas seconded the motion. Elyse called for a roll call vote. Council Members Casas, Hyer, Poore, Taylor, and Sjoblom voted yes. The motion carried.

Council Member Taylor moved to put the employee performance merit increase on the first meeting in January 2017. Council Member Poore seconded. Elyse called for a roll call vote. Council Member Casas, Hyers, Poore, Taylor, and Sjoblom voted yes. The motion carried.

**DISCUSSION ITEMS:**

**Employee Performance Merit Increases:**

**COUNCIL ITEMS:**

**Council Member Poore:**

**Contacting City Attorney:** Council Member Poore discussed being denied talking to the City Attorney until the Council gives their consensus. Council Member Hyer said if there is no cost incurred then it is fine to contact him. Tom said the traditional expenses for City Attorney have been exceeded. He explained that Council Member Poore's email is to ask Doug Ahlstrom to conduct work. He said the code is ambiguous. Council Member Poore said she wanted Doug's interpretation of the code. Tom said he has already authorized it.

**PUBLIC COMMENTS:**

Mark Larsen said he is trying to put together a mailbox ordinance. He said 6650 South will be on the agenda 10 January 2017. He said a decision needs to be made on this.

Council Member Hyer moved to go into a closed session as per UCA § Section 52-4-205(1)(a): Discussion of the character, professional competence, or physical, or mental health of an individual at 9:00 p.m. Council Member Sjoblom seconded the motion. Elyse

called for the vote. Council Members Casas, Hyer, Sjoblom, Taylor and Poore voted yes. The motion carried.

Council Member Casas moved to go back into an open meeting at 10:36 p.m. Council Member Hyer seconded the motion. Tom called for the vote. Council Members Casas, Hyer, Sjoblom, Taylor and Poore voted yes. The motion carried.

Council Member Casas asked about real estate transactions and public disclosure. Tom said when negotiations take place for property, then it can be kept private.

Council Member Casas moved to give Tom Smith a \$5,000 bonus based on past performance in 2016. Council Member Sjoblom seconded the motion. Tom called for the vote. Council Members Casas, Hyer, Sjoblom, and Poore voted yes. Council Member Taylor voted yes but wanted it noted that he wasn't in favor of the amount. The motion carried.

**ADJOURNED:** Council Member Hyer moved to adjourn the meeting at 10:42 p.m. Council Member Sjoblom seconded the motion. Council Members Casas, Hyer, Sjoblom, Taylor, and Poore voted yes. The motion carried.

**APPROVED:** \_\_\_\_\_ Date

Mayor: Tammy Long

\_\_\_\_\_  
Transcriber: Michelle Clark

Attest: \_\_\_\_\_  
City Recorder: Elyse Greiner

# SOUTH WEBER CITY COUNCIL WORK MEETING

**DATE OF MEETING:** 13 December 2016

**TIME COMMENCED:** 5:01 p.m.

**PRESENT: MAYOR:**

Tammy Long

**COUNCILMEMBERS:**

Scott Casas  
Kent Hyer  
Marlene Poore  
Merv Taylor  
Jo Sjoblom

**CITY RECORDER:**

Elyse Greiner

**CITY MANAGER:**

Tom Smith

**Transcriber:** Minutes transcribed by Michelle Clark

**VISITORS:** Bryan Wageman, Mark Larsen, Paul Laprevote, Jason Tubbs, Zach McFarland, and Mark McRae.

## CONSENT AGENDA:

- **Approval of November 15, 2016 Meeting Minutes**
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- **RES 16-36: Amendments to the Procurement Policy**
- **RES 16-37: Appointment of Fire Chief**

Council Member Casas was excited about the percent of revenue on the budget to actual. Council Member Poore questioned a gas card payment in which Paul Laprevote researched. Council Member Casas asked about the old snow plow. Bryan Wageman explained that they included it in the scrap pile. Council Member Casas asked about oil changes. Bryan said they tried to take the vehicles to King Auto but they are too busy. Bryan said they take the vehicles to Jiffy Lube. Mark Larsen said Jiffy Lube does keep record of what has been done on City vehicles. Council Member Casas said if at all possible, he would like to keep business in South Weber City.

Discussion took place regarding amending the 2017 meeting schedule to make the third Thursday of the month a work meeting to begin at 5:00 p.m.

Mayor Long asked if there were any questions on Resolution 16-36: Amendments to the Procurement Policy. Council Member Poore asked about the Mayor signing all contracts. Council Member Hyer doesn't understand why the Mayor should sign the contracts. Council

Member Casas said Doug Ahlstrom suggested the Mayor sign them. Council Member Hyer said the City Manager is the one who deals with the contracts and feels he should be the one to sign them. Council Member Poore would like to get Doug Ahlstrom’s opinion on that, since he was the one who suggested it. Council Member Casas would like Doug Ahlstrom’s opinion as well.

Mayor Long asked if there were any questions with Resolution 16-37 concerning Derek Tolman being appointed Fire Chief. Council Member Hyer asked how many applicants applied. Mayor Long said there were four applicants. Tom said two were internal and two external applicants. He said the hiring panel discussed pros and cons of hiring internal verses external. Council Member Casas said Derek has a leadership style within the department. He felt having a Fire Chief within the City has some weight to it. Council Member Taylor said Derek is close and knows the citizens. Council Member Casas said Derek is a third generation fire fighter. Council Member Casas said he stopped by the fire station today and met with the fire fighters. He said they were excited as well as enthusiastic about serving South Weber City.

**ACTION ITEMS:**

**Public Hearing on Resolution 16-35: FY 2016-2017 Budget:**

Mark McRae said State code states that if funds fall below in the City, the following year we have to bring it up to that level. He said Country Fair Days was one of those funds. Proposed amendments to the budget for FY 2016-17 are as follows:

Increase Sales Tax Revenue in the General Fund by	\$6,000
Increase Transfer to CFD in the Admin. Dept. of the General Fund by	\$6,000
Increase the Transfer from General Fund revenue in CFD by	\$6,000
Increase the Transfer to Fund Balance expense in CFD by	\$6,000

**Ordinance 16-23: Repealing Code Section 3.01.090 B4 Inspection; Right of Entry:**

Tom said the City Council and staff have reviewed City Code Section 3.01.090 B.4. and found inspections of rental units to be unnecessary as rentals are no longer a type of regulated business.

The Council discussed keeping simple items on the agenda available for action verses some controversial items being discussed one week and action on the next week.

**Public Works Operations and Management Plan:** Tom stated Mark Larsen has drafted a schedule for the Public Works Department. It includes hours worked, certification tracking, and duties & task assignments. This will allow for review of where hours are being spent. Mark said he is doing it on an Excel calendar right now, but it is still a work in progress. He estimated it will be completed in the next few months. Tom said the plan also includes checks on the fleets. He said they also looked at job descriptions. He said there is data entry with iWorQ that includes inspections, manhole service, etc. He said this information will provide reports for the Council to review. Tom said in the past ten years there have been six employees, which does not include seasonal employees. On average there is one employee that is replaced per year. Tom said he would like to go back to the model of having six employees. He explained Mark Larsen’s position and said to keep operations going he holds firm that Mark needs to be in the office to conduct administrative duties. He said as the City grows more and more development is coming in and the model needs to be adjusted. He discussed the City being broken up into quads and assignments being made to certain Public Works employees. Tom said right now the

Public Works Department is down one full time employee. Tom said he would like to fill that position.

Council Member Taylor asked why the City is losing an employee a year. He doesn't like the City being a training ground. Bryan said most of them leave for more money. Tom said the City has to be able to compete. Council Member Casas said he doesn't see in the plan anything that discusses hiring another employee. He also discussed the possibility of the Public Works Department taking on the snow removal of the park and ride verses hiring an outside company. Tom said we need to decide the priority.

**Bid Award for Park and Ride Snow Removal Service: no discussion on this item**

**FY 2015-2016 Audit Report by Keddington & Christensen, LLC: no discussion on this item**

**Weaver Estates Approval Review:** The Council briefly discussed the history of the approval of Weaver Estates.

**DISCUSSION ITEMS:**

**Employee Performance Merit Increases: no discussion on this item**

**Adjourned at 6:00 p.m.**

**APPROVED:** \_\_\_\_\_ Date

**Mayor: Tammy Long**

\_\_\_\_\_  
**Transcriber: Michelle Clark**

**Attest:** \_\_\_\_\_  
**City Recorder: Elyse Greiner**

# SOUTH WEBER CITY CITY COUNCIL MEETING

**DATE OF MEETING:** 20 December 2016

**TIME COMMENCED:** 6:00 p.m.

**PRESENT: MAYOR:**

Tammy Long

**COUNCILMEMBERS:**

Scott Casas  
Kent Hyer  
Marlene Poore (excused)  
Merv Taylor  
Jo Sjoblom

**CITY RECORDER:**

Elyse Greiner (excused)

**CITY MANAGER:**

Tom Smith

**CITY ATTORNEY:**

Doug Ahlstrom

**Transcriber:** Minutes transcribed by Michelle Clark

**VISITORS:** Layne & Jill Kap, Rhett & Keelee Weaver, Lynn Poll, Diane & Mike Ford, Mark & Natalie Dayton, Brandon Jones, Lyle Jorgensen, Lilian DeLong, Karen Cordon, and Cole Fessler.

Mayor Long called the meeting to order and welcomed those in attendance.

**PLEDGE OF ALLEGIANCE:** Mayor Long

**PRAYER:** Council Member Hyer

**AGENDA:** Council Member Hyer moved to approve the agenda as written. Council Member Taylor seconded the motion. Tom called for the vote. Council Members Casas, Hyer, Taylor, and, Sjoblom voted yes. The motion carried.

Mayor Long excused Elyse Greiner and Council Member Poore from tonight's meeting.

**CONFLICT OF INTEREST:** None

## **ACTION ITEMS:**

**Review of RES 16-34: Final Plat for Weaver Estates Subdivision:** Mayor Long said for those people who want to have more homes in this area with one egress, she suggested going down to the school to see what happens with traffic in that area.

Tom said Title 11.04.040A3 of the South Weber City Code limits the number of residential building units to 30 past the last intersection with two means of ingress/egress. The Weaver Estates Subdivision consists of one lot that fronts on Lester Drive and is less than 250 feet from the intersection of 1250 East. There are currently 30 approved residential building units past this intersection. Therefore, a strict interpretation of the code would restrict this one-lot subdivision from being approved. Tom said however, this was not caught by the City staff, the developer, the developers engineer, the Planning Commission, the City Council or the public until after it was fully approved by the City Council as per staff recommendation.

Tom said he has met with Brandon Jones, City Engineer, as well as Doug Ahlstrom, City Attorney. He said the City staff, City Engineer, and City Attorney recommend approval of this subdivision.

Mayor Long asked the procedure for submitting a subdivision application. Tom reviewed the process of submitting an application and the process of going to Sketch Plan and then to Planning Commission.

Doug Ahlstrom, City Attorney, said in his opinion, the City made a mistake and no one caught it along the way. He said on the other hand, the developer's engineer missed it too. He said courts always favor the developer in a situation like this against the City. He said there could be a lawsuit filed by the developer because of the cost they have spent. He said the options are: 1. City can revoke approval and code is what it is. 2. City can take a softer approach and admit mistake and go ahead with approval. Doug said typically the 30 lot rule comes from the international fire code. He said it is normally recommended to cities. He said for more than 30 lots it requires two ingress/egresses. He said this code is for emergency purposes. He also pointed out another code (11-02-010) which he read. He said this code is saying that any new applicant will still have to abide by the 30 lot requirement, just in case the Council may be worried about setting a precedent. He would advise taking the softer stance, admit the mistake, and recommended approval of this particular subdivision. Council Member Taylor is concerned about what happens when others approach the City and want the same treatment. Doug said another developer would need to show damage. Council Member Taylor asked if there have been any other applications. Tom said, "no". Tom explained the living document or checklist that will be used in the future on every subdivision. He said there are core rules that each subdivision must follow.

Council Member Taylor asked if the developer has incurred expenses. Tom said he has been told that the developer has incurred some expense. Brandon Jones, City Engineer, said this doesn't usually happen. In fact, he has been here for 11 years and he hasn't seen this happen before. He agrees with the City Attorney. He said had it been pointed out sooner, the City would have taken a different approach. He said given the point we are where we are at, and given the fact there is no detrimental effects, he thinks it should move forward. He said in the future they will take every precaution to make sure this doesn't happen again. He said there were two public hearings held in which there wasn't any public that picked up on it either. Brandon said public comment was brought to the Council after approval.

Doug said in development situations when a developer decides to sue the City, the courts almost always side with the developer in that situation because the City is presumed to know better than anyone else, its own code. He can see where a judge would say the City should have caught this



earlier. Council Member Taylor said then the City would be responsible for the court cost and attorney fees. Tom did speak to the Fire Chief. He is concerned about access to a fire hydrant, in which there is sufficient.

Council Member Casas said he has reviewed this over the last week. He said the Council has the ability to change ordinance. He would suggest looking at increasing the 30 lot requirement. Council Member Taylor said codes are enacted to be adhered too. He feels the Council needs to decide what is in the best interest of those involved. He feels the City needs to admit the mistake. Council Member Hyer said he visited the site today. He said the majority of the subdivisions on Lester are on the south side. He said this particular subdivision is on the north side of the Family Activity Center. He said in this situation he doesn't think there is anywhere near the concern for fire. He also feels the City needs to own up to the mistake. He is not in favor of amending the code.

**Lynn Poll, 826 E. South Weber Drive**, said he did not write a letter as was stated in the last meeting. Mr. Poll discussed the city code for a 70' right of way requirement. He asked if 1250 East is going to be 70' wide. He said the people along that street have not been contacted by the City.

**Karen Cordon, 1131 E. 7450 S.**, said she is very disappointed. She feels there needs to be justice for all. She said they have had to turn away people who want to develop in Easton Village but had to be turned away because of the 30 lot limitation.

**Lilian DeLong, 7382 S. 1025 E.**, said several years ago when this all began, they told the City they would be willing to sell their home. She would like a decision to be made. She said their lives have been in limbo because they don't know what the plan is for the street. She feels the City needs to make a decision and stick with it.

**Diane Ford, 1110 East South Weber Drive**, said she attended the meeting last week. She apologized if she offended anyone after last week's meeting. She is not in favor of bending the rules. She said when they went into business with Layne Kap, Easton Village Subdivision was scheduled for three phases. She said they approached the City several times concerning the third phase. She said on 3 December 2012 Layne signed the agreement stating he was aware that there was a 30 lot limit. She said they have spent a horrendous amount of money and it wasn't until they had many meetings with the Sketch Plan and Planning Commission that they were told there would be no exceptions.

**Layne Kap, 8085 S. Juniper Court**, explained that he thought Title 11.04.040A3 pertained just to Easton Village Subdivision. He said a mistake was made. He said the City staff and City Engineer made a mistake. He said the code is designed for the country. He said you can't compare this City to Ogden City. He said that is why you have a consulting engineer.

Council Member Taylor asked about the possibility of lawsuits. Doug said any person who sues has to show damages. Brandon Jones said the location of this one lot is important. He admits that the last point of egress was 1160 East but at a closer look 1250 East is the last means of an egress. He said this development is between the two. He then took responsibility and said he understands his job is to follow the City code. He feels this was an oversight because the lot

location is at the beginning. He said for all future applications, this will not happen again and his adherence to the code will be just as strong as it has been.

**Council Member Hyer moved to continue with approval of Resolution 16-34. Council Member Sjoblom seconded the motion. Tom called for the vote. Council Members Casas, Hyer, Taylor, and, Sjoblom voted yes. The motion carried.**

**COUNCIL ITEMS:**

**Council Member Hyer:**

**Youth City Council:** The Youth Council recently held the Breakfast with Santa and gave out awards for the City Christmas Light Contest.

**MAYORS ITEMS:**

**Mayor Long:** She recently attended a 3.83% increase from the Central Weber Sewer Improvement District.

**CITY ENGINEER ITEMS:**

**Connection with 7375 S. & Lester Drive:** Brandon feels this is something that the Council needs to look at. He is willing to meet with the Council to discuss what this will entail.

**PUBLIC COMMENT:**

**Natalie Dayton, 7420 S. 1025 E.** said she has been a resident for 55 years. She said in that time frame she feels she upholds the law. She wonders if the Council lives up to policy and procedures. She said she does have another access to her property because she has paid money to have these done. She feels the City staff needs to be doing there job.

**Lynn Poll, 826 E. South Weber Drive,** said he would hope the City Council will look at amending the 70' right of way to 60' right of way.

**Lyle Jorgensen, 7420 S. 1025 E.,** asked about the 4' drop off of Lester Drive. Brandon said it was engineered for water run off. He said that rode can't even be used.

**ADJOURNED: Council Member Taylor moved to adjourn the meeting at 6:56 p.m. Council Member Hyer seconded the motion. Tom called for the vote. Council Members Casas, Hyer, Sjoblom, and Taylor voted yes. The motion carried.**

**APPROVED:** \_\_\_\_\_ **Date**  
**Mayor: Tammy Long**

\_\_\_\_\_  
**Transcriber: Michelle Clark**

**Attest:**

\_\_\_\_\_  
**City Manager: Tom Smith**

DRAFT

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
<u>TAXES</u>					
10-31-100	10,111.45	15,018.82	311,000.00	295,981.18	4.8
10-31-120	668.17	1,863.44	3,700.00	1,836.56	50.4
10-31-200	2,237.39	11,202.34	30,000.00	18,797.66	37.3
10-31-300	86,803.68	242,075.86	778,000.00	535,924.14	31.1
10-31-310	33,327.21	110,756.08	330,000.00	219,243.92	33.6
TOTAL TAXES	133,147.90	380,916.54	1,452,700.00	1,071,783.46	26.2
<u>LICENSES AND PERMITS</u>					
10-32-100	2,070.00	2,750.00	13,600.00	10,850.00	20.2
10-32-210	25,414.84	74,111.87	170,000.00	95,888.13	43.6
TOTAL LICENSES AND PERMITS	27,484.84	76,861.87	183,600.00	106,738.13	41.9
<u>INTERGOVERNMENTAL REVENUE</u>					
10-33-400	.00	.00	.00	.00	.0
10-33-560	78,784.59	78,784.59	195,000.00	116,215.41	40.4
10-33-580	.00	.00	4,000.00	4,000.00	.0
TOTAL INTERGOVERNMENTAL REVENUE	78,784.59	78,784.59	199,000.00	120,215.41	39.6
<u>CHARGES FOR SERVICES</u>					
10-34-100	900.00	11,730.00	10,000.00	( 1,730.00)	117.3
10-34-105	11,339.75	23,556.96	30,000.00	6,443.04	78.5
10-34-250	40.00	1,385.00	1,000.00	( 385.00)	138.5
10-34-254	.00	.00	.00	.00	.0
10-34-270	.00	14,960.00	.00	( 14,960.00)	.0
10-34-760	.00	152.00	.00	( 152.00)	.0
TOTAL CHARGES FOR SERVICES	12,279.75	51,783.96	41,000.00	( 10,783.96)	126.3
<u>FINES AND FORFEITURES</u>					
10-35-100	8,435.00	38,767.67	117,000.00	78,232.33	33.1
TOTAL FINES AND FORFEITURES	8,435.00	38,767.67	117,000.00	78,232.33	33.1

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
<u>MISCELLANEOUS REVENUE</u>					
10-36-100 INTEREST EARNINGS	6,319.27	29,578.12	5,000.00	( 24,578.12)	591.6
10-36-300 NEWSLETTER SPONSORS	.00	100.00	100.00	.00	100.0
10-36-400 SALE OF ASSETS	.00	.00	.00	.00	.0
10-36-900 SUNDRY REVENUES	641.53	14,425.66	5,000.00	( 9,425.66)	288.5
10-36-901 FARMERS MARKET	.00	.00	.00	.00	.0
TOTAL MISCELLANEOUS REVENUE	6,960.80	44,103.78	10,100.00	( 34,003.78)	436.7
<u>CONTRIBUTIONS AND TRANSFERS</u>					
10-39-091 TRANSFER FROM CAPITAL PROJECTS	.00	.00	.00	.00	.0
10-39-100 FIRE AGREEMENT/JOB CORPS	3,580.00	3,580.00	3,500.00	( 80.00)	102.3
10-39-110 FIRE AGREEMENT/COUNTY	.00	.00	1,000.00	1,000.00	.0
10-39-900 CONTRIBUTION FROM GF SURPLUS	.00	.00	.00	.00	.0
10-39-910 CONTRIB. FROM CLASS "C"	.00	.00	470,100.00	470,100.00	.0
TOTAL CONTRIBUTIONS AND TRANSFERS	3,580.00	3,580.00	474,600.00	471,020.00	.8
TOTAL FUND REVENUE	270,672.88	674,798.41	2,478,000.00	1,803,201.59	27.2

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>LEGISLATIVE</u>					
10-41-005 SALARIES - COUNCIL & COMMISSIO	2,300.00	12,067.00	31,600.00	19,533.00	38.2
10-41-131 EMPLOYEE BENEFIT-EMPLOYER FICA	175.95	952.05	2,500.00	1,547.95	38.1
10-41-133 EMPLOYEE BENEFIT - WORK. COMP.	43.00	244.51	1,300.00	1,055.49	18.8
10-41-210 BOOKS, SUBS. AND MEMBERSHIPS	.00	.00	4,000.00	4,000.00	.0
10-41-230 TRAVEL	.00	1,500.00	7,000.00	5,500.00	21.4
10-41-240 OFFICE SUPPLIES AND EXPENSE	.00	.00	.00	.00	.0
10-41-370 PROFESSIONAL/TECHNICAL SERVICE	.00	.00	.00	.00	.0
10-41-620 MISCELLANEOUS SERVICES	.00	5,267.04	500.00	( 4,767.04)	1053.4
10-41-765 YOUTH CITY COUNCIL	.00	.00	.00	.00	.0
10-41-925 TRANSFER TO COUNTRY FAIR DAYS	.00	.00	5,000.00	5,000.00	.0
<b>TOTAL LEGISLATIVE</b>	<b>2,518.95</b>	<b>20,030.60</b>	<b>51,900.00</b>	<b>31,869.40</b>	<b>38.6</b>
<u>JUDICIAL</u>					
10-42-004 SUPERVISOR SALARIES	1,082.12	5,951.66	14,000.00	8,048.34	42.5
10-42-110 PART-TIME EMPLOYEE SALARIES	2,722.20	14,773.22	33,000.00	18,226.78	44.8
10-42-130 EMPLOYEE BENEFIT - RETIREMENT	784.59	4,272.52	11,000.00	6,727.48	38.8
10-42-131 EMPLOYEE BENEFIT-EMPLOYER FICA	291.03	1,585.46	4,000.00	2,414.54	39.6
10-42-133 EMPLOYEE BENEFIT - WORK. COMP.	6.09	32.35	200.00	167.65	16.2
10-42-134 EMPLOYEE BENEFIT - UI	.00	.00	700.00	700.00	.0
10-42-135 EMPLOYEE BENEFIT - HEALTH INS.	.00	.00	.00	.00	.0
10-42-210 BOOKS/SUBSCRIPTIONS/MEMBERSHIP	.00	510.27	500.00	( 10.27)	102.1
10-42-230 TRAVEL	73.87	1,128.93	2,400.00	1,271.07	47.0
10-42-240 OFFICE SUPPLIES & EXPENSE	.00	265.33	1,000.00	734.67	26.5
10-42-243 COURT REFUNDS	.00	75.00	.00	( 75.00)	.0
10-42-313 PROFESSIONAL/TECH. - ATTORNEY	600.00	2,400.00	7,400.00	5,000.00	32.4
10-42-317 PROFESSIONAL/TECHNICAL-BAILIFF	300.00	1,200.00	4,000.00	2,800.00	30.0
10-42-350 SOFTWARE MAINTENANCE	5.00	25.00	500.00	475.00	5.0
10-42-550 BANKING CHARGES	.00	305.83	600.00	294.17	51.0
10-42-610 MISCELLANEOUS	18.50	58.30	500.00	441.70	11.7
10-42-980 ST. TREASURER SURCHARGE	6,638.91	15,442.04	50,000.00	34,557.96	30.9
<b>TOTAL JUDICIAL</b>	<b>12,522.31</b>	<b>48,025.91</b>	<b>129,800.00</b>	<b>81,774.09</b>	<b>37.0</b>

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>ADMINISTRATIVE</u>					
10-43-110	16,057.98	79,764.22	204,000.00	124,235.78	39.1
10-43-120	898.83	4,844.77	12,700.00	7,855.23	38.2
10-43-125	.00	.00	.00	.00	.0
10-43-130	3,010.70	17,294.71	47,800.00	30,505.29	36.2
10-43-131	1,305.04	6,495.91	16,500.00	10,004.09	39.4
10-43-133	40.28	208.82	3,500.00	3,291.18	6.0
10-43-134	.00	.00	3,000.00	3,000.00	.0
10-43-135	3,289.05	16,559.94	45,000.00	28,440.06	36.8
10-43-136	.00	75.00	4,000.00	3,925.00	1.9
10-43-140	.00	.00	1,000.00	1,000.00	.0
10-43-210	51.85	1,926.66	3,600.00	1,673.34	53.5
10-43-220	90.25	3,535.50	4,000.00	464.50	88.4
10-43-230	33.00	5,371.23	11,000.00	5,628.77	48.8
10-43-240	102.52	1,304.48	10,000.00	8,695.52	13.0
10-43-251	.00	1,133.21	3,500.00	2,366.79	32.4
10-43-252	.00	.00	.00	.00	.0
10-43-253	.00	.00	.00	.00	.0
10-43-256	.00	102.09	500.00	397.91	20.4
10-43-262	643.92	2,336.11	9,000.00	6,663.89	26.0
10-43-270	.00	1,589.04	5,000.00	3,410.96	31.8
10-43-280	687.00	5,104.73	13,000.00	7,895.27	39.3
10-43-308	682.50	3,696.64	12,200.00	8,503.36	30.3
10-43-309	.00	.00	19,000.00	19,000.00	.0
10-43-310	.00	.00	7,000.00	7,000.00	.0
10-43-311	.00	.00	5,000.00	5,000.00	.0
10-43-312	2,222.25	6,992.09	12,000.00	5,007.91	58.3
10-43-313	2,400.00	7,050.00	30,000.00	22,950.00	23.5
10-43-314	.00	1,580.05	1,500.00	( 80.05)	105.3
10-43-316	.00	.00	.00	.00	.0
10-43-319	10,809.75	30,469.96	30,000.00	( 469.96)	101.6
10-43-329	47.46	329.51	2,000.00	1,670.49	16.5
10-43-330	.00	.00	.00	.00	.0
10-43-350	860.72	4,633.59	8,500.00	3,866.41	54.5
10-43-360	.00	.00	.00	.00	.0
10-43-370	234.14	1,181.56	.00	( 1,181.56)	.0
10-43-510	100.00	42,632.34	40,000.00	( 2,632.34)	106.6
10-43-550	.00	745.87	2,000.00	1,254.13	37.3
10-43-610	.00	127.92	4,000.00	3,872.08	3.2
10-43-620	.00	.00	.00	.00	.0
10-43-621	.00	.00	.00	.00	.0
10-43-625	( 4.00)	26.10	.00	( 26.10)	.0
10-43-740	8,305.00	11,745.09	21,800.00	10,054.91	53.9
10-43-745	.00	.00	.00	.00	.0
10-43-841	.00	.00	87,400.00	87,400.00	.0
10-43-910	.00	.00	227,600.00	227,600.00	.0
TOTAL ADMINISTRATIVE	51,868.24	258,857.14	907,100.00	648,242.86	28.5

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>PUBLIC SAFETY</u>					
10-54-310 SHERIFF'S DEPARTMENT	11,047.67	55,238.35	146,000.00	90,761.65	37.8
10-54-311 ANIMAL CONTROL	1,131.28	4,525.12	15,000.00	10,474.88	30.2
10-54-320 EMERGENCY PREPAREDNESS	.00	.00	500.00	500.00	.0
10-54-321 LIQUOR LAW ENFORCEMENT	5,742.00	5,742.00	4,500.00	( 1,242.00)	127.6
10-54-740 EQUIPMENT PURCHASES	.00	.00	.00	.00	.0
<b>TOTAL PUBLIC SAFETY</b>	<b>17,920.95</b>	<b>65,505.47</b>	<b>166,000.00</b>	<b>100,494.53</b>	<b>39.5</b>
<u>FIRE PROTECTION</u>					
10-57-110 FULL-TIME EMPLOYEE SALARIES	200.00	2,599.51	.00	( 2,599.51)	.0
10-57-120 PART-TIME EMPLOYEE SALARIES	696.34	5,547.34	39,000.00	33,452.66	14.2
10-57-131 EMPLOYEE BENEFIT-EMPLOYER FICA	68.58	623.24	3,000.00	2,376.76	20.8
10-57-133 EMPLOYEE BENEFIT - WORK. COMP.	30.75	277.08	1,500.00	1,222.92	18.5
10-57-134 EMPLOYEE BENEFIT - UI	.00	.00	600.00	600.00	.0
10-57-210 BOOKS, SUBS. AND MEMBERSHIPS	100.00	100.00	1,300.00	1,200.00	7.7
10-57-230 TRAVEL	.00	131.77	9,700.00	9,568.23	1.4
10-57-240 OFFICE SUPPLIES & EXPENSE	.00	289.00	1,000.00	711.00	28.9
10-57-250 EQUIPMENT SUPPLIES & MAINT.	501.25	2,336.49	13,100.00	10,763.51	17.8
10-57-256 FUEL EXPENSE	39.38	259.83	1,100.00	840.17	23.6
10-57-260 BUILDINGS & GROUNDS MAINT.	.00	.00	.00	.00	.0
10-57-270 UTILITIES	.00	1,275.02	7,000.00	5,724.98	18.2
10-57-280 TELEPHONE	.00	1,100.20	4,700.00	3,599.80	23.4
10-57-350 SOFTWARE MAINTENANCE	38.05	782.74	1,300.00	517.26	60.2
10-57-370 PROFESSIONAL & TECH. SERVICES	1,041.50	4,301.11	13,200.00	8,898.89	32.6
10-57-450 SPECIAL PUBLIC SAFETY SUPPLIES	.00	.00	14,100.00	14,100.00	.0
10-57-530 INTEREST EXPENSE- BOND	.00	7,500.53	9,500.00	1,999.47	79.0
10-57-550 BANKING CHARGES	.00	153.81	500.00	346.19	30.8
10-57-620 HEALTH & WELLNESS EXPENSES	.00	.00	900.00	900.00	.0
10-57-740 EQUIPMENT PURCHASES	.00	.00	.00	.00	.0
10-57-745 EQUIPMENT COSTING OVER \$500	.00	.00	.00	.00	.0
10-57-811 SALES TAX REV BOND - PRINCIPAL	.00	.00	.00	.00	.0
<b>TOTAL FIRE PROTECTION</b>	<b>2,715.85</b>	<b>27,277.67</b>	<b>121,500.00</b>	<b>94,222.33</b>	<b>22.5</b>



SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>BUILDING INSPECTION</u>					
10-58-105 PART-TIME EMPLOYEE SALARIES	.00	.00	.00	.00	.0
10-58-110 FULL-TIME EMPLOYEE SALARIES	3,497.81	19,571.73	46,500.00	26,928.27	42.1
10-58-120 PART-TIME EMPLOYEE SALARIES	1,402.50	6,572.65	22,000.00	15,427.35	29.9
10-58-130 EMPLOYEE BENEFIT - RETIREMENT	674.41	3,857.71	11,000.00	7,142.29	35.1
10-58-131 EMPLOYEE BENEFIT-EMPLOYER FICA	365.09	1,953.95	5,300.00	3,346.05	36.9
10-58-133 EMPLOYEE BENEFIT - WORK. COMP.	88.83	488.89	1,800.00	1,311.11	27.2
10-58-134 EMPLOYEE BENEFIT - UI	.00	.00	700.00	700.00	.0
10-58-135 EMPLOYEE BENEFIT - HEALTH INS.	352.50	1,597.17	5,300.00	3,702.83	30.1
10-58-210 BOOKS/SUBSCRIPTIONS/MEMBERSHIP	309.00	409.00	2,300.00	1,891.00	17.8
10-58-230 TRAVEL	.00	41.04	2,000.00	1,958.96	2.1
10-58-250 EQUIP. SUPPLIES & EXPENSE	.00	34.52	1,000.00	965.48	3.5
10-58-255 VEHICLE LEASE	.00	.00	.00	.00	.0
10-58-256 FUEL EXPENSE	.00	149.75	1,000.00	850.25	15.0
10-58-350 SOFTWARE MAINTENANCE	.00	1,200.00	1,500.00	300.00	80.0
10-58-370 PROFESSIONAL & TECH. SERVICES	.00	.00	2,000.00	2,000.00	.0
10-58-620 MISCELLANEOUS	.00	345.64	600.00	254.36	57.6
10-58-740 EQUIPMENT PURCHASES	.00	.00	.00	.00	.0
<b>TOTAL BUILDING INSPECTION</b>	<b>6,690.14</b>	<b>36,222.05</b>	<b>103,000.00</b>	<b>66,777.95</b>	<b>35.2</b>
<u>STREETS</u>					
10-60-110 FULL-TIME EMPLOYEE SALARIES	1,130.20	6,572.73	17,000.00	10,427.27	38.7
10-60-120 PART-TIME EMPLOYEE SALARIES	66.75	2,693.50	14,000.00	11,306.50	19.2
10-60-130 EMPLOYEE BENEFIT - RETIREMENT	235.95	1,371.91	3,900.00	2,528.09	35.2
10-60-131 EMPLOYEE BENEFIT-EMPLOYER FICA	89.57	699.06	2,200.00	1,500.94	31.8
10-60-133 EMPLOYEE BENEFIT - WORK. COMP.	35.25	244.50	1,100.00	855.50	22.2
10-60-134 EMPLOYEE BENEFIT - UI	.00	.00	300.00	300.00	.0
10-60-135 EMPLOYEE BENEFIT - HEALTH INS.	16.64	83.04	600.00	516.96	13.8
10-60-140 UNIFORMS	78.77	305.21	300.00	( 5.21)	101.7
10-60-230 TRAVEL & TRAINING	.00	313.90	1,000.00	686.10	31.4
10-60-250 EQUIPMENT SUPPLIES & MAINT.	1,313.32	3,529.04	16,900.00	13,370.96	20.9
10-60-255 VEHICLE LEASE	.00	.00	2,500.00	2,500.00	.0
10-60-256 FUEL EXPENSE	42.40	190.46	2,100.00	1,909.54	9.1
10-60-260 BUILDINGS & GROUNDS - SHOP	.00	812.65	9,000.00	8,187.35	9.0
10-60-271 UTILITIES - STREET LIGHTS	.00	14,718.50	40,000.00	25,281.50	36.8
10-60-312 PROFESSIONAL & TECH. - ENGINR	9,729.00	11,057.00	18,000.00	6,943.00	61.4
10-60-350 SOFTWARE MAINTENANCE	38.05	190.25	4,000.00	3,809.75	4.8
10-60-370 PROFESSIONAL & TECH. SERVICES	186.00	774.00	3,000.00	2,226.00	25.8
10-60-410 SPECIAL HIGHWAY SUPPLIES	6,607.66	18,794.91	21,000.00	2,205.09	89.5
10-60-420 WEED CONTROL	.00	.00	5,000.00	5,000.00	.0
10-60-421 PEDESTRIAN SAFETY	.00	.00	.00	.00	.0
10-60-422 CROSSWALK/STREET PAINTING	.00	.00	4,000.00	4,000.00	.0
10-60-424 CURB & GUTTER RESTORATION	.00	.00	15,000.00	15,000.00	.0
10-60-550 BANKING CHARGES	.00	153.81	800.00	646.19	19.2
10-60-745 EQUIPMENT COSTING OVER \$500	13,547.00	13,547.00	.00	( 13,547.00)	.0
<b>TOTAL STREETS</b>	<b>33,116.56</b>	<b>76,051.47</b>	<b>181,700.00</b>	<b>105,648.53</b>	<b>41.9</b>

SOUTH WEBER CITY CORPORATION  
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FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>CLASS "C" ROADS</u>					
10-61-105 PART-TIME EMPLOYEE SALARIES	.00	.00	.00	.00	.0
10-61-110 FULL-TIME EMPLOYEE SALARIES	1,261.79	7,068.74	16,000.00	8,931.26	44.2
10-61-130 EMPLOYEE BENEFIT - RETIREMENT	233.73	1,358.61	3,900.00	2,541.39	34.8
10-61-131 EMPLOYEE BENEFIT-EMPLOYER FICA	92.34	521.32	1,300.00	778.68	40.1
10-61-133 EMPLOYEE BENEFIT - WORK. COMP.	27.13	168.28	500.00	331.72	33.7
10-61-134 EMPLOYEE BENEFIT - UI	.00	.00	300.00	300.00	.0
10-61-135 EMPLOYEE BENEFIT - HEALTH INS.	157.37	687.38	2,100.00	1,412.62	32.7
10-61-230 TRAVEL	.00	.00	.00	.00	.0
10-61-256 FUEL EXPENSE	.00	.00	500.00	500.00	.0
10-61-410 SPECIAL HIGHWAY SUPPLIES	.00	.00	.00	.00	.0
10-61-411 SNOW REMOVAL SUPPLIES	1,122.94	1,122.94	29,500.00	28,377.06	3.8
10-61-425 SLURRY SEAL	.00	141,967.59	155,000.00	13,032.41	91.6
10-61-730 STREET OVERLAY	.00	.00	456,000.00	456,000.00	.0
<b>TOTAL CLASS "C" ROADS</b>	<b>2,895.30</b>	<b>152,894.86</b>	<b>665,100.00</b>	<b>512,205.14</b>	<b>23.0</b>
<u>PARKS</u>					
10-70-110 FULL-TIME EMPLOYEE SALARIES	2,959.37	15,635.53	40,000.00	24,364.47	39.1
10-70-120 PART-TIME EMPLOYEE SALARIES	166.00	4,292.19	16,000.00	11,707.81	26.8
10-70-130 EMPLOYEE BENEFIT - RETIREMENT	562.81	4,619.29	7,900.00	3,280.71	58.5
10-70-131 EMPLOYEE BENEFIT-EMPLOYER FICA	236.04	1,484.79	4,200.00	2,715.21	35.4
10-70-133 EMPLOYEE BENEFIT - WORK. COMP.	75.08	507.75	1,600.00	1,092.25	31.7
10-70-134 EMPLOYEE BENEFIT - UI	.00	.00	800.00	800.00	.0
10-70-135 EMPLOYEE BENEFIT - HEALTH INS.	208.45	2,512.44	12,000.00	9,487.56	20.9
10-70-230 TRAVEL & SEMINARS	.00	.00	2,000.00	2,000.00	.0
10-70-250 EQUIPMENT SUPPLIES & MAINT.	613.25	3,140.17	6,000.00	2,859.83	52.3
10-70-255 VEHICLE LEASE	.00	.00	2,500.00	2,500.00	.0
10-70-256 FUEL EXPENSE	1,181.32	1,834.28	4,000.00	2,165.72	45.9
10-70-260 BUILDINGS & GROUNDS	1,204.73	2,115.60	9,000.00	6,884.40	23.5
10-70-261 GROUNDS SUPPLIES & MAINTENANCE	.00	8,627.47	19,000.00	10,372.53	45.4
10-70-265 TRAILS: SUPPLIES AND MAINTENAN	.00	.00	.00	.00	.0
10-70-270 UTILITIES	1,130.58	1,130.58	9,000.00	7,869.42	12.6
10-70-350 SOFTWARE MAINTENANCE	38.05	190.25	500.00	309.75	38.1
10-70-430 TREES	.00	.00	5,000.00	5,000.00	.0
10-70-435 SAFETY INCENTIVE PROGRAM	.00	.00	.00	.00	.0
10-70-550 BANKING CHARGES	.00	153.81	400.00	246.19	38.5
10-70-625 UTA PARK AND RIDE	42.02	6,985.59	12,000.00	5,014.41	58.2
10-70-730 IMPROVEMENTS OTHER THAN BUILD.	.00	.00	.00	.00	.0
10-70-745 EQUIPMENT COSTING OVER \$500	.00	.00	.00	.00	.0
10-70-901 FARMERS MARKET	.00	.00	.00	.00	.0
<b>TOTAL PARKS</b>	<b>8,417.70</b>	<b>53,229.74</b>	<b>151,900.00</b>	<b>98,670.26</b>	<b>35.0</b>

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
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GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>TRANSFERS</u>					
10-80-800 TRANSFER TO STORM SEWER FUND	.00	.00	.00	.00	.0
10-80-841 TRANS. TO RECREATION FUND	.00	.00	.00	.00	.0
10-80-910 TRANSFER TO CAP. PROJ. FUND	.00	.00	.00	.00	.0
10-80-925 TRANSFER TO COUNTRY FAIR DAYS	.00	.00	.00	.00	.0
TOTAL TRANSFERS	.00	.00	.00	.00	.0
TOTAL FUND EXPENDITURES	138,666.00	738,094.91	2,478,000.00	1,739,905.09	29.8
NET REVENUE OVER EXPENDITURES	132,006.88	( 63,296.50)	.00	63,296.50	.0

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

RECREATION FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>RECREATION REVENUE</u>					
20-34-720 RENTAL - ACTIVITY CENTER	623.00	2,205.00	4,500.00	2,295.00	49.0
20-34-750 RECREATION FEES	1,980.00	21,629.91	37,000.00	15,370.09	58.5
20-34-751 MEMBERSHIP FEES	2,421.00	6,500.00	22,000.00	15,500.00	29.6
20-34-752 COMPETITION LEAGUE FEES	.00	5,680.00	13,000.00	7,320.00	43.7
20-34-753 MISC REVENUE	.00	65.25	500.00	434.75	13.1
20-34-811 SALES TAX BOND PMT-RESTRICTED	.00	.00	.00	.00	.0
20-34-841 GRAVEL PIT FEES	.00	1,181.69	60,000.00	58,818.31	2.0
<b>TOTAL RECREATION REVENUE</b>	<b>5,024.00</b>	<b>37,261.85</b>	<b>137,000.00</b>	<b>99,738.15</b>	<b>27.2</b>
<u>SOURCE 36</u>					
20-36-895 KNIGHT'S FOOTBALL DONATIONS	.00	.00	.00	.00	.0
20-36-897 KNIGHT'S FOOTBALL REGISTRATION	.00	( 60.00)	7,000.00	7,060.00	( .9)
20-36-898 KNIGHT'S FOOTBALL SALES	.00	.00	.00	.00	.0
20-36-899 BIGGEST LOSER	.00	.00	.00	.00	.0
<b>TOTAL SOURCE 36</b>	<b>.00</b>	<b>( 60.00)</b>	<b>7,000.00</b>	<b>7,060.00</b>	<b>( .9)</b>
<u>SOURCE 37</u>					
20-37-100 INTEREST EARNINGS	.00	.00	1,000.00	1,000.00	.0
<b>TOTAL SOURCE 37</b>	<b>.00</b>	<b>.00</b>	<b>1,000.00</b>	<b>1,000.00</b>	<b>.0</b>
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
20-39-091 TRANSFER FROM CAPITAL PROJECTS	.00	.00	.00	.00	.0
20-39-470 TRANSFER FROM GENERAL FUND	.00	.00	87,400.00	87,400.00	.0
20-39-900 CONTRIBUTION FROM FUND BALANCE	.00	.00	.00	.00	.0
<b>TOTAL CONTRIBUTIONS &amp; TRANSFERS</b>	<b>.00</b>	<b>.00</b>	<b>87,400.00</b>	<b>87,400.00</b>	<b>.0</b>
<b>TOTAL FUND REVENUE</b>	<b>5,024.00</b>	<b>37,201.85</b>	<b>232,400.00</b>	<b>195,198.15</b>	<b>16.0</b>

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

RECREATION FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>RECREATION EXPENDITURES</u>					
20-71-110 FULL-TIME EMPLOYEE SALARIES	3,484.80	19,286.20	50,000.00	30,713.80	38.6
20-71-120 PART-TIME EMPLOYEE SALARIES	2,916.72	15,270.36	41,000.00	25,729.64	37.2
20-71-130 EMPLOYEE BENEFIT - RETIREMENT	686.50	3,799.36	10,000.00	6,200.64	38.0
20-71-131 EMPLOYEE BENEFIT-EMPLOYER FICA	477.24	2,581.30	7,600.00	5,018.70	34.0
20-71-133 EMPLOYEE BENEFIT - WORK. COMP.	122.25	686.43	3,000.00	2,313.57	22.9
20-71-134 EMPLOYEE BENEFIT - UI	.00	.00	1,400.00	1,400.00	.0
20-71-135 EMPLOYEE BENEFIT - HEALTH INS.	656.16	3,280.80	7,900.00	4,619.20	41.5
20-71-210 BOOKS/SUBSCRIPTIONS/MEMBERSHIP	.00	.00	.00	.00	.0
20-71-230 TRAVEL	.00	.00	1,500.00	1,500.00	.0
20-71-240 OFFICE SUPPLIES AND EXPENSE	.00	278.38	1,000.00	721.62	27.8
20-71-241 MATERIALS & SUPPLIES	26.12	230.09	2,000.00	1,769.91	11.5
20-71-250 EQUIPMENT SUPPLIES & MAINT.	.00	.00	400.00	400.00	.0
20-71-256 FUEL EXPENSE	.00	29.56	100.00	70.44	29.6
20-71-262 GENERAL GOVERNMENT BUILDINGS	.00	.00	4,000.00	4,000.00	.0
20-71-270 UTILITIES	.00	3,919.13	5,500.00	1,580.87	71.3
20-71-280 TELEPHONE	.00	841.50	3,000.00	2,158.50	28.1
20-71-331 CITY PROMOTION	.00	244.81	1,500.00	1,255.19	16.3
20-71-340 PROGRAM OFFICIALS	2,375.75	5,633.50	14,000.00	8,366.50	40.2
20-71-350 SOFTWARE MAINTENANCE	38.05	190.25	600.00	409.75	31.7
20-71-370 PROFESSIONAL/TECHNICAL SERVICE	.00	.00	.00	.00	.0
20-71-480 BASKETBALL	287.60	1,354.07	6,500.00	5,145.93	20.8
20-71-481 BASEBALL & SOFTBALL	.00	.00	5,500.00	5,500.00	.0
20-71-482 SOCCER	.00	1,619.65	3,500.00	1,880.35	46.3
20-71-483 FLAG FOOTBALL	.00	2,334.81	3,000.00	665.19	77.8
20-71-484 VOLLEYBALL	.00	881.26	1,500.00	618.74	58.8
20-71-485 SUMMER FUN	.00	143.52	2,000.00	1,856.48	7.2
20-71-486 SR LUNCHEON	.00	445.29	1,500.00	1,054.71	29.7
20-71-487 KNIGHT'S FOOTBALL	150.00	3,282.20	9,000.00	5,717.80	36.5
20-71-489 COMPETITION LEAGUE SPORTS	.00	.00	.00	.00	.0
20-71-490 BIGGEST LOSER	.00	.00	.00	.00	.0
20-71-494 YOUTH CITY COUNCIL	.00	.00	4,000.00	4,000.00	.0
20-71-510 INSURANCE & SURETY BONDS	.00	.00	.00	.00	.0
20-71-530 INTEREST EXPENSE	.00	19,287.07	23,700.00	4,412.93	81.4
20-71-550 BANKING CHARGES	.00	153.81	600.00	446.19	25.6
20-71-610 MISCELLANEOUS	.00	561.57	2,000.00	1,438.43	28.1
20-71-620 MISCELLANEOUS SERVICES	.00	9.62	.00	( 9.62)	.0
20-71-625 CASH OVER AND SHORT	.00	( 1.25)	.00	1.25	.0
20-71-740 EQUIPMENT PURCHASES	.00	4,995.00	8,000.00	3,005.00	62.4
20-71-745 EQUIPMENT COSTING OVER \$500	.00	.00	.00	.00	.0
20-71-811 SALES TAX REV BOND - PRINCIPAL	.00	.00	.00	.00	.0
20-71-900 BUDGETED INCREASE IN FUND BAL	.00	.00	7,100.00	7,100.00	.0
TOTAL RECREATION EXPENDITURES	11,221.19	91,338.29	232,400.00	141,061.71	39.3
TOTAL FUND EXPENDITURES	11,221.19	91,338.29	232,400.00	141,061.71	39.3
NET REVENUE OVER EXPENDITURES	( 6,197.19)	( 54,136.44)	.00	54,136.44	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

SEWER IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>REVENUE</u>					
21-37-100 INTEREST EARNINGS	.00	.00	.00	.00	.0
21-37-200 SEWER IMPACT FEES	9,366.00	23,415.00	81,000.00	57,585.00	28.9
TOTAL REVENUE	9,366.00	23,415.00	81,000.00	57,585.00	28.9
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
21-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	67,000.00	67,000.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	67,000.00	67,000.00	.0
TOTAL FUND REVENUE	9,366.00	23,415.00	148,000.00	124,585.00	15.8

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

SEWER IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
21-40-490 SEWER IMPACT FEE PROJECTS	2,287.25	2,287.25	16,000.00	13,712.75	14.3
TOTAL EXPENDITURES	2,287.25	2,287.25	16,000.00	13,712.75	14.3
<u>DEPARTMENT 80</u>					
21-80-800 TRASFERS	.00	.00	132,000.00	132,000.00	.0
TOTAL DEPARTMENT 80	.00	.00	132,000.00	132,000.00	.0
TOTAL FUND EXPENDITURES	2,287.25	2,287.25	148,000.00	145,712.75	1.6
NET REVENUE OVER EXPENDITURES	7,078.75	21,127.75	.00	( 21,127.75)	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

STORM SEWER IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>REVENUE</u>					
22-37-100 INTEREST EARNINGS	.00	.00	.00	.00	.0
22-37-200 STORM SEWER IMPACT FEE	3,990.00	15,707.04	50,000.00	34,292.96	31.4
TOTAL REVENUE	3,990.00	15,707.04	50,000.00	34,292.96	31.4
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
22-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	89,000.00	89,000.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	89,000.00	89,000.00	.0
TOTAL FUND REVENUE	3,990.00	15,707.04	139,000.00	123,292.96	11.3



SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

STORM SEWER IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
22-40-690 PROJECTS	1,977.39	1,977.39	139,000.00	137,022.61	1.4
22-40-699 STORM SEWER IMPACT FEE PROJECT	.00	.00	.00	.00	.0
22-40-799 FACILITIES	.00	.00	.00	.00	.0
TOTAL EXPENDITURES	1,977.39	1,977.39	139,000.00	137,022.61	1.4
<u>DEPARTMENT 80</u>					
22-80-800 TFR TO STORM SEWER FUND	.00	.00	.00	.00	.0
TOTAL DEPARTMENT 80	.00	.00	.00	.00	.0
TOTAL FUND EXPENDITURES	1,977.39	1,977.39	139,000.00	137,022.61	1.4
NET REVENUE OVER EXPENDITURES	2,012.61	13,729.65	.00	( 13,729.65)	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

PARK IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>REVENUE</u>					
23-37-100 INTEREST EARNINGS	.00	.00	.00	.00	.0
23-37-200 PARK IMPACT FEE	3,268.00	5,410.98	34,000.00	28,589.02	15.9
TOTAL REVENUE	3,268.00	5,410.98	34,000.00	28,589.02	15.9
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
23-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	.00	.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	.00	.00	.0
TOTAL FUND REVENUE	3,268.00	5,410.98	34,000.00	28,589.02	15.9

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

PARK IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
23-40-250 EQUIPMENT	.00	.00	.00	.00	.0
23-40-760 PROJECTS	.00	.00	9,000.00	9,000.00	.0
23-40-800 PARK FUND BALANCE	.00	.00	25,000.00	25,000.00	.0
TOTAL EXPENDITURES	.00	.00	34,000.00	34,000.00	.0
TOTAL FUND EXPENDITURES	.00	.00	34,000.00	34,000.00	.0
NET REVENUE OVER EXPENDITURES	3,268.00	5,410.98	.00	( 5,410.98)	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

ROAD IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>REVENUE</u>					
24-37-100 INTEREST EARNINGS	.00	.00	500.00	500.00	.0
24-37-200 ROAD IMPACT FEE	4,134.00	13,127.00	30,000.00	16,873.00	43.8
TOTAL REVENUE	4,134.00	13,127.00	30,500.00	17,373.00	43.0
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
24-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	36,500.00	36,500.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	36,500.00	36,500.00	.0
TOTAL FUND REVENUE	4,134.00	13,127.00	67,000.00	53,873.00	19.6

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

ROAD IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
24-40-760 PROJECTS	.00	.00	67,000.00	67,000.00	.0
24-40-799 FACILITIES	.00	.00	.00	.00	.0
TOTAL EXPENDITURES	.00	.00	67,000.00	67,000.00	.0
TOTAL FUND EXPENDITURES	.00	.00	67,000.00	67,000.00	.0
NET REVENUE OVER EXPENDITURES	4,134.00	13,127.00	.00	( 13,127.00)	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

COUNTRY FAIR DAYS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>COUNTRY FAIR DAYS REVENUE</u>					
25-34-800	2,000.00	18,636.00	13,650.00	( 4,986.00)	136.5
25-34-850	.00	.00	.00	.00	.0
25-34-900	.00	5,955.00	7,500.00	1,545.00	79.4
25-34-901	.00	1,783.00	4,250.00	2,467.00	42.0
25-34-902	.00	1,020.00	1,000.00	( 20.00)	102.0
25-34-903	.00	.00	.00	.00	.0
25-34-904	.00	1,921.36	2,200.00	278.64	87.3
25-34-905	.00	4,862.03	6,000.00	1,137.97	81.0
25-34-906	.00	860.00	1,300.00	440.00	66.2
25-34-907	.00	.00	.00	.00	.0
25-34-908	.00	.00	.00	.00	.0
25-34-909	.00	558.00	750.00	192.00	74.4
25-34-910	.00	3,443.35	4,650.00	1,206.65	74.1
25-34-911	.00	1,180.00	800.00	( 380.00)	147.5
25-34-912	.00	.00	125.00	125.00	.0
25-34-919	.00	75.00	50.00	( 25.00)	150.0
25-34-921	.00	.00	.00	.00	.0
25-34-922	.00	.00	.00	.00	.0
25-34-923	.00	.00	.00	.00	.0
	<u>2,000.00</u>	<u>40,293.74</u>	<u>42,275.00</u>	<u>1,981.26</u>	<u>95.3</u>
<u>SOURCE 37</u>					
25-37-100	.00	.00	.00	.00	.0
	<u>.00</u>	<u>.00</u>	<u>.00</u>	<u>.00</u>	<u>.0</u>
<u>CONTRIBUTIONS AND TRANSFERS</u>					
25-39-470	.00	.00	5,000.00	5,000.00	.0
25-39-500	.00	.00	.00	.00	.0
	<u>.00</u>	<u>.00</u>	<u>5,000.00</u>	<u>5,000.00</u>	<u>.0</u>
	<u>2,000.00</u>	<u>40,293.74</u>	<u>47,275.00</u>	<u>6,981.26</u>	<u>85.2</u>

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

COUNTRY FAIR DAYS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>COUNTRY FAIR DAYS EXPENDITURES</u>					
25-72-500 MONDAY DINNER & MAKE A DEAL	.00	6,441.20	7,500.00	1,058.80	85.9
25-72-501 GOLF TOURNAMENT	.00	2,234.22	4,250.00	2,015.78	52.6
25-72-502 3 ON 3 BASKETBALL	.00	818.70	600.00	( 218.70)	136.5
25-72-503 BABY CONTEST & LITTLE MISS	.00	.00	.00	.00	.0
25-72-504 KID-K FUN RUN	.00	2,114.20	2,200.00	85.80	96.1
25-72-505 RICHARD BOUCHARD MEMORIAL RUN	.00	5,182.26	6,000.00	817.74	86.4
25-72-506 RODEO	.00	1,276.86	1,000.00	( 276.86)	127.7
25-72-507 PARADE	.00	67.45	700.00	632.55	9.6
25-72-508 ADULT ANYTHING GOES	.00	.00	.00	.00	.0
25-72-509 YOUTH ANYTHING GOES	.00	838.48	750.00	( 88.48)	111.8
25-72-510 FIREWORKS	.00	4,000.00	4,000.00	.00	100.0
25-72-511 ENTERTAINMENT	.00	2,894.50	4,250.00	1,355.50	68.1
25-72-512 EQUIPMENT RENTALS	.00	6,026.08	4,000.00	( 2,026.08)	150.7
25-72-513 SHIRTS	.00	.00	300.00	300.00	.0
25-72-515 PROMO PRINTING/MAILING SUPPLIE	.00	59.18	700.00	640.82	8.5
25-72-516 COKE WAGON	.00	2,513.21	4,000.00	1,486.79	62.8
25-72-517 MISC SUPPLIES	607.81	2,939.11	1,000.00	( 1,939.11)	293.9
25-72-518 EQUIPMENT PURCHASES	.00	4,000.00	.00	( 4,000.00)	.0
25-72-519 SOUTH WEBER IDOL	.00	4.74	.00	( 4.74)	.0
25-72-520 EATING CONTEST	.00	.00	.00	.00	.0
25-72-521 CAR SHOW	.00	164.94	200.00	35.06	82.5
25-72-522 DUTCH OVEN	.00	.00	.00	.00	.0
25-72-523 BOOTHS	.00	268.07	400.00	131.93	67.0
25-72-524 SWIM PARTY	.00	.00	750.00	750.00	.0
25-72-525 ICE	.00	328.09	1,000.00	671.91	32.8
25-72-526 MAKE A DEAL	.00	2,942.68	3,500.00	557.32	84.1
25-72-527 TENT RENTAL	.00	.00	.00	.00	.0
25-72-528 OL TIMERS BASEBALL GAME	.00	100.00	175.00	75.00	57.1
25-72-600 BUDGETED INCREASE IN FUND BAL	.00	.00	.00	.00	.0
TOTAL COUNTRY FAIR DAYS EXPENDITURES	607.81	45,213.97	47,275.00	2,061.03	95.6
TOTAL FUND EXPENDITURES	607.81	45,213.97	47,275.00	2,061.03	95.6
NET REVENUE OVER EXPENDITURES	1,392.19	( 4,920.23)	.00	4,920.23	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

WATER IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>REVENUE</u>					
26-37-100 INTEREST EARNINGS	.00	.00	1,500.00	1,500.00	.0
26-37-200 WATER IMPACT FEES	8,196.00	28,686.00	60,000.00	31,314.00	47.8
TOTAL REVENUE	8,196.00	28,686.00	61,500.00	32,814.00	46.6
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
26-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	171,500.00	171,500.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	171,500.00	171,500.00	.0
TOTAL FUND REVENUE	8,196.00	28,686.00	233,000.00	204,314.00	12.3



SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

WATER IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>DEPARTMENT 40</u>					
26-40-690 PROJECTS	.00	.00	.00	.00	.0
26-40-760 WATER IMPACT FEE PROJECTS	355.50	1,989.00	233,000.00	231,011.00	.9
26-40-799 FACILITIES	.00	.00	.00	.00	.0
TOTAL DEPARTMENT 40	355.50	1,989.00	233,000.00	231,011.00	.9
<u>TRANSFERS</u>					
26-80-800 TRANSFERS	.00	.00	.00	.00	.0
TOTAL TRANSFERS	.00	.00	.00	.00	.0
TOTAL FUND EXPENDITURES	355.50	1,989.00	233,000.00	231,011.00	.9
NET REVENUE OVER EXPENDITURES	7,840.50	26,697.00	.00	( 26,697.00)	.0

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

RECREATION IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<hr/>					
27-34-200 RECREATION IMPACT FEES	3,336.00	5,004.00	35,000.00	29,996.00	14.3
TOTAL SOURCE 34	3,336.00	5,004.00	35,000.00	29,996.00	14.3
<hr/>					
<u>REVENUE</u>					
27-37-100 INTEREST EARNINGS	.00	.00	.00	.00	.0
TOTAL REVENUE	.00	.00	.00	.00	.0
<hr/>					
<u>CONTRIBUTIONS &amp; TRANSFERS</u>					
27-39-470 TRANSFER FROM RECREATION FUND	.00	.00	.00	.00	.0
27-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	30,200.00	30,200.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	30,200.00	30,200.00	.0
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TOTAL FUND REVENUE	3,336.00	5,004.00	65,200.00	60,196.00	7.7

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

RECREATION IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
27-40-760 PROJECTS	.00	4,500.00	65,200.00	60,700.00	6.9
27-40-799 FACILITIES	.00	.00	.00	.00	.0
TOTAL EXPENDITURES	.00	4,500.00	65,200.00	60,700.00	6.9
TOTAL FUND EXPENDITURES	.00	4,500.00	65,200.00	60,700.00	6.9
NET REVENUE OVER EXPENDITURES	3,336.00	504.00	.00	( 504.00)	.0

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

PUBLIC SAFETY IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
29-34-200 PUBLIC SAFETY IMPACT FEES	756.00	3,157.49	6,000.00	2,842.51	52.6
TOTAL SOURCE 34	756.00	3,157.49	6,000.00	2,842.51	52.6
 <u>REVENUE</u>					
29-37-100 INTEREST EARNINGS	.00	.00	.00	.00	.0
TOTAL REVENUE	.00	.00	.00	.00	.0
 <u>CONTRIBUTIONS &amp; TRANSFERS</u>					
29-39-470 TRANS FROM CAPITAL IMPROVEMENT	.00	.00	.00	.00	.0
29-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	17,200.00	17,200.00	.0
TOTAL CONTRIBUTIONS & TRANSFERS	.00	.00	17,200.00	17,200.00	.0
 TOTAL FUND REVENUE	 756.00	 3,157.49	 23,200.00	 20,042.51	 13.6

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

PUBLIC SAFETY IMPACT FEE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
29-40-760 PROJECTS	.00	1,750.00	23,200.00	21,450.00	7.5
29-40-799 FACILITIES	.00	.00	.00	.00	.0
TOTAL EXPENDITURES	.00	1,750.00	23,200.00	21,450.00	7.5
TOTAL FUND EXPENDITURES	.00	1,750.00	23,200.00	21,450.00	7.5
NET REVENUE OVER EXPENDITURES	756.00	1,407.49	.00	( 1,407.49)	.0

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

CAPITAL PROJECTS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>INTERGOVERNMENTAL REVENUE</u>					
45-33-400 STATE GRANTS	.00	.00	29,000.00	29,000.00	.0
TOTAL INTERGOVERNMENTAL REVENUE	.00	.00	29,000.00	29,000.00	.0
<u>CHARGES FOR SERVICES</u>					
45-34-435 DONATIONS - CMP RAIL ROAD	.00	.00	.00	.00	.0
45-34-440 CONTRIBUTIONS	.00	.00	.00	.00	.0
45-34-445 CONTRIBUTIONS - RESTRICTED	.00	260.00	1,000.00	740.00	26.0
TOTAL CHARGES FOR SERVICES	.00	260.00	1,000.00	740.00	26.0
<u>MISCELLANEOUS REVENUE</u>					
45-36-100 INTEREST EARNINGS	.00	.00	3,000.00	3,000.00	.0
45-36-110 SALE OF PROPERTY	.00	.00	.00	.00	.0
TOTAL MISCELLANEOUS REVENUE	.00	.00	3,000.00	3,000.00	.0
<u>CONTRIBUTIONS AND TRANSFERS</u>					
45-39-380 FUND SURPLUS-UNRESTRICTED	.00	.00	.00	.00	.0
45-39-385 SAFETY VEHICLE FUND - RESTRICT	.00	.00	.00	.00	.0
45-39-389 FUND BALANCE TO BE APPROPRIATE	.00	.00	46,400.00	46,400.00	.0
45-39-390 TRANS FROM GENERAL FUND - SAFE	.00	.00	227,600.00	227,600.00	.0
45-39-450 BOND FORFEITURE	.00	.00	.00	.00	.0
45-39-470 TRANSFER FROM GENERAL FUND	.00	.00	.00	.00	.0
45-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	.00	.00	.0
TOTAL CONTRIBUTIONS AND TRANSFERS	.00	.00	274,000.00	274,000.00	.0
TOTAL FUND REVENUE	.00	260.00	307,000.00	306,740.00	.1

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

CAPITAL PROJECTS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
45-40-700 SHOP EXPENDITURES	.00	.00	.00	.00	.0
45-40-730 CHERRY FARMS RESTROOM	.00	.00	.00	.00	.0
45-40-740 GENERAL CAPITAL PROJECTS	.00	.00	.00	.00	.0
45-40-745 EQUIPMENT COSTING OVER \$500	.00	.00	.00	.00	.0
45-40-760 STREET OVERLAY/RESTORE CURB-G	.00	.00	.00	.00	.0
45-40-780 FIRETRUCK ANNUAL PAYMENT	.00	.00	.00	.00	.0
45-40-790 SNOW PLOW TRUCK LEASE OR PURCH	.00	.00	.00	.00	.0
45-40-830 TRNSFR- PARK PMT 8782020	.00	.00	.00	.00	.0
TOTAL EXPENDITURES	.00	.00	.00	.00	.0
<u>DEPARTMENT 43</u>					
45-43-740 ADMIN - PURCHASE OF EQUIPMENT	.00	.00	.00	.00	.0
TOTAL DEPARTMENT 43	.00	.00	.00	.00	.0
<u>DEPARTMENT 57</u>					
45-57-740 FIRE - PURCHASE OF EQUIPMENT	.00	.00	85,000.00	85,000.00	.0
TOTAL DEPARTMENT 57	.00	.00	85,000.00	85,000.00	.0
<u>DEPARTMENT 60</u>					
45-60-720 STREETS - BUILDINGS	.00	1,901.75	62,000.00	60,098.25	3.1
45-60-730 STREETS-IMP OTHER THAN BLDG	170.00	4,324.50	86,000.00	81,675.50	5.0
TOTAL DEPARTMENT 60	170.00	6,226.25	148,000.00	141,773.75	4.2
<u>DEPARTMENT 70</u>					
45-70-710 PARKS - LAND	.00	.00	.00	.00	.0
45-70-730 PARKS - IMPROV OTHER THAN BLDG	.00	2,960.00	40,000.00	37,040.00	7.4
45-70-740 PARKS - PURCHASE OF EQUIPMENT	34,000.00	34,000.00	34,000.00	.00	100.0
TOTAL DEPARTMENT 70	34,000.00	36,960.00	74,000.00	37,040.00	50.0
<u>DEPARTMENT 90</u>					
45-90-900 TRANSFER TO FUND BALANCE	.00	.00	.00	.00	.0
TOTAL DEPARTMENT 90	.00	.00	.00	.00	.0

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

CAPITAL PROJECTS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
TOTAL FUND EXPENDITURES	34,170.00	43,186.25	307,000.00	263,813.75	14.1
NET REVENUE OVER EXPENDITURES	( 34,170.00)	( 42,926.25)	.00	42,926.25	.0



SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

WATER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>MISCELLANEOUS REVENUE</u>					
51-36-100 INTEREST EARNINGS	.00	.00	4,000.00	4,000.00	.0
51-36-300 MISC UTILITY REVENUE	375.00	1,425.00	.00	( 1,425.00)	.0
TOTAL MISCELLANEOUS REVENUE	375.00	1,425.00	4,000.00	2,575.00	35.6
<u>WATER UTILITIES REVENUE</u>					
51-37-100 WATER SALES	90,065.76	450,400.29	1,013,500.00	563,099.71	44.4
51-37-105 WATER CONNECTION FEE	1,590.00	5,832.00	12,000.00	6,168.00	48.6
51-37-130 PENALTIES	4,730.00	21,315.02	15,000.00	( 6,315.02)	142.1
TOTAL WATER UTILITIES REVENUE	96,385.76	477,547.31	1,040,500.00	562,952.69	45.9
<u>SOURCE 38</u>					
51-38-820 CONTRIBUTIONS - WTR IMPACT FD	.00	.00	.00	.00	.0
51-38-900 SUNDRY REVENUES	1,985.42	1,985.42	.00	( 1,985.42)	.0
51-38-910 CAPITAL CONTRIBUTIONS	.00	.00	.00	.00	.0
51-38-920 GAIN LOSS DISPOSAL OF ASSETS	.00	.00	.00	.00	.0
TOTAL SOURCE 38	1,985.42	1,985.42	.00	( 1,985.42)	.0
<u>CONTRIBUTIONS AND TRANSFERS</u>					
51-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	.00	.00	.0
51-39-511 TRANSFER FROM SEWER UTILITY	.00	.00	.00	.00	.0
TOTAL CONTRIBUTIONS AND TRANSFERS	.00	.00	.00	.00	.0
TOTAL FUND REVENUE	98,746.18	480,957.73	1,044,500.00	563,542.27	46.1

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

WATER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
51-40-105 PART-TIME EMPLOYEE SALARIES	222.60	1,182.16	4,000.00	2,817.84	29.6
51-40-110 FULL-TIME EMPLOYEE SALARIES	9,593.04	52,046.60	126,000.00	73,953.40	41.3
51-40-130 EMPLOYEE BENEFIT - RETIREMENT	1,849.38	10,611.04	30,000.00	19,388.96	35.4
51-40-131 EMPLOYEE BENEFIT-EMPLOYER FICA	730.18	3,947.94	10,000.00	6,052.06	39.5
51-40-133 EMPLOYEE BENEFIT - WORK. COMP.	165.61	974.27	3,000.00	2,025.73	32.5
51-40-134 EMPLOYEE BENEFIT - UI	.00	.00	1,500.00	1,500.00	.0
51-40-135 EMPLOYEE BENEFIT - HEALTH INS.	1,058.92	5,986.50	21,000.00	15,013.50	28.5
51-40-140 UNIFORMS	78.77	403.37	300.00	( 103.37)	134.5
51-40-210 BOOKS/SUBSCRIPTIONS/MEMBERSHIP	.00	.00	1,200.00	1,200.00	.0
51-40-230 TRAVEL	.00	40.41	3,000.00	2,959.59	1.4
51-40-240 OFFICE SUPPLIES & EXPENSE	192.50	634.73	1,000.00	365.27	63.5
51-40-245 EQUIPMENT COSTING OVER \$500	.00	.00	.00	.00	.0
51-40-250 EQUIPMENT SUPPLIES & MAINT.	621.72	2,282.32	14,500.00	12,217.68	15.7
51-40-255 VEHICLE LEASE	.00	.00	.00	.00	.0
51-40-256 FUEL EXPENSE	84.39	363.98	2,000.00	1,636.02	18.2
51-40-260 BUILDINGS & GROUNDS	.00	.00	9,000.00	9,000.00	.0
51-40-262 GENERAL GOVERNMENT BUILDINGS	.00	.00	.00	.00	.0
51-40-270 WATER - POWER & PUMPING	.00	9,219.10	24,000.00	14,780.90	38.4
51-40-280 TELEPHONE AND WIRELESS	52.20	709.44	2,000.00	1,290.56	35.5
51-40-311 PROFESSIONAL TECHNICAL	.00	.00	2,350.00	2,350.00	.0
51-40-312 PROFESSIONAL/TECHNICAL-ENGIN	2,307.00	12,647.75	20,000.00	7,352.25	63.2
51-40-315 PROFESSIONAL & TECH. - AUDITOR	.00	.00	.00	.00	.0
51-40-350 SOFTWARE MAINTENANCE	114.15	2,215.75	5,100.00	2,884.25	43.5
51-40-370 UTILITY BILLING	135.33	2,945.17	6,300.00	3,354.83	46.8
51-40-480 SPECIAL WATER SUPPLIES	.00	.00	5,000.00	5,000.00	.0
51-40-481 WATER PURCHASES	127,229.76	252,618.61	251,000.00	( 1,618.61)	100.6
51-40-483 EMERGENCY LEAKS & REPAIRS	.00	.00	.00	.00	.0
51-40-485 FIRE HYDRANT UPDATE	.00	28,371.34	40,000.00	11,628.66	70.9
51-40-490 WATER O & M CHARGE	10,981.37	26,696.91	56,000.00	29,303.09	47.7
51-40-530 INTEREST EXPENSE	.00	.00	.00	.00	.0
51-40-550 BANKING CHARGES	.00	1,166.96	2,000.00	833.04	58.4
51-40-650 DEPRECIATION	.00	.00	200,000.00	200,000.00	.0
51-40-720 METER REPLACEMENTS	.00	44,275.00	50,000.00	5,725.00	88.6
51-40-730 CAPITAL OUTLAY - IMPROV	6,218.50	6,218.50	50,000.00	43,781.50	12.4
51-40-740 TELEMETERING SYS/WATER TANKS	.00	.00	.00	.00	.0
51-40-750 CAPITAL OUTLAY - VEHICLES	22,250.00	22,250.00	22,250.00	.00	100.0
51-40-811 BOND PRINCIPAL	.00	.00	.00	.00	.0
51-40-900 TRANSFER TO FUND BALANCE	.00	.00	82,000.00	82,000.00	.0
<b>TOTAL EXPENDITURES</b>	<b>183,885.42</b>	<b>487,807.85</b>	<b>1,044,500.00</b>	<b>556,692.15</b>	<b>46.7</b>
<u>DEPARTMENT 80</u>					
51-80-512 CONTRIBUTIONS	.00	.00	.00	.00	.0
<b>TOTAL DEPARTMENT 80</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.0</b>

SOUTH WEBER CITY CORPORATION  
 EXPENDITURES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

WATER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
TOTAL FUND EXPENDITURES	183,885.42	487,807.85	1,044,500.00	556,692.15	46.7
NET REVENUE OVER EXPENDITURES	( 85,139.24)	( 6,850.12)	.00	6,850.12	.0

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

SEWER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>MISCELLANEOUS REVENUE</u>					
52-36-100 INTEREST EARNINGS	.00	.00	6,000.00	6,000.00	.0
TOTAL MISCELLANEOUS REVENUE	.00	.00	6,000.00	6,000.00	.0
<u>SEWER UTILITIES REVENUE</u>					
52-37-130 PENALTIES	.00	.00	.00	.00	.0
52-37-300 SEWER SALES	71,179.72	359,220.61	800,000.00	440,779.39	44.9
52-37-360 CWDIS 5% RETAINAGE	349.95	1,516.45	7,000.00	5,483.55	21.7
52-37-400 CWSID SEWER CONN FEES PAYABLE	.00	.00	.00	.00	.0
52-37-500 SEWER IMPACT FEES-REST BOND	.00	.00	.00	.00	.0
TOTAL SEWER UTILITIES REVENUE	71,529.67	360,737.06	807,000.00	446,262.94	44.7
<u>SOURCE 38</u>					
52-38-820 TFR FROM SEWER IMPACT FEES	.00	.00	132,000.00	132,000.00	.0
52-38-910 CAPITAL CONTRIBUTIONS	.00	.00	.00	.00	.0
52-38-920 GAIN LOSS SALE OF ASSETS	.00	.00	.00	.00	.0
TOTAL SOURCE 38	.00	.00	132,000.00	132,000.00	.0
<u>SOURCE 39</u>					
52-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	73,500.00	73,500.00	.0
TOTAL SOURCE 39	.00	.00	73,500.00	73,500.00	.0
TOTAL FUND REVENUE	71,529.67	360,737.06	1,018,500.00	657,762.94	35.4

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

SEWER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
52-40-105 PART-TIME EMPLOYEE SALARIES	189.21	1,004.99	3,000.00	1,995.01	33.5
52-40-110 FULL-TIME EMPLOYEE SALARIES	5,403.81	29,631.50	72,000.00	42,368.50	41.2
52-40-130 EMPLOYEE BENEFIT - RETIREMENT	1,045.14	6,143.48	17,000.00	10,856.52	36.1
52-40-131 EMPLOYEE BENEFIT-EMPLOYER FICA	414.71	2,262.98	6,000.00	3,737.02	37.7
52-40-133 EMPLOYEE BENEFIT - WORK. COMP.	86.76	512.31	2,000.00	1,487.69	25.6
52-40-134 EMPLOYEE BENEFIT - UI	.00	.00	1,000.00	1,000.00	.0
52-40-135 EMPLOYEE BENEFIT - HEALTH INS.	683.72	4,075.15	13,000.00	8,924.85	31.4
52-40-140 UNIFORMS	78.77	305.21	300.00	( 5.21)	101.7
52-40-210 BOOKS/SUBSCRIPTIONS/MEMBERSHIP	.00	.00	.00	.00	.0
52-40-230 TRAVEL	.00	.00	1,000.00	1,000.00	.0
52-40-240 OFFICE SUPPLIES & EXPENSE	.00	442.19	1,200.00	757.81	36.9
52-40-250 EQUIPMENT SUPPLIES & MAINT.	36.96	36.96	4,000.00	3,963.04	.9
52-40-255 VEHICLE LEASE	.00	.00	.00	.00	.0
52-40-260 BUILDINGS & GROUNDS	.00	.00	.00	.00	.0
52-40-270 SEWER - POWER & PUMPING	.00	186.04	500.00	313.96	37.2
52-40-312 PROFESSIONAL/TECHNICAL-ENGIN	247.50	678.00	3,000.00	2,322.00	22.6
52-40-315 PROFESSIONAL & TECH. - AUDITOR	.00	.00	.00	.00	.0
52-40-350 SOFTWARE MAINTENANCE	114.15	570.75	1,500.00	929.25	38.1
52-40-370 UTILITY BILLING	96.24	2,184.47	6,000.00	3,815.53	36.4
52-40-483 EMERGENCY R & R SEWER	.00	.00	.00	.00	.0
52-40-490 SEWER O & M CHARGE	400.00	534.82	20,000.00	19,465.18	2.7
52-40-491 SEWER TREATMENT FEE	103,789.00	209,853.00	415,000.00	205,147.00	50.6
52-40-492 CONNECTION FEE - CWSID	.00	.00	.00	.00	.0
52-40-530 INTEREST EXPENSE	.00	.00	.00	.00	.0
52-40-550 BANKING CHARGES	.00	884.84	2,000.00	1,115.16	44.2
52-40-650 DEPRECIATION	.00	.00	90,000.00	90,000.00	.0
52-40-690 PROJECTS	4,920.75	13,112.00	360,000.00	346,888.00	3.6
52-40-990 TRANSFER TO FUND BALANCE	.00	.00	.00	.00	.0
<b>TOTAL EXPENDITURES</b>	<b>117,506.72</b>	<b>272,418.69</b>	<b>1,018,500.00</b>	<b>746,081.31</b>	<b>26.8</b>
<u>TRANSFERS AND CONTRIBUTIONS</u>					
52-80-512 CONTRIBUTIONS	.00	.00	.00	.00	.0
<b>TOTAL TRANSFERS AND CONTRIBUTIONS</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.0</b>
<b>TOTAL FUND EXPENDITURES</b>	<b>117,506.72</b>	<b>272,418.69</b>	<b>1,018,500.00</b>	<b>746,081.31</b>	<b>26.8</b>
<b>NET REVENUE OVER EXPENDITURES</b>	<b>( 45,977.05)</b>	<b>88,318.37</b>	<b>.00</b>	<b>( 88,318.37)</b>	<b>.0</b>

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

SANITATION UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>MISCELLANEOUS REVENUE</u>					
53-36-100 INTEREST EARNINGS	.00	.00	1,500.00	1,500.00	.0
TOTAL MISCELLANEOUS REVENUE	.00	.00	1,500.00	1,500.00	.0
<u>SANITATION UTILITIES REVENUE</u>					
53-37-130 PENALTIES	.00	.00	.00	.00	.0
53-37-700 SANITATION FEES	28,526.46	142,434.44	327,500.00	185,065.56	43.5
TOTAL SANITATION UTILITIES REVENUE	28,526.46	142,434.44	327,500.00	185,065.56	43.5
<u>SOURCE 38</u>					
53-38-920 GAIN LOSS SALE OF ASSETS	.00	.00	.00	.00	.0
TOTAL SOURCE 38	.00	.00	.00	.00	.0
<u>SOURCE 39</u>					
53-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	.00	.00	.0
TOTAL SOURCE 39	.00	.00	.00	.00	.0
TOTAL FUND REVENUE	28,526.46	142,434.44	329,000.00	186,565.56	43.3

SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

SANITATION UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
53-40-105 PART-TIME EMPLOYEE SALARIES	55.65	295.61	1,000.00	704.39	29.6
53-40-110 FULL-TIME EMPLOYEE SALARIES	1,480.55	8,288.16	21,000.00	12,711.84	39.5
53-40-130 EMPLOYEE BENEFIT - RETIREMENT	289.70	1,912.18	4,000.00	2,087.82	47.8
53-40-131 EMPLOYEE BENEFIT-EMPLOYER FICA	113.43	634.37	1,700.00	1,065.63	37.3
53-40-133 EMPLOYEE BENEFIT - WORK. COMP.	29.47	172.11	500.00	327.89	34.4
53-40-134 EMPLOYEE BENEFIT - UI	.00	.00	300.00	300.00	.0
53-40-135 EMPLOYEE BENEFIT - HEALTH INS.	196.41	1,075.29	3,700.00	2,624.71	29.1
53-40-140 UNIFORMS	.00	104.76	300.00	195.24	34.9
53-40-240 OFFICE SUPPLIES & EXPENSE	.00	.00	.00	.00	.0
53-40-250 EQUIPMENT SUPPLIES & MAINT.	.00	.00	3,000.00	3,000.00	.0
53-40-251 VEHICLE MAINT & SUPPLIES	.00	.00	.00	.00	.0
53-40-255 VEHICLE LEASE	.00	.00	.00	.00	.0
53-40-350 SOFTWARE MAINTENANCE	114.15	570.75	1,600.00	1,029.25	35.7
53-40-370 UTILITY BILLING	30.07	1,152.79	6,100.00	4,947.21	18.9
53-40-492 SANITATION FEE CHARGES	39,239.60	98,467.12	284,000.00	185,532.88	34.7
53-40-550 BANKING CHARGES	.00	570.07	1,800.00	1,229.93	31.7
53-40-650 DEPRECIATION	.00	.00	.00	.00	.0
TOTAL EXPENDITURES	41,549.03	113,243.21	329,000.00	215,756.79	34.4
TOTAL FUND EXPENDITURES	41,549.03	113,243.21	329,000.00	215,756.79	34.4
NET REVENUE OVER EXPENDITURES	( 13,022.57)	29,191.23	.00	( 29,191.23)	.0

SOUTH WEBER CITY CORPORATION  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

STORM SEWER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>MISCELLANEOUS REVENUE</u>					
54-36-100 INTEREST EARNINGS	.00	.00	2,500.00	2,500.00	.0
TOTAL MISCELLANEOUS REVENUE	.00	.00	2,500.00	2,500.00	.0
<u>STORM SEWER UTILITIES REVENUE</u>					
54-37-130 PENALTIES	.00	.00	.00	.00	.0
54-37-450 STORM SEWER REVENUE	14,260.49	70,987.30	165,000.00	94,012.70	43.0
TOTAL STORM SEWER UTILITIES REVENUE	14,260.49	70,987.30	165,000.00	94,012.70	43.0
<u>SOURCE 38</u>					
54-38-600 TFR FROM STORM SWR IMPACT FEE	.00	.00	.00	.00	.0
54-38-900 SUNDRY REVENUES	.00	.00	.00	.00	.0
54-38-910 CAPITAL CONTRIBUTIONS	.00	.00	.00	.00	.0
54-38-920 GAIN LOSS SALE OF ASSETS	.00	.00	.00	.00	.0
TOTAL SOURCE 38	.00	.00	.00	.00	.0
<u>SOURCE 39</u>					
54-39-500 CONTRIBUTION FROM FUND BAL	.00	.00	120,200.00	120,200.00	.0
TOTAL SOURCE 39	.00	.00	120,200.00	120,200.00	.0
TOTAL FUND REVENUE	14,260.49	70,987.30	287,700.00	216,712.70	24.7



SOUTH WEBER CITY CORPORATION  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

STORM SEWER UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
54-40-105 PART-TIME EMPLOYEE SALARIES	55.65	295.61	500.00	204.39	59.1
54-40-110 FULL-TIME EMPLOYEE SALARIES	1,314.61	7,385.64	19,000.00	11,614.36	38.9
54-40-130 EMPLOYEE BENEFIT - RETIREMENT	256.95	1,733.22	4,100.00	2,366.78	42.3
54-40-131 EMPLOYEE BENEFIT-EMPLOYER FICA	100.91	565.62	1,500.00	934.38	37.7
54-40-133 EMPLOYEE BENEFIT - WORK. COMP.	26.31	153.98	500.00	346.02	30.8
54-40-134 EMPLOYEE BENEFIT - UI	.00	.00	300.00	300.00	.0
54-40-135 EMPLOYEE BENEFIT - HEALTH INS.	178.11	987.69	3,500.00	2,512.31	28.2
54-40-140 UNIFORMS	78.77	131.14	300.00	168.86	43.7
54-40-230 TRAVEL & TRAINING	.00	300.00	500.00	200.00	60.0
54-40-240 OFFICE SUPPLIES & EXPENSE	.00	.00	.00	.00	.0
54-40-250 EQUIPMENT SUPPLIES & MAINT.	.00	155.86	1,300.00	1,144.14	12.0
54-40-255 VEHICLE LEASE	.00	.00	.00	.00	.0
54-40-256 FUEL EXPENSE	.00	64.18	500.00	435.82	12.8
54-40-270 STORM SEWER - POWER & PUMPING	.00	46.56	200.00	153.44	23.3
54-40-312 PROFESSIONAL/TECHNICAL-ENGIN	247.25	2,957.15	2,000.00	( 957.15)	147.9
54-40-315 PROFESSIONAL & TECH. - AUDITOR	.00	.00	.00	.00	.0
54-40-331 PROMOTION-STORM WATER	.00	1,155.00	1,200.00	45.00	96.3
54-40-350 SOFTWARE MAINTENANCE	152.20	761.00	1,500.00	739.00	50.7
54-40-370 UTILITY BILLING	39.09	899.32	6,000.00	5,100.68	15.0
54-40-493 STORM SEWER O & M	.00	880.00	15,000.00	14,120.00	5.9
54-40-550 BANKING CHARGES	.00	450.76	1,800.00	1,349.24	25.0
54-40-650 DEPRECIATION	.00	.00	100,000.00	100,000.00	.0
54-40-690 PROJECTS	7,060.25	12,351.05	128,000.00	115,648.95	9.7
<b>TOTAL EXPENDITURES</b>	<b>9,510.10</b>	<b>31,273.78</b>	<b>287,700.00</b>	<b>256,426.22</b>	<b>10.9</b>
<u>DEPARTMENT 80</u>					
54-80-512 CONTRIBUTIONS	.00	.00	.00	.00	.0
<b>TOTAL DEPARTMENT 80</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.0</b>
<b>TOTAL FUND EXPENDITURES</b>	<b>9,510.10</b>	<b>31,273.78</b>	<b>287,700.00</b>	<b>256,426.22</b>	<b>10.9</b>
<b>NET REVENUE OVER EXPENDITURES</b>	<b>4,750.39</b>	<b>39,713.52</b>	<b>.00</b>	<b>( 39,713.52)</b>	<b>.0</b>

SOUTH WEBER CITY CORPORATION  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 5 MONTHS ENDING NOVEMBER 30, 2016

PENALTIES UTILITY FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>MISCELLANEOUS REVENUE</u>					
55-36-100 INTEREST EARNINGS	.00	.00	.00	.00	.0
TOTAL MISCELLANEOUS REVENUE	.00	.00	.00	.00	.0
<u>SOURCE 37</u>					
55-37-130 PENALTIES	.00	.00	.00	.00	.0
TOTAL SOURCE 37	.00	.00	.00	.00	.0
TOTAL FUND REVENUE	.00	.00	.00	.00	.0
NET REVENUE OVER EXPENDITURES	.00	.00	.00	.00	.0

## Report Criteria:

Report type: GL detail

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name	
12/22/16	36398	A-1 KEY SERVICE, INC.	12/19/16	Key Cards For City Employees (6)	1043262	56.70	A-1 KEY SERVICE, INC.	
	Total 36398:						56.70	
12/08/16	36324	Ahlstrom, Douglas J.	12/06/16	City Attorney Services - Nov. 2016	1043313	1,387.50	Ahlstrom, Douglas J.	
	Total 36324:						1,387.50	
12/08/16	36325	Airgas USA LLC	11/30/16	Oxygen	1060250	8.42	Airgas USA LLC	
	Total 36325:						8.42	
12/22/16	36399	Airgas USA LLC	12/31/16	Acetylene for Torch	1060250	26.31	Airgas USA LLC	
	Total 36399:						26.31	
12/16/16	36357	ALLRED, CHRISTOPHER F	12/06/16	Prosecution Services - Nov. 2016	1042313	600.00	ALLRED, CHRISTOPHER F	
	Total 36357:						600.00	
12/08/16	36326	ALPHAGRAPHICS	12/02/16	Building Inspection Forms	1058210	277.83	ALPHAGRAPHICS	
	Total 36326:						277.83	
12/01/16	36282	Ashton, Dawson	11/29/16	Referee - Basketball	2071340	18.75	Ashton, Dawson	
	Total 36282:						18.75	
12/16/16	36358	Ashton, Dawson	12/13/16	Referee - Basketball	2071340	48.75	Ashton, Dawson	
	Total 36358:						48.75	
12/29/16	36428	Ashton, Dawson	12/26/16	Referee - Basketball	2071340	18.75	Ashton, Dawson	
	Total 36428:						18.75	
12/08/16	36327	AT&T MOBILITY	10/17/16	FIRE - engine air card Acct#834520288	1057370	154.21	AT&T MOBILITY	

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36327:						154.21	
12/16/16	36359	Auger, Jaden	12/13/16	Referee - Basketball	2071340	26.25	Auger, Jaden
Total 36359:						26.25	
12/01/16	36283	Big Dog Renewable Energy	11/30/16	Completion Bond - SWC161012144	4521350	200.00	Big Dog Renewable Energy
Total 36283:						200.00	
12/16/16	36360	Birt, Hudson	12/13/16	Referee - Basketball	2071340	63.75	Birt, Hudson
Total 36360:						63.75	
12/08/16	36328	Blue Raven Solar	12/05/16	Completion Bond - SWC161101155	4521350	200.00	Blue Raven Solar
Total 36328:						200.00	
12/08/16	36329	BLUE STAKES OF UTAH	11/30/16	Blue Stakes - Nov. 2016	5140250	91.77	BLUE STAKES OF UTAH
Total 36329:						91.77	
12/08/16	36330	Bright, Toby	12/05/16	Completion Bond - SWC150922098	4521350	200.00	Bright, Toby
Total 36330:						200.00	
12/22/16	36400	BROWN, CURTIS	12/19/16	Reimburse – Shirt	1043610	37.35	BROWN, CURTIS
Total 36400:						37.35	
12/16/16	36361	BROWN, KAYD	12/13/16	Referee - Basketball	2071340	52.50	BROWN, KAYD
Total 36361:						52.50	
12/01/16	36284	Browning, Colby	11/29/16	Referee - Basketball	2071340	63.75	Browning, Colby
Total 36284:						63.75	
12/16/16	36362	Browning, Colby	12/13/16	Referee - Basketball	2071340	37.50	Browning, Colby

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36362:						37.50	
12/08/16	36331	BRUMFIELD, KEITH	12/01/16	Completion Bond - SWC160919127	4521350	500.00	BRUMFIELD, KEITH
Total 36331:						500.00	
12/01/16	36285	CALL, SARAH	11/29/16	Zumba Insturction	2071340	75.00	CALL, SARAH
Total 36285:						75.00	
12/01/16	36286	CASELLE INC	11/22/16	Time Keeper & Doc Mgmt. Software	1043740	8,305.00	CASELLE INC
Total 36286:						8,305.00	
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	1042350	5.00	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	1043350	114.15	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	1057350	38.05	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	1060350	38.05	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	1070350	38.05	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	2071350	38.05	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	5140350	114.15	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	5240350	114.15	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	5340350	114.15	CASELLE INC
12/15/16	10803223	CASELLE INC	12/01/16	Casell Support/Maint. - Jan. 2016	5440350	152.20	CASELLE INC
Total 108032234:						766.00	
12/01/16	36287	CENTURYLINK	11/10/16	Data Line - Water	5140490	50.95	CENTURYLINK
Total 36287:						50.95	
12/22/16	36401	CENTURYLINK	12/10/16	Data Line - Water	5140490	101.90	CENTURYLINK
Total 36401:						101.90	
12/01/16	36288	Chabries, Laura	12/01/16	Football Equip. Deposit Refund	2071487	150.00	Chabries, Laura
Total 36288:						150.00	

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/29/16	36429	Christina May	12/22/16	Overpayment on Utility acct #5603304	0111750	97.02	Christina May
Total 36429:						97.02	
12/01/16	36289	COLONIAL FLAG SPECIALTY CO INC	11/22/16	Flag Rotatation - Parks	1070250	37.00	COLONIAL FLAG SPECIALTY CO INC
Total 36289:						37.00	
12/08/16	36332	COLONIAL FLAG SPECIALTY CO INC	11/29/16	Flag Roatation - Memorial Park	1070250	127.00	COLONIAL FLAG SPECIALTY CO INC
12/08/16	36332	COLONIAL FLAG SPECIALTY CO INC	12/06/16	Flag Rotatation - City Hall	1043262	65.60	COLONIAL FLAG SPECIALTY CO INC
Total 36332:						192.60	
12/22/16	36402	Compass Minerals America	12/09/16	Salt for Roads	1061411	2,261.07	Compass Minerals America
Total 36402:						2,261.07	
12/22/16	36403	Darren Francois Noury	12/20/16	Refund Overpayment of Court Case	1021350	30.00	Darren Francois Noury
Total 36403:						30.00	
12/16/16	36363	DAVIS COUNTY GOVERNMENT	12/07/16	Bailiff Service - Nov. 2016	1042317	300.00	DAVIS COUNTY GOVERNMENT
Total 36363:						300.00	
12/22/16	36404	DAVIS COUNTY HEALTH DEPT	12/09/16	Water Samples - July-Dec. 2016	5140490	504.00	DAVIS COUNTY HEALTH DEPT
Total 36404:						504.00	
12/22/16	36405	DAVIS COUNTY SHERRIFF OFFICE	12/15/16	Court Witness - Officer T Robinson	1042610	18.50	DAVIS COUNTY SHERRIFF OFFICE
Total 36405:						18.50	
12/28/16	10803223	DE LAGE LANDEN	11/20/16	COPIER MAINT AGREEMENT - SHARP	1042240	21.07	DE LAGE LANDEN
12/28/16	10803223	DE LAGE LANDEN	11/20/16	COPIER MAINT AGREEMENT - SHARP	1043240	49.16	DE LAGE LANDEN
12/28/16	10803223	DE LAGE LANDEN	11/20/16	COPIER MAINT AGREEMENT - SHARP	5140240	35.12	DE LAGE LANDEN
12/28/16	10803223	DE LAGE LANDEN	11/20/16	COPIER MAINT AGREEMENT - SHARP	5240240	35.11	DE LAGE LANDEN
Total 108032235:						140.46	

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/16/16	36364	Dygert, Casey	12/13/16	Referee - Basketball	2071340	33.75	Dygert, Casey
Total 36364:						33.75	
12/29/16	36430	Dygert, Casey	12/26/16	Referee - Basketball	2071340	93.75	Dygert, Casey
Total 36430:						93.75	
12/12/16	35870	E@L, LLC	V 08/10/16	Refund - Overpayment	0111750	11.71	E@L, LLC
Total 35870:						11.71	
12/16/16	36365	EARTHTEC TESTING AND ENGINEER	11/30/16	Soil Testing - Heather Cove Project	5440690	587.00	EARTHTEC TESTING AND ENGINEER
12/16/16	36365	EARTHTEC TESTING AND ENGINEER	11/30/16	Soil Testing - Cottonwood Cove Upgrade	5240690	569.80	EARTHTEC TESTING AND ENGINEER
Total 36365:						1,156.80	
12/16/16	36366	eCivis	12/07/16	Grant research service	1043311	2,190.00	eCivis
Total 36366:						2,190.00	
12/08/16	36333	ENERGY SAVERS	12/07/16	Completion Bond - SWC161107160	4521350	200.00	ENERGY SAVERS
Total 36333:						200.00	
12/22/16	36406	Executech	12/01/16	IT Services - Nov. 2016	1043308	682.50	Executech
12/22/16	36406	Executech	12/01/16	Antivirus / Backup - Nov. 2016	1043350	580.07	Executech
Total 36406:						1,262.57	
12/16/16	36367	Flare Fire Protection	12/08/16	Fire Extinguisher Services	1054320	441.00	Flare Fire Protection
Total 36367:						441.00	
12/01/16	36290	Fochtman, Tyler	11/29/16	Referee - Basketball	2071340	48.00	Fochtman, Tyler
Total 36290:						48.00	
12/16/16	36368	Fochtman, Tyler	12/08/16	Referee - Basketball	2071340	80.00	Fochtman, Tyler

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36368:						80.00	
12/16/16	36369	Ford Const. & Design	12/12/16	Completion Bond - SWC 151202136	4521350	500.00	Ford Const. & Design
Total 36369:						500.00	
12/16/16	36370	FREEDOM MAILING SERVICES, INC	12/02/16	Utility Bills - Dec. 2016	5140370	412.28	FREEDOM MAILING SERVICES, INC
12/16/16	36370	FREEDOM MAILING SERVICES, INC	12/02/16	Utility Bills - Dec. 2016	5240370	286.81	FREEDOM MAILING SERVICES, INC
12/16/16	36370	FREEDOM MAILING SERVICES, INC	12/02/16	Utility Bills - Dec. 2016	5340370	134.44	FREEDOM MAILING SERVICES, INC
12/16/16	36370	FREEDOM MAILING SERVICES, INC	12/02/16	Utility Bills - Dec. 2016	5440370	62.74	FREEDOM MAILING SERVICES, INC
Total 36370:						896.27	
12/22/16	36407	FREEMAN, AUTUMN	12/16/16	Refund for Civic Center Deposit	1034250	200.00	FREEMAN, AUTUMN
Total 36407:						200.00	
12/19/16	35843	Garrison, Megan	V 07/22/16	Refund of Utility Deposit	5121350	102.00	Garrison, Megan
Total 35843:						102.00	
12/29/16	36431	GovConnection Inc	12/14/16	VPN Router - Fire	1043740	527.57	GovConnection Inc
Total 36431:						527.57	
12/22/16	36408	GRAINGER	12/09/16	Cleaning Supplies	1057240	140.55	GRAINGER
Total 36408:						140.55	
12/08/16	36334	Green Castle	11/28/16	UDot Snow Removal Park & Ride	1070625	200.00	Green Castle
12/08/16	36334	Green Castle	12/04/16	UDot Snow Removal Park & Ride	1070625	1,350.00	Green Castle
Total 36334:						1,550.00	
12/01/16	36291	GRIFFIN FAST LUBE UTAH	10/19/16	Service - Jason's Truck	1060250	305.04	GRIFFIN FAST LUBE UTAH
Total 36291:						305.04	
12/01/16	36292	Hamer, Caiden	11/29/16	Referee - Basketball	2071340	48.00	Hamer, Caiden



Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36292:						48.00	
12/01/16	36059	Hamer, Cameron	V 10/03/16	Referee - 4 games	2071340	60.00	Hamer, Cameron
Total 36059:						60.00	
12/01/16	36293	Hamer, Cameron	10/03/16	Referee - 4 games	2071340	60.00	Hamer, Cameron
12/01/16	36293	Hamer, Cameron	11/29/16	Referee - Basketball	2071340	48.00	Hamer, Cameron
Total 36293:						108.00	
12/16/16	36371	HANSEN & ASSOCIATES	12/07/16	Surveying - Cottonwood Cove Collector	5240690	1,520.75	HANSEN & ASSOCIATES
12/16/16	36371	HANSEN & ASSOCIATES	12/07/16	Surveying - 1250 E Project	4560730	985.00	HANSEN & ASSOCIATES
Total 36371:						2,505.75	
12/08/16	36335	HARRIS, STACIE	12/02/16	Requested Utility Credit Refund	0111750	433.51	HARRIS, STACIE
Total 36335:						433.51	
12/16/16	36372	Hayes, Hunter	12/13/16	Referee - Basketball	2071340	63.75	Hayes, Hunter
Total 36372:						63.75	
12/29/16	36432	Hayes, Hunter	12/17/16	Referee - Basketball	2071340	30.00	Hayes, Hunter
Total 36432:						30.00	
12/01/16	36294	HD SUPPLY WATERWORKS	11/15/16	Insulating Blankets (25)	5140490	559.00	HD SUPPLY WATERWORKS
12/01/16	36294	HD SUPPLY WATERWORKS	11/15/16	Water Meters (6)	5140490	1,398.30	HD SUPPLY WATERWORKS
12/01/16	36294	HD SUPPLY WATERWORKS	11/15/16	Repair Clamps (2)	5140490	249.74	HD SUPPLY WATERWORKS
12/01/16	36294	HD SUPPLY WATERWORKS	11/15/16	LED work Lights (4)	1060250	102.00	HD SUPPLY WATERWORKS
Total 36294:						2,309.04	
12/22/16	36409	HD SUPPLY WATERWORKS	12/02/16	External Mount Antenna	5140250	288.75	HD SUPPLY WATERWORKS
12/22/16	36409	HD SUPPLY WATERWORKS	12/07/16	12 Meter Adapters	5140490	654.88	HD SUPPLY WATERWORKS
12/22/16	36409	HD SUPPLY WATERWORKS	12/07/16	1 Repair Clamp	5140490	173.37	HD SUPPLY WATERWORKS

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36409:						1,117.00	
12/01/16	36295	Hibbert, Zachary	11/26/16	Overpayment on Utility Account	0111750	5.00	Hibbert, Zachary
Total 36295:						5.00	
12/22/16	36410	HOLT, MARK	12/20/16	Refund on Deposit for Civic Center	1034250	200.00	HOLT, MARK
Total 36410:						200.00	
12/01/16	36296	INDUSTRIAL TOOL BOX	11/28/16	3 Coats	1060250	283.59	INDUSTRIAL TOOL BOX
Total 36296:						283.59	
12/08/16	36336	INDUSTRIAL TOOL BOX	11/29/16	Spray Paint - Blue Stakes	5140490	720.20	INDUSTRIAL TOOL BOX
Total 36336:						720.20	
12/22/16	36411	INDUSTRIAL TOOL BOX	12/05/16	Asphalt Blade	5140250	320.00	INDUSTRIAL TOOL BOX
12/22/16	36411	INDUSTRIAL TOOL BOX	12/27/16	Safety Gloves	1060250	299.64	INDUSTRIAL TOOL BOX
Total 36411:						619.64	
12/08/16	36337	INFOBYTES, INC.	11/25/16	City Website Maintenance - Dec. 2016	1043370	234.14	INFOBYTES, INC.
Total 36337:						234.14	
12/08/16	36338	Intermountain Wind & Solar	12/07/16	Completion Bond - SWC 161103158	4521350	200.00	Intermountain Wind & Solar
Total 36338:						200.00	
12/16/16	36373	Intermountain Workmed	12/02/16	DOT Physical Exam	5140135	65.00	Intermountain Workmed
Total 36373:						65.00	
12/01/16	36297	INTERSTATE BARRICADES	11/29/16	Fire Station Street Sign	1060410	122.27	INTERSTATE BARRICADES
Total 36297:						122.27	

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/08/16	36339	INTERWEST SUPPLY CO	11/30/16	Snow Plow Bolts	1061411	130.63	INTERWEST SUPPLY CO
Total 36339:						130.63	
12/22/16	36412	IWORQ SYSTEMS	12/12/16	IWORQ Software Work Management & Support	5140350	1,000.00	IWORQ SYSTEMS
Total 36412:						1,000.00	
12/29/16	36433	JACKMAN HEATING & AIR	12/22/16	Furnace Replacement (Fire Dept.)	1057260	1,957.00	JACKMAN HEATING & AIR
Total 36433:						1,957.00	
12/01/16	36298	Jeske, Colton	11/29/16	Referee - Basketball	2071340	82.50	Jeske, Colton
Total 36298:						82.50	
12/16/16	36374	Jeske, Colton	12/13/16	Referee - Basketball	2071340	52.50	Jeske, Colton
Total 36374:						52.50	
12/16/16	36375	JOHNSON ELECTRIC	11/18/16	Street Light Repair - 1600 E, 2050 E	1060271	184.72	JOHNSON ELECTRIC
Total 36375:						184.72	
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	GIS - Utility Maps	5140312	189.75	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Miscellaneous	1043312	375.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	City Shops Master Plan	1060312	898.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	IFFP's, IFA's, URA's	1043312	247.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	1250 East St. Reconstruction - Final	1060312	2,873.75	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	UDOT TAP App. 2015 E	1060312	214.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	2016 Street Maint. Projects	1060312	123.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Water Conservation Plan	5140312	78.75	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	2016 Cap. Facil. Plan - Culinary Water	2640760	355.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Westside Water Reservoir - Gen, 1&2	5140730	2,030.25	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Canyon Dr. Waterline Replacemnt	5140312	1,517.25	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	General Storm Water	5440312	44.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Davis County Storm Water Coalition	5440312	133.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Heather Cove Storm Drain	5440690	3,319.75	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	2016 Sewer Outfall (Old Fort Rd. 6650 S)	5240690	1,469.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	2016 Cap. Facil. Plan - Sanitary Sewer	2140490	2,287.25	JONES AND ASSOCIATES

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Cannyon Vista	1043319	287.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Bowman Old Farm Estates	1043319	697.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Riverside Place Phases 1&2	1043319	1,918.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Old Maple Farms Phases 1&2	1043319	1,076.25	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Soccer Complex	1043319	157.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	South Weber Drive Commercial	1043319	123.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Ferndale	1043319	78.75	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Bambrough Property (Nilson Homes)	1043319	210.00	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	Weaver Estates	1043319	367.50	JONES AND ASSOCIATES
12/08/16	36340	JONES AND ASSOCIATES	12/01/16	South Weber Valley Estates	1043319	157.50	JONES AND ASSOCIATES
Total 36340:						21,230.75	
12/08/16	36341	Judkins, Jacob	12/07/16	Reimbursement for Creeper	1057250	42.83	Judkins, Jacob
Total 36341:						42.83	
12/22/16	36413	KASTLE ROCK EXCAVATING INC	12/13/16	Water Leak Repair	5140490	468.00	KASTLE ROCK EXCAVATING INC
Total 36413:						468.00	
12/29/16	36434	Keddington & Christensen, LLC	12/29/16	Audit Services 2016	1043309	10,000.00	Keddington & Christensen, LLC
Total 36434:						10,000.00	
12/29/16	36435	Kent's Repair	12/19/16	Honda Water Pump Repair	5140250	54.00	Kent's Repair
Total 36435:						54.00	
12/16/16	36376	Kerrie & Randall Popek	12/15/16	Overpayment on Utility	0111750	73.75	Kerrie & Randall Popek
Total 36376:						73.75	
12/08/16	36342	KEYES ADMINISTRATORS	12/01/16	HRA Fee - Oct, Nov, Dec, 2016	1043136	75.00	KEYES ADMINISTRATORS
Total 36342:						75.00	
12/01/16	36299	Lamb, Alexander	11/28/16	Referee - Basketball	2071340	48.00	Lamb, Alexander

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36299:						48.00	
12/16/16	36377	Lamb, Alexander	12/13/16	Referee - Basketball	2071340	112.00	Lamb, Alexander
Total 36377:						112.00	
12/01/16	36300	LAYTON CITY CORPORATION	11/23/16	Metro Strike Force - 2016-17	1054321	5,742.00	LAYTON CITY CORPORATION
Total 36300:						5,742.00	
12/22/16	36414	LEFAVOR ENVELOPE COMPANY	12/14/16	Envelopes	1043240	74.33	LEFAVOR ENVELOPE COMPANY
12/22/16	36414	LEFAVOR ENVELOPE COMPANY	12/14/16	Envelopes	1043240	69.93	LEFAVOR ENVELOPE COMPANY
Total 36414:						144.26	
12/01/16	36301	LEWIS-GOETZ & CO/EVCO HOUSE OF HO	11/30/16	Hydraulic Hose to Repair Snow Plow	1060250	173.69	EVCO House of Hose
12/01/16	36301	LEWIS-GOETZ & CO/EVCO HOUSE OF HO	12/01/16	Hydraulic Oil - Dump Truck	1060250	258.00	EVCO House of Hose
Total 36301:						431.69	
12/08/16	36343	LOWES PROX	11/25/16	CFD - Office Shelf	2572517	55.81	LOWES PROX
12/08/16	36343	LOWES PROX	11/25/16	3/4 in PVC Conduits	1070250	301.68	LOWES PROX
12/08/16	36343	LOWES PROX	11/25/16	PVC Conduit Body, 3/4 PVC Elbow Pipe	1043262	7.19	LOWES PROX
12/08/16	36343	LOWES PROX	11/25/16	Wire Connector, Light Switch	1043262	9.99	LOWES PROX
12/08/16	36343	LOWES PROX	11/25/16	Sewer Inspection Tools	5240250	36.96	LOWES PROX
12/08/16	36343	LOWES PROX	11/25/16	Laminate, Shelf Bracket	1043262	82.06	LOWES PROX
12/08/16	36343	LOWES PROX	11/25/16	Shelf Bracket	1043262	15.16	LOWES PROX
Total 36343:						508.85	
12/01/16	36302	Malan, Brigg	11/29/16	Referee - Basketball	2071340	78.75	Malan, Brigg
Total 36302:						78.75	
12/16/16	36378	Malan, Brigg	12/05/16	Referee - Basketball	2071340	82.50	Malan, Brigg
Total 36378:						82.50	
12/29/16	36436	Malan, Brigg	12/14/16	Referee - Basketball	2071340	56.25	Malan, Brigg

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36436:						56.25	
12/01/16	36303	Moon, Jacey	11/29/16	Referee - Basketball	2071340	86.25	Moon, Jacey
Total 36303:						86.25	
12/16/16	36379	Moon, Jacey	12/13/16	Referee - Basketball	2071340	52.50	Moon, Jacey
Total 36379:						52.50	
12/29/16	36437	Moon, Jacey	12/26/16	Referee - Basketball	2071340	48.75	Moon, Jacey
Total 36437:						48.75	
12/16/16	36380	MOUNT OLYMPUS	12/16/03	Water Cooler at City Hall	1043262	16.19	MOUNT OLYMPUS
Total 36380:						16.19	
12/01/16	36304	Nielson, Kalena	11/29/16	Referee - Basketball	2071340	33.75	Nielson, Kalena
Total 36304:						33.75	
12/16/16	36381	Nielson, Kalena	11/30/16	Referee - Basketball	2071340	52.50	Nielson, Kalena
Total 36381:						52.50	
12/08/16	36344	Northridge High School	12/06/16	Sponsor Ad in Highschool Basketball Pro.	2071331	250.00	Northridge High School
Total 36344:						250.00	
12/01/16	36305	OFFICE DEPOT	11/18/16	Copy Paper & Calendars	1043240	102.52	OFFICE DEPOT
Total 36305:						102.52	
12/16/16	36382	OFFICE DEPOT	12/02/16	Folders, Post- it Notes, Sheet Protectors	1043240	40.46	OFFICE DEPOT
Total 36382:						40.46	
12/01/16	36306	OREILLY AUTOMOTIVE, INC.	11/29/16	Creeper	1060250	44.99	OREILLY AUTOMOTIVE, INC.

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36306:						44.99	
12/01/16	36307	PEHP LTD PAYMENTS	12/01/16	LTD Premium - 11/01/16 to 12/30/16	1043135	279.58	PEHP LTD PAYMENTS
Total 36307:						279.58	
12/08/16	36345	PERRY HOMES	12/05/16	Completion Bond - SWC 160705090	4521350	500.00	PERRY HOMES
Total 36345:						500.00	
12/16/16	36383	PERRY HOMES	12/12/16	Completion Bond - SWC 160726097	4521350	500.00	PERRY HOMES
Total 36383:						500.00	
12/16/16	36384	PITNEY BOWES - Acct # 1908277-MR16	12/01/16	Postage Machine - Oct.- Dec. 2016	1043251	330.36	PITNEY BOWES - Acct # 1908277-MR16
Total 36384:						330.36	
12/22/16	36415	PLUIM, WIM	12/20/16	Refund of Deposit	5121350	102.00	PLUIM, WIM OR CAROL
12/29/16	36415	PLUIM, WIM	V 12/20/16	Refund of Deposit	5121350	102.00	PLUIM, WIM OR CAROL
Total 36415:						204.00	
12/29/16	36438	PLUIM, WIM OR CAROL	12/20/16	Refund of Deposit	5121350	102.00	PLUIM, WIM OR CAROL
Total 36438:						102.00	
12/01/16	36308	Post Asphalt & Construction	11/22/16	Street Patching - 2 Roads	1060410	2,445.00	Post Asphalt & Construction
Total 36308:						2,445.00	
12/22/16	36416	Post Asphalt & Construction	12/13/16	Water Leak Repair	5140490	1,417.50	Post Asphalt & Construction
Total 36416:						1,417.50	
12/08/16	36346	Protect Youth Sports	12/01/16	Background Checks - 2 Employees	1043210	35.90	Protect Youth Sports
Total 36346:						35.90	

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/22/16	36417	RANDY MARRIOTT CONSTRUCTION	12/13/16	Deliver Salt	1057240	834.44	RANDY MARRIOTT CONSTRUCTION
Total 36417:						834.44	
12/08/16	36347	Rasmussen, Michelle	12/07/16	Civic Center Deposit Refund	1034250	200.00	Rasmussen, Michelle
Total 36347:						200.00	
12/22/16	36418	RELIABLE BUSINESS SYSTEMS	12/10/16	Annual Tax Forms	1043240	273.58	RELIABLE BUSINESS SYSTEMS
Total 36418:						273.58	
12/22/16	36419	RICHARDS SIGN CO	11/04/16	Stencils for Gas Cans	1070250	37.40	RICHARDS SIGN CO
Total 36419:						37.40	
12/08/16	36348	ROBINSON WASTE SERVICES INC	11/30/16	Park & Ride Collection - Nov. 2016	1070625	42.02	ROBINSON WASTE SERVICES INC
Total 36348:						42.02	
12/16/16	36385	ROBINSON WASTE SERVICES INC	11/30/16	Garbage collection service - Nov. 2016	5340492	9,928.80	ROBINSON WASTE SERVICES INC
Total 36385:						9,928.80	
12/01/16	36309	Rosier, Zachary	11/29/16	Referee - Basketball	2071340	176.25	Rosier, Zachary
Total 36309:						176.25	
12/16/16	36386	Rosier, Zachary	12/13/16	Referee - Basketball	2071340	105.00	Rosier, Zachary
Total 36386:						105.00	
12/29/16	36439	Rosier, Zachary	12/26/16	Referee - Basketball	2071340	127.50	Rosier, Zachary
Total 36439:						127.50	
12/29/16	36440	Roy City	12/29/16	South Weber City swim Party	2015610	700.00	Roy City
12/29/16	36440	Roy City	12/29/16	CFD swim Party	2515610	700.00	Roy City



Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36440:						1,400.00	
12/01/16	36310	RUSH TRUCK CENTER	11/30/16	Hydraulic Oil - Dump Truck	1060250	252.06	RUSH TRUCK CENTER
Total 36310:						252.06	
12/01/16	36311	Schow, Brock	11/29/16	Referee - Basketball	2071340	101.25	Schow, Brock
Total 36311:						101.25	
12/16/16	36387	Schow, Brock	12/13/16	Referee - Basketball	2071340	82.50	Schow, Brock
Total 36387:						82.50	
12/29/16	36441	Schow, Brock	12/26/16	Referee - Basketball	2071340	60.00	Schow, Brock
Total 36441:						60.00	
12/01/16	36312	Sivulich, Sierra	11/29/16	Referee - Basketball	2071340	30.00	Sivulich, Sierra
Total 36312:						30.00	
12/16/16	36388	Sivulich, Sierra	12/08/16	Referee - Basketball	2071340	15.00	Sivulich, Sierra
Total 36388:						15.00	
12/01/16	36313	SMITH AND EDWARDS COMPANY	11/17/16	Work Boots - Zach	1060250	151.95	SMITH AND EDWARDS COMPANY
Total 36313:						151.95	
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/16/16	Coat - Jackson	1060140	34.19	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/16/16	Coat - Jackson	5140140	34.19	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/16/16	Coat - Jackson	5240140	34.19	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/16/16	Coat - Jackson	5340140	34.19	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/16/16	Coat - Jackson	5440140	34.19	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/18/16	Jacket - Jason	1060140	30.40	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/18/16	Jacket - Jason	5140140	30.40	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/18/16	Jacket - Jason	5240140	30.40	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/18/16	Jacket - Jason	5340140	30.40	SMITH AND EDWARDS COMPANY

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/18/16	Jacket - Jason	5440140	30.38	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/23/16	Pants - Jason	1060140	19.54	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/23/16	Pants - Jason	5140140	19.54	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/23/16	Pants - Jason	5240140	19.54	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/23/16	Pants - Jason	5340140	19.54	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	11/23/16	Pants - Jason	5440140	19.55	SMITH AND EDWARDS COMPANY
12/22/16	36420	SMITH AND EDWARDS COMPANY	12/19/16	Jacket with Logo	1043140	56.99	SMITH AND EDWARDS COMPANY
Total 36420:						477.63	
12/01/16	36314	Smith, Thomas	11/28/16	Employee Christmas Party	1043329	47.46	Smith, Thomas
Total 36314:						47.46	
12/16/16	36389	Smith, Thomas	12/14/16	Reimbursement for Uniform - Shirt	1043610	32.04	Smith, Thomas
Total 36389:						32.04	
12/08/16	36349	Solar City	12/15/16	Completion Bond - SWC161003136	4521350	200.00	Solar City
Total 36349:						200.00	
12/01/16	36315	Solar Installs	11/28/16	Completion Bond - SWC161115167	4521350	200.00	Solar Installs
12/01/16	36315	Solar Installs	11/30/16	Completion Bond - SWC161115169	4521350	200.00	Solar Installs
Total 36315:						400.00	
12/08/16	36350	Solar Installs	12/05/16	Completion Bond - SWC161115168	4521350	200.00	Solar Installs
Total 36350:						200.00	
12/01/16	36316	SORENSEN, LAURIE	11/30/16	Mileage - XBP Coris User Group	1042230	73.87	SORENSEN, LAURIE
Total 36316:						73.87	
12/01/16	36317	Spiva, Payton	11/29/16	Referee - Basketball	2071340	60.00	Spiva, Payton
Total 36317:						60.00	
12/16/16	36390	Spiva, Payton	12/13/16	Referee - Basketball	2071340	52.50	Spiva, Payton

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36390:						52.50	
12/01/16	36318	Staker Parson Companies	11/07/16	Water Leak Repair	5140490	12.94	Staker Parson Companies
12/01/16	36318	Staker Parson Companies	11/10/16	Water Leak Repair - Road Base	5140490	549.18	Staker Parson Companies
Total 36318:						562.12	
12/22/16	36421	Staker Parson Companies	12/07/16	Water Leak Repair - Road Base	5140490	574.15	Staker Parson Companies
Total 36421:						574.15	
12/08/16	36351	STANDARD EXAMINER	11/30/16	Public Hearings - Dec. 2016	1043220	90.25	STANDARD EXAMINER
Total 36351:						90.25	
12/22/16	36422	STANDARD EXAMINER	12/15/16	1 Year newspaper Subscription	1043210	242.06	STANDARD EXAMINER
Total 36422:						242.06	
12/22/16	36423	SWEEP N UTAH	12/13/16	Nov. 2016 Street Sweeping (3 Days)	1060410	3,960.00	SWEEP N UTAH
Total 36423:						3,960.00	
12/01/16	36319	Taylor, Clayton	11/29/16	Referee- Basketball	2071340	82.50	Taylor, Clayton
Total 36319:						82.50	
12/29/16	36442	Taylor, Clayton	12/26/16	Referee- Basketball	2071340	33.75	Taylor, Clayton
Total 36442:						33.75	
12/08/16	36352	The Bodily Works, LLC	09/14/16	Security cameras - City Hall	1043350	150.00	The Bodily Works, LLC
12/08/16	36352	The Bodily Works, LLC	12/07/16	Security cameras - City Hall	1043350	150.00	The Bodily Works, LLC
Total 36352:						300.00	
12/16/16	36391	Tuamoheloa, Nolan	12/13/16	Referee - Basketball	2071340	22.50	Tuamoheloa, Nolan

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36391:						22.50	
12/01/16	36320	TWIN D INC	11/16/16	Heather Cove Storm Drain Project	5440690	1,063.75	TWIN D INC
Total 36320:						1,063.75	
12/01/16	36321	ULINE	11/17/16	Ice Melt	1061411	1,122.94	ULINE
Total 36321:						1,122.94	
12/08/16	36353	UNIFIRST CORPORATION	12/02/16	Mats and Towels Services	2071241	26.12	UNIFIRST CORPORATION
Total 36353:						26.12	
12/08/16	36354	UPPERCASE PRINTING, INK	11/28/16	Newsletter - Dec. 2016	5140370	78.66	UPPERCASE PRINTING, INK
12/08/16	36354	UPPERCASE PRINTING, INK	11/28/16	Newsletter - Dec. 2016	5240370	55.94	UPPERCASE PRINTING, INK
12/08/16	36354	UPPERCASE PRINTING, INK	11/28/16	Newsletter - Dec. 2016	5340370	17.48	UPPERCASE PRINTING, INK
12/08/16	36354	UPPERCASE PRINTING, INK	11/28/16	Newsletter - Dec. 2016	5440370	22.72	UPPERCASE PRINTING, INK
Total 36354:						174.80	
12/09/16	10803223	US Bank - Visa Payment	11/25/15	24' Wave dry slide	2071331	340.50	BOUNCIN BINS
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Cleaning Supplies	2071241	21.94	Walmart
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Miscellaneous Videos	2071610	23.84	Walmart
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Land Use Training	1041230	10.00	UTAH LEAGUE OF CITIES
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Food - Halloween Party	1043329	82.08	Olive Garden
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Paper Products	1043240	6.20	Fresh Market
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Ebook - Understand Fin. Stmt.	1043210	8.00	GFOA
12/09/16	10803223	US Bank - Visa Payment	11/25/15	UCMA Fall Conf.	1043230	29.62	Generic Travel Restaurant
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Pickleballs	2071241	19.13	Dicks Sporting Goods
12/09/16	10803223	US Bank - Visa Payment	11/25/15	UBLA Conference - fuel	1043256	74.46	Generic Travel Fuel
12/09/16	10803223	US Bank - Visa Payment	11/25/15	Live 2 Lead Training	1043230	210.00	Event Brite
Total 108032233:						825.77	
12/22/16	36424	UTAH LOCAL GOVERNMENTS TRUST	12/12/16	Workers Comp Monthly - Jan. 2017	1022250	951.20	UTAH LOCAL GOVERNMENTS TRUST
Total 36424:						951.20	

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
12/01/16	36322	UTAH RETIREMENT SYSTEMS	11/28/16	Additional Payroll for on-call	1022300	14.01	UTAH RETIREMENT SYSTEMS
Total 36322:						14.01	
12/08/16	36355	UTAH STATE TREASURER	12/01/16	Court Surcharge Remittance - Nov. 2016	1042980	3,481.11	UTAH STATE TREASURER
Total 36355:						3,481.11	
12/22/16	36425	VERIZON WIRELESS	12/08/16	Aircard for PW GPS	5140280	57.20	VERIZON WIRELESS
Total 36425:						57.20	
12/16/16	36392	Vivint Solar	12/12/16	Completion Bond - SWC161101156	4521350	200.00	Vivint Solar
Total 36392:						200.00	
12/08/16	36356	WASATCH INTEGRATED WASTE MGMT	11/01/16	Garbage Disposal - Oct 2016	5340492	14,404.00	WASATCH INTEGRATED WASTE MGMT
Total 36356:						14,404.00	
12/22/16	36426	WENDT, THADDEUS	12/20/16	Public Defender Fee	1042313	100.24	WENDT, THADDEUS
12/22/16	36426	WENDT, THADDEUS	12/21/16	Public Defender Fee.	1042313	100.00	WENDT, THADDEUS
Total 36426:						200.24	
12/16/16	36393	WHITAKER CONSTRUCTION CO., INC	12/09/16	Sewer Outfall Project	5240690	91,499.25	WHITAKER CONSTRUCTION CO., INC
Total 36393:						91,499.25	
12/16/16	36394	WILKINSON SUPPLY	10/14/16	Chain Saw Chain	1070250	67.98	WILKINSON SUPPLY
Total 36394:						67.98	
12/16/16	36395	WILLIAMS, HOLLY	12/12/16	Completion Bond - SWC 160616082	4521350	500.00	WILLIAMS, HOLLY
Total 36395:						500.00	
12/22/16	36427	Win-911 software	11/28/16	Water Alarm Notification Software	5140350	495.00	Win-911 software

Chk. Date	Check #	Payee	Inv. Date	Description	GL Account	G/L Amt	Merchant Name
Total 36427:						495.00	
12/01/16	36323	Workforce QA	10/30/16	Pre-Employment Drug Test	1043135	38.00	Workforce QA
Total 36323:						38.00	
Grand Totals:						221,411.67	

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

City Recorder: \_\_\_\_\_

**RESOLUTION 17-01**  
**Appointment of Mayor Pro Tempore**

**BE IT HEREBY RESOLVED**, by the City Council of South Weber City, State of Utah, as follows:

**WHEREAS**, in the absence of Mayor Tamara P. Long, the City Council of South Weber City desires to appoint a Mayor Pro- Tempore; and

**WHEREAS**, the Mayor Pro-Tempore will act in the official capacity of Mayor in the Mayor's absence;

**NOW THEREFORE**, the City Council of South Weber City appoints the following Councilmember to serve as Mayor Pro-Tempore for a period of one year:

**Scott Casas**  
**Mayor Pro-Tempore**  
**January 2017 – December 2017**

**PASSED AND ADOPTED** by the City Council of South Weber this **10<sup>th</sup> day of January 2017**.

\_\_\_\_\_  
**Tamara P. Long, Mayor**

**ATTEST:**

\_\_\_\_\_  
**Elyse Greiner, Recorder**

Roll call vote is as follows:		
Mr. Casas	Yes	No
Ms. Poore	Yes	No
Mr. Hyer	Yes	No
Mrs. Sjoblom	Yes	No
Mr. Taylor	Yes	No

# *South Weber City*

## *Proposal For A Job Valuation & Compensation Study*

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*December 28, 2016*

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**Prepared By**



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## **INTRODUCTION**

The development of a sound personnel management system begins with an organizational statement addressing the objectives of management related to achieving a predetermined employer status and labor market posture. Underlying the objectives is the organization's attitude or philosophy about work and workers. With this in mind the consultant assumes (1) that South Weber City desires to achieve a reasonable level of competitiveness and maintain current standards in providing quality services by attracting and retaining the most qualified employees and (2) in order to avoid becoming a training ground for other employers, the city views it desirable to provide career development opportunities where ever possible, competitive compensation and commit other resources necessary to enhance the attractiveness of the city as an employer.

## **PROJECT PHILOSOPHY**

Personnel Systems & Services subscribes to and promotes equal pay for equal work, non-discrimination in employment and fair and good faith dealing in all employee-employer relationships. Management has the right to expect a fair day's labor for the daily wage provided. Employees have the right to expect a fair day's pay for the labor given. The appropriateness of the pay provided is a function of the market place, the organizations internal equity system, which establishes the value of the job to a specific employer, and the perceived value of the individual based upon job performance, which includes loyalty, dependability and competence.

The employee's perception of equity and consistency in pay practices may not result in greater productivity and efficiency while the perception of inequity and inconsistency will most always produce discontent.

# SERVICE AREAS

## JOB DESCRIPTION UPDATE & DEVELOPMENT

The process of collecting facts about jobs sufficient to update job descriptions and specifications is the preliminary requirement necessary to complete job evaluation and classification, the application of your internal equity instrument. The description details what is involved in the job that includes job title, general purpose statements, and essential functions. The specifications for the job refer to those statements that describe personal characteristics, minimum qualifications, knowledge, skills, and abilities, or special qualifications that must be met for a job applicant to be considered eligible for the position. Completed documents are ADA compliant regarding essential functions of each individual position.

## JOB EVALUATION & CLASSIFICATION

The evaluation of the job comes through the establishment of measurement criteria against which all jobs are compared to determine relative organizational value. The instrument is typically a point system, a factoring method, job ranking, or a combination. Measurement criteria are aspects of the job such as job knowledge, minimum qualifications, and difficulty of work, accountability, responsibility, supervision, job controls, and work environment. The objective of this phase of the project is to determine and establish the internal equity program that is ultimately attached to market data to create a formal pay plan. This process will assist the city to identify its own "worth of work" values resulting in a **"site validated"** internal equity methodology.

## LABOR MARKET ANALYSIS

A review of the labor market, the economic area in which you wish to compete, is essential to the overall success of the pay plan. The objective of the analysis is to achieve external competitiveness. This phase involves the completion of a survey of employer wages and benefits for city benchmark positions. Using statistical measures and evaluation techniques it is possible to determine your competitive position in the chosen market place including public and/or private employers, and then establish a specific posture regarding the most realistic market objectives in terms of pay ranges and methods of pay progression. Where does the City want to posture itself in the market place? As a trendsetter? A leading-edge competitor? At market parity? Or, as reasonably comparable?

## COMPENSATION POLICIES & PROCEDURES

This service involves providing at no cost a model compensation management policy which addresses method of progression from minimum to midpoint and from midpoint to maximum of the pay range. Additionally, an outline for creating an incentive program will be included.

## BASIS OF SOUND PAY PROGRAMS

As the city seeks to establish and maintain an effective compensation program it is recommended that consideration be given to some or all of the following:

1. Size and type of business: *The ability to pay* certain rates, based upon revenues and financial resources.
2. Organizational Philosophy: *The willingness to pay* certain rates and *attitudes* about ranking among other employers within a selected labor market.
3. Nature and Diversity of Work: *The degree of specialization*, work variety, and technology (an element of the job classification methodology).
4. Regional Economics: *The prevailing rates* of pay and the rates of inflation.
5. Availability of Labor Supply: *The competition* for certain types of jobs resulting from an abundance or shortage of certain skills and abilities within the labor market.
6. Value of Work Contribution: *The worth of a particular job* to the organization (the overall value determined through classification methodology).
7. Pay Supplements: *The total compensation comparability* afforded through various incentives and discretionary benefits.
8. Reputation of the Organization: *The competitiveness* of pay and *social recognition* as high- or low-paying.
9. Pay Progression Policy:
  - The learning curve impact associated with certain types of jobs.
  - Pay range uniformity vs. diversity (pay schedule design).
  - Length of Service.
  - Performance based increases.
  - Pay for knowledge or level of competency.
  - The use of "control rates" within the pay ranges.
10. Bonus and Incentive Plans:
  - The use of "non-scheduled" recognitions.
  - The use of non-monetary rewards.
11. Ownership Protection: involves realistic consideration of resource limitations. The cost of administration should constantly be balanced against achieving the other objectives of the pay plan and overall personnel program.

# SCOPE OF WORK JOB ANALYSIS & CLASSIFICATION STUDY

## PRE-PROJECT PLANNING

- A. Conduct web meeting(s) with designated staff and city management to discuss philosophy, work plan and explain instruments.
- B. Determine customization needs for proposed instruments.
- C. Identify communication processes and methods to satisfy employee engagement expectations.

## QUESTIONNAIRE ADMINISTRATION, COLLECTION & ONSITE PREPARATIONS

Step #1: The consultant will provide to MANAGEMENT/HR staff the data collection instruments (along with instructions for completion) for distribution to fulltime employees. These instruments will include a "Job Values" survey and a Position Analysis Questionnaire. Target dates for completion will be attached in a memo regarding the project when delivered to employees.

The Position Analysis Questionnaire will ask a variety of questions related to job duties, responsibilities, knowledge, skills, abilities, etc. This is a standard tool necessary in accumulating job facts for all job classifications. *This phase could be minimized by the use of existing position descriptions as the primary instrument for updating. Employees may wish to use a combination of both documents in order to provide the greatest amount of written information regarding their position. Unique positions not previously included in the personnel system would still require the use of the questionnaire.*

Step #2: MANAGEMENT/HR staff to review a "Job Values Survey" instrument provided by the consultant to determine that the survey content addresses all the "worth of work" values of interest to the city. This process results in the delivery of a "site validated" job evaluation (point factor) instrument consistent with those criteria set forth in the Fair Labor Standards Act as the legitimate basis to "discriminate" or differentiate the pay between jobs.

Step #3: MANAGEMENT/HR distributes to all departments the survey along with instructions for completion and a targeted completion date with completed forms being returned to the MANAGEMENT/HR office. As an option, the survey may be distributed electronically, completed on the employee's desktop, and immediately returned to the consultant via email.

Step #4: Supervisors and MANAGEMENT/HR staff review completed employee Position Analysis Questionnaires.

Step #5: Completed survey and questionnaires to be compiled and mailed or emailed to the consultant by MANAGEMENT/HR staff.

Step #6: If available, MANAGEMENT/HR staff delivers electronic copies of existing/current job descriptions to the consultant.

Step #7: The consultant and onsite audit team reviews all completed questionnaires and current job descriptions.

Step #8: MANAGEMENT/HR staff to email the consultant an Excel file containing the employee census identifying employee first name, last name, location, department, job title, pay grade/band, pay range minimum and maximum and current actual pay.

## ONSITE ENGAGEMENT

Step #9: **Employee Orientation:** The consultant will prepare a proposed onsite schedule to include an employee orientation to conduct an open discussion with all employees regarding the purpose of the review and the processes to be followed. One, two or more meeting sessions could be scheduled to allow all employees to attend, without disrupting services and operations. Each orientation should require 45-60 minutes each. Orientations to be included along with the onsite job audit schedule.

Step #10: **On-site Job Audits:** The consultant will prepare an audit schedule and propose times for individual and group audits and deliver the proposed schedule to MANAGEMENT/HR staff for review and distribution. A brief time will be allowed to shift and reschedule employees where the proposed schedule contains conflicts or poses attendance issues. This process will allow all employees opportunity for direct verbal input. All positions with one incumbent will be audited. Positions with more than one incumbent may be involved in group audits. At the option of the employees in multiple incumbent positions, they may select a member of the group to represent them in the audit process. Each audit is to take approximately 45-60 minutes. **Mike Swallow will personally meet with all department heads.**

## **JOB DESCRIPTION PREPARATION**

Step #11: **Position Description Rough Draft:** Upon completing job audits the consultant will update or prepare rough draft descriptions describing general purpose, supervisory relationships, essential functions, minimum qualifications, knowledge, skills, abilities, and special qualifications required for the job. The drafts will be delivered to MANAGEMENT/HR staff for review and distribution. This document should be reviewed and approved by both position incumbents, or a representative or representatives of the position, and supervisors. Individuals will be encouraged to make additions or deletions to the position description in cooperation with supervisors as needed to satisfy their perceptions of their jobs.

Rough draft documents will incorporate options for **career progression** utilizing job families and related logical structure.

Step #12: **Position Description Final Draft:** Upon receiving the returned rough draft descriptions the consultant will finalize all changes and updates. Significant alterations may require follow-up audits by the Consultant to clarify significant differences in job perceptions.

## **JOB EVALUATION & CLASSIFICATION**

Based upon the results of the "Job Values" survey the consultant will develop and deliver a customized job evaluation instrument reflecting the employee "worth of work" priorities. The consultant will then perform the initial point factor evaluation of each job based upon the finalized job description and prepare recommendations for job pay ranges. The instrument will compare each job against measures such as responsibility, difficulty of work, job knowledge and work environment, etc. The scientific approach used in the construction of the factor tool is based upon Weber's "Law Of Just-Noticeable-Difference." An optional step in the classification process would be to involve the use of a committee facilitated by the consultant (cost to be determined and is in addition to the costs illustrated in the proposal, pg. 10), which would make the "fine-tuning" **classification and pay range recommendations.**

Step #13: Consultant develops and recommends point factor evaluation instrument and pay grade options with consideration being given to various pay plan designs, with or without pay grades.

Step #14: The consultant applies the point valuation instrument to each job and creates the baseline for establishing internal equity and job valuation consistency.

Step #15: MANAGEMENT/HR Officer and assigned staff in cooperation with the consultant "fine-tunes" the assignment of points to each job, which process may include an invitation to subject matter experts, supervisors and/or job incumbents to meet and discuss job content.

Step #16: During the fine-tuning process, the consultant, MANAGEMENT/HR Officer and assigned MANAGEMENT/HR staff work together to identify and determine possible classification consolidations, career path options, and job family progression series. The fine-tuning exercise will constitute staff training in the classification methodology.

# SCOPE OF WORK MARKET COMPENSATION STUDY

## MARKET DATA COLLECTION & ANALYSIS

Step #17: The consultant will utilize the Technology Net, web-based resource to expedite the conducting of the Market Compensation Study. Additionally, if requested by the city, complementary market data may be added to the data obtained through direct solicitation of the **targeted survey participants in the South Weber market area as defined by management. Additional data sources may be purchased, i.e., Economic Research Institute (ERI), Utah Employer Council, Utah Department of Workforce Services, etc.**

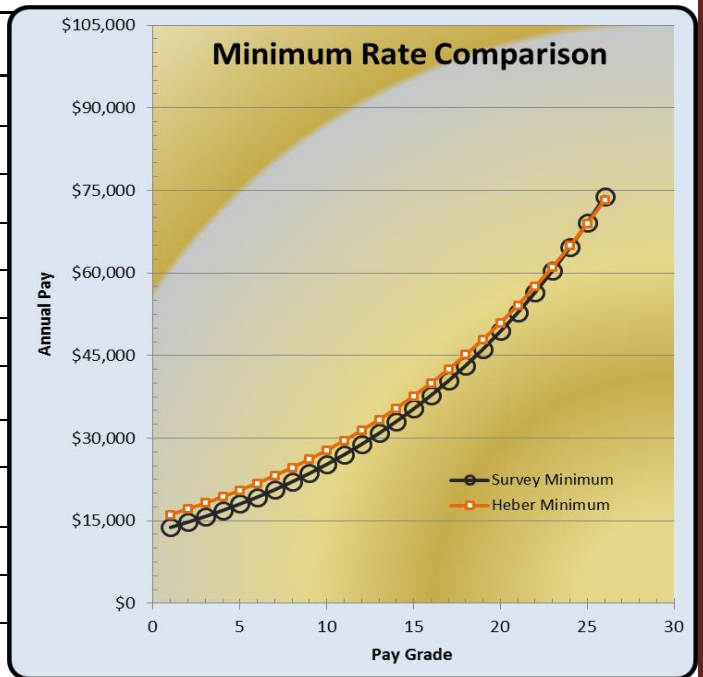
Step #18: **Labor Market Analysis:** The consultant will conduct a survey of base wages within a selected labor market for the city benchmark positions matched in the TechNet system. The survey participants will be chosen by city management and MANAGEMENT/HR staff and represent various non-profit, public and private entities with whom the city desires to be competitive. It is recommended that this sample remain stable over the years to assure consistency in market evaluation.

It is also recommended that the survey participants represent the "trend setters", thus enabling the city to ascertain the leadership position of the market. By knowing what market leaders are doing the city can determine what kind of pay policy and posture they want to maintain in relationship with the selected market. Statistical analysis and charts will be used to describe the survey results.

Step #19: Consultant will develop and deliver regression analysis graphic illustrations of the city's comparative position with the defined market area and survey participants.

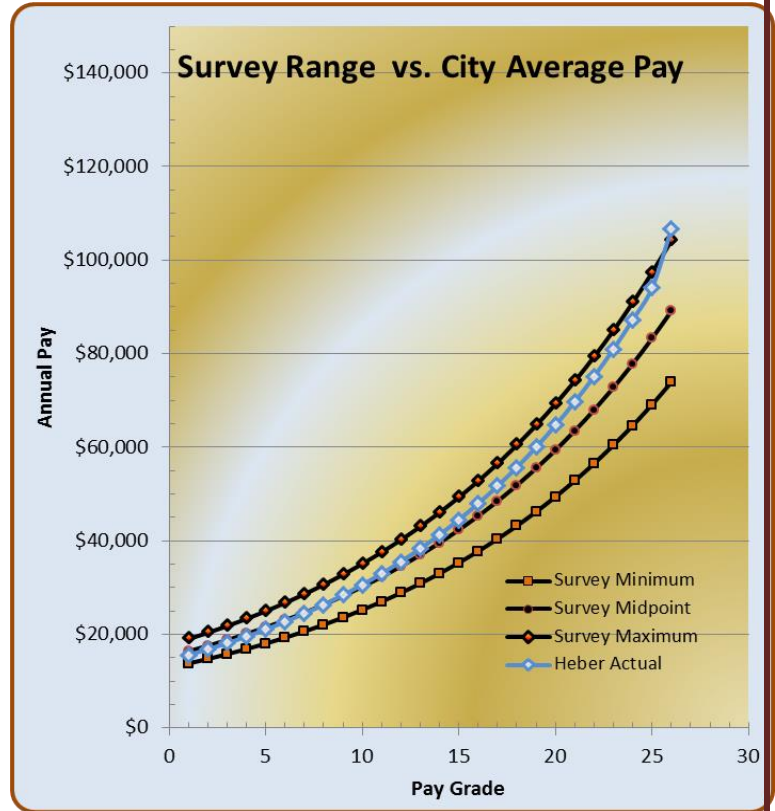
**Sample Analytical Chart #1**

Pay Grade	Survey Minimum	Heber Minimum	\$ Difference	% Difference
10	\$25,249	\$27,814	\$2,566	9.2%
11	\$27,002	\$29,551	\$2,549	8.6%
12	\$28,877	\$31,396	\$2,518	8.0%
13	\$30,883	\$33,355	\$2,473	7.4%
14	\$33,028	\$35,438	\$2,410	6.8%
15	\$35,321	\$37,650	\$2,329	6.2%
16	\$37,774	\$40,000	\$2,226	5.6%
17	\$40,398	\$42,498	\$2,100	4.9%
18	\$43,203	\$45,151	\$1,947	4.3%
19	\$46,204	\$47,969	\$1,766	3.7%
20	\$49,412	\$50,964	\$1,551	3.0%
21	\$52,844	\$54,145	\$1,301	2.4%



## Sample Analytical Chart #2

Pay Grade	Survey Minimum	Survey Midpoint	Survey Maximum	Heber Actual
1	\$13,797	\$16,417	\$19,018	\$15,614
2	\$14,756	\$17,566	\$20,357	\$16,827
3	\$15,780	\$18,796	\$21,790	\$18,135
4	\$16,876	\$20,112	\$23,324	\$19,544
5	\$18,048	\$21,520	\$24,966	\$21,062
6	\$19,302	\$23,027	\$26,724	\$22,699
7	\$20,642	\$24,639	\$28,605	\$24,463
8	\$22,076	\$26,364	\$30,619	\$26,364
9	\$23,609	\$28,209	\$32,774	\$28,412
10	\$25,249	\$30,184	\$35,082	\$30,620
11	\$27,002	\$32,298	\$37,552	\$32,999
12	\$28,877	\$34,559	\$40,195	\$35,563
13	\$30,883	\$36,978	\$43,025	\$38,326
14	\$33,028	\$39,567	\$46,054	\$41,304
15	\$35,321	\$42,338	\$49,297	\$44,513
16	\$37,774	\$45,302	\$52,767	\$47,972
17	\$40,398	\$48,473	\$56,482	\$51,699
18	\$43,203	\$51,867	\$60,459	\$55,716
19	\$46,204	\$55,498	\$64,715	\$60,046



**Alternative: No Pay Grades:** Now developed and available is an approach to compensation analysis that eliminates the use of pay grades but still retains the integrity of an internal equity maintenance methodology. Over the years there have always been complaints about pay grade structures that become manipulated. While it is almost impossible to eliminate all manipulation, this new approach can significantly minimize and may eventually eliminate such fairness distortions. Based upon an internal equity valuation each job can have an individualized market based pay range. The slightest variations between the worth of jobs based upon your entity's worth-of-work values can now be recognized resulting in base pay management that is not cumbersome attached to a confining "pay plan".

This approach **can also overcome the frustrations of "Broad Banding"** and eliminate the challenges of associating non-benchmarked jobs to the benchmark anchor. Here too, every job can be uniquely assigned a market derived pay rate.

### EMPLOYER PROVIDED BENEFITS

In identifying the city's competitive posture with the labor market, the consultant will develop a total compensation picture. There are three basic approaches to comparing benefits: (1) Benefit plan provision method, (2) Employer cost method, and (3) standard cost method or the "level of benefit approach". All three methods have strengths and weakness. Method #2 is the approach utilized by U.S. Chamber of Commerce and the Bureau of Labor Statistics to analyze trends in employer benefits. The question that will be addressed is: "How does the amount of money the city is spending per employee (for employer paid benefits) compare to the amount of money competitors are spending on their employees" (discretionary and mandatory benefits)?

Step #20: The consultant will solicit Total Compensation data, the total value of employer paid benefits. The Total Compensation Value (TCV) will be calculated for each position and included in the final market analysis.



## **SALARY STRUCTURE REVIEW & RECOMMENDATIONS**

- Step #21: The Consultant and MANAGEMENT/HR Staff will finalize the salary structure to ensure conformity with management philosophy for pay progression methodology and competitive positioning within the defined market. After identifying market relationships, the City will select a level of competitiveness to be achieved in the design of the new pay plan or "plans" with consideration being given to targeted percentiles in the data's prevailing rates. The learning curve philosophy may also be reflected in the development of ranges for various job classifications. Under the "No Pay Grade" alternative, each individual job classification/description will potentially have an independent and separate pay range based upon market.
- Step #22: The Consultant will complete the full integration of the results of the classification and job evaluation phase of the study with the market compensation study.
- Step #23: The Consultant will Identify and calculate a least cost implementation plan and identify the placement of each employee in relation to their job's revised pay grade/range and classification. As needed, the consultant will create "phase-in" options based upon calculated economic impact.
- Step #24: Based upon the preferred option for the number of pay grades the consultant will prepare and deliver recommendations for salary schedule restructuring. If the "No Pay Grade" option is of interest the results can be reviewed according to individual jobs and job families.
- Step #25: Discuss with MANAGEMENT/HR staff the desire and value of opening an appeal window to allow employees to appeal their job's classification and recommended pay range/grade.

## **ADDITIONAL CONSIDERATIONS/ PROJECT ENHANCEMENTS**

**Performance Management System:** A performance management and evaluation program will normally be designed in combination with one of two ways: (1) to be utilized to monitor employee, work unit, and organizational progress toward achieving established goals and objectives; and (2) to provide justification for pay increases, advancement, promotion, and incentive awards and job retention. In achieving option two, the success of the program will involve integrating the performance management and evaluation program into the other aspects of the total compensation system. Other compensation factors to be evaluated simultaneously would include some or all the following:

A. **Base Pay:** This is the acceptable market range as determined through labor market analysis. The objective of the base pay program is to achieve a predetermined pay posture within the city's defined market area. One of four levels is usually pursued: 1) trend setting 2) competitive 3) parity or 4) comparable. The base pay plan is the companion to the job classification system that is the method of determining internal equity for the purpose of establishing base pay. Movement through the base pay schedule would be determined by two factors- the learning curve concept and acceptable performance (the minimal level of job productivity that would justify job retention).

B. **Incentive Award/Bonus Plan:** This system allows management to reward performance without compounding the costs in all other areas of compensation which are related to base pay (FICA, retirement, supplemental retirement, insurance, etc.). Such awards are one time, based upon predetermined criteria, can be given to individuals or work groups, and can be either monetary or non-monetary. Even benefits, such as additional annual leave could be used. Such reward systems would provide more financial control.

C. **Longevity Pay:** Generally, such pay is attached to the base pay schedule. When so attached, this program does also compound other costs mentioned above. Annual leave schedules that allow employees to accumulate leave at increasing rates according to time in service are a form of longevity pay. When considering options for rewarding the dedicated, long service employee, annual leave can be supplemented by a lump sum cash program structured like annual accrual schedules. By separating items "b" and "c" from the base pay schedule, management will be better able to minimize the rewarding of mediocrity.

D. **Cost-of-Living Adjustments:** This adjustment to the general base pay schedule is an estimate of market changes. The amount of such adjustments is determined regionally by the Bureau of Labor Statistics and reported as the consumer price index. This is a shortcut substitute to conducting a thorough labor market analysis. It is generally recommended that an

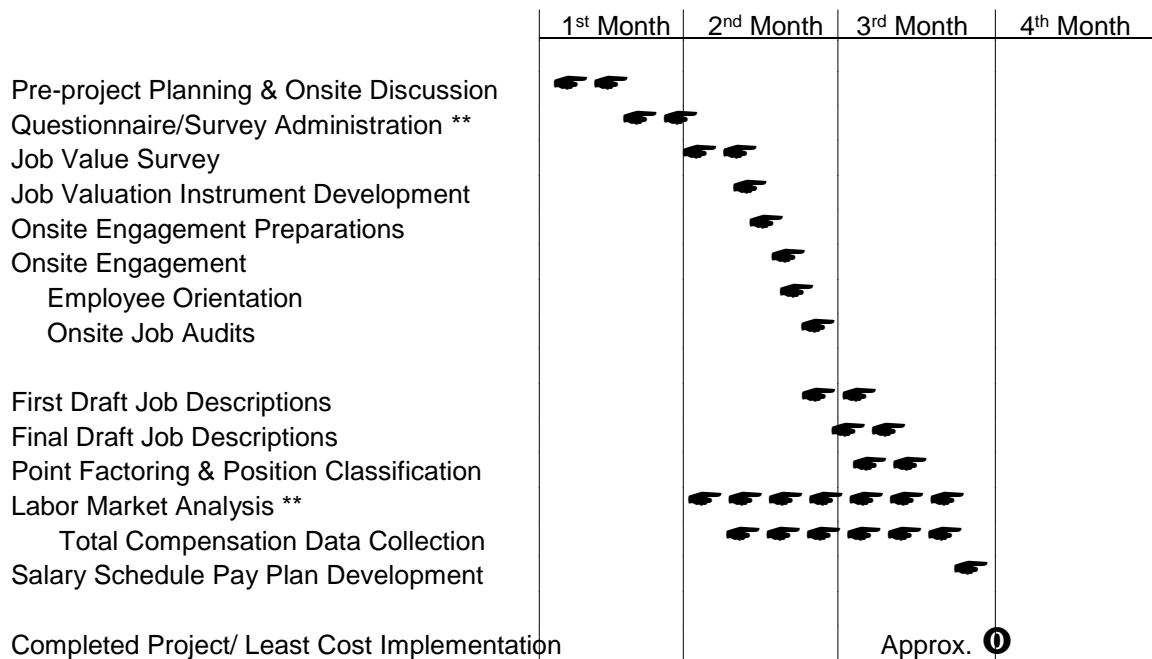
organization conduct the labor market analysis at least every two or three years to rectify error produced by using CPI or some other market index.

E. **Market Differentials:** This compensation practice comes into play when the supply and demand in the job market impacts certain types of jobs. It is identified through labor market analysis and shows up as an inconsistency between internal job value (classification) and external market pay. These adjustments are temporary and are utilized as needed to retain quality employees who have recognized the marketability of their knowledge, skills, and abilities.

**DELIVERABLE PRODUCT AND MATERIALS**

Upon conclusion of the project the consultant will provide the City with electronic copies of all project deliverables, i.e., job descriptions, job evaluation instrument, job valuations, market data, market analysis and pay plan. Additionally six bank set of Mylar covered tabs will be provided if the city desires to create ring-binder books labeled: Organization Charts, Policies and Procedures, Position Descriptions, Classification and Job Analysis, Salary Information, and Sample Personnel Forms.

**TIME REQUIREMENTS**  
**Wage & Salary Market Analysis Study**



\*\* It is the consultant's experience that slowing in the time line can occur at these phases of the study. Generally, supervisors need to be insistent regarding employees completing and returning Values Survey within the allocated time period. Should such hurdles develop in the study, the target completion date could be over run. Commitment from all levels of management to promote the projects successful completion will be a key element.

① = Deliverable

# COST OF SERVICES

(Based upon approximately 17 Fulltime & Regular Part-time employees, approx. 12 job classifications/descriptions)

## **Program A-Job Descriptions**

1. Employee Project Orientation 1 @ \$250 each	\$250.00
2. Questionnaire Administration & Review, 17 @ \$25/each With preliminary Organizational Analysis & Class Determinations	\$425.00
3. On-site Job Audits <i>individual and group job audits, approx. 17 @ 60 min. ea.</i>	\$1,275.00
4. Writing & rewriting of job descriptions approximately 12 @ \$50.00 ea.	\$600.00

<b>Total: Program A</b>	<b>\$2,550.00</b>
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## **Program B-Job Evaluation & Classification**

1. Values Survey Data Entry & Tabulation 17 @ \$5/each	\$85.00
2. Customization of Point Factor Instrument	\$1,500.00
3. Job Analysis & Classification 12 job classes @ \$40 ea. (Pay Grade Determination)	\$480.00

<b>Total: Program B</b>	<b>\$2,065.00</b>
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## **Program C-Labor Market Wage/Salary Analysis**

1. Labor Market Salary Survey and Analysis	\$3,750.00
2. Employer Paid Benefit Review & Comparisons	\$750.00
3. Pay Plan Integration & Recommendations	\$600.00

<b>Sub Total- Program C</b>	<b>\$5,100.00</b>
<b>TechNet Discount @ 25%</b>	<b>(\$1,275.00)</b>
<b>Total Program C</b>	<b>\$3,825.00</b>

**Utah/TechNet Subscriber Discount @ 25+% applied to program "C"**

## **Program D- Policy & Procedure Development & Recommendations**

1. Model Compensation Policy	\$0.00
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<b>Total: Program D</b>	<b>\$0.00</b>
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<b>Total Cost: Program A-D:</b>	<b>\$8,440.00</b>
<b>All overhead Expenses, i.e., team travel, meals, materials, etc. @ 5%</b>	<b>\$422.00</b>
<b>Total</b>	<b>\$8,862.00</b>

Payment Schedule: Upon completion of "Job Values" survey exercise- 20%. Upon completion of on-site job audits -20%. Upon delivery of 1<sup>st</sup> draft job descriptions- 20%. Upon delivery of job evaluation instrument & initial job value or market range recommendations- 20%. Upon delivery of Wage Analysis and final project materials with least cost implementation impact- 20%.

**MIKE SWALLOW**  
**PROFESSIONAL & BUSINESS PROFILE**

**WORK EXPERIENCE**

(1976-2016)

**Technology Net, Inc.;** Partner and co-developer of the TechNet online Compensation Survey System. 800 Subscribers in Utah, Idaho, New Mexico, Wyoming, Colorado, Mid-American Regional Council (Kansas & Missouri), Kansas Association of Counties, Virginia and Maryland. Established 2002.

**Personnel Systems & Services.** Currently providing technical assistance consulting services in human resource management systems consisting of: job analysis and classification, labor market compensation analysis and pay plan development, policy and procedure development, grievance management and resolution, performance management, recruitment and selection, training and general HR management programs. Company established in 1988.

**Bureau Manager- Local Government MANAGEMENT/HR Consultant,** Bureau of Consulting Services, Department of Human Resource Management, State of Utah. Develop, market, coordinate and deliver technical assistance services to Utah cities and counties in human resource management, supervisory training, organizational development, employee assistance programs, employee relations, fair employment programs, recruitment and selection, job classification, and wage and benefit analysis. Direct and coordinated state-wide and interstate salary and benefit surveys and analysis.

**Contract Consultant,** Emery County, Price City, Tooele City, Iron City, Tooele City and Carbon County Utah. In conjunction with State of Utah consulting duties, and under special contract, acted as advisor and resource to the City. Provided consultation related to policies, procedures, classification, compensation, recruitment, selection, discipline, termination and employee relations.

**Self Employed, Benefits Broker & Personnel Consultant.** Marketing and sales of individual and group benefits utilizing medical reimbursement plans, salary continuation plans, business continuation programs, stock redemption plans and 401(k) salary reduction plans. Performed private consulting to professionals and local governments. Developed business plans or proformas with income projections, cash flow analysis, balance sheets and break even analysis. Worked as an associate to Ricketts and Associates-Risk Management/Vierra-CPA firm. Licensed to sell life, health and disability insurance.

**Idaho Association of Counties,** Boise, Idaho. Develop, market, coordinate and deliver technical assistance services to Idaho cities and counties in human resource management, supervisory training, organizational development, employee assistance programs, employee relations, fair employment programs, recruitment and selection, job classification, and wage and benefit analysis.

**Current Retainers:** North Davis County Sewer District, UT; Washington City, UT; Idaho Falls, ID.

**Current Projects:** Roosevelt, UT; Timpanogos Special Service District, UT; Springdale, UT; Morgan County, UT; Sevier County, UT; UTOPIA, UT; Duchesne County, UT.

**Annual Projects Conducted via Technology Net:** Wasatch Compensation Group annual salary and benefit survey (Salt Lake City, West Valley, Murray, Sandy, Provo, Orem, Ogden, Layton, Park City, West Jordan, St. George, and South Salt Lake). Colorado Municipal League, Virginia Institute of Government/University of Virginia, Maryland Municipal League, Kansas Association of Counties, Mid-America Regional Council (Kansas & Missouri).

## REFERENCES

Mr. Nathan Crane, Highland City, UT, 801-772-4566; [NCrane@highlandcity.org](mailto:NCrane@highlandcity.org)

Ms. Natasha Hirschi, HR Manager, Cedar City, UT, 435-865-2880, [hnatasha@cedarcity.org](mailto:hnatasha@cedarcity.org)

Ms. Judy Thimakis, HR Director/Acting City Manager, American Fork, 801-763-3000, [jthimakis@afcity.net](mailto:jthimakis@afcity.net)

Mr. Jamie Davidson, City Manager, Orem, UT, 801-229-7038, [jpdavidson@orem.org](mailto:jpdavidson@orem.org)

Mr. Seth Perrins, City Manager, Spanish Fork, UT, 801-804-4535, [sperrins@spanishfork.org](mailto:sperrins@spanishfork.org)

Mr. Ralf Barnes, HR Director, Wasatch Mental Health, UT, 801-852-4710, [rbarnes@wasatch.org](mailto:rbarnes@wasatch.org)

Mr. Jeff Shumway, Business Manager, Southwest Public Health, UT, 435-986-2585, [jshumway@swuhealth.org](mailto:jshumway@swuhealth.org)

Ms. Pam Springs, HR Director, Lafayette, CO, 303-665-5588, [pamsp@cityoflafayette.com](mailto:pamsp@cityoflafayette.com)

Ms. Jennifer Coates, Town Manager, Ridgway, CO, 970-626-5308 Ext. 212, [jcoates@town.ridgway.co.us](mailto:jcoates@town.ridgway.co.us)

Mr. Roger Carter, City Manager, 111 North 100 East, Washington City, UT, 435-656-6300, [rcarter@washingtoncity.org](mailto:rcarter@washingtoncity.org)

Mr. David Kitchen, HR Manager, Lehi City, 801-768-7100, [dkitchen@lehi-ut.gov](mailto:dkitchen@lehi-ut.gov)

Ms. Ruth Holyoak, HR Officer, 111 North 100 East, Washington City, UT, 435-656-6315; [rholyoak@washingtoncity.org](mailto:rholyoak@washingtoncity.org)

Mr. Edward Dickie, City Manager, Santa Clara, UT, 435-673-6712, [edickie@sccity.org](mailto:edickie@sccity.org)

Ms. Delilah Walsh, County Manager, Socorro County, Socorro, NM, 575-835-0589, [dwalsh@co.socorro.nm.us](mailto:dwalsh@co.socorro.nm.us)

Ms. Melanie Marsh, Human Resources Director, Payson, UT, 801-465-5202, [melaniem@payson.org](mailto:melaniem@payson.org)

Mr. Mark Fratrick, Village Manager, Taos Ski Valley, NM, 575-776-8220, [mfratrick@vtsv.org](mailto:mfratrick@vtsv.org)

Mr. Keith Lord, General Manager, Taylorsville-Bennion Improvement District, UT, 801-968-9081, [klord@tbid.org](mailto:klord@tbid.org)

Ms. Michelle Britain, HR Director, Canyon County Ambulance District, ID, 208-795-6924, [mbritain@ccparamedics.com](mailto:mbritain@ccparamedics.com)

Ms. Rebecca Fritz, HR Director, Ouray, CO, 970-325-7062, [fritrz@cityofouray.com](mailto:fritrz@cityofouray.com)

Mr. Anthony Mortillaro, Executive Director, North Central Regional Transit District, NM, 505-629-4725, [anthonym@ncrtd.org](mailto:anthonym@ncrtd.org)

Mr. Dan Tarwater, HR Director, Las Vegas, NV, (702) 229-6011, [dtarwater@lasvegasnevada.gov](mailto:dtarwater@lasvegasnevada.gov)

Ms. Sue Brown, Compensation Administrator, Las Vegas, NV, (702) 229-6011, [sbrown@LasVegasNevada.GOV](mailto:sbrown@LasVegasNevada.GOV)

**Others Upon Request**

## PREVIOUS ENGAGEMENTS

### Classification, Compensation, Supervisor Training, Performance Management

#### UTAH

<p>Bluffdale City Bountiful Water Subconservancy District Box Elder City Brian Head Town Brigham City Cache City School District Canyonlands Natural History Association Carbon City Housing Authority Cedar City Centerfield Central Weber Sewer Improvement District Clearfield City Davis Applied Technology Center Davis City Davis City School District Draper City East Carbon City Emery City Emery City School District Ephraim City Five City Association of Governments Garfield City Grand City Heber City Heber Light &amp; Power Heber Valley Railroad Helper City Holladay City Hurricane City Kearns Improvement District LaVerkin City Layton City Lehi City Mapleton City Midvale City Morgan City Mountainland Association of Governments Murray School District Neways International</p>	<p>North Davis City Sewer District Park City School District Phonex Corporation Pleasant Grove City Price City Provo City Riverdale City Salt Lake City Service Area #1 San Juan City San Juan School District Santaquin City Sevier Applied Technology Center Six City Commissioners Organization Snyderville Recreation District South Davis City Fire Department South Jordan City South Salt Lake City Southeastern Utah Association of Governments Spanish Fork City Springville City State Board of Education (Utah) State Court Administrator, Office of Summit City Syracuse City Taylorsville Timpanogos Special Service District Tooele County Tooele City Uintah Basin Applied Technology Center Uintah School District Utah Risk Management Mutual Association Wasatch City Wasatch Front Regional Council Washington City Washington City Washington Terrace Wellington City West Jordan Woods Cross Zion Natural History Association</p>
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#### IDAHO

<p>Coeur d'Alene City Idaho Falls City Benewah County Blaine County Bonner County Bonneville County Boundary County Canyon County Caribou County Canyon County Ambulance District</p>	<p>Custer County Gooding County Idaho County Kootenai County Lemhi County Madison County Minidoka County Owyhee County Power County Valley County</p>
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## NEW MEXICO

New Mexico Municipal League New Mexico Finance Authority Albuquerque Ruidoso Santa Fe North Central Regional Transit District	Taos Ski Valley Carlsbad Town of Taos Clovis
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## WYOMING/COLORADO/ALASKA

Hoonah, AK Cody, WY Park County, WY Powell, WY Lander, WY Central Wyoming College	Wheatland, WY Torrington, WY Wyoming Municipal Power City, WY Lafayette, CO Walsenburg, CO Logan City, CO Georgetown, CO
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**Other: National District Attorney Association, Washington DC/Arlington VA**

## PROJECT TEAM-KEY STAFF

### **Mike Swallow**

President of Personnel Systems & Services, Inc.; a human resource consulting company established in 1988 and a general partner of Technology Net, Inc., established in 2001. For over 30 years Mike has been providing technical assistance primarily to local government entities either as a staff consultant or independent consultant in various HR management areas, including job analysis and classification, labor market analysis and pay plan development, policy and procedure development, grievance management and resolution, performance management & evaluation, recruitment and selection and supervisor training. Having been engaged by over 100 entities, Personnel Systems & Services has clients based in Utah, New Mexico, Idaho, Wyoming, New Jersey and Alaska. Previous employers include the Utah Intergovernmental Personnel City, Idaho Association of Counties, State of Utah- DHRM, and Summit County. Academic credentials include a master's degree in public administration and a bachelor's degree in psychology from Brigham Young University.

### **David R. Colvin**

David has provided management and consulting services to state and local governments, and education for more than 25 years. Mr. Colvin has a dozen years of experience in city government management in three states, including 9 years as a city manager or administrator. During his tenure as a city manager/administrator, he managed many large-scale capital improvement projects, developed and implemented master plans, city-wide performance reporting systems, human resource systems, and performance based budgets. As a strategic planner, fiscal and management analyst for a state legislature, Mr. Colvin has 9 years' experience managing and facilitating the development of several state-wide strategic plans and providing consulting services in developing a state-wide performance measurement system. Mr. Colvin has also managed and provided training for a University's state and local government managers/elected officials leadership and management development program, and provided consulting services to many local governments in developing human resource systems and implementing other organizational development efforts. Mr. Colvin has a Bachelor's degree in Communications and Organizational Behavior, and a Master of Public Administration degree, from Brigham Young University.

### **Gaylyn Larsen, SPHR**

Gaylyn boasts over 21 years of experience in local government human resource management, which experience is complimented by three years of full time consulting. Her consulting engagements involved the development of job classification and compensation systems, and she has been a member of several job audit teams in connection with consulting engagements entered into by Personnel Systems & Services. Gaylyn is served as the Salt Lake County Sheriff Department's Human Resource Director for several years and is currently Human Resource Director for Wasatch Front Waste & Recycling District. Previously, she served as Human Resource Director for the City of St. George for nearly 8 years and as a Human Resource Analyst for the Utah State Tax Commission. Her academic credentials include a degree in Personnel & Industrial Relations with a minor in Economics.

### **Jeff Monson**

Jeff has attained degrees in Business Management, Business Administration, and a Master's degree in Organizational Management. He has 15 years of training, program development, and human resource experience. Jeff gained much of his experience while working at Intermountain Health Care. During that time, he worked with a variety of employee and patient groups and committees and helped develop and implement effective communication techniques and behavioral modification programs. He also gained a wide range of experience from working with over 300 small- and medium-sized organizations, assisting them with human resource, benefit, and safety issues. Additionally, he has helped companies develop the necessary policies and procedures to become more effective and profitable. Various projects involved the resolution of issues between employers and employees regarding compliance issues, safety laws, and regulations. He was elected and serves as a member of the Board of Trustees for Kearns Oquirrh Park Fitness Center. Currently Jeff is the Human Resource Director for the Valley Emergency Communications Center, Salt Lake County.

### **Richard T. Morley**

Richard (Ric) holds a bachelor's degree in business administration and is a human resource professional with 20+ years of combined experience in human resource management, business, business development, purchasing, accounting, computers, and retail business management. With his experience crossing several disciplines, he brings multiple business talents to our consulting team. Since 1991 he has been involved in HR operations. This included the development of seminars in time management (Simple Time Management); serving as Director of Operations for a company that achieved over 50 million a year in sales (where he also developed the basis for the future HRIS system); serving as a team member providing HR consulting to local governments; and serving as Director of Human Resources for a small company where he was later promoted to Executive Vice President. Here he also developed an internet-based HRIS system that works with almost all payroll and human resource programs. Most recently, Ric assisted in forming a human resource company named HR Group Central whose focus is to provide customized HR technical assistance to small and large companies where he is currently serving as the COO. Ric is a member of the SHRM and has been involved with various chamber organizations.

### **Judy Thimakis**

Judy has a combined 27 years of human resource experience in private industry, higher education, and local government public administration. As a PhD, Judy has occupied a faculty position at the University of Phoenix, teaching in the master's and undergraduate programs. In a full time capacity, Judy works for American Fork City as the HR Manager, and has worked for Salt Lake County as the Executive Director of the Deputy Sheriff Merit Commission and Senior HR Consultant in the Human Resources Department. She managed the Compensation Department for the University of Utah and directed the HR functions in private industry. She is experienced in managing benefits, compensation, recruitment, employee relations, safety, training, law enforcement testing, law enforcement merit systems, and some information systems. Academically, Judy carries a Bachelor's Degree in Human Resources and a Master's Degree in Public Administration. She owns a Doctorate of Management where her dissertation subject was Gender and Leadership, a Comparative Study. She is trained in dispute resolution and is a Legislative Advocate, assisting with lobbying efforts for University of Utah. Judy has been active professionally serving on boards in the human resources area, including President, Vice President, and a board member for the Intermountain Compensation and Benefit Association (ICBA) and the International Public Management Association-Human Resources (IPMA-HR).



# ***Appendix***

# Addendum #1

## Instructions *Job Value Survey*

**Notice:** *There is nowhere to identify you by name on this survey. You may indicate in the upper right-hand corner which department you are in, but if you are uncomfortable identifying where in the organization you work, you may leave it blank. Please be thoughtful as you consider your responses. Ranking or rating all items in a section with "1" or any of the same number values is of no worth or help to this process. We appreciate your contribution.*

**Section I:** The Fair Labor Standards Act (FLSA) identifies the type of criteria that is defensibly used to establish or recognize differences in the value of a job for the purpose of setting pay rates. That criterion is listed in the left hand column in section one. In your opinion, which of these is the most important or significant in making that determination? Should the value of a job be influenced more by difficulty of the work or the level and type of responsibility in the job? Are they of equal value or importance? Your task is to rank those four items on the left in order of importance, 1 being the most important and 4 being the least important. If you believe that any of the four are of equal importance you may assign them the same number (therefore, you may have a 1, two 3's, and a 4 or any other combination of 1's, 2's, 3's or 4's). In completing this section you are recommending to the organization a value system for assigning the worth of work, or the worth of a job. Placing a "1" on everything is not helpful to the organization so it is hoped that the employee will give a little thought to this exercise.

In the column on the right are other lists each associated with the four primary or major factors on the left. In each group complete the same exercise. For example, there are three items that are used to define "difficulty of work", rank these three in order of importance from 1 to 3. The item given the value of "1" is that aspect of "difficulty" which you view the most significant. Complete that same exercise for each of the defining lists for the four primary job value factors.

**Section II:** This is a short list of the many areas management may be addressing in order to determine how the organization wants to relate to your labor market. What is your recommendation for those items that should be given the highest priority? Rank these in order of importance also, 1 being the highest and 6 being the least important. Here again you may rank some items the same as others.

**Section III:** What an employee contributes to the organization can generally be related to one or all of the three items listed in this section. When you consider what an individual contributes to the organization, which of these three should be considered the strongest when establishing an employee recognition program? Rank these three items from 1 to 3, again, 1 being the most important.

**Section IV:** This section allows each employee to make a statement about how fairly they believe they are currently being paid by the organization. If you believe you are underpaid because the job you perform has not been given the proper level of importance, you would check the "yes" box. If you believe you are underpaid in comparison with your peers that are performing essentially the same job as you, mark the "yes" box on question #2. If you believe the amount of work you complete is not given proper recognition, mark the "yes" box on question #3. In the last question, if you believe you can go just about anywhere and get a job paying better than you are being paid, doing the same type of work, check "yes" on statement #4. However, if you believe you are fairly compensated on any of these questions, indicate by checking the "No" box.

**Notice:** *Please be thoughtful as you consider your responses. Ranking or rating all items in a section with "1" or any of the same number value is of no worth or help to this process. We appreciate your contribution.*

**Instructions:** In each of the sections below, follow the specific instructions in order to rank the order of importance you would give each of the factors or statements listed. "Importance" is the value you, the employee, believe should be used by the organization, not how you perceive the organization to presently value these items. The **value "1" represents most important**. The larger the number the **less** the importance to you.

**Section I: Internal Equity** (these are measures or values against which all jobs are compared in order to establish the worth of the job to the organization included under four primary categories: Difficulty of Work, Responsibility, Work Environment and Job Knowledge. Rank the primary factors at the left in order of importance from 1 to 4. If you perceive any of the four to be of equal importance you may use the same value more than once, however, **do not place a "1" on all four- be thoughtful**. At the right, rank each of the **sub-factors** for each primary factor from 1 to 3, 1 to 4, etc.

**Primary Factors**

**Sub Factors**

- |   |  |
|---|--|
| <p><u>  2  </u> <b>Difficulty of Work</b> →</p> | <p><u>  1  </u> Complexity of Tasks<br/> <u>  3  </u> Variety of Work<br/> <u>  2  </u> Decision Making / Judgment</p>   |
| <p><u>  4  </u> <b>Work Environment</b> →</p>   | <p><u>  1  </u> Physical Effort<br/> <u>  2  </u> Working Conditions<br/> <u>  3  </u> Hazard Uncertainty</p>  |
| <p><u>  1  </u> <b>Job Knowledge</b> →</p>      | <p><u>  2  </u> Level of Education/Training<br/> <u>  3  </u> Amount of Experience<br/> <u>  1  </u> Type of knowledge, skill &amp; ability<br/> <u>  4  </u> Licenses / Certifications</p>  |
| <p><u>  2  </u> <b>Responsibility</b> →</p>     | <p><u>  2  </u> Accuracy / Consequence of Error<br/> <u>  3  </u> Supervision Exercised<br/> <u>  1  </u> Freedom to Act / Job Controls<br/> <u>  4  </u> Budget Accountability<br/> <u>  5  </u> Internal &amp; External Contacts/Customers</p> |

**Section II: External Parity** (These issues typically affect pay policy and practice. In your opinion, which of these should be considered most important by management as they consider setting policy or practice? Value them from 1 to 6, 1 being the most important. Some may be valued the same.)

- 2   Ability to Pay (size & type of business)
- 3   Organizational Philosophy (willingness to pay, attitudes about ranking among competitors)
- 1   Regional Economics (Prevailing Rates and Rates of Inflation)
- 5   Availability of Labor Supply (Demand, competition for particular skills and jobs)
- 6   Reputation of the Organization (competitiveness of pay and market recognition as high or low paying)
- 4   Pay Supplements (Incentives and Benefits)

**Section III: Contributory Value** (When receiving recognition for your contribution to the organization, you prefer it be for which of these, priority from 1 to 3.)

- 3   Longevity (Years of Service)   2   Efficiency (Timely Completion of Work)   1   Effectiveness (Volume & Quality of Work)

**Section IV: General Equity Perception** (Do you believe you are under paid when considering the following.....)

- |  |   |
|--|---|
| 1. The Value of your job to the organization?  | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes |
| 2. The pay of others within your organization performing essentially the same type of work?  | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes |
| 3. The amount of work you perform?   | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes |
| 4. The pay of others outside your organization performing essentially the same type of work? | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes |

# Factor I- Job Knowledge 40%



# American Fork

		A	B	C	D	E	F	G	H
<div style="border: 1px solid black; padding: 5px; width: fit-content;">FORMAL EDUCATION &amp; TRAINING</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content;">KNOWLEDGE, SKILLS &amp; ABILITIES</div>	Minimal Formal Education.	Graduation From High School Or GED.	High School, GED & up to 1 Year Of Job Related Training or Education.	2 Years Of Job Related Training, or Associate Degree.	4 Years of job related training, Or Bachelor's Degree.	4 yr. degree plus 1 Year Of Graduate Work.	2 Years Of Graduate Work, Masters Degree Or Equivalent.	Extensive Graduate Work Beyond Masters.
		1. Unskilled. Ability to follow simple oral instructions. Reading and performing simple mathematical computations may be required. May need a basic understanding of the use of common office equipment or basic hand and power tools.	0.62	0.68	0.72	0.78	0.82		
2. Semi-skilled. Proficiency in the use of simple equipment. Knowledge of general office procedures, practice or operations. Proficient in math, reading, keyboard operations, common office equipment or basic hand and power tools.	0.65	0.72	0.75	0.82	0.87				
	0.77	0.89	1.02	1.17	1.23				
	0.81	0.93	1.07	1.23	1.29				
3. Requires working level knowledge, skills, and abilities related to a broad range of either complex clerical or technical functions or apprentice level knowledge of a single function area or work specialization.	0.85	0.98	1.12	1.29	1.46	1.53	1.75		
	1.00	1.15	1.33	1.53	1.60	1.84			
	1.05	1.21	1.39	1.60	1.84	1.93			
4. Requires para-professional or full performance level of knowledge, skills, and abilities primarily related to a well defined discipline or vocational specialization. Journey level proficiency.	1.11	1.27	1.46	1.68	1.84	2.08	2.39		
	1.30	1.50	1.72	1.90	2.19	2.51			
	1.37	1.57	1.81	2.08	2.39	2.51			
5. Entry level professional KSA's utilizing techniques which require understanding of involved practices, principles and/or theory or mastery of a well defined discipline or vocational specialization.	1.44	1.65	1.90	2.19	2.51	2.96	3.41	3.92	4.51
		1.95	2.24	2.58	2.96	3.41	3.58	4.12	4.73
		2.05	2.35	2.71	3.11	3.58	3.76	4.32	4.97
6. Requires experienced professional level knowledge, skills, and abilities. High proficiency demonstrated through independent application of principles or theory. Creative work.		2.15	2.47	2.84	3.27	3.76	4.32	4.97	
			2.91	3.35	3.85	4.43	5.10	5.86	
			3.06	3.52	4.05	4.65	5.35	6.15	
7. Highly developed, seasoned professional. Managerial KSA's, Mastery of involved practices, precedents, theory, principles.			3.21	3.69	4.25	4.89	5.62	6.46	
				4.36	5.01	5.76	6.63	7.62	
				4.57	5.26	6.05	6.96	8.00	
			4.80	5.52	6.35	7.30			

**Additional points are awarded for required experience as a percentage of the points awarded for Job Knowledge:**

- I. Up to one (1) year of experience...5%
- II. Up to three (3) years of experience..10%
- III. Up to five (5) years of experience..20%
- IV. Up to eight (8) years of experience...30%
- V. Over eight (8) years of experience...40%

This factor measures the nature and extent of information or facts which the worker must understand to do acceptable work (e.g., steps, procedures, practices, rules, policies, theories, principles, concepts and precedents) and the nature and extent of skills/abilities necessary to apply the acquired knowledge. It also includes the amount of training required by the job prior to entry. Special requirements, certifications or licenses. **Award additional points as a percentage of the points awarded above for knowledge & training for the following:**

- I. Commercial drivers, applicator, operator licenses or specialized clerical certification...5%.**
- II. Technical license or certification...10%**
- III. Professional license or designation...20%.**
- Multiple credentials, licenses or certifications....award an additional 5%.**
- Annual or periodic recertification, testing or mandatory training requirements...award an additional 5%.**

# Factor II - Responsibility

## 35%

ACCOUNTABILITY & ACCURACY

CONTROLS OVER THE WORK

	A	B	C	D	E	F
Consequences of error produce little or no negative impact. Remedies are readily available within the context of the task being performed. Minimal loss of time to correct the error.		Errors normally result in loss of own time to correct or check. Quality of task completion impacted by need for accuracy related to repetitive tasks or operations.	Errors may result which affect one or more work group. Immediate Supervisors must remedy errors and generally assume full accountability. Impact may vary in severity.	Errors may result affecting multiple work units within a department or cause injury or operating problems difficult to correct. Financial/legal implications exist to some degree.	Errors may result affecting entire department. Consequences affect public image for an extended time period requiring considerable resources to correct. Financial/legal implications are serious.	Errors may result which affect the entire organization. Consequences severely affect organizational efficiency. Public image severely damaged. Impact demands executive action. Extensive Financial/legal implications
1. Clear, detailed and specific instructions given for both one-of-a-kind and repetitious tasks; work is closely controlled through the structured nature of the work, by circumstances in which it is performed, or through review of the supervisor.	0.94 0.98	1.16 1.22 1.28	1.51 1.58 1.66			
2. Continuing or individual assignments. Supervisor specifies limitations, quality and quantity of work expected, deadlines and priorities. There is some freedom allowed in selecting methods to be used, but are limited.	1.03 1.08 1.13	1.33 1.40 1.47	1.73 1.82 1.91			
3. The work is strictly controlled by practices and procedures which are covered by well defined policy; work is performed without direct supervision but is reviewed periodically by the supervisor.	1.18 1.24 1.30	1.53 1.61 1.69	2.00 2.09 2.20	2.59 2.72 2.86	3.37 3.54 3.72	
4. The work is subject to policies, practices, and procedures. Some freedom is allowed in the application of policy or procedure. The supervisor sets the overall objectives and identifies available resources. Employee in consultation with supervisor develops projects and deadlines.		1.76 1.85 1.95	2.29 2.41 2.53	2.98 3.13 3.29	3.88 4.07 4.28	5.04 5.29 5.56
5. Work is performed under managerial direction with the individual determining what, when, and how the work is done. Establishes unit or program goals & objectives			2.64 2.77 2.91	3.43 3.60 3.78	4.46 4.68 4.92	5.80 6.09 6.39
6. These jobs by their very nature and size, are broadly subject to general goals and objectives. Work is performed under broad guidance of policy makers. Much autonomy and freedom to act is essential to job effectiveness.				3.94 4.14 4.35	5.13 5.38 5.65	6.67 7.00

Additional points are awarded for supervisory responsibility and public contacts as a percentage of the points awarded for responsibility:

**SUPERVISION:** I. Serves as leadworker of one unit, crew, or group.....5% II. Performs as first-line supervisor. Is responsible for quality and quantity. Schedules and assigns work.....10%. III. Supervises more than one group performing similar functions. Has general responsibility for project completion.....15%. IV. Manages a department. Determines priorities. Delegates through subordinate supervisors. Hires & Disciplines.....20%. **PUBLIC CONTACTS:** I. recurring routine contacts with the public or workers in other units requiring exchange of factual information or explanation.....10% II. Contacts with people and/or managers regarding routine administrative or technical matters.....20%. III. Contacts with administrators or professionals in developing and soliciting cooperative relationships.....30% IV. Contacts with administrators with significant impact on programs, projects or policies....40%. V. Contacts with legislative, executive or judicial officials affecting the purpose of the organization...50%. **BUDGET:** I. Secondary responsibility to implement and monitor the budget of a section or division.....5%. II. Primary responsibility to prepare and administer a budget for more than one section or division, or for a department .....10%.

## Factor III- Difficulty of Work 15%

JUDGMENT & DECISIONS  
REQUIRED

COMPLEXITY & VARIETY OF  
WORK

	A	B	C	D	E	F
Little or no judgment or decisionmaking. Decisions limited to routine steps in performing well defined tasks or in determining the speed at which to perform.		Decisions are few and directly related to a well defined process. Requires some judgment in selecting variations in sequence of steps, operations or procedures.	Decisions are frequent but related to a well defined process. Judgment is required to select most suitable procedure from more than one process alternative.	Decisions are varied and based upon practice or policy. Employee required to make interpretative judgments when necessary to deviate from standard methods. Determines use of resources.	Decisions are varied based upon broad principles and guidelines. Judgment required to determine program direction and options for policy implementation.	Makes technical and complex decisions based upon research. Judgments must be made without existing guidelines. Creates policy affecting the entire organization.
1. The work consists of a few tasks or functions that are clear cut and directly related. Action to be taken or responses to be made are readily available. There is little variation in the work.	0.40 0.42	0.50 0.52 0.55				
2. The work consists of duties involving more than one sequence of steps. Variations in the work stem from differences in the source of information, kinds of transactions, entries or other factual situations.	0.44 0.46 0.49	0.57 0.60 0.63	0.74 0.78 0.82			
3. The work consists of various duties involving different processes and methods. Choices to be considered differ with the subject, phase, or issues involving each assignment.	0.51 0.53 0.56	0.66 0.69 0.73	0.86 0.90 0.94	1.11 1.17 1.23		
4. Aspects of the work involve conditions and elements that must be identified and analyzed to discern interrelationships and deviations from standards in a specialty field or discipline. Tasks require development of goals and objectives based upon existing interpretation of established policies, rules and guidelines.		0.76 0.79 0.83	0.98 1.03 1.08	1.28 1.34 1.41	1.66 1.74 1.83	2.16 2.27 2.38
5. The work consists of independent assignments with varying duties which comprise a primary level of responsibility. Factors to be considered involve the assessment of unusual circumstances, variations in approach, incomplete or conflicting data, and incompatible results. The work requires the development and implementation of program options.		0.87 0.91 0.96	1.13 1.19 1.25	1.47 1.54 1.62	1.91 2.01 2.11	2.48 2.61 2.74
6. The work consists of a variety of duties involving a broad range of activities or depth of analysis to develop and implement department or organization-wide goals and policies.				1.69 1.78 1.86	2.20 2.31 2.42	2.86 3.00

**Award additional points for stress as a percentage of points awarded for difficulty of work:** This sub-factor attempts to recognize the degree of mental or emotional fatigue or stress inherent to the job and sustained through concentration, work pressures or critical incidents (CIS syndrome). Consider the cycle, duration, and intensity sustained. Consider the need to deal with the public over controversial issues, the responsibility for problem resolution and the need to meet time deadlines. **SOME- 5% MODERATE- 10% CONSIDERABLE- 15% CRITICAL INCIDENT-20%**

# Factor IV- Work Environment 10%

PHYSICAL EFFORT

WORKING CONDITIONS

	A	B	C	D
Effort is minimal and is exerted only for short, intermitted periods. Effort involves light lifting of tools, objects, and working materials. May involve light pushing, pulling, reaching, bending. Requires normal hearing and visual acuity. Normally performs in seated position. Occasional standing for short durations.		Effort is exerted occasionally for short periods of time. Strain periodic but not prolonged. Moderate lifting, pushing, pulling, bending. More than normal visual and hearing acuity for precision work. Normally performs in abnormal sitting or standing positions. Moderate Manual dexterity required.	Effort is exerted regularly for sustained periods of time. Strain may be for frequent or moderate duration. Moderately heavy lifting, pushing, pulling. Considerable crouching, stooping or lying in prone position. Some strain on sight and hearing. Performs in abnormal positions. High Manual dexterity required.	Effort is prolonged and frequent. Strain may be extended in duration. Effort involves heavy lifting (90 lbs), pushing, pulling with excessive crouching, stooping or lying in prone position. Could involve intense strain on sight and hearing. High manual dexterity be required.
1. No observable hazards or threat to health or safety. Adequate working conditions with at least minimum environmental conditions to assure the comfort of most workers.	0.60 0.63	0.66 0.69 0.72	0.75 0.79 0.83	0.87 0.91 0.96
2. Minimum hazardous working conditions. Minor threat to health and/or safety. Generally adequate working conditions with minimum environmental conditions to assure comfort. Traveling in an automobile may be a regular part of the job.	0.74 0.78 0.82	0.85 0.89 0.94	0.98 1.03 1.08	1.13 1.18 1.24
3. Occasional exposure to hazardous work conditions (noise, fumes, heights, slippery, vibrations, moving parts, disease etc.). Moderate exposure to dust, grease, temperature changes, noise, inadequate lighting, inclement weather, etc. Periodic conditions which involve chance of injury.	0.96 1.01 1.06	1.11 1.16 1.22	1.27 1.34 1.40	1.47 1.54 1.62
4. Daily exposure to hazardous work conditions. Prolonged and frequent exposure to dust, grease, extreme temperature, or severe outdoor weather conditions. Recurring conditions which involve chance of injury.	1.25 1.32 1.38	1.44 1.51 1.59	1.66 1.74 1.83	1.90 2.00

**Hazard Uncertainty:** For positions having tasks that place employees in historically life threatening situations (i.e., Fire, Police) add 100% to the base points awarded above for work environment. For positions which require the operation of maintenance or service equipment on city roadways, add 50%. For positions requiring regular and frequent travel, whether local or regional, primarily by automobile, add 25%.

## American Fork Compensation Study

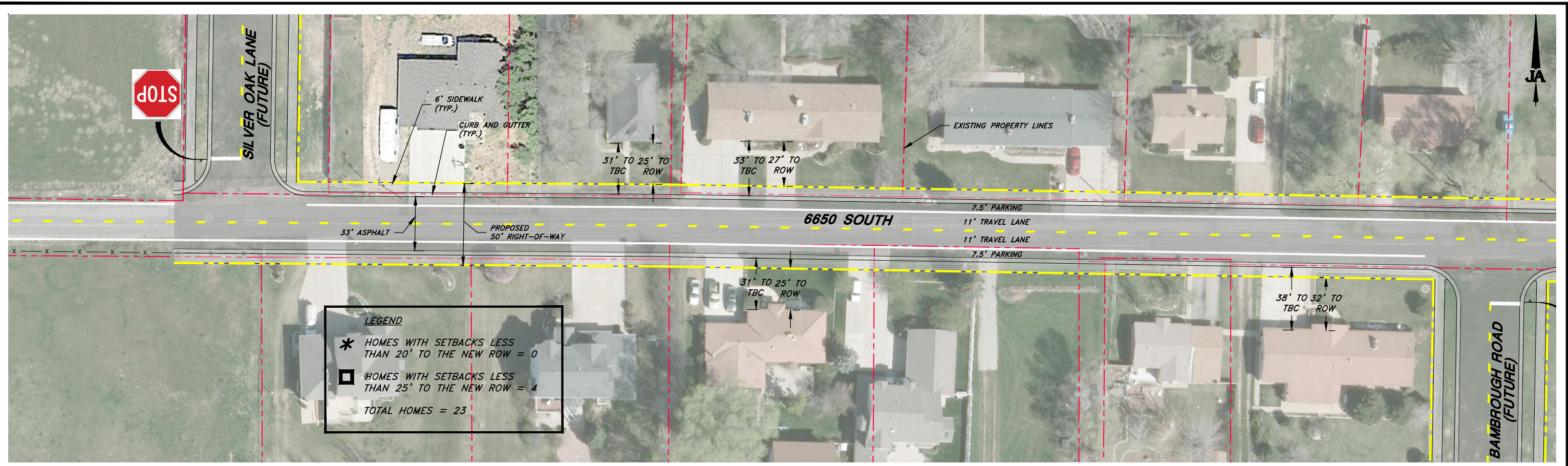
### Proposed Pay Plan

#### Hourly Pay Rates

#### Monthly Pay Rates

#### Annual Pay Rates

	Pay Range				Pay Range				Pay Range				
	Job Value	Minimum	Midpoint	Maximum	Job Value	Minimum	Midpoint	Maximum	Job Value	Minimum	Midpoint	Maximum	Range
City Administrator	26.87	\$55.67	\$69.59	\$83.51	26.87	\$9,649	\$12,062	\$14,474	26.87	\$115,794	\$144,742	\$173,691	50.00%
Police Chief	22.00	\$41.44	\$51.80	\$62.16	22.00	\$7,183	\$8,979	\$10,775	22.00	\$86,199	\$107,749	\$129,299	50.00%
Fire Chief	22.00	\$41.44	\$51.80	\$62.16	22.00	\$7,183	\$8,979	\$10,775	22.00	\$86,199	\$107,749	\$129,299	50.00%
Public Works Director	21.05	\$39.14	\$48.93	\$58.71	21.05	\$6,785	\$8,481	\$10,177	21.05	\$81,416	\$101,770	\$122,124	50.00%
Parks & Recreation Director	20.11	\$36.98	\$46.22	\$55.46	20.11	\$6,409	\$8,012	\$9,614	20.11	\$76,911	\$96,139	\$115,367	50.00%
Public Relations/Economic Development Director	18.98	\$34.54	\$43.18	\$51.81	18.98	\$5,987	\$7,484	\$8,981	18.98	\$71,845	\$89,807	\$107,768	50.00%
Assistant Fire Chief	18.72	\$34.00	\$42.50	\$51.00	18.72	\$5,893	\$7,366	\$8,839	18.72	\$70,713	\$88,392	\$106,070	50.00%
Finance/Budget Officer	18.36	\$33.26	\$41.58	\$49.89	18.36	\$5,765	\$7,207	\$8,648	18.36	\$69,184	\$86,480	\$103,777	50.00%
Library Director	18.06	\$32.67	\$40.83	\$49.00	18.06	\$5,662	\$7,077	\$8,493	18.06	\$67,943	\$84,929	\$101,915	50.00%
City Engineer/Regulatory Compliance Officer	17.80	\$32.16	\$40.20	\$48.24	17.80	\$5,575	\$6,968	\$8,362	17.80	\$66,896	\$83,620	\$100,345	50.00%
Deputy Police Chief	17.51	\$31.60	\$39.51	\$47.41	17.51	\$5,478	\$6,848	\$8,217	17.51	\$65,737	\$82,171	\$98,605	50.00%
Human Resource Director	17.10	\$30.83	\$38.53	\$46.24	17.10	\$5,343	\$6,679	\$8,015	17.10	\$64,118	\$80,148	\$96,178	50.00%
Planning Director	17.05	\$30.72	\$38.40	\$46.08	17.05	\$5,325	\$6,656	\$7,987	17.05	\$63,897	\$79,871	\$95,845	50.00%
Battalion Chief/Fire Marshal	16.80	\$30.26	\$37.83	\$45.39	16.80	\$5,245	\$6,557	\$7,868	16.80	\$62,944	\$78,680	\$94,416	50.00%
IT/Broadband Director	16.34	\$29.44	\$36.80	\$44.16	16.34	\$5,103	\$6,379	\$7,655	16.34	\$61,242	\$76,552	\$91,863	50.00%
Police Lieutenant	16.06	\$28.95	\$36.18	\$43.42	16.06	\$5,017	\$6,271	\$7,526	16.06	\$60,206	\$75,258	\$90,309	50.00%
Chief Building Official	15.46	\$27.90	\$34.88	\$41.86	15.46	\$4,837	\$6,046	\$7,255	15.46	\$58,042	\$72,552	\$87,063	50.00%
Police Sergeant	14.55	\$26.41	\$33.01	\$39.62	14.55	\$4,578	\$5,723	\$6,867	14.55	\$54,936	\$68,670	\$82,404	50.00%
Street Superintendent	14.38	\$26.15	\$32.69	\$39.23	14.38	\$4,533	\$5,666	\$6,800	14.38	\$54,398	\$67,998	\$81,597	50.00%

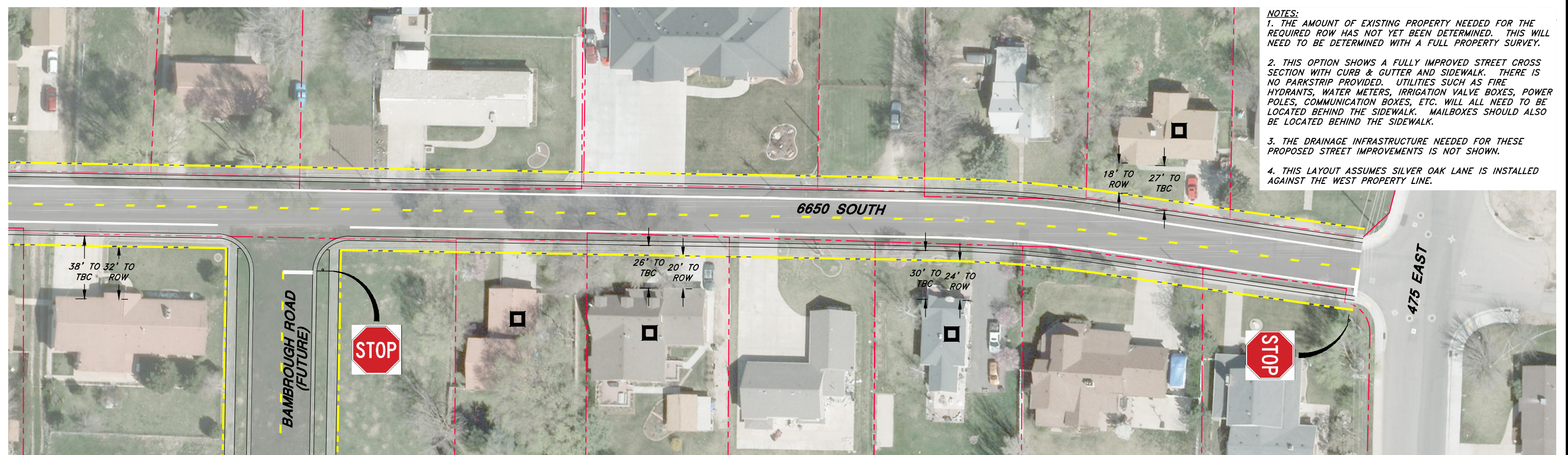


**LEGEND**

\* HOMES WITH SETBACKS LESS THAN 20' TO THE NEW ROW = 0

□ HOMES WITH SETBACKS LESS THAN 25' TO THE NEW ROW = 4

TOTAL HOMES = 23



**NOTES:**

1. THE AMOUNT OF EXISTING PROPERTY NEEDED FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
2. THIS OPTION SHOWS A FULLY IMPROVED STREET CROSS SECTION WITH CURB & GUTTER AND SIDEWALK. THERE IS NO PARKSTRIP PROVIDED. UTILITIES SUCH AS FIRE HYDRANTS, WATER METERS, IRRIGATION VALVE BOXES, POWER POLES, COMMUNICATION BOXES, ETC. WILL ALL NEED TO BE LOCATED BEHIND THE SIDEWALK. MAILBOXES SHOULD ALSO BE LOCATED BEHIND THE SIDEWALK.
3. THE DRAINAGE INFRASTRUCTURE NEEDED FOR THESE PROPOSED STREET IMPROVEMENTS IS NOT SHOWN.
4. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.

PROJECT ENGINEER				
DATE	REV.	DATE	APPR.	FILE NAME: C:\

SCALE:  
HORIZ.  
1" = 60'

DESIGNED BKJ  
DRAWN TWE  
CHECKED BKJ

**JA**  
**JONES & ASSOCIATES**

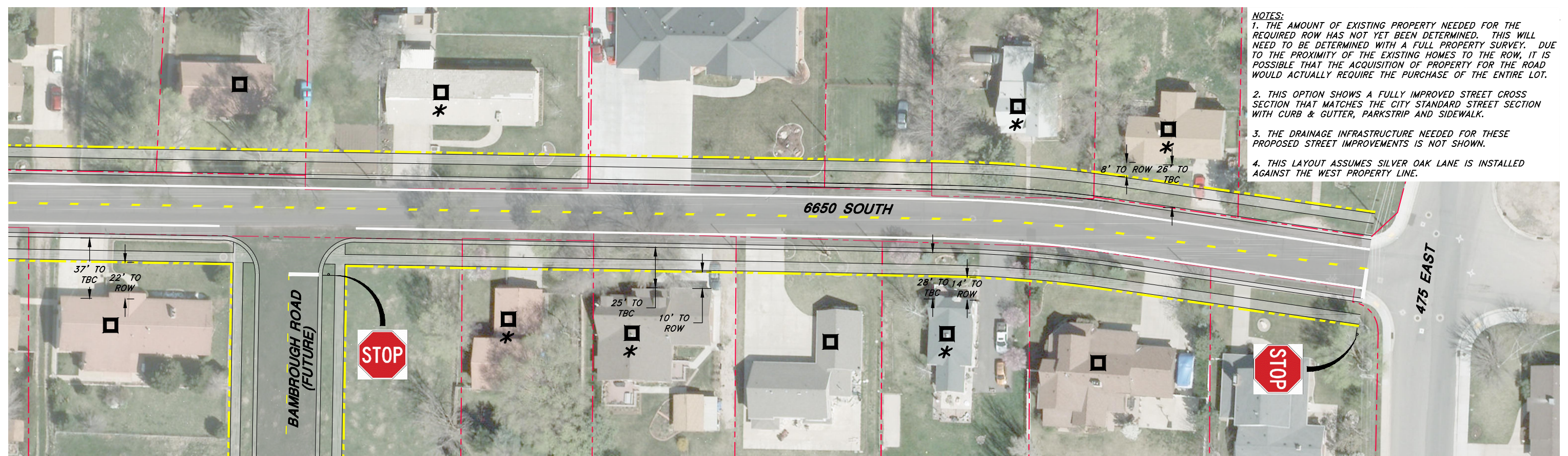
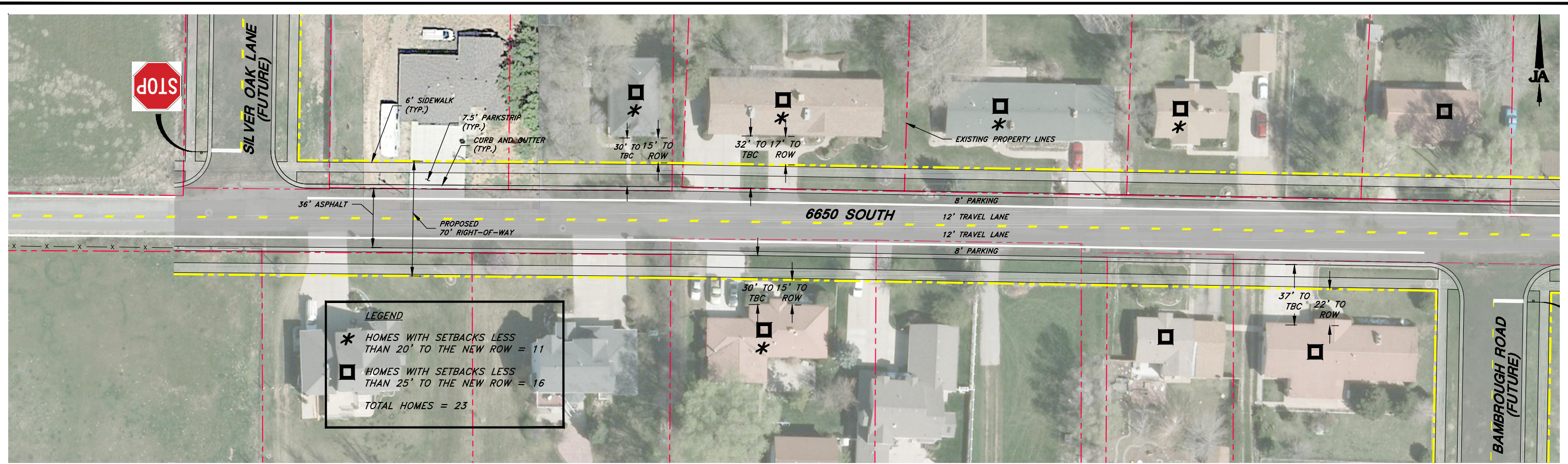
**CONSULTING ENGINEERS**

1716 East 5600 South  
South Ogden, Utah 84403 (801) 476-9767

**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 1A - WIDENING (50' ROW)**





PROJECT ENGINEER	REV.	DATE	APPR.	FILE NAME: C:\
DATE				

SCALE:  
HORZ.  
1" = 60'

DESIGNED *BKJ*  
DRAWN *TWE*  
CHECKED *BKJ*

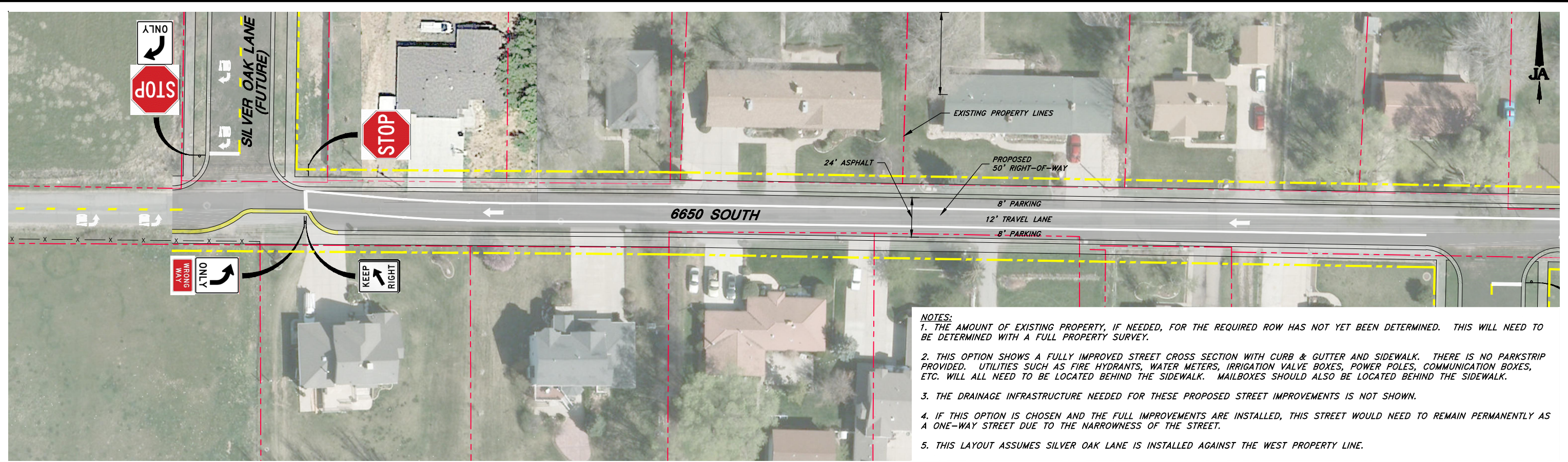
**JA**  
**JONES & ASSOCIATES**

**CONSULTING ENGINEERS**

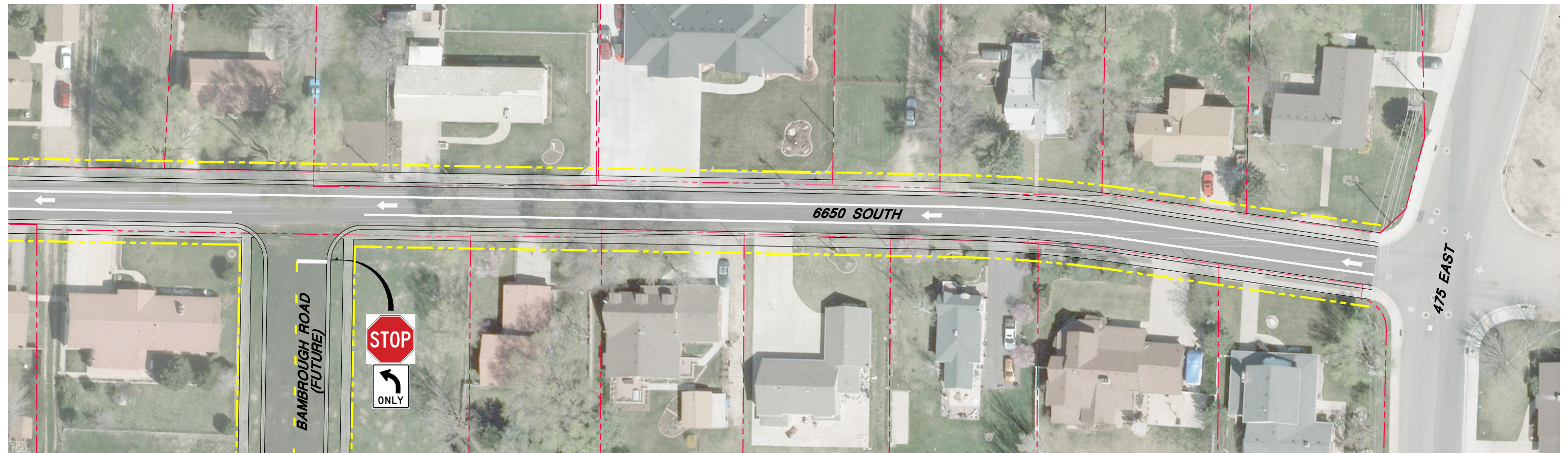
1716 East 5600 South  
South Ogden, Utah 84403 (801) 476-9767

**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 1B - WIDENING (70' ROW)**



- NOTES:**
1. THE AMOUNT OF EXISTING PROPERTY, IF NEEDED, FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
  2. THIS OPTION SHOWS A FULLY IMPROVED STREET CROSS SECTION WITH CURB & GUTTER AND SIDEWALK. THERE IS NO PARKSTRIP PROVIDED. UTILITIES SUCH AS FIRE HYDRANTS, WATER METERS, IRRIGATION VALVE BOXES, POWER POLES, COMMUNICATION BOXES, ETC. WILL ALL NEED TO BE LOCATED BEHIND THE SIDEWALK. MAILBOXES SHOULD ALSO BE LOCATED BEHIND THE SIDEWALK.
  3. THE DRAINAGE INFRASTRUCTURE NEEDED FOR THESE PROPOSED STREET IMPROVEMENTS IS NOT SHOWN.
  4. IF THIS OPTION IS CHOSEN AND THE FULL IMPROVEMENTS ARE INSTALLED, THIS STREET WOULD NEED TO REMAIN PERMANENTLY AS A ONE-WAY STREET DUE TO THE NARROWNESS OF THE STREET.
  5. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.



PROJECT ENGINEER				
DATE	REV.	DATE	APPR.	FILE NAME: C:\

SCALE:  
 HORZ.  
 1" = 60'

DESIGNED BKJ  
 DRAWN TWE  
 CHECKED BKJ

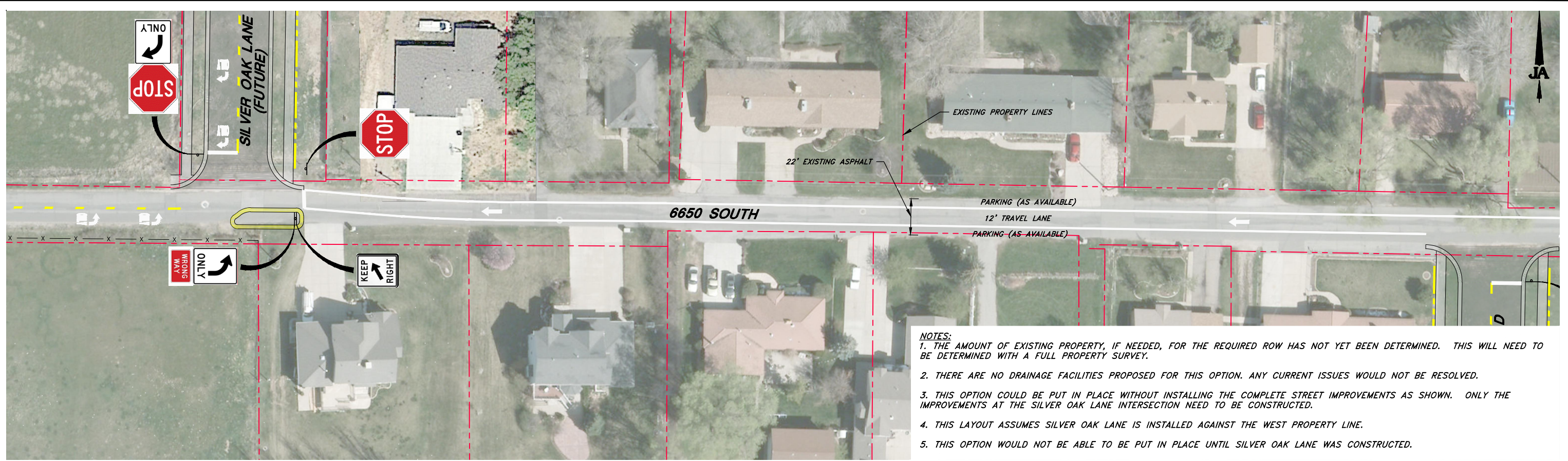
**JA**  
**JONES & ASSOCIATES**

CONSULTING ENGINEERS

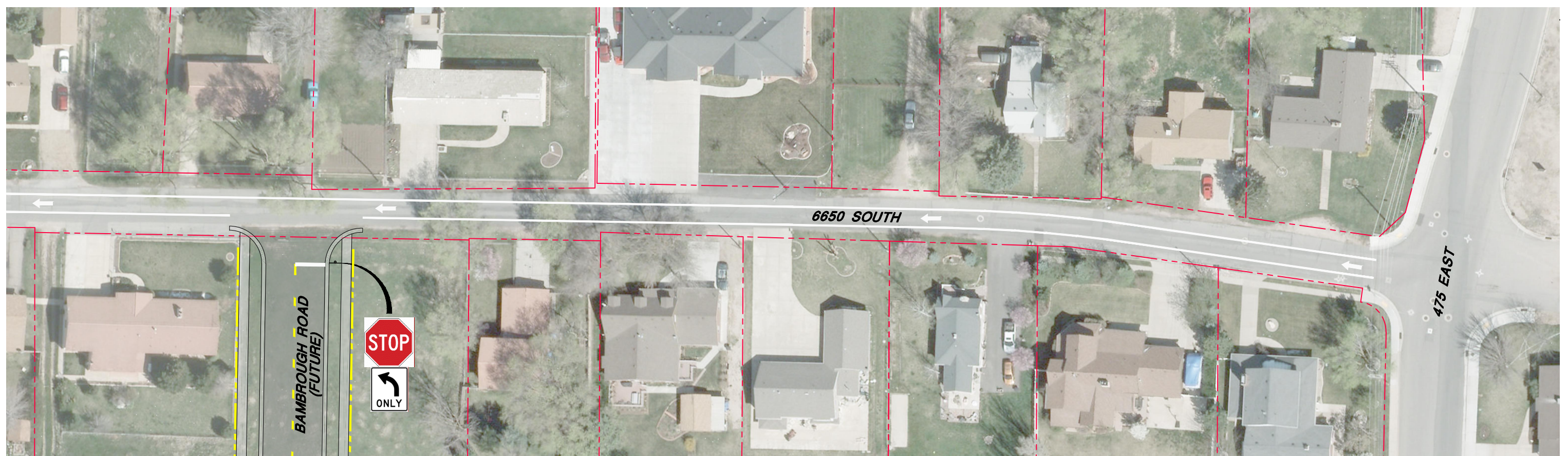
1716 East 5600 South  
 South Ogden, Utah 84403 (801) 476-9767

**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 2 - ONE-WAY STREET (WESTBOUND)**



- NOTES:**
1. THE AMOUNT OF EXISTING PROPERTY, IF NEEDED, FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
  2. THERE ARE NO DRAINAGE FACILITIES PROPOSED FOR THIS OPTION. ANY CURRENT ISSUES WOULD NOT BE RESOLVED.
  3. THIS OPTION COULD BE PUT IN PLACE WITHOUT INSTALLING THE COMPLETE STREET IMPROVEMENTS AS SHOWN. ONLY THE IMPROVEMENTS AT THE SILVER OAK LANE INTERSECTION NEED TO BE CONSTRUCTED.
  4. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.
  5. THIS OPTION WOULD NOT BE ABLE TO BE PUT IN PLACE UNTIL SILVER OAK LANE WAS CONSTRUCTED.



PROJECT ENGINEER			
DATE	REV.	DATE	APPR.
			FILE NAME: C:\

SCALE:  
 HORZ.  
 1" = 60'

DESIGNED BKJ  
 DRAWN TWE  
 CHECKED BKJ

**JA**  
**JONES & ASSOCIATES**

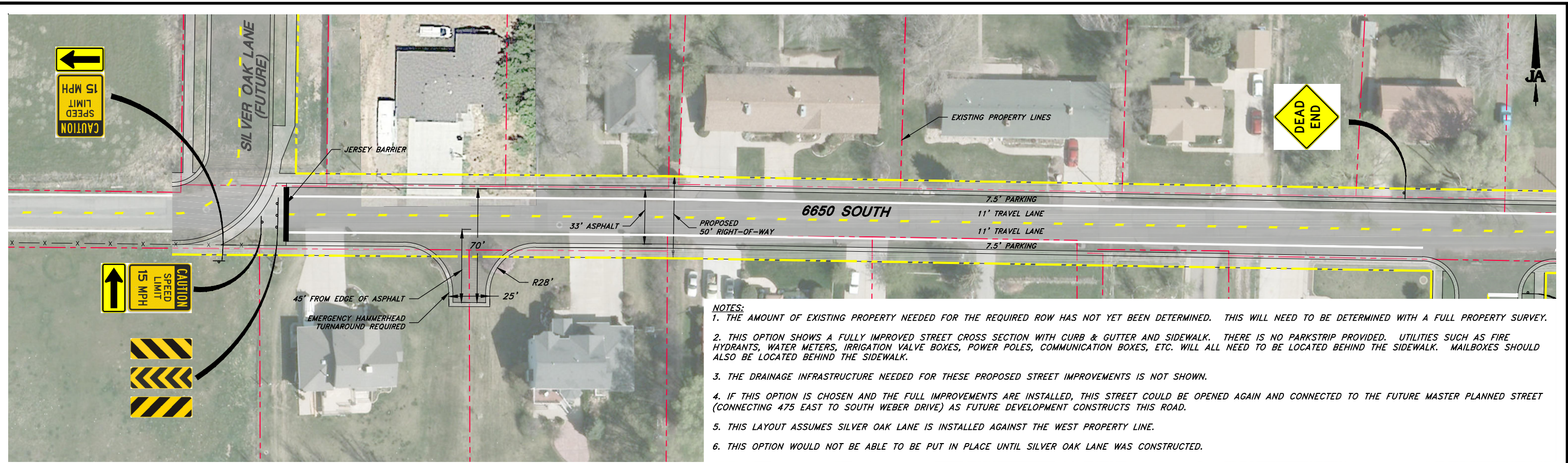
CONSULTING ENGINEERS

1716 East 5600 South  
 South Ogden, Utah 84403 (801) 476-9767

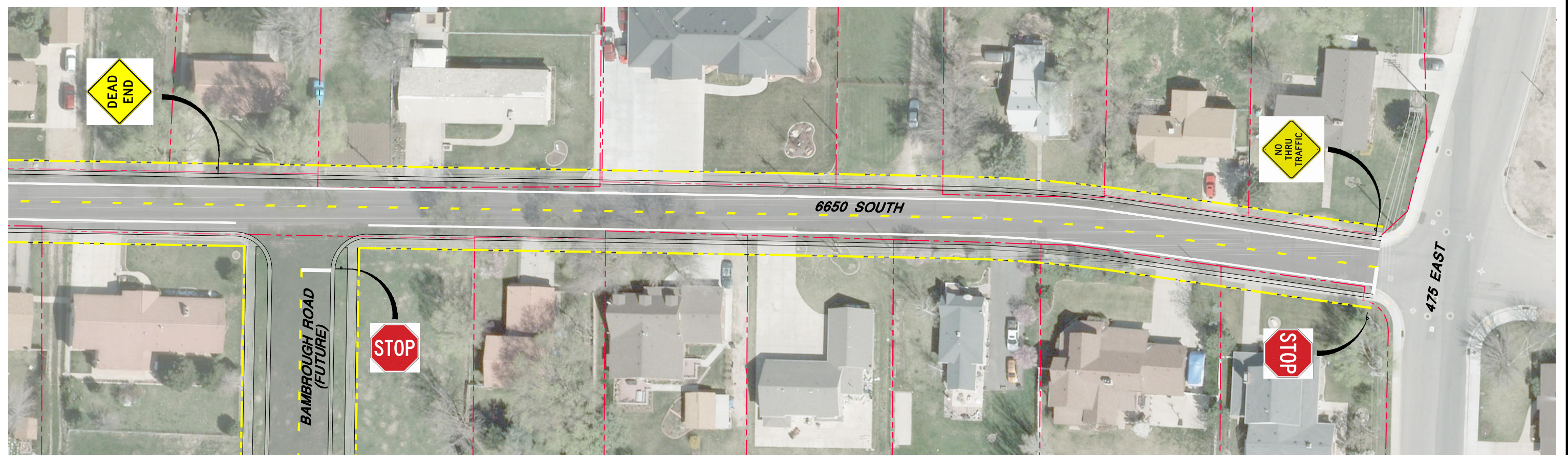
**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 2a - ONE-WAY STREET (REQD. IMPROVEMENTS ONLY)**

SHEET:  
**2a**  
 OF X SHEETS  
 0



- NOTES:**
1. THE AMOUNT OF EXISTING PROPERTY NEEDED FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
  2. THIS OPTION SHOWS A FULLY IMPROVED STREET CROSS SECTION WITH CURB & GUTTER AND SIDEWALK. THERE IS NO PARKSTRIP PROVIDED. UTILITIES SUCH AS FIRE HYDRANTS, WATER METERS, IRRIGATION VALVE BOXES, POWER POLES, COMMUNICATION BOXES, ETC. WILL ALL NEED TO BE LOCATED BEHIND THE SIDEWALK. MAILBOXES SHOULD ALSO BE LOCATED BEHIND THE SIDEWALK.
  3. THE DRAINAGE INFRASTRUCTURE NEEDED FOR THESE PROPOSED STREET IMPROVEMENTS IS NOT SHOWN.
  4. IF THIS OPTION IS CHOSEN AND THE FULL IMPROVEMENTS ARE INSTALLED, THIS STREET COULD BE OPENED AGAIN AND CONNECTED TO THE FUTURE MASTER PLANNED STREET (CONNECTING 475 EAST TO SOUTH WEBER DRIVE) AS FUTURE DEVELOPMENT CONSTRUCTS THIS ROAD.
  5. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.
  6. THIS OPTION WOULD NOT BE ABLE TO BE PUT IN PLACE UNTIL SILVER OAK LANE WAS CONSTRUCTED.



PROJECT ENGINEER				
DATE	REV.	DATE	APPR.	FILE NAME: C:\

SCALE:  
HORZ.  
1" = 60'

DESIGNED BKJ  
DRAWN TWE  
CHECKED BKJ

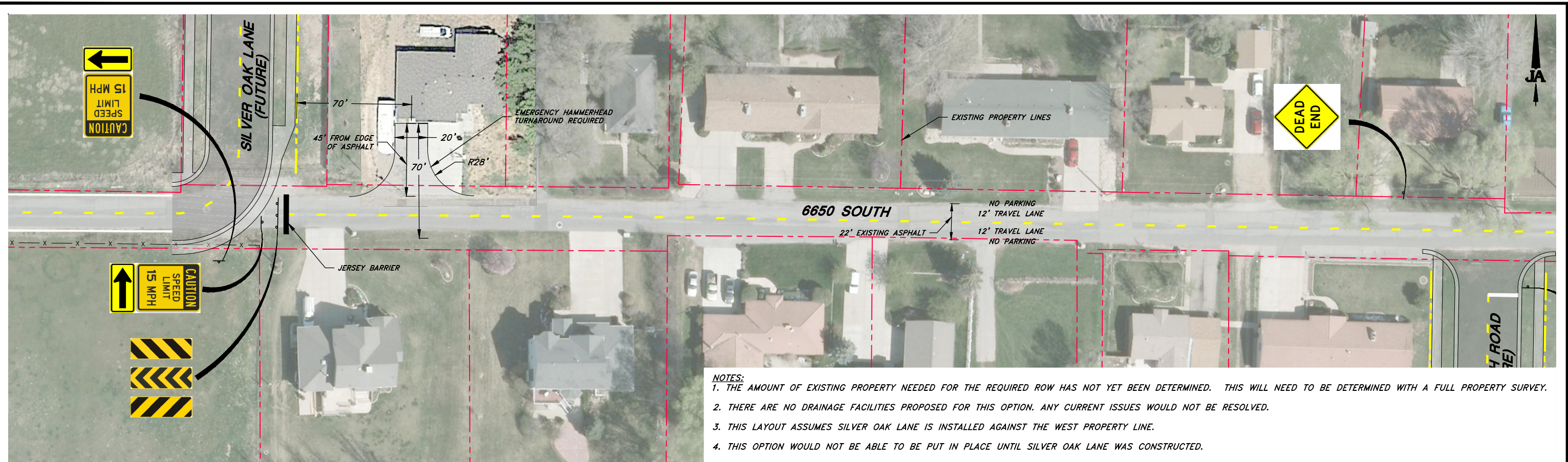
**JA**  
**JONES & ASSOCIATES**

**CONSULTING ENGINEERS**

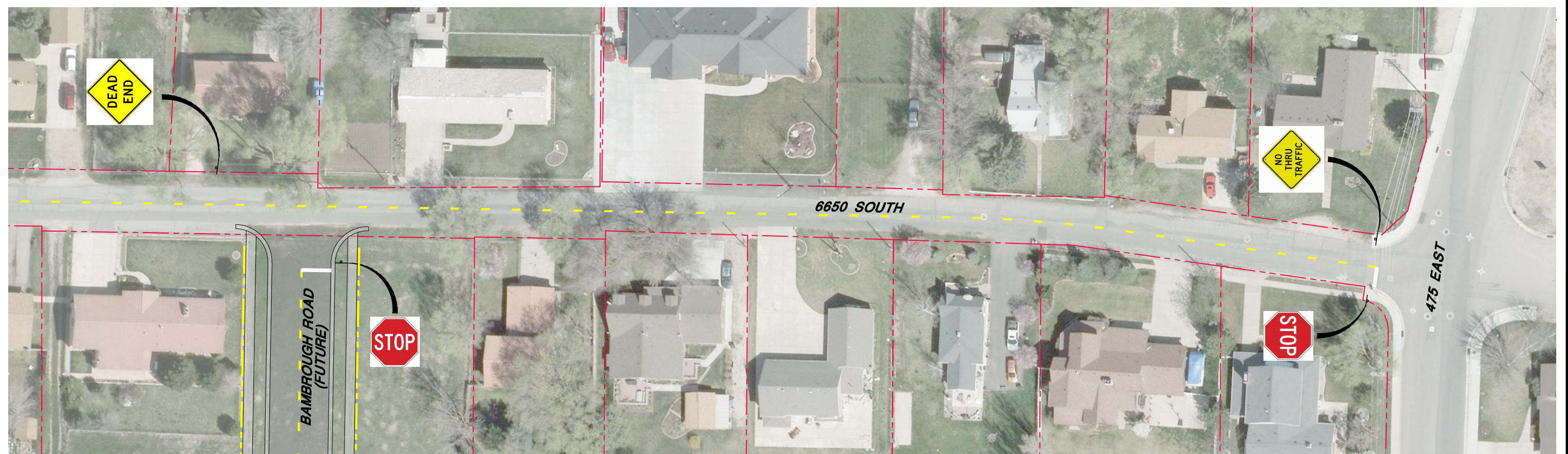
1716 East 5600 South  
South Ogden, Utah 84403 (801) 476-9767

**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 3 - DEAD END (50' ROW)**



- NOTES:**
1. THE AMOUNT OF EXISTING PROPERTY NEEDED FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
  2. THERE ARE NO DRAINAGE FACILITIES PROPOSED FOR THIS OPTION. ANY CURRENT ISSUES WOULD NOT BE RESOLVED.
  3. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.
  4. THIS OPTION WOULD NOT BE ABLE TO BE PUT IN PLACE UNTIL SILVER OAK LANE WAS CONSTRUCTED.



PROJECT ENGINEER				
DATE	REV.	DATE	APPR.	FILE NAME: C:\

SCALE:  
HORZ.  
1" = 60'

DESIGNED BKJ  
DRAWN TWE  
CHECKED BKJ



**CONSULTING ENGINEERS**

1716 East 5600 South  
South Ogden, Utah 84403 (801) 476-9767

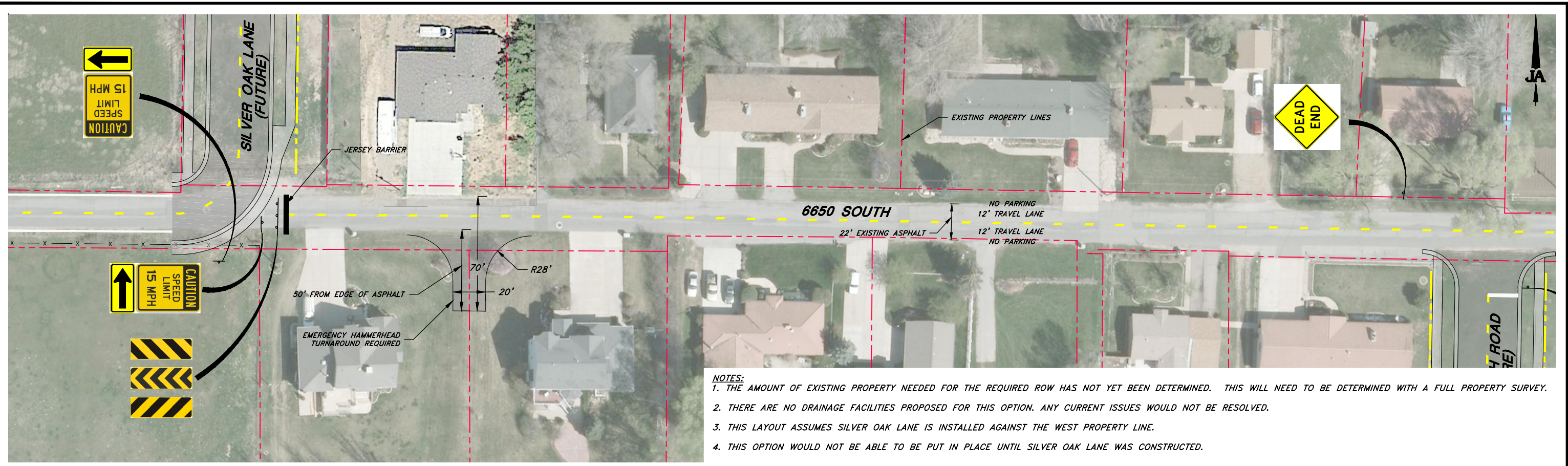
**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 3a (Alt.) - DEAD END (REQD. IMPROVEMENTS ONLY)**

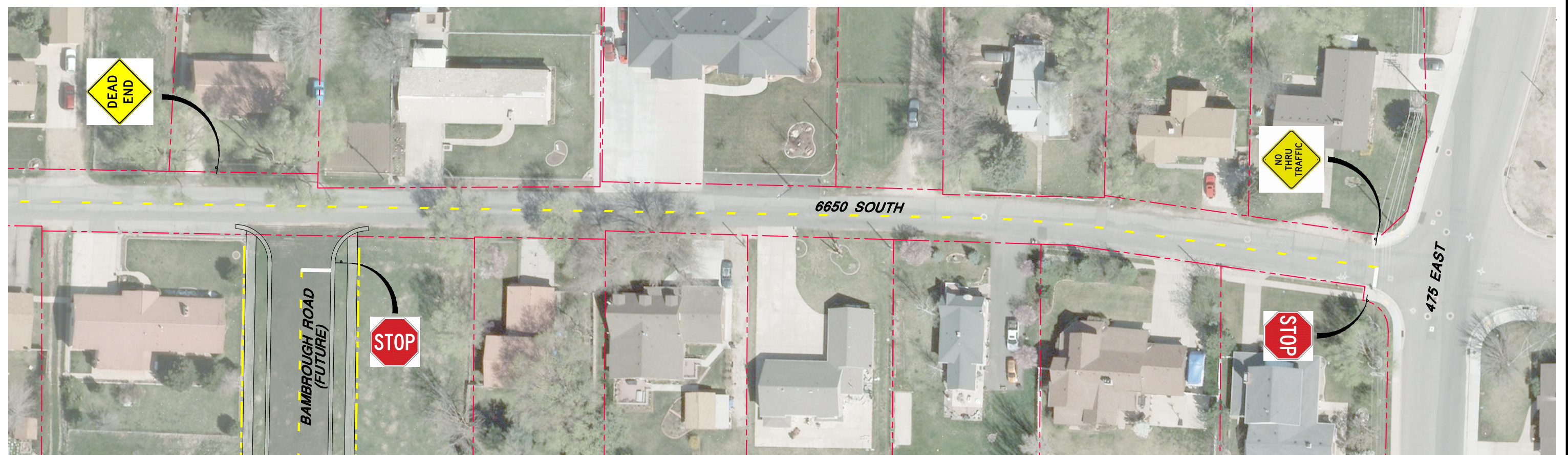
SHEET:

**3a**

OF X SHEETS  
0



- NOTES:**
1. THE AMOUNT OF EXISTING PROPERTY NEEDED FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
  2. THERE ARE NO DRAINAGE FACILITIES PROPOSED FOR THIS OPTION. ANY CURRENT ISSUES WOULD NOT BE RESOLVED.
  3. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.
  4. THIS OPTION WOULD NOT BE ABLE TO BE PUT IN PLACE UNTIL SILVER OAK LANE WAS CONSTRUCTED.



PROJECT ENGINEER			
DATE	REV.	DATE	APPR.
			FILE NAME: C:\

SCALE:  
 HORZ.  
 1" = 60'

DESIGNED BKJ  
 DRAWN TWE  
 CHECKED BKJ

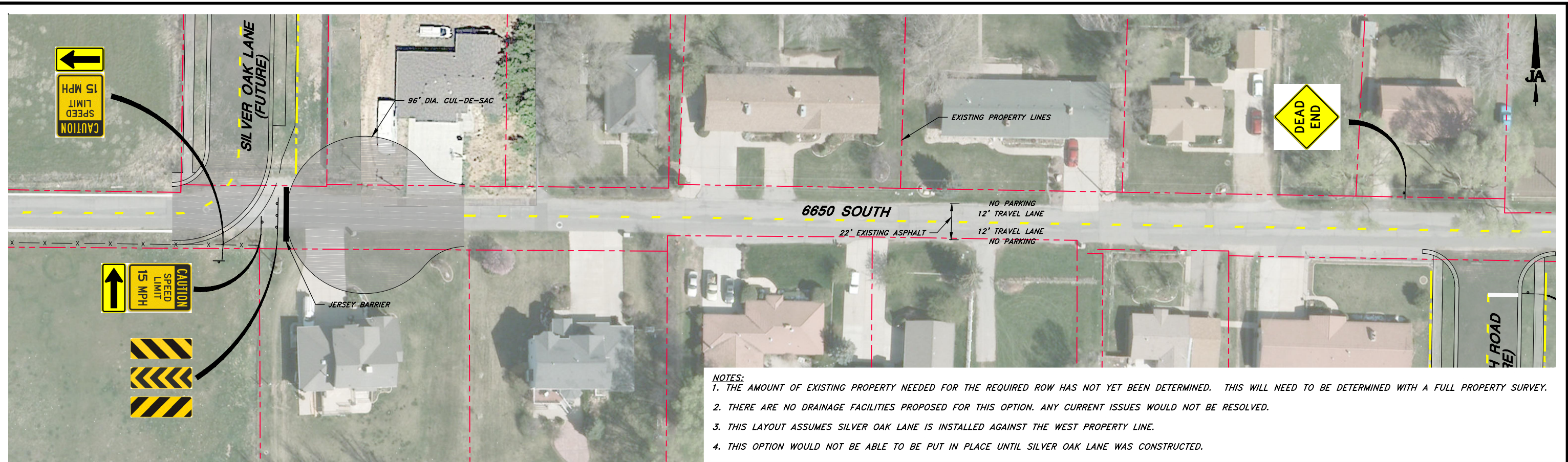
**JA**  
**JONES & ASSOCIATES**

CONSULTING ENGINEERS

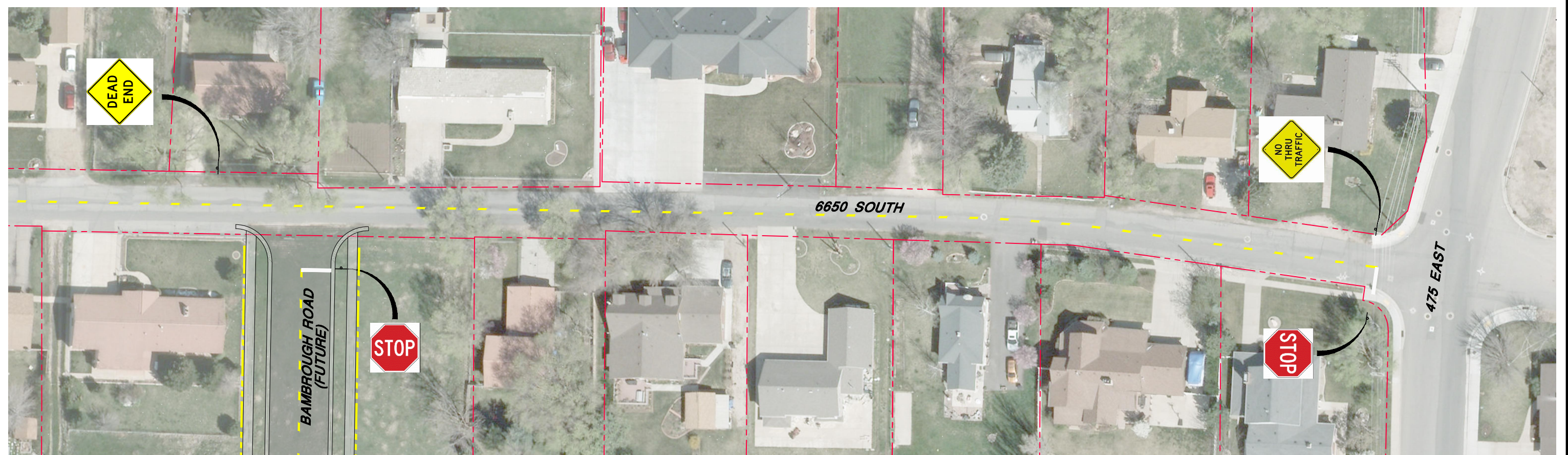
1716 East 5600 South  
 South Ogden, Utah 84403 (801) 476-9767

**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 3a - DEAD END (REQD. IMPROVEMENTS ONLY)**



- NOTES:**
1. THE AMOUNT OF EXISTING PROPERTY NEEDED FOR THE REQUIRED ROW HAS NOT YET BEEN DETERMINED. THIS WILL NEED TO BE DETERMINED WITH A FULL PROPERTY SURVEY.
  2. THERE ARE NO DRAINAGE FACILITIES PROPOSED FOR THIS OPTION. ANY CURRENT ISSUES WOULD NOT BE RESOLVED.
  3. THIS LAYOUT ASSUMES SILVER OAK LANE IS INSTALLED AGAINST THE WEST PROPERTY LINE.
  4. THIS OPTION WOULD NOT BE ABLE TO BE PUT IN PLACE UNTIL SILVER OAK LANE WAS CONSTRUCTED.



PROJECT ENGINEER				
DATE	REV.	DATE	APPR.	FILE NAME: C:\

SCALE:  
HORZ.  
1" = 60'

DESIGNED BKJ  
DRAWN TWE  
CHECKED BKJ



**CONSULTING ENGINEERS**

1716 East 5600 South  
South Ogden, Utah 84403 (801) 476-9767

**SOUTH WEBER CITY CORPORATION**  
**6650 SOUTH IMPROVEMENT OPTIONS**

**OPTION 3b - DEAD END (50' ROW) (CUL-DE-SAC)**

SHEET:  
**3b**  
OF X SHEETS  
0

# 6650 South - Open House Survey Summary

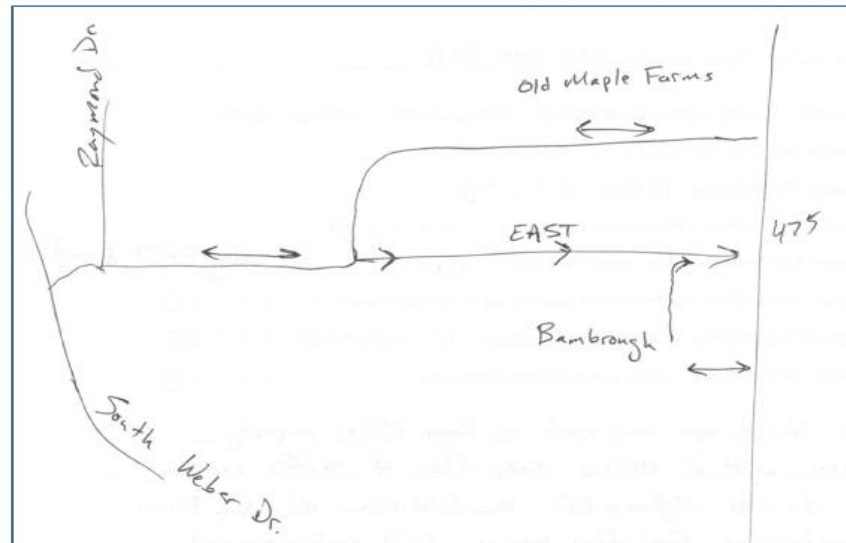
#	Name	Option 1A	Option 1B	Option 2	Option 2A	Option 3	Option 3a *	Option 3b
		Widening - 50' ROW	Widening - 70' ROW	One-Way - Full Improvements	One-Way - Minimal Improvements	Dead End, Hammerhead Turnaround - Full Improvements	Dead End, Hammerhead Turnaround - Minimal Improvements	Dead End, Cul-de- sac - Minimal Improvements
1	Tony Moses 6458 Raymond Rd	1	1	1	5	1	1	1
2	Tim Grubb 6926 S 475 East						5	
3	Jarrel Coy 401 E 6650 S	1	1	1	1	1	5	1
4	Jaron Alberts 296 E 6650 S	1	1	1	3	1	5	1
5	Delene Hyde 349 E 6650 S						5	
6	LaRae Harper 324 E 6650 S						5	
7	S Swedin 2204 E 7400 S		4					
8	Kent & Cheryl Bambrough 390 E 6650 S						5	
9	Roger Miller 291 E 6650 S						5	
<b>Total Votes</b>		3	7	3	9	3	36	3
<b>Average votes (Blanks as 0)</b>		0.33	0.78	0.33	1.00	0.33	4.00	0.33

*\* See comments on Page 2. Several requested showing the hammerhead turnaround on the Hyde's property. This would not comply with distances required by the Fire Code. Therefore, there is no drawing that depicts this. There was a comment about having the hammerhead turnaround on the north side of the street. Drawing 3a (Alt.) depicts this option. However, it was not one of the drawings presented at the Open House.*



## 6650 South - Open House Survey COMMENTS

#	Name	COMMENTS
1	Tony Moses 6458 Raymond Rd	Start one way east at Roger Miller Property, two-way west of Millers. Keep Flow of Traffic heading EAST to the highway exit. New subdivision Old Maple Farms & Mabroughs East flow leaving. Limit confusion and having west traffic flowing through Old Maple Farms. See Diagram Below
2	Tim Grubb 6926 S 475 East	The turnaround needs to be on the north side of the road on the Alberts property - west side of their driveway
3	Jarrel Coy 401 E 6650 S	
4	Jaron Alberts 296 E 6650 S	
5	Delene Hyde 349 E 6650 S	3A with Hammerhead on Hyde's pasture
6	LaRae Harper 324 E 6650 S	Move hammerhead to Hyde's property
7	S Swedin 2204 E 7400 S	
8	Kent & Cheryl Bamrough 390 E 6650 S	A dead end that doesn't encroach on our neighbors property would be ideal. Move the hammerhead to the Hyde's property
9	Roger Miller 291 E 6650 S	Move hammerhead from proposed place to Hyde's property



Tony Moses Diagram



To: SOUTH WEBER FIRE DEPARTMENT
1600 EAST SOUTH WEBER DRIVE
SOUTH WEBER, UT 84405

DATE: 1/5/2017

We hereby propose and agree to furnish, after your acceptance of this proposal and the proper execution by the South Weber Fire Department, hereinafter called the BUYER and an officer of Rosenbauer South Dakota, LLC, hereinafter called the COMPANY, the following apparatus and equipment:

ROSENBAUER STOCK # 16318 PUMPER APPARATUS BODY MANUFACTURED BY ROSENBAUER SOUTH DAKOTA, LLC AND SPECIFIED EQUIPMENT MOUNTED ON A ROSENBAUER COMMANDER CHASSIS

TOTAL ... \$411,785.00

FOUR HUNDRED ELEVEN THOUSAND SEVEN HUNDRED EIGHTY FIVE DOLLARS

All of which are to be built in accordance with the specifications, clarifications and exceptions attached, and which are made a part of this agreement and contract.

DELIVERY: The estimated delivery time for the completed apparatus, is to be made 60 days after receipt of and approval of this contract duly executed, (chassis must arrive within days or delivery may be delayed), subject to all causes beyond the Company's control.

PAYMENT TERMS: Final payment for the apparatus shall be made at time of delivery or pick up of the completed vehicle. It is the responsibility of the Buyer to have full payment ready when the apparatus is complete and ready to deliver.

MISCELLANEOUS PROVISIONS: This agreement shall be construed in accordance with the laws of the State of South Dakota. The parties agree that any litigation arising from or in connection with any dispute between the parties under this agreement shall be venued in South Dakota.

NOTE\* 1.) THIS IS A STOCK UNIT AND IS SUBJECT TO PRIOR SALE ON A FIRST COME FIRST SERVE BASIS.

The amount in this proposal shall remain firm for a period of 30 days from the date of same.

Respectfully submitted,

DEALER: GRAHAM FIRE APPARATUS
SALES REP: [Signature]
KENT GRAHAM

BUYER:
We accept the above proposal and enter into contract with signature below.
Title
Title
Date

After company receipt of this document signed by the Buyer, the document will be reviewed and upon approval, countersigned by the Company thereby putting the document in force.

ROSENBAUER SOUTH DAKOTA, LLC
Title
Date

www.rosenbaueramerica.com info@rosenbaueramerica.com

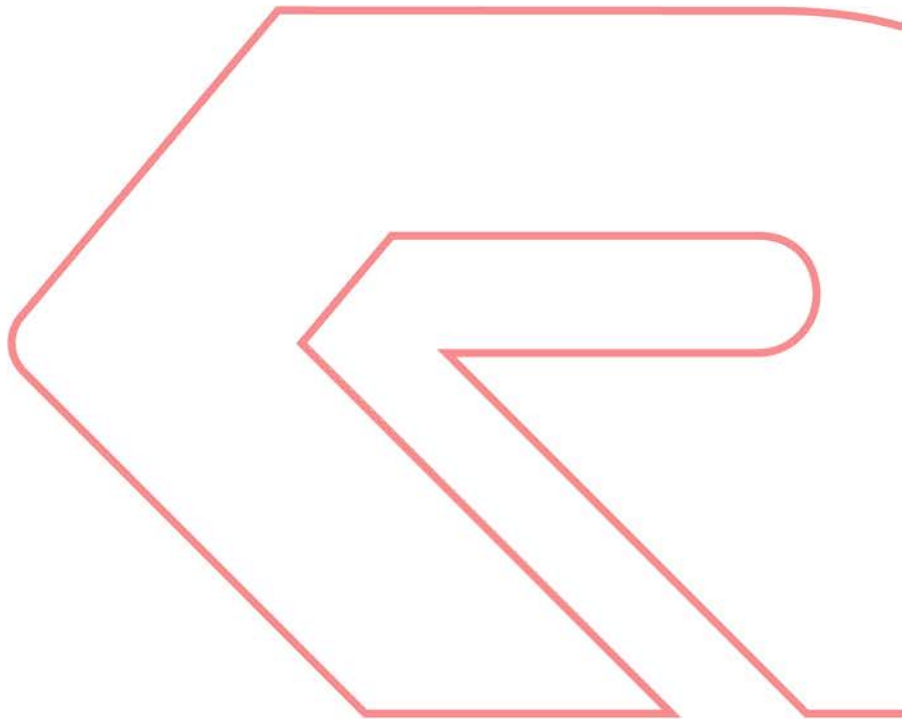
ROSENBAUER SOUTH DAKOTA, LLC. 100 THIRD STREET LYONS, SOUTH DAKOTA 57041
ROSENBAUER MINNESOTA, LLC. 5181 260TH STREET WYOMING, MINNESOTA 55082
ROSENBAUER MOTORS, LLC. 5190 260TH STREET WYOMING, MINNESOTA 55082
ROSENBAUER AERIALS, LLC. 870 SOUTH BROAD STREET FREMONT, NEBRASKA 68025

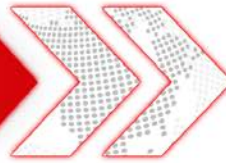
The logo for Rosenbauer Firefighting Technology. It features the word "rosenbauer" in a bold, white, lowercase sans-serif font. Below it, the words "Firefighting Technology" are written in a smaller, white, italicized sans-serif font. The text is set against a solid red background that is part of a larger graphic element consisting of two overlapping chevron shapes pointing to the right. The front chevron is solid red, and the back one is white with a grey dot pattern.

**rosenbauer**  
*Firefighting Technology*

**DEPARTMENT NAME**

**BID #**





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## **CHASSIS SPECIFICATION**

### **NFPA 2009 STANDARDS**

This unit shall comply with the NFPA standards effective January 1, 2009.

Certification of slip resistance of all stepping, standing and walking surfaces shall be supplied with delivery of the apparatus.

A plate that is highly visible to the driver while seated shall be provided which states the overall height, length, and gross vehicle weight rating.

The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company shall designate, in writing, which is qualified to witness and certify test results.

### **PAINT WARRANTY TEN YEAR**

The PPG paint performance guarantee will cover the areas of the vehicle finished with the specified product for a period of TEN (10) years beginning the day the vehicle is delivered to the purchaser.

The areas as outlined on the guarantee certificate will be covered for the following paint failures:

#### **Guarantee Inclusions:**

Full apparatus body manufactured and painted by Rosenbauer America. LLC:

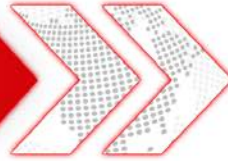
1. Peeling or delaminating of the topcoat and/or other layers of paint.
2. Cracking or checking.
3. Loss of gloss caused by cracking, checking, or hazing.
4. Any paint failure caused by defective PPG Fleet Finishes, which are covered by this guarantee.

All guarantee exclusions, limitations, and methods of claims are covered in the full certificate provided to the original purchaser.

Note: Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

### **CAB STRUCTURE WARRANTY**

The cab structure shall be warranted for a period of ten (10) years with the complete detail of the warranty outlined in a document provided upon request.



### **TRANSMISSION WARRANTY**

The Allison EVS transmission shall be warranted for a period of five (5) years with the complete detail of the warranty outlined in a document provided upon request.

### **ENGINE WARRANTY**

The Cummins engine shall be warranted for a period of five (5) years or 100,000 miles, which ever comes first, with the complete detail of the warranty outlined in a document provided upon request.

### **FRAME WARRANTY**

The frame and cross members shall carry a lifetime warranty with the complete detail of the warranty outlined in a document provided upon request.

### **REAR AXLE WARRANTY**

The rear axle shall be warranted by Meritor for two (2) years with unlimited miles under the general service application.

### **CAB AND CHASSIS WARRANTY**

The cab and chassis shall carry a twenty-four (24) month warranty providing limited parts and labor from the date the complete apparatus is delivered to the end user. The complete detail of the warranty shall be outlined in a document provided upon request.

### **STATIC LOAD SEAT TEST INFORMATION**

This model of seat shall have successfully completed the static load tests set forth by FMVSS 207/210. This testing shall include a simultaneous forward load of 3000 pounds each on the lap and shoulder belts and twenty (20) times the weight through the center of gravity. This model of seat installed in the cab model, as specified, shall have successfully completed the dynamic sled testing using FMVSS 208 as a guide with the following accommodations. In order to reflect the larger size outfitted firefighters, the test dummy used shall be a 95th percentile hybrid III male weighing 225 pounds rather than the 50th percentile male dummy weighing 165 pounds as referenced in FMVSS 208.

The materials used in construction of the seat shall also have successfully completed testing with regard to the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which dictates the allowable burning rate of materials in the occupant compartments of motor vehicles.

### **CAB TEST INFORMATION**

The cab as built shall have successfully completed the pre-load side impact, static roof load application and frontal impact without encroachment to the occupant survival space when tested in accordance with Section 4 of SAE J2420 COE Frontal Strength Evaluation Dynamic Loading Heavy Trucks, Section 5 of SAE J2422 Cab Roof Strength Evaluation Quasi –Static Loading Heavy Trucks and ECE R29 Uniform Provisions Concerning the Approval of Vehicles with regard to the Protection of the Occupants of the Cab of a Commercial Vehicles Annex 3 Paragraph 5.



The above tests shall have been witnessed by and attested to by an independent third party. The test results shall have been recorded using cameras, high speed imagers, accelerometers and strain gauges.

Documentation of the testing shall be provided upon request.

### **CAB INTEGRITY CERTIFICATION**

The manufacturer shall provide a cab crash test certification with this proposal including SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading for Heavy Trucks and SAE J2420 COE Frontal Strength Evaluation - Dynamic Load for Heavy Trucks.

### **CAB TEST INFORMATION**

#### **Roof Crush**

The cab shall be subjected to a roof crush test of 120,000 pounds exceeding the requirements of ECE 29 criteria. The 120,000 requirement is important to ensure to most structurally sound and safe cab in the event of a crash or roll over.

#### **Side Impact**

The cab shall be subjected to dynamic moving barrier slammed into the side of the cab at 7.5 mph, striking with an impact of 15,157 foot pounds of energy. This test will closely represent the forces a cab would incur in a rollover incident.

#### **Frontal Impact**

The cab shall withstand a frontal force produced from a moving barrier slammed into the front of the cab traveling at 10.5 mph, striking with an impact of 42,587 foot pounds of energy.

The same cab shall withstand all tests without any measurable intrusion into the survival space of the occupant area.

### **OPERATION AND PARTS LIST MANUALS**

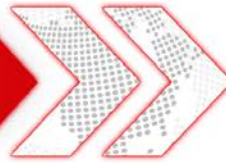
Each cab and chassis shall include two (2) electronic copies of the operation manuals and parts listings. The manuals shall include information specific to the components included on the apparatus.

### **ENGINE AND TRANSMISSION MANUALS**

One (1) paper copy of the specific engine and transmission manuals shall accompany each cab and chassis.

### **AS BUILT WIRING DIAGRAMS**

Each cab and chassis shall include one (1) digital copy of the wiring schematics and component wiring.



## **CAB**

### **CAB CUSTOM STYLE**

The cab shall be a custom, cab over engine style, with the driver and officer positions ahead of the engine and front axle. The cab shall be specifically designed and manufactured for the fire service industry.

The cab shall be designed and assembled by the apparatus manufacturer in a facility located on the manufacturer's premises. No Exceptions.

The cab shall be of a totally enclosed full tilt design, with the interior area completely open to improve visibility and verbal communication between the occupants. The cab shall be capable of tilting 45-degrees, allowing the chassis engine to be removed, if required, without tilting the cab beyond 45-degrees. No Exceptions.

The cab shall include a four (4)-point rubber isolated cab pivot and mounting system. The rear histic mounts shall be isolated from the chassis frame to reduce the transfer of road vibrations and frame torque into the cab, while providing superior handling characteristics. No solid mounted rear lock downs shall be acceptable. No Exceptions.

The front cab pivot assemblies shall be 1/2" A36 steel plate with a .31" thick 2-1/2" diameter tube cross member mechanically attached to the cab and frame. There shall be two (2) greaseable rubber isolated engineered bushings to reduce the transfer of road vibrations into the cab.

The cab shall be locked down by a two (2)-point automatic spring-loaded hook mechanism that actuates after the cab has been lowered.

The cab super-structure shall be designed with high strength 6061-T6 aluminum extrusions and 3/16" 5052-H32 aluminum plate. This shall include the "A", "B", "C" and "D" extruded pillars, triple wall front end reinforced by 3/16" thick x 2"x3" extrusion tubes, 3/16" side walls, roof and 3/16" rear wall. This shall offer superior occupant protection in the event of vehicle impact.

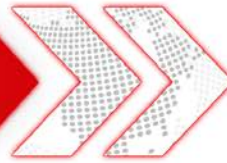
The extrusions shall provide adequate space for routing of wiring and hoses which will provide service accessibility. Routing of harnessing which requires pulling of wires through tubes will not be allowed. No Exceptions.

The "A" pillar shall be of a closed section, one-piece extrusion extending from the cab header to the bottom of the cab. This design shall ensure strength and superior resistance to buckling in the event of a frontal impact.

The cabs front corners shall be constructed of 5052-H32 stamped aluminum to provide a consistent material composition. The stamping process alleviates the high tendency of fractures through the fusing of dissimilar metal composition as appears with a casting process.

Cast cab components, including cab corners, "A" pillars and front fascia components shall not be acceptable due to the high tendency of fractures. No Exceptions.





Additional cab strength shall be obtained through closed section, dual extrusions in the construction of the "D" pillars.

The front façade shall be constructed with dual wall .19" thick 5052-H32 aluminum plates which make up the front bulkhead, reinforced by .19" thick 6061-T6 aluminum extrusion (box-sections), though-out the inner and outer perimeter of the front end / façade. The reinforcing the third wall / barrier is .13" thick 5052-H32 work hardened aluminum façade panels. All welded no adhesive.

The cab side wall of the cab shall be 3/16" thick 5052-H32 aluminum plate. The cab side plate shall wrap the corner of the cab b pillar and slam post. The cab rear wall plates shall be reinforced with a minimum of two (2) 3/16 x 3" aluminum sections; the cab side reinforcements shall be a minimum of 28" apart and span from the cab B pillar and cab C pillar.

The rear wall of the cab shall be 3/16" thick 5052-H32 aluminum plate. The rear cab plate shall wrap the corner of the cab and attach to the cab D pillar and slam post. The cab rear wall plates shall be reinforced with four horizontal and dual vertical support sections; the dual vertical support structure shall consist of 1/8" thick x 2" 6061-T6 aluminum tubes and the horizontal hat sections shall consist of 1/8" thick x 4" 5052-H32 aluminum. The dual vertical support sections shall be 40" a-part, and the cab shall contain a minimum of four (4) 4" hat section horizontal supports.

Additionally, the rear edge of the floor shall include a 3/16" 6061-T6 aluminum tube extrusion (under the floor) and a 7" 5052-H32 aluminum cab floor support section (above the floor)

The outside cab width shall measure 99" across. The interior cab shall have a width of 93".

The cab length shall measure 77.3" from the center of the front axle to the front cab skin and 60" from center of the front axle to the back of the cab, for a total cab length of 137.3".

The cab shall also feature ample driver and officer foot room, a total of 3.7 square feet for the driver and 4.45 square feet of floor space at the officer's feet. (No exceptions)

The engine tunnel shall be a tapered design, featuring 24" clear width at floor level, first taper shall start 16" from floor level and taper inward for a clear width of 25.5" and the final taper shall start at 20.5" from floor level and taper inward for a clear width of 33" in the driver's position.

The engine tunnel shall be a tapered design, featuring 22-1/2" clear width at floor level, first taper shall start 16" from floor level and taper inward for a clear width of 24" and the final taper shall start at 20.5" from floor level and taper inward for a clear width of 31-1/2" in the officer's position.

The crew floor shall feature a complete flat floor design, including provisions for a one o'clock PTO inclusion, while still offering an uninterrupted 25 total square feet of space. The distance from the back of the tunnel to the interior wall shall be 46" measured at floor level and 52" at top of engine tunnel.

The leading edge of the cab floor from the steps shall meet NFPA 13-7.3 slip resistance requirements, by using bi-directional, knurled trim piece on both the front and rear cab doors. No Exceptions.



The cab shall incorporate a two-step design at each door, with a first step height of approximately 22" from the ground. The leading edge of the first step shall be 5" further outboard than the second step to provide a staircase design for safer egress.

The front cab first step shall measure a minimum of 32" wide x 9-1/2" deep. The front cab intermediate step shall measure a minimum 33" wide x 8-1/2" deep.

The crew cab first step shall measure a minimum of 26-1/2" wide x 9-1/2" deep. The crew cab intermediate step shall measure a minimum 28" wide x 9-1/2" deep.

The cab shall meet or exceed cab impact test (SAE J-2420, cab rollover test (SAE J2422), and cab seating requirements (FMVSS 210, and FMVSS 208).

### **ROOF STYLE - 11" RAISED**

The cab roof design shall incorporate an angled front roof, transitioning into a rolled extrusion for a swept back design.

The roof height shall feature an 11" raise starting over the driver and officer positions and continuing back to the roof and rear wall joint. Raised roof designs that do not include a raised portion over the driver and officer positions will not be acceptable. No Exceptions.

The roof of the cab shall feature dual .25" thick interlocked structural member extrusions running the entire width of the cab defending against buckling in the event of a rollover.

The cab header shall feature dual 6061-T6 aluminum extrusions which shall offer superior rigidity and strength.

The raised roof shall offer a crew head height area of 66-1/2" from the floor to the ceiling in the crew areas for optimum headroom.

The crew roof super structure shall include a reinforcement hat-section structure 1/8" thick 5052-H32 aluminum bracing. The for-aft support braces will be 24" on center apart, the side to side support braces will stretch from cab side to cab side and centered between the dual 3/16" extruded and plate reinforced roll-cage section.

The forward cab roof section shall include a combination of 1/8" 6061-T6 extruded tube reinforcements and a hat-section structure 1/8" thick 5052-H32 aluminum bracing. The bracing shall wrap the entire perimeter of the cab forward roof, and the condenser support structure.

The condenser support structure shall include 1/8" triple sections, supporting the outer perimeter and center of the condenser mounting pad.

Additionally, the entire roof super structure is reinforced by a .25" thick roof edge corner extrusion around the entire cab perimeter.

A drip rail shall be provided along the top radius of each cab side. The drip rails shall help prevent water from the cab roof running down the cab side.

## **CAB DOORS**

The cab shall include a total of four (4) doors, two (2) forward and two (2) rear crew doors.

The forward cab doors shall be a minimum of 45" wide and the rear crew doors shall be a minimum of 41" wide to provide enhanced entry and egress of the cab.

The two (2) forward doors shall offer a clear door opening measurement of 42" wide and two (2) rear crew clear door opening measurement of 38" wide, measured from door seal to door seal. No Exceptions.

Each cab door shall feature:

- Superior strength and rigidity from 3/16" closed section extruded door frames
- Insulation and damping inside each door for a solid feel and minimized reverberation when closed
- A minimum of 1" rolled rubber bulb seal style gasket and an "L" foam seal around the door ensuring a weather tight fit
- Integrated, mechanical door stop
- A full length, hidden piano style 10 gauge stainless steel door hinge with a 1/4" pin, which shall be mounted inside the panel of the door prohibiting dirt and debris from becoming trapped in the hinge
- An integrated one-piece inner door assembly that includes a glass track, mounting provisions for window regulator, door handle and door panel shall be utilized. The inner door assembly shall be easily removed with nut inserts. Self tapping screws shall not be acceptable.

## **CAB STEPS**

The cab steps shall meet NFPA 13-7.3 in size and slip resistance requirements.

The cab shall incorporate a two-step design at each door, with a first step height of approximately 22" from the ground. The leading edge of the first step shall be 5" further outboard than the second step to provide a staircase design for safer egress.

The front cab first step shall measure a minimum of 32" wide x 9-1/2" deep. The front cab intermediate step shall measure a minimum 33" wide x 8-1/2" deep.

The crew cab first step shall measure a minimum of 26-1/2" wide x 9-1/2" deep. The crew cab intermediate step shall measure a minimum 28" wide x 9-1/2" deep.

The top crew step shall incorporate an angle approximately midway from the rear wall to the crew door hinge extending out the flooring under the rear facing outer seat positions, offering foot placement for safety while seated in this position.

## **CAB STEP TRIM**

The lower cab steps at all doors shall be finished with a grip strut material. The intermediate cab steps shall be finished with an embossed aluminum tread plate.



### **CAB STEP TRIM KICKPLATE**

The cab step risers at all doors, the vertical section of all steps, shall include an aluminum tread plate finish. The kickplate shall be flared at the bottom.

### **FULL HEIGHT DOORS**

All doors shall be full height from the roof of the cab extending down to cover and protect the entrance step areas.

### **DOOR FILL PANEL**

The door fill panel shall have the same finish as the door.

### **DOOR HANDLES**

The exterior door handles shall be constructed of die-cast steel. They shall feature heavy duty pull style handles which are extended out and suitable for easy grasping with a gloved hand.

The handles shall be complimentary to the cab exterior and shall be black in color.

The interior door handle shall be a paddle style which shall be black in color. The paddle shall be hinged towards the front of the cab and shall include a manual door lock unless otherwise specified.

### **CAB DOOR LOCKS**

All cab doors shall include manual door locks with keys. The door lock shall include a toggle and shall be an integral part of the interior door handle which is red in color. The exterior door lock is integral with the door latch. The cab doors may be unlocked from the exterior with a key or through a thumb turn from inside the cab.

### **INTERIOR CAB DOORS**

All cab doors shall consist of a one-piece formed and stamped aluminum interior panel. The panel shall include a formed collar around the interior door latch. ABS material shall not be acceptable. No Exceptions.

### **INTERIOR CAB DOOR FINISH**

All cab doors shall be finished in an ARMA coating for durability. The finish shall be black in color.

### **INTERIOR FRONT DOOR PULL**

The interior driver and officer cab doors shall include one (1) customized cast aluminum single piece door grab pulls designed specifically for the fire service.

The single piece door pull shall have a curved designed in a "L" formation to provide multiple points for grasping with a gloved hand. The horizontal dimension shall be a minimum of 28" and



the vertical dimension shall be a minimum of 20". The door pulls shall have an ergonomic curve making them easier to grasp when entering and exiting the cab. No Exceptions.

The door pull shall feature secure mounting in three separate locations of the pull utilizing stainless steel fasteners with nut inserts in each location. Self-taping screws or other mounting techniques shall not be allowed for interior door pulls or grab handles.

Each handle shall be constructed of A356 aluminum casting and shall feature a black powder coated finish.

### **INTERIOR GRAB HANDLE REAR DOOR**

A black powder coated cast aluminum grab handle shall be provided on the inside of each rear crew door. The handle shall extend horizontally the width of the window just above the windowsill. The handle shall assist with entry and egress from the crew area of the vehicle.

The interior driver and officer rear cab crew doors shall include one (1) customized cast aluminum single piece door grab pulls designed specifically for the fire service.

The door pulls shall have an ergonomic curve making them easier to grasp when entering and exiting the cab. No Exceptions.

The door pull shall feature secure mounting with stainless steel fasteners with nut inserts in each location. Self-taping screws or other mounting techniques shall not be allowed for interior door pulls or grab handles.

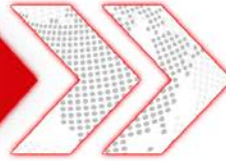
Each handle shall be constructed of A356 aluminum casting and shall feature a black powder coated finish.

### **WINDSHIELD**

A one (1)-piece, safety glass full width windshield with more than 3,228 square inches of clear viewing area will be provided. No Exceptions.

The windshield shall feature:

- A completely uninterrupted view from both the driver and officer positions
- The windshield will consist of three (3) layers; the outer light, the middle safety laminate, and the inner light. The .114" thick outer light layer will provide superior chip resistance. The middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage. The inner light will provide yet another chip resistant layer.
- Economical replacement readily available from auto glass supplier
- Easily removable for replacement using standard automotive techniques
- A frit band will be provided along with an outer trim seal on the outside perimeter of the windshield for a finished automotive appearance.



### **WINDSHIELD WIPER SYSTEM**

A single windshield wiper system shall be incorporated in conformance with FMVSS and SAE requirements. Two (2) 22" windshield wiper arms shall be mounted below the windshield. Each arm shall include a 26" long wiper to provide optimum windshield clearing.

The windshield wiper fluid reservoir can be filled without raising the cab.

### **WINDSHIELD WIPER ACTIVATION**

The windshield wipers shall be activated through a switch on the driver's panel.

### **WINDOW -DRIVER'S DOOR**

The driver's door shall include a window which measures 27" wide x 24" high with a clear viewing area of 687 square inches. The glass shall include a standard automotive tint and through the use of a manual crank style handle shall roll completely into the door housing.

The window shall be trimmed in a black anodized aluminum ring and rubber seal to keep water from entering the cab when closed.

### **WINDOW- OFFICER'S DOOR**

The officer's door shall include a window which measures 27" wide x 24" high with a clear viewing area of 687 square inches. The glass shall include a standard automotive tint and through the use of a manual crank style handle shall roll completely into the door housing.

The window shall be trimmed in a black anodized aluminum ring and rubber seal to keep water from entering the cab when closed.

### **REAR DRIVER SIDE CREW WINDOW**

The rear driver's side crew door shall include a window measuring 26.5" wide x 21.75" high with a clear viewable area of 577 square inches. The glass shall include a standard automotive tint and through the use of a manual crank style handle shall roll completely into the door housing.

### **REAR OFFICER SIDE CREW WINDOW**

The rear officer's side crew door shall include a window measuring 26.5" wide x 21.75" high with a clear viewable area of 577 square inches. The glass shall include standard automotive tint and through the use of a crank style handle shall roll completely into the door housing.

### **DRIVER CANOPY SIDE WINDOW**

The cab shall include a fixed driver's side window glass which shall be located between the cab front and rear doors. The glass shall be 18" wide x 24" high and shall include a standard automotive tint and shall be trimmed in a black anodized rubber ring for a tight seal when closed.



### **OFFICER CANOPY SIDE WINDOW**

The cab shall include a fixed officer's side window glass which shall be located between the cab front and rear doors. The glass shall be 18" wide x 24" high and shall include a standard automotive tint and shall be trimmed in a black anodized rubber ring for a tight seal when closed.

### **CAB INTERIOR AND TRIM**

#### **CAB INSULATION**

The cab shall be completely insulated from road and vehicle resonance, exterior sound and thermal intrusion.

The cab insulation system shall be comprised of three separate components each designed to assure optimal thermal and acoustic properties are achieved. Two layers of insulation material shall be utilized in conjunction with a .2" air barrier.

The cab shall utilize at a minimum 10 mils of flexible extensional visco elastic vibration damping insulation offering excellent acoustic reduction properties.

A minimum of .8" of SCbond Polyurethane Foam insulation shall be applied as an additional insulation between the cab skin and all interior ceiling and wall surfaces. The insulation shall have a density of 10 lb/ft<sup>3</sup> +/- .5 providing better thermal properties and acoustic reduction properties.

The interior cab insulation system shall ensure that no seated position within the cab exceeds 72dB as certified by the manufacture. This decibel rating shall be measured with the apparatus traveling 45 mph with climate control settings off.

All insulation used in the construction of the cab shall be marine grade featuring longevity and resistance to degradation.

Use of open cell material as the primary insulation will not be acceptable. No exceptions.

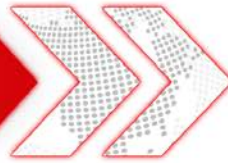
#### **ENGINE TUNNEL INSULATION**

The engine tunnel shall include an insulated barrier from noise on the underside of each tunnel surface. This barrier shall be engineered for surrounding engines.

The insulation barrier shall provide an acceptable decibel level within the cab meeting or exceeding the recommendations of NFPA 1901.

The thickness of the engine tunnel insulation shall be 1" thick. The insulating material shall be open cell polyether based foam with a textured surface, specifically designed for acoustic absorption.

Use of aluminized faced material on the engine tunnel shall not be acceptable. No exceptions.



The engine tunnel insulation shall be precisely cut and sealed to fit each segment on the underside of the tunnel surface. The insulation shall then be affixed by a pressure sensitive adhesive.

The insulation shall meet or exceed FMVSS 302 flammability testing.

### **CAB UNDERBODY INSULATION**

The underside of the cab shall include at a minimum of 1" of a uni-seal Cab-Foam insulation offering reducing vibration noise and thermal effect to the interior of the cab.

### **DAMPING INSULATION**

The entire cab, including the ceiling and walls shall include additional insulation reducing structure borne noise from vibration, impact and resonance within the cab.

### **INTERIOR TRIM MATERIAL**

The interior trim shall feature a 31 oz. marine grade vinyl which features a tensile strength of ASTM D751 of excellent, tear strength meeting the Federal standard 191-5134 of excellent and shall be oil resistant passing the CID-A-A-2950A requirement for no permeation.

Due to the excellent qualities of the marine grade vinyl material, no other type of interior trim shall be acceptable. No Exceptions.

The soft trim vinyl shall feature mildew resistance passing ASTM G21-90 and shall be rated to -25 degrees Fahrenheit.

The vinyl shall be flame retardant meeting California Fire Code 117, UFAC Class 1, and BIFMA Class 1 and shall have a high resistance to abrasion.

The interior of the cab including the side walls and ceiling panels shall feature this soft trim and shall be black in color.

### **REAR WALL INTERIOR MATERIAL**

The rear wall of the cab shall be covered in black 31 oz. marine grade vinyl for a more pleasing appearance.

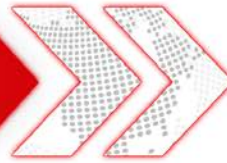
### **FLOOR MAT**

The interior flooring of the cab shall be covered with an advanced black multi-layer acoustic dampening mat. The floor matting shall be an open/closed cell, flexible polyurethane polyamide material with frictional dampening and dissipation properties. The mat shall be a fire and skid resistant non-wicking material.

### **SUN VISORS**

The driver and officer seats shall feature a sun visor mounted in the header over each seating position. The sun visors shall be gray tinted plastic.





## CAB DASH

The cab dash shall offer heavy duty, durable construction from formed aluminum. The cab dash shall feature a finish of ARMA advanced urethane coating for a rugged finish.

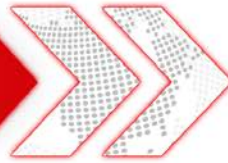
ARMA is a polyurethane/polyurea elastomer providing a tough, flexible, impact-absorbing, chemical & abrasion-resistant, even-textured, skid-resistant surface.

The ARMA coating shall offer durability, scratch resistance, chemical and abrasion resistance even against today's advanced firefighting turnout materials with consistent, even coverage and a uniform texture. The ARMA 952 coating is extremely flexible, stretching to 280% of its original size without any adhesion loss, eliminating the "shearing effect" and loss of adhesion that plagues other coatings due to substrate expansion, contraction and elevation shifts. Due to its almost instantaneous gel time, ARMA 952 can be built up to any thickness in one application, including vertical and overhead surfaces, which eliminates the need for multi-coat applications. The ARMA stability with a working temperature of up to 121 °C (250 °F) with intermittent temperatures up to 177 °C (350 °F).

The ARMA advanced urethane coating finish shall resist fading from UV light.

This construction shall allow for a clean, seamless dash area that shall reduce unnecessary joining of cab dash components. This design allows for the following features:

- Optimal heating and cooling of cab occupants, HVAC louvers shall be integrated into the gauge panel with a total of six (6) louvers; three louvers pointing at the driver and three louvers pointing at the officer.
- For improved safety cab switches and controls shall be ergonomically located within easy reach of the driver when in the seated position with seatbelts fastened. This design will reduce driver distraction and increase safety by putting frequently accessed driver controls within easy reach to allow the driver more time to focus on the road.
- The officer side cab dash shall house the three HVAC louvers on the officer side. This panel will also provide ergonomically located switches and controls for the officer. All controls shall be within easy reach while in the seated position with seatbelts fastened.
- Access panels on the top of the dash for both the driver and officer sides easing maintenance access to controls, components and gauge assemblies
- The driver side dash shall include gauges for primary air pressure, secondary air pressure, a Pacific Insight instrumentation gauge panel and the DEF gauge as standard
- The driver side dash shall also include two (2) lower panels to the left and right of the steering column for FMVSS switches such as the Off/Ignition and start switches and the park brake assembly
- The dash shall include a provision for switches to the right of the Driver
- The officer dash shall include a recessed area for optional mounting cradles or brackets for a laptop computer, mobile data terminal, map compartment or clip board
- The officer dash shall include a provision for switches to the left of the Officer



## **ENGINE TUNNEL**

The engine tunnel shall be constructed of aluminum offering superior durability in addition to thermal and acoustic resistance.

The tunnel shall feature an ARMA coating which shall match the dash and header in texture and color for a consistent appearance and robust finish.

The engine tunnel shall feature:

- A low profile design measuring approximately 46.5" wide and 23-1/2" in height from the crew floor shall offer optimum visibility of the windshield and cab interior from any seated position. No Exception.
- The engine tunnel at the driver's position shall be a tapered design, featuring 24" clear width at floor level, first taper shall start 16" from floor level and taper inward for a clear width of 25.5" and the final taper shall start at 20.5" from floor level and taper inward for a clear width of 33".
- The engine tunnel at the officer's position shall be a tapered design, featuring 22-1/2" clear width at floor level, first taper shall start 16" from floor level and taper inward for a clear width of 24" and the final taper shall start at 20.5" from floor level and taper inward for a clear width of 31-1/2".
- The design shall offer a minimum of 26" for the driver and 24" for the officer as measured from the inside door pan to the top edge of the tunnel. The dimension measured at the "H" (hip) point, with the seat in the lowest position, shall be a minimum of 28-1/2" for the driver and 27" for the officer. No Exception.
- Recessed sections for ease of mounting equipment at the rear of the tunnel or for compartments and bases which can be used for installing Fire/EMS equipment and components such as flashlights and light boxes
- A finish of ARMA advanced urethane coating offering durability, scratch, UV, chemical and abrasion resistance

## **CAB DASH & ENGINE TUNNEL**

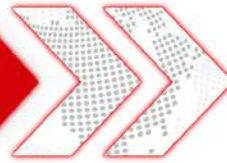
The cab dash and the engine tunnel of the cab shall be coated with ARMA Coating for a durable finish. The color shall be black.

## **OFFICER GLOVE COMPARTMENT**

The officer side of the cab dash shall include a glove compartment with door and latch.

## **12V POWER POINTS**

There shall be one black plate including two (2) 12v power points provided. It shall be mounted on the outer edge of the driver's side of the center dash area. They shall be within easy reach of the driver; and they shall be wired directly to the battery.



## **12V POWER POINTS**

There shall be one black plate including two (2) 12v power points provided. It shall be mounted on the outer edge of the officer's side of the center dash area. They shall be within easy reach of the officer; and they shall be wired directly to the battery.

## **CUP HOLDER**

A two place cup holder shall be mounted on the engine tunnel butting up to the center portion of the dash. It shall be within easy reach of both the driver and the officer.

## **INTERIOR CAB FINISH**

The interior cab shall be finished in a high performance polyurethane coating including the interior A, B, C and D pillars, all occupant seat frames and any surrounding surfaces extending to the ball seal around each door. This type of coating shall feature:

- Durability, scratch, chemical and abrasion resistance
- Consistent, even coverage and a uniform texture
- Resistance from fading from exposure to UV light
- Black in color

## **CAB HEADER / HEATING AND AC**

### **CAB HEADER**

The cab header shall offer heavy duty, durable construction using resin transfer molding (RTM) technology formed composite material. The composite material shall be .28" thick for improved resistance and military type strength.

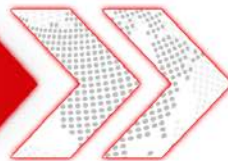
RTM is a low pressure, closed molding process which offers a dimensionally accurate and high quality surface finish composite molding, using liquid thermoset polymers reinforced with various forms of fiber reinforcements. The matrix selection of polymer and reinforcement dictates molding mechanical and surface finish performance.

ABS polymer construction shall not be acceptable. No Exceptions.

The cab header shall offer a finish of ARMA advanced urethane coating for a rugged design and finish. No Exceptions.

ARMA is a polyurethane/polyurea elastomer providing a tough, flexible, impact-absorbing, chemical & abrasion-resistant, even-textured, skid-resistant surface.

The ARMA coating shall offer durability, scratch resistance, chemical and abrasion resistance even against today's advanced firefighting turnout materials with consistent, even coverage and a uniform texture. The ARMA 952 coating is extremely flexible, stretching to 280% of its original size without any adhesion loss, eliminating the "shearing effect" and loss of adhesion that plagues other coatings due to substrate expansion, contraction and elevation shifts. Due to its almost instantaneous gel time, ARMA 952 can be built up to any thickness in one application, including vertical and overhead surfaces, which eliminates the need for multi-coat applications. The ARMA stability with a working temperature of up to 121 °C (250 °F) with intermittent temperatures up to 177 °C (350 °F).



The ARMA advanced urethane coating finish shall resist fading from UV light.

The cab header shall also be purpose built for integration of Fire/EMS components and ease of maintenance with panels above both the driver and officer positions measuring 8" wide x 15" long for mounting radios, aerial controls and switches.

### **HEATING AND COOLING SYSTEMS**

The interior cab climate control shall be comprised of a triple system which shall include a defroster, a cab and crew heater and air conditioner for a complete HVAC system. The air conditioning system shall be comprised of compressor, condenser, and a minimum of three (3) evaporators to provide consistent temperature control throughout the entire cab. The front system shall be controlled with a conventional rotary knob control on the dash and the rear overhead system shall be controlled through a conventional rotary knob control in the rear crew area. No Exceptions.

The system shall be rated as an Emergency Vehicle grade for the use in Fire and Rescue style vehicles and shall provide environmental air treatment in accordance with published SAE standards.

The HVAC system shall be tested and certified by the component manufacturer, including all three systems. No Exceptions.

The HVAC system shall be a total and complete system, not incorporating the use of auxiliary heating and cooling systems. The HVAC system shall provide sufficient defrosting, heating and cooling to the entire cab without the need for any auxiliary systems.

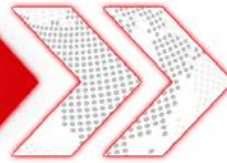
The lines for the system shall be mounted in the extrusion of the "B" and "C" pillars on each side of the cab allowing for the space between the front and rear crew doors to be used for lighting and other components.

### **DEFROSTING SYSTEM**

The defrosting system shall feature:

- To provide maximum defrost and heating performance, a 55,000 BTU heater-defroster unit with 558 CFM of air flow will be provided inside the cab.
- The defroster unit will be strategically located under the center forward portion of the instrument panel. For easy access, a removable cover will be installed over the defroster unit.
- Mounting under the dash with fresh air intake providing excellent defrost and demist capabilities. Systems not utilizing fresh intake shall not be acceptable. No Exceptions.
- Six (6) vents shall be located in the top forward portion of the dash for superior defrosting properties across the entire windshield.
- The defroster will include an integral aluminum frame air filter, high performance dual scroll blowers, and ducts designed to provide maximum defrosting capabilities for the one (1) piece windshield.

### **HEATING SYSTEM**



The heating system shall feature:

- Delivery of a minimum of 82,000 BTU/hour of heat to the entire cab.
- Heat and air circulation shall be provided to the driver and officer foot area of the cab as standard through ducting in the foot well area of both positions.
- Substantial air movement and heating provided to the driver and officer's position, with six (6) adjustable louvers, located in the dash, three (3) adjustable louvers directed at the driver and three (3) adjustable louvers directed at the officer
- Dual overhead units with five (5) adjustable louvers shall be mounted above the rear facing seat positions on the driver and officer side of the cab
- A minimum of 530 CFM of air flow measured at the front seated positions and 240 CFM per side in the rear seated positions.

## **AIR CONDITIONING**

The air conditioning system shall feature:

- A minimum of 45,000 BTU/hour of cooling capacity to the entire cab.
- Two (2) crew overhead evaporators located near the B-pillar on each side of the cab allowing for greater frontal visibility for the forward facing crew seating and allowing for more interior mounting of accessories.
- A gravity condensation drain system shall be utilized. These drains shall remove all condensation from the evaporator units and direct it to the exterior of the chassis cab for optimal performance. Systems utilizing pumps to remove condensation, or gravity systems with poles or other obstructions located within the cab to route drains through shall not be acceptable. No Exceptions.
- Substantial air movement and optimum cooling provided to the driver and officer positions, with six (6) adjustable louvers, located in the dash, three (3) adjustable louvers directed at the driver and three (3) adjustable louvers directed at the officer
- Substantial air flow and optimum cooling provided to the driver and officer side crew areas of the cab, with five (5) adjustable louvers above the rear facing seat positions on the driver and officer sides of the cab

Proposals offering ceiling mounted evaporator units in the center of the cab above or on the engine tunnel shall not be accepted as this is a safety consideration due to the lack of visibility and communication within the cab.

## **A/C COMPRESSOR**

A refrigerant compressor shall be provided to power the air conditioning evaporators.

A belt driven, model TM-21, 13.00 cubic inch compressor shall be installed on the engine.

## **CAB PAINT AIR CONDITIONING CONDENSER**

The air conditioning condenser shall be painted to match the roof color.



## **CONDENSOR**

The cab air conditioning system shall include one (1) low profile HE-condenser which shall be centered forward on the roof of the cab.

## **HEATING AND COOLING CONTROLS**

The HVAC system shall be controlled from the Driver dash through three (3) turn style knobs for the temperature control, the fan control and for the mode. Fan controls shall also be available to the rear crew area.

## **REAR CREW AREA CONTROLS -CENTERED OVERHEAD**

The controls for the crew area heat shall be mounted overhead, centered between the rear facing seating position.

## **SEAT AND SEAT BELT COLOR**

This seat in the cab shall be gray in color with a red seat belt.

## **DRIVER SEAT**

The driver's seat shall be a H. O. Bostrom Sierra Electric 8-Way, high back ABTS bucket seat. The seat shall have contoured, high-density cushions with lumbar support. The seat cushion shall be supported with a serpentine spring suspension. The seat shall have eight-inch fore and aft adjustment, 2 inch height adjustment, front of seat tilt, rear of seat tilt, reclining seat back and occupancy sensor in the seat cushion. All seat adjustments will be electric and will be adjusted with a switch mounted under the front of the seat cushion. The seat control switch bracket will have a slotted mounting to allow up to 1" of rearward adjustment to accommodate user preference.

The seat shall be equipped with a red, integrated 3-point shoulder harness and lap belt and an emergency locking retractor. The seat belt shall include a buckle latched switch. The seat belt shall include a rotating bezel guide at the upper shoulder point and shall be routed through the seat frame and covering to protect webbing.

## **SEAT BACK**

The seat back shall incorporate a standard style headrest.

## **SEAT MOUNTING DRIVER**

The driver's electric seat shall be installed in an ergonomic position in relation to the cab dash.

The power seat or seats installed in the cab shall be wired directly to battery power.

## **SEAT MATERIAL**

The seats shall include a covering of high strength, wear resistant fabric made of durable ballistic polyester.



A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids.

### **DRIVER SEAT BOX STORAGE COMPARTMENT**

There shall be a storage area under the driver's seat. The compartment shall be 21.25 inches wide, 22.50 inches long, and 6.25 inches high. The access opening shall be 9.00 inches wide and 4.50 inches high.

### **ALUMINUM ACCESS DOOR**

There shall be a Arma coated aluminum door cover provided for the drive and officer seat compartment. It shall be equipped with a piano style hinge and a manual latch.

### **OFFICER SEAT**

The officer's seat shall be a H. O. Bostrom Tanker 450 ABTS (All Belts to Seat/Integrated Seat Belts) series high back seat with fixed base. The seat shall have contoured, high-density cushions with lumbar support and Occupancy sensor in the seat cushion. The seat cushion shall be supported with a serpentine spring suspension. The seat shall include an SCBA storage area with one piece, flip- up headrest with spring return. The seat shall include two-part bolster padding with removable insert to accommodate SCBAs with rigid waist belts.

The seat shall be equipped with a red integrated 3-point shoulder harness and lap belt and an emergency locking retractor. The seat belt shall include a buckle latched switch. The seat belt shall include a rotating bezel guide at the upper shoulder point and shall be routed through the seat frame and covering to protect webbing.

### **SEAT BACK**

A SecureAll™ SCBA locking system which shall be one bracket model and store all U.S. and International SCBA brands and sizes while in transit or for storage within the seat back. The bracket shall be easily adjustable for all SCBA brands and cylinder diameters. All adjustment points shall utilize similar hardware and adjustments shall be made with one tool.

- The bracket shall be adjustable to compensate for different cylinder lengths without the use of tools. The adjustment shall be made by raising a lever and moving the top clamp vertically
- A center guide fork shall keep the SCBA tank in place for a safe and comfortable fit in the seat back cavity. The SCBA unit simply needs to be pushed against the pivot arm to engage the patented auto- locking system. Once the lock is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions

The SecureAll™ shall include a release handle which shall be integrated into the seat cushion for quick and easy release. This shall eliminate the need for straps or pull cords to interfere with other SCBA equipment.

## **SEAT MATERIAL**

The seats shall include a covering of high strength, wear resistant fabric made of durable ballistic polyester.

A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids.

## **OFFICER'S SEAT BOX STORAGE COMPATMENT**

There shall be a storage area under the officer's seat. The compartment shall be 19.75 inches wide, 17.50 inches long, and 6.25 inches high. The access opening shall be 9.00 inches wide and 4.50 inches high.

## **REAR FACING OUTER SEAT**

Two (2) rearward facing outer crew seat shall be a H. O. Bostrom Tanker 400CT ABTS (All Belts To Seat/Integrated Seat Belts) series with Flip/Up cushion. The seat shall have contoured, high-density cushions with lumbar support and occupancy sensor in the seat cushion. The seat cushion shall be spring biased to fold to vertical position when occupant weight is removed. The seat shall include a SCBA storage area with integral headrest.

The seat shall be equipped with a red integrated 3-point shoulder harness and lap belt and an emergency locking retractor. The seat belt shall include a buckle latched switch. The seat belt shall include a rotating bezel guide at the upper shoulder point and shall be routed through the seat frame and covering to protect webbing.

## **SCBA SEAT**

The Officer's seat shall be an HO Bostrom Tanker 450 series seat. The seat shall include an SCBA storage area with one piece, flip-up headrest with spring return. The seat shall include two-part bolster padding with removeable insert to accommodate SCBA's with rigid waist belts.

## **SEAT BACK**

A SecureAll™ SCBA locking system which shall be one bracket model and store all U.S. and International SCBA brands and sizes while in transit or for storage within the seat back. The bracket shall be easily adjustable for all SCBA brands and cylinder diameters. All adjustment points shall utilize similar hardware and adjustments shall be made with one tool.

- The bracket shall be adjustable to compensate for different cylinder lengths without the use of tools. The adjustment shall be made by raising a lever and moving the top clamp vertically
- A center guide fork shall keep the SCBA tank in place for a safe and comfortable fit in the seat back cavity. The SCBA unit simply needs to be pushed against the pivot arm to engage the patented auto- locking system. Once the lock is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions





The SecureAll™ shall include a release handle which shall be integrated into the seat cushion for quick and easy release. This shall eliminate the need for straps or pull cords to interfere with other SCBA equipment.

### **REAR FACING OUTER SEAT MOUNTING**

Each rear facing outer seat shall be mounted facing the rear of the cab.

### **SEAT MATERIAL**

The seats shall include a covering of high strength, wear resistant fabric made of durable ballistic polyester.

A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids.

### **FORWARD FACING CENTER SEAT**

Two (2) forward facing center seats shall be Bostrom fixed seats and shall feature all the seat belts within the seat (ABTS).

### **SEAT BACK**

A SecureAll™ SCBA locking system which shall be one bracket model and store all U.S. and International SCBA brands and sizes while in transit or for storage within the seat back. The bracket shall be easily adjustable for all SCBA brands and cylinder diameters. All adjustment points shall utilize similar hardware and adjustments shall be made with one tool.

- The bracket shall be adjustable to compensate for different cylinder lengths without the use of tools. The adjustment shall be made by raising a lever and moving the top clamp vertically
- A center guide fork shall keep the SCBA tank in place for a safe and comfortable fit in the seat back cavity. The SCBA unit simply needs to be pushed against the pivot arm to engage the patented auto- locking system. Once the lock is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions

The SecureAll™ shall include a release handle which shall be integrated into the seat cushion for quick and easy release. This shall eliminate the need for straps or pull cords to interfere with other SCBA equipment.

### **SEAT MOUNTING FORWARD FACING CENTER**

The forward facing center seats shall be installed facing the front of the cab.

### **SEAT MATERIAL**

The seats shall include a covering of high strength, wear resistant fabric made of durable ballistic polyester.



A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids.

#### **SEAT FRAME FORWARD FACING ENCLOSED**

The forward facing center seats shall include an enclosed seat frame which is located and installed on the rear wall.

The seat frame shall be constructed of no less than 5052-H32 .1620" thick aluminum plate.

#### **SEAT FRAME FORWARD FACING ACCESS**

The seat frame shall include two (2) cutouts on the front of the seat box for access. Each cutout shall be in the outboard position facing the rear crew doors.

#### **SEAT FRAME FORWARD FACING ACCESS**

The seat frame shall include two (2) cutouts, one (1) on the driver and one (1) on the officer side, facing the rear crew doors for access.

#### **SEAT COMPARTMENT DOOR FINISH**

The seat box doors shall be finished in a high performance polyurethane coating. The color shall be black.

#### **SEAT COMPARTMENT FINISH**

The seat frame shall be finished in a high performance polyurethane coating. The color shall be black.

#### **EXTERIOR GRAB HANDLES**

One (1) 18" anti-slip exterior assist handle shall be mounted behind each of the cab doors. The grab handle shall be constructed of aluminum and be 1.25" diameter with a knurled finish enabling non-slip assistance with a gloved hand and mounted on stanchions.

#### **CAB FASCIA**

The cab fascia shall offer a traditional, yet aggressive appearance, in its design and shall be constructed of work-hardened 5052-H32 aluminum. This design shall feature:

- A super structure which is fully welded to the cab, for a seamless and robust integration
- Thermoformed headlamp bezels, constructed of impact resistant, polycarbonate composite which is vacuum metalized to eliminate peeling and bubbling of a chrome type film or plating
- Traditional style headlight bezels with 4 x 6 high intensity headlights which shall add a classic look to the fascia while improving visibility
- The turn signal lights shall be located in the lower outboard portion of the head lamp bezel and a warning light in the lower inboard position



## **FRONT GRILLE**

A prominent front grille shall punctuate the aggressive design of the cab with its outboard wing style warning light bezels and heavy framework. The front grille shall feature:

- Stamped steel construction for superior strength and durability
- Chrome plated for an aesthetically pleasing appearance
- Tiltable and/or removable mesh panel for fluid fill and fluid check access
- Two (2) 4" x 6" warning light locations in the upper wings
- Up to six (6) warning light locations along the mid bar for a variety of warning light combinations

## **LIGHT BEZEL**

The front grille shall include wing light bezels. The bezels shall be constructed of a stainless material.

## **FRONT GRILLE - UNITED STATES OF AMERICA FLAG INLAY**

An American Flag shall be painted over the front grille honeycomb inlay, with a minimum of two (2) coats of clear coat to help protect the painted surface.

## **GRILLE LOGO**

The front grille shall include a Rosenbauer logo.

## **FRONT GRILLE INLAY**

The front grille shall include a honeycomb inlay of stainless steel, painted black, which shall provide air flow to through the grille and provide a sporty, muscular appearance to the front of the apparatus.

## **HEADLIGHTS**

A quadruple headlight assembly shall be provided in the fascia to enhance the look. The top two (2) bezels shall include head lamps while the lower bezels shall house a turn signal in the outboard position and a warning light in the inboard position.

## **FRONT TURN SIGNALS**

Two (2) Whelen M6 LED square, front turn signal assemblies shall be included on the front fascia directly below the headlights, one each side of the cab grille. Each turn signal shall be mounted in an attractive façade style bezel which is an integral part of the fascia.

## **SIDE MARKER LIGHTS**

Two (2) Weldon amber LED round, side marker light assemblies shall be mounted on the side of the cab ahead of the driver door, adjacent to the front head lamp bezel.



## **HEADLIGHT AND MARKER LIGHT ACTIVATION**

The head light and marker lights shall be activated through a switch on the driver's panel.

## **FRONT MARKER LAMPS**

The cab front shall include five (5) LED amber marker lamps above the windshield in accordance with the Department of Transportation requirements.

## **CAB FENDERS**

The cab wheel wells shall include full width, 14 gauge 304 polished, stainless steel cab fenders to resist corrosion and enable easier cleaning maintenance. The inner liner, measuring 18" wide shall be constructed of plastic with an outer fenderette measuring 2.5" wide.

## **COMMANDER LOGO**

A COMMANDER logo shall be installed on each side of the chassis cab.

## **FRONT MUD FLAPS**

The cab and chassis shall be provided with rubber front mud flaps.

## **CAB TILT SYSTEM**

The cab shall be a full tilt style. A hydraulic cab lift system shall be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves.

The dual lift cylinders shall lift the cab 45 degrees from a horizontal plane facilitating easy engine maintenance and possible removal.

The tilt angle shall allow access to the engine and area under the cab without contacting any components mounted to the gravel shield.

The cab shall be locked down by a two (2)-point automatic spring-loaded hook mechanism that actuates after the cab has been lowered.

The cylinders shall include blocking valves which prevent motion when no control buttons are pushed. In the event of a hydraulic system failure, the valves shall retain the fluid in the cylinders.

A redundant mechanical stay arm shall automatically be engaged once the cab has been fully raised. Before lowering the cab, this device must be disengaged using the stay arm control located on the driver's side rear of the cab.

All mounting points shall be bolted directly to the frame rail.

The cab lift safety system shall be interlocked with the parking brake. The cab tilt mechanism shall be active only when the parking brake is set and the ignition is in the on position. If the parking brake is release, the cab tilt mechanism shall be disabled.



## REARVIEW MIRRORS

West Coast Style Mirrors

### REARVIEW MIRRORS

Retrac Aerodynamic West Coast style dual vision mirror heads model 613820 shall be provided and installed each of the front cab doors. The mirrors shall be mounted with 1" diameter tubular stainless steel arms to provide a rigid mounting and reduce vibration.

The mirrors shall measure 8" x 19" high and shall include an integral convex mirror in the mirror head below the flat glass to provide wider field of vision. The flat and convex mirrors shall be motorized with remote horizontal and vertical adjustment. The control switches shall be mounted within easy reach of the driver. The flat and convex mirrors shall be heated for defrosting in severe cold weather conditions.

The mirror backs shall be constructed of vacuum formed chrome plated ABS plastic housings that are corrosion resistant and shall include an amber marker light. The mirrors shall be manufactured with the finest quality non-glare glass.

### REARVIEW MIRROR REMOTE ACTIVATION

The driver's panel shall include activation for the rearview mirrors remote function. The driver panel shall also include a switch activating the mirrors to be heated.

### CAB TWO TONE PAINT

The cab surface shall be thoroughly washed with grease cutting solvent (PPG DX330) prior to any sanding. The cab surface shall then be sanded and minor imperfections filled and sanded. The prepared surface shall then be washed again with (PPG DX330) to remove any contaminants from all surfaces to be painted.

The first coating to be applied shall be a pre-treat self-etching primer (PPG DX1787) (.5 to 1.0 dry film build) for maximum adhesion to the body material. The next two to four coats shall be an acrylic urethane primer resurfacing agent (PPG K38). The film build shall be 4-6 mils when dry. The primer coat, after appropriate dry time, shall be sanded with 320-600 grit sandpaper to ensure a maximum gloss finish. The last step shall be an application of at least three coats of PPG Concept acrylic urethane two-component color (single stage). The film build shall be 2-3 mils when dry. The single stage acrylic urethane, when mixed with component (PPG DCX61) catalyst shall provide a UV barrier to prevent fading and chalking.

The cab shall be painted two colors, which shall be determined prior to the cab assembly.

### CAB PAINT UPPER

The upper cab color shall be PPG \_\_\_\_\_ color and \_\_\_\_\_ number.

### CAB PAINT LOWER

The lower or primary cab color shall be PPG \_\_\_\_\_ color and \_\_\_\_\_



number.

### **CAB UNDERCOAT**

The cab shall have an undercoat applied prior to the cab being set on the running gear. The under coat shall be a waterborne, one-component, air dry undercoat formulated to prevent chipping, cracking and marring of painted or unpainted surfaces after exposure to high impact sand, gravel or other abrasive materials. It shall also have high corrosion resistance.

### **CAB PAINT EXTERIOR BREAKLINE**

The upper and lower paint shall meet on the cab which shall start at the grille under the wings and travel 6" below the cab windshield and approximately 5" under the driver and passenger and crew door windows with a curve.

### **FRONT AXLE**

A Meritor MFS Easy Steer non-drive axle shall be incorporated as the front axle for the chassis. The axle shall feature:

- A capacity of 20,000 pounds
- A 3.74" drop and a 71" king pin intersection (KPI)
- A conventional style hub with a standard knuckle

### **FRONT WHEEL BEARING LUBRICATION**

The front axle wheel bearings shall be lubricated with oil. The oil level can be visually checked via clear inspection windows in the front axle hubs.

### **FRONT SUSPENSION**

The front suspension shall include a Hendrickson leaf spring suspension. The suspension shall feature:

- Capacity rating of 20,000 pounds
- 9 Leafs
- Case hardened threaded bushings
- A Grease fitting
- Double wrapped front eye

### **FRONT SHOCK ABSORBERS**

Two (2) Bilstein inert, nitrogen gas filled shock absorbers shall be provided and installed as part of the front suspension system. The shocks shall be a monotubular design and fabricated using a special extrusion method, utilizing a single blank of steel without a welded seam, achieving an extremely tight peak-to-valley tolerance and maintains consistent wall thickness. The



monotubular design shall provide superior strength while maximizing heat dissipation and shock life.

The ride afforded through the use of a gas shock is more consistent and shall not deteriorate with heat, the same way a conventional oil filled hydraulic shock would.

The Bilstein front shocks shall include a digressive working piston assembly allowing independent tuning of the compression and rebound damping forces to provide optimum ride and comfort without compromise. The working piston design shall feature fewer parts than most conventional twin tube and “road sensing” shock designs and shall contribute to the durability and long life of the Bilstein shock absorbers.

Proposals offering the use of conventional twin tube or “road sensing” designed shocks shall not be considered.

### **POWER STEERING GEAR WITH ASSIST**

The power steering gear shall be a TRW model TAS 85 and shall include the following:

- A balanced, hydraulic, positive displacement, sliding vane power steering pump which is gear driven from the engine
- One-piece, 2" diameter drag link for maintaining consistent wheel alignment resulting in less maintenance.
- The steering gear shall be mounted on a plane that is at a 9-degree angle in relationship to the center plane of the chassis. This mounting technique is designed to reduce the operating angle of input steering shafts. A more direct, responsive, and smoother handling vehicle will result from these unique design characteristics.

A certified torque and geometry study by TRW shall be available upon request.

### **CHASSIS ALIGNMENT**

The chassis frame rails shall be measured to insure the length is correct and cross checked to make sure they run parallel and are square to each other. The front and rear axles shall be laser aligned. The front tires and wheels shall be aligned and toe-in set on the front tires by the chassis manufacturer.

Alignment documentation shall be delivered with chassis.

### **FRONT AXLE CRAMP ANGLE**

The chassis shall have a front axle cramp angle of 46 degrees to the left and right.

The manufacturer shall provide third party verification of cramp angle upon request from the fire department.

### **FRONT TIRES**

The front tires shall be Michelin 315/80R 22.5 20PR “L” tubeless radial XZA1 highway tread.

The front tires shall feature:

- A stamped load capacity of 18,180 pounds per axle with a speed capacity of 75 miles per hour when properly inflated to 130 pounds per square inch

### **FRONT WHEEL**

The front wheels shall be Alcoa hub piloted, 22.50 inch X 9.00 inch polished aluminum wheels. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts. The wheels shall feature one-piece forged strength and shall include Alcoa's Dura-Bright® finish with XBR technology as an integral part of the wheel surface. Alcoa Dura-Bright® wheels keep their shine without polishing. Brake dust, grime and road debris are easily removed by simply cleaning the wheels with soap and water.

### **FRONT BRAKES**

The chassis shall include front brakes which are a Meritor brand, 16.5" x 6" S-cam drum type. Front brakes shall include brake chambers supplied by Meritor and shall be approved per application.

### **FRONT BRAKE SLACK ADJUSTERS**

The front brakes shall include Meritor automatic slack adjusters shall be installed on the chassis which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.

### **FRONT BRAKE DUST SHIELDS**

The front axle shall be equipped with brake dust shields.

### **STEERING COLUMN AND WHEEL**

The cab shall include a Douglas Autotech steering column. The steering column shall feature an 18", four (4) spoke steering wheel located at the driver's position; a seven (7) position tilt and 2.25" telescopic adjustment. The steering wheel shall be provided with a black vinyl cover with foam padding and a horn button, self-canceling turn signal switch, four-way hazard switch and headlamp dimmer switch.

### **REAR AXLE**

A single Meritor RS-25-160 driving axle shall be incorporated as the rear axle for the chassis. The axle shall feature:

- Rated capacity of 27,000 pounds
- Heavy duty Hypoid gearing for longer life, increased strength and quieter operation
- Industry-standard wheel ends for compatibility with both disc and drum brakes, and unitized oil seal technology to keep lubricant in and help prevent contaminant damage
- Rigid differential case for high axle strength and reduced maintenance
- Rugged Dependability





Rectangular shaped, hot formed housing with a standard wall thickness at spring seat of .63" for extra strength and rigidity

- Precision forged, single differential gearing

#### **REAR AXLE DIFFERENTIAL LUBRICATION**

The rear axle differential shall be lubricated with oil.

#### **REAR WHEEL BEARING LUBRICATION**

The rear axle wheel bearings shall be lubricated with oil.

#### **REAR SUSPENSION**

The single rear axle shall feature a Reyco 79KB vari-rate, self-leveling captive slipper type conventional multi-leaf spring suspension, with 57.50 inch X 3.00 inch springs. One (1) adjustable and one (1) fixed torque rod shall be provided.

The rear suspension capacity shall be rated at 27,000 pounds based on the capacity of the brakes and rear tires.

#### **REAR SHOCK ABSORBERS**

Shock absorbers shall be supplied by the suspension manufacturer and installed on the rear axle suspension.

#### **REAR BRAKES**

The rear brakes shall be Meritor 16.50 inch X 7.00 inch S-cam drum type.

The rear brakes shall include brake chambers supplied by Meritor and shall be approved per application.

#### **REAR BRAKE DUST SHIELDS**

The rear brakes shall be equipped with brake dust shields.

#### **REAR BRAKE SLACK ADJUSTERS**

The rear brakes shall include Meritor automatic slack adjusters installed on the axle which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.

#### **REAR TIRE**

The rear tires shall be Michelin 12R-22.5 16PR "H" tubeless radial XDN2.



The rear tires shall feature:

- All weather tread designed for premier traction and mileage
- A stamped load capacity shall of 27,120 pounds per axle with a speed capacity of 75 miles per hour when properly inflated to 120 pounds per square inch

### **REAR WHEEL**

The rear wheels shall be Alcoa hub piloted, 22.50 inch X 8.25 inch aluminum wheels with a polished outer surface and Alcoa Dura-Bright® wheel treatment with XBR® technology as an integral part of the wheel. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.

### **WHEEL GUARDS**

The rear wheels shall include a plastic isolator approximately 0.04” thick installed between the Aluminum and steel to help prevent corrosion caused by dissimilar metal contact.

- Engineering Note: If alum outer and steel inner rim the guard will be between rims, if all alum rims it will be installed between inner rim and hub.

### **VEHICLE TOP SPEED**

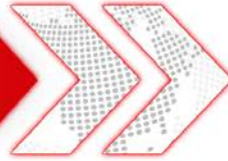
The top speed of the vehicle shall be programmed at approximately 68 MPH +/-2 MPH at governed engine RPM.

### **BRAKE SYSTEM**

A rapid build-up air brake system shall be provided. The air brakes shall include a two (2) air tank, three (3) reservoir system with a minimum of 4152 cubic inch of air capacity. A floor mounted treadle valve shall be mounted inside the cab for graduated control of applying and releasing the brakes. A spring brake valve shall be installed to provide a controlled service brake application during an unlikely event including primary air supply loss. The system shall include an anti-compounding feature. All air reservoirs provided on the chassis shall be labeled for identification.

The rear axle spring brakes shall automatically apply in any situation when the air pressure falls below 25 PSI and shall include a mechanical means for releasing the spring brakes when necessary. An audible alarm shall designate when the system air pressure is below 60 PSI.

A four (4) sensor, four (4) modulator Anti-lock Braking System (ABS) shall be installed on the front and rear axles in order to prevent the brakes from locking or skidding while braking during hard stops or on icy or wet surfaces. This in turn shall allow the driver to maintain steering control under heavy braking and in most instances, shorten the braking distance. The electronic monitoring system shall incorporate diagonal circuitry which shall monitor wheel speed during braking through a sensor and tone ring on each wheel. A dash mounted ABS lamp shall be provided to notify the driver of a system malfunction. The ABS system shall automatically disengage the auxiliary braking system device when required. The speedometer screen shall be capable of reporting all active defaults using PID/SID and FMI standards.



## **PARK BRAKE**

Upon application of the push-pull valve in the cab, the rear brakes will engage via mechanical spring force. This is accomplished by dual chamber rear brakes, satisfying the FMVSS parking brake requirements.

Park brake system shall include an anti-compounding feature.

## **PARK BRAKE CONTROL**

A Meritor-Wabco manual hand control push-pull style valve shall operate the parking brake system. The control shall be yellow in color.

The parking brake actuation valve shall be mounted on the driver's side dash to the right of the steering column within easy reach of the driver.

## **AIR DRYER**

The brake system shall include a Wabco System Saver 1200 Plus air dryer with an integral 100 watt heater with a Metri-Pack sealed connector. The system shall have an integrated purge volume and integrated governor.

The system shall have the following features:

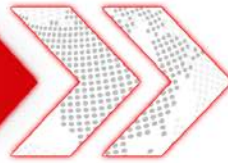
- Premium desiccant provides greater water adsorption
- Replaceable spin on cartridge for simple maintenance
- Compact light weight design
- Pressure relief safety valve
- Turbo cut-off valve for boosted compressor applications
- Service components are external for easy replacement
- Common service components proven for reliability and quality

## **AIR COMPRESSOR**

The air compressor provided for the engine shall be a Wabco® SS318 single cylinder pass-through drive type compressor which shall be capable of producing 18.7 CFM at 1200 engine RPMs. The air compressor shall feature a higher delivery efficiency translating to more air delivery per horsepower absorbed. The compressor shall include an aluminum cylinder head which shall improve cooling, reduce weight and decrease carbon formation. Superior piston and bore finishing technology shall reduce oil consumption and significantly increasing the system component life.

## **AIR GOVERNOR**

An air governor shall be provided to control the cut-in and cut-out pressures of the engine mounted air compressor. The governor shall be calibrated to meet FMVSS requirements. The air governor shall be integrated in the air dryer assembly.



## MOISTURE EJECTORS

An automatic moisture ejector with a manual drain provision shall be installed on the wet tank of the air supply system. Manual pet-cock type drain valves shall be installed on all remaining reservoirs of the air supply system.

## AIR SUPPLY LINES

A dual air system plumbed with color coded reinforced nylon tubing air lines shall be installed on the chassis. The primary (rear) brake line shall be green, the secondary (front) brake line red, the parking brake line orange and the auxiliary (outlet) will be blue.

Brass push-lock type fittings shall be used on the nylon tubing. All drop hoses shall include fiber reinforced neoprene covered hoses.

## FRAME

The chassis frame shall consist of two (2) "C" style parallel rails, constructed of high strength low alloy and shall feature the following:

- A Domex **MODEL 110XF** 10.19" high by 3.63" deep cold rolled steel frame.
- Inner channel measuring 9.31" high x 3.25" deep x .25" thick
- The 10.19" frame height shall be maintained throughout the entire length of the frame to allow for maximum storage capacity for the entire apparatus.
- If frame rails that are larger than those specified are to be utilized, the maximum height of each frame rail shall not exceed 10.25" at any point on the frame rail. This will ensure the lowest possible vehicle center of gravity allowing maximum stability as well as providing the lowest body height possible.
- Frame rail shall have a consistent frame web throughout the entire length.
- The entire frame rail design shall be manufactured in the United States of America and readily available on the aftermarket.
- Grade 8 Yellow zinc coated fasteners, huck bolts shall not be acceptable
- Manufacturer's lifetime warranty

The frame ratings shall be as follows:

- 110,000 PSI minimum yield strength high strength low alloy steel
- Minimum Resisting Bending Moment (RBM) of 2,810,000 inch pounds per rail

To avoid frame cracking and failure over time, the top flange of the frame adjacent to the engine installation shall have a tapered design. Notches for engine components shall not be accepted due to fatigue and the potential for cracking. No Exceptions

## UNDER FRAME REINFORCEMENT

An under slung frame reinforcement shall be installed below the frame rails in the transmission area to increase the vertical rigidity of the frame.

The under frame reinforcement provides:

- Enhanced handling
- Improved ride quality



- Increase resistance to frame and cross member fatigue
- Enhanced vehicle stability providing improved safety to occupants

### **CROSS MEMBERS**

There shall be a minimum of seven (7) steel plate cross members installed on the apparatus.

- 50,000 psi minimum yield strength steel plate cross members
- Manufacturer's lifetime warranty to match frame warranty. No Exceptions.
- Installed with one-piece cross member gusset to maximize vertical strength and minimize cross member flex

Crossmembers can be inverted when required to allow for PTO drive line installation without the need for notching or modifying the cross members in anyway. No Exceptions.

### **FRAME FINISH**

Prior to assembly, each frame rail section and cross member shall be hot dip galvanized. The galvanizing process will permeate each frame section to prevent rust and corrosion and not be merely an over-coating. The galvanized frame sections shall be provided in the natural finish eliminating the requirement for finish paint and the subsequent requirements for touch up paint and/or total repaint after a period of time due to nicks, chips and corrosion. Galvanizing shall provide a barrier and cathodic protection from corrosion. During the galvanizing process, the complete frame sections and cross members shall be immersed in molten zinc. Through diffusion, the zinc shall bond to the steel at the molecular level. The resulting zinc coating shall provide a barrier that shields the steel from the environment.

### **FRONT FRAME EXTENSION FINISH**

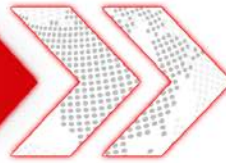
The front frame extension shall be hot dipped galvanized to resist weather, dirt and other corrosive material.

### **FRAME WARRANTY**

Rosenbauer Motors, LLC hereby warrants the galvanized frame rails shall be warranted for a period of twenty 20 years and includes the following coverage:

- The galvanized surfaces of the frame rails and cross members shall be free from corrosion caused by dissimilar metals, adhesion, blistering or peeling.
- The galvanized surfaces of the frame rails and cross members shall be free from any corrosion perforation.

Under this warranty Rosenbauer Motors, LLC agrees to repair or refinish any galvanized surface that has been found to have a defect caused by defective manufacturing methods or galvanized material where there is no indication of abuse, neglect, unusual or other than normal service providing that such item or items are, at the option of Rosenbauer Motors, LLC, made available for our inspection at our request, returned to our factory or other location designated by us with transportation prepaid within thirty days after the date of failure or within twenty years from the date of delivery of the apparatus to the original purchaser, whichever occurs first, and inspection indicates the failure was attributed to a defect caused by defective manufacturing methods or



galvanized material selection. Written authorization for repair or item replacement must be sought from Rosenbauer Motors, LLC customer service prior to the repair or item replacement occurring.

**Coverage Period**

0 – 10 years = 100%

11 – 15 years = 50%

16 – 20 years = 25%

**This warranty shall not apply to or cover:**

- Normal maintenance services including clean and repair of surface corrosion caused by normal road salt/chemicals or debris contacting the frame rails and cross members.
- Damage to the galvanized frame rails caused by exposure to severe environmental or chemical conditions or acidic environment.
- Any item that has been repaired, replaced or altered by a facility not approved in advance by Rosenbauer Motors, LLC, or in a manner which, at Rosenbauer Motors, LLC discretion, may adversely affect the safe operation or durability of the vehicle or item.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.
- Any malfunction resulting from misuse, negligence, alteration, accident or lack of operational knowledge, lack of normal or required maintenance or adjustments, fire or acts of God.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer Motors, LLC, 5190 260th St. Wyoming, MN 55092.

**NOTE:** Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

**BUMPER**

The chassis shall feature a temporary bumper for shipment to the body manufacturer. Bumpers and bumper extensions are available on the body side of the specifications.

**BUMPER EXTENSION**

The bumper shall extend 24” from the cab fascia to the edge of the bumper face.

**TOW HOOKS**

Two (2) tow hooks shall be mounted to the bumper extension under the bumper towards the forward section of the extension. The tow hooks shall be steel and shall be powder coated black.



## **ENGINE PLACEMENT**

The engine shall be a maximum of 36" from the center line of the front axle to the front face of the engine block. The engine valve cover shall be a maximum of 23" from the top of the frame.

The engine placement shall provide optimal weight distribution to the front axle to enhance vehicle handling. More weight out in front of the front axle can cause a "fulcrum effect" and cause unsafe "bump steer" conditions.

The engine shall be mounted in a position that provides for the lowest possible height of the interior engine tunnel. An engine tunnel height from the floor of the chassis cab shall be no more than 21" high inside the cab.

Engine placement shall provide a minimum of 11" between the engine fan and radiator to maximize the airflow and cooling of the engine.

## **ENGINE**

A Cummins ISL 9.0 liter, four-cycle diesel fueled, turbo charged engine shall feature the following:

- One of the highest power to weight ratios in its class
- Heavy-duty replaceable wet liners, roller followers, by-pass oil filtration with replaceable spin on cartridge and targeted piston cooling for longer service in tough work environments
- Improved cooled EGR system
- 543 Cubic inches of displacement
- High pressure common rail fuel system producing a precise quantity of fuel at ultra-high pressures
- Fully integrated, robust electronic engine controls

The engine shall be coupled with a Holset VGT™ (Variable Geometry Turbocharger).

The engine shall be filled with Citgo brand Citgard 500 (or equivalent) SAE 15W40 CJ4 low ash engine oil for proper engine lubrication.

The engine shall be EPA certified to meet the 2010 emissions standards without compromising performance, reliability or durability using cooled exhaust gas recirculation and selective catalytic reduction technology.

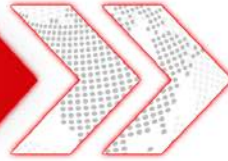
The engine shall include an original equipment manufacturer installed oil drain plug.

The engine shall include programming which will govern the top speed of the vehicle.

### **HORSEPOWER**

The engine shall have 450 horsepower at 2100 RPM, with a governed speed of 2200 RPM.

The engine shall have 1250 foot pounds of torque at 1400 RPM.



### **AUXILIARY ENGINE BRAKE**

The engine shall utilize a variable geometry turbo (VGT). The VGT auxiliary engine brake shall be an integral part of the turbo and shall offer a variable rate of exhaust flow, which when activated shall slow the engine and in turn slow the vehicle.

The VGT shall actuate the vehicle's brake lights when engaged as an auxiliary brake. A cutout relay shall be installed to disable the VGT when in pump mode or when an ABS event occurs. The VGT engine brake shall activate at a 0% accelerator throttle position when in operation mode.

### **TRANSMISSION PRE-SELECT**

When the auxiliary brake is engaged, the transmission shall automatically shift to fourth gear to decrease the rate of speed. The transmission shall assist the secondary braking system, thereby slowing the vehicle.

### **AUXILIARY ENGINE BRAKE CONTROL**

An engine compression brake control device shall be included. The electronic control device shall monitor various conditions and shall activate the engine brake only if all of the following conditions are simultaneously detected:

- A valid gear ratio is detected.
- The driver has requested or enabled engine compression brake operation.
- The throttle is at a minimum engine speed position.
- The electronic controller is not presently attempting to execute an electronically controlled final drive gear shift.

The compression brake shall be controlled through an on/off switch driver's side panel.

### **ENGINE PROGRAMMING HIGH IDLE SPEED**

A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation.

The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle."

### **ENGINE HIGH IDLE CONTROL**

The vehicle shall be equipped with an automatic high-idle speed control. It shall be pre-set so when activated, it will operate the engine at the appropriate RPM to increase alternator output and optimize output of the HVAC system.

This device shall operate only when the master switch is activated and the transmission is in neutral with the parking brake set. The device shall disengage when the operator depresses the brake





pedal, or the transmission is placed in gear, and shall be available to manually or automatically re-engage when the brake is released, or when the transmission is placed in neutral.

### **ENGINE AIR INTAKE**

The engine air intake system shall include an ember separator air intake filter which shall be located behind the fascia.

The filter shall protect the downstream air filter from embers using a combination of unique flat and crimped metal screens constructed into a corrosion resistant steel frame.

This multilayered screen shall be designed to trap embers or allow them to burn out before passing through the pack, while creating only minimal air flow restriction through the system. Periodic cleaning or replacement of the screen shall be all that is required after installation.

The intake shall also feature a cyclone style water separator to remove unwanted moisture from incoming air.

The engine shall include an air intake filter which shall be bolted to the frame and located under the front of the cab. This dry type filter shall ensure dust and debris is safely contained inside the disposable housing, eliminating the chance of contaminating the air intake system during air filter service via a leak-tight seal.

The filter must have a capacity of no less than 1350 cubic feet of air per minute. The filter paper media must be of a flame retardant treated material. An electric air filter restriction indicator shall also be included with the system.

### **ENGINE EXHAUST SYSTEM**

The exhaust system shall include a diesel particulate filter (DPF), a diesel oxidation catalyst, and a selective catalytic reduction catalyst (SCR) to meet current EPA standards.

The selective catalytic reduction catalyst shall utilize a diesel exhaust fluid solution consisting of urea and purified water to convert nitrogen oxide into nitrogen, water, and trace amounts of carbon dioxide. The solution shall be injected into the system through the decomposition tube between the DPF and SCR.

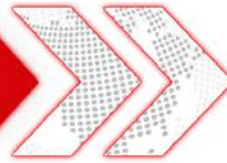
The system shall utilize 0.065 inch thick stainless steel exhaust tubing between the engine turbo and the DPF.

The DPF, the decomposition tube, and the SCR canister through the end of the tailpipe shall all be connected with zero leak gasketed clamps. The discharge shall terminate horizontally on the right side of the vehicle ahead of the rear tires with an exhaust gas diffuser.

The diffuser shall lower exhaust gas temperatures during the regeneration cycle.

### **DIESEL EXHAUST FLUID TANK**

There shall be a molded cross linked polyethylene tank for the Diesel Exhaust Fluid (DEF). The tank shall have a capacity of not less than five (5) usable gallons and shall be mounted on the left hand side of the chassis frame in front of the batteries below the frame.



The DEF tank shall be designed with capacity for expansion in case of fluid freezing. Engine coolant, which shall be thermostatically controlled, shall be run through lines in the tank to help prevent the DEF from freezing and to provide a means of thawing the fluid if it should become frozen.

### **DIESEL EXHAUST FLUID TANK**

There shall be an access door provided in the top rear step of left side crew area for access to the DEF tank.

### **ENGINE EXHAUST ACCESSORIES**

An exhaust temperature mitigation device shall be shipped loose for installation by the body manufacturer on the vehicle. The temperature mitigation device shall lower the temperature of the exhaust by combining ambient air with the exhaust gasses at the exhaust outlet.

### **ENGINE EXHAUST WRAP**

The exhaust tubing between the engine turbo and the diesel particulate filter (DPF) shall be wrapped with a thermal cover in order to retain the necessary heat for DPF regeneration. The exhaust wrap shall also help protect surrounding components from radiant heat which can be transferred from the exhaust.

### **DIESEL PARTICULATE FILTER CONTROLS**

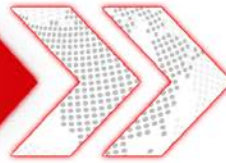
There shall be two (2) controls for the diesel particulate filter. One (1) control shall be for regeneration and one (1) control shall be for regeneration inhibit. Each switch shall be located in a covered location.

### **ENGINE COOLING SYSTEM**

The radiator and the complete cooling system shall meet or exceed NFPA and engine manufacturer cooling system requirements.

The system shall include and feature the following:

- A vertically stacked charge air cooler providing the maximum cooling capacity for the engine. Proposals offering horizontally stacked charge air cooler shall not be acceptable. No Exceptions
- The charge air cooler and radiator shall measure not less than 1382 square inches
- A one (1) piece nine (9) blade fan and shroud
- A surge tank with a low coolant probe and capable of removing entrained air from the cooling system
- Radiator re-circulation shields to prevent heated air from re-entering the cooling system and affecting performance
- Mounts allowing the entire radiator to drop through the frame for service when needed - No Exceptions



- Engine placement shall provide a minimum of 8" between the engine fan and radiator to maximize the airflow and cooling of the engine.
- A Spin on Element water filter with corrosion inhibitor shall be provided for the cooling system. No Exception.

### **COOLANT HOSES**

The cooling systems hose shall be formed silicone hose and formed aluminized steel tubing and include stainless steel constant torque band clamps.

### **ENGINE COOLANT**

The cooling package shall include Extended Life Coolant (ELC). The use of ELC provides longer intervals between coolant changes over standard coolants providing improved performance. The coolant shall contain a 50/50 mix of ethylene glycol and de-ionized water to keep the coolant from freezing to a temperature of -34 degrees F.

Supplemental coolant additives (SCA) are not required as this is part of the extended life coolant makeup.

### **ENGINE PUMP HEAT EXCHANGER**

A single bundle type coolant to water heat exchanger shall be installed between the engine and the radiator. This pump heat exchanger shall circulate water from the fire pump to the heat exchanger thereby reducing the temperature of the coolant for the engine. The heat exchanger shall be designed to prohibit water from the pump from coming in contact with the engine coolant.

### **TRANSMISSION**

The drive train shall include an Allison Gen IV-E model EVS 3000 torque converting, automatic transmission which shall include electronic controls. The transmission shall feature two (2) 10-bolt PTO pads located on the converter housing.

The transmission shall include two (2) internal oil filters and Allison approved transmission fluid which shall be utilized in the lubrication of the EVS transmission. An electronic oil level sensor shall be included with the readout located in the shift selector.

The Gen IV-E transmission shall include prognostic diagnostic capabilities. These capabilities shall include the monitoring of the fluid life, filter change indication, and transmission clutch maintenance.

The transmission gear ratios shall be:

- 1st 3.49:1
- 2nd 1.86:1
- 3rd 1.41:1
- 4th 1.00:1
- 5th 0.75:1
- 6th 0.65:1 (if applicable)
- Rev 5.03:1



### **TRANSMISSION COOLING SYSTEM**

The transmission shall include a water to oil cooler system located in the cooling loop between the radiator and the engine. The transmission cooling system shall meet all transmission manufacturer requirements. The transmission cooling system shall feature continuous flow of engine bypass water to maintain uninterrupted transmission cooling.

### **TRANSMISSION DRAIN PLUG**

The transmission shall include an original equipment manufacturer installed oil drain plug.

### **TRANSMISSION FLUID**

The transmission shall include two (2) internal oil filters and Allison approved transmission fluid which shall be utilized in the lubrication of the EVS transmission. An electronic oil level sensor shall be included with the readout located in the shift selector.

### **TRANSMISSION SHIFT SELECTOR**

An Allison pressure sensitive range selector touch pad shall be provided and located on the tunnel to the right of the driver.

The shift selector shall provide an indicator on the digital display and shall alert the driver/operator when a specific maintenance function is required.

### **PTO LOCATION**

The transmission driven power take off (PTO) shall be mounted in the 1:00 o'clock position.

### **TRANSMISSION MODE PROGRAMMING**

The transmission, upon start-up, will select the fifth speed operation without the need to press the mode button.

### **TRANSMISSION PROGRAMMING**

The EVS group package number 127 shall contain the 198 vocational package for the fire service for this apparatus as a Pumper. This package shall incorporate an automatic neutral with selector override. This feature commands the transmission to neutral when the park brake is applied, regardless of drive range requested on the shift selector which requires re-selecting the drive range to shift out of neutral for the override.

This package shall be coupled with the use of a split shaft PTO and incorporate pumping circuits. These circuits shall be used allowing the vehicle to operate in the fourth range lockup while operating the pump mode due to the 1 to 1 ratio through the transmission, therefore the output speed of the engine is the input speed to the pump. The pump output can be easily calculated by using this input speed and the drive ratio of the pump itself to rate the gallons of water the pump can provide.

An eight (8) pin diagnostic connector will be provided next to the steering column.



The trans module shall contain the following circuits:

Function ID	Description	Wire assignment
C	PTO Request	142
J	Fire Truck Pump Mode (4th Lockup)	122 / 123
C	Range Indicator	145 (4th)
G	PTO Enable Output	130
	Signal Return	103

**DRIVELINE**

All drivelines shall be heavy duty metal tube and equipped with Spicer 1710 series universal joints.

The shafts shall be dynamically balanced prior to installation to alleviate future vibration. In areas of the driveline where a slip shaft is required, the splined slip joint shall be coated with Glide Coat®.

**FUEL SYSTEM**

The fuel tank shall have a capacity of fifty (50) gallons/one hundred eighty-nine (189) liters and shall measure 35.00 inches in width X 15.00 inches in height X 24.00 inches in length. The tank shall offer:

- A vent port which will facilitate venting to the top of the fill neck for rapid filling without any “blow-back”
- One (1) 2” NPT fill port for left hand fill with a .5” NPT drain plug centered side to side 9” from the front of the tank
- A roll over ball check vent for temperature related fuel expansion and draw
- A design including dual draw tubes and sender flanges
- A baffled design and shall be constructed of steel
- An exterior painted with a PRP CorSol™ black anti-corrosive exterior metal treatment finish which offers external corrosion resistance

The fuel tank shall be mounted below the frame, behind the rear axle. There shall be two (2) three-piece strap hanger assemblies with “U” straps bolted midway on the fuel tank, allowing the tank to be easily lowered and removed for service purposes.

The strap hanger material shall be stainless steel. No Exceptions.

For isolation of vibration and movement, rubber isolating pads shall be provided between the tank and the hanger strap assemblies. The tank straps shall be attached to rubber coated cross members which help isolate the tank from frame flex.

Strap mounting studs through the rail, hidden behind the body shall not be acceptable.

All fuel lines shall be connected with steel fittings with all fittings pointed towards the right side (curbside) of the chassis.



The chassis fuel lines shall feature an additional 4' of length provided so the tank can be easily lowered and removed for service purposes which shall be coiled and secured at the top of the tank.

### **FUEL FILTER/WATER SEPARATOR**

The fuel system shall have a Fleetguard FS1065 fuel filter/water separator as a primary filter. The fuel filter shall have a drain valve.

A water in fuel sensor shall be provided and wired to an instrument panel lamp and audible alarm to indicate when water is present in the fuel/water separator.

A secondary fuel filter shall be included as approved by the engine manufacturer.

### **FUEL LINES**

The fuel system supply and return lines installed from the fuel tank to the engine shall be black aramid braided lines with a fiber outer braid. The fuel lines shall be connected with reusable steel fittings. Fuel line is compatible with bio-fuel blends.

### **FUEL SHUTOFF VALVE**

Two (2) fuel shutoff valves shall be installed at the fuel filter to allow the fuel filter to be changed without loss of fuel to the fuel pump.

### **FUEL COOLER**

The cross flow air to fuel cooler shall be all aluminum and shall be provided to lower fuel temperature allowing the vehicle to operate at higher ambient temperatures. The fuel cooler shall be located behind the battery box, under the frame.

The fuel cooler shall incorporate a fan for improved heat transfer.

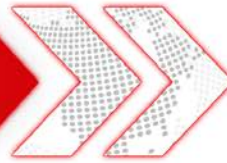
### **ALTERNATOR**

The charging system shall include a 270 amp Leece Neville 12-volt alternator. The alternator shall include a self-excited integral regulator.

### **ELECTRICAL SYSTEM**

There shall be a 12-volt direct current single starting electrical system providing power to all components for the cab and chassis. The system shall feature:

- 300 degree Fahrenheit high temperature, flame retardant loom
- All SAE wiring color coded and labeled as to its function
- Wiring which is cross link with 311 degree Fahrenheit insulation
- A suppressed system in accordance with SAE J551



The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible.

Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload.

General protection circuit breakers will be a combination of automatic and manual reset breakers. This will provide a durability and capacity maximization of the electrical system. When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.

### **EMI/RFI PROTECTION**

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter requirements. Component and partial (incomplete) vehicle testing is not adequate as overall vehicle design can impact test results and thus is not acceptable by itself.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

### **ELECTRICAL HARNESSING INSTALLATION**

To ensure rugged dependability, all wiring harnesses installed by the apparatus manufacturer will conform to the following specifications:

SAE J1128 - Low tension primary cable

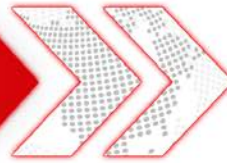
SAE J1292 - Automobile, truck, truck-tractor, trailer and motor coach wiring

SAE J163 - Low tension wiring and cable terminals and splice clips

SAE J2202 - Heavy duty wiring systems for on-highway trucks

NFPA 1901 - Standard for automotive fire apparatus

FMVSS 302 - Flammability of interior materials for passenger cars, multipurpose passenger vehicles, trucks and buses



SAE J1939 - Serial communications protocol

SAE J2030 - Heavy-duty electrical connector performance standard

SAE J2223 - Connections for on board vehicle electrical wiring harnesses NEC - National Electrical Code

SAE J561 - Electrical terminals - Eyelet and spade type

SAE J928 - Electrical terminals - Pin and receptacle type A

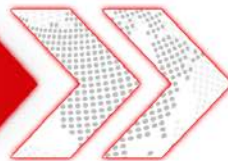
For increased reliability and harness integrity, harnesses will be routed throughout the cab and chassis in a manner which allows the harnessing to be laid into its mounting location. Routing of harnessing which requires pulling of wires through tubes will not be allowed.

Wiring will be run in loom or conduit where exposed, and have grommets or other edge protection where wires pass through metal. Wiring will be color, function and number coded. Wire colors will be integral to each wire insulator and run the entire length of each wire. Harnessing containing multiple wires and uses a single wire color for all wires will not be allowed. Function and number codes will be continuously imprinted on all wiring harness conductors at 3.00" intervals. All wiring installed between the cab and into doors will be protected by an expandable rubber boot to protect the wiring. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

- All wire ends not placed into connectors will be sealed with a heat shrink end cap. Wires without a terminating connector or sealed end cap will not be allowed.
- All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
- Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
- For low cost of ownership, electrical components designed to be removed for maintenance will be quickly accessible. For ease of use, a coil of wire will be provided behind the appliance to allow them to be pulled away from the mounting area for inspection and service work.
- Corrosion preventative compound will be applied to non-waterproof electrical connectors located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation of the plug.
- Any lights containing non-waterproof sockets in a weather-exposed area will have corrosion preventative compound added to the socket terminal area.
- All electrical terminals in exposed areas will have protective Coating applied completely over the metal portion of the terminal.
- Rubber coated metal clamps will be used to support wire harnessing and battery cables routed along the chassis frame rails.
- Heat shields will be used to protect harnessing in areas where high temperatures exist. Harnessing passing near the engine exhaust will be protected by a heat shield.
- Cab and crew cab harnessing will not be routed through enclosed metal tubing. Dedicated wire routing channels will be used to protect harnessing therefore improving the overall integrity of the vehicle electrical system. The design of the cab will allow for easy routing of additional wiring and easy access to existing wiring.
- All braided wire harnesses will have a permanent label attached for easy identification of the harness part number and fabrication date.
- All standard wiring entering or exiting the cab will be routed through sealed bulkhead connectors to protect against water intrusion into the cab.





## **BATTERY CABLE INSTALLATION**

All 12-volt battery cables and battery cable harnessing installed by the apparatus manufacturer will conform to the following requirements:

SAE J1127 - Battery Cable

SAE J561 - Electrical terminals, eyelets and spade type

SAE J562 - Nonmetallic loom

SAE J836A - Automotive metallurgical joining

SAE J1292 - Automotive truck, truck-tractor, trailer and motor coach wiring

NFPA 1901 - Standard for automotive fire apparatus

Battery cables and battery cable harnessing will be installed utilizing the following guidelines:

- All battery cables and battery harnesses will have a permanent label attached for easy identification of the harness part number.
- Splices will not be allowed on battery cables or battery cable harnesses.
- For ease of identification and simplified use, battery cables will be color coded. All positive battery cables will be red in color or wrapped in red loom the entire length of the cable. All negative battery cables will be black in color.
- For increased reliability and reduced maintenance, all electrical buss bars located on the exterior of the apparatus will be coated to prevent corrosion.

## **ELECTRICAL COMPONENT INSTALLATION**

All lighting used on the apparatus will be, at a minimum, a two (2) wire light grounded through a wired connection to the battery system. Lights using an apparatus metal structure for grounding will not be allowed.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order. The results of the tests will be recorded and provided to the purchaser at time of delivery.

## **DRIVER SWITCH PANEL**

The driver panel to the right of the Driver's position shall include the following:

- In the upper most row it shall have the HVAC Controls, which shall include three (3) controls, the fan speed, comfort and defrost control, and temperature control. In the far right position shall be the seat belt indicator.
- In the middle section there shall be eight (8) backlit switches, the switch closest to the driver shall be the Emergency Master switch, and the switch on the far right side shall be a high idle switch leaving six (6) blank switches in between for customer applications.
- In the bottom row there shall be six (6) switches. These switches shall be configured in the following order starting with the switch closest to the driver, headlight switch, dimmer switch, wiper control, engine brake on/off switch, with 2 blank switches on the far right side for customer application.

## **MASTER WARNING SWITCH**

A master switch shall be included in the main rocker switch panel. The switch shall be a rocker type, red in color and labeled "Master" for identification. The switch shall feature control over all



devices wired through it. Any warning device switch left in the “ON” position shall automatically power up when the master switch is activated.

### **LOAD MANAGEMENT SYSTEM**

A load manager shall be installed on the chassis. It shall be programmed to shed loads to prevent over loading of the electrical system.

### **CAB INSTRUMENTATION**

The instrumentation panel within the cab shall feature a Pacific Insight gauge panel which shall include three (3) 5" diameter information centers, telltale indicator lamps, control switches, alarms, and a LCD diagnostic panel.

The gauges shall be easy to read including red backlighting.

The instrument panel shall contain the following gauges and indicators:

The middle information center shall include:

- A programmable speedometer to read either 0 to 140 MPH or 0 to 140 KM/H
- An amber telltale lamp indicating the Check Engine
- An amber telltale lamp indicating MIL Engine Emissions System Malfunction
- A red telltale lamp indicating Stop Engine
- A tachometer gauge with 0-3,000 RPM

The right hand side information center shall include:

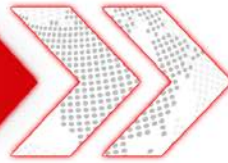
- A gauge to display the engine oil pressure with high and low level indicators and stop engine alarm
- A fuel level gauge with a low fuel indicator and alarm
- An LED bar displaying 4 stages of the level for the Diesel Exhaust Fluid (DEF) with a refill indicator
- A voltage gauge with low voltage indicator
- A water temperature gauge with high water temp indicator and alarm

The left hand side information center shall include:

- A primary air PSI gauge including low air and high air warning displays
- A secondary air PSI gauge with low and high air warning indication

An LCD diagnostic display, located in the left hand side information center shall include digital readouts for the following:

- Odometer
- Transmission oil temp
- Engine oil temp
- Speedometer
- Engine hours
- Engine and transmission code
- Exhaust temp



- Engine coolant temp
- Engine oil PSI
- Turbo boost PSI
- Primary air pressure
- Secondary air pressure
- Engine load %
- Engine torque
- Battery volts
- Fuel level %
- Vehicle speed
- RPM
- DEF level
- Instant fuel economy
- Average fuel economy
- Engine hours
- Capable to record four trips, each shall be include:
  - Trip distance
  - Fuel economy
  - Fuel used
  - Idle fuel used
- The LCD screen shall also provide diagnostic capability

To promote safety, the following telltale indicator lamps will be integral to the gauge assembly and are located below the middle information center. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols. The following indicator lamps shall be located on the Telltale panel:

#### BLUE Indicator Lights

- High Beam Headlight

#### GREEN Indicator Lights

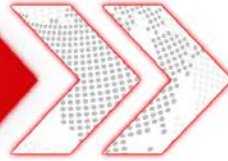
- Right Turn Indicator
- Left Turn Indicator
- Battery On (Always On)

#### YELLOW Indicator Lights

- Particle Filter Regeneration (DPF)
- Regeneration Inhibit (Switch Engaged)
- Check Transmission
- Air Intake Restriction
- High Exhaust System Temperature (HEST)
- Wait to Start
- ATC (Automatic Traction Control) (when applicable)
- Water in Fuel

#### RED Indicator Lights

- Low Engine Coolant Level
- Air Bag Warning (when applicable)



- High Transmission Temperature
- ABS
- Parking Brake

### **ALARMS**

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Alarm silence: Any active audible alarm will be able to be silenced with a button on the right side of the LCD screen.

### **INDICATOR LAMP AND ALARM PROVE-OUT**

Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

### **DIAGNOSTIC PANEL**

A diagnostic panel shall be accessible while standing on the ground and located inside the driver's side door, left of the steering column. The diagnostic panel shall allow diagnostic tools such as computers to connect to various vehicle systems for improved trouble shooting providing a lower cost of ownership. Diagnostic switches shall allow engine and ABS systems to provide blink codes should a problem exist.

The diagnostic panel shall include the following:

- Engine diagnostic port
- Transmission diagnostic port
- ABS diagnostic port
- SRS diagnostic port (when applicable)
- V-Mux USB diagnostic port (when applicable)
- Engine diagnostic switch (blink codes flashed on check engine telltale indicator)
- Diesel particulate filter regeneration switch (when applicable)
- Diesel particulate filter regeneration inhibit switch (when applicable)

### **BACKLIGHTING COLOR**

The instrumentation gauges and the switch panel legends shall be backlit using amber LED backlighting.

### **INSTRUMENTATION PANEL**

The instrumentation panel inlay shall be powder coat black.

### **VEHICLE DATA RECORDER**

Apparatus shall be equipped with a Class1 "Vehicle Data Recorder (VDR) that is connected to the power train CAN (Controller Area Network) bus consisting of transmission (TCM), engine control



(ECM) and anti-lock brake (ABS) modules mounted on the apparatus. The VDR will function per NFPA 1901-2009 sections 4.11 (Vehicle Data Recorder) utilizing the power train s J1939 data.

The VDR data shall be downloadable by USB cable to a computer using either Microsoft™ or Apple™ Operating Systems using Class 1/ O.E.M. supplied reporting software. The latest version of the software shall be available by contacting Class 1.

The apparatus shall be equipped with a Class1 Seat Belt Warning System” (SBW) that is connected to the power train CAN (Controller Area Network) bus consisting of transmission (TCM), engine control (ECM) and anti-lock brake (ABS) modules mounted on the apparatus. The SBW will function per NFPA 1901-2009 14.1.3.10 (Seat Belt Warning) using the Class1 “Seat Belt Input Module” for seat occupied and belt status information.

The SBW system shall have the ability to use either normally open (NO) or normally closed (NC) switches (user selectable by “dip switches” at ground potential) for operation.

### **BATTERIES**

The single start electrical system shall include four (4) 950 CCA batteries. The batteries shall feature:

- A 210 minute reserve capacity
- 4/0 welding type dual path starter cables per SAE J541
- Heat shrink and sealant encapsulated ends on the cables

### **BATTERY COMPARTMENTS**

A well ventilated battery storage compartment shall house the batteries on the officer and driver side of the chassis and shall be located so as to offer easy access to the batteries when the cab is tilted.

Each battery compartment shall feature a painted battery box with cover.

### **BATTERY CABLES**

The starting system shall include cables which shall be protected by a 275 degree F minimum high temperature flame retardant loom.

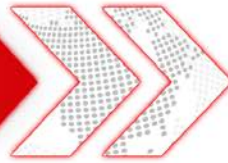
The loom shall be sealed to keep out dirt, dust and debris.

### **BATTERY JUMPER STUD**

The starting system shall include battery jumper studs.

These studs shall be located in the forward most portion of the driver's side lower step.

The studs shall allow the vehicle to be jump started, charged, or the cab to be raised in an emergency in the event of battery failure.



## **IGNITION**

A master battery system with a keyless start ignition system shall be provided. Each system shall be controlled by a Land & Sea brand two position switch, of which shall be mounted on the left side driver kick panel.

A push button type starter button shall be provided on the driver dash to the left of the steering wheel.

The starter button shall only operate when both the master battery and ignition switches are in the "ON" position.

## **POWER & GROUND STUD**

An electrical distribution panel shall include two (2) power studs. The studs shall be size #10 and each of the power studs shall be circuit protected with a fuse of the specified amperage. One (1) power stud shall be capable of carrying up to a 40 amp battery direct load. One (1) power stud shall be capable of carrying up to a 15 amp ignition switched load. The two (2) power studs shall share one (1) #10 ground stud.

## **ADDITIONAL POWER & GROUND STUDS**

One (1) additional power and ground studs shall be provided behind the switch panel. These shall be powered through the master switch.

## **GROUND LIGHTS**

Each door shall include a Whelen 3SCOCDCR LED NFPA compliant ground light mounted to the underside of the cab step below each door.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

## **GROUND LIGHT ACTIVATION**

The ground lights shall activate when the park brake is engaged.

## **CAB STEP LIGHTING**

One (1) LED light shall be mounted to the riser of the middle cab step, a total of four (4) step lights for the cab, in accordance with NFPA.

Each light shall include a polycarbonate lens and shall be contained in a housing which is vibration welded with a bulb which shall be shock mounted. Each step light shall not be any larger than 3" in diameter.

The step lighting shall activate by opening any of the cab doors.

## **ENGINE COMPARTMENT LIGHTING**

Two (2) LED lights shall be mounted to the engine compartment in such a fashion as to provide as much light as possible to the engine compartment area. The engine compartment lighting shall activate with the tilting of the cab.



### **INTERIOR OVERHEAD CAB LED LIGHTING**

Each cab door shall include an LED lamp with a red and a clear lens. The clear lamp shall illuminate with the opening of each respective door with both the red and clear portions of the lamp activated by individual switches on each lamp.

### **INTERIOR DOOR WARNING LIGHTS**

The interior of each door shall include one (1) red 3" diameter LED warning light located on the door panel. Each light shall activate with a flashing pattern when the door is in the open position to serve as a warning to oncoming traffic.

### **DO NOT MOVE APPARATUS/ HAZARD LIGHT**

The front headliner of the cab shall include a flashing red Whelen 500 Series LED light clearly labeled "Do Not Move Apparatus".

The flashing red light shall be located centered left to right for greatest visibility.

The light and alarm shall be interlocked for activation when either a cab door is not firmly closed or an apparatus compartment door is not closed, and the parking brake is released.

### **DOOR OPEN ALARM**

There shall be an alarm interlocked for activation when either a cab door or apparatus compartment door is not completely closed, or the parking brake is released.

### **BACK-UP ALARM**

One (1) Preco automatic electric back-up alarm shall be wired to the back-up light circuit, and mounted under the rear of the apparatus body.

### **BATTERY CHARGER AND AIR COMPRESSOR**

One (1) Kussmaul Pump Plus 1200 model #091-187-12-R-B1 battery charger and air compressor system shall be installed. The 120 volt compressor system shall be designed to maintain the air pressure in the chassis brake system whenever the pressure drops below a predetermined level.

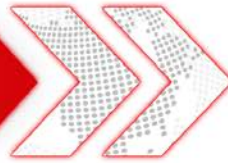
The battery charger shall be supplied from the 120 volt shore power receptacle and be a fully automatic high output charging system. The unit shall be mounted in a clean dry area and will be accessible for service and/or maintenance.

Automatic Shoreline - 20 Amp

There shall be a yellow, 20-amp super auto eject cover supplied.

Shoreline located above the Cab Side

The Battery Charger indicator shall be located in the canopy window.



## **BODY SPECIFICATIONS**

### **MISCELLANEOUS**

#### **MAX HEIGHT**

The maximum height of the apparatus shall not exceed: 9' 8"

#### **MAX LENGTH**

The maximum length of the apparatus shall not exceed: 32'

#### **OVERALL WIDTH**

An overall width restriction has not been specified for this apparatus.

#### **MAX WHEELBASE**

The maximum wheelbase of the apparatus shall not exceed: 170"

#### **ANGLE OF APPROACH**

The angle of approach for the apparatus shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901.

#### **ANGLE OF DEPARTURE**

The angle of departure for the apparatus shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901.

#### **CENTER OF GRAVITY**

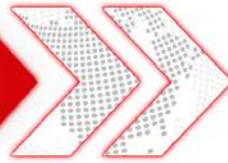
The apparatus, prior to acceptance, will be required to meet the vehicle stability of the applicable NFPA Automotive Fire Apparatus Standard.

A calculated center of gravity shall be provided. The calculated or measured center of gravity (CG) shall be no higher than 80-percent of the rear axle track width.

#### **PRE-CONSTRUCTION CONFERENCE (AT FIRE DEPARTMENT)**

A pre-construction conference shall be conducted at the Fire Department Headquarters, at which time all final designs and equipment mounting locations will be approved, prior to any sheet metal being cut. A factory-trained dealer shall be present during the pre-construction conference to answer any design questions relating to the layout of the apparatus. All expenses for travel, meals, and lodging shall be included. BIDDER SHALL INDICATE INTENTION TO PROVIDE THE REQUIRED PRE-CONSTRUCTION CONFERENCE IN THE PROPOSAL PACKET.





### **INSPECTION TRIPS**

Inspection trip(s) for Fire Department personnel shall be made to the facility during the course of construction of the apparatus. Successful bidder shall consult with Fire Department committee chairperson as to the proper timing of the inspection trip(s). Air travel (for distances over 250 miles), meals, and lodging expenses shall be included. BIDDER SHALL INDICATE INTENTION TO PROVIDE THE REQUIRED INSPECTION TRIP(S) IN THE PROPOSAL PACKET.

### **DEMONSTRATION**

Fire Department personnel shall be properly instructed as to the proper use of the entire apparatus including, but not limited to, chassis, fire pump system, the apparatus and all equipment. The demonstration shall be made by a factory trained Specialist who shall be responsible for complete instruction as to operation and maintenance of the chassis, and the completed vehicle.

The demonstration specialist shall remain at the Fire Department for a sufficient amount of time to provide thorough instructions to all personnel, or as instructed by Chief of the Department. All meals, motel and travel costs shall be the responsibility of the successful bidder.

### **BUMPER TO BUMPER WARRANTY**

The manufacturer shall provide a one (1) year bumper-to-bumper warranty. The manufacturer shall supply details of their warranty information with their bid submission.

### **ALUMINUM BODY WARRANTY - TEN YEAR**

The manufacturer shall provide a ten (10) year structural and corrosion perforation warranty for the fabricated aluminum body. The manufacturer shall supply details of their warranty information with their bid submission.

### **GALVANIZED STEEL SUBFRAME WARRANTY**

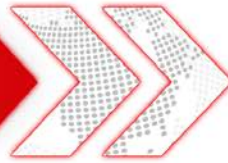
The manufacturer shall provide a lifetime warranty for the galvanized steel subframe of the apparatus body. The manufacturer shall supply details of their warranty information with their bid submission.

### **PAINT WARRANTY - TEN YEAR**

The manufacturer shall provide a ten (10) year paint warranty for all portions of the apparatus that they have painted. The manufacturer shall supply details of their warranty information with their bid submission.

### **LETTERING WARRANTY**

The manufacturer shall provide a two (2) year warranty for the lettering and striping applied to the apparatus. The manufacturer shall supply details of their warranty information with their bid submission.



### FIRE PUMP WARRANTY

A five (5) year warranty on the Hale fire pump shall be provided. The warranty shall be parts and labor for the first 2 years and parts only for years 3 through 5. The manufacturer shall supply details of their warranty information with their bid submission.

### GALVANIZED PLUMBING WARRANTY

The manufacturer shall provide a ten (10) year warranty on the galvanized plumbing components and installation. The manufacturer shall supply details of their warranty information with their bid submission.

### COMPLETE COMPACT DISC MANUAL

The manufacturer shall provide with the vehicle upon delivery, one (1) complete delivery manual. These manuals shall be on a computer generated compact disc (CD), with reference guide for each section of the vehicle. Within each section shall be:

228. Individual component manufacturer instruction and parts manual
229. Warranty forms for body
230. Warranty forms for all major components
231. Warranty instructions and format to be used in compliance with warranty obligations
232. Wiring diagrams
233. Installation instructions and drawings of major parts
234. Visual graphics and electronic photos of the installations of major parts
235. Necessary normal routine service forms, publications and components of body portion of apparatus
236. Technical publications on training and instructions for major body components
237. Warning and safety related notices for personnel protection

Cab and chassis manuals on parts, service and maintenance shall be provided

### "ON-LINE" SERVICE MANUAL SUPPORT

As part of the standard delivery manual, the manufacturer shall give a password-protected link to the end user, allowing access to the manufacturers' database on service parts. The internet-based system shall allow the end user to access the major component supplier's service parts listing such as Hale, Waterous, Akron, etc. This shall be accomplished with simplistic point and click features on the manufacturer line item within the "stripper" or "line sheet". This will include, automatic updates, printable schematics, and manufacturer's web links and is available in a commercially available format of Adobe Acrobat Reader to access these documents. The manufacturer shall submit with the bid proposal, a sample set of on line Adobe formatted material that has been printed from the manufacturer's website. Failure to do so will result in rejection of the proposal. Reference to "on delivery" or "at prebuild" submission is not an acceptable response for the bid document.

### Parts Listings within Manuals

The manuals will include cross-reference part numbers from the apparatus manufacturers' part number to the vendor parts. Example: Brand X Fire Apparatus, Hydraulic Ladder Rack, Part #WW-



MN-0302 cross-referenced to Ziamatic Corporation Part 098-MN2345. This will allow for reference between individual parts and complete installation assemblies as completed by the body builder. The manuals will list all components of the vehicle that includes a vendor part utilized in a complete installation via the manufacturers "line item sheet" or "stripper" utilized to manufacture the completed vehicle. These are "As Built" and proposals with "typical" or "generic" manuals will be rejected.

#### Illustrative Schematics within Manuals

The manufacturer shall include installation diagrams and drawings of all major sub assemblies. This will include components such as hydraulic ladder rack assemblies, pump panels, tanks, fire pumps, etc. The drawings shall be linked via an Internet based service program, in an electronic format from the manufacturers "stripper" (line item listing) of the manufacturing document. The manufacturer shall submit, with the bid proposal, a sample schematic. Failure to do so will result in rejection of the proposal. Reference to "on delivery" or "at prebuild" submission is not an acceptable response for the bid document.

#### Digital Images within Manuals

In addition to two and three-dimensional installation drawings, the manufacturer shall make accessible, via an internet based link, the actual photos of the installed components listed within the "stripper" or line sheet. This will include, but not limited to Wiring terminals, main body distribution strips, fire pump shifting, auxiliary components, etc. The manufacturer shall submit a sample of these with the bid submission. Failure to submit the digital images with the bid will result in rejection of the proposal. Reference to "on delivery" or "at prebuild" submission is not an acceptable response for the bid document.

#### Installation Instructions within Manuals

The manufacturers "work instructions" or "installation instructions" shall be included with the service manuals. These documents shall be accessible via a web-based link to the individual vehicle manufactured. The work instructions shall give systematic instructions of the installation process. The manufacturer shall submit, with the bid proposal, a sample set of instructions. Failure to do so will result in rejection of the proposal. Reference to "on delivery" or "at prebuild" submission is not an acceptable response for the bid document.

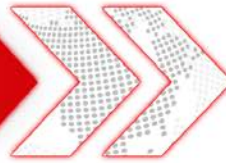
#### Automatic Updates of Manuals and Parts Listings

The online manuals will include automatic updates that are accessible via the web link. When clicking on the part within the manufacturers stripper or line sheet, it will allow the end user to access the component manufacturer website for updated information. This will allow for latest parts and service components from the individual part manufacturer or vendor.

#### Electrical Schematics

To maintain the vehicles electrical systems, the manufacturer shall provide to the purchaser the instructional manuals, complete electrical information and schematics on the vehicle. The electrical information shall be provided as follows:

#### Wiring Systems 12 and 120 Volt:



- 238. Graphic symbols for electrical diagrams.
- 239. Wire labeling, imprinting codes and index.
- 240. Computer generated electrical schematics indicating the circuit number, wire size, switches, circuit breaker and terminals on the vehicle.

The manufacturer shall submit, with the bid proposal, a sample set of diagrams. Failure to do so will result in rejection of the proposal. Reference to "on delivery" or "at prebuild" submission is not an acceptable response for the bid document.

### **IN PROCESS PHOTOS**

The vehicle manufacturer shall provide a series of photos of the apparatus as it progresses through the production process. There will be a minimum of four (4) photos per interval and a total of six intervals, one (1) upon chassis arrival, four (4) during construction and one (1) upon completion.

### **ROSENBAUER CUSTOM CHASSIS**

A Rosenbauer Commander custom fire truck chassis shall be furnished with the following apparatus body and equipment. See attached specifications for exact chassis configuration.

### **DC ELECTRICAL SYSTEM**

#### **FEDERAL ELECTRONIC SIREN**

One (1) Federal Signal EQ2B electronic siren speakers shall be recess mounted into the left side of the front bumper. The Federal Signal EQ2B electronic siren shall be mounted in the cab. This unit shall feature the Q-siren wail (manual and automatic) horn, yelp and Q-brake. The amplifier shall produce 200 watts of power for siren, PA or rebroadcast. The system will be capable of driving (1) 200-watt speaker, recess mounted into the bumper on the LH side. The siren shall provide inputs for optional external switches to operate manual wail, brake or air horn features.

#### **SPEAKER**

Two (2) Federal Signal DynaMax Model #ES100 100-watt speaker shall be installed. The black aluminum speaker shall include a polished trim #ESFMT.

#### **SPEAKER**

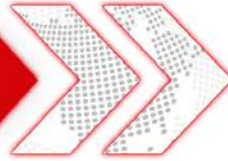
Two (2) stainless steel grille shall be installed on the speaker.

#### **SPEAKER LOCATIONS**

The siren speakers shall be recessed in the apparatus bumper with one (1) speaker on each side.

#### **LIGHTBAR**

One (1) Whelen NFPA Edge Ultra Freedom light bar shall be included with the apparatus cab. The light bar shall be model FN72QLED and shall be mounted on the roof of the cab towards the front, above the windshield.



The light bar shall feature:

- A 72" light bar designed for high performance
- Two (2) front corner red linear LED light heads
- Four (4) front linear LED light heads, two (2) red and two (2) white
- Two (2) end red linear LED light heads with square ends
- A lens configuration of red/ clear/ red to offer the most ultra-bright, ultra-wide angle impact
- Designed in accordance with NFPA Zone A lighting requirements

### **LIGHTBAR ACTIVATION**

The front upper light bar activation shall be wired into the master warning switch.

There shall be a separate switch to shut off clear light on light bar during adverse weather conditions.

### **UPPER REAR WARNING LIGHTS**

One (1) pair of Whelen model M9 LED warning lights shall be installed, one each side on the upper rear of the apparatus body. The dimensions of the lights shall be 6-1/2" x 10-3/8". There shall be chrome bezels supplied and installed on the warning lights.

### **UPPER SIDE FRONT WARNING LIGHTS**

One (1) pair of Whelen model M9 LED warning lights shall be installed, on the upper portion of the body side, towards the front. The dimensions of the lights shall be 6-1/2" x 10-3/8". There shall be chrome bezels supplied and installed on the warning lights.

### **UPPER SIDE REAR WARNING LIGHTS**

One (1) pair of Whelen model M9 LED warning lights shall be installed, one each side on the upper portion of the body side, towards the rear of the body. The dimensions of the lights shall be 6-1/2" x 10-3/8".

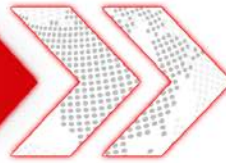
There shall be chrome bezels supplied and installed on the warning lights.

### **UPPER WING FRONT WARNING LIGHTS**

One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side on the front of the chassis cab upper grille area. The dimensions of the lights shall be 4-5/16" x 6-3/4". There shall be chrome bezels supplied and installed on the warning lights.

### **INBOARD HEADLIGHT WARNING LIGHTS**

One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side on the front of the chassis cab, inboard of the turn signals. The dimensions of the lights shall be 4-5/16" x 6-3/4".



### **INNER GRILLE WARNING LIGHTS**

One (1) pair of Whelen model M7 LED warning lights shall be installed, one each side on the front of the chassis grille, inboard position. The dimensions of the lights shall be 3-3/8" x 7-5/8".

### **OUTER GRILLE WARNING LIGHTS**

One (1) pair of Whelen model M7 LED warning lights shall be installed, one each side on the front of the chassis grille, outboard position. The dimensions of the lights shall be 3-3/8" x 7-5/8".

### **INTERSECTION WARNING LIGHTS**

One (1) pair of Whelen model M6 LED warning lights shall be installed one each side of the chassis cab. The dimensions of the lights shall be 4-5/16" x 6-3/4".  
There shall be chrome bezels supplied and installed on the warning lights.

### **LOWER MID CHASSIS WARNING LIGHTS**

One (1) pair of Whelen model M6 LED warning lights shall be installed one each side of the chassis cab, above the chassis wheels. The dimensions of the lights shall be 4-5/16" x 6-3/4".  
There shall be chrome bezels supplied and installed on the warning lights.

### **LOWER MID BODY WARNING LIGHTS**

One (1) pair of Whelen model #500 surface mounted red Super LED warning lights shall be installed, one each side of the apparatus, mid-body. The dimensions of the lights shall be 1-5/8" x 5" x 1".  
There shall be chrome bezels supplied and installed on the warning lights.

### **LOWER REAR SIDE WARNING LIGHTS**

One (1) pair of Whelen model #500 surface mounted red Super LED warning lights shall be installed, one each side of the apparatus body, towards the rear of the body. The dimensions of the lights shall be 1-5/8" x 5" x 1".  
There shall be chrome bezels supplied and installed on the warning lights.

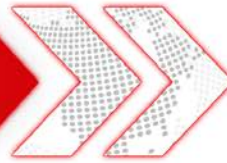
### **LOWER REAR WARNING LIGHTS**

One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side on the lower rear of the apparatus body. The dimensions of the lights shall be 4-5/16" x 6-3/4".

## **LOW VOLTAGE ELECTRICAL SYSTEM SPECIFICATIONS**

The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The electrical equipment installed by the apparatus manufacturer shall conform to current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA standards.

All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for the protected circuit. Voltage drops in all wiring from the power source



to the using device shall not exceed 10 percent. The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. All exposed wiring shall be protected in a loom with a minimum 289 degree Fahrenheit rating. All wiring looms shall be properly supported and attached to body members. The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer's instructions. Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels.

The wiring between the cab and body shall be joined using Deutsche type connectors or an enclosed in a terminal junction panel area. This system will permit body removal with minimal impact on the apparatus electrical system. All connections shall be crimp-type with insulated shanks to resist moisture and foreign debris such as grease and road grime. Weather-resistant connectors shall be provided throughout to ensure the integrity of the electrical system.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in a junction box or covered with a removable electrical panel. The wiring shall be secured in place and protected against heat, liquid contaminants and damage. Wiring shall be uniquely identified every three-inches (3") by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA #1901 standards.

The electrical circuits shall be provided with low voltage overcurrent protective devices. Such devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. The overcurrent protection shall be suitable for electrical equipment and shall be automatic reset type and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. The system shall have electro-magnetic interference suppression provided as required in applicable SAE standards.

The electrical system shall include the following:

- Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. A corrosion preventative compound shall be applicable to all terminal plugs located outside of the cab or body.
- The electrical wiring shall be harnessed or be placed in a protective loom.
- Holes made in the roof shall be caulked with silicone. Large fender washers shall be used when fastening equipment to the underside of the cab roof.
- Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate in it.
- A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.
- All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.

The warning lights shall be switched in the chassis cab with labeled switches in an accessible



location. Individual rocker switches shall be provided only for warning lights provided over the minimum level of warning lights in either the stationary or moving modes. All electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator. The warning light switches shall be of the rocker type. For easy nighttime operation, an integral indicator light shall be provided to indicate when the circuit is energized. All switches shall be appropriately identified as to their function.

A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and "call for the right of way". When the parking brake is applied, a "blocking right of way" system shall automatically activate per requirements of the applicable NFPA standards. All "clear" warning lights shall be automatically turned off upon application of the parking brake.

### **NFPA REQUIRED TESTING OF ELECTRICAL SYSTEM**

The apparatus shall be electrically tested upon completion of the vehicle and prior to delivery. The electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of the applicable NFPA standards. The following minimum testing shall be completed by the apparatus manufacturer:

#### **1. Reserve capacity test:**

The engine shall be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a failed test.

#### **2. Alternator performance test at idle:**

The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

#### **3. Alternator performance test at full load:**

The total continuous electrical load shall be activated with the engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system is permitted during this test. However, if an alarm sounds due to excessive battery discharge, as detected by the system requirements in the NFPA standards, or a system voltage of less than 11.7 volts dc for more than 120 seconds is present, the test has failed.

#### **4. Low voltage alarm test:**

Following the completion of the above tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts dc for a 12 volt system shall be considered a





test failure. The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.

#### NFPA REQUIRED DOCUMENTATION

The following documentation shall be provided on delivery of the apparatus:

- a. Documentation of the electrical system performance tests required above.
- b. A written load analysis, including:
  1. The nameplate rating of the alternator.
  2. The alternator rating under the conditions.
  3. Each specified component load.
  4. Individual intermittent loads.

#### WEATHER PROOF ELECTRICAL JUNCTION BOX

The main electrical junction box shall be a **sealed weather proof box** and located away from water spray conditions. The main body junction panel shall house the automatic reset breakers and relays where required. The main body junction panel shall be located in the pump compartment.

#### DASH MOUNTED EMERGENCY ELECTRICAL SWITCH PANEL

An electrical switch panel shall be designed and mounted in the cab dash area. All switches shall be provided with backlighted snap-in legend inserts.

#### **SWITCHES**

All emergency light switches shall be lighted, rocker style. Switches shall be internally lit when the switch circuit is in the on position. A plug-in identification label is to be provided and installed adjacent to each rocker switch with backlighting provided behind the label.

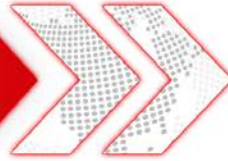
An internally lighted "master" switch shall be provided and wired through a heavy-duty relay to activate power to the emergency lights.

#### AIR HORNS

Two (2) 24.5" Stuttertone chrome plated air horns shall be recess mounted into the front bumper with one positioned on each side. An air protection valve shall be provided in the air horn piping that will not allow the chassis air brake system to drop below 90 PSI..

#### ELECTRIC TRAFFIC HORN AND AIR HORN SELECTOR SWITCH

One (1) selector switch shall be provided on the cab's dash that will allow the chassis steering wheel horn button to activate either the electric traffic horn or air horn system.



### **AIR HORN FOOT SWITCH**

One (1) foot switch shall be installed to activate the air horn system on the officer's side of the floor.

### **LIGHT MOUNTING LOCATION**

The mounting location for the specified light shall be on the front edge of the chassis cab roof.

### **12VOLT FLOODLIGHT**

One (1) Akron Brass, Extenda-Lite roof mounted brow, item ELSS-XLDC-W-BL shall be provided. Each Brow shall be equipped with a 220 watt light head with the front bezel painted white.

The light head shall contain 8 high power LEDs and a highly polished reflector. The light head shall operate from a 10-36 VDC and maintain stable light output of 19,000 lumens and constant power consumption of 220W (current = power / voltage). There shall be angle tilt-mounting brackets attached to the side of the light housing. The cast aluminum housing shall not exceed 190 degrees F. Each brow light shall be equipped with a twelve-inch pigtail.

The Extenda-Lite Brow Mount components shall have a 5 year warranty. The SceneStar LED light head shall have a 6 year warranty.

### **LIGHT SWITCH - REMOTE LOCATION**

A switch shall be installed from a remote location on the apparatus body or the chassis cab. The weatherproof on-off toggle switch shall be used for the remote switching.

### **HAND LIGHTS**

All NFPA required portable hand lights supplied by the Customer must be installed before the apparatus is placed into service.

### **MARKER LIGHTS**

LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements.

### **LICENSE PLATE BRACKET**

One (1) Cast Products license plate bracket shall be provided at the rear bumper. The bracket shall have a polished finish and LED light.

### **TAIL LIGHTS**

Two (2) Whelen M6 LED tail/brake lights shall be provided. The rectangular 4"x6" light shall be red.



### **TURN SIGNALS**

Two (2) Whelen M6 LED turn signals shall be provided.

### **BACKUP LIGHTS**

Two (2) Whelen Series M6 LED backup lights shall be installed on the rear of the apparatus body. The dimensions shall be 4" x 6" and the lens color shall be clear.

### **FOUR LIGHT HOUSING**

Two (2) chrome plated tail light housings shall be supplied. Each housing shall be designed to hold four (4) Whelen M6 rear lights located at the lower rear corners of the body.

### **MID BODY LED TURN SIGNALS**

Two (2) mid body LED turn signals shall be provided. The location of the turn lights shall be at mid-body near the rear wheel axle.

### **GROUND LIGHTS**

There shall be two (2) Whelen 3SC0CDCR LED lights provided under the front bumper.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

The ground lighting shall be activated by the opening of the respective door as well as being activated when the parking brake is set.

### **GROUND LIGHTS**

There shall be two (2), one each side, Whelen 3SC0CDCR LED NFPA compliant ground light mounted to the underside of the rub rail of the pump house.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

The ground lighting shall be activated by the opening of the respective door as well as being activated when the parking brake is set.

### **GROUND LIGHTS**

There shall be two (2), one each side, Whelen 3SC0CDCR LED NFPA compliant ground light mounted to the underside of the rub rail, mid body.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

The ground lighting shall be activated by the opening of the respective door as well as being activated when the parking brake is set.



### **GROUND LIGHTS**

There shall be two (2) Whelen 3SC0CDCR LED NFPA compliant ground light mounted to the underside of the rear step.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

The ground lighting shall be activated by the opening of the respective door as well as being activated when the parking brake is set.

### **GROUND LIGHTS**

There shall be two (2) Whelen 3SC0CDCR LED NFPA compliant ground light mounted to the underside of the compartments, behind the rear wheels.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

The ground lighting shall be activated by the opening of the respective door as well as being activated when the parking brake is set.

The ground lights shall automatically activate when the parking brake is applied.

### **REAR TAILBOARD LIGHTS**

Two (2) LED step lights with clear lens shall be installed to illuminate the step surfaces at the rear of the apparatus body.

The step/walkway light switch shall be installed and wired to the parking brake.

### **DECK LIGHTS - FRONT**

The deck lights shall be installed at the front of the hose bed.

Two (2) 12 volt Truck-Lite Model 81380 floodlights, each with six (6) LED's, shall be installed.

A deck light switch shall be installed and wired to the parking brake.

### **SCENE LIGHT**

Eight (8) Whelen M9 Series Super-LED 7-1/8" x 9-1/8" gradient scene light(s) with chrome plated surface mount flange shall be installed.

SCENE LIGHT LOCATION

One (1) scene light shall be located on the left side of the cab.

SCENE LIGHT LOCATION

One (1) scene light shall be located on the right side of the cab.

SCENE LIGHT LOCATION

Two (2) scene light shall be located on the left side of the apparatus body.

SCENE LIGHT LOCATION



Two (2) scene light shall be located on the right side of the apparatus body.

#### **SCENE LIGHT LOCATION**

Two (2) scene light shall be located on the rear of the apparatus body.

#### **SCENE LIGHT SWITCHING**

A scene light switch with indicator shall be installed on the cab dash and on the pump panel to control the left side scene light(s). The switches shall be wired to operate in a three-way configuration to allow the light(s) to be controlled from either location regardless of switch position. The switches shall be labeled "LEFT SCENE".

#### **SCENE LIGHT SWITCHING**

A scene light switch with indicator shall be installed on the cab dash and on the pump panel to control the right side scene light(s). The switches shall be wired to operate in a three-way configuration to allow the light(s) to be controlled from either location regardless of switch position. The switches shall be labeled "RIGHT SCENE".

A scene light switch with indicator shall be installed on the cab dash and on the pump panel to control the rear scene light(s). The switches shall be wired to operate in a three-way configuration to allow the light(s) to be controlled from either location regardless of switch position. The switches shall be labeled "REAR SCENE".

The rear scene lights shall activate automatically upon placing the transmission into reverse.

#### **TRAFFIC ARROW LIGHT**

One (1) Whelen Model #TAL65 Traffic Advisor shall be installed. The light shall be equipped with six (6) LED lights measuring 36" in length. The unit shall be mounted at the rear of the apparatus body. The Traffic Advisor control head shall be mounted inside the cab and be accessible by the driver and officer.

The traffic arrow light shall be recessed mounted at the rear of the apparatus body.

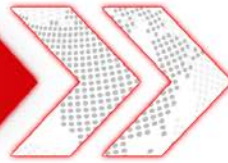
#### **CHASSIS MODIFICATIONS**

##### **FLUID DATA PLAQUE**

One (1) fluid data plaque containing required information shall be provided based on the applicable components for this apparatus, compliant with NFPA Standards:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubricant
- Power steering fluid
- Pump transmission lubrication fluid
- Other NFPA applicable fluid levels or data as required

Location shall be in the driver's compartment or on driver's door.



## DATA LABEL

### HEIGHT LENGTH & WEIGHT

A highly visible label indicating the overall height, length, and weight of the vehicle shall be installed in the cab dash area.

### CAB SEATING POSITION LIMITS

The label shall also include the seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

## NO RIDE LABEL

One (1) "NO RIDERS" label shall be applied on the vehicle at the rear step area or other applicable areas. The label shall warn personnel that riding in or on these areas, while the vehicle is in motion is prohibited.

## CAB SEATING POSITION LIMITS

One (1) label shall be installed in the cab to indicate seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

## HELMET WARNING TAG

One (1) label shall be installed in the cab, visible from each seating position. The label shall read "CAUTION: DO NOT WEAR HELMET WHILE SEATED." Helmets must be properly stowed while the vehicle is in motion according to the current edition of NFPA 1901.

## REAR TOWING PROVISIONS

There shall be two tow eyes furnished under the rear of the body and attached directly to each chassis frame rail. There shall be a reinforcement spreader bar connecting the two tow eyes. Tow eyes are to be constructed of 3/8" plate steel with a 4" I.D. hole, large enough for passing through a tow chain end hook.

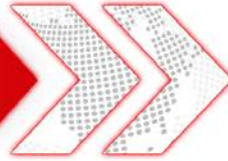
The tow plates shall be painted black.

## FRONT BUMPER GRAVELSHIELD

A 18" front to rear filler panel constructed from NFPA compliant, slip resistant aluminum tread plate shall be provided on the front chassis frame extension. The extension shall be covered on the top and sides, up to the level of front bumper and shall be reinforced to support one (1) firefighter (approximately 250 pounds) and the equipment specified to be installed.

## FRONT BUMPER COMPARTMENT

One (1) recessed fire hose compartment constructed from smooth aluminum shall be installed in the center of the front bumper extension. Water drain holes shall be drilled in the bottom.



### **BUMPER COMPARTMENT DOOR**

The center section of the front bumper shall be cleanly and precisely cut out. This section shall then be re-attached with a heavy duty stainless steel piano hinge at the bottom and two (2) latches shall be installed to hold the center section in the closed position. An aluminum tread plate top cover for the center front bumper compartment shall be supplied. The top cover shall have a stainless steel hinge at the rear and a hold open device. When the center-hinged section of the front bumper is released the top cover may be opened providing quick and easy access to the front bumper compartment. The front bumper extension assembly shall be adequately re-inforced to accommodate the hinged front face bumper compartment door.

### **HUB AND LUG NUT COVERS**

The apparatus shall have chrome or stainless steel hub and lug nut covers on the front and single rear axles.

### **TIRE PRESSURE INDICATOR**

There shall be a tire pressure indicator at each tire's valve stem on the vehicle that shall indicate if there is insufficient pressure in the specific tire.

### **EXHAUST SYSTEM**

The chassis exhaust shall be modified and redirected to the right side of the apparatus and will exit ahead of the rear wheel.

### **EXHAUST HEAT SHIELD**

A heat shield shall be installed under the body in the areas where the exhaust system is routed.

### **REAR MUD FLAPS**

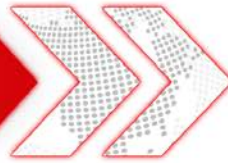
One (1) pair of black mud flaps shall be installed behind the rear wheels.

### **HELMET SECUREMENT**

Six (6) Zico model UHH-1 helmet holder shall be supplied on the apparatus. The Zico holder safely stores your helmet. The model UHH-1 is compliant for use inside of the crew cab. Place the helmet hook on the red knob and pull the strap to lock the helmet in place. The holder fits any size helmet without any major adjustments. It is safely stored and always within quick access. Simply pull the strap down and remove the helmet.

### **CAB REFERENCE MATERIAL AND BINDER STORAGE MODULE**

One (1) cab storage module shall be provided at the rearward area of the engine enclosure to accommodate a minimum of three (3) 2" three ring binders. The binders shall be stored one (1) wide and three (3) high in the module. The compartment shall be fabricated of smooth aluminum. The cabinet's exterior finish shall match the interior finish of the chassis cab. The cabinet's interior shall have a natural finish.



## **PUMP & PLUMBING**

### **ROSENBAUER N FIRE PUMP**

A Rosenbauer Model N fire pump shall be mounted and installed. The midship pump system shall have a rated capacity of 1500 GPM and shall meet all applicable sections of NFPA standards. The pump shall be constructed and mounted in accordance with the following specifications.

Pump shall deliver the percentage of rated discharge at pressures indicated below:

100% of rated capacity at 150 pounds net pressure  
70% of rated capacity at 200 pounds net pressure  
50% of rated capacity at 250 pounds net pressure  
100% of rated capacity at 165 pounds net pressure

### **IMPELLER AND SHAFT**

The high-grade light alloy impellers shall be accurately balanced and mounted on a stainless steel pump shaft. The shaft shall be supported by three roller bearings; two located in the gearbox and one in the suction inlet. Bearings shall be protected from water and sediment by maintenance free self-adjusting mechanical seals.

### **PUMP DRIVE SYSTEM**

Fire pump shall incorporate high strength helical gear drive single stage transmission. Pump drive system shall be with a heavy-duty PTO system bolted directly to the chassis transmission. There shall be a heavy-duty drive shaft furnished from the PTO to the midship pump transmission.

### **PUMP BODY**

The pump shall incorporate a high pressure, three-stage pump. The high-pressure side shall be capable of developing 100 GPM at 600 PSI simultaneously while pumping the rated volume specified above.

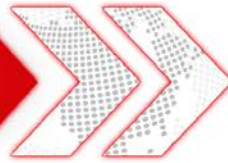
The main pump body shall be easily removable without disturbing setting of the pump on the chassis or engine. The pump body is to be of high quality seawater resistant bronze.

The pump manufacturer shall test the pump for 10 minutes hydrostatically at a pressure of 500 PSIG. Hydrostatic certification by the pump manufacturer shall be provided.

### **PRIMER – AUTOMATIC**

An automatic fire pump priming system shall be provided and installed. The system shall be oil-less type and environmentally safe. Once engaged, the system shall be fully automatic and not require any action from the pump operator/engineer when pump draft is lost. This feature provides an additional safety margin by maintaining pump flow from the available water source automatically during drafting operations. When air is introduced during a drafting operation from conditions such as whirlpools or turbulence from porta-tank refill operations, the priming system shall automatically





engage to remove the air and stabilize water flow and pump pressure. For additional safety, the entire system shall operate at less than 70dBA of ambient noise.

The priming system shall engage automatically whenever the pump discharge falls below five (5) psi and shall remain engaged until a pump prime has been achieved. The priming system shall automatically disengage when a positive pump discharge pressure has been established. The electrical current draw from the chassis batteries shall not exceed four (4) amps at any given time of operation and allow for unlimited run time without causing an overheat condition for of any of the system components.

A single engagement switch shall be provided on the pump control panel that will allow the operator to engage the automatic pump priming system. There shall be a light provided on the pump control panel to indicate when the system is engaged. The pump shall be capable of taking suction and discharging water with a lift of 10 feet in not more than 30 seconds with the pump dry, through 20 feet of suction hose of appropriate size. The priming system shall comply to applicable sections of NFPA standards.

### **ENGINE/PUMP GOVERNOR**

The apparatus shall be equipped with a Class1 “Total Pressure Governor Plus” (TPG+) that is connected to the Engine Control Module (ECM) mounted on the engine. The “TPG+” will operate as a pressure sensor (regulating) governor (PSG) utilizing the engines J1939 data for optimal resolution and response when supported by the engine manufacturer. If J-1939 engine control is not supported, then analog remote throttle control shall be provided by the “TPG+”. The “TPG+” shall function as a Master Pump Discharge and Intake Gauge.

The TPG+ shall utilize control algorithms that minimize pressure spikes during low or erratic water supply situations. The “TPG+” shall be backwards compatible to any engine that supplies J1939 RPM, Temperature and Oil Pressure information providing the ability to maintain a consistent fleet fire-fighting capability and reduce operator cross training and confusion.

The “TPG+” shall have the ability to use either a 300 PSI or a 600 PSI discharge pressure transducer and a 300 PSI intake pressure transducer. PSG system diagnostics shall be built in and accessible by technicians. Programmable presets for RPM and Pressure settings shall be easily configurable. The straightforward menu structure shall allow the “TPG+” configuration to match existing apparatus operation as closely as possible.

The “TPG+” shall also include indication of engine RPM, system voltage, engine oil pressure and engine/transmission temperature with audible alarm output for all. The “TPG+” uses the J1939 data bus for engine information, requiring no additional sensors to be installed. The TPG+ shall monitor and display pump and engine hours. The “TPG+” shall use J1939 broadcast warnings for the alarm as a standard and allow the “user” to select warning values if “SOPs” dictate.

### **PTO FIRE PUMP SHIFT – STATIONARY PUMPING**

The Rosenbauer power-take-off driven fire pump shall be equipped with a Hot-Shift electrically operated PTO engagement in the cab.

The system shall include applicable the NFPA standard interlocks, pump shift and OK TO PUMP indicator lights in the cab and pump panel. The fire pump system shall be equipped with an



interlock system shall be provided to ensure that the pump drive system components are properly engaged in the pumping mode of operation so that the pumping system can be safely operated from the pump operator's position in a stationary pumping mode.

### **MIDSHIP FIRE PUMP DRIVESHAFTS AND INSTALLATION**

The midship PTO fire pump shall be installed and shall include installation of the fire pump, modification and/or fabrication of new drivelines and all pump-mounting brackets. The PTO drive shaft(s) shall be spin balanced prior to final installation.

### **PUMP ANODES**

There shall be sacrificial, zinc anodes in the pump steamer ports which shall protect the pump and piping from electrolysis. These anodes shall also act as screens.

### **PUMP PLUMBING SYSTEM**

The fire pump plumbing system shall be of rigid stainless steel pipe or flexible piping with stainless steel fittings. Mechanical grooved couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service. Flexible hose couplings shall be threaded stainless steel or mechanical grooved coupling connections.

The fire pump and plumbing shall be hydrostatically tested in compliance to applicable sections of NFPA standards. The test results shall be included in the delivery documentation.

### **FIRE PUMP MASTER DRAIN**

The fire pump plumbing system and fire pump shall be piped to a single pump panel mounted 'handwheel' type master pump drain assembly. The master drain valve shall be a bronze master drain with a rubber disc seal, a universal joint and a handwheel control on the pump panel. The master drain shall also provide for low point drainage of the fire pump and auxiliary devices.

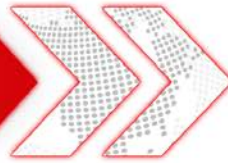
### **ADDITIONAL LOW POINT DRAINS**

The plumbing system shall be equipped with additional low point manually operated drain valves to allow total draining of the fire pump plumbing system. These valves shall be accessible from the side of the vehicle and labeled for exact location.

### **STAINLESS STEEL INTAKE MANIFOLD**

The suction manifold assembly shall be fabricated with Schedule #10 type 304 stainless steel. All threaded fittings shall be a minimum of Schedule 10 stainless steel. The suction manifold assembly shall have radiused sweep elbows to minimize water turbulence into the suction volute. The suction manifold shall be welded and pressure tested prior to installation. The stainless steel manifold assembly shall be attached to the pump intake volute with a heavy-duty, flexible Victaulic coupling.

The stainless steel manifold assembly shall have a ten (10) year warranty.



### **STAINLESS STEEL DISCHARGE MANIFOLD**

The discharge manifold assembly shall be fabricated with minimum of Schedule #10 Type 304 stainless steel. All threaded fittings shall be a minimum of Schedule #40 stainless steel. The discharge manifold assembly shall have radiused sweep elbows to minimize water turbulence. The manifold shall be welded and pressure tested prior to installation. The stainless steel manifold inlet shall be attached to the pump discharge and have additional brackets as required to support the discharge manifold, valves and related components.

The stainless steel manifold assembly shall have a ten (10) year warranty.

### **FIRE PUMP & PLUMBING SYSTEM PAINTING**

The fire pump and plumbing system shall be painted by the fire apparatus manufacturer. The fire pump and the plumbing shall be painted metallic silver.

### **HOSE THREADS**

The hose threads shall be National Standard Thread (NST) on all base threads on the apparatus intakes and discharges.

### **LEFT SIDE – 6" UNGATED INTAKE**

One (1) 6" un gated suction intake shall be installed on the left side pump panel to supply the fire pump from an external water supply. The threads shall be 6" NST. The intake shall be provided with a removable screen.

One (1) 6" chrome plated cap shall be provided. The threads shall be NST and the cap shall be equipped long handles.

### **RIGHT SIDE – 6" UNGATED INTAKE**

One (1) 6" un gated suction intake shall be installed on the right side pump panel to supply the fire pump from an external water supply. The intake shall be provided with a removable screen.

One (1) 6" chrome plated cap shall be provided. The threads shall be NST and the cap shall be equipped long handles.

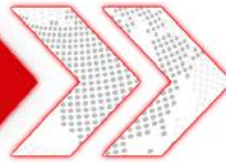
### **WATER TANK TO PUMP LINE**

One (1) 3" water tank to fire pump line shall be provided with a full flow quarter turn ball valve, 3" piping, and with flex hose and stainless steel hose clamps. The tank to pump line shall be equipped with a check valve to prevent pressurization of the water tank.

The line shall be flow tested during the fire pump testing and shall meet applicable requirements of NFPA standards.

The specified valve shall be an Akron 8000 Series three-inch (3") valve with a stainless ball.

One (1) Akron valve equipped with a manually operated pull rod, with quarter-turn locking feature shall be provided on the specified intake. The handle shall be equipped with a color-coded name plate.



### **FIRE PUMP TO WATER TANK FILL LINE**

One (1) 2" fire pump to water tank refill and pump bypass cooler line shall be provided. The valve shall be a full flow quarter turn ball valve with 2" piping and flex hose to tank. The valve control handle shall have a nameplate located near the valve control.

The specified valve shall be an Akron 8000 Series two-inch (2") valve with a stainless ball.

One (1) Akron valve equipped with a manually operated pull rod, with quarter-turn locking feature shall be provided on the specified intake. The handle shall be equipped with a color-coded name plate.

### **INTAKE RELIEF/DUMP VALVE**

One (1) TFT A18 series, 2-1/2" intake relief/dump valve preset at 125 psi shall be permanently installed on the suction side of the fire pump. The valve shall have an adjustment range of 75 psi to 250 psi, and shall be designed to automatically self-restore to a non-relieving position when excessive pressure is no longer present.

Discharge side of the intake relief valve shall be plumbed away from the pump operator.

### **FIRE PUMP COOLING**

The fire pump shall be equipped with 3/8" cooling line from the pump to the water tank. This recirculation line shall be controlled by a pump panel control valve with nameplate label noting it as the "fire pump bypass cooler". There shall be a check valve installed in the pump cooler line to prevent tank water from back flowing into the pump when it is not in use.

### **CHASSIS ENGINE HEAT EXCHANGER COOLING SYSTEM**

The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations. A manually opened valve, mounted at the operator's panel, shall direct water from the fire pump to the heat exchanger that is mounted in the engine radiator cooling hose. The system shall provide cooling water from the fire pump to circulate around the engine radiator coolant without mixing or coming in direct contact with the engine coolant. The unit shall be installed by the chassis manufacturer and connected to the plumbing system by the fire apparatus manufacturer.

A nameplate label shall be installed on the pump panel noting "engine cooling system" with "on-off" opening directions noted.

### **UNDERWRITERS LABORATORIES FIRE PUMP TEST**

The pump shall undergo an Underwriters Laboratories Incorporated test per applicable sections of NFPA standards, prior to delivery of the completed apparatus.

The UL acceptance certificate shall be furnished with the apparatus on delivery.

### **FIRE PUMP TEST LABEL**

A fire pump performance and rating label shall be installed on the fire apparatus pump panel. The label shall denote levels of pump performance and testing completed at factory. These shall

include GPM at net pump pressure, RPM at such level, and other pertinent data as required by applicable NFPA standards. In addition, the pressure control device, tank to pump flow tests, and other required testing shall be completed.

In addition, the entire pump, suction and discharge passages shall be hydrostatically tested to a pressure as required by applicable NFPA standards. The pump shall be fully tested at the pump manufacturer's factory to the performance specifications as outlined by applicable NFPA standards. Pump shall be free from objectionable pulsation and vibration.

If applicable, the fire pump shall be tested and rated as follows:

- 100% of rated capacity at 150 pounds net pressure.
- 70% of rated capacity at 200 pounds net pressure.
- 50% of rated capacity at 250 pounds net pressure.
- 100% or rated capacity at 165 pounds net pressure.

### **LEFT SIDE – 2-1/2" GATED INTAKE**

One (1) 2-1/2" gated suction intake shall be installed on left side pump panel to supply the fire pump from an external water supply. The control valve shall be a quarter turn ball valve and shall have 2-1/2" NST female thread of chrome plated brass.

The intake shall be equipped with a 3/4" drain and bleeder valve. A nameplate label and removable screen shall be installed.

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

One (1) 2-1/2" chrome plated plug shall be provided. The threads shall be NST and the plug shall be equipped rocker lugs and chain or cable securement.

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

The specified intake valve shall be equipped with one (1) manually operated, swing-type manual control located adjacent the intake. The valve shall be equipped with a color-coded name plate.

### **2" DISCHARGE - FRONT CENTER BUMPER**

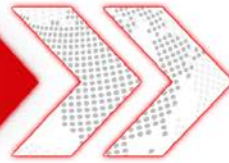
One (1) 2" discharge shall be installed at front center bumper area, come through the center of lower portion of center bumper compartment outlet with 1-1/2" NST male threads. The valve control shall be on pump panel and a nameplate label provided at valve control area.

The plumbing shall be flexible hose with abrasion resistant support mountings. Auxiliary low point drains shall be provided on the discharge line.

A Class 1 automatic type 3/4" bleeder valve shall be installed.

Note: The hose connection for the front discharge shall be swivel type located inside the front bumper hosewell.

The specified valve shall be an Akron 8000 Series two-inch (2") valve with a stainless ball.



### **SEALED LEVER BANKS - CABLE CONTROLS**

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

One (1) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **TWO (2) 1-1/2" SPEEDLAY DISCHARGES**

Two (2) 1-3/4" pre-connect hose speedlays shall be installed ahead of the front of body or pump enclosure, controlled with quarter turn 2" diameter ball valves. The outlets shall be equipped 2" NPT female swivel x 1-1/2" male NST hose threads.

The hosebed decking shall be constructed with slots integrated into the hosebed floor.

The hose bed shall provide a minimum capacity of 200 feet of 1-3/4" diameter double jacket hose with hose and nozzle provided by fire department.

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

The specified valve shall be an Akron 8000 Series two-inch (2") valve with a stainless ball.

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

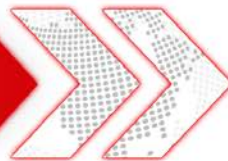
The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

Two (2) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **2-1/2" SPEEDLAY DISCHARGE**

One (1) 2-1/2" pre-connect hose speedlay shall be installed ahead of the front of body or pump enclosure, controlled with quarter turn 2-1/2" diameter ball valve. The outlet shall be equipped 2-1/2" NPT female swivel x 2-1/2" male NST hose threads.



The hosebed decking shall be constructed with slots integrated into the hosebed floor.

The hosebed shall provide a minimum capacity of 150 feet of 2-1/2" diameter double jacket hose with hose and nozzle provided by fire department.

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

One (1) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **SPEEDLAY COVER**

The speedlay cover shall be supplied and installed by the Dealer.

### **ROLLERS FOR PRE-CONNECTED SPEEDLAY HOSE BED**

The pre-connect speedlay hosebed shall be equipped stainless steel "U" shaped roller system, one on each end of the hosebed.

### **REMOVABLE TRAY FOR PRE-CONNECTED HOSE BEDS**

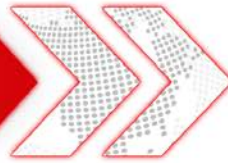
The 2-1/2" pre-connect hosebed(s) shall be equipped with a "U" shaped aluminum hose tray. The unit shall be equipped with pull out hand holes and retaining devices to secure the tray, nozzle, and hose in transit.

### **REMOVABLE TRAY FOR PRE-CONNECTED HOSE BEDS**

The 1-3/4" pre-connect hosebed(s) shall be equipped with a "U" shaped aluminum hose tray. The unit shall be equipped with pull out hand holes and retaining devices to secure the tray, nozzle, and hose in transit.

### **LEFT SIDE PUMP PANEL – 2-1/2" DISCHARGE**

Two (2) 2-1/2" discharge shall be installed on the left side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads.



A color coded nameplate label shall be provided adjacent the control handle.

An Innovative Controls  $\frac{3}{4}$ " cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

Two (2) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

### **SEALED LEVER BANKS - CABLE CONTROLS**

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

Two (2) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **RIGHT SIDE PUMP PANEL – 2-1/2" DISCHARGE**

One (1) 2-1/2" discharge shall be installed on the right side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads.

A color coded nameplate label shall be provided adjacent the control handle.

An Innovative Controls  $\frac{3}{4}$ " cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

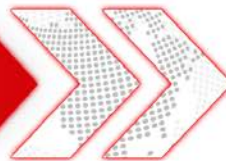
One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

### **SEALED LEVER BANKS - CABLE CONTROLS**

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be





locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

One (1) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **RIGHT SIDE PUMP PANEL – 3" x 4" DISCHARGE**

One (1) 3" discharge shall be installed on the right side pump panel area and shall be controlled by a full flow 3" slow-close quarter turn ball valve. The discharge shall have 4" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

One (1) lightweight aluminum elbow with 30 degree slant shall be provided. Threads shall be 5" Storz with lugs and manual locks x 4" female swivel NST with rocker lugs.

One (1) 5" lightweight aluminum Storz cap with cable or chain securement shall be provided. The specified valve shall be an Akron 8000 Series three-inch (3") valve with a stainless ball.

### **SEALED LEVER BANKS - CABLE CONTROLS**

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

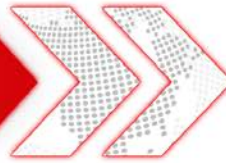
The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

One (1) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **REAR RIGHT SIDE – 2-1/2" DISCHARGE**

One (1) 2-1/2" discharge shall be installed on the right side rear panel of the apparatus body and shall be controlled by a quarter turn ball valve on the pump panel. The discharge shall have 2-1/2" NPT x 2-1/2" NST male hose threads. The outlet shall be equipped with an engraved nameplate label shall be installed adjacent the valve control handle.



An Innovative Controls  $\frac{3}{4}$ " cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

The valve controls shall be sealed lever banks with aircraft cable controls. The lever banks shall be locking with a polished finish. They shall have a 6" stroke for ease of operation.

The aircraft cable that is used to control the valve from the lever bank shall be furnished with 7/8" bulkhead both ends, 5/16" threaded ends and will also require a 5/16" swivel u-joint that unhooks from the ball valve. This cable will be used for ease of maintenance and operation.

The lever bank bell cranks shall be enclosed in an aluminum box that is attached below the pump operator's control panel.

The aluminum box shall be weather tight so that dust is not allowed to enter the command center of the apparatus through the top control pump panel.

One (1) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **3" MONITOR DISCHARGE**

One (1) 3" discharge shall be piped to the area over the pump enclosure with 3" NPT male threads provided. The pipe shall be equipped with Victaulic couplings (if necessary) and shall be properly secured to prevent movement when a monitor or deck gun is attached. The quarter turn ball valve shall be controlled on pump panel.

A color coded nameplate label shall be provided adjacent the valve control handle.

An Innovative Controls  $\frac{3}{4}$ " cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift, to open and push down, to close. The valve shall be mounted with an insulating gasket between the valve and the panel to reduce freezing potential.

### **TELESCOPING MONITOR PIPE**

One (1) Task Force Tips model # XG18VL-PL manually telescoping waterway shall be installed. The waterway shall be capable of being lowered to deck level (or into a monitor well) for storage and transportation and shall be capable of being raised to an extended height of 18" by lifting a quick release latch located at the base of the extension tube. This latching device shall be capable of locking the waterway in either the raised or lowered position while maintaining the ability to horizontally rotate the monitor device 360 degrees.

A sensor shall be located on the waterway that signals a 12 volt indicator light installed in the cab



to illuminate to indicate that the monitor is raised.

The aluminum riser shall have a 3" waterway; hardcoat anodized finish and be furnished with a 3" Victaulic inlet and a 3" male NPT outlet.

The specified valve shall be an Akron 8000 Series three-inch (3") valve with a stainless ball.

One (1) Akron valve equipped with an Akron manually operated hand wheel control with dial type position indicator shall be provided on the specified 3" discharge. A color-coded name plate installed over the valve control.

One (1) 2-1/2" Noshok discharge pressure gauges (30"-0-400 PSI) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.

### **SIDE MOUNT PUMP ENCLOSURE**

The side mount pump enclosure shall be removable and supported from the chassis frame rails. This enclosure will allow independent flexing of the pump enclosure from the body and allow for quick removal. The support structure shall be constructed of extruded aluminum tubing and angle.

All pump suction and discharge controls are to be mounted on the driver side pump operator's panel so as to permit operation of the pump from a central location. The fire pump, valves and controls shall be accessible for service and maintenance as required by applicable sections of NFPA standards.

The "master" gauges shall be suitably enclosed and mounted on a full pump compartment width "hinged" gauge panel constructed of the same material as the pump operators control panel, allowing access to the backside of all gauges and gauge lines. The individual gauges shall be mounted inline with the control handle or adjacent to the control handle. The panel shall include a stainless steel piano hinge, flush mounted chrome plated trigger latch, and stainless steel cable end stops. Electrical wiring and all gauge lines shall be properly tie wrapped to prevent kinking or cutting of the lines when the panel is opened.

The following controls and equipment as specified in the specifications, shall be provided on the pump panel or within the pump enclosure:

- Primer.
- Pump and plumbing area service lights.
- Pressure control device and throttle control.
- Fire pump and engine instruments.
- Pump intakes and discharge controls.
- Master intake and discharge gauges.
- Tank fill control.
- Tank suction control.
- Water tank level gauge.
- Pump panel lights.

### **LEFT SIDE RUNNING BOARD – SIDE MOUNT PANEL**

The left side mount pump panel shall be equipped with side running board. The running board will



extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab.

The running board shall be constructed of aluminum tread plate, bolted in place with stainless steel fasteners. The step surfaces shall be in compliance to applicable sections of NFPA requirements.

#### **PUMP SLIDE OUT STEP – LEFT SIDE**

A slide out step assembly shall be installed on the left side pump panel using roller bearing slide tracks. The step shall be fabricated of slip resistant NFPA compliant grating, and shall extend out approximately 24" and lock in both the in and out positions.

#### **RIGHT SIDE RUNNING BOARD – SIDE MOUNT PANEL**

The right side mount pump panel shall be equipped with side running board. The running board will extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab.

The running board shall be constructed of aluminum tread plate, bolted in place with stainless steel fasteners. The step surfaces shall be in compliance to applicable sections of NFPA requirements.

#### **PUMP SLIDE OUT STEP – RIGHT SIDE**

A slide out step assembly shall be installed on the right side pump panel using roller bearing slide tracks. The step shall be fabricated of slip resistant NFPA compliant grating, and shall extend out approximately 24" and lock in both the in and out positions.

#### **PUMP ENCLOSURE ACCESS DOOR – RIGHT SIDE UPPER**

A pump panel access door shall be provided on the upper right side of the side mount pump enclosure. The access door shall be approximately 18" high and as wide as possible. The door shall be constructed of 14 gauge #304 brushed stainless steel with push button type latches.

#### **FRONT ACCESS PUMP PANEL**

A removable front access panel shall be installed on the front of the pump enclosure of the apparatus. The panel shall be constructed of aluminum tread plate and be fastened to the pump enclosure with push button or D-ring type latches.

#### **PUMP PANELS – SIDE MOUNT**

The pump operator's panel, along with the lower left hand and right hand pump panels shall be constructed of 14 gauge #304 brushed stainless steel and be fastened to the pump enclosure with 1/4" stainless steel bolts.

The instrument area shall have a stainless steel continuous hinge that shall swing for easy access to gauges.



### **LEFT SIDE PUMP PANEL – BOLTED**

The pump panel installed on the left hand side of the pump enclosure shall be fastened to the pump enclosure with 1/4" stainless steel bolts.

### **HINGED PUMP PANEL – RIGHT SIDE**

The pump panel installed on the on the right hand side of the pump enclosure shall be hinged with push-button latches.

### **PUMP PANEL COLOR TRIM PANELS**

Innovative Controls intake and discharge trim rings shall be installed to the apparatus with mounting bolts. These bezel assemblies will be used to identify intake and discharge ports with color and verbiage. These trim rings are designed and manufactured to withstand the specified apparatus service environment and shall be backed by a warranty equal to that of the exterior paint and finish. The specified assemblies feature a chrome-plated panel-mount bezel with durable UV resistant polycarbonate inserts. These UV resistant polycarbonate graphic inserts shall be sub-surface screen printed to eliminate the possibility of wear and protect the inks from fading. All insert labels shall be backed with 3M permanent adhesive (200MP), which meets UL969 and NFPA standards

### **BACKBOARD STORAGE**

A compartment large enough to accommodate two (2) backboards and one (1) stokes basket shall be supplied above the pump. The compartment shall be equipped with an access door on each side of the pump compartment. Each hinged single access door with D-ring shall be constructed of aluminum painted to match the apparatus.

### **LABELS**

Safety, information, data, and instruction labels for apparatus shall be provided and installed at the operator's instrument panel.

The labels shall include rated capacities, pressure ratings, and engine speeds as determined by the certification tests. The no-load governed speed of the engine, as stated by the engine manufacturer, shall also be included.

The labels shall be provided with all information and be attached to the apparatus prior to delivery.

### **COLOR CODED PUMP PANEL LABELING AND NAMEPLATES**

Discharge and intake valve controls shall be color coded in compliance to guidelines of applicable sections of NFPA standards.

Innovative Controls permanent type nameplates and instruction panels shall be installed on the pump panel for safe operation of the pumping equipment and controls.



### **MIDSHIP PUMP PANEL LIGHTS – LEFT SIDE**

Three (3) Weldon #2631 or equal LED lights with clear lenses shall be installed under an instrument panel light hood on the left side pump panel. The lights shall be controlled by a switch located on the operator's instrument panel.

### **MIDSHIP PUMP PANEL LIGHTS – RIGHT SIDE**

Two (2) Weldon #2631 or equal LED lights with clear lenses shall be installed under an instrument panel light hood on the right side pump panel. The lights shall be controlled by a switch located on the operator's instrument panel.

### **PUMP PANEL LIGHTS**

One (1) pump panel light shall be illuminated at the time the fire pump is engaged into operation. The remaining lights shall be controlled by a switch located on the operator's instrument panel.

### **TEST TAPS**

Test taps for pump intake and pump pressure shall be provided on the pump instrument panel and be properly labeled.

### **WATER TANK LEVEL GAUGE - PUMP PANEL**

The apparatus shall be equipped with an Innovative Controls SL Series Tank Level Monitor System shall be installed. The display model # shall be 3030358-04. The system shall include an electronic water display module, one (1) pressure transducer-based sender unit, and a 15' connection cable. The display module shall show the volume of water in the tank using 10 superbright easy-to-see LEDs arrangement. The 10-LED arrangement shall form a straight vertical pattern to easily distinguish the tank level at a glance. Tank level indication is enhanced by the use of green LEDs at the full and near-full levels, amber LEDs between  $\frac{3}{4}$  and  $\frac{1}{4}$  tank levels, and red LEDs at the near-empty and empty levels. The electronic water display module shall be waterproof and shock resistant being encapsulated in a urethane-based potting compound. The potted water display module shall be mounted to a chrome plated panel-mount bezel with a durable easy-to-read polycarbonate insert featuring blue graphics and a water icon for water.

All programming functions shall be accessed and performed from the front of the display module. The programming includes self-diagnostics, manual or self-calibration, and networking capabilities to connect remote slave displays. Low tank level warnings shall include flashing red LEDs starting below the  $\frac{1}{4}$  level and an output for an audible alarm.

The display module shall receive an input signal from a pressure transducer. This stainless steel sender unit shall be installed on the outside of the water tank near the bottom. All wiring, cables and connectors shall be waterproof without the need for sealing grease.

Location of the water tank level display shall be at the pump panel.

### **WATER TANK LEVEL LIGHTS**

Two (2) Whelen PS-TANK vertically mounted LED lights shall be installed one each side of the



apparatus to allow for monitoring the water tank level from a distance.

They shall be configured as follows:

- GREEN - Position 1 indicates FULL
- BLUE - Position 2 indicates 3/4
- AMBER - Position 3 indicates 1/2
- RED - Position 4 indicates 1/4

Each light shall remain illuminated until the water level drops below full 3/4, 1/2, or 1/4 levels. When the level drops below 1/4 the RED light will flash to indicate an empty tank. The Whelen PS-TANK water tank level lights shall be controlled with a Innovatic Controls remote driver.

#### **AIR HORN PUSH-BUTTON**

One (1) push button with a label shall be installed on the pump instrument panel to operate the air horns.

#### **AIR OUTLET - LEFT SIDE PUMP PANEL**

One (1) auxiliary air outlet with a quick release fitting shall be installed on the driver side pump panel. The air outlet shall be piped to a protected air tank with a check valve on the chassis air brake system.

#### **WATER TANK -750 GALLON**

The apparatus shall be equipped with a seven-hundred-fifty (750) gallon polypropylene water tank. The tank shall be equipped with a four-inch (4") overflow pipe (a six-inch (6") overflow pipe shall be provided if required by dump valve installation).

#### **WATER TANK**

The apparatus shall be equipped with a rectangular tank.

#### **WATER TANK FILL TOWER**

A fill tower measuring approximately 10" x 10" square shall be provided on the water tank up to and including 1500 gallons total capacity.

The apparatus shall be equipped with a polypropylene water tank. The tank body and end bulkheads shall be constructed of .5" thick, polypropylene, nitrogen-welded and tested inside and out. Tank construction shall conform to applicable NFPA standards. The tank shall carry a lifetime warranty.

The transverse and longitudinal .375" thick swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments.

The .5" thick cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity



during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the booster tank.

A combination vent/water fill tower shall be provided at front of the tank. The 0.5" thick polypropylene fill and overflow tower shall be equipped with a hinged lid and a removable polypropylene screen. The overflow tube shall be installed in fill tower and piped with a minimum schedule 40 PVC pipe through the tank.

The water tank sump shall be located in the forward area of the tank. There will be a schedule 40 polypropylene tank suction pipe from the front of the tank to the tank sump. The tank drain and clean out shall be located in the bottom of the tank sump. The sump shall have a minimum 3" threaded outlet on the bottom to be used for a combination clean out and drain.

The pump to tank refill connection shall be sized to mate with tank fill discharge line. A deflector shield inside the tank will also be provided.

The tank shall rest on the body cross members in conjunction with such additional cross members, spaced at a distance that would not allow for more than 530 square inches of unsupported area under the tank floor. In cases where overall height of the tank exceeds 40 inches, cross member spacing must be decreased to allow for not more than 400 square inches of unsupported area.

The tank must be isolated from the cross members through the use of hard rubber strips with a minimum thickness and width dimension of 1/4" x 1" and a hardness of approximately 60 durometer. The rubber must be installed so it will not become dislodged during normal operation of the vehicle. Additionally, the tank must be supported around the entire bottom outside perimeter and captured both in the front and rear as well as side to side to prevent tank from shifting during vehicle operation.

A picture frame type cradle mount with a minimum of 2" x 2" x 1/4" mild steel, stainless steel, or aluminum angle shall be provided or the use of corner angles having a minimum dimension of 4" x 4" x 1/4" by 6" high are permitted for the purpose of capturing the tank.

Although the tank is designed on a free floating suspension principle, it is required that the tank have adequate vertical hold down restraints to minimize movement during vehicle operation. If proper retention has not been incorporated into the apparatus hose floor structure, an optional mounting restraint system shall be located on top of the tank, half way between the front and the rear on each side of the tank. These stops can be constructed of steel, stainless steel or aluminum angle having minimum dimensions of 3" x 3" x 1/4" and shall be approximately 6" to 12" long. These brackets must incorporate rubber isolating pads with a minimum thickness of 1/4" inch and a hardness of 60 durometer affixed on the underside of the angle. The angle should then be bolted to the body side walls of the vehicle while extending down to rest on the top outside edge of the upper side wall of the tank.

Hose beds floors must be so designed that the floor slat supports extend full width from side wall to side wall and are not permitted to drop off the edge of the tank or in any way come in contact with the individual covers where a puncture could occur. Tank top must be capable of supporting loads up to 200 lbs per sq. foot when evenly distributed. Other equipment such as generators, portable pumps, etc. must not be mounted directly to the tank top unless provisions have been





designed into the tank for that purpose. The tank shall be completely removable without disturbing or dismantling the apparatus structure.

The tank construction shall include PolyProSeal™ technology wherein a sealant shall be installed between the plastic components prior to being fusion welded. This sealing method shall provide a liquid barrier, offering leak protection in the event of a weld compromise.

The tank shall be equipped with Polychromatic fill towers. The water fill tower shall be blue in color. The foam tank fill towers, if applicable, shall be yellow for foam A and green for foam B and black for any additional foam fill towers.

The water tank shall be certified for the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered.

The tank shall be manufactured by United Plastic Fabricating (UPF).

### **WATER TANK WARRANTY**

**UNITED PLASTIC FABRICATION INC.** Warrants each UPF POLY-TANK IIE Booster/Foam tank to be free from manufacturing defects in material and workmanship for the service life of the vehicle (vehicle must be actively used in fire suppression). The UPF POLY-TANK IIE must be installed in accordance with the United Plastic Fabricating installation manual. Every UPF POLY-TANK IIE is thoroughly inspected and tested for leaks before leaving our facility. Should any problems develop with your UPF POLY-TANK IIE booster/foam tank and will not meet performance criteria during the service life of the vehicle, notify UPF in writing or call our TOLL FREE SERVICE HOT LINE 1-800-USA-POLY. Provide UPF with the serial number and a description of the problem. If the tank problem would render the truck out of service, UPF will dispatch a service technician WITHIN 48 HOURS (2 DAYS) to repair the tank. (This time period is for North America only). If the vehicle can remain in service, UPF will dispatch a service technician within a mutually agreed upon time period.

We will repair, or at our option, replace the tank with a new UPF POLY-Tank IIE. UPF will cover customary and reasonable costs to remove and install the UPF POLY-TANK IIE. This warranty will not cover tanks that have been improperly installed, misused or abused, and the serial number must not have, been altered, defaced or removed. UPF will not cover any unauthorized third party repairs or alterations. Any of these actions may void the warranty.

**THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF UNITED PLASTIC FABRICATION, INC.**

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UNITED PLASTIC FABRICATION, INC. Neither assumes, nor authorizes any person supposing to act on its behalf, to change, nor assume for it, any warranty or liability concerning its product.

**IN NO EVENT WILL UNITED PLASTIC FABRICATION, INC BE LIABLE FOR AN AMOUNT IN EXCESS OF THE PRESENT RETAIL, PURCHASE PRICE PLUS INSTALLATION AND REMOVAL COST OF THE BOOSTER TANK, FOR ANY LOSS OR DAMAGE, WHETHER DIRECT OR INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR OTHERWISE ARISING OUT OF FAILURE OF ITS PRODUCT.**

This warranty gives you specific legal rights, and you may have other rights, which vary from state



to state. Some states do not allow exclusion or limitation of incidental or consequential damage, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

### **HOSEBED SINGLE AXLE**

The hose bed compartment deck shall be constructed entirely from maintenance-free, extruded aluminum slats. The slats shall have an anodized, radiused ribbed top surface. The slats shall be of widths approximately 3/4" high x 6" wide and shall be welded into a one-piece grid system to prevent the accumulation of water and allow ventilation to assist in drying hose.

The apparatus hose body shall be properly reinforced without the use of angles or structural shapes and free from all projections that might injure the fire hose.

The main apparatus hose body shall run the full length of the apparatus body from behind the pump panel area to the rear face of the body.

The upper rear interior of the hose body on the right and left sides shall be overlaid with brushed stainless steel to protect the painted surface from damage by hose couplings.

### **HOSE BED STORAGE CAPACITY**

The hose bed shall be designed to have a storage capacity for a minimum of 55 cubic feet of fire department supplied fire hose.

The hose bed shall be designed to have storage capacity for eight (8) 50-ft lengths of 2.5" Double Jacket fire hose.

The hose bed shall be designed to have storage capacity for twelve (12) 100-ft lengths of 5" LDH Single Jacket rubber fire.

### **ALUMINUM HOSEBED DIVIDER**

Two (2) adjustable hosebed divider constructed of .250" aluminum shall be installed on the apparatus.

### **BULKHEAD DIVIDER**

There shall be a full width smooth aluminum bulkhead behind the fill tower(s).

### **HOSEBED COVER**

The apparatus hose bed cover shall be supplied and installed by the Dealer.

## **BODY CONSTRUCTION**

### **3/16" ALUMINUM BODY**

The body shall be fabricated of aluminum extrusions, smooth aluminum sheet and aluminum treadplate.



The aluminum extrusion alloy shall be 6061 with a temper rating of T6, and have a tensile strength of 45,000 PSI and yield strength of 40,000 pounds. The aluminum extrusions shall 3" x 3" aluminum tubing, 1-3/4" x 3" aluminum tubing and 3" x 3" aluminum angle and specially designed extrusions, up to .250" wall thickness where applicable.

The smooth aluminum sheet material alloy shall be 5052 with a temper rating of H32, and have a tensile strength of 33,000 PSI and yield strength of 28,000 pounds.

The aluminum treadplate alloy shall be 3003 with a temper rating of H22, and have a tensile strength of 30,000 PSI and yield strength of 28,000 pounds.

The extrusions shall be designed as structural-framing members with the smooth aluminum and treadplate fabricated to form compartments, hosebeds, and floors. All aluminum material shall be welded together using the latest mig spray pulse arc welding system.

Compartment floors shall be of the sweep out design with the floor higher than the compartment door lip and to be water and dust proof. All compartments shall be made to the maximum practical dimensions to provide maximum storage capacity. To ensure maximum storage space, the apparatus shall be constructed without any void spaces between the body and the compartment walls. Double wall construction does not meet this requirement.

All exterior compartments shall have polished aluminum drip moldings installed above the doors where necessary to prevent water from entering the compartments.

Wheel well panels shall be formed aluminum that is welded in place. There shall be no visible bolt heads, retention nuts or fasteners on the exterior surface of the panel. To fully protect the wheel well area from road debris and to aid in cleaning, a full depth radius wheel well liner shall be provided. The frame side of the wheel well area on each side of the opening shall be attached to the frame side of the front and rear compartments. All seams on the frame side of the body shall be welded and caulked to prevent moisture from entering the compartments.

The rear wheel wells shall be radius cut for a streamlined appearance. A polished aluminum fenderette shall be furnished at each rear wheel well opening, held in place with stainless steel fasteners.

#### **FASTENERS**

All aluminum and stainless steel components shall be attached using stainless steel fasteners.

Compartment door hinges, handrails and running boards shall be attached using minimum 1/4" diameter machine bolt fasteners.

3/16" diameter fasteners shall only be used in nonstructural areas such as; door handles, trim moldings, gauge mounting, etc.

#### **ELECTROLYSIS CORROSION CONTROL**

The apparatus shall be assembled using ECK or electrolysis corrosion control, on all high corrosion potential areas, such as door latches, door hinges, trim plates, fenderettes, etc. This coating is a high zinc compound that shall act as a sacrificial barrier to prevent electrolysis and corrosion



between dissimilar metals. This shall be in addition to any other barrier material that may be used.

All 1/4" diameter and smaller screws and bolts shall be stainless steel with a powdered aluminum coating. This coating shall be bonded metallurgically to the stainless screws to prevent peeling and flaking. This coating is designed to reduce the potential for electrolysis and corrosion to occur where items are assembled and attached.

Due to the expected life of the vehicle, proposals will only be acceptable from manufacturers that include these corrosion features.

### **COMPARTMENT FLOORS**

The compartment floors shall be constructed of smooth aluminum material, to match the compartment interior walls.

### **GALVANIZED SUB-FRAME**

The apparatus body subframe shall be constructed entirely of heavy steel structural channel material.

Two full frame lengths, three-inch (3") 3.4 pound per foot longitudinal steel channels shall form the sides of the body subframe and sides of the water tank cradle. Subframe crossmembers shall be fabricated with three inch (3") 3.4 pound per foot heavy steel channel cross members welded to the longitudinal body subframe sides and the full length frame pads.

Two full frame length 1/2" x 3" flat steel frame pads shall be attached to the body subframe and rest on top of the chassis frame rails for proper frame weight distribution.

The steel frame pads, longitudinal steel channels and subframe crossmembers shall be attached to the chassis frame rails using heavy "U" bolt fasteners to allow removal of the subframe and body assembly from the chassis. There shall be a barrier provided between the subframe and body to prevent electrolysis.

The rear subframe and lower body platform support members shall be of the "two piece" design, fabricated of 3.4 lb. Per foot heavy channel and welded to the full length subframe channel liners at the rear.

A minimum of two rear platform support channels shall be provided and constructed of 3.4 lb. Per foot heavy steel material. Each support channel shall have welded in gusset where the support meets the rear subframe rails.

After fabrication the entire subframe assembly shall be hot dip galvanized to prevent corrosion. The hot dip galvanized subframe shall have a lifetime warranty against failure due to corrosion.

This steel subframe shall carry the weight of the apparatus body, tank, water and equipment. This method of apparatus construction gives an excellent strength/weight ratio.

### **BODY CONFIGURATION**

The aluminum apparatus body shall be up to 220" long, reference the drawing for actual body



length.

### **SINGLE AXLE WHEEL AREA**

For ease of accessibility and maintenance, wheel well panels shall be double break formed painted smooth plate that is welded in place.

To fully protect the wheel well area from road debris and to aid in cleaning, a full depth (minimum of 25") radius wheel well liner shall be provided. Wheel well liner shall be smooth aluminum to prevent corrosion.

### **FENDERETTES**

The rear wheel wells shall be radius cut for a streamlined appearance. A polished stainless steel fenderette shall be furnished at each rear wheel well opening, held in place with concealed stainless steel fasteners.

### **BODY WIDTH**

The overall width of the pumper body shall not exceed 102".

### **COMPARTMENT DEPTH**

The side compartments on the pumper body shall have the maximum available height and depth dimensions. These dimensions shall remain consistent for the full height and depth of the compartment.

### **HOSEBED WIDTH**

The width of the pumper body hosebed shall be 48".

### **BODY WIDTH**

The overall width of the pumper body shall not exceed 102".

### **COMPARTMENT HEIGHT**

The left side body compartments shall be 72".

### **COMPARTMENT HEIGHT**

The right side body compartments shall be 72" high.

### **ROLL UP DOOR**

The apparatus body shall be equipped with roll up door(s).

### **ROLL UP DOOR CONSTRUCTION**

The roll up door(s) shall be fabricated from aluminum extrusions and be manufactured and



assembled in the United States.

The door slats shall be double-wall extrusions with dimensions of 1.366" high x .315" thick. The exterior surface shall be flat and the interior surface concave to deflect loose equipment to prevent the door from jamming. Each slat shall have interlocking end shoes to prevent the slat from moving side to side resulting in binding of the door. Each slat shall be separated by a co-extruded PVC and rubber inner seal to prevent metal to metal contact and minimize dirt and moisture from entering the compartment. The inner seal shall not be visible from the exterior to maintain a clean appearance of door. The slats shall have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects.

The track shall be a one (1) piece aluminum assembly that has an attaching flange and finishing flange incorporated into the design that facilitates installation and provides a finished look to the door without additional trim or caulking. A low profile side seal shall be utilized to maximize usable compartment space.

A drip rail designed to prevent water from dripping into the compartment shall be provided. The drip rail shall have a built in replaceable non-contacting seal to eliminate scratching of the surface of the door.

Bottom rail extrusion must have smooth back to prevent loose equipment from jamming the door and have "V" shaped double seal to prevent water and debris from entering the compartment. The door latch system shall be a full width one (1) piece lift bar that enables the user to operate with one hand.

The roll mechanism shall have a clip system that connects the curtain slats to the operator drum to allow for easy tension adjustment without tools. A four (4) inch diameter counterbalanced operator drum to shall be incorporated to assist in lifting the door.

### **ROLL UP DOOR**

ROM Tall Bottom Rail adds an additional 1-1/2" clearance between the liftbar and the threshold. The same clean ROM bottom rail look is preserved while providing adequate hand clearance while wearing gloves.

### **DOOR DRIP PANS**

An aluminum drip pan shall be provided on the roll up door.

### **LEFT FRONT COMPARTMENT**

There shall be one (1) full height compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door.

The compartment shall be equipped with the following:

One (1) louver with filter shall be installed in the compartment.

#### **COMPARTMENT DIVIDER**

One (1) compartment divider constructed from 3/16" smooth aluminum material shall be installed. The divider shall be bolted in for ease of removal.



#### ROLL-OUT ALUMINUM TOOL BOARD

One (1) roll-out tool board panel shall be mounted vertically within compartment. The panel and tracks shall be rated to a maximum load of 500 lb. Panel to be formed of .188" smooth aluminum with an opening to accommodate a gloved-hand to slide tool board.

The tool board shall slide out to full extension of the compartment, with a device to hold tool board in both fully-extended and stored positions.

#### COMPARTMENT LIGHTS

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.

#### LEFT OVERWHEEL COMPARTMENT

There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door.

The compartment shall be equipped with the following:

One (1) louver with filter shall be installed in the compartment.

#### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

#### PULL-OUT AND DROP-DOWN

One (1) roll-out and tilt-down equipment tray shall be installed in the customer-specified compartment. The tray with roller bearing tracks shall be rated to a maximum load of 250 lb. Construction shall consist of two (2) inch tall extruded aluminum sides. Trim-Lok edge trim shall be installed on the front lip to afford protection to equipment and firefighter when loading/unloading. Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

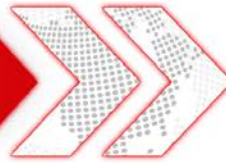
Track assembly shall allow tray to roll out and tilt down at approximately a 30-degree angle.

#### COMPARTMENT LIGHTS

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.



## LEFT REAR COMPARTMENT

There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door.

The compartment shall be equipped with the following:

One (1) louver with filter shall be installed in the compartment.

### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

### ADJUSTABLE SHELF

Two (2) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

### 500# ROLLOUT TRAY

One (1) roll-out equipment tray shall be installed in the compartment. The tray with telescoping slides and cam follower bearings shall be rated to a maximum load of 500 lbs. The tray shall have a gas shock to hold the tray extended or closed. There shall be a lock to prevent movement, when the tray is in the closed position.

The tray shall be formed of .188" smooth aluminum plate, fabricated with two (2) inch sides.

Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

### COMPARTMENT LIGHTS

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.

## RIGHT FRONT COMPARTMENT

There shall be one (1) full height compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door.

The compartment shall be equipped with the following:

One (1) louver with filter shall be installed in the compartment.

### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.





#### ADJUSTABLE SHELF

Two (2) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

#### 500# ROLLOUT TRAY

One (1) roll-out equipment tray shall be installed in the compartment. The tray with telescoping slides and cam follower bearings shall be rated to a maximum load of 500 lbs. The tray shall have a gas shock to hold the tray extended or closed. There shall be a lock to prevent movement, when the tray is in the closed position.

The tray shall be formed of .188" smooth aluminum plate, fabricated with two (2) inch sides. Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

#### COMPARTMENT LIGHTS

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.

#### RIGHT HIGH SIDE COMPARTMENTS

There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door.

The compartment shall be equipped with the following:

One (1) louver with filter shall be installed in the compartment.

#### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

#### SWING-OUT ALUMINUM TOOL BOARD

One (1) swing-out vertical tool board assembly constructed of .188" smooth aluminum shall be provided. with locks for holding it in the "in" and "out" positions.

The tool board shall have a chrome grab handle, for easy access with a gloved hand.

#### COMPARTMENT LIGHTS

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks



with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.

### **RIGHT REAR COMPARTMENT**

There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door.

The compartment shall be equipped with the following:

One (1) louver with filter shall be installed in the compartment.

ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

ADJUSTABLE SHELF

Two (2) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

COMPARTMENT LIGHTS

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.

### **REAR BODY CONFIGURATION**

The rear of the apparatus body shall be of the flat back design.

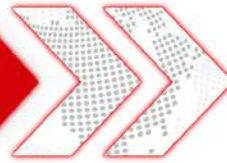
### **REAR CENTER COMPARTMENT**

There shall be one (1) full height compartment located at the rear of the apparatus. The compartment shall be equipped with a full height natural finish roll up door. The compartment shall be partitioned off from the side compartments.

The compartment shall be equipped with the following:

A removable louvered vent shall be provided in the compartment.

ADJUSTABLE SHELVING TRACKS



The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

#### **ADJUSTABLE SHELF**

One (1) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

#### **500# ROLLOUT TRAY**

One (1) roll-out equipment tray shall be installed in the compartment. The tray with telescoping slides and cam follower bearings shall be rated to a maximum load of 500 lbs. The tray shall have a gas shock to hold the tray extended or closed. There shall be a lock to prevent movement, when the tray is in the closed position.

The tray shall be formed of .188" smooth aluminum plate, fabricated with two (2) inch sides. Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

#### **COMPARTMENT LIGHTS**

Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up.

The compartment light will be controlled by a magnetic "On-Off" switch located on each compartment door.

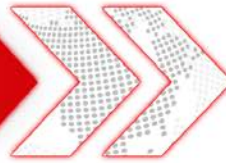
#### **REAR STEP - 12" BOLT-ON**

A 12" deep step surface shall be provided at the rear of the apparatus body, bolted in place and easily removable for replacement or repair. The tailboard shall be constructed of .188" aluminum diamond plate or equal non-slip surface in compliance with NFPA #1901 standards.

The maximum height of the step assembly shall be no more than 24" from the ground when the apparatus is in the loaded condition. A label shall be provided warning personnel that riding on the rear step while the apparatus is in motion is prohibited.

#### **SLIDE OUT VERTICAL LADDER COMPARTMENT**

Ground ladders shall slide into a compartment accessed through a door on a compartment located above the rear center compartment. This shall allow ladders to be stored in a horizontal position. The compartment shall house the specified ground ladders on individual scuff resistant brackets. There will be a stop in front of the compartment to prevent the ladders from sliding forward. A hinged door shall be provided and installed using finger type latches. The door shall be provided with hollow core weatherstripping to seal compartment from the elements. The hinged door shall be constructed of aluminum treadplate.



### **EXTERIOR FOLDING ATTIC LADDER MOUNTING**

An exterior mounting shall be provided for the specified folding attic ladder.

### **LADDER SOURCE**

New ground ladders shall be provided by the body builder.

### **PIKE POLE MOUNTING BRACKET**

Two (2) tube shall be provided for pike pole mounting. The tube shall have a 2" interior diameter and shall be mounted in the ladder tunnel.

### **HARD SUCTION MOUNTING**

One (1) hard suction hose compartment shall be provided at the top of the body compartments, behind the roll up door, on the left side. The design shall allow the hose to be individually removed from the rear of the apparatus. The hard suction hose compartment shall have an hinged door with push to latch door catches. The hinged door shall be constructed of brushed aluminum.

### **HARD SUCTION MOUNTING**

One (1) hard suction hose compartment shall be provided at the top of the body compartments, behind the roll up door, on the right side. The design shall allow the hose to be individually removed from the rear of the apparatus. The hard suction hose compartment shall have an hinged door with push to latch door catches. The hinged door shall be constructed of brushed aluminum.

### **SUCTION HOSE SOURCE**

New suction hose shall be provided by the body builder.

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### **FRONT BODY PROTECTION PANELS**

Brushed stainless steel overlays and panels shall be installed on the front corners of the body. The material shall be bolted in place and sealed to prevent any moisture entry between the overlay and the body structure.

### **FRONT BODY PROTECTION PANELS**

Aluminum tread plate overlays and panels shall be installed on the front of the body compartment from the lower edge to the top of the compartment doors.

### **REAR BODY PROTECTION PANELS**

Brushed stainless steel overlays and panels shall be installed on the rear corners of the body. The overlays shall be bolted in place and sealed to prevent any moisture entry between the overlay



and the body structure.

### **REAR BODY PROTECTION PANELS**

The rear body panels of the body shall be a smooth material, to allow for the proper application and installation of a "Chevron" stripe on the rear.

### **POLISHED COMPARTMENT TOP WELDS**

The compartment top welds to be polished.

### **REAR INTERMEDIATE STEP**

An intermediate fixed step shall be provided at the rear of the apparatus body, bolted in place and easily removable for replacement or repair. The intermediate step shall be constructed of .188" polished aluminum diamond plate or equal non-slip surface in compliance with NFPA #1901 standards and be approximately 8" deep x 48" wide.

### **ACCESS LADDER - EZ CLIMB - RIGHT REAR**

There shall be a swing out and down access ladder supplied and installed on the apparatus, for accessing the top of the apparatus. It shall be made of an all-aluminum design and shall incorporate treads six (6") inches deep and no more than eighteen (18") inches apart. The ground to the first step dimension, on level ground, shall be no more than twenty-four (24") inches. When in the deployed position the ladder shall have an angle of approximately 75-degrees to facilitate ascending and descending the ladder. The ladder shall be retained in the stowed and deployed position by two (2) gas cylinders and shall not require the use of lathes to hold it in position.

### **HANDRAIL - REAR STEP**

Two (2) extruded aluminum non-slip handrails, approximately 48" in length, shall be provided and vertically mounted on the rear access ladder, one (1) on each side.

One (1) extruded aluminum non-slip handrail, approximately 48" in length, shall be installed on the rear of the apparatus body, on the opposite side from the rear access ladder.

### **HANDRAIL - BELOW HOSEBED**

One (1) extruded aluminum non-slip handrail, approximately 48" in length, shall be provided and horizontally mounted below the hosebed on the rear of the apparatus.

### **EXTRUDED ALUMINUM RUB RAILS**

Full body length polished aluminum rub rails shall be bolted in place on the lower right and left body sides. The side rub rails shall be a heavy extruded aluminum "C" channel.

### **NYLON SPACERS FOR RUB RAILS**

There shall be nylon spacers provided between the rubrail and the body. This shall allow wash out and replacement in the event of damage.



### **WHEEL WELL PROVISION LOCATION**

The wheel well provisions shall be located on the left side of the apparatus, ahead of the rear wheels.

One (1) bottle storage compartment for four (4) SCBA bottles shall be provided and located in the rear wheel well of the apparatus body.

The storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement. A painted door shall be provided.

Four (4) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

### **WHEEL WELL PROVISION LOCATION**

The wheel well provisions shall be located on the left side of the apparatus, behind of the rear wheels.

### **FUEL FILL DOOR**

A Fire Shopp Inc. fuel fill access assembly shall be provided on the left side rear wheel well area. The assembly shall include a brushed stainless steel fuel fill enclosure door and a black polymer fuel assembly. A label indicating DIESEL FUEL ONLY shall be applied.

### **WHEEL WELL PROVISION LOCATION**

The wheel well provisions shall be located on the right side of the apparatus, ahead of the rear wheels.

One (1) bottle storage compartment for four (4) SCBA bottles shall be provided and located in the rear wheel well of the apparatus body.

The storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement. A painted door shall be provided.

Four (4) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

### **WHEEL WELL PROVISION LOCATION**

The wheel well provisions shall be located on the right side of the apparatus, behind of the rear wheels.

One (1) storage compartment for floor dry shall be provided and located in the rear wheel well of the apparatus body. The storage compartment shall be constructed of aluminum, mounted on slides, to allowing the compartment to pull out for filling. The door assembly shall be provided with



a gasket between the door and the body side, bolted in place and removable for repair or replacement. A painted aluminum door, with D-ring, shall be provided.

### **UPPER BODY SIDE COMPARTMENT**

Two (2) upper body compartment shall be provided top of body with dimensions of approximately 90" and over 21" deep.

The compartment shall have a lift-up door installed, constructed of 1/8" aluminum tread plate. The door shall have a stainless steel hinge and dual gas openers. The door opening shall be flanged upward 1" to prevent water from running into compartments when the door is closed. One (1) T-handle style latch shall be installed to hold down the door.

The compartment shall be located on the left side of the body.  
COMPARTMENT LIGHTS

Two (2) LED light fixtures shall be installed. The lights shall be mounted on the compartment door. The lights shall have a clear lens.  
The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

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COMPARTMENT LIGHTS

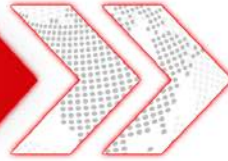
Two (2) LED light fixtures shall be installed. The lights shall be mounted on the compartment door. The lights shall have a clear lens.  
The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

## **AC ELECTRICAL SYSTEM**

### **GENERATOR**

One (1) 10 KW "SMART POWER" hydraulically powered generator system generator shall be furnished and installed on the apparatus. The system shall be capable of producing 10 KW single phase, 120/240 volts at 60 hertz.

A HOT SHIFT" PTO and hydraulic pump unit shall be provided and installed. Interconnecting hoses shall be of the size, pressure rating and length recommended by the generator manufacturer.



The tray assembly for the generator unit shall be mounted with the air exhaust properly vented.

The reservoir/filter assembly shall be a high efficiency 3-micron glass filter. System shall use Dextron 11E or III hydraulic oil.

The Quad meter containing the volt, frequency, and dual amp meters, shall be mounted in an enclosed compartment with the circuit breaker box, which is connected to the generator system.

#### Data Label

A permanent data label indicating the following information shall be applied:

- Rated voltage
- Phase
- Frequency
- Amperage
- Continuous Watts
- Peak Watts

#### ELECTRICAL SYSTEM INSTALLATION

The line voltage electrical system shall comply with the applicable NFPA standards and also comply with the applicable sections of the National Electric Code #70 standards. Line voltage carrying equipment downstream of the power source shall be "listed" (where available) and installed in accordance with manufacturer's instructions. The electrical equipment installed shall be suitable for intended use and type locations (wet, dry, or underbody and chassis).

The grounding and bonding shall comply to applicable sections of NFPA standards. The chassis frame rail, body sheet metal, and cab sheet metal shall be properly bonded per NFPA schematic. The bonding copper conductor shall be rated at 115 % of current rating of power source.

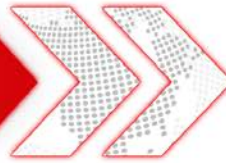
#### Over-Current Protection Panel

Manually re-settable over current devices shall be installed to protect the line voltage electrical system components. A main over current protection device shall be provided. The device shall be either incorporated in the power source or connected to the power source by a power supply assembly. The size of the main over current protection device shall not exceed 100 percent of the nameplate amperage rating on the power source specification label or the rating of the next larger available size over current protection device where so recommended by the power source manufacturer.

The conductor used in the power supply assembly between the output terminals of the power source and the main over current protection device shall not exceed 144 inches in length. If over this distance, a separate master disconnect shall be installed at the generator area.

Over current protection devices shall be provided for each individual circuit and shall be sized at not less than 15 amps in accordance with NEC. Each over current protection device shall be marked to identify the function of the circuit it protects. The circuit breaker panel and instruments shall be located so that all circuit breakers are readily visible under normal operating conditions. The panel shall be readily visible and located so that there is unimpeded access to the panel board controls.





### Hydraulic Components

A hydraulic system filter, fluid level gauge, and fluid temperature gauge shall be provided as integral components within the hydraulic reservoir. The reservoir shall be easily accessible to allow filter changes and fluid level checks. There shall be at least 10 inches of clear space above the reservoir to allow removal of the filter element. Interconnecting hoses and fittings shall meet the generator system manufacturer's recommendations for pressure, size, and type of hose used. Where any hydraulic hose contacts other surfaces, the hose shall be protected from chafing. The hydraulic pump shall be driven by a power take-off mounted to the chassis automatic transmission.

### Control Panel

The panel shall include the following:

- Green indicator light to indicate PTO engagement. The light shall be labeled "GENERATOR ENGAGED."
- Red indicator to indicate hydraulic fluid overheating.
- Main circuit breaker panel with "main" breaker and individual line breakers.
- All breakers, outlets, switches, and receptacles shall be labeled per requirements of applicable NFPA standards.
- The generator shall be capable of producing full rated power throughout the entire RPM range of the engine.

### Instruction Label

An instruction label indicating essential generator operating instructions, including power-up and power-down sequence shall be permanently attached at or near the operator's panel.

## **ELECTRICAL SYSTEM TESTING**

All apparatus installed wiring and associated equipment shall be tested by the apparatus manufacturer in compliance to applicable NFPA standards. The apparatus manufacturer shall test the generator system at the continuous duty rating for a minimum of two (2) hours.

If the apparatus is equipped with a fire pump, both the generator and fire pump shall be operated simultaneously at full pump capacity and generator at "continuous rating" for two (2) hours. Failure of either the generator system or fire pump system during testing will require retesting of both components simultaneously.

The conditions specified shall be recorded at least every 1/2 hour during the test. The results of these tests shall be submitted to the purchaser upon delivery.

Each outlet shall be tested individually to device rating.

Electrical polarity verification shall be made of all permanently wired equipment and receptacles to determine that connections have been properly made.

## **CIRCUIT BREAKER BOX**

One (1) circuit breaker box for single phase voltage equipment shall be provided capable of



holding twelve (12) breakers.

### **CIRCUIT BREAKER BOX LOCATION**

The circuit breaker box shall be installed in an outside body compartment.  
The instrument panel for the generator shall be installed in a side body compartment.

### **GENERATOR STARTUP**

An activation switch for the hydraulic generator shall be installed in the apparatus cab.

### **GENERATOR REMOTE EXCITE SWITCH**

A remote excite switch for the hydraulic generator shall be located in the cab. An indicator light shall illuminate when the generator is running. The switch shall be centrally located for use by both seating positions.

### **GENERATOR REMOTE EXCITE SWITCH**

A remote excite switch for the hydraulic generator shall be located on the pump panel. An indicator light shall illuminate when the generator is running.

### **GENERATOR MOUNTING LOCATION**

The generator shall be installed in the front section of the hosebed.

### **LINE VOLTAGE WIRING INSTALLATION**

Line voltage wiring in the apparatus shall be with Type SO or approved cable suitable for mobile applications. The flexible electrical cable shall have 600-volt insulation rated for at least 194 degrees F. All junction boxes shall conform to the National Electric Code and shall be accessible for service.

Electrical cable shall be supported within 6 inches of any junction box and at a minimum of every 24 inches of run. Supports shall be made of corrosion protected metal that does not cut or abrade the conduit or cable and shall be mechanically fastened to the vehicle.

Electrical cable shall not be attached to chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components, or low voltage wiring and shall be separated by a minimum of 12 inches from exhaust piping or properly shielded and separated from fuel lines by a minimum of 6 inches distance.

All wiring connections and terminations shall provide a positive mechanical and electrical connection. Connectors shall be installed in accordance with the manufacturer's instructions. Wire nuts or insulation displacement and insulation piercing connectors shall not be used.

### **120V ELECTRIC RECEPTACLE – STRAIGHT BLADE**

Two (2) 120-volt 20 amp straight blade, 3-prong duplex receptacle with spring loaded weatherproof cover shall be provided.



The electric receptacle shall be located on the exterior left rear face of the body.  
The electric receptacle shall be located on the exterior right rear face of the body.

### **CHASSIS CAB SHORELINE RECEPTACLES**

Receptacles shall be household duplex type, wired to the shoreline for the charging of portables.  
Final location to be determined at pre-construction conference.

### **120V ELECTRIC RECEPTACLE – STRAIGHT BLADE**

Two (2) 120-volt 20 amp straight blade, 3-prong duplex receptacle with spring loaded weatherproof cover shall be provided.  
The electric receptacle shall be located inside the rear portion of the crew cab.

### **ELECTRIC CABLE REEL**

One (1) Hannay ECR-1600 series electric cable reel with an electric rewind shall be installed on the vehicle. The reel shall be designed for use with 240 volt, four (4) wire cable. The duty rating of the cable reel shall be for continuous usage. The reel shall be installed so that it is easily accessible for cord access and maintenance. A 12-volt motor controlled by a push button switch located in a convenient position and properly labeled shall perform the electric rewind function.

The installation of the cable reel shall meet applicable sections of the NFPA standards at.

#### **Reel Capacity**

The reel shall be sized to hold 110 percent of the capacity needed for the specified cable length.  
The wire size shall be in accordance with the National Electric Code.

#### **Labeling**

An information label shall be installed in a location visible adjacent to any permanently connected reel with the following data:

- Voltage
- Phase
- Current type
- Current rating
- Total cable length

#### **Electrical Supply Wiring To Reel**

The wiring shall end in a sealed conduit box at the reel with mechanical connectors to allow removal of the reel. Appropriately, sized wire and circuit breakers shall be utilized.  
The electric cable reel shall be installed in the upper right side body compartment ahead of the rear wheels.

A two hundred foot (200') length of 10/4 yellow electric cable shall be installed with specified plugs. The cable shall be type SEO-WA with a 30 amp, 240 volt rating.

The electric cable shall be configured with a 120/240-volt 30 amp NEMA L14-30R four-prong twist lock female receptacle.



One (1) ball stop shall be attached to the electric cable to prevent total re-wind and to allow the cable to remain at a reachable position. The ball shall positively attach to the cable and be bright orange in color for high visibility.

### **JUNCTION BOX**

One (1) Akron yellow electrical junction box shall have a 12" pigtail with a NEMA L14-30 twist-lock plug for connection to the cord reel. The unit shall have an integral pilot light to indicate electrical current.

The unit shall be equipped with four (4) 120 volt 20 amp NEMA 5-20 straight blade receptacles, each with a hinged, weatherproof cover. The two (2) receptacles closest to the junction box inlet shall be a circuit and the remaining two (2) receptacles shall be on a separate second circuit. Each circuit shall have a 20 amp circuit breaker.

One (1) aluminum storage bracket designed to hold an electric junction box shall be supplied. The holder shall be mounted in the same compartment as the specified cable reel.

One (1) four-sided encompassing stainless steel roller unit for the electric cable shall be installed on specified reels. The roller unit shall be mounted in the specified location to permit the cable to feed directly off the reel.

### **PRE-WIRE, LIGHT TOWER ON CAB ROOF**

Pre-wire for future install of Command Light light tower. Wires shall be run from the breaker box to the headliner at the rear center of the cab roof. No breaker will be installed in the breaker box.

### **PAINT – LETTERING & STRIPING**

#### **BODY PAINT PROCESS**

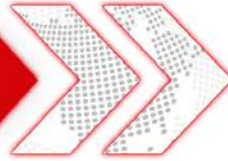
All bright metal fittings, if unavailable in stainless steel shall be heavily chrome plated. Iron fittings shall be copper plated prior to chrome plating.

All seam shall be caulked both inside and along the exterior edges with a urethane automotive sealant to prevent moisture from entering between any body panel.

The body and all parts shall be thoroughly washed with a grease cutting solvent (PPG DX330) prior to any sanding. After the body has been sanded and the weld marks and minor imperfections are filled and sanded, the body shall be washed again with (PPG DX330) to remove any contaminants on the surface.

The first coating to be applied is a pre-treat self etching primer (PPG DX1787) (.5 to 1.0 dry film build) for maximum adhesion to the body material. The next two to four coats (depending on need) shall be an acrylic urethane primer surfacer (PPG K36). The film build shall be 4-6 mils when dry. The primer surfacer coat, after appropriate dry time, shall be sanded with 320-600 grit sandpaper to ensure maximum gloss of the paint. The last step is the application of at least three coats of PPG Concept polyurethane two-component color (single stage). The film build being 2-3 mils dry. The single stage polyurethane, when mixed with component (PPG F3270) catalyst shall provide a UV barrier to prevent fading and chalking.

All products and technicians are certified by PPG every two (2) years.



### **INTERIOR COMPARTMENT FINISH**

The interior compartment walls shall be coated with a heavy spray on lining material. The compartments shall be cleaned with a wax and grease remover and then caulked with a urethane caulk. The compartments are then sprayed with one coat of epoxy primer, then two to three coats of urethane bed liner. The lining material shall dry to form an impervious one piece covering to protect the compartment interiors from damage. The lining material shall be applied on eight (8) compartments.

### **INTERIOR COMPARTMENT FINISH**

The lining material shall be grey in color.

### **ROOF INTERIOR COMPARTMENT FINISH**

The roof interior compartment walls and floor shall be coated with a heavy spray on lining material. The lining material shall dry to form an impervious one piece covering to protect the compartment interiors from damage. The lining material shall be grey in color and applied on four (4) compartments.

### **WHEEL PAINTING**

The exterior faces of the front wheels and outer rear wheels only, shall be finish painted to match the apparatus body. Wheels shall be properly prepared and finished with primer coats and top coats as specified.

### **TOUCH-UP PAINT**

Two (2) two (2) ounce bottles of touch-up paint (one for each color) shall be furnished with the completed truck at final delivery.

### **UNDERCOATING**

The entire underside of the single axle apparatus body is to be cleaned and properly prepared for application of a sprayed on automotive type undercoating for added corrosion resistance. Undercoating is to be a solvent based, rubberized coating, black in color.

### **LETTERING**

The dealer shall supply the apparatus lettering.

### **APPARATUS DOOR GRAPHICS**

Two (2) custom door seals designed primarily with letters and numbers shall be proposed for installation on the apparatus.

### **REFLECTIVE STRIPING**

A 1" x 4" x 1" wide 3M brand Scotchlite reflective multi-stripe shall be affixed to the perimeter of the vehicle. There shall be a 1" gap between each of the stripes. Striping shall conform to applicable



NFPA requirements. At least 50% of the perimeter length of each side and width of the rear, and at least 25% of the perimeter width of the front of the vehicle shall have reflective striping.

The striping shall be applied in a large "Z" pattern.

#### **COLOR OF STRIPING MATERIAL**

The color of the 3M brand striping material shall be white.

#### **CHEVRON STRIPING**

The entire rear portion of the body shall have 3M Diamond Grade reflective red and amber striping installed. The chevron style striping shall be applied at a 45-degree upward angle pointing towards the center upper portion of the rear panel.

#### **REFLECTIVE STRIPE**

Reflective striping shall be installed on the interior of each chassis door.

#### **LOOSE EQUIPMENT**

#### **WHEEL CHOCKS WITH MOUNTS**

A pair of Zico Model SAC-44 Quic-Chok folding wheel chocks shall be provided and mounted under the apparatus body with model SQCH-44H horizontal mounting brackets.

#### **ROOF LADDER**

One (1) Duo Safety Model 775-A, 14 foot aluminum roof ladder with folding steel roof hooks on one end and steel spikes on the other end shall be provided on the apparatus. The ladder shall meet or exceed all latest NFPA Standards.

#### **EXTENSION LADDER**

One (1) Duo-Safety Model 900-A, 24 foot two (2) section aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.

#### **FOLDING LADDER**

One (1) Duo Safety Model 585-A, 10 foot folding aluminum ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA Standards.

#### **PIKE POLES**

All NFPA required pike poles will be supplied and installed by the Customer before the apparatus is placed into service.

#### **FLAT HEAD AXES**

All NFPA required flat head axes will be supplied and installed by the Customer before the



apparatus is placed into service.

#### **PICK HEAD AXES**

All NFPA required pick head axes will be supplied and installed by the Customer before the apparatus is placed into service.

#### **SUCTION HOSE - SPECIAL SIZE**

Two (2) length of special size (6" x 14') PVC flexible suction hose shall be supplied. The suction hose shall have light weight couplings provided.

#### **HOSE COUPLINGS**

Light weight aluminum couplings shall be provided on the suction hose. A long handle female swivel shall be provided on one end and a rocker lug male shall be provided for the other end.

#### **STRAINER**

One (1) Kocheck Model BS60 barrel strainer shall be provided. The strainer shall be constructed from aluminum with K-Brite finish and include a tie off loop on the end plate. The strainer shall be provided with a 6.0" NST female rocker lug coupling.

#### **STRAINER MOUNTING**

One (1) screw type strainer mounting plate shall be provided. The mounting plate shall be cast aluminum and be 6.0" NST thread.

#### **EMERGENCY ROAD KIT**

One (1) DOT emergency kit shall be provided with the completed apparatus and shall include a 2.5 BC fire extinguisher and three reflective triangles.

#### **DEALER SUPPLIED EQUIPMENT**

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