



# PUBLIC WORKS LONG RANGE STRATEGIC PLAN

September 2015





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## Project Team

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Our team wishes to thank the following individuals for touring us through the facilities, sharing pertinent information and providing general assistance on this project. We would also like to thank Bill Linfield for the cover photograph.

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### Town of Silverthorne Town Council

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Derrick Fowler  
Peggy Long  
Stuart Richardson  
JoAnne Nadalin

### Municipal Peer Group

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Paul Ruud, Town of Telluride  
James Phelps, Town of Breckenridge  
Tim Mack, Town of Frisco  
Mat Car and Rodney Due, Town of Crested Butte



## Executive Summary

### Project Background

SGM was selected through a competitive process to develop a Long Range Strategic Plan (LRSP) for the Public Works Department. The primary objective of this project as stated in the RFP is to “develop a clear set of goals, policies and standards for the Department for the next ten years.” More specifically, the LRSP is intended to address three core issues:

- How best to develop / redevelop the Cottonwood and/or Brian Avenue sites.
- How best to address snow removal when on-street parking is implemented.
- How best to adjust the organizational chart, staffing needs and responsibilities for the future.

In order to thoroughly address these issues, SGM’s team adhered to the following project approach:

- Conducted preliminary research by reviewing key documents such as budgets, comprehensive plans, previous reports, policies and more.
- Interviewed staff and Town Council, as well as public works staff from similar organizations.
- Developed findings that serve as the basis of what the Town and/or the team see as the primary challenges and opportunities to address.
- Analyzed the data and information, and then reviewed with senior staff.
- Developed recommendations and a draft LRSP for staff review.

The final step will be making final edits and presenting the final LRSP to Town Council.

### Findings

Findings are intended to summarize the facts, observations, stakeholder perspectives or other pertinent information that inform recommendations and actions. The findings, summarized below, were developed by SGM and shared with town staff to confirm that there were not any errors or misunderstandings.

Town Council members and the community are generally very satisfied with the level of service provided by Public Works (PW) according to council member comments and the 2011 community survey. A high priority is keeping the Town looking good and the public appears willing to allocate funds to Public Works. Primary concerns for the Council and staff are succession planning for long-time PW staff that will be retiring in the near future and developing a solid PW organizational structure for the future. Within the current structure there appears to be cooperation among PW staff and other Town departments although project coordination and communication are areas for needed improvement. Such improvement is most needed with both the Recreation and Culture and Community Development departments, specifically as it relates to special events, parks maintenance and facilities maintenance.

A concern of SGM and town staff is that 60% of the Town’s sales tax is restricted by voters to fund *capital* expenditures despite an increasing need for *maintenance* funding and a decreasing need for capital funding. This may pose a significant challenge if staffing levels are increased in order to meet growing expectations of service, such as more parks maintenance, on-street parking snow removal, more special events, residential development and the support services required as a result such as utilities management and administrative support.

Capital funding will be necessary in order to develop a new Public Works facility. Not only are existing PW facilities space-constrained and falling below current best practice standards, but several inefficiencies need addressed such as storing winter maintenance vehicles and equipment in repair bays (which decreases a mechanics

efficiency) or outdoors (which decreases the operators efficiency). Although the Cottonwood site was originally intended to solve these issues, there is general agreement that it is not big enough to house all PW facility needs without encroaching on Cottonwood Park. Also, there is some concern that moving all of PW to Cottonwood would further erode communication between PW and other departments.

Despite a dedicated effort by staff, the Parks Maintenance department is in need of stability and consistency with respect to management and expectations. Similarly, the PW department is anxious to maintain stability and consistency with respect to its GIS operations. Because GIS is heavily used by multiple people in multiple departments, cooperation and good communication is critical.

It's worth noting that when the objective of a project such as the LRSP is to develop recommendations for improvement, issues of concern are identified and highlighted more so than areas of achievement. Despite the noted issues of concern, the PW department has been very successful in exceeding the expectations of the Silverthorne community and we commend them for these efforts.

## Recommendations

As mentioned above, there were several questions stated in the RFP that the Town wanted this Long Range Strategic Plan to address. This plan consolidates those questions into three overarching questions.

- 1. What is the most functional and cost-effective way to redevelop a Public Works Facility for the Town of Silverthorne utilizing the Cottonwood site and the Brian Avenue site? Specifically, what functions should be located at Cottonwood v. Brian Avenue site? Should new facilities be phased, and if so how?**

After research and analysis it was clear that virtually any combination of developing the Cottonwood and/or existing Brian Avenue sites is possible and even functional. This plan describes what we felt were the two best alternatives.

### Alternative 1 - Maintain Brian Avenue site in its entirety and construct new facility at Cottonwood:

- A new PW facility at the Cottonwood site is constructed that would house all Utilities Department operations, a new Facilities Management Department, and allow for future expansion of PW operations.
- The Brian Avenue site would be master planned and redesigned to accommodate a *new* Fleet Maintenance / Streets shop, a new or newly upgraded space for all non-Utilities PW Administration, administrative support areas and PW common areas, a new or upgraded space for Parks Maintenance shop, and indoor parking for as many 'current season' vehicles / equipment as is feasible.
- All other buildings would remain, be relocated, or be replaced with more functional facilities per the new master plan and all operations not associated to Fleet Maintenance, Streets and/or Parks Maintenance would be relocated to the Cottonwood site. The Cottonwood site would also store 'non-current season' vehicle / equipment storage.
- Ideally employee parking is moved off-site perhaps through a shared parking agreement with the Outlet stores.

### Alternative 2 - Minimize Brian Avenue site use for eventual property sale and relocate all PW functions to Cottonwood site:

- A new PW facility at the Cottonwood site is constructed to house all PW department operations including a potential new Facility Management Department shop and office.
- The Town would develop a phasing plan for migrating PW operations from the Brian Avenue site to Cottonwood. The phasing plan would account for the possibility of constructing the new PW facility at Cottonwood in phases.

**2. How can the Public Works department best modify their operations in order to maintain new on-street parking?**

On-street parking is being phased in with the first phase including striped parking on Rainbow Drive, then eventually making it permanent by extending the curb and gutter. The next phase would be constructing parking through-out the Town Core area, likely in multiple phases. Accordingly this plan recommends that the Town modify its operational plan and add necessary resources in phases as well.



Photo courtesy of Bill Linfield

- Phase 1 – Rainbow Drive / No new night crew – This phase is intended to ‘test the waters’ of on-street parking by allowing the Town to better understand the impacts without fully investing in equipment and/or staffing, or significantly changing snow removal procedures. This trial is made possible by striping the parking instead of constructing curb and gutter, and by not adding a night snow removal crew. Parking would only be permitted on one side of the street on any given day and snow removal routes and shifts do not change from current operations. Additional staff is added; however no new equipment is needed.
- Phase 2 – New night crew – This phase begins when the Town is ready to fully commit to on-street snow removal by adding a night crew. Parking for *all* on-street parking areas would be prohibited during early morning hours. During this time crews would plow snow from curb to road centerline. The centerline windrow would then be removed and hauled away. For this phase, equipment operators are added and hauling of snow is expected to require out-sourcing. An additional loader or snow blower may also need to be purchased, depending on the haul strategy.

**3. What Public Works organizational and management structure will best allow Public Works to thrive while adapting to near-term changes in staff?**

For the Town of Silverthorne to address not only the imminent changes but the perpetual changes that are part of municipal governance, flexibility and adaptability will be critical. Fostering a ‘team of teams’ approach can help grow capacity in these areas. The recommendations and goals included in this report are intended to facilitate this ‘team of teams’ approach. Essentially this approach revolves around the following core strategies:

- *Commit to clear and consistent communication with everyone.* Stronger communication not only within Public Works, but with other departments (i.e. teams) will strengthen trust and a shared awareness of what it takes for all teams to succeed. Perhaps the most evident opportunity to strengthen communication includes coordination between Public Works and Recreation and Culture staff.
- *Allow people and departments to thrive by aligning skills and interests with responsibilities and compensation.* For example in order for parks maintenance to meet or exceed the rising community needs and expectations, a team must be led by someone trained, dedicated and interested in parks. In order for the Town’s growing inventory of increasingly technical facilities to function properly and efficiently, a team must be created and led by someone trained, dedicated and interested in facilities.
- *Continue to integrate and expand the use of tools intended to optimize efficiency and efficacy.* Town staff is already using GIS and Cartegraph for many functions, and there are great opportunities to not only use them both more effectively, but to integrate them better. Doing so will not only improve efficiency and efficacy, but will likely assist in the first two strategies as well.

Detailed recommendations that support these strategies are included in the report and in Table 6 - Organizational Chart Recommendations.

## Implementation

The recommendations in this report are intended to include the detail needed for successful implementation. However, to summarize these recommendations into easily referenced goals, please refer to Table 1 below.

<b>Table 1 - Public Works Goals</b>			
<b>Funding priority</b>	<b>Goal</b>	<b>Goal description</b>	<b>Timeframe</b>
<b>Admin.</b>			
	AD 1	Improve communication within PW and with other departments (refer to recommendations in question 3)	ASAP
	AD 2	Finalize PW Shop Design/Construction strategy (refer to recommendations in question 2)	2016
high	AD 2.1	Design Cottonwood facility	2016
high	AD 2.2	Design Brian Avenue facility	2016
high	AD 2.3	Construct Cottonwood facility	as funding allows
high	AD 2.4	Construct Brian Avenue facility	
	AD 3	Define senior management responsibilities as recommended (refer to Organizational Chart Recommendations table)	2016
	AD 4	Develop redundancy/succession policy for all positions (refer to Organizational Chart Recommendations table)	2016
	AD 5	Identify training needs and commit to recommended training as recommended (refer to Organizational Chart Recommendations table and recommendations in question 3)	2017
	AD 6	Better/fully utilize Cartegraph for project costing and reporting for all departments (refer to 'Recommended Cartegraph Report Templates' listed in Appendix of report)	2015
<b>Streets</b>			
	ST 1	Adopt on-street parking snow removal strategy (refer to recommendations in question 2)	as necessary
medium	ST 1.1	Hire additional seasonal operator for snow removal	when LOS complaints warrant
high	ST 1.2	Hire new maintenance worker for snow removal	2016
low	ST 1.3	Hire night snow removal crew, including 2 operators	as necessary
low	ST 1.4	Possibly buy a loader to support night crew	as necessary
	ST 2	Provide 7 day-a-week coverage (refer to Organizational Chart Recommendations table)	as necessary
	ST 3	Identify GIS lead for Streets	2016
	ST 4	Conduct regular coordination meetings with special events staff	ASAP



<b>Table 1 - Public Works Goals (cont.)</b>			
<b>Funding priority</b>	<b>Goal</b>	<b>Goal description</b>	<b>Timeframe</b>
<b>Fleet</b>			
	FL 1	Evaluate need for additional mechanic if 7 day-a-week Public Works coverage is added and/or when new shop is built	as necessary
low	FL 1.1	Hire new mechanic if deemed necessary	as necessary
	FL 2	Provide 7 day-a-week mechanic coverage if 7 day-a-week Public Works coverage is added	TBD
<b>Water</b>			
	WT 1	See Admin goals	
<b>Sewer</b>			
	SW 1	See Admin goals	
<b>JSA</b>			
	JS 1	See Admin goals	
<b>Facilities</b>			
medium	FC 1	Hire a qualified Facility Manager and launch new department	before theater opens
	FC 2	Consolidate town-wide facility maintenance services within new department	after FC 1 is complete
	FC 3	Develop Facilities Management Plan (refer to 'Recommended Facilities Management Plan Notes' listed in Appendix of report)	after FC 1 is complete
<b>Parks</b>			
high	PK 1	Hire a qualified Parks Maintenance Manager	2016
	PK 2	Develop annual work plans approved by Parks Planner and PW Director	after PK 1 is complete
<b>Engineering</b> <i>(If it remains part of Public Works)</i>			
	EN 1	Prioritize training in needed areas, such as project management	2016
	EN 2	Agree upon skill and goal expectations.	2016

<b>Table 1 - Public Works Goals (cont.)</b>			
<b>Funding priority</b>	<b>Goal</b>	<b>Goal description</b>	<b>Timeframe</b>
<b>GIS/Mapping</b>			
medium	GS 1	Conduct a review (ideally by a third party) of GIS work flows, tools, database organization, and possibly licensing agreement to identify potential efficiencies and opportunities for improvement. Budget for this review on an annual basis. (Initial review should be < \$2,500.)	before Public Works Admin. Asst. retires
	GS 1.1	Implement recommendations which will likely include typical GIS maintenance, which includes but is not limited to database organization (aka file clean-up). This may require third party assistance or a dedicated time allotment from Town staff.	2016 and beyond
	GS 2	Identify next GIS Editor for PW	2016
	GS 3	Develop and adopt language for Town RFPs and land use requirements that clearly articulates specific requirements for acceptable GIS as-built-data.	before theater goes to bid
	GS 4	Define job titles and/or responsibilities and/or pay scales for GIS 'users' v. 'editors'. Editors have a higher level of capabilities and responsibilities. There should be at least one editor on the Public Works staff and at least one on the Community Development staff. Each respective editor should have ultimate authority and responsibility for all aspects of GIS including data collection and/or mapping. Additional editors and/or users can be added as necessary.	as necessary
	GS 5	Assign responsibility to one GIS editor (either Public Works or Community Development) for ensuring that all Town departments/staff are consistent in how they collect, store, and use GIS data.	2016
	GS 6	Ask the Town's Cartegraph representative to provide a cost estimate to fully integrate GIS and Cartegraph so that information does not need to be entered twice.	2016
medium	GS 6.1	Implement GIS / Cartegraph software integration	as funding allows

### Executive Summary Conclusion

The Town of Silverthorne is fortunate to have a Public Works Department with dedicated and experienced staff with a commitment to delivering a high level of service to its community. Many of the recommendations in this Long Range Strategic Plan are confirmation that the Town and its Public Works Department are on solid footing, but like all organizations, would benefit from updating some of its current practices, aligning skillsets and responsibilities, and committing to clear and consistent communication at all levels. Development of a new Public Works facility is also a high priority and has been in the works for quite some time. One of the objectives of this plan is to add clarity with respect to how best to proceed with that much needed asset. And with on-street parking now a reality and more in the planning phase, this plan articulates a plan for Public Works to adapt its long-standing snow removal procedures incrementally as necessary. Together these recommendations are intended to guide the Public Works Department in its strategic planning for the coming decade.

# Long Range Strategic Plan

## Project Background

SGM was selected through a competitive process to develop a Long Range Strategic Plan for the Public Works Department. The scope of work requested in the RFP stated that the Public Works Department Strategic Plan will:

- Review existing Department operations and make recommendations to increase efficiency
- Make Department organizational recommendations based upon future Town growth
- Review Department organizational chart and recommend necessary changes
- Review duties of Department positions and recommend changes
- Analyze and recommend future staffing needs
- Recommend changes to service levels
- Recommend addition or deletion of services
- Analyze contracted approach for services where appropriate
- Identify training needs
- Recommend specific goals and time frames for various divisions within Public Works, including streets, parks, buildings, fleet, water/sewer, and GIS/Mapping
- Determine space needs for Department
- Analyze pros/cons of moving entire Department operation to a new facility at Cottonwood, or keeping satellite operation closer to Town Core
- Attend at least one work session with Town Council to solicit their thoughts and feedback
- Attend meetings with PW staff to solicit their input



From this RFP, SGM's assessment team created and is delivering the following specific scope of services:

### Phase 1 – Preliminary Research

1. SGM will organize and conduct a kick-off meeting with the Town to confirm project goals, scope, budget and deliverables.

### Phase 2 – Interviews and Observations

1. SGM will conduct staff interviews and access all applicable information on department operations; organizational chart; current and future staffing needs, service levels, facility needs; GIS mapping; current outsourcing and potential opportunities; goals and timelines; etc...
2. SGM will conduct field observations of prioritized assets, including streets, parks, buildings, fleet, water/sewer, and other applicable Public Works assets.
3. SGM will incorporate thorough investigation into all aspects of the Cottonwood v. satellite operations during interviews.
4. SGM will attend one work session with Town Council to solicit their thoughts and feedback.

### Phase 3 – Analysis and Draft Long Range Strategic Plan (LRSP)

1. SGM will create a departmental profile based on all data/information gathered and review with Town staff to confirm accuracy.
2. SGM will assess and analyze profile information, comparing to industry best practices, comparable municipal best practices, and the decades of combined hands-on experience of SGM's Project Team.

3. SGM will develop preliminary recommendations for goals and timeframes for the various divisions within Public Works listed in the RFP in order to increase efficiency and/or improve service levels based, on both current and projected future demands of growth. In addition to more general departmental recommendations, SGM's final recommendations will include:
  - a. Applicable training alternatives;
  - b. 10 year facility space needs;
  - c. Pros/cons of relocation to Cottonwood v. satellite operations. This cost/benefit analysis will include a 'decision-tree' matrix that allows the Town to fully understand the pros/cons to facilitate a decision at all levels, including Town Council, senior management and staff.
4. SGM will review draft recommendations with staff.

**Phase 4 – Finalize Long Range Strategic Plan**

1. SGM will finalize recommendations and present to the Town as requested.



## Summary of Findings

Before SGM’s assessment team began analyzing information and developing recommendations, a comprehensive list of findings were created for each category. The team used these findings to not only confer what was heard and understood, but also as the foundation upon which to develop specific recommendations. These findings are a collection of observations that the assessment team ascertained about Public Works (PW) management, operations, etc. The findings were shared with Town staff to confirm that there were not any errors or misunderstandings. Many of the findings are also referenced in applicable recommendations.

Specific sources of findings are primarily from interviews conducted with town staff. However the assessment team also reviewed pertinent information including the current budget, organizational charts, planning documents, job descriptions, work plans, etc. The team interviewed PW staff, Town Council members (TC), and other town staff that interact with Public Works. Site observations were made for all PW facilities.



Photo courtesy of Bill Linfield

### General & Administration

- Town Council members and community are generally very satisfied with level of service for Public Works (PW), according to Council comments and the 2011 community survey. A high priority is keeping the town looking good.
- The Town and PW in particular, have very good staff retention. A primary concern for Council and staff is succession planning for long-time PW staff who will be retiring in the near future.
- There is some PW staff concern about how to adjust to change, such as long-time staff turnover, on-street parking, etc. There is also a perception that PW is slow, or even resistant to change.
- Requesting a property tax of voters to increase PW funding is off the table. What is not off the table for future funding includes:
  - Additional sales tax, maintenance fees, improvement districts, urban renewal, RETA, etc.
- Town Council has been debt free for 9 years. They would consider debt for large projects but wouldn’t consider reducing service levels.
- Resolving the PW organizational structure is a high priority. This includes resolving current issues as well as planning for the future.
- There has been inconsistency in project management, facility management and parks maintenance management that warrants improvement.
- Finding qualified new employees is very challenging, partly due to the cost of living and partly due to diminishing pool of technically-skilled people.
- According to PW staff, a considerable amount of PW infrastructure and special event responsibility has been added without a proportional increase in PW staff over the past several years.
- There is general consensus that fund balances are healthy.
- 60% of the Town’s sales tax is restricted by voters to fund capital expenditures.

- Some staff questions whether 60% is too high now, given the need to maintain more infrastructure. Some feel that once capital facilities are constructed, more funds should be dedicated to maintenance and operations.
- There have been community discussions about the Towns of Dillon and Silverthorne merging, with potential benefit being economies of scale with respect to PW operations.
- Town staff is very diligent about preventative maintenance.
- There isn't as much redundancy in PW staff as they would like, despite some cross-training efforts. There does appear to be very good cooperation across Public Works departments.
- There appears to be cooperation among PW staff and other departments although project coordination and communication are areas for needed improvement. There is a perception that Public Works hasn't embraced the community's vision as articulated in various master plans.
- PW staff work Monday – Friday unless required to work weekends for snow removal, special events, or other extenuating circumstances. Not having PW staff regularly available on weekends makes special events more challenging to plan and execute.

### Streets

- Based on Community Survey, the public appeared to be very satisfied with snow removal in 2011 and willing to allocate funds to Public Works.
- The Snow Removal Plan and priorities appear to be well thought out.
- Some PW staff feels that the snow removal LOS has suffered. What used to take one day to accomplish now takes 2.5 days. And it takes more manpower in the winter with less snowfall because the snow isn't there to insulate culverts, gutters, and other features that become frozen. As a result crews have to spend a lot of time thawing culverts and icy areas.
- Snow removal efforts on sidewalks and trails are reported to be fair but are hampered by lack of staff and the snow removal policy of plowing snow to the side.
- Some staff are concerned that the Town is understaffed for a big snow year.
- Winter maintenance typically lasts 9 months of the year. Summer maintenance typically lasts 6 months of the year. Therefore splitting an employee's time 50/50 is problematic.
- From some PW perspectives, maintaining sidewalks and parks has become more important to the community than maintaining streets.
- Many vehicles and equipment are stored outdoors (approximately 50%), which compromises maintenance tasks; some believe as much as 20-30%.
- Special events require a significant and growing amount of PW staff time and usually require immediate attention. Other priorities need to shift as a result. This is challenging for PW staff.
- Due to the geographic location of the Town being at a high elevation and at a very busy I-70 interchange, responding to street emergencies requires more time than one would expect.
- It is anticipated that the Town will create on-street parking on Rainbow Drive (*completed*) and several of the streets in the Town Core. This will necessitate a change in their snow removal practices and possibly more PW staff.

### *Fleet*

- In general, vehicles are relatively new and kept in very good working order.
- There is general agreement that fleet department is understaffed.
- Shop bays are antiquated and generally substandard. The maintenance bays are too narrow and no separate space exists for a welding area, tire changing and storage, and other shop functions.
- Vehicle maintenance efficiency is significantly compromised because snow plows and sanders are parked in the maintenance bays at night.
- John reports that he spends 20 – 25% of his time on administration and the remainder of his time doing vehicle maintenance. He feels he could/should be spending 50% of his time on admin if he had a third mechanic.
- Staff feels they manage a very good Preventive Maintenance Program on vehicles and equipment.
- 7 day-a-week coverage (as opposed to current 5 day coverage) for fleet maintenance is reportedly needed.

### *GIS & Technology*

- There is strong concern among PW staff about the new fingerprint time clock.
- Town uses Cartegraph to track asset inventories and to maintain vehicle maintenance records but not for other department cost accounting such as streets, parks, etc. There has been some pavement management work done in Cartegraph. Fuel mileage is recorded manually through Excel spreadsheets but could be recorded in Cartegraph with an upgrade. Town will be migrating to OMS in the cloud to facilitate data collection. However Cartegraph will still have limited integration with ArcGIS.
- GIS is used heavily by multiple people in multiple departments. GIS Online has been used but can be cumbersome so the Town is upgrading to ArcGIS. Limited server functionality also limits performance. However, ArcGIS will still have limited integration with Cartegraph.
- Public Works initiated the use of GIS to collect ROW features for Streets & Water infrastructure. PW staff would like to have a server large enough to accommodate the data and have real time updates from handheld devices in the field.
- There appears to be opportunity to better organize the data in order to reduce server size and/or make data more readily available to all Town departments.
- There is concern among PW about what will happen to GIS in the future, as staff continues to change. PW staff would like to serve as the lead GIS department with full editing rights.
- Zac Hastings is responsible for GIS structure. As other IT responsibilities grow for Zac, he is less available to create maps for non-PW Town departments.
- The Town has had a GIS consultant in the past to help manage structure, data, maps, etc.
- Because the Town is nearing build-out, asset collection will decrease. If data supplied to the Town by developers or contractors was provided in proper format, GIS workload would reportedly decrease.
- Despite use of GIS and Cartegraph, both programs are underutilized.

### *Parks and Trails*

- There is not consensus on how well parks and trails are being maintained. Some feel that in the summer, maintenance of parks and trails is good, but could be improved.
- Staff reports that they can't keep up with maintenance expectations, including special events.

- Because winter operations continue well into spring, summer preparation such as getting flowers planted often suffers.
- Parks maintenance management has changed several times in recent years. Parks staff looks forward to having a dedicated manager and regaining departmental stability.
- Communication / cooperation at all levels between Parks and Trails, Recreation and Culture, and Community Development is in need of improvement.

#### ***Facility Maintenance***

- It appears there have been different approaches to facility maintenance and custodial care, none of which have achieved the desired results.
- Currently there are two facility maintenance staff that are part of PW (Scott and Ben) responsible for maintaining all Town facilities. The Recreation Center also has two staff members dedicated to facility maintenance.
- Communication /cooperation at all levels between Facility Maintenance and Recreation and Culture needs improvement.

#### ***Water/Wastewater/JSA***

- Staff reports that water quality and delivery are excellent.
- Utilities have very good AMP planning and reportedly have adequate funding.
- Emergency utility vehicles are parked outside in the winter which increases the response time to water line breaks and other emergencies.

#### ***Public Works Facility Planning/Design***

- Town Council is not unanimous in whether to maintain any PW Facility at Brian Ave. site.
- There is general agreement that Cottonwood site is not big enough to house all PW facility needs without encroaching on Cottonwood Park.
- It is unlikely that the Town will borrow funds to build a new PW facility.
- There is nothing preventing the Town from utilizing the Brian Ave. facility in the future.
- Most Parks facilities are closer to Brian Avenue site than to Cottonwood. Driving parks maintenance equipment from Brian Ave. shop to Cottonwood takes 17-23 minutes.
- Existing PW facility lacks space and fleet maintenance equipment to optimize operations.
- The 2008 design did provide detailed design for utility space, but not for fleet maintenance.
- There is some concern that moving all of PW to Cottonwood would further erode communication between PW and other Town departments.



## Recommendations

As outlined in the Scope of Work stated in the Request for Proposals (RFP), the Town was requesting that the Public Works Long Range Strategic Plan (LRSP) address several specific issues. As the research and analysis progressed, it became apparent that all of the issues stated in the RFP fell into three distinct categories. Therefore the recommendations are detailed responses to three key questions that address all of the issues.

### Public Works Facility

1. **What is the most functional and cost-effective way to redevelop a Public Works Facility for the Town of Silverthorne utilizing the Cottonwood site and the Brian Avenue site? Specifically, what functions should be located at Cottonwood v. Brian Avenue site? Should new facilities be phased and if so how?**

In 2008 the Town had initiated preliminary design for a new Public Works Facility at the Cottonwood site. However the project was put on hold during the economic downturn. To understand the preliminary program for a new Public Works facility we referenced the program planning document created for this project with updated needs provided by Bill Linfield. This data was supplemented with site visits and personal conversations with town staff and the Town Council. Please refer to the ‘Space Needs’ table in the Appendix.

The intent in 2008 was to relocate 100% of Public Works operations to the Cottonwood site. However; part of the scope of this strategic plan was to evaluate whether some operations should remain at the Brian Avenue site and if so, which ones. The ‘Space Proximity’ table below evaluates the adjacency criticality for each of the departments within Public Works. The ‘Space Analysis’ table below lists pros and cons for locating each department at either Brian Avenue or Cottonwood.

Department	PW admin.	Streets admin.	Streets maint.	Fleet admin.	Fleet maint.	Parks admin.	Parks maint.	Engineering	Utilities admin.	Utilities maint.	Facilities admin.	Facilities maint.
PW admin		5	1	5	1	5	1	3	3	1	3	2
Streets admin.			5	5	4	4	3	2	3	1	1	1
Streets maint.				5	5	4	4	2	1	3	1	2
Fleet admin.					5	4	4	1	2	2	1	1
Fleet maintenance						3	4	1	1	3	1	2
Parks admin.							5	1	1	2	3	3
Parks maintenance								1	1	2	2	3
Engineering									2	2	1	1
Utilities admin.										5	2	1
Utilities maint.											2	1
Facilities admin.												5
Facilities maint.												
<b>Legend</b>	5	Most critical link, daily coordination										
	4	Pretty critical link, daily or weekly coordination										
	3	Critical link, weekly coordination										
	2	Somewhat critical link, weekly or monthly coord.										
	1	Least critical link, almost no coordination										

<b>Table 3 - Public Works Shop Space Analysis – Brian Avenue Site</b>		
<b>Department</b>	<b>Brian Ave. Pro</b>	<b>Brian Ave. Con</b>
<b>PW admin</b>	Closer to Town Hall and majority of infrastructure	Antiquated facility
<b>Streets maintenance</b>	Closer to majority of infrastructure	Space constrained, not enough indoor equip. storage
<b>Fleet maintenance</b>	Currently vehicle storage and fleet maintenance	Challenging to design and phase construction of new facility
<b>Parks maintenance</b>	Closer to majority of parks; could repurpose exist. Fleet maint.	Currently no dedicated space
<b>Engineering</b>	Closer to Town Hall and majority of infrastructure	Not convenient public access or Com Dev interaction
<b>Utilities</b>	Closer to majority of infrastructure	Far from JSA plant
<b>Facilities</b>	Closer to majority of facilities	Currently no dedicated shop space

<b>Table 4 - Public Works Shop Space Analysis – Cottonwood Site</b>		
<b>Department</b>	<b>Cottonwood Pro</b>	<b>Cottonwood Con</b>
<b>PW admin</b>	Can customize design	Space limitations, farther from Town Hall
<b>Streets maintenance</b>	Can customize design, likely new facility	Space limitations, farther from majority of infrastructure
<b>Fleet maintenance</b>	Can customize design, likely new facility	Space limitations
<b>Parks maintenance</b>	Can customize design, likely new facility	Space limitations, farther from majority of parks
<b>Engineering</b>	Can customize design, likely new facility	Space limitations, farther from Town Hall and projects
<b>Utilities</b>	Adjacent to JSA plant, can customize design, likely new facility	Space limitations, farther from some infrastructure
<b>Facilities</b>	Can customize design, likely new facility	Space limitations, farther from majority of facilities

From this research and analysis, SGM has developed the following two recommended alternatives:

**Recommendations:**

Alternative 1 - Maintain Brian Avenue site in its entirety and build new facility at Cottonwood site:

This alternative is founded on the following premises: the Town would not sell the Brian Avenue site; there are significant operational and organizational optimization benefits from maintaining non-Utilities PW functions in the Town Core; the Cottonwood site is not ideal to house *all* PW functions; and the Brian Avenue site can be redeveloped in phases to meet present and future needs of non-Utilities PW departments while accommodating future Town Core design/redevelopment goals. This alternative includes the following elements:

- The Town would proceed with designing and constructing a PW facility at the Cottonwood site that would:
  - house all Utilities Department operations;
  - house a new Facilities Management Department shop and office if applicable; and
  - allow for future expansion PW operations.
- The Town develops a masterplan for the Brian Avenue site that includes the following program areas:
  - A new Fleet Maintenance / Streets shop.
  - New or newly upgraded space for all non-Utilities PW Administration, administrative support areas and PW common areas;
  - Parks Maintenance shop.
  - Indoor parking for as many ‘current season’ vehicles / equipment as is feasible.
- A new fleet maintenance facility would be constructed either on the easterly side fronting Adams Avenue or on the northwest corner of the site fronting Brian Avenue. If the new facility fronts Adams Avenue, the façade could be designed to adhere to Town Core design guidelines and possibly invite pedestrian activity by locating PW offices that would benefit from easier public access, such as the PW Director, Town Engineer, etc. The new facility would ideally house:
  - all Fleet Maintenance operations including shop and administration;
  - all Streets operations including shop and administration; and
  - potentially all non-Utilities PW Administration, administrative support areas and PW common areas. These program areas could also be located in a separate building.
- The current PW building 1 would continue to house all PW Administration, administrative support areas and PW common areas during construction.
- The greenhouse, miscellaneous storage and police impoundment area would be relocated to the Cottonwood site. The Cottonwood site would also include ‘non-current season’ vehicle / equipment storage.
- All other buildings would remain, be relocated, or be replaced with more functional facilities per the new master plan.

**Facilities Management**

SGM is recommending that a new Facilities Management Department be created requiring a workshop and administrative space. Like several other PW departments there would be efficiencies realized if this department was located in the Town Core area. However, the higher priority should be to locate Fleet Maintenance, Streets and Parks Maintenance in the Town Core. The existing facility maintenance shop located in the Recreation Center could either remain the working space for the new department, or if new space is necessary, it should be located at the Cottonwood site as opposed to the Brian Avenue site.

- After the new Fleet Maintenance Facility is completed, the Parks Maintenance Department takes over the current PW Fleet Maintenance/Streets shop in perpetuity.
- Either a new building would be constructed to house all non-Utilities PW Administration, administrative support areas and PW common areas, or the existing building would be upgraded to best practice standards.
- The Town Engineer either relocates to Town Hall or remains part of PW Administration space.
- Ideally employee parking is moved off-site, perhaps through a shared parking agreement with the Outlet stores.
- Depending on how the Brian Avenue site gets redeveloped, the remainder of the site is optimized for *indoor* 'current season' vehicle / equipment storage.

Alternative 2 - Minimize Brian Avenue site use for eventual property sale and relocate all PW functions to Cottonwood site:

This alternative is founded on the premise that the Town would prefer to sell the Brian Avenue site at some point in the future. In order to allow for phased construction in an effort to avoid financing of a new PW facility at the Cottonwood site, the Brian Avenue site would be utilized until full build-out at Cottonwood. This alternative includes the following elements:

- The Town would proceed with designing and constructing a PW facility at the Cottonwood site that would house all PW Department functions including a potential new Facility Management Department shop and office.
- The Town would develop a phasing plan for migrating PW operations from the Brian Avenue site to Cottonwood. This plan would account for the possibility of constructing the new PW facility at Cottonwood in phases.
- The Town Engineer would either relocate to Town Hall or remain part of PW Administration space.
- The current PW building 1 would continue to house all PW departments during construction.
- Once the new Cottonwood facility is complete but before the Brian Avenue site sells, the Brian Avenue site could still be used for vehicle / equipment storage, greenhouse functions, police impoundment
- All other buildings would be relocated or remain on-site for the next owner.



## On-street Parking Snow Removal

### 2. How can the Public Works department best modify their operations in order to maintain new on-street parking?

The Town has not had on-street parking until its very recent re-striping of Rainbow Drive to create on-street parking. (Please refer to Figure 1 below.) It is also planning to phase in on-street parking in the Town Core area as lots get developed, parking need increases and/or funds become available. (Please refer to Figure 2 below.) The Public Works department, according to both its citizens and the Town Council, does a commendable job of snow removal. The large majority of snow removal involves plowing snow off of streets and sidewalks onto the adjacent ROW and dedicated snow storage areas. When necessary, some snow is plowed, loaded into dump trucks and then hauled to a remote location, however this process is avoided whenever possible due to the high cost of additional staff, equipment and time requirements.

On-street parking will introduce new challenges with respect to snow removal. Challenges include but are not limited to:

- Snow removal of the street becomes more challenging because on-street parking restricts snow plows from pushing the snow to the curb. Snow is typically plowed to the center of the street and haul away.
- Snow removal of the parking areas will be challenging if and when spaces are occupied. This typically results in additional signage restricting parking during dedicated snow removal times. Enforcement of this regulation can be a challenge.
- More snow hauling will be necessary in the future, not only as a result of on-street parking, but because the Pavilion lawn is no longer available for storage. The new theater parking lot will also likely require hauling. This will necessitate additional equipment and/or additional operators and/or additional contract expense. More hauling will also necessitate additional remote location snow storage, more equipment traffic, and the resulting noise and stormwater concerns.
- All of the above will necessitate additional training for operators, as well as a grace period for operators to fine-tune their modified snow removal procedures.



A bad example of on-street parking snow removal

### Peer Group Comparison

Most mountain resort towns in Colorado, which have a grid pattern in the form of city blocks, allow on-street parking during a majority of the day in the central business core of the community. Since parked cars occupy the town Right of Way (ROW) on either side of the street, the Streets Department can't plow snow to either side of the street as they normally would in a non-urban residential area. Therefore, they typically impose No Parking Hours, typically from 2 a.m. – 6 a.m. (varies), and mobilize snow removal crews to remove the snow during the No Parking hours. To better inform the recommendations for the Town of Silverthorne's snow removal plan, a description of the town core snow removal operations for Aspen, Breckenridge, Telluride, Frisco, and Crested Butte is provided below:



THE CITY OF ASPEN

The city imposes No Parking restrictions from 3 a.m. – 7 a.m. on approximately 24 city blocks from Main Street to Durant Streets, north to south, and Original to Aspen Streets, east – west. They are also responsible for plowing Colorado Highway 82 within Town limits. Whenever there is a snow event of three inches or more, the Streets Dept. plows snow to the middle of the street, and then a separate crew reports to work at 12 a.m. Since Hwy 82 has No Parking overnight, they use graders and loaders to pull snow from the curb to the middle of the highway where a snow blower is utilized to blow snow into tandem dump trucks to haul the snow to the ‘snow dump’ located outside of town. Once Highway 82 has been cleared of snow the same crew starts removing snow from the downtown core at 2 a.m. Again graders are used to move snow from the parking areas to the middle of the streets and loaders are used to push snow from the alleys to the middle of the adjacent streets. A snow blower is used to blow snow into the trucks to be hauled away. Aspen contracts for up to 22 trucks to haul the snow per event, which is budgeted at \$185,000 annually. It takes less than two minutes to load a truck with a snow blower, and it takes two trucks to haul off the snow from one block for a 3” snowstorm. In the residential areas of Town the snow is plowed to the ROW on either side of the street in the traditional manner.



The town core snow removal operation is very similar to Aspen. They impose 2 a.m. – 6 a.m. No Parking Restrictions on multiple blocks in the central core. Several crews using graders, loaders, snow blowers, and trucks remove the snow from the full width of a city street and haul it to a snow storage area. In addition to city streets Breckenridge has several day skier parking lots that have to be cleared during the nighttime hours. Breckenridge provides 24/7 snow removal coverage, and they hire 9 additional seasonal operators to assist their full time Street Department staff of 9 operators.



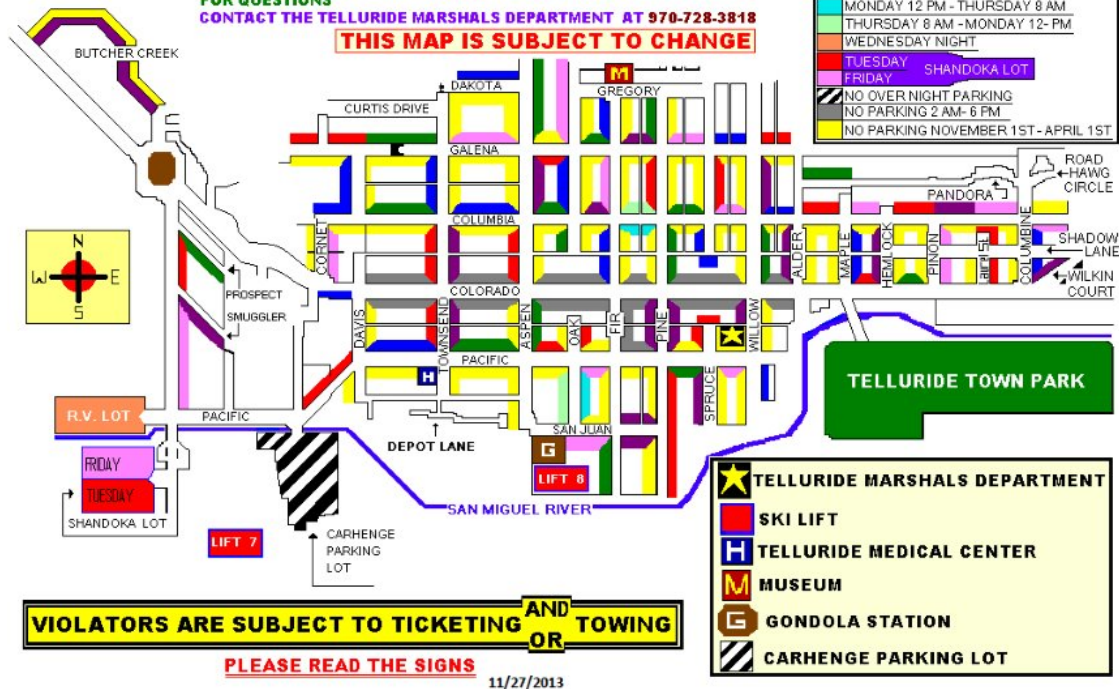
Unlike Aspen and Breckenridge, Telluride only removes snow from Colorado Ave., their main street, in the same manner as Aspen and Breckenridge. No Parking restrictions are imposed on approximately 10-12 blocks of Colorado Ave. from 2 a.m. to 6 a.m. They use a grader to plow the snow from the curb to the middle of the street and loaders (not a snow blower) to load the snow hauling trucks. The loaders are equipped with large snow buckets that can load a truck with three scoops of the bucket. Their snow storage area is located at their Public Works Facility, and it takes a truck 15 minutes to do a round trip from the town core to the snow dump. It takes the street crew one full shift to remove snow from Colorado Ave, during a normal snowstorm, and two plus days for larger events. To avoid having to haul snow from all of their remaining city streets in the town core on the night of a snow event they impose No Parking restrictions from 11/1 to 4/1 on one side of a given street and allow parking on the other side. During a snow event they plow the snow on a street to the No Parking side, and on non-snow event days they remove the snow, using loaders and trucks, to their snow storage area (s).

## TELLURIDE SNOW REMOVAL SCHEDULE

COLORED AREAS INDICATE SNOW REMOVAL DAYS  
THE NON-COLORED AREAS ARE PRIVATE STREETS OR  
NO PARKING ANY TIME.

FOR QUESTIONS  
CONTACT THE TELLURIDE MARSHALS DEPARTMENT AT 970-728-3818

**THIS MAP IS SUBJECT TO CHANGE**



Frisco is similar to Telluride in that it allows parking on both sides of Main Street and imposes 2 a.m. – 6 a.m. They have No Parking restrictions to allow the snow crew to remove snow at night. They remove the snow in the same manner as the other three towns using a snow blower, and their goal is to have bare pavement. No Parking restrictions are maintained from 12 a.m. to 6 a.m. on all other streets, alleys, and ROW's. Immediately after snow is removed from Main Street the street crew plows the remaining streets on storms with 4" or more accumulation, in the traditional manner by plowing snow to either side of the street. They store the snow in the ROW adjacent to the street. During the winter the Town has two short-term overnight parking lots.

### Following are the priorities for snow removal:

#### #1 Main Street and the Central Core Area - RED

Due to the volume of pedestrian and vehicular traffic, "Bare pavement" is the goal in the Core Area. Snow is first removed from the sidewalks to the parking areas and then plowed to the centerline of Main Street. The snowpile is then blown into trucks with a snowblower and hauled to designated snow storage areas.

#### #2 Residential Streets - BLUE

Residential streets are plowed immediately after Main Street with emphasis on schools, fire station, bus routes, stop signs, hills, curves, and intersections. Snow is plowed onto the street rights of way when accumulations reach four inches or more. This usually takes multiple passes by the plow to get the job done completely.

#### #3 Alleys -----

The Core Area alleys of town are normally plowed first, followed by the residential area. This includes THROUGH alleys only.

#### #4 Dead-end and/or Unimproved Alleys

These alleys do not receive regular winter maintenance, but will be plowed after the storm cycle as time and manpower permits. We want to emphasize that plowing of these alleys may not occur until well after the storm cycle.

Note: Summit Boulevard is maintained by the Colorado Department of Transportation (CDOT).

Excerpt from Frisco's snow removal plan



Similar to Silverthorne Crested Butte does not plow to the center of Elk Avenue, their main street, and bring in a night crew to remove the snow (like the four towns described above). Instead the Town of Crested Butte plows curb to curb on all streets (Elk Ave. does have parallel parking lanes on both sides), and snow is usually stored in the right of way. On Elk Avenue the snow is stored in the right of way between the back of curb and the sidewalk, until such time crews can come in and remove the berms after a storm event. The Town Council requests the berms be left in place on Elk Avenue one week prior to Christmas until one week after New Years for the “look and feel” of a mountain town (for the visitors). Elk Avenue, bus routes, and emergency routes are kept down to oil (bare pavement). The remainder of the streets can get some accumulation, but no more than 6 inches before they will peel pack. When a snow storm accumulates 3” or more, the snow plow crew will report to work at 12 a.m. and “will plow snow to the alternate sides of the street according to the following parking rules: residential parking restrictions are in affect from 11/1 to 4/30 and enforced between 1 a.m. and 10 a.m. Vehicles may be parked on the north and east side of the streets on Tuesday, Thursday, and Saturdays. Vehicles may be parked on the South and West sides of the streets on Sunday, Monday, Wednesday, and Fridays.” (Telluride tried the alternating parking scheme, but abandoned it because people would forget which side of the street to park on and during a prolonged snow event they had trouble clearing snow from the non-parked side of the street in time to meet the parking schedule). On non-snow days crews remove snow from the ROW’s and snow stashes throughout town and haul it to snow storage areas outside of town.

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Fortunately Silverthorne has the benefit of experimenting with striped on-street parking before more challenging permanent on-street parking is constructed. This initial experiment, along with the expected phasing of permanent on-street parking should also allow for phasing of snow removal operations. The purpose of this plan is to assist the Town in planning for the financial impact of on-street parking snow removal and therefore the two phases represent enhancing existing day-time snow removal operations to accommodate the Rainbow Drive striping phase, and adding a night snow removal crew when necessary. Please refer to Table 5 below for a cost estimate summary. The two phases are described as follows:

**Recommendations:**

Phase 1: Rainbow Drive / No new night crew. Phase 1 is intended to ‘test the waters’ of on-street parking. This trial allows the Town to better understand the impacts without fully investing in equipment and/or staffing, or significantly changing snow removal procedures. This trial is made possible by striping the parking instead of constructing curb and gutter, and by not adding a night snow removal crew to the Public Works staff.

Parking would only be permitted on one side of the street on any given day. Snow removal crews would plow the ‘closed’ side on alternating days. For this phase, snow removal routes and shift hours do not change from current operations. Additional staff is added; however no new equipment is needed. After the first winter, the Town can re-assess procedures and confirm what additional effort and investment is necessary for future phases. Specific recommendations include:



Parking Regulations: **Option A** – During winter months, parking will be prohibited on the west side of Rainbow Drive on four dedicated days of the week (e.g. Sunday’s, Tuesday’s, Thursday’s and Saturday’s). During winter months, parking will be prohibited on the east side of Rainbow Drive on three dedicated days of the week (e.g. Monday’s, Wednesday’s and Friday’s).

**Option B** - During winter months, parking will be prohibited on the west side of Rainbow Drive.



It is recommended that whatever parking regulations are adopted be appropriately signed and well publicized prior to inception. There will inevitably be transition necessary for both the staff and the public. However once any transition period is over, enforcement of the parking regulations should be firm and consistent to minimize disruptions to snow removal operations.

Snow Removal Operations: During current shift hours of 5:00am – 6:30pm, the ‘closed’ side of Rainbow Drive will be plowed in a similar manner as it is currently plowed, with snow plowed to the sidewalk. In order to improve efficiency, the sidewalk will be plowed to the side by a maintenance worker where ROW is available, or into the street where no ROW is available, *prior* to the street being plowed. If necessary, snow will be stored on on-street parking spaces and hauled away when resources allow. A seasonal operator is also added to assist with additional workload resulting from on-street parking and supplement recent workload additions such as new streets at Summit Sky Ranch and the recent need to haul from the Pavilion.

Plan communication: As illustrated in the examples of snow removal plans from similar towns, the added parking restrictions that come part and parcel with on-street parking should be well communicated to the general public. Communication should begin before any policy is adopted so there is buy-in and understanding from all stakeholders. Specifically, we recommend the following:

- Solicit stakeholder feedback on Phase 1 parking strategy. Stakeholders could include nearby business owners, the general public, Town Council and all applicable town staff, especially Public Works staff, Recreation & Culture, Community Development and Administration.
- Develop a draft plan that includes a graphical representation of the parking restrictions and snow removal plan. The plan may need to be supplemented with an internal (town staff only) narrative clearly articulating how these changes will affect other departments.
- Publish the draft plan on the website and publicize that it is available for review to all stakeholders for a limited period of time before a plan is finalized.
- Edit the final plan accordingly and publish/publicize it again as soon as possible, ideally before the first snowstorm.
- Keep the plan updated on the website and inform stakeholders when changes are made.

Training: No additional training anticipated.

Equipment Storage: Snow removal equipment that is not stored indoors drastically reduces efficiency and as a result level of service. Adding on-street parking will only increase the need to add indoor, or at a minimum covered, equipment storage.



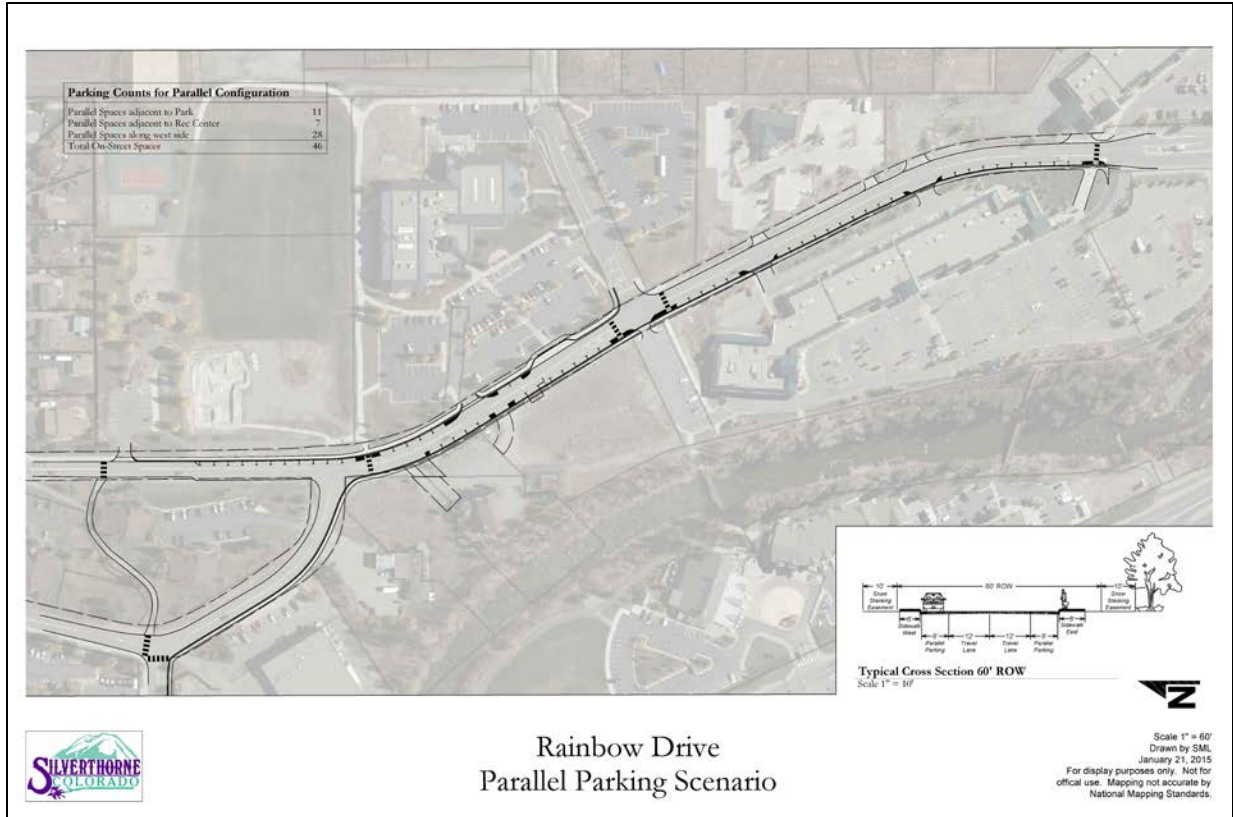


Figure 1 Rainbow Drive Parallel (aka on-street) Parking Scenario diagram



Figure 2 Town Core On-street Parking Template Diagram

Phase 2: New night crew. Phase 2 begins when the Town is ready to fully commit to on-street snow removal by adding a night crew. Rainbow Drive parking regulations and snow removal operations stated above would change to reflect the Phase 2 recommendations below.

Parking for *all* on-street parking areas would be prohibited during early morning hours. During this time crews would plow snow from curb to road centerline. Centerline windrow would then be removed and hauled away. For this phase, equipment operators are added and hauling of snow is expected to require out-sourcing. An additional loader or snow blower may also need to be purchased, depending on the haul strategy. Specific recommendations include:

Parking Regulations: During winter months, parking is prohibited in *all* on-street parking from 12:00am – 6:00am, daily. The alternating side restrictions on Rainbow Drive in Phase 1 can be eliminated for this phase.

It is recommended that whatever parking regulations are adopted be appropriately signed and well publicized prior to inception. There will inevitably be transition necessary for both the staff and the public. However once any transition period is over, enforcement of the parking regulations should be firm and consistent to minimize disruptions to snow removal operations.



Efficient snow removal for hauling

Snow Removal Operations: Beginning at 12:00am or whenever parking areas are clear of vehicles, a newly hired grader operator can begin centerline plowing from curb to curb. A newly hired snow blower operator will then blow the centerline windrow into 2-5 alternating haul trucks which will then haul the snow away. Sidewalks will be plowed in the same manner as described in Phase 1, such that snow will be plowed to the side where ROW is available, or into the street where no ROW is available, *prior* to the street being plowed.

Plan communication: See Phase 1 narrative.

Training: Provide an allowance for operators to observe other operators in Frisco, Breckenridge, Aspen, Crested Butte and/or Telluride as necessary.

Equipment Storage: See Phase 1 narrative.

<b>Table 5 - On-street Parking Snow Removal Costs</b>										
	Current resources available		Phase 1 Rainbow Drive / No new night crew				Phase 2 New night crew			
<b>Equipment</b>	#	Out-sourced	Add. Req'd	Capital \$	Annual \$	Out-sourced	Add. Req'd	Capital \$	Annual \$	Out-sourced
Haul truck	2	no	none	\$0	TBD	no	0 <sup>5</sup>	\$0	TBD	yes
Loader	3	no	none	\$0	TBD	no	1 <sup>3</sup>	\$250,000	TBD	no
Plow/sand/ haul truck	3	no	none	\$0	TBD	no	0	\$0	TBD	no
Plow/sand truck	1	no	none	\$0	TBD	no	0	\$0	TBD	no
Grader	1	no	none	\$0	TBD	no	0	\$0	TBD	no
Snow blower	1	no	none	\$0	TBD	no	0	\$0	TBD	no
Snow bucket	1	no	none	\$0	n/a	no	0	\$0	n/a	no
<b>Staffing</b>										
Equipment operator	0	no	1 <sup>1</sup>	n/a	\$ 35,000	no	2 <sup>4</sup>	n/a	\$ 70,000	no
Haul driver	0	no	0	n/a	\$0	no	2 - 5 <sup>5</sup>	n/a	TBD	yes
Maintenance worker	0	no	1 <sup>2</sup>	n/a	\$ 48,000	no	0	n/a	\$0	no
<b>Notes</b>										
1	Adding 1 one seasonal operator at the start of Phase 1 assumes that the Town is satisfied with the current level of service (e.g. some snow events require multiple days to remove snow from all parking areas). If this level of service is not satisfactory, then 2 operators should be added at the start of Phase 1.									
2	<p><b>Option A</b> - New Parks Maintenance Manager would assist with sidewalk plowing in winter.</p> <p><b>Option B</b> - New full-time maintenance worker would plow sidewalks in the winter and assist with special events or parks maintenance in the summer.</p> <p><b>Option C</b> - Hire seasonal maintenance worker for sidewalk plowing.</p>									
3	Loader may or may not be needed. Re-evaluate as Town Core on-street parking develops.									
4	A new night crew for on-street parking snow removal would require a grader operator and a loader operator.									
5	The level of trucks/drivers required will depend on how quickly the Town wants the centerline windrow cleared and snow storage location. While staff would prefer not to contract out, the number of trucks/drivers required may necessitate contracting this service out.									



## Organizational Structure

### 3. What Public Works organizational and management structure will best allow Public Works to thrive while adapting to near-term changes in staff?

As Baby boomers continue to enter retirement age, many towns are faced with senior staff turnover and the Town of Silverthorne is no different. Within a year and a half the Public Works department will see the retirement of its Public Works Director and its Administrative Assistant, both of whom have a tremendous amount of history and institutional knowledge. In less than 10 years it is also projected that at least three other senior staff members, also with tremendous history and institutional knowledge will retire. In an effort to be proactive rather than reactive, planning for these transitions is a key objective of this plan.

In order to answer the above-stated question, our team thoroughly reviewed key town documents including the 2015 Community Profile, the Comprehensive Plan, the 2015-2016 Town Budget, the 2011 Community Survey, and the various master plans for the respective departments. We also conducted personal interviews with town staff and the Town Council. In some cases one-on-one interviews were conducted to better understand what's working, what's not, and why. Research and personal interviews with other comparable towns were also conducted to gain additional insight into how comparable Public Works departments work.

Embedded in the question above are several smaller questions that were either stated in the RFP or requested otherwise that are addressed individually below.

#### Recommendations:

1. Review Department organizational chart and duties of Department positions and recommend necessary changes. Analyze and recommend future staffing needs.

The Town requested that this question first evaluate the position and provide criteria guidance for the selection of his successor if applicable.

For such an evaluation, the first question is whether the Town should maintain the position of Public Works Director. While some municipalities subdivide various Public Works departments, it is our opinion that the Town and the community will be better served if all departments are unified under one director. It is therefore SGM's recommendation that the Town maintain this position because of the importance of having a unified team of employees responsible for managing and maintaining the Town's infrastructure, adequately responding to emergencies and assisting with special events. Please refer to the 'Sample Public Works Director Job Description' in the Appendix for specific recommendations on roles and responsibilities for a Public Works Director.

The nature of Public Works requires strong collaboration and cooperation not only within PW departments, but between other departments and other agencies and community groups. Leading this effort requires a unique skillset integrating strong leadership, organized management and technical competency that is critical to success. It is our observation that while the Town of Silverthorne's Public Works Department thrives in many ways, collaboration is one area that warrants an improved commitment and dedication.

Specifically, it is recommended that the Town approach its governance/management structure

as a “Team of Teams<sup>1</sup>” with the purpose of creating an organization that is adaptable and fosters “trust, common purpose, shared awareness, and the empowerment of individual members to act.<sup>2</sup>” This is easier said than done and it’s likely that this is a challenge for every organization. It should also be noted that:

*“Trust and purpose are inefficient: getting to know your colleagues intimately and acquiring a whole-system overview are big time sinks; the sharing of responsibilities generates redundancy. But this overlap and redundancy – these inefficiencies – are precisely what imbues teams with high-level adaptability and efficacy. Great teams are less like “awesome machines” than awesome organisms.”*

*-Excerpt from Team of Teams, by General Stanley McChrystal, page 120.*

It is recommended that developing a ‘team of teams’ with a heightened focus on collaboration should be a top priority for a new Public Works Director, as well as other senior staff within the Town.

Our team also evaluated all current departments within, and the respective staffing. Please refer to Table 6 below for specific notes and recommendations for organizational changes.

<b>Table 6 - Organizational Chart Recommendations</b>		
<b>Position</b>	<b>Roles and Responsibilities</b>	
Town Manager		
Assistant Town Manager		
<b>Public Works</b>	PW Director	The Town requested that the PW LRSP provide criteria guidance for his successor. Please refer to the report and the 'Sample Public Works Director Job Description' for recommendations.
	Admin. Assistant/GIS Editor	There should always be a GIS point-person within PW with GIS 'editing' authority and responsibility. If new hire has skillset, new Admin. Asst. should maintain this role. If not, next most qualified PW person should, such as someone from Utilities or Streets. This person is responsible for not only creating GIS maps, but for managing asset/data collection and Town-wide database management. This position should also be the point-person for Cartegraph and integrating GIS and Cartegraph better.

<sup>1</sup> Reference from “Team of Teams – New Rules of Engagement for a Complex World”, authored by General Stanley McChrystal, U.S. Army, Retired with Tantum Collins, David Silverman, and Chris Fussel, published by Penguin Publishing Group, New York, 2015.

<sup>2</sup> Reference from page ix of Walter Issacson’s Forward to the above referenced book.



Table 6 - Organizational Chart Recommendations (cont.)		
Position	Roles and Responsibilities	
<b>Public Works</b>	<p><b>Facility Manager (new)</b></p> <p>Building Maintenance Coordinator</p>	<p>A new position of Facility Manager is needed given the amount and complexity of buildings. This position may warrant a senior manager, depending on the individual and number of direct reports. Ideally all building maintenance staff and potentially custodial staff report to this position.</p>
	<p><b>Building Maintenance Technicians (relocated from R&amp;C)</b></p> <p><b>Building Maintenance Workers (relocated from R&amp;C)</b></p>	<p>BM technicians and workers for the Pavilion, Rec. Center. and new Theater relocate back to new Facilities department in PW in order to consolidate facility management expertise.</p>
	<p><b>Streets Senior Manager</b></p>	<p>Department heads in PW could be classified as managers or <i>senior</i> managers. Senior managers have greater responsibility, more direct reports, and would rotate being the Asst. PW Director. Senior managers are approx. 50-75% management and managers are approx. 25-50% management.</p>
	<p>Senior Equipment Operator</p>	<p>Eliminate Parks Maintenance management responsibilities.</p>
	<p>Equipment Operator</p>	<p>Phase in new schedules that accommodate 7 day-a-week coverage when necessary.</p>
	<p><b>Equipment Operator (new)</b></p>	<p>Add operator for on-street parking snow removal Phase 1.</p>
	<p>Fleet Manager</p>	
	<p>Mechanic</p>	
	<p><b>Mechanic (potentially new)</b></p>	<p>Evaluate adding an additional mechanic to reduce backlog, provide weekend coverage and allow fleet manager more time to better plan budgets and reporting.</p>
	<p><b>Utilities Senior Manager</b></p>	<p>See same note for Streets Senior Manager.</p>
	<p>Joint Sewer Authority staff</p>	
	<p>Water &amp; Sewer staff</p>	
	<p><b>Parks Maintenance Manager (modified)</b></p>	<p>New dedicated manager needed to meet community expectations. Position would report to PW Director but Parks Planner and PW Director would jointly approve the work plan. Position would also serve as SPORT liaison and assist with coordinating Parks-related special events with Events Asst. Position should also be responsible for GIS mapping and Cartegraph use for the Parks department.</p>
	<p>Park Maintenance Workers</p>	<p>Consider shifting Parks restroom cleaning to custodial staff or contracting these services. This could improve quality, efficiency and staff morale.</p>
	<p><b>Seasonal Maintenance Worker</b></p>	<p>Add fulltime or seasonal worker, or have Parks Maintenance Manager assist with snow removal.</p>
	<p>Engineer (relocated to Com Dev)</p>	<p>See note for Engineer below.</p>

Table 6 - Organizational Chart Recommendations (cont.)		
Position	Roles and Responsibilities	
Com Dev	Planning Manager	
	Senior Planner	
	Planner/CSO	There should always be a GIS point-person within Com Dev with GIS 'editing' authority and responsibility. This person should have responsibility for creating GIS maps for Com Dev-related projects as necessary.
	Planner/GIS Editor	
	Planner/Parks Planner	Existing position would add the responsibility of overseeing and approving the annual Parks Maintenance workplan in partnership with the Public Works Director. Stronger and more regular communication will be required between this position, the Public Works Director and the Parks Maintenance Manager.
<b>Engineer (relocated from PW)</b>	Relocate from PW; duties better align with Com Dev dept.; location in Town Hall is better for public. Consider making ROW permits a Streets responsibility.	
IS Tech	Network Administrator	
	Information Systems Tech	
	GIS	GIS infrastructure management remains part of IS department. Delivering GIS mapping services is shared between PW and Com Dev.
Recreation & Culture	Recreation & Culture Director	
	Pavilion Coordinator	
	Events Assistant	
	Building Maintenance Technician (relocated to PW)	See same note under Building Maintenance Technicians above.
	Building Maintenance Worker (relocated to PW)	
	Facility Coordinator	
	Head Custodian	Possibly relocate to Facilities department.
	Custodians	
Front Desk Manager		

2. Identify training needs:

Training is often viewed as a necessary evil but it has the opportunity to improve efficiency and reduce risk (and potentially expenses), while improving employee commitment/engagement. General recommendations are as follows.

- a. Continue current training which includes all applicable risk management/accident prevention/workman's comp training and First-Aid/CPR/AED training for all employees.
- b. When new assets such as vehicles, equipment, etc. are purchased, have staff O&M training included in the cost of the asset.
- c. Continue to fund and encourage attendance in Local Transportation Assistance Program's (LTAP) 'Safety on the Job' training. Other applicable LTAP events should be attended

periodically by staff. Ideally all PW staff will have the opportunity to attend these events, even if attendance alternates.

- d. In order to create management redundancy for vacations, illness and succession planning, the managers should be/continue to be cross-trained in all aspects of PW management. Senior managers should attend applicable management-level trainings available from LTAP and/or American Public Works Association (APWA).

Specific training recommendations for each position are listed in the table below.

<b>Table 7 - Organizational Chart Recommendations - Training</b>		
<b>Position</b>	<b>Training</b>	
Town Manager Assistant Town Manager		
<b>Public Works</b>	PW Director	Depending on the skillsets of the new director, training should ideally round out leadership, managerial and technical skills. The American Public Works Association (APWA) and the local Colorado chapter is a great resource for training for not only technical issues, but also for the various levels of management and leadership training. Active participation in regional Local Transportation Assistance Program's (LTAP) trainings and/or conferences is also recommended. Lastly it is recommended that the new director actively network with other municipalities through working groups, committees, etc. through APWA, LTAP, CML, etc. Obtaining a Level 1 Public Works Manager or Executive certification through APWA is recommended.
	Admin. Assistant/GIS Editor	It is possible that this person will be the most knowledgeable staff member within Public Works on GIS and Cartegraph and therefore will be the go-to resource for all other staff. Therefore it is critical that in addition to continuing education related to being an Admin. Asst., this person should actively participate in regional working groups for both GIS and Cartegraph, as well attend annual trainings. As is recommended for all PW employees, participation in APWA, LTAP and CML is recommended.

**Table 7 - Organizational Chart Recommendations – Training (cont.)**

Position	Training
<div style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Public Works</b></div>    <div style="text-align: right;"><b>Facility Manager (new)</b></div>	<p>Depending on the skillsets of the manager, training should ideally round out managerial and technical skills. Unfortunately training resources for facility managers are not as centralized as they are for other public works areas and therefore vendor-specific training on HVAC equipment and controls is recommended at least annually. It is recommended that this person actively network with other facility managers (either municipal or otherwise) through working groups, committees, etc. through CML, etc. Obtaining a Level 1 Public Works Supervisor (PWS) certification through APWA is recommended.</p>
	<p>Vendor-specific training on HVAC equipment and controls is recommended at least annually.</p>
	<p><b>Building Maintenance Coordinators</b> <b>Building Maintenance Technicians (relocated from R&amp;C)</b></p>
	<p><b>Building Maintenance Workers (relocated from R&amp;C)</b></p>
<div style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Public Works</b></div>       <div style="text-align: right;"><b>Streets Senior Manager</b></div>	<p>Depending on the skillsets of the senior manager, training should ideally round out leadership, managerial and technical skills. The American Public Works Association (APWA) and the local Colorado chapter is a great resource for training for not only technical issues, but also for the various levels of management and leadership training. Active participation in regional Local Transportation Assistance Program’s (LTAP) trainings and/or conferences is also recommended. Lastly it is recommended that this person actively network with other municipalities through working groups, committees, etc. through APWA, LTAP, CML, etc. Obtaining a Level 1 Public Works Supervisor or Manager certification through APWA is recommended.</p>
	<p>Annual technical and management training through APWA and LTAP is recommended. Obtaining a Level 1 Public Works Supervisor (PWS) certification through APWA is recommended.</p>
	<p>Annual training through APWA and LTAP is recommended.</p>
	<p><b>Fleet Manager</b></p>
	<p>Annual technical and management training through APWA and LTAP is recommended. Obtaining a Certified Public Fleet Professional (CPFP) certification through APWA is also recommended. Obtaining a Level 1 Public Works Supervisor (PWS) certification through APWA is recommended.</p>
	<p>Annual training through APWA and LTAP is recommended.</p>
	<p>Annual training through APWA and LTAP is recommended.</p>

**Table 7 - Organizational Chart Recommendations – Training (cont.)**

Position	Training
<b>Public Works</b>	<p>Depending on the skillsets of the senior manager, training should ideally round out leadership, managerial and technical skills. The Rocky Mountain Water Environment Association (RMWEA) is a great wastewater-specific resource and the American Water Works Association (AWWA) is a great resource for water-specific training for not only technical issues, but also for the various levels of management and leadership training. It is recommended that this person actively network with other municipalities/special districts through working groups, committees, etc. through RMWEA, AWWA and the Special District Association (SDA). Obtaining a Level 1 Public Works Supervisor or Manager certification through APWA is recommended.</p>
	<p>Utilities Senior Manager</p>
	<p>Joint Sewer Authority staff</p>
	<p>Water &amp; Sewer staff</p>
	<p><b>Parks Maintenance Manager (modified)</b></p>
	<p>Park Maintenance Workers</p>
	<p>Seasonal Maintenance Worker</p>
	<p>Engineer (relocated to Com Dev)</p>



Table 7 - Organizational Chart Recommendations – Training (cont.)		
Position	Training	
Com Dev	Planning Manager	
	Senior Planner	
	Planner/CSO	It is possible that this person will be the most knowledgeable staff member within Community Development on GIS and therefore will be the go-to resource for all other staff. Therefore it is critical that in addition to planning-specific continuing education, this person should actively participate in regional working groups for GIS, as well attend annual trainings. Participation in CML is recommended.
	Planner/GIS Editor	
	Planner/Parks Planner	In addition to planning-specific training and continuing education, it is recommended that this person also acquire parks management expertise as well as a cursory understanding of applicable PW issues. For parks management training, the National Recreation and Park Association (NRPA) are recommended. For PW training, APWA and LTAP are recommended resources.
<b>Engineer (relocated from PW)</b>	Depending on the skillsets of the engineer, training should ideally round out managerial and technical skills. The American Society of Civil Engineers (ASCE) is a good resource for municipal engineering-specific training. Regardless of whether the engineer position resides under Public Works or Community Development, participation in APWA, LTAP and CML is recommended.	
IS Tech	Network Administrator	
	Information Systems Tech	
	GIS	In addition to IT-specific training and continuing education, annual training through esri (GIS vendor) is recommended.
Recreation & Culture	Recreation & Culture Director	
	Pavilion Coordinator	
	Events Assistant	
	Building Maintenance Technician (relocated to PW)	
	Building Maintenance Worker (relocated to PW)	
	Facility Coordinator	
	Head Custodian	
	Custodians	
	Front Desk Manager	

- Recommend changes, addition or deletion of services.  
As stated earlier, the community appears to be very satisfied with the level of services provided. Limited revenue will make it difficult to add services without a specific funding strategy and we found no services that we would recommend eliminating. However there were a few services that would benefit from some level of change.

- a. *Snow Removal* – The community and Town Council appear to be satisfied with the current level of snow removal service; however some staff feels that during an average or big snow year, snow removal takes longer than they feel it should. Certainly once on-street parking is added, existing resources will be stretched even further. This concern is another reason SGM’s recommendation to questions #2 is to phase in additional resources as necessary. Adding a additional staff in Phase 1 would likely address this issue.
  - b. *Parks Maintenance* – Clearly a high priority for the Town of Silverthorne is for the town to “look good” and parks and open space are big contributors to its appearance. It seems that some community members and Parks Maintenance staff would like to improve parks maintenance. The challenge has been inconsistent management and limited resources. Limited resources will always be an issue to some degree as expectations and revenue rarely align; however some level of change is needed. Our recommendations include:
    - Hire a full-time Parks Maintenance Manager who is trained, dedicated and interested in parks. This position would report to PW Director because Parks Maintenance should be part of Public Works; however the annual Parks Maintenance work plan would be jointly approved by the Parks Planner and PW Director so that the programming vision can align with maintenance operations. The Parks Maintenance Manager would also serve as SPORT liaison and assist with coordinating Parks-related special events with Events Assistant. This position should also be responsible for GIS mapping and Cartegraph use for the Parks Maintenance Department which is ideal winter work. A full-time manager would add capacity in the spring and to a lesser degree in the fall when Parks Maintenance staff is needed for winter work. In the summer, this person could either ‘lead’ irrigation, landscaping or turf maintenance, or provides support to these areas.
    - Consider shifting Parks restroom cleaning to custodial staff or contracting these services. This could improve quality, efficiency and staff morale.
    - In an effort to benchmark what a contractor would charge to maintain the Town’s parks, SGM recommends getting pricing from contractors for reference. A ‘Sample Parks Maintenance Bid Sheet’ is provided in the Appendix. This bid sheet could also be completed by the Parks Maintenance Manager and provided to Parks Maintenance staff to convey time expectations. If a manager is not hired, contracting for services may be necessary to at the very least supplement existing services.
  - c. *Special Events* – According to Town staff, special events continue to grow in popularity and required staff effort. Due to the nature of special events, staff effort is often required at night and on weekends, which can be challenging for Street crews that aren’t scheduled to work during those times. This challenge can be addressed by better coordination between Public Works and Recreation & Culture and/or rescheduling of crews. In all likelihood it will require a combination of the two. To improve coordination, SGM recommends that events staff coordinate directly with the immediate supervisor of the Public Works crews. Communication about upcoming events must happen with enough advance notice to allow all stakeholders adequate time to plan accordingly. Rescheduling to 7 day-a-week coverage would likely address this issue.
4. Analyze contracted approach for services where appropriate  
Please refer to the Table 8 – Outsource Evaluation below for specific recommendations.

<b>Table 8 - Out-sourcing Evaluation</b>				
	<b>Position</b>	<b>Currently out-sourced</b>	<b>Recom. out-source</b>	<b>Comments</b>
1	Snow plowing	no	maybe	outsourcing would not be responsive enough and likely more expensive; however may be beneficial during on-street parking phase-in
2	Snow hauling	yes	maybe	outsourcing would make sense during on-street parking phase-in until economy of scale was reached
3	Paving / overlays	yes	yes	too much investment in equipment, personnel and storage space necessary to do in-house
4	Chip sealing	yes	yes	too much investment necessary to do in-house
5	Crack sealing	no	maybe	recommend bidding out to verify cost effectiveness, include long-term contract option
6	Street striping / markings	yes	yes	infrequent, likely not cost-effective to do in-house
7	Concrete work	yes	yes	recommend out-sourcing for projects beyond very minor repairs
8	Engineering	sometimes	sometimes	has been effective for larger projects, recommend continuing this approach
9	Floodplain management	no		recommend out-sourcing if specific project warrants it due to expertise and/or workload limitations
10	HVAC service	yes	maybe	depending on how Facilities Maintenance team evolves, may make sense to do maintenance and light repair in-house
11	Vehicle/equipment repair	no	maybe	currently extensive repair or warranty work is out-sourced; a new shop and possibly an additional mechanic would be necessary to do in-house, re-evaluate after new shop is built
12	Yellow equipment major service	no	maybe	
13	Some vehicle diagnostics	no	maybe	
14	Misc. manual labor	no	maybe	
15	Grant writing	no	maybe	specialized skill, recommended for high dollar and/or technical grants
16	General Parks maintenance	no	maybe	recommend getting pricing from contractors for reference (see 'Parks Bids' worksheets), recommend keeping in-house if management can be resolved
17	Landscape maintenance	no	maybe	
18	Large construction/installation projects	yes	yes	typically too much investment necessary in personnel and training to do in-house
19	Special events	no	maybe	better coordination and 7 day-a-week coverage is intended to allow these tasks to be done in-house; re-evaluate after implementation
20	Holiday lighting installation	no	yes	out-sourcing is recommended to better meet community expectations; but cost will increase
21	Miscellaneous: guardrails, culvert cleaning, specialty signs, etc.	yes	yes	evaluate on a case-by-case basis

5. Recommend specific goals and time frames for various divisions within Public Works, including streets, parks, buildings, fleet, water/sewer, and GIS/Mapping.  
Please refer to Table 9 - Public Works Goals table in the Implementation section.

## Implementation

<b>Table 9 - Public Works Goals</b>			
<b>Funding priority</b>	<b>Goal</b>	<b>Goal description</b>	<b>Timeframe</b>
<b>Admin.</b>			
	AD 1	Improve communication within PW and with other departments (refer to recommendations in question 3)	ASAP
	AD 2	Finalize PW Shop Design/Construction strategy (refer to recommendations in question 2)	2016
high	AD 2.1	Design Cottonwood facility	2016
high	AD 2.2	Design Brian Avenue facility	2016
high	AD 2.3	Construct Cottonwood facility	as funding allows
high	AD 2.4	Construct Brian Avenue facility	
	AD 3	Define senior management responsibilities as recommended (refer to Organizational Chart Recommendations table)	2016
	AD 4	Develop redundancy/succession policy for all positions (refer to Organizational Chart Recommendations table)	2016
	AD 5	Identify training needs and commit to recommended training as recommended (refer to Organizational Chart Recommendations table and recommendations in question 3)	2017
	AD 6	Better/fully utilize Cartegraph for project costing and reporting for all departments (refer to 'Recommended Cartegraph Report Templates' listed in Appendix of report)	2015
<b>Streets</b>			
	ST 1	Adopt on-street parking snow removal strategy (refer to recommendations in question 2)	as necessary
medium	ST 1.1	Hire additional seasonal operator for snow removal	when LOS complaints warrant
high	ST 1.2	Hire new maintenance worker for snow removal	2016
low	ST 1.3	Hire night snow removal crew, including 2 operators	as necessary
low	ST 1.4	Possibly buy a loader to support night crew	as necessary
	ST 2	Provide 7 day-a-week coverage (refer to Organizational Chart Recommendations table)	as necessary
	ST 3	Identify GIS lead for Streets	2016
	ST 4	Conduct regular coordination meetings with special events staff	ASAP

<b>Table 9 - Public Works Goals (cont.)</b>			
<b>Funding priority</b>	<b>Goal</b>	<b>Goal description</b>	<b>Timeframe</b>
<b>Fleet</b>			
	FL 1	Evaluate need for additional mechanic if 7 day-a-week Public Works coverage is added and/or when new shop is built	as necessary
low	FL 1.1	Hire new mechanic if deemed necessary	as necessary
	FL 2	Provide 7 day-a-week mechanic coverage if 7 day-a-week Public Works coverage is added	TBD
<b>Water</b>			
	WT 1	See Admin goals	
<b>Sewer</b>			
	SW 1	See Admin goals	
<b>JSA</b>			
	JS 1	See Admin goals	
<b>Facilities</b>			
medium	FC 1	Hire a qualified Facility Manager and launch new department	before theater opens
	FC 2	Consolidate town-wide facility maintenance services within new department	after FC 1 is complete
	FC 3	Develop Facilities Management Plan (refer to 'Recommended Facilities Management Plan Notes' listed in Appendix of report)	after FC 1 is complete
<b>Parks</b>			
high	PK 1	Hire a qualified Parks Maintenance Manager	2016
	PK 2	Develop annual work plans approved by Parks Planner and PW Director	after PK 1 is complete
<b>Engineering</b> <i>(If it remains part of Public Works)</i>			
	EN 1	Prioritize training in needed areas, such as project management	2016
	EN 2	Agree upon skill and goal expectations.	2016



Table 9 - Public Works Goals (cont.)			
Funding priority	Goal	Goal description	Timeframe
<b>GIS/Mapping</b>			
medium	GS 1	Conduct a review (ideally by a third party) of GIS work flows, tools, database organization, and possibly licensing agreement to identify potential efficiencies and opportunities for improvement. Budget for this review on an annual basis. (Initial review should be < \$2,500.)	before Public Works Admin. Asst. retires
	GS 1.1	Implement recommendations which will likely include typical GIS maintenance, which includes but is not limited to database organization (aka file clean-up). This may require third party assistance or a dedicated time allotment from Town staff.	2016 and beyond
	GS 2	Identify next GIS Editor for PW	2016
	GS 3	Develop and adopt language for Town RFPs and land use requirements that clearly articulates specific requirements for acceptable GIS as-built-data.	before theater goes to bid
	GS 4	Define job titles and/or responsibilities and/or pay scales for GIS 'users' v. 'editors'. Editors have a higher level of capabilities and responsibilities. There should be at least one editor on the Public Works staff and at least one on the Community Development staff. Each respective editor should have ultimate authority and responsibility for all aspects of GIS including data collection and/or mapping. Additional editors and/or users can be added as necessary.	as necessary
	GS 5	Assign responsibility to one GIS editor (either Public Works or Community Development) for ensuring that all Town departments/staff are consistent in how they collect, store, and use GIS data.	2016
	GS 6	Ask the Town's Cartegraph representative to provide a cost estimate to fully integrate GIS and Cartegraph so that information does not need to be entered twice.	2016
medium	GS 6.1	Implement GIS / Cartegraph software integration	as funding allows

### Town Council Direction

On September 8, 2015 this report was presented to the Silverthorne Town Council. There was good discussion around the recommendations in this report; however there were some unresolved questions. The following questions may or may represent all of the unresolved questions; however they are intended to respond to the primary questions.

1. Should any investment be made in the Brian Avenue site? (Please refer to Question #1 in the Recommendations Section for context.) This report recommends two alternatives, one which includes a permanent Public Works presence at the Brian Avenue site and one that includes relocating all Public Works facilities from the Brain Avenue site to the Cottonwood site in phases. There appeared to be little, if any support for the former, referred to as Alternative 1 in this report. Alternative 2 recommends developing a phasing plan that would likely be guided by need and available funding. This alternative also

includes utilizing the Brian Avenue site indefinitely until such time it is no longer needed. The specific phasing we would recommend for Alternative 2 is as follows:

- a) The Town would proceed with designing and constructing a PW facility at the Cottonwood site that would house *all* PW Department functions including a potential new Facility Management Department shop and office.
  - b) The Town would develop a phasing plan for migrating PW operations from the Brian Avenue site to Cottonwood. This plan would account for the possibility of constructing the new PW facility at Cottonwood in phases. If phasing is to occur, we recommend the following:  
Phase 1: Construct a new facility to relocate all Utilities staff and operations; all Fleet Maintenance staff and operations; as well as one or more bays for indoor equipment storage. This would free up the current mechanic bays for additional equipment storage indoors and would free up offices at the Brian Avenue facility for the Facilities Manager and Parks Maintenance Manager.  
Phase 2: Construct the second phase of the new facility to relocate remaining Public Works staff and operations.
  - c) The current PW building 1 would continue to house all PW departments during construction.
  - d) Once the new Cottonwood facility is complete but before the Brian Avenue site sells, the Brian Avenue site could still be used for vehicle / equipment storage, greenhouse functions, police impoundment
  - e) All other buildings would be relocated or remain on-site for the next owner.
2. Should a potential third site be identified for the Public Works facility? *(Please refer to Question #1 in the Recommendations Section for context.)* In 1998 20 sites were identified for consideration. The due diligence effort eventually reduced this list to one, the Cottonwood site. Apparently the Cottonwood site was selected as part of this due diligence largely because the Town already owned it, it is next to the sewer plant, and it is shared with the Fire District. The site also has direct highway access and is flat. It should be noted that since that initial site analysis, most of the sites evaluated in 1998 are now developed and not available. According to Bill Linfield, all of the criteria which led to the selection of the Cottonwood site are still valid.
- It should be noted that there seems to be little, if any disagreement that a site near or in the Town Core would be beneficial in perpetuity if only for vehicle storage or other miscellaneous uses. This should be considered if and when the Town decides to sell the Brian Avenue site or acquire other property.
- There was also some question as to the need to have all Public Works operations, including streets, utilities, etc. located at one site. For what it's worth, our team can't think of any municipality that operates wet (water and wastewater) utilities where the utilities and public works department operates from a joint facility. It doesn't mean there aren't any or that it wouldn't work, but that separating them works just fine for most municipalities.
3. How much of Cottonwood Park would be required if all of Public Works were to relocate there? *(Please refer to Question #1 in the Recommendations Section for context.)* While approximate square footage totals for Public Works operations have been documented, no design or design program that incorporates all operations at Cottonwood site has been initiated. The design program will include vehicle circulation, material storage, and many other elements that will determine the final footprint. However, at this very preliminary planning phase, it is estimated that 1-3 additional acres of Cottonwood Park may be necessary to accommodate the Public Works facility. It is strongly recommended that design of the Cottonwood facility be initiated as soon as possible so that Cottonwood Park Master Plan impacts can be confirmed.

4. What would the cost of a new fleet maintenance shop be? *(Please refer to Question #1 in the Recommendations Section for context.)* With some additional guidance on priorities and assumptions, our team could provide an engineer's estimate if requested.
5. Is a fulltime Parks Maintenance Manager really necessary? *(Please refer to Question #3 in the Recommendations Section for context.)* This report recommends that this position be filled in 2016 because we see it as necessary to optimizing Parks Maintenance. This report also recommends evaluating out-sourcing parks maintenance. Regardless of whether or not these services are out-sourced, this report recommends a Parks Maintenance Manager is necessary to provide overall management of the Town's parks. However it should be noted that this position may not require an additional person as it could be filled from within and/or encompass current parks maintenance responsibilities.
6. Is a fulltime Facility Manager really necessary? *(Please refer to Question #3 in the Recommendations Section for context.)* This report recommends that this position be filled before the theater opens because we see it as necessary to adequately maintaining today's more complicated buildings. However it should be noted that this position may not require an additional person as it could be filled from within and/or encompass current facilities maintenance responsibilities.

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## Appendix

### Appendix 1 - Recommended Cartegraph Reports

#### Annually/ Monthly:

- Cost Summary by Location
- Cost Summary by Task
- Cost Summary by Employee
- Cost Detail by Location/Task
- Fleet- Comprehensive Summary
- Fleet - Last Odometer Reading
- Fleet - Work Order Detail
- Fleet - Repair Cost summary
- Fleet - Mechanic Weekly Summary

#### Periodically as needed:

- Employee Listing
- Equipment Listing
- Locations Listing
- Location Feature Listing
- Contractor Vendor Listing
- Contractor Vendor Summary
- Project Cost Summary



## Appendix 2 - Recommended Facilities Management Plan Notes

SGM recommends that the Town develop a Facilities Management Plan in order to improve efficiencies, reduce risk of failures, retain more institutional knowledge, and perhaps reduce HVAC service expenses. This plan should be integrated with a broader Asset Management Plan and live on the Town's network for any approved user to access at any time. Considering the Town may or may not develop a Facilities Management department and it is adding somewhat complex building to its inventory, this plan is critical. This plan should include, but not be limited to the following:

- a. An inventory of all facilities and major equipment with general descriptions (facility description, HVAC system description, etc.), important information (location of shut-off valves/circuits, recent history of work performed, etc.), and key contact information (vendors, service technicians, etc.). This inventory will require time; however it can begin small and evolve as time allows. Cartegraph and possibly GIS may be used to assist with this task.
- b. A 20 year (or 10 year minimum) repair and replacement schedule and budget for major components, equipment, etc. Ideally this is developed after or as part of a condition assessment of all facilities. These costs should be incorporated into the Town's master asset management plan.
- c. A customized maintenance manual for primary facilities that includes daily/weekly/monthly/seasonal/annual checklists with instructions on how to maintain components and systems.
- d. An annual work plan that outlines prioritized projects and also includes a way to track day to day service requests. Cartegraph may be used for this.

**Public Works Shop Space Needs**

Appendix 5.a.

Descriptions	Existing				Space Standard	New Program (10 years)			
	Quantity			Remarks		Quantity			Remarks
Area Description	Staff	Space	Area (sf)			Staff	Space	Area (sf)	
<b>ADMINISTRATION</b>									
Engineering									
Engineer	1		110	Town Hall	210	1	210	Private Office	
Inspector	0		120	Town Hall	150	1	150	Private Office	
Intern Engineer	0		100	0	100	1		Work Station	
Parks									
Parks Superintendent	1		Incl	Shared office w/Streets Supt.	150	1	150	Private office w/layout area	
Parks Foreman	3		110	3 workers share	50	5	250	Shared office/Seasonal	
Public Works									
Director	1		190	Shared with Recreation	250	1	250	Private Office	
Assistant Director	1		190	Shared office/Water Tech	180	1	180	Private Office	
Administrative Assistant	1		150	Office w/office equipment	120	1	120	Workstation	
Receptionist	0				100	1	100	Workstation	
Fleet Maintenance									
Fleet Maintenance Manager	1		190	3 workers share					
Mechanic	1								
Streets									
Streets Superintendent	1		150	Shared office w/Parksoffice w/la	150	1	150	Private office w/layout area	
Senior Equipment Operators	2		240	2 workers share	75	2	150	Shared office/Seasonal	
Utilities									
Utilities Manager	1		150						
Senior Water Operator	1		150	includes lab	150	1	150	Private office w/layout area	
Water Operator	1		90		75	1	75	Shared office	
Water Operator	2		95	2 workers share	75	1	75	Shared office	
Support Areas									
Copy/Work/File Area			Incl.	In Admin. Assist Area			150		
Library/File Room			120	Town Hall			200		
Computer/Telephone Room			incl				120		
Reception/Lobby							200		
Women's Restroom			Incl.	See Common Area			60	Public accessible	
Men's Restroom			Incl.	See Common Area			60	Public accessible	
Subtotal	12		1,120			18	2,800		
Circ/Mech/Elec/Struct			344	Actual	40%		1,120		
<b>TOTAL ADMINISTRATION</b>			<b>1,464</b>				<b>3,920</b>		

**Public Works Shop Space Needs**

Appendix 5.a.

Descriptions	Existing		New Program (10 years)				
<b>COMMON AREAS</b>							
Mud Room					120	Washdown, benches	
Computer Workstation	Incl.	In other offices	25	2	50	workstation	
Training/ Conference Room	150				800	Dividable; for 40 people	
Chair/Table Storage					120		
Breakroom	460	Also used for Training Room			300		
Kitchen	Incl.	In breakroom			150		
Janitorial Closet					100		
Mechanical Room	40				Incl.		
Locker Area	Incl.	In various areas			200	20 full & 12 half lockers	
Women's Restroom/Changing/Shower	30				180	Fixtures per code and shower	
Men's Restroom/Changing/Shower	70				250	Fixtures per code and shower	
<b>TOTAL-COMMON AREAS</b>	<b>499</b>				<b>2,270</b>		
<b>FLEET MAINTENANCE</b>							
Lead Mechanic's Office/Library	1	190	Shared with Parts Storage	150	1	150	Private Office
Repair Bays	0.5	2	1,600	20 x 40	2	4	4,000
Small Engine Repair/Common Work Area	1	960	20 x 48				300
Portable Equipment Storage Area			Incl.				200
Tool Box Storage	1	50					50
Tool Storage Rooms	1	130					150
Fabrication Shop							
Welding Bay		Incl.	In Welding Shop	20 x 50	1		1,000
Welding Shop		378					250
Steel Storage		Incl.	in Welding Shop				250
Tire Shop/Storage		180					200
Storeroom							
Parts Storage		130					500
Receiving Area							100
Bulk Storage		168	Mezzanine Above Welding				400
Wash Bay		1,152		20 x 50	1		1,000
Wash Equipment Alcove		Incl.					80
Laundry Room		Incl.	in Wash Bay				30
Lube/Compressor Room		80					250
Subtotal	1.5	3,708			3		8,910
Circ/Mech/Elec/Struct		1,092	Actual	20%			0
<b>TOTAL - FLEET MAINTENANCE</b>		<b>4,800</b>					<b>8,910</b>

**Public Works Shop Space Needs**

Appendix 5.a.

Descriptions	Existing			New Program (10 years)		
<b>SHOP AREAS</b>						
Parks						
General Laborers	9		Seasonal - Summer	12		Seasonal - Summer
Irrigation Shop/Storage	1	30	Included in Sweeper Garage		120	
Streets						
Carpentry Shop	1	310	Included in Sweeper Garage		400	
Sign Shop	1	310	Included in Sweeper Garage		400	With Sign Machine
Sign/Lumber Storage	1	312	Included in Sign Garage		Incl.	See Carpentry Shop
Utilities						
Meter Shop/Storage	1	500	Upstairs		800	
Subtotal		1,462			1,720	
Circ/Mech/Elec/Struct		-80	Calculated	10%	172	
<b>TOTAL - SHOP AREAS</b>		<b>1,382</b>			<b>1,892</b>	
<b>ENCLOSED HEATED STORAGE</b>						
Parks						
Pickup with Water Tank		0		10 x 20	1	200
Public Safety						
Evidence Bay		Incl.	Use Wash Bay	12 x 30	1	360
Streets						
Plow Truck			See exterior	12 x 35	4	1,680
Motor Grader			See exterior	12 x 45	1	540
Loader			See exterior	12 x 35	3	1,260
Pickup			See exterior	10 x 20	2	400
Sweeper Bay #22, 24	2	300	In sweeper garage	10 x 25	2	500
Portable Equipment			various locations	10 x 20	4	800
Hazardous Material Storage						200
Utilities						
Tra-L-Vac Sotrage #21		1	In sign garage	10 x 20	1	200
Subtotal		540				6,140
Circ/Mech/Elec/Struct		50	Calculated	10%		614
<b>TOTAL - ENCLOSED HEATED STORAGE</b>		<b>590</b>				<b>8,754</b>

**Public Works Shop Space Needs**

Appendix 5.a.

Descriptions	Existing		New Program (10 years)		
<b>ENCLOSED UNHEATED STORAGE</b>					
Parks					
Equipment Storage	266			400	
Fertilizer Storage	160			400	
Irrigation Storage	96				See Shop Areas
Public Safety					
Found Property/Evidence Storage	200	Town Hall Basement		360	Bikes, TV's, VCR's
Public Works					
Archive Record Storage		Town Hall Basement		400	
Recreation					
Equipment Storage		At the Recreation Center		1,000	
Streets					
Miscellaneous Storage				1	1,000
<b>TOTAL - ENCLOSED UNHEATED STORAGE</b>	<b>722</b>			<b>3,560</b>	
<b>COVERED STORAGE</b>					
Parks					
Utility Cart		Winter in Greenhouse	8 x 10	2	160
Wash Pad		Outside	12 x 30	1	360
Streets					Mowers/Sweepers
Utility Cart		See Exterior	8 x 10	1	80
Cold Patch	75				150
Cone/Barrier Storage		See Exterior	8 x 10		600
Sand Storage		Use CDOT			10,000
Utilities					
Pickup		See Exterior	10 X 20	1	200
<b>TOTAL - COVERED STORAGE</b>	<b>75</b>				<b>11,550</b>



**Public Works Shop Space Needs**

Appendix 5.a.

Descriptions	Existing			New Program (10 years)		
<b>EXTERIOR SPACES</b>						
Storage						
Parks						
Greenhouse	600				800	
Material Bunkers		At Trent Park				See Streets
Streets						
Cone/Barrier Storage	500					See Covered
Material Bunkers		At Trent Park in piles	15 x 20	6	1,800	
Plow Storage	2,000	At JSA			3,000	
V-Box Sander Storage	2,000	At JSA			3,000	
Waste Dumpster (roll-off)	240				240	
Yard Storage	20,000	At Trent Park			25,000	At Trent Park
Utilities						
Pipe Yard Storage	360				400	
Dock	120				200	
Fuel Island	800				800	
Vehicles						
Parks Vehicles						
Pickup (#3,4,9)	2	800	Includes circulation	10 x 20	3	1,200 includes circulation
Medium Duty (#7,15)	3	1,500	includes circulation	10 x 25	2	1,000 includes circulation
Public Safety						
Range Trailer	1					in Evidence Bay
Speed Trailer	1					in Evidence Bay
Streets Vehicles						
Backhoe (#23)	1	500	Winter, Stored in Maint. Bays	10 x 25		See Enclosed Heated
Plow Truck (#12, 13, 16)	3	2,880	Winter, Stored in Maint. Bays	12 x 40		See Enclosed Heated
Motor Grader (#26)	1	960	Winter, Stored in Maint. Bays	12 x 40		See Enclosed Heated
Loader (#14, 25, 27)	3	2,880	Winter, Stored in Maint. Bays	12 x 40		See Enclosed Heated
Pickup (#2, 5, 6, 18, 19)	5	2,000	Includes circulation	10 x 20	7	2,800 Includes Circulation
Tanker (#17)	1	960	Includes circulation	12 x 40	1	960 Includes Circulation
Holder (#28, 29)	2	800	Includes circulation	10 x 20		See Enclosed Heated
Utility Cart (#44)	1	160	Includes circulation	8 x 10		See Covered
Compressor (#30)	1	160	Includes circulation	8 x 10	1	160 Includes Circulation
Skidster (#20)	1	160	Includes circulation	8 x 10	1	160 Includes Circulation
Sno-Go (#41)	1	400	Includes circulation	10 x 20	1	400 Includes Circulation
Tractor (#42)	1	160	Includes circulation	8 x 10	1	160 Includes Circulation
Administration Vehicle	0			8 x 10	2	320 Includes Circulation
Utilities						
Pickup (#1, 10)	2	800	Includes Circulation	10 x 20	2	800 Includes Circulation
Impound Yard						
Standard	2	800	Includes Circulation	10 x 20	6	2,400 Includes Circulation
Disability Parking	1	520	Includes Circulation	13 x 20	1	520 Includes Circulation
Visitor Parking	1	324	Includes Circulation	9 x 18	3	972 Includes Circulation
Employee Parking	15	4,860	Includes Circulation	9 x 18	30	9,720 Includes Circulation
<b>TOTAL - EXTERIOR SPACES</b>	<b>49</b>	<b>48,244</b>			<b>61</b>	<b>56,812</b>

Vehicle List

Appendix 5.b.

Vehicles		As of 12/31/14														
Asset #	Model Year	Vehicle/Unit #	Cost	Dept	Life	Salvage Value	Net Cost	Annual Depr	Accum Depr 12/31/2013	Depr 2014	Accum Depr 12/31/2014	2014 Book Value	2014 Net Book Value	Diff (s/b Ann Depr)	Diff s/b 0	
11.1993.240	1993	93 Champion Van/240	0		10		0		0		0	0	0			
11.1995.119	1995	95 Ford F250/119	21,900	PW	10	2,500	19,400	0	19,400	0	19,400	2,500	Fully Depr	2,500	0	
11.1997.	1997	Park - Carryall II Utility Vehicle	3,500	PW	10	500	3,000	0	3,000	0	3,000	500	Fully Depr	500	0	
11.1998.108	1998	98 Ford F150/108	15,300	PW	10	2,500	12,800	0	12,800	0	12,800	2,500	Fully Depr	2,500	0	
11.1998.111	1998	98 Ford F150/111	15,300	PW	10	2,500	12,800	0	12,800	0	12,800	2,500	Fully Depr	2,500	0	
11.1999.109	1999	99 Dodge Ram T300/109	16,478	PW	10	2,500	13,978	0	14,677	0	14,677	1,801	Fully Depr	1,801	0	
11.2000.130	2000	00 Kenworth Tandem Dump/130	76,279	PW	10	20,000	56,279	0	59,093	0	59,093	17,186	Fully Depr	17,186	0	
11.2000.	2000	Snowmobile (at the Raven for Nordic)	6,699	PW	5	500	6,199	0	6,199	0	6,199	500	Fully Depr	500	0	
11.2001.132	2001	01 Dodge pickup/132	22,844	PW	10	2,500	20,344	0	20,344	0	20,344	2,500	Fully Depr	2,500	0	
11.2001.122	2001	02 Freight/Johnston Sweeper/122	163,965	PW	15	10,000	153,965	10,264	128,304	10,264	138,569	25,397		35,661	10,264	
11.2001.126	2001	02 John Deere Grader/126	183,192	PW	15	25,000	158,192	10,546	131,827	10,546	142,373	40,819		51,365	10,546	
11.2002.302	7/3/2002	2002 Chevy Tahoe/302	30,462	PS	7	2,500	27,962	0	29,961	0	29,961	502	Fully Depr	502	0	
11.2004.104		2004 International Truck/104	144,795	PW	15	45,000	99,795	6,653	69,857	6,653	76,510	68,286		74,939	6,653	
11.2004.136	2004	Plow Truck and Bed/136	129,904	PW	10	20,000	109,904	10,990	98,069	10,990	109,059	20,845		31,835	10,990	
11.2005.243	2005	Tahoe/243 Chief	33,789	PS	7	2,500	31,289	0	31,289	0	31,289	2,500	Fully Depr	2,500	0	
11.2005.151	2005	F350w/plow/151	27,963	PW	10	2,500	25,463	2,546	21,643	2,546	24,189	3,773		6,319	2,546	
11.2005.152	2005	F550/152	63,995	PW	10	5,000	58,995	5,899	50,145	5,899	56,045	7,950		13,849	5,899	
11.2006.102	2006	Chevy Silverado #102	24,133	PW	10	1,900	22,233	2,223	16,675	2,223	18,898	5,235		7,458	2,223	
11.2006.235	2006	2007 Chevy Silverado #235(CSO Veh)	25,146	PW	10	1,934	23,212	2,321	17,409	2,321	19,730	5,416		7,737	2,321	
11.2006.137	2006	2007 International 7500 #137 w/equip	142,709	PW	15	20,875	121,834	8,122	60,917	8,122	69,039	73,670		81,792	8,122	
11.2006.121	2006	Caterpillar Backhoe/121	126,419	PW	15	24,650	101,769	6,785	50,885	6,785	57,669	68,750		75,535	6,785	
11.2007.131	2007	Snowplow for #131	5,666	PW	10	567	5,099	510	3,314	510	3,824	1,842		2,352	510	
11.2007.163	2007	1997 Freightliner Water Truck#163	24,420	PW	10	2,442	21,978	2,198	14,286	2,198	16,484	7,937		10,134	2,198	
11.2007.139	2007	Chevy Crew Cab#139	35,398	PW	10	3,540	31,858	3,186	20,708	3,186	23,894	11,505		14,690	3,186	
11.2007.382	2007	Dodge Van #382	18,310	PW	10	1,800	16,510	1,651	10,732	1,651	12,383	5,928		7,579	1,651	
11.2007.164	2007	Snowblower/164	142,450	PW	15	14,245	128,205	8,547	55,556	8,547	64,103	78,348		86,895	8,547	
11.2008.300	2008	Chrysler Town and Country Van#300	19,500	PW	10	1,950	17,550	1,755	9,653	1,755	11,408	8,093		9,848	1,755	
11.2008.165	2008	Ford F250 Truck#165	24,246	PW	10	2,425	21,821	2,182	12,002	2,182	14,184	10,062		12,244	2,182	
11.2008.265	2008	Plow for F250#165	5,643	PW	10	564	5,079	508	2,793	508	3,301	2,342		2,850	508	
11.2008.304	2008	2007 Forester for Admin #304	17,495	PW	10	1,749	15,746	1,575	8,660	1,575	10,235	7,260		8,835	1,575	
11.2009.252	2009	Tahoe #252	40,154	PS	7	4,015	36,139	5,163	23,232	5,163	28,395	11,759		16,922	5,163	
11.2009.168	2009	Caterpillar 906H Sidewalk Loader#168	102,139	PW	15	10,214	91,925	6,128	27,578	6,128	33,706	68,433		74,562	6,128	
11.2009.268	2009	Myslik Plow for 906H Sidewalk Loader	4,451	PW	5	445	4,006	401	3,605	401	4,006	445		846	401	
11.2010.169	2010	Sweeper #169	162,670	PW	10	16,267	146,403	14,640	51,241	14,640	65,881	96,789		111,429	14,640	
11.2010.170	2010	Loader #170	185,350	PW	12	18,535	166,815	13,901	48,654	13,901	62,556	122,794		136,696	13,901	
11.2010.270	2010	Loader Plow 16ft Gjerstad for 170	39,475	PW	12	3,948	35,528	2,961	10,362	2,961	13,323	26,152		29,113	2,961	
11.2010.171	2010	Ford Truck/171	27,779	PW	10	2,778	25,001	2,500	8,750	2,500	11,250	16,529		19,029	2,500	
11.2011.305	2011	Ford Focus/305	15,033	PW	10	1,503	13,530	1,353	4,735	1,353	6,088	8,945		10,298	1,353	
11.2010.253	2010	Impala/253	31,701	PS	7	3,170	28,531	4,076	14,265	4,076	18,341	13,360		17,436	4,076	
11.2010.254	2010	Impala/254	31,701	PS	7	3,170	28,531	4,076	14,265	4,076	18,341	13,360		17,436	4,076	
11.2010.255	2010	Impala/255	31,701	PS	7	3,170	28,531	4,076	14,265	4,076	18,341	13,360		17,436	4,076	
11.2011.172	2011	International 7500 #172 w/attachments	178,533	PW	15	17,853	160,680	10,712	26,780	10,712	37,492	141,041		151,753	10,712	
11.2011.173	2011	Gjerstad 16' Plow for Loader #173	40,659	PW	12	4,066	36,593	3,049	7,624	3,049	10,673	29,986		33,035	3,049	
11.2011.174	2011	Sidewalk Loader Cat 906H #174 w/plow	87,018	PW	10	8,702	78,316	7,832	19,579	7,832	27,411	59,607		67,439	7,832	
11.2012.175	2012	Toolcat/175	50,725	PW	15	5,073	45,653	3,044	4,565	3,044	7,609	43,116		46,160	3,044	
11.2012.176	2012	Kubota Tractor/176	23,160	PW	15	2,316	20,844	1,390	2,084	1,390	3,474	19,686		21,076	1,390	
11.2013.179	2012	John Deere 624K Loader #179	180,946	PW	12	18,095	162,851	13,571	6,785	13,571	20,356	160,590		174,161	13,571	
11.2013.180	2011	Trackless MT6 #180	112,035	PW	10	11,204	100,832	10,083	5,042	10,083	15,125	96,910		106,993	10,083	
11.2013.181	2012	Chevy Colorado PU #181	26,290	PW	10	2,629	23,661	2,366	1,183	2,366	3,549	22,741		25,107	2,366	
11.2013.183	2013	Bobcat Toolcat 5600 #183.	47,442	PW	15	4,744	42,698	2,847	1,423	2,847	4,270	43,173		46,019	2,847	
11.2013.184	2013	F250 PU Chassis #184	35,115	PW	10	3,511	31,603	3,160	1,580	3,160	4,741	30,374		33,535	3,160	
11.2013.185	2013	F250 PU Chassis #185	32,994	PW	10	3,299	29,695	2,969	1,485	2,969	4,454	28,540		31,510	2,969	
11.2013.256	2013	Chevy Tahoe #256	47,487	PS	7	4,749	42,738	6,105	3,053	6,105	9,158	38,328		44,434	6,105	
11.2013.257	2013	Chevy Tahoe #257	47,487	PS	7	4,749	42,738	6,105	3,053	6,105	9,158	38,328		44,434	6,105	
11.2013.258	2013	Chevy Tahoe #258	47,487	PS	7	4,749	42,738	6,105	3,053	6,105	9,158	38,328		44,434	6,105	
TOTALS THRU 2014			3,197,432			387,594	2,809,838	227,076	1,301,239	227,076	1,528,315	1,669,117		1,896,193	227,076	
2014 Additions																
Model Year	Vehicle/Unit #	Cost	Dept	Life	Salvage Value	Net Cost	Annual Depr	Accum Depr 12/31/2013	Depr 2014	Accum Depr 12/31/2014	Book Value					
2014	F350 Super #186	38,152	PW	10	3,815	34,337	3,434	0	1,717	1,717	36,435					
2015	F350 #187	37,008	PW	10	3,701	33,307	3,331	0	1,665	1,665	35,343					
2014	John Deere 624K Loader #189 w/12' Plow	188,198	PW	12	18,820	169,378	14,115	0	7,057	7,057	181,141					
2014	12' Straight Plow for Loader #189	15,803	PW	12	1,580	14,223	1,185	0	593	593	15,210					
		279,161			27,916	251,245	22,064	0	11,032	11,032	268,129					
		3,476,593			415,510	3,061,083	249,140	1,301,239	238,108	1,539,347	1,937,246					



<b>Sample Parks Maintenance Bid Sheet Total</b>		<b>Appendix 5.c.2.</b>
<b>Location</b>	<b>Total Hours</b>	<b>Total Cost</b>
Rainbow Park		\$
Trent Park		\$
North Pond Park		\$
Arctic Placer Park		\$
Willow Grove Open Space		\$
Cottonwood Park		\$
Park 7		\$
Park 8		\$
Park 9		\$
Park 10		\$
Park 11		\$
Park 12		\$
	-	\$ -



We provide innovative, practical solutions to make our clients successful while ensuring the health, safety and welfare of our neighbors.

We develop and maintain lasting client relationships and are committed to our local communities.

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