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CHAPTER 1 - INTRODUCTION

PROJECT BACKGROUND:

Design Edge, PC completed a **Facilities Needs Assessment Study** in 2008 for the Utility and Public Works Department, to specifically study the Utilities and Public Works Department current facilities needs, and provide the city a roadmap for future growth in five, ten, and twenty year planning horizons.

The study was driven by the City of Fountain's dramatic growth in population from 2000 to 2007 estimated at 62.1 %, creating a significant demand for increased municipal services, and as a result additional staff, equipment, and facility needs. Subsequent to the report's completion the City's growth slowed down to a modest 11% from 2008 to 2013. The City's overcrowded and aging facilities have seen very little to no improvement over the last 5 years.

The purpose of this report is to update portions of the original report specifically as they relate to the following departments:

Utilities-Water Department
Utilities-GIS Department
Community Services -Parks Division
PWD- Streets Division
PWD- Fleet Maintenance Division

Additionally, the City has added a new Transit Division under the direct supervision of the PWD director. This report addresses the facilities needs for the Transit Division.

REPORT METHODOLOGY

This report builds upon and modifies our previous report dated January 20th, 2009. Our research consisted of the following:

- Interviews of current department supervisors to discuss staffing, equipment and facility changes, and projections for a five year planning horizon.
- We compared existing facilities with our previous report findings
- We reviewed new demographic and population information;
- Review of Capital Expenditure planning by the various departments listed above.

Lorraine Center location assessment:

This portion of the study focuses on the suitability of the Lorraine Center as a possible location for relocating the referenced departments.

REPORT LIMITATIONS:

Facilities Needs Assessment Studies are inherently limited by the following:

- They rely on growth projections which are in turn based on various historical trends and assumptions which may or may not prove accurate in the future.
- Operational assumptions impact staffing and service delivery patterns. These may change under new conditions or new leadership.
- New technologies may arise that open new opportunities for efficiency and at the same time create expectation of additional services. Some functions may be reduced, while other functions expand.

This report is intended to address space needs only. It is not intended to assess operational issues. For example, it is not intended to assess what staffing needs should be, but forecast what staffing levels maybe, in the planning horizons.

CONCLUSIONS:

Much of the original report recommendations are still valid. The current conclusion from this facility needs assessment study is that existing facilities are severely inadequate, existing sites overcrowded and lack of security is a major concern for all stakeholders. Conditions have worsened over the last five years since the original report was completed. Additional staff and equipment have been added to most departments without any increase in space.

Some of these inadequacies have adverse cost and performance impact. For example, because covered parking is inadequate, certain key pieces of equipment stored outdoors weather rapidly, requiring more maintenance and also frequent replacement.

Similarly, buildings have exhausted their useful life and require more maintenance. They do not meet current accessibility standards, and provide poor working environments. It is a well known fact that work spaces affect productivity.

Synopsis of Recommendations:

Tbd.

CHAPTER 2 - SPACE NEEDS ASSESSMENT

2.1 OVERVIEW

The space needs for the City of Fountain Utilities, and the Public Works Department, is largely driven by the number of equipment owned by each department. The number of personnel in each department is the next major factor, although office space requirements are small compared to the need for equipment storage, and shop space. The amount of space allocated to each staff position varies by department. For example, in one department a particular staff position may need a 100 sf. of office space and another 100 s.f. of typical office support spaces such as corridors, break areas, conference rooms, etc; in another department a similar staff position may need an additional 150 sf. of training rooms, break rooms, map storage rooms etc.

In order to reliably project space needs, the consultant examined current conditions through site surveys, building measurements, conditions observations, and interviews with various personnel in each department. Current space deficiencies were noted. The information was then analyzed with other factors such as:

- Immediate and Long term projected personnel growth
- Planned or anticipated functional or operational changes
- Space standards based on generally accepted planning and design guidelines and/or the Consultant's experience in similar projects.

2.2 DEFINITIONS

Net square feet (NSF) is the floor area between the walls of a room or defined space.

Department Gross Square Feet (DGSF) is the floor area within the boundaries of a functional department as defined by a space planning criteria, including floor area occupied by rooms/spaces, walls defining the spaces, and circulation corridors connecting the different rooms of the department.

Building Gross Square Feet (BGSF) is the floor area of the entire building or project, which includes floor area occupied by rooms/spaces, walls, corridors, conveyances, mechanical/utility rooms, and shafts.

2.3 DERIVING SPACE STANDARDS:

Various space standards have been used to determine amount of space required by a particular function or employee classification. They are used to determine current and future space needs. While space standards establish actual area of a space for a particular use, it should be stressed that the layout of a space is extremely important and plays a big part in the perception of the adequacy of a given amount of available space.

Commonly used space standards exist for office uses. Architectural standards books, recommend space standards for office and cubicle sizes. These are estimated in net square feet, or NSF.

The benefits of using Space standards are:

1. They create a consistent method of allocating space to various levels of staff within an organization.
2. They help establish average space needs per individual pieces of equipment to include support spaces.
3. Future space allocations can be easily determined using the same method. This helps plan for future growth and expansion
4. By allocating a standard Cost per square foot of space, cost of needed space can be easily established.

Table 1.1 is a list of standard space sizes by function used in this report.

Table 1.1 Space standards for City of Fountain Utilities and PWD

FUNCTION	AREA in SF
Department Director	220
Department Superintendent	200
Engineer	200
Inspector	150
Other Standard Private Office	100-150
Administrative Assistant	100-120
Technical Staff (CAD, GIS)	75-150
Foreman	120
Inventory Clerk	100
Customer Service Representatives	75
Field Staff	75
Other Standard Workstation	64-75
Service Counter	25/Station
Waiting Area/Queuing	10/Person
Lobby	15/Person
Conference Rooms	20/Person
Training Rooms	20/Person
General Storage	100
File Storage	15/unit

Departmental gross square feet (DGSF) per employee refers to the overall space needed per employee in a department, to include but not limited to office and support spaces such as circulation corridors, restrooms, building support spaces such as mechanical and electrical rooms, conference rooms, and break rooms. Support spaces vary by organizations based on their functions and the nature of services that they provide. Office employees especially professional employees require larger offices for project layout space, office printing, faxing, and copying equipment, file and document storage space. Field employees do not require office space but may require break room and changing room spaces instead. A department that has a higher proportion of field employees to office employees will have smaller DGSF per employee.

The DGSF per employee for each division has been determined using a combination of office standards, the consultants experience in space planning of similar facilities, and a study of existing DGSF/employee. Table 1.2 is a comparison of existing to Proposed *office* DGSF for each department. The DGSF vary by departments because, some

departments have a need for larger training rooms, plan rooms, and similar spaces in addition to standard office space needs.

Table 1.2 Existing and Proposed DGSF of Office Space per FTE

Department	Existing DGSF/FTE	Proposed DGSF/FTE
GIS	186	300
Water Department	205	250
Fleet Maintenance	55	115
Facility Maintenance	114	64
Streets and Drainage	103	225
Parks	216	200
Transit	100	120

Table 1.3 shows the existing and projected DGSF for each Department. For Calculating Building Gross Square foot (BGSF), a similar approach is used as in determining DGSF/employee. Typical standards used for determining BGSF, range from adding 20% to 35% to DGSF of each department. Most of the departments surveyed with the exception of Customer Service and GIS have few offices, but large space needs for such functions as break rooms, map rooms, conference, and training rooms. The use of seasonal employees for fieldwork also drives the need for larger break room spaces. From the consultants experience in similar facilities, these types of departments have fewer wall spaces and circulation corridors and hence adding a 15% factor to total DGSF would be an appropriate formula for determining the BGSF for these departments. Table 1.4 shows proposed BGSF for each department.

Table 1.3 Existing and Proposed BGSF

Department	Existing BGSF	BGSF 2014	BGSF 2019	BGSF 2023
GIS	745	1200	1500	1800
Water Department				
Office	2,863	3,500	3,750	4,250
Shop and Storage	9,527	14,000	14,000	15,300
Water Department Total	12,390	17,500	17,750	19,550
Fleet Maintenance	8,120	12,101	12,301	16,331
Transit Division				
Office	300	360	360	420
Vehicle parking	0	3,000	3,000	3,000
Transit	300	3,360	3,360	3,420
Facility Maintenance	608	1,176	1,176	1,554
Streets and Drainage				
Office	822	1,800	2,025	2,250
Shop and Storage	8,462	13,900	15,200	18,900
Streets and Drainage Total	9,284	15,700	17,225	21,150
Parks				
Office	647	800	1,000	1,400
Shop and Storage	5,226	6,240	7,920	10,200
Parks Total	5,873	7,040	8,920	11,600

2.4 DEPARTMENT PROFILES

A profile for each department location is presented on the following pages. Each profile represents an analytical description of the department and is a culmination of the data gathered through surveys and interviews with key staff. Also included in the profile is the Consultant's recommended future personnel and space needs. A description of the main categories presented in each department profile is provided below.

Function – Statement of department's purpose and function.

Facilities Needs and Current Deficiencies– Summary of Departments current space needs, and deficiencies.

Future Needs– Summary of Departments future space needs.

Growth Factors – Lists the factors (i.e. growth in population, funding, etc.) that have the greatest impact on personnel growth (or reduction) in the departments over the next 20 years.

Historical Personnel Data – Presents full-time employees or equivalents per year from 1998 to 2007.

Personnel Projection – Presents the results from the various personnel forecast models (Historical Percent Change, Comparison Study and Linear Regression, Department's Recommendation) and identifies the Consultant's recommendation for future personnel needs in five year intervals through the year 2028.

Parking Needs – Lists the number of parking spaces needed for staff and visitors through the year 2028

Space Needs Projection – Presents the existing DGSF and DGSF/staff and shows future personnel needs applied toward the recommended DGSF per staff to arrive at future space needs in five year intervals through the year 2028.

Critical Adjacencies – Identifies the departments/agencies with which the department has frequent face-to-face interaction and thus requires a close proximity to in regards to physical location.

Other Needs – Identifies the departments/agencies with which the department has frequent face-to-face interaction and thus requires a close proximity to in regards to physical location.

CHAPTER 3 - WATER DEPARTMENT

Function:	Provide water and maintain service lines to customers in the Fountain area.									
Facilities' Needs and Current Deficiencies	<ul style="list-style-type: none"> • Current facilities are in poor condition and need to be replaced. Facility does not have adequate and code compliant restrooms. • Not enough office space for all employees • Need Training Room, Map Layout and Storage Area, additional break area • Need visitor parking and conference room • Need locker area for water operators with designated hamper area for laundry pickup. 									
Future Needs	New facility with adequate employee space and outdoor and indoor equipment storage.									
Growth Factors:	City population growth and city expansion.									
Historical Personnel Data:	Full Time Employees or Equivalents per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	8	8	11	12	12	12	12	12	12	14
Personnel Projection	Method				2014	2019	2023			
	Historical Percent Change				15	16	20			
	Dept. Manager Projections				14	15	17			
	Comparison Study				28	41	51			
	FTE Staff Projection				14	15	17			
Parking Needs	Item				2014	2019	2023			
	Visitor Parking				3	4	4			
	Employees				14	15	17			
	Parking Needs Projection				17	19	21			
	Based on office parking standards									
Office Space Needs Projections	Item				2014	2019	2023			
	Existing DGSF				2,803					
	Existing DGSF/FTE				205					
	FTE Staff Projection				14	15	17			
	DGSF Space Projection				3500	3750	4250			
Vehicle Parking, Shop and Storage Space projection	Item				2014	2019	2023			
	Indoor Parked Vehicles				20	20	22			
	DGSF/Parked Vehicle				550	550	550			
	Vehicle Parking				11,000	11,000	12,100			
	Shop + Storage				3,000	3,000	3,200			
	DGSF Space Projection				14,000	14,000	15,300			
Yard Equipment Parking	Most of the equipment is parked under cover. Yard Equipment parking is only temporary.									
Critical Adjacencies	None									
Other Facility Needs										

3.1 DEPARTMENT OVERVIEW:

The Water Department provides and maintains water service to existing, new customers and potential customers in their service area. The Department has 14 employees and is divided into two functional areas: engineering and planning, and operation and construction. The department services approximately 7300 customers. Growth has slowed from previous estimates, and based on current growth estimates, the department expects to add approximately 110 to 140 new connections per year for the next five years.

The City of Fountain receives the majority of its water (77%) from the Frying Pan-Arkansas Project. This Frying Pan-Arkansas (Fry-Ark) Water is treated and delivered to Fountain from facilities owned by the Fountain Valley Authority (FVA). Fountain's water supply is supplemented by five (5) groundwater wells that are owned by Fountain, which pump water (23%) from the Fountain Creek Alluvium. With the exception of the five groundwater wells used to supplement the water supply during peak summer demands, Fountain's water system is primarily gravity fed. (*See Exhibit 3.1 -Fountain's Water System Map*)

Fry-Ark water is sent through pipelines from Pueblo Reservoir up to the Goldfield Tank site, which is located in Widefield approximately 3.5 miles north and east of Fountain's City Hall. Fountain owns one booster station, and jointly owns an additional booster station with Widefield Water District, both of which are located at the Goldfield Tank site. There are an additional six (6) water tanks that are jointly owned by Fountain, Widefield and Fountain Valley Authority that receive treated water from the Fountain Valley Authority (FVA) Treatment Plant No. 4. All of the water tanks are interconnected and Fountain's booster stations are small pumping stations that can be used to move water between the tanks or provide water to Fountain's pressure zone areas. Fountain also has a Southwest Tank site located approximately two miles south and west of Fountain's City Hall. The three-million gallon (MG) Southwest Tank site receives water from the FVA Water Treatment Plant via the Fountain Valley Conduit. Fountain's five well sites are located within City limits. The City of Fountain distributes approximately 4.1 million gallons (MG) of water per day to its residents.

Recently, 4 Venetucci Wells were added to supplement City water supply.

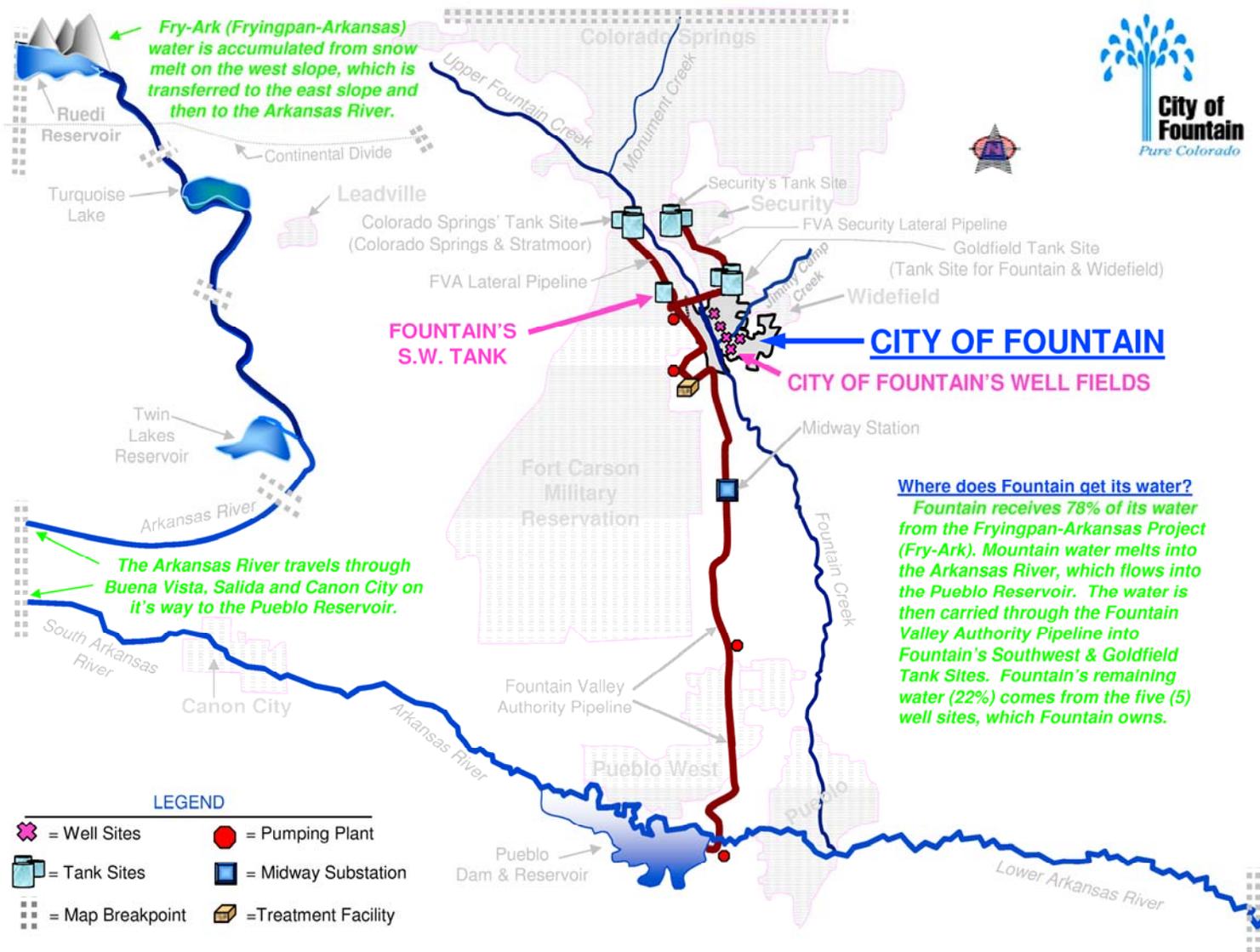


Exhibit 3.1 - City of Fountain Water System Map

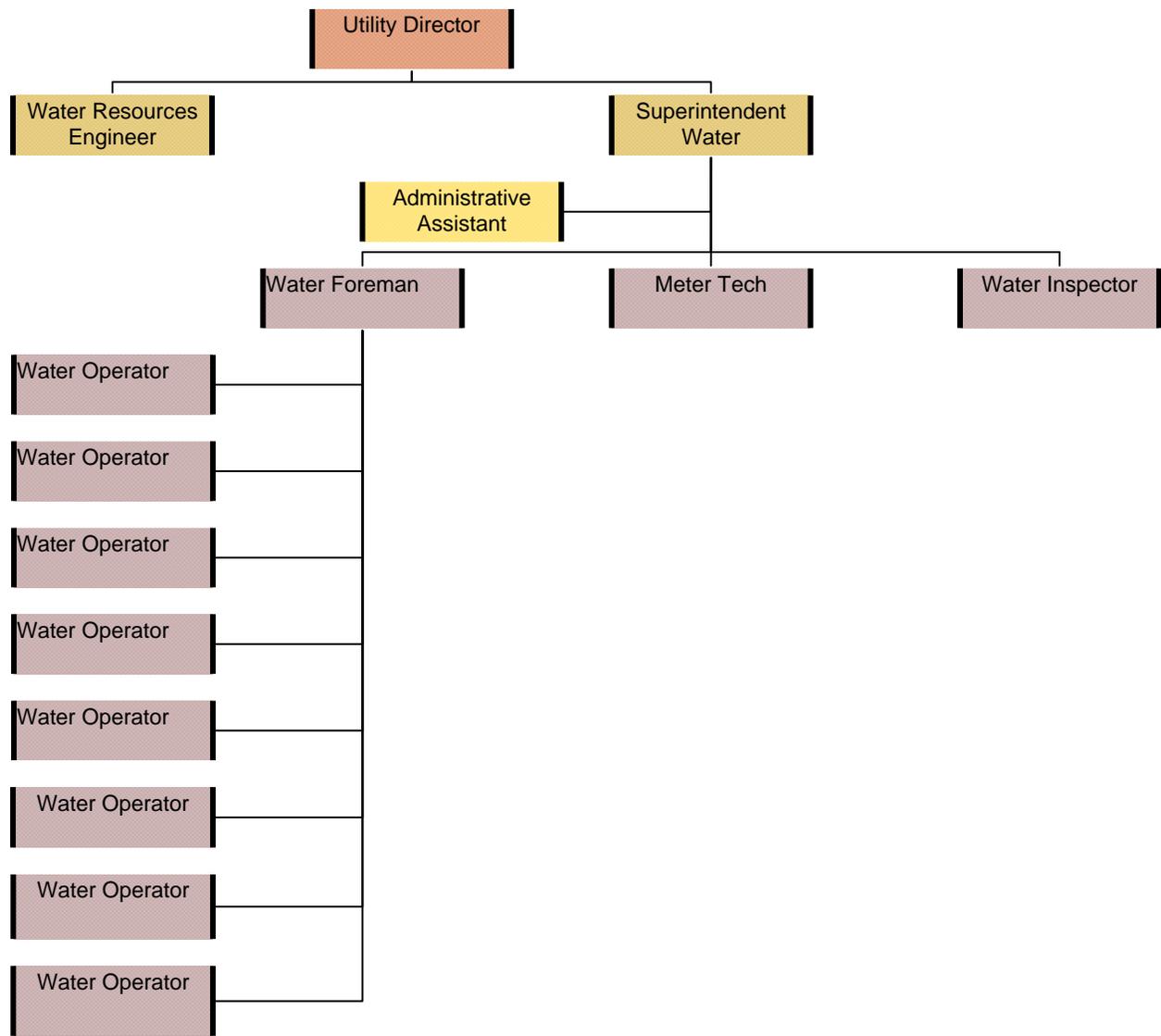


Exhibit 3.2- Organization Chart for Water Department

Exhibit 3.2 shows the current organizational structure for the department

The Water Department is managed by the Water Superintendent who reports directly to the Utilities director. The water superintendent is responsible for the technical and managerial functions related to the water treatment and distribution system. Specific duties include coordinating the planning, design, operations, and maintenance of these systems. He has direct supervisory responsibility for the following positions:

Water Foreman (1):

Supervises day-to-day activities of assigned water operators, coordinates construction and maintenance work schedules for water system projects.

Water Operators (8):

Performs technical activities related to water treatment, including water sampling and

analysis, inspects booster stations and water lines, and conducts system preventive maintenance.

Water Inspector (1):

Performs inspections of new and existing water lines, monitors water quality, responds to customer connect and disconnect requests, and conducts system diagnostic checks.

Meter Technician(1):

Performs water meter installation and conversions, maintenance, responds to customer connect and disconnect requests.

Administrative Assistant;

Provides all administrative and clerical support to the water superintendent.

The water department also has the following staff:

Water Resources Engineer (1):

Reports directly to the Utilities Director. The water resources engineer provides technical support services for operations and construction and oversees special projects and engineering reviews

Part Time Engineering Support (0.5)

This is a temporary contract position from June 2013 through November 2013 to support the Water Resources Engineer (Saddle Tap Replacement Project, Valve Replacement Project, Subdivision Planning Reviews, Update the Water Construction Standards). This position maybe extended for a longer duration.

CAD/GIS Technician (2)

Is a staff of the GIS Department and reports to the GIS Analyst. Duties include water system mapping, and database administration. The GIS staff is assisting the Water department in transferring their as-built documents from paper to electronic formats.

Exhibit 3.3- Water Department at 415 West Alabama.



3.2 CURRENT SPACE INVENTORY:

The Water Department is located at 415 Alabama Avenue in Fountain. They are collocated with the Public Works Department, Streets and Parks Division, and the Facilities Maintenance Division. Exhibit 3.3 is a site plan of the Water department yard. The site is approximately 2.14 Acres with several buildings as follows:

Building No. 1 Water Department and Public Works Department Office:



▲ *Main Entry Corridor with no Reception Lobby takes visitors directly into office spaces*

The staff occupies a concrete block and wood framed structure which it shares with the Streets and Parks Division of the Public Works Department. The building is approximately 3,037 sf, of which approximately 800 sf is occupied by the Public Works Department. Services such as break areas, restrooms, mechanical and janitorial spaces are common to both departments. Restrooms are also shared with the public. The age of the building could not be determined, but the structure including the roof is in poor condition requiring substantial repairs.

The building also has various accessibility and non building code compliant elements. There are no accessible and only one unisex toilet.

The Water Department receives approximately Walk-in visitors per month including customers and business visitors.



◀ *Water Department Building with several additions*

Building No. 2 Shop/Storage Building:

Exhibit 3.5 shows the building layout of the Water Department space in Shop/Storage building no. 2. This is a pre-engineered metal building with multiple bays occupied by the Water department, the Streets & Drainage, and Parks Division of the PWD. The Water Department occupies several bays and approximately 6,250 sf. in this building. The building is used for vehicle and equipment storage. The building has a mezzanine supported on wood posts. A visual inspection showed several missing posts, and structural deflections of the mezzanine support structure. The building is unsafe and in poor condition. It should be replaced as repairing it in its current condition is not cost effective.

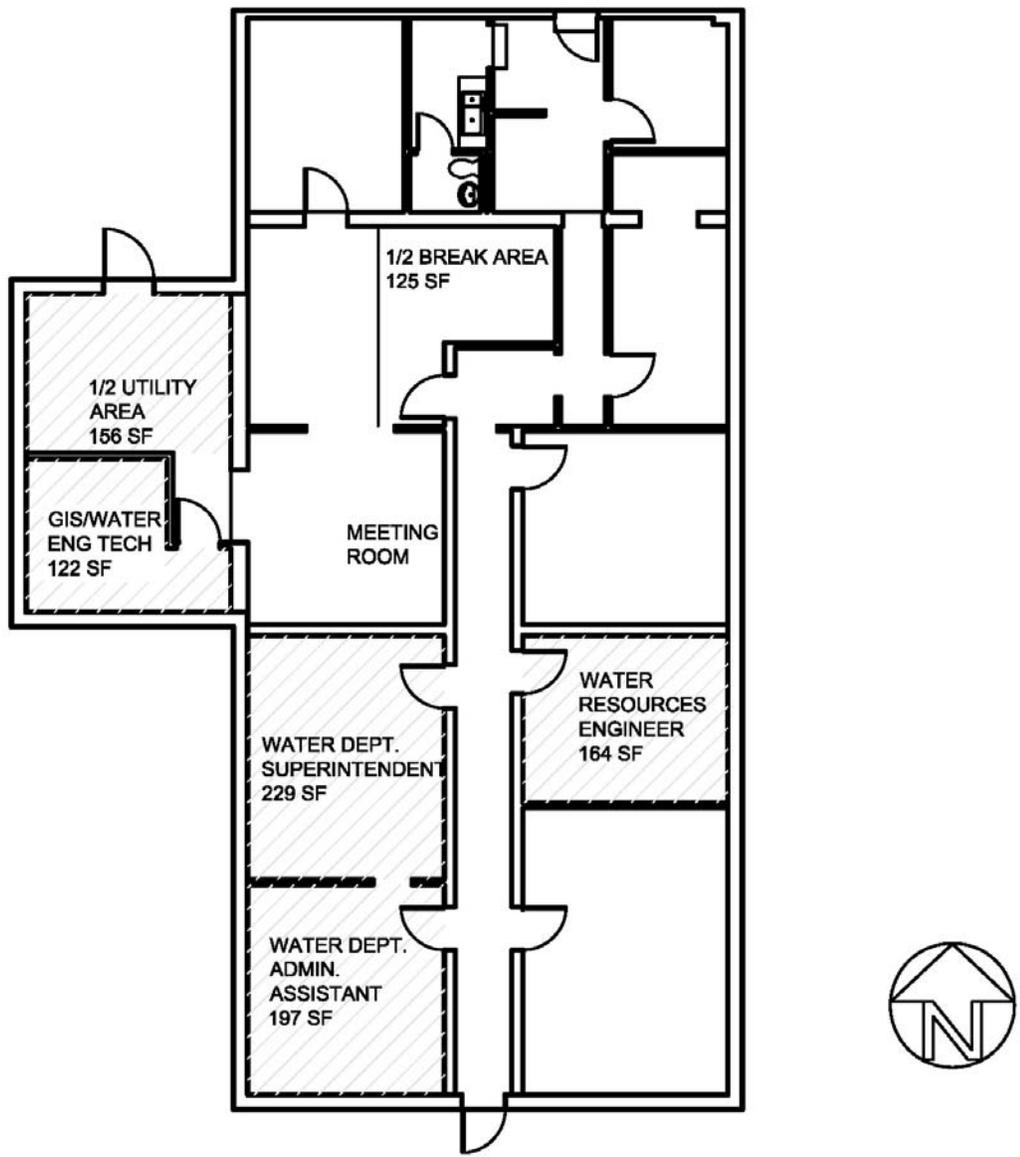


◀ Sagging Mezzanine beams in Shop Building

Building No. 3 Vehicle Storage Building:

Exhibit 3.6 shows the building layout of Storage building no. 3. This is a 2,400 sf. pre-engineered metal building with 2 bays. The building is used for vehicle storage. It was built in 2007 and is in good condition.

Exhibit 3.4- Floor Plan of Office Building No. 1.



FLOOR PLAN OF WATER DEPT. ADMINISTRATIVE BUILDING

Exhibit 3.5- Floor Plan of Shop/Storage Building No. 2

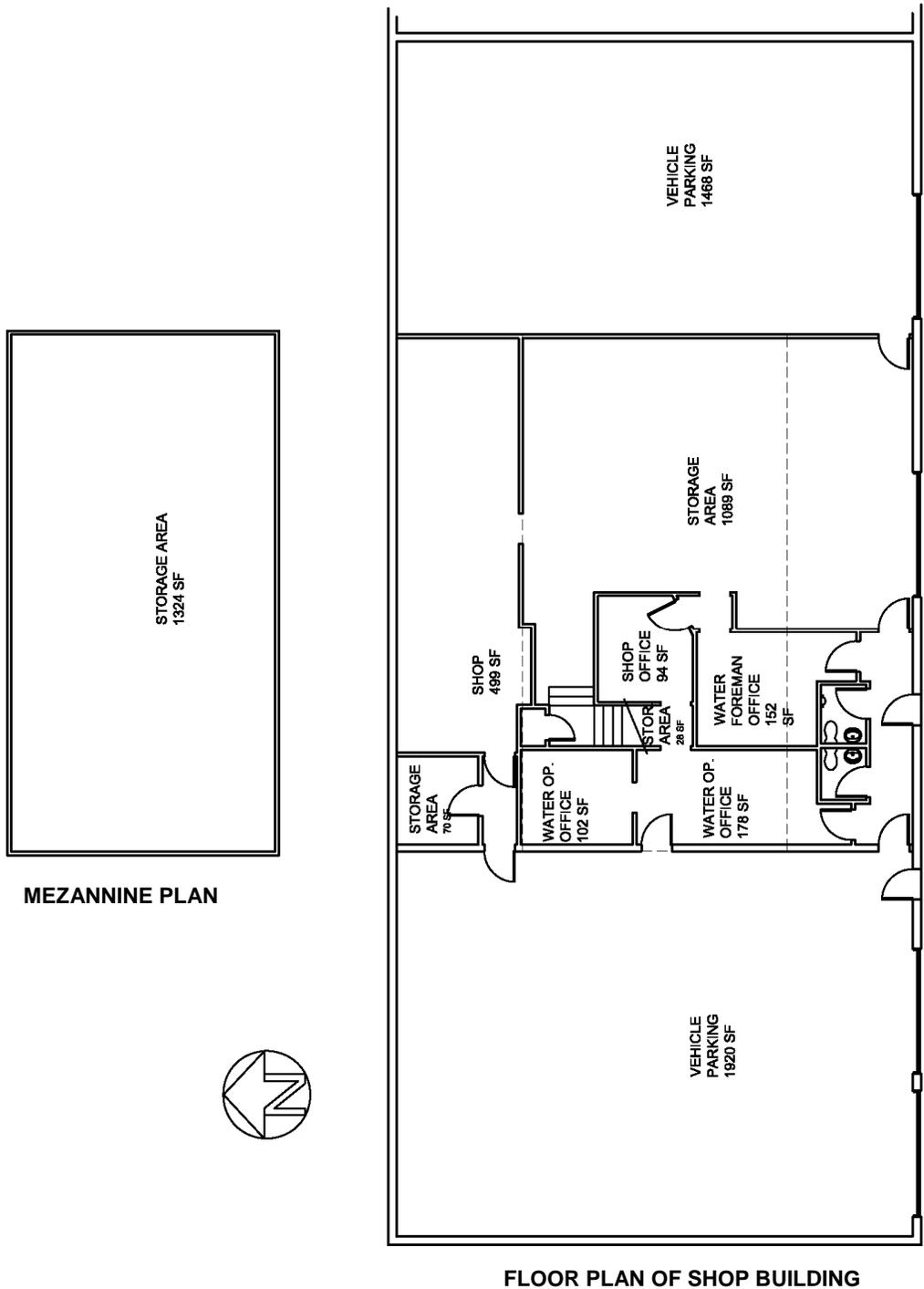
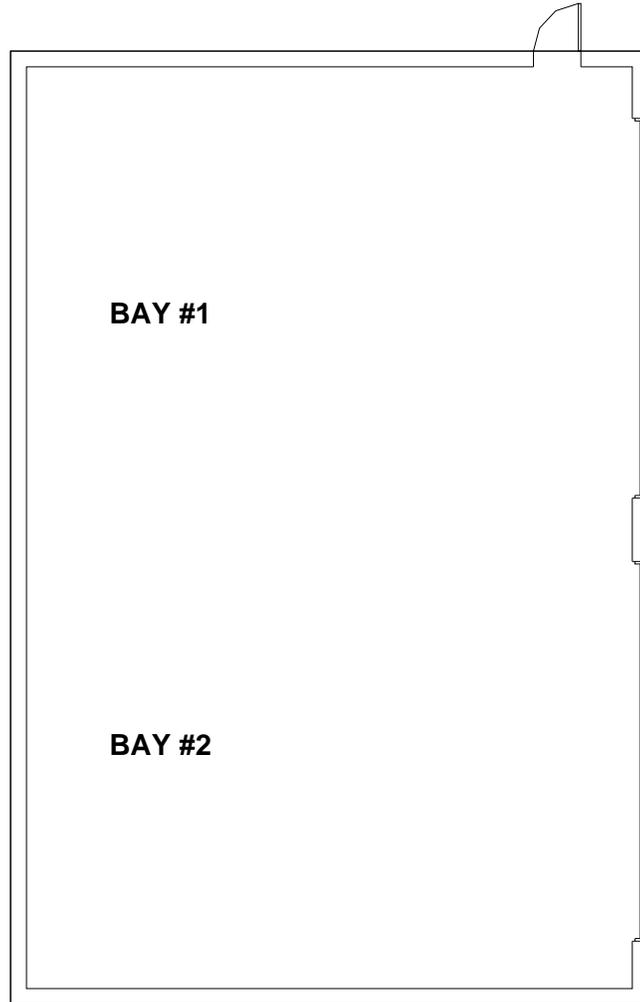


Exhibit 3.6- Floor Plan of Storage Building No. 3



3.3 SPACE DEFICIENCIES:

Exhibit 3.4 through 3.6 show existing facility plans. Current deficiencies were discovered through space measurements, observations, and interviews with Ron Woolsey, Water Superintendent; Michael Fink, Water Resources Engineer, and Nick Zieger, Water Foreman, in the following areas:

3.3.1 Office Space Needs:

Customer Waiting/Reception Area:

Water Department does not have a designated customer reception area. Visitors walk in to a corridor/hallway with a reception window into the administrative assistant's office. A designated customer reception area should be provided. This is necessary for several reasons:

- Administrative Assistant receives visitors and needs to have a private and secure environment when handling day to day business activity (i.e. money, employees, phone conversations, reports etc.)
- Visitors have an identifiable arrival point where they can be directed to appropriate staff.
- Creates a secure area where non-departmental staff have to wait before they can access the rest of the facility.
- Creates a customer friendly public face for the department, and therefore a positive service opportunity.

Water Resource Engineer:

The Water Resource Engineer has 164sf. of office space which is inadequate for this function. Provide a minimum of 200 sf. of office space.

Water Foreman:

The Water Foreman's office is located in the shop/storage building. The space is adequate but poorly laid out. The water foreman needs to be located adjacent to, and with convenient access to the water superintendent and the water operators.

Water Operator

The Water Operators share an open office space, in the shop building. The space is inadequate and poorly laid out. Each water operator should have a minimum of 75 sf of net assignable work space.

Meeting/Conference Room

There is no dedicated conference room for meeting business visitors. Since our last report, the break room was modified to serve as a make-shift meeting area. Most meetings involving large groups are held at city hall. Travel time and costs can be reduced by providing an onsite meeting space. The water departments needs vary from small private meetings to larger meetings. Based on the expected number of visitors, provide a minimum 200 sf. conference room.

Training Room

The water department has several onsite training programs for water operators. These training seminars often include water operators from other jurisdictions such as Security water district, and take place in the shop building. The space is inadequate and is shared as a break area, and a map room. Larger Meetings can be held in the training room. These meetings require internet access, video projection facility, telephonic conferencing, white board display and a coffee/refreshment cabinet area. Provide a training room of 375 sf. that will accommodate 25 people. Alternately, provide a larger break room that may be subdivided with temporary partitions during training sessions to allow both functions to occur concurrently. A larger, modern space will be conducive to better and more productive training sessions.

Break Room

The existing break room is located in the main office building. It serves the water and public works department. The break room is also used as a meeting room, locker storage area, laundry pickup storage, and cleaning supply storage area by both departments. The existing area is inadequate for the staff served, and not conveniently located for the water operators. It also does not have kitchen facilities for employees to prepare or warm up meals. Provide a minimum of 30 sf. per employee. Provide an additional 250sf. if this area is also used for training. Break Room should have dedicated space for lockers and laundry hamper with a changing room. Provide a usable kitchen to support staff and visitors.

Map Room

Maps are stored in the shop building. The space is shared as a general storage, a training room, and a break area. A dedicated map room of 200 sf should be provided with adequate layout space for maps and drawings. Convenient access for field crew and the Water Resource Engineer is required.

GIS Technicians

The GIS Technician's office space is very inadequate. Provide a minimum of 120 sf. of office space with access to the map room. GIS Technician should be located adjacent to the Water Resource Engineer and the Water Superintendent.

File/Document Storage

File cabinets are located in individual offices with the majority of the project documents located in the administrative assistants office. Provide a secure centralized file storage area, so authorized employees can access necessary documents. This leads to better filing practices within an organization so project documents are properly stored for convenient access. This can be located adjacent to, or in the administrative assistant's office. Provide a minimum of 120 sf. of net assignable space for file storage.

Copier/Fax Room

Office supplies are stored in the administrative assistants office. This is inconvenient and also creates a security issue. A separate fax/ copier area with an office supply cabinet is required. This should be a minimum of 50 s.f.

Drop Safe

A secure safe is needed for cash storage.

Restrooms

The water department has a single unisex non-accessible restroom. Provide building code compliant plumbing fixture count for each sex that is accessible.

3.3.2 Storage and Shop Space Needs:

Existing shop space is a long and narrow room approximately 41'-0" x 12'-0". This room is inadequate for the function and needs to be approximately 1,000 s.f. This space would need adequate tempered air supply and ventilation to maintain an ambient working temperature range of 55 to 75 degrees year round.

General Storage space is available on the main shop floor and the mezzanine above. Most of the floor storage is along the bay walls around parked equipment. Mezzanine storage is not conveniently accessed and is not used. Maps are also stored in the parking bays and take up a substantial amount of space.

3.3.3 Equipment Storage:

Equipment and vehicles are parked in two separate buildings as described in Section 5.2. The existing space is adequate for the number of equipment needing covered storage, but the condition of the facilities is very inadequate. Storage space would need a unit heater to maintain the space at a minimum of 45 deg. year round.

3.3.4 Yard Storage Needs:

Open Storage:

Although existing storage space appears to be adequate, it is poorly organized onsite leading to inefficient parking of equipment and a general sense of site congestion. Reorganizing outdoor storage areas, modifying traffic patterns, and planning future storage areas should be a priority in master planning this site.

3.4 SECURITY:

Security issues identified are as follows:

- The site is secured by a gated fence with electronic card access. However, there are no backup electronic controls to ensure and notify that the gates are locked after hours.
- Water department and PWD need after hour access to the site and equipment. Proper controls are necessary to ensure that the departments do not compromise each other's security after hours.
- None of the buildings on site have electronic surveillance cameras or a security alarm system. On site surveillance cameras are necessary to protect valuable equipment. A security alarm system should be considered for the main office building.
- The department is currently working with a security consultant for a security system with cameras

3.5 PARKING:

Onsite parking is available for employee vehicles but only a limited amount of parking is available for visitors. The water superintendent indicated that in addition to employee parking, 3 to 4 more parking spaces ,for visitors, would be needed.

3.6 FUTURE NEEDS ASSESSMENT:

Future space projections for the Water Department, for the reports five (2019) and ten year (2023) planning horizons, was established through interviews with the Water Superintendent, the Water Resource Engineer. The report builds upon the staffing studies completed in the earlier report.

Exhibit 3.6 is a space projection summary for the planning horizons of this report. Additional space needs identified are as follows:

3.6.1 Water Operations

1. Water Technician and Water Operator: Provide additional space at the rate of 50 sf/person added in future years. The department anticipates adding one more water operator and one technician over the next 5 years
2. GIS Technician: Provide additional space at the rate of 80 sf/person.
3. Map Storage: With new technologies, map storage area would not increase over the next ten years, but the functional area would need to increase to allow for more people accessing the maps.
4. Break Room/training Room: This function would need to grow with growing number of employees.
5. Equipment Storage: Over the next ten years, six more pieces of equipment are expected to be (net) added to the fleet. Provide 550 sf. of storage space per additional vehicle parked.

3.6.2 Water Engineering:

1. Engineering Technicians: No immediate change in staffing is anticipated for the next five years. The department may add one addition technician in the next ten years but this will be an existing part time person converted to full time.
2. Support Personnel: Part time personnel will need office space at the rate of 80 sf/person
3. Support Spaces: The engineering departments support space needs are similar to water operations. As long as the departments are adjacent to each other and collocated, these facilities can be shared.

• **Exhibit 3.7- Water Department Office Space Projection Summary**

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Water Department Operations						
Water Dept Supt.	229	-29	200	200	200	Private Office
Admin Assistant	197	-7	120	120	120	Does not include File Storage
Water Inspector	145	5	150	150	150	Private Office
Water Foreman	152	-2	150	150	150	Private Office
Meter Tech	102	-2	100	100	100	Private Office
Water Operator (8)	272	128	400	400	400	Open Office
Water Technician	68	7	75	75	75	Open Office
<i>Future Water Operator</i>				50	150	
<i>Future Water Technician</i>				75	150	
Water Department						
Water Resource Engineer	164	36	200	200	200	
<i>Engineering technician (Part</i>	122		80	80	80	
GIS**						
GIS Tech	73	27	100	100	100	
<i>Future GIS Tech</i>			100	100	100	
Support Spaces						
Break Room	430	20	450	510	630	* See note below
Map Room		200	200	200	300	
Utility Storage/Service	156		350	350	350	
Training Room		375	375	375	450	
Conference Room		200	200	200	200	
Restrooms	120	60	180	180	180	
File Storage		80	150	150	150	
Copier/Fax Room		50	50	50	50	
FTE Staff projection	14	0	14	15	17	
DGSF Space projection+20%			4356	4578	5142	
Existing DGSF Office Space	2803					
DGSF/FTE Staff	205		304	305	302	

Exhibit 3.7- Water Department Office Space Projection Summary- Continued

Averaged Staffing Space Projection				
	SPACE PROJECTIONS			REMARKS
	NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
FTE Staff projection	14	15	17	
DGSF per Employee	250	250	250	
DGSF Space Projection	3500	3750	4250	

Exhibit 3.8- Water Department Equipment Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Building No. 2						
Shop	574	426	1000	1000	1200	
Vehicle Parking	3896		3896	3896	3896	See below for Future Vehicle parking
Storage	1333		2000	2000	2000	
Mezzanine	1324					
Building No. 3						
Vehicle Parking	2400	4704	2400	2400	2400	
Future Vehicle Parking			4704	4704	5804	*= No. of Add'l Projected Vehicles *550
Total Storage Area	2,657	0	2,000	2,000	2,000	
Total Shop Area	574	426	1,000	1,000	1,200	
Total Vehicle Parking	6,296	4,704	11,000	11,000	12,100	
Total Area	9,527	5,130	14,000	14,000	15,300	
Vehicles Parked Under Cover		13	20	20	22	
Existing Vehicles Parked Under Cover	7					
(Existing) DGSF/Vehicle	899					
Proposed DGSF/Vehicle			550	550	550	

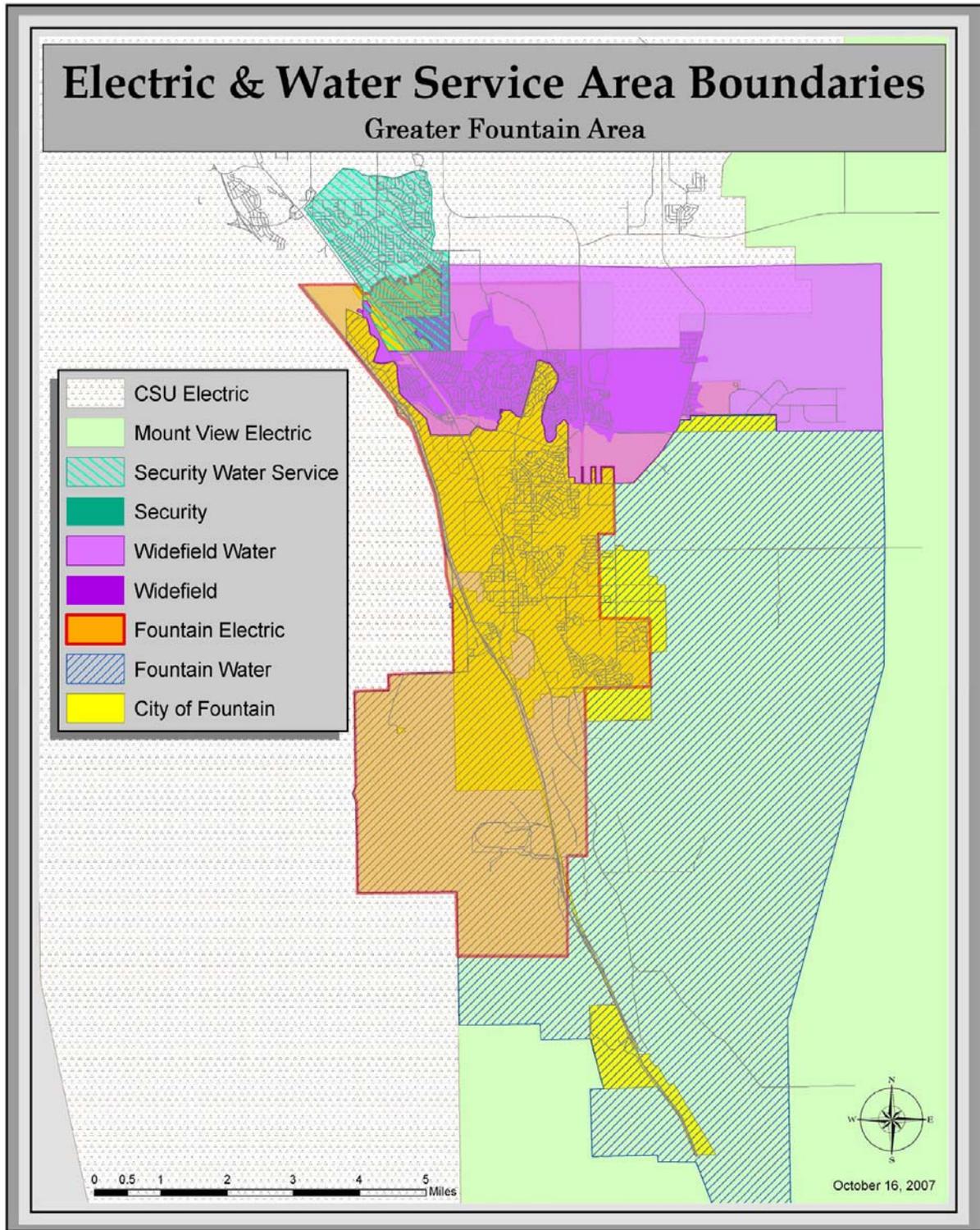
3.7 LOCATION ANALYSIS :

The water department and PWD site is on Alabama Avenue next to Fountain Middle School. There is a fair amount of cross pedestrian traffic of school children crossing the road during the day. There is a designated cross walk with a stop sign, but PWD and Water Department vehicle operators have to be watchful of children running across the road at different locations. With increased traffic over the years, the risk of potential traffic accident has increased and will continue to increase as the departments grow. This situation has to be managed with the schools help, so that children cross the road and designated areas only, and vehicle operators are constantly watchful of pedestrians.

This is largely a residential area, and sometimes, emergency water repair activities can occur at off-hours when vehicles move in and out of the yard. As the Public Works Department and the Water Department continue to grow, there will be contention for the limited growth area on this site. Both departments cannot continue to expand at this location.

Exhibit 3.9 shows the Electric and Water Service Area Boundaries. The water department is located in the south western corner of the service area. However, travel time and travel distances to all points within the service are still within acceptable limits.

Exhibit 4.8- Electric & Water Service Boundary



CHAPTER 4 - GIS DEPARTMENT:

Function:	Provide GIS data and support for Utilities Departments and General City Departments									
Facilities' Needs and Current Deficiencies	<ul style="list-style-type: none"> One GIS employee is located at the Water Department due to space constraints. GIS Analyst at Water Department needs more office space. Storage space for files and extra equipment is required. Plotter room for plotters, trimmer, large format copier and map layout is required. Area adjacent to plotter area required for storing foam board and plotter paper is also necessary. 									
Future Needs	Future staffing and equipment growth									
Growth Factors:	Growing use of GIS systems in general city and city utility functions. As city expands more GIS services will be needed.									
Historical Personnel Data:	Full Time Employees or Equivalents per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	1	1	2	2	2	2	2	2	4	4
Personnel Projection	Method				2014	2019	2023			
	Historical Percent Change				4	5	6			
	Dept. Manager Projections				4	5	6			
	Comparison Study				n/a	n/a	n/a			
	FTE Staff Projection				4	5	6			
Parking Needs	Item				2014	2019	2023			
	Equipment/vehicle Parking				3	3	4			
	Employees				4	5	6			
	Parking Needs Projection				7	8	10			
Space Needs Projections	Item				2014	2019	2023			
	Existing DGSF				716					
	Existing DGSF/FTE				358					
	FTE Staff Projection				4	5	6			
	Average DGSF/Staff				300	300	300			
	DGSF Space Projection				1200	1500	1800			
Critical Adjacencies	Beneficial to be collocated with other City Utility Functions (Water, Electric, Customer Service) as well as general City functions such as City Planning and Engineering.									
Other Facility Needs										

4.1 OVERVIEW:

The GIS Department is currently located on the second floor of the City Hall building at 116 S. Main Street. The department is responsible for providing GIS data and support for Utilities Departments and General City Departments. As the City continues to grow, the GIS department will need to maintain city maps for larger city areas and support more GIS needs from various departments.

The GIS Department of the City of Fountain Utility Department has 4 employees. Exhibit 4.1 shows the current organizational structure for the division. The department is managed by the GIS Manager, who reports to the utilities department director. The GIS manager also provides support for Planning and City Engineering, City Manager, Utility Director, Economic Development, and Fire and Police. The manager has responsibility over the following positions:

GIS Technician (2): GIS technicians are located in the Water Department Office space on Alabama Avenue and provides GIS support to the Water Department. They occupy approximately

Exhibit 4.1- Organization Chart for GIS Department

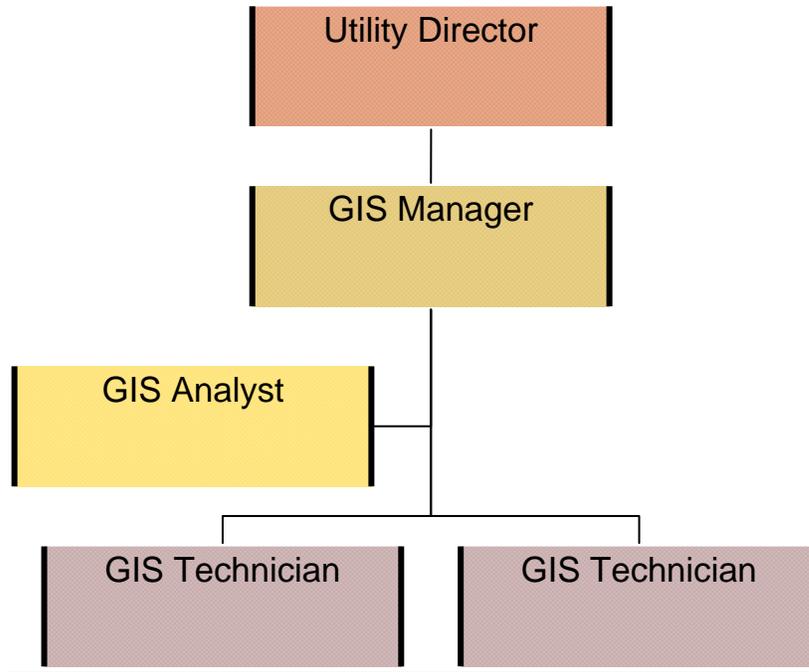
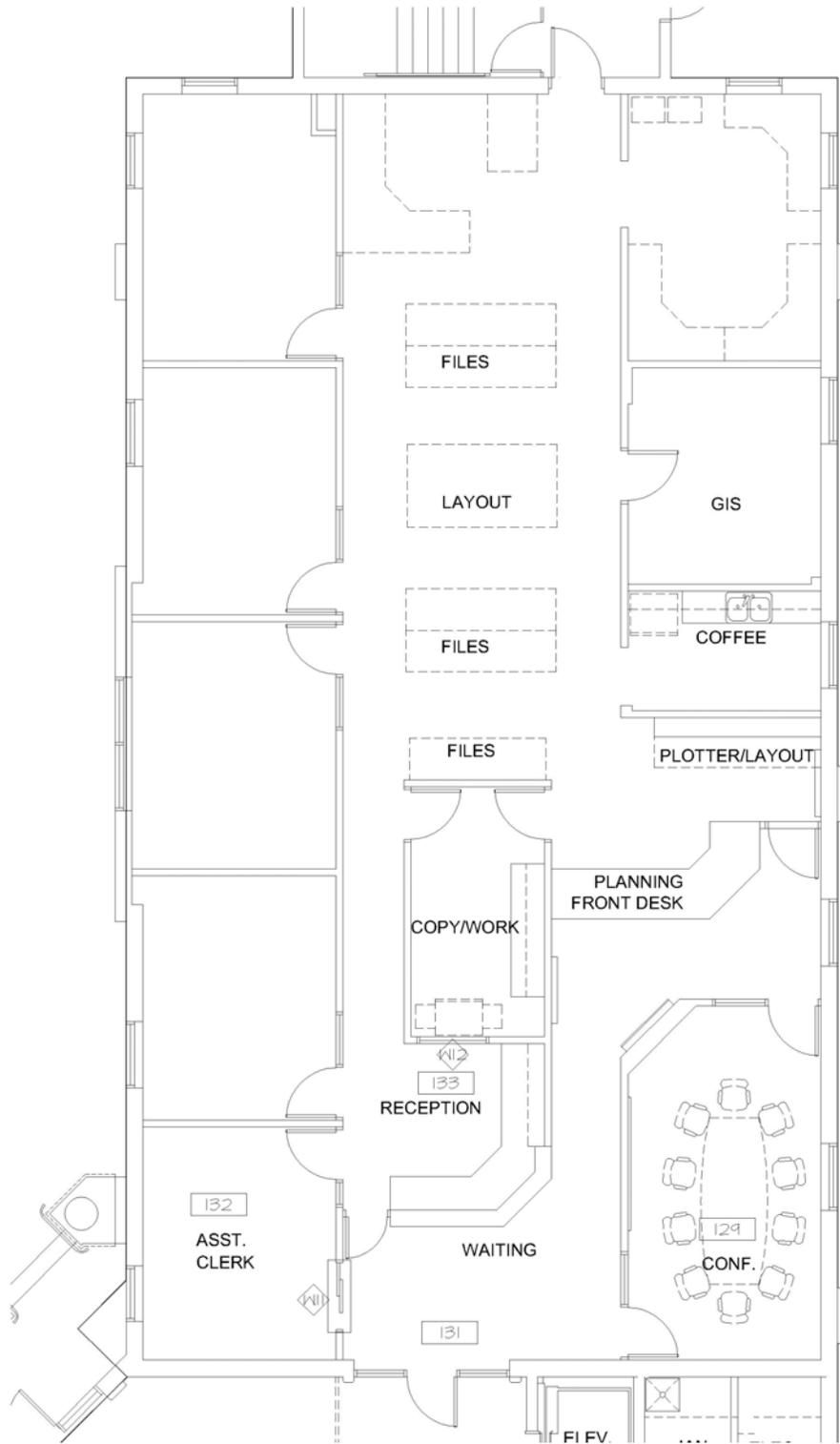


Exhibit 4.2- GIS Department at 116 S. Main St.



4.2 CURRENT SPACE INVENTORY:

4.2.1 Current Space Overview:

The GIS Department shares space with the City Planning department.

The GIS Analyst receives approximately 2 to 3 visitors per week. She has approximately 150 sf of office space and an additional 200 sf of equipment and shared layout space. In addition, there is long term storage in the basement of City Hall of approximately 200 sf. The GIS technician is located in the Water Department. It would be advantageous to the department to have both staff members at one location. However, proximity to the Water department allows the GIS technician to provide better support to the Water Department.

4.2.2 Space Deficiencies:

Current deficiencies were discovered through interviews with the GIS Analyst Manager, in the following areas:

GIS Manager:

- The GIS Manager is collocated with the City planning department and has a 150sf of office space that is adequate for the function. Additional layout and equipment space is shared with the planning department

GIS Technician:

- The GIS technicians are located in two areas at the water department. One GIS Technician has only 73sf of office space while the other Technician shares a 122sf space with a part time water department employee. Each technician needs 100 sf. of office space with additional 200 sf of equipment and Layout space. As long as the technician continues to operate out of the Water Department, a common Map room and layout space with the water department would be sufficient.

GIS Analyst:

- The GIS analyst is located

Supply Storage:

- The current common storage in the basement is adequate but could be more conveniently located in proximity to the department for quick access to paper and board supplies.

4.2.3 Security:

City Hall does not have any security guards on duty. Security is not an overriding concern to the GIS department as they do not have many customer visits.

4.2.4 Parking:

On street parking is available on Main Street, Ohio Ave to the North and Missouri Avenue to the South. Off Street on site visitors parking is available adjacent to the building . Employee parking is available on a lot located at the south east corner of E Missouri Avenue and S. Main Street. The department currently needs parking for two city owned vehicles.

4.3 CURRENT AND FUTURE NEEDS ASSESSMENT:

Exhibit 4.3 is a space projection summary for the planning horizons of this report. Additional space needs identified are as follows:

1. GIS Technicians: As Technicians are added in the future, and additional 100 dgsf/person will be required
2. Storage: Additional storage to meet current and future needs have been identified in the space projection summary.
3. Printing and Layout: Additional space to support future technicians has been identified in the space projection summary.

Ancillary support spaces such as restrooms, break rooms, meeting rooms, and reception/waiting areas may be shared with other departments and should be sized appropriate to the number of personnel sharing these spaces.

Table 7.3 GIS Department Space Projection

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
GIS Manager	150	0	150	150	150	
GIS Analyst	73	27	100	450	600	
GIS Technicians	122	0	200	300	400	
Copier/Plotter Area	200	0	200	200	300	
Layout Space		0	150	150	200	
Supply Storage	200	0	200	200	250	
Meeting Room	0	0	0	0	0	May be shared with other departments
FTE Staff projection	4		4	5	6	
DGSF Space projection+15%*		27	1,150	1,668	2,185	
(E) DGSF Office Space	745					
DGSF/FTE Staff	186		288	334	364	

*- To include Building Common Areas

Averaged Staffing Space Projection

FTE Staff projection	4		4	5	6	
Average DGSF/Staff	300		300	300	300	
DGSF Space Projection	1200		1200	1500	1800	

4.4 LOCATION ANALYSIS

As the department continues to vie for space with other City departments in City Hall, it is imperative that the City considers the future of this department and the direction of its growth. Many similar sized or larger cities have separate GIS staff in many utility and planning departments providing focused support.

With current and developing technology, a centralized location of the GIS department that can provide virtual support to City departments is viable, but would require some level of customer training to assist them in the use of this technology. The existing locations of the GIS staff in various departments, leads to inefficiencies in equipment and spaces. A common location would have several advantages:

- Reduces redundancy/duplication of equipment
- Better tracking of mobile equipment.
- More efficient use of personnel with limited duplication of activities.
- More control over scheduling and processes
- Improves the way the department develops and provides GIS support.

Centralizing GIS activities would require a cultural change in the way Water and Electric Departments are supported by GIS personnel.

CHAPTER 5 - STREETS AND DRAINAGE DIVISION

Function:	The street division of the public works department is responsible for cleaning and maintaining City-owned streets and right-of-ways. The division engages in activities such as debris and litter removal from streets, snow removal, tree trimming, pothole patching, concrete repair, street light maintenance, curb and gutter maintenance, traffic sign maintenance, and striping of streets.									
Facilities' Needs and Current Deficiencies	<ul style="list-style-type: none"> • Need Meeting Room and additional break area • Need visitor parking • Not enough storage space • Need more Equipment and Vehicle covered parking 									
Future Needs	New facility with adequate employee space and outdoor and indoor equipment storage.									
Growth Factors:	City population growth and city expansion. With additional streets added.									
Historical Personnel Data:	Full Time Employees or Equivalents per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	7	7	7	7	7	7	7	7	6+(2)*	6+(2)*
Personnel Projection	Method	2014		2019		2023				
	Historical Percent Change	8		9		10				
	Dept. Manager Projections	8		9		10				
	Comparison Study	N/A		N/A		N/A				
	FTE Staff Projection	6+(2)*		9		10				
	*-(2) Part Time Workers									
Parking Needs	Item	2014		2019		2023				
	Visitor Parking	2		3		3				
	Employees	8		9		10				
	Parking Needs Projection	10		12		13				
Office Space Needs Projections	Item	2014		2019		2023				
	Existing DGSF	822								
	Existing DGSF/FTE	103								
	FTE Staff Projection	8		9		10				
	Average DGSF/Staff*	225		225		225				
	DGSF Space Projection	1,800		2,025		2,250				
	*Seasonal Staff Factored									
Vehicle Parking, Shop and Storage Space needs	Item	2014		2019		2023				
	Indoor Parked Vehicles	15		17		19				
	DGSF/Parked Vehicle	650		650		650				
	Vehicle Parking	9,750		11,050		12,350				
	Additional Storage	4,150		4,150		6,550				
	DGSF Space Projection	13,900		15,200		18,900				
Yard Equipment Parking	Equipment is currently parked in the yard, but preferable to park under cover.									
Critical Adjacencies	None. There are positive synergies with collocating with Parks and Water Department									

5.1 DEPARTMENT OVERVIEW:

The Street & Drainage Division of the Public Works Department currently maintains a total of 103 miles of roads, six bridges, two traffic signals, two traffic calming speed limit signs, five lighted school pedestrian crossings, 639 storm drainage inlets, 193 drainage culverts, 173 manholes, several drainage detention ponds, several miles of storm drain pipes and 271 drainage outfall structures

The Division performs the following major responsibilities:

- Snow Removal & Ice Control
- Street Sweeping –roads, walks, parking lots
- Pavement Management Systems
- Street Paving, Patching & Crack Sealing
- Streetscape, Shoulders & Sidewalks
- Traffic Signals, Striping & Signage
- Drainage Facilities –curbs, culverts, storm sewers, etc.
- Mowing & Weed Control
- Community Special Events including City Spring Cleanup, Thunder In The Valley, Blast Dance, Labor Day Parade, Harvest Moon Festival and Cowboy Christmas
- Support Other Departments with labor, materials and equipment

The division is managed by the Streets & Drainage superintendent, who reports to the public works department director. The Division is currently staffed with one full-time Superintendent, one Crew Leader, four full-time Maintenance Workers and two regular part-time Maintenance Workers. The current organizational structure is shown in Exhibit 5.1

Superintendent:

The superintendent directs the day-to-day operations of the street divisions by supervising staff, coordinating projects and administrative matters. The superintendent also conducts inspections of construction sites for compliance with City codes and ordinances. The Streets and Drainage Division has seven full-time employees with 3 additional seasonal workers assisting in the summer months. The superintendent shares an administrative assistant with the water department. He has supervision responsibility for the following positions:

Street Crew Leader:

Supervises work crews in the street division, coordinates work assignments, and operates heavy equipment.

Street Maintenance Worker (6):

Operates heavy equipment such as dump trucks, snow plows, backhoes, and graders. Performs maintenance duties such as asphalt overlay, traffic control stripping and storm drain maintenance

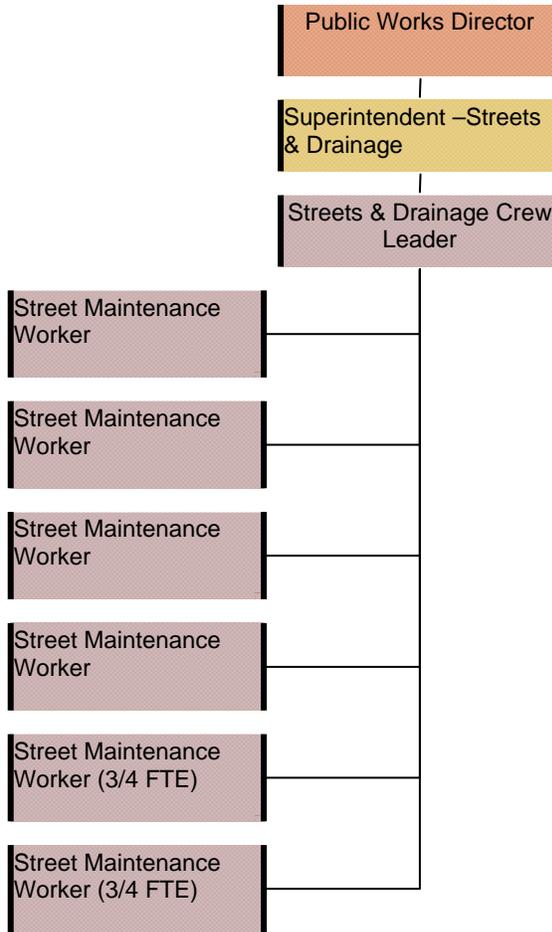


Exhibit 5.2 Organizational Chart of Streets and Drainage Division

5.2 CURRENT SPACE INVENTORY:

The Streets and Drainage Division is collocated with the Parks Division and the Water Department. Exhibit 3.2 is a site plan of the Water department and the Public Works yard. The site is approximately 2.14 Acres with several buildings as follows:

Building No. 1 Water Department and Public Works Department Office:

The staff occupies a concrete block and wood framed structure which it shares with the Water Department and the Parks Division of the PWD. The building is approximately 3,037 sf, of which approximately 800 sf is occupied by the PWD. Services such as break areas, restrooms, mechanical and janitorial spaces are common to both departments. Restrooms are also shared with the public. The age of the building could not be determined, but the structure including the roof, is in poor condition requiring substantial repairs.

The building also has various accessibility and non building code compliant elements. There is no accessible and only one unisex toilet. The Streets and Drainage Division

receives few walk-in customer visitors, but often need to meet with scheduled business visitors at City Hall due to lack of Conference Room facilities in the building.

Building No. 2 Shop/Storage Building:

Exhibit 5.3 shows the building layout of the Streets Division space in Shop/Storage building no. 2. This is a pre-engineered metal building with multiple bays occupied by the Water department, the Streets & Drainage, and Parks Division of the PWD. The Streets & Drainage Division occupies approximately 3,100 sf. in this building. The building is used for vehicle and equipment storage. The building has a mezzanine supported on wood posts. A visual inspection showed several missing posts, and structural deflections of the mezzanine support structure. The building is unsafe and in poor condition. It should be replaced as repairing it in its current condition is not cost effective.



Shop Building

Building No. 4:

A portion of this building was used by the Police Department until recently as an evidence storage facility, but is no longer used as such. The remainder of the building is used in part for storage of an antique fire truck and additional storage for the PWD. This building was not surveyed.

Storage Building No. 6

Exhibit 5.4 is a floor plan of this building. It is a 4,250 sf large barrel shaped metal structure, also described as the Quanza hut building. Several large bays are used for vehicle storage. One bay was designed as a vehicle wash bay but is currently not being used as a wash bay. A portion of the building is used by Facilities and Maintenance Division of the PWD. The building is in poor condition with several deferred maintenance and repairs needed.



Storage Building No. 6- "Quanza Building"

Sand Storage Building No. 7

This building is a 1,000 sf pre-engineered metal building built in 2007. It is used for sand and Salt Storage. It is in good condition.

Exhibit 5.2- Floor Plan of PWD space in Office Building No. 1

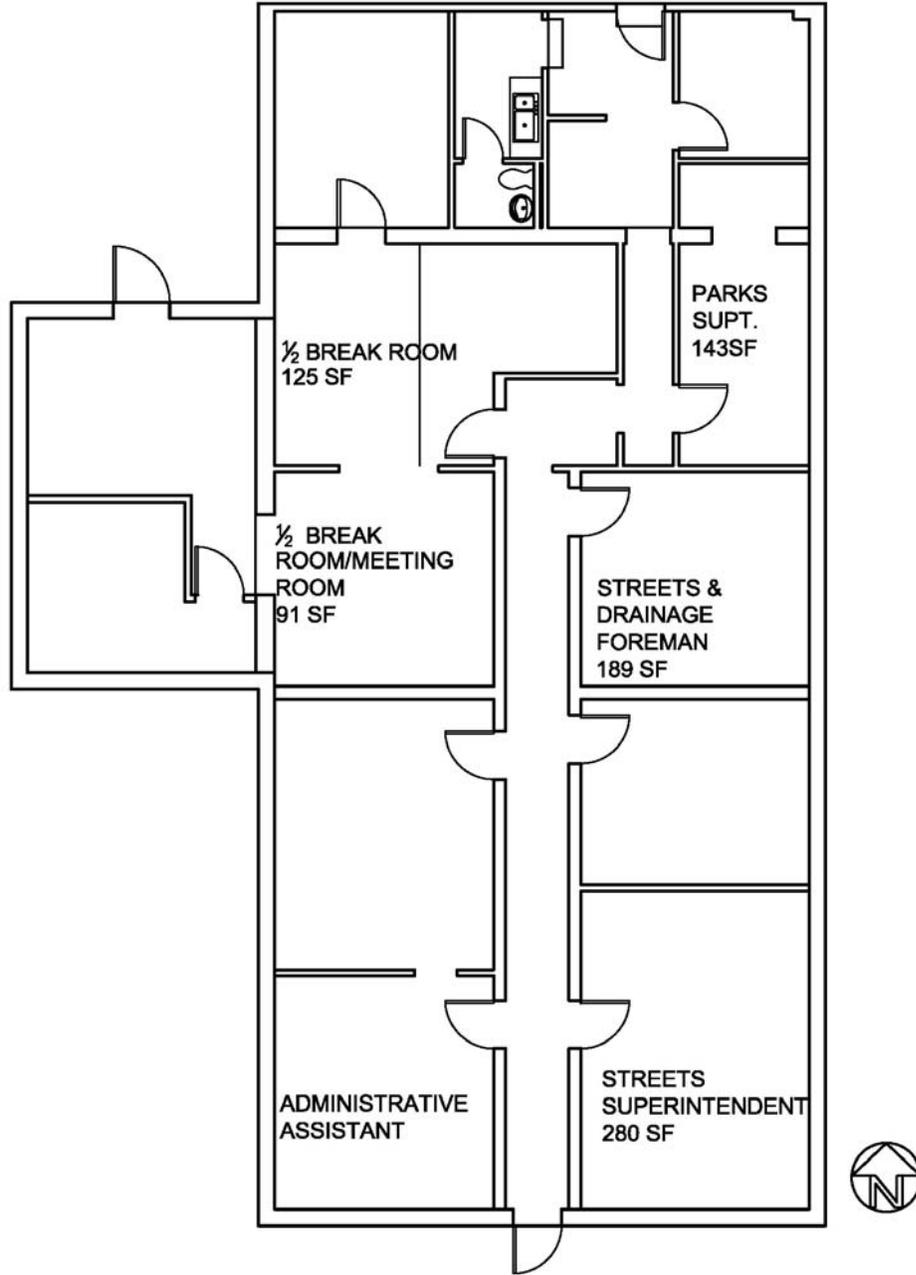


Exhibit 5.3- Floor Plan of Shop/Storage Building #2.

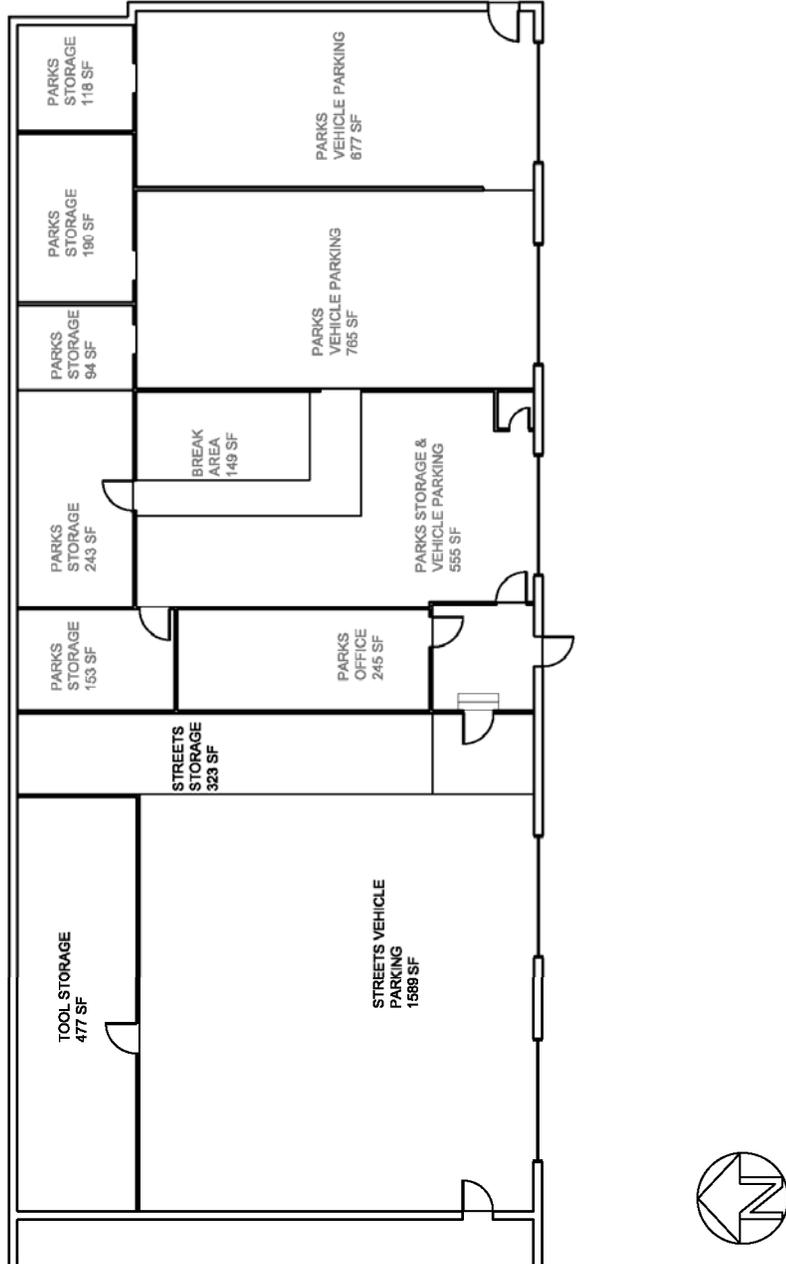
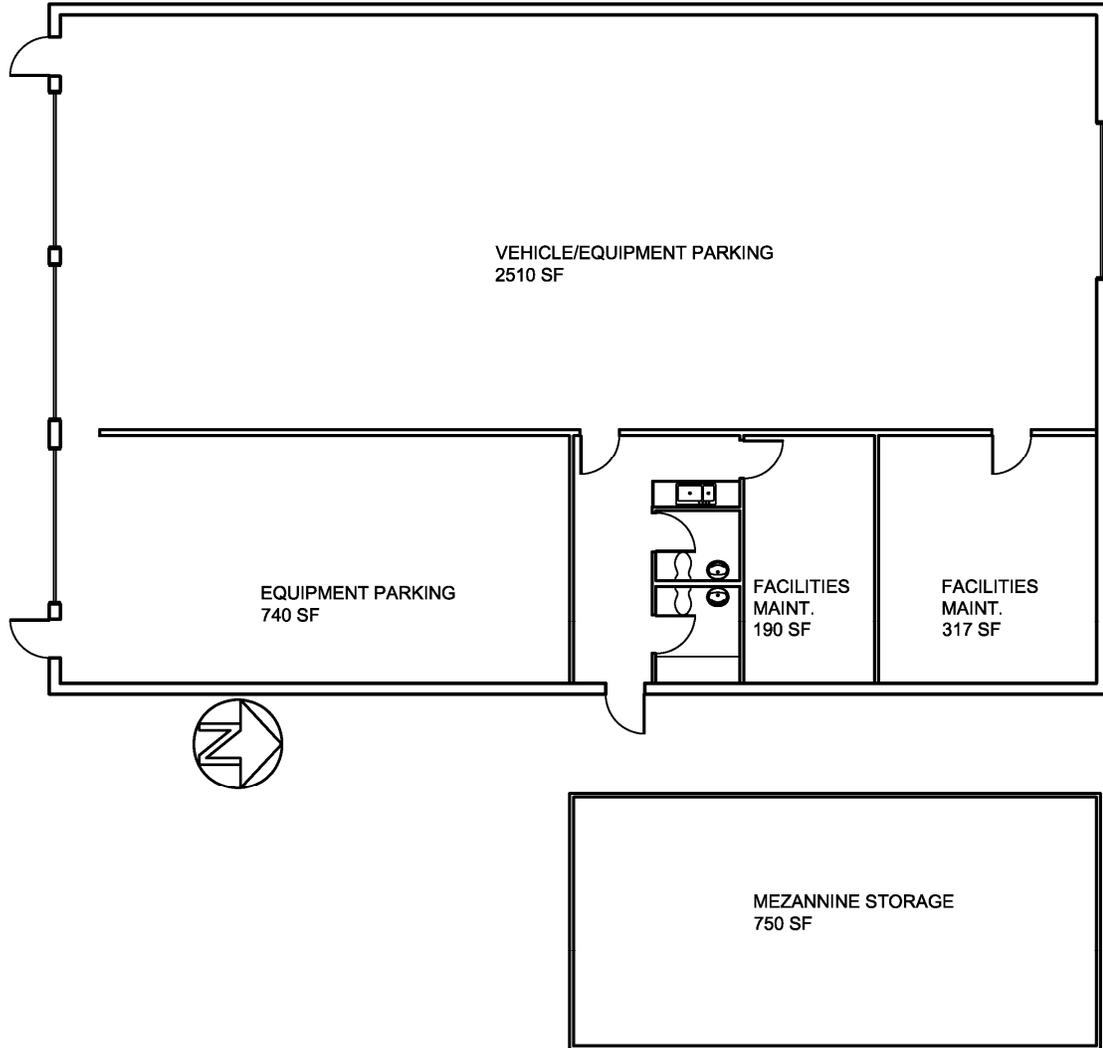


Exhibit 5.4- Floor Plan of Storage Building No. 4



5.3 SPACE DEFICIENCIES:

Current deficiencies were discovered through space measurements, visual observations, and interviews with Duane Greenwood, PWD Director and Bill Hughes, Streets Superintendent.

5.3.1 Office Space Needs:

Customer Waiting/Reception Area:

The Streets and Drainage Division does not have a designated customer reception area. Visitors walk in to a corridor/hallway with a reception window into the administrative assistant's (shared with water department) office. While the department receives only about 4 visitors a week, a designated customer reception area should be provided. This is necessary for several reasons:

1. Administrative Assistant receives visitors and needs to have a private and secure environment when handling day to day business activity (i.e. money, employees, phone conversations, reports etc.)
2. Visitors have an identifiable arrival point where they can be directed to appropriate staff.
3. Creates a secure area where non-departmental staff have to wait before they can access the rest of the facility.
4. Creates a customer friendly public face for the department, and therefore a positive service opportunity.

Meeting/Conference Room

There is a small meeting room in the office building shared with the water department. Most meetings involving large groups are held at city hall. Travel time and costs can be reduced by providing an onsite meeting space. The divisions needs vary from small private meetings to larger meetings. Based on the expected number of visitors, provide a minimum 150 sf. conference room.

Break Room

The existing break room is located in the main office building. It serves the water and public works department. The break room is also used as a locker storage area, laundry pickup storage, and cleaning supply storage area by both departments. The existing area is inadequate for the full time and seasonal staff served, and not conveniently located for the PWD maintenance workers. It also does not have kitchen facilities for employees to prepare or warm up meals. Provide a minimum of 45sf. per FTE. Break Room should have dedicated space for lockers and laundry hamper with a changing room. Provide a usable kitchen to support staff and visitors.

File/Document Storage

File cabinets are located in individual offices. Provide a secure centralized file storage area, so authorized employees can access necessary documents. This leads to better filing practices within an organization so project documents are properly stored for convenient access. This can be located adjacent to, or in the administrative assistant's office. Provide a minimum of 100 sf. of net assignable space for file storage.

Copier/Fax Room

Office supplies are stored in the administrative assistants office. This is inconvenient and also creates a security issue. A separate fax/ copier area with an office supply cabinet is required. This should be a minimum of 50 s.f.

Restrooms

The office building has a single unisex non-accessible restroom. Provide building code compliant plumbing fixture count for each sex that is accessible.

5.3.2 Storage and Shop Space Needs:

The Streets and Drainage Department does not have adequate covered storage for equipment. Expensive equipment are stored open to the elements, which lead to faster deterioration and hence, a shorter useful life. With additional covered parking, the equipment is protected and the life of these pieces of equipment can be extended.

While some pieces of equipment need to be secured inside an enclosed structure, others can be stored in three sided storage barns.

Exhibit 5.7 identifies current deficiencies. The division has less than half of its needed covered parking. Based on existing designated gross square feet (DGSF) per vehicle parked, future needs maybe calculated at the rate of 650 DGSF/vehicle. Similarly, the division has less than half of required small parts storage.



◀ *Vehicle/Equipment Parking in Shop Building*

5.3.3 Yard Storage Needs:

Open Storage:

Although existing storage space appears to be adequate, it is poorly organized onsite leading to inefficient parking of equipment and a general sense of site congestion. Reorganizing outdoor storage areas, modifying traffic patterns, and planning future storage areas should be a priority in master planning this site.

5.4 SECURITY:

Security issues identified are as follows:

- The site is secured by a gated fence. However, there are no backup electronic controls to ensure and notify that the gates are locked after hours. The police evidence storage building and yard is a potential target for security threats.
- Water department and PWD need after hour access to the site and equipment. Proper controls are necessary to ensure that the departments do not compromise each other's security after hours.
- None of the buildings on site have electronic surveillance cameras or a security alarm system. On site surveillance cameras are necessary to protect valuable equipment. A security alarm system should be considered for the main office building.
- The site has experienced several break ins and thefts targeted at the police evidence storage facility and impound yard. Consider relocating police evidence storage to a secure facility.

5.5 PARKING:

Onsite parking is available for employee vehicles but only a limited amount of parking is available for visitors. The superintendent indicated that in addition to employee parking, 2 to 3 more parking spaces ,for visitors, would be needed.

5.4 FUTURE NEEDS ASSESSMENT:

The prior report completed by Design Edge, PC identified deficiencies in various functional spaces within the Streets Division. These deficiencies still exist. No additional space has been added to the Streets Division. These deficiencies are listed below:

The current facilities' used by the Streets & Drainage division are extremely inadequate and in poor condition. It is not cost effective to continue maintain buildings in this condition. The Office building No. 1 and the Shop Building No. 2 should be replaced immediately due to life safety and accessibility issues. Exhibit 5.6 and 5.7 is a space projection summary for the planning horizons of this report. In addition to current deficiencies identified in Section 8.2, future space needs are as follows:

- Break Room: Increase area of break room at the rate of 45 sf/person added in future years.
- Storage: Additional storage to meet current and future needs have been identified in the space projection summary.
- Vehicle Parking: Additional covered vehicle parking should be planned at the rate of 650 DGSF/vehicle for major pieces of equipment.

Exhibit 5.6- Streets and Drainage Division Office Space Projection Summary						
PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Streets						
Streets & Parks Superintendent	280		200	200	200	
Streets Crew leader	189		175	175	175	
Streets Maintenance Worker						
Break Area	216	144	540	630	765	
Conference Room		150	225	300	300	
Customer Reception Area		100	100	150	200	
File Storage		100	100	100	150	
Copier/Fax		50	50	50	50	
Future Staffing Space Needs:						
Administrative Assistant				100	100	
Sub-Total	685	544	1,390	1,705	1,940	
Circulation and Support Spaces (20%)	137	109	278	341	388	
DGSF Space Projection +20%		653	1,668	2,046	2,328	
Existing DGSF	822					
DGSF/Employee	103					
Averaged DGSF/Employee Approach						
No of Employees			8	9	10	
DGSF per FTE			225	225	225	
DGSF for Streets			1,800	2,025	2,250	

Exhibit 5.7- Streets and Drainage Division Shop and Vehicle Storage Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Building No. 2						
Storage	323	500	1,000	1,000	1,000	
Vehicle Parking	1,589		1,589	1,589	1,589	
Building No. 3						
Sand Storage	2,400		2,400	2,400	4,800	
Building No. 4						
Streets Maintenance -Vehicle Parking	3,400		3,400	3,400	3,400	
Archival Storage	750		750	750	750	
Additional Vehicle Parking		5,200	5,200	6,500	7,800	No. of Additional Projected Vehicles under covered parking *650
Total Storage Area	3,473	500	4,150	4,150	6,550	
Total Vehicle Parking	4,989	5,200	10,189	11,489	12,789	
Total Area	8,462	5,700	14,339	15,639	19,339	
Vehicles Parked Under Cover		8	15	17	19	
Existing Vehicles Parked Under Cover	7					
(Existing) DGSF/Vehicle	713					
Proposed DGSF/Vehicle	650		679	676	673	
Averaged DGSF/Vehicle Approach						
Vehicles Parked Under Cover			15	17	19	
DGSF/Vehicle			650	650	650	
Total Covered Parking			9750	11050	12350	
DGSF for Vehicles Parking and Storage			13,900	15,200	18,900	

5.5 LOCATION ANALYSIS

The water department and PWD site is on Alabama Avenue next to Fountain Middle School. There is a fair amount of cross pedestrian traffic of school children crossing the road during the day. There is a designated cross walk with a stop sign, but PWD and Water Department vehicle operators have to be watchful of children running across the road at different locations. With increased traffic over the years, the risk of potential traffic accident has increased and will continue to increase as the departments grow. This situation has to be managed with the schools help, so that children cross the road and designated areas only, and vehicle operators are constantly watchful of pedestrians.

The site is located towards the far south western corner of the service area. However, travel time and travel distances to all points within the service are still within acceptable limits.

This is largely a residential area, and very often especially during winter months, snow removal activities lead to a fair amount of disturbance at night.

Due to the above reasons, the location cannot be considered an appropriate location for a PWD service center.

PARKS DIVISION

Function:	The Parks division of the public works department is responsible for maintaining City-owned parks, streetscapes, and cemetery maintenance. The division engages in activities such as debris removal, mowing, fertilizing turf, installing and maintaining irrigation systems, landscaping, and cleaning park facilities. During winter months, the division assists the street division with snow removal efforts.									
Facilities' Needs and Current Deficiencies	<ul style="list-style-type: none"> • Shop, Storage, and Break Area • Equipment Storage and Vehicle Parking 									
Future Needs	New facility with adequate employee space and outdoor and indoor equipment storage.									
Growth Factors:	City population growth and city expansion. With new parks being developed in new subdivisions, the parks department will need to grow to meet service demands.									
Historical Personnel Data:	Full Time Employees or Equivalents per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	3	3	3	3	3	3	3	3	3+(2)*	3+(2)*
Personnel Projection	Method				2014	2019	2023			
	Historical Percent Change				5	5	7			
	Dept. Manager Projections				3	5	7			
	Comparison Study				3	4	7			
	FTE Staff Projection				3+(2)*	4+(2)*	7			
*(2) Part Time Workers										
Parking Needs	Item				2014	2019	2023			
	Visitor Parking				1	1	3**			
	Employees				5	6	7			
	Parking Needs Projection				6	7	10			
**- With Future Recreation Programs										
Office Space Needs Projections	Item				2014	2019	2023			
	Existing DGSF				647					
	Existing DGSF/FTE				216					
	FTE Staff Projection				3+(2)*	4+(2)*	7			
	Average DGSF/Staff				200	200	200			
DGSF Space Projection				800	1,000	1,400				
Vehicle Parking, Shop and Storage Space projection	Item				2014	2019	2023			
	Indoor Parked Equipment				10	16	20			
	Average DGSF/Equipment				200	200	200			
	General + Chemical Storage				2,800	3,100	4,200			
	Workshop				300	300	300			
DGSF Space Projection				6,240	7,920	10,200				
Yard Equipment Parking	Several pieces of equipment are currently parked in the open. All equipment should be parked under cover.									
Critical Adjacencies	None. Beneficial to be collocated with other PWD divisions.									

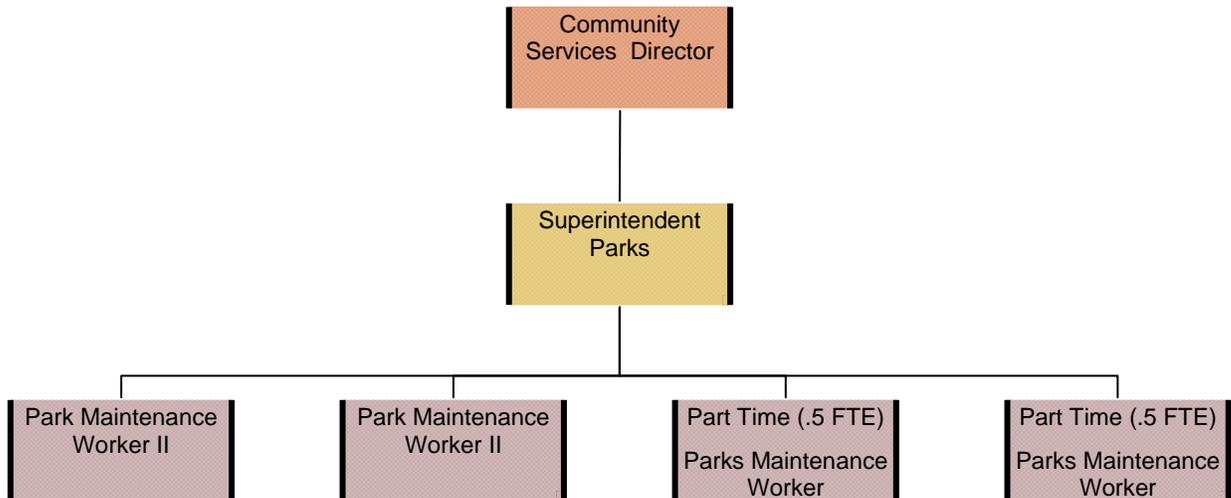
6.1 DEPARTMENT OVERVIEW:

The Parks division of the public works department is responsible for maintaining City-owned parks, streetscapes, and cemetery maintenance. The division engages in activities such as debris removal, mowing, fertilizing turf, installing and maintaining irrigation systems, landscaping, and cleaning park facilities. During winter months, the division assists the street division with snow removal efforts.

The Parks Division Office/Maintenance Facility is located at 415 West Alabama Avenue. The Parks Division currently maintains nine recreational parks, five open space parks, five recreation trails, one dancing fountain, one splash pad, one cemetery, three streetscape areas and one park & ride facility. The Parks Division is responsible for the following

- Parks include: Aga, Conley, Fountain Mesa, Hibbard, Heritage, Lindamood, Mayors/ Veterans, Metcalfe and Disk Park.
- Recreation Facilities and Playgrounds, including Ball Fields and a Splash Pad
- Open Space Parks, including Adams, Jimmy Camp Confluence, Hibbard, Heritage and Cumberland Green
- Multi-use trails, including Adams, Metcalfe, Hibbard, Cross Creek and Fountain Mesa Cemetery
- City Buildings/Facilities Turf & Landscape Maintenance and Sidewalk Snow Removal
- Fountains including City Hall and Mayor's Park
- Rights of Way Landscaping such as Streetscape & Street Trees, Park & Ride Landscape, and City Gateway Signage & Landscape.
- Coordination with Heritage Special Improvement Maintenance District
- Community Events Including Arbor Day

As the community continues to grow, the Parks division will have to support additional parks, city buildings and open spaces. New recreational programs will create a need for more customer service spaces. Currently reservation for park facilities are made at City Hall at the community services reception counter.

Exhibit 6.1- Organization Chart for Parks Division

The division is managed by the Parks superintendent, who reports to the community services director. The superintendent directs the day-to-day operations of the parks divisions by supervising staff, coordinating projects and administrative matters. Parks Division staff includes the superintendent, two full time Park maintenance workers, and two part time (20 Hours/week) maintenance workers. During the summer months the staffing is augmented by 8 -10 seasonal workers. The current organizational structure is shown in Exhibit 6.1

Parks Superintendent

The superintendent shares an administrative assistant with the water department. He supervises work crews in the parks division, and coordinates work assignments. He has supervision responsibility for the following positions:

Park Maintenance Worker (2):

Operates heavy equipment, assists with snow removal, and performs landscaping duties such as mowing, pruning trees and irrigation system maintenance.

6.2 CURRENT SPACE INVENTORY:

The Parks Division is located at 415 Alabama Avenue in Fountain. They are collocated with the Water Department and the Streets & Drainage division of the PWD. Exhibit 3.3 is a site plan of the Water department and the Public Works yard. The site is approximately 2.14 Acres with several buildings as described in Chapter 5-Streets Division. The Parks Superintendent's office is located in the Office Building No. 1. Other spaces occupied by Parks Division are as follows:

Building No. 1 Water Department and Public Works Department Office:

The Parks Superintendent's office of about 143 sf, is in this concrete block and wood framed structure which he shares with the Streets Division of the PWD. (See Exhibit 5.2). Services such as break areas, restrooms, mechanical and janitorial spaces are common to all departments. Restrooms are also shared with the public. The age of the building could not be determined, but the structure including the roof, is in poor condition requiring substantial repairs. The building also has various accessibility and non building code compliant elements. There is no accessible and only one unisex toilet. The Parks Division receives few walk-in customer visitors, but often need to meet with scheduled business visitors at City Hall due to lack of Conference Room facilities in the building.

Building No. 2 Shop/Storage Building:

Exhibit 6.2 shows the building layout of the Streets Division space in Shop/Storage building no. 2. This is a pre-engineered metal building with multiple bays occupied by the Water department, the Streets & Drainage, and Parks Division of the PWD. The Parks Division occupies approximately 3,100 sf. in this building. The building is used for vehicle and equipment storage. The building has a mezzanine supported on wood posts. A visual inspection showed several missing posts, and structural deflections of the mezzanine support structure. The building is unsafe and in poor condition. It should be replaced as repairing it in its current condition is not cost effective.

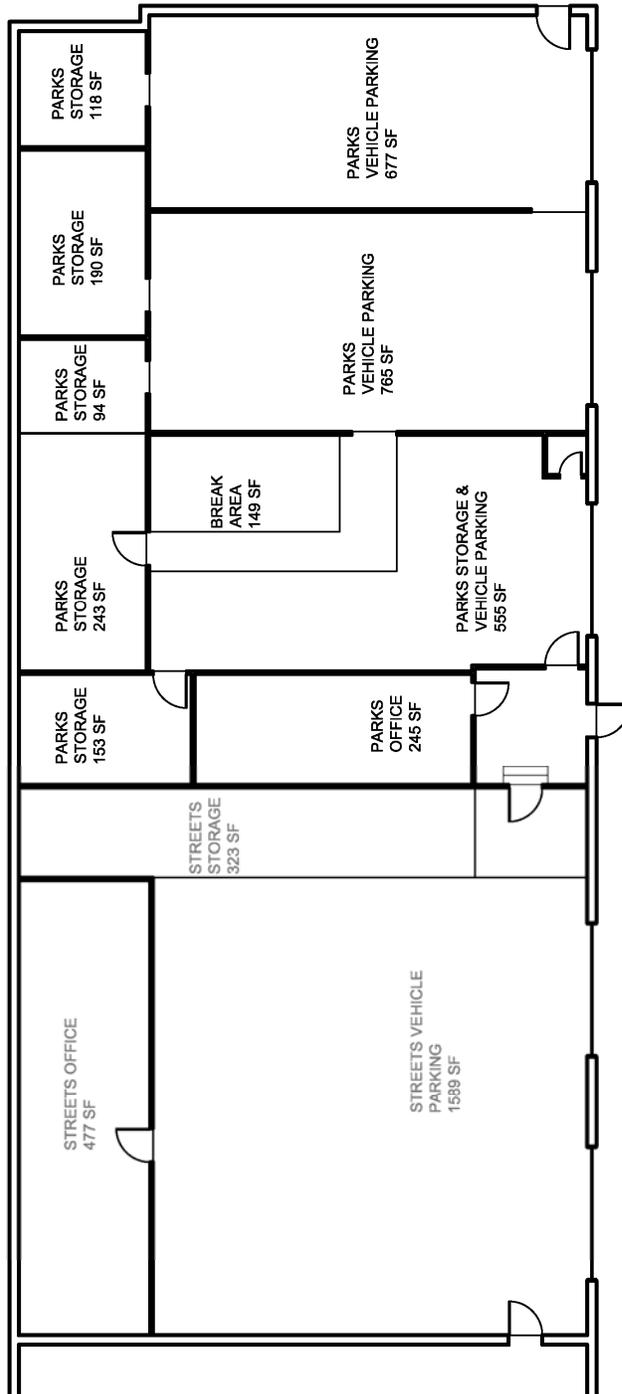
Building No. 4:

A portion of this building was used by the Police Department until recently as an evidence storage facility, but is no longer used as such. The Parks division now occupies the vacated space. This building was not surveyed.

Storage Building No. 5:

This is a storage container unit used for chemical storage by the Parks Division

Exhibit 6.2- Floor Plan of Shop/Storage Building #2.



6.3 SPACE DEFICIENCIES:

Current deficiencies were discovered through space measurements, visual observations, and interviews with Duane Greenwood, PWD Director and Bill Hughes, Streets and Parks Superintendent.

6.3.1 Office Space Needs:

The Parks Superintendent's office is located in the Office Building No. 1 adjacent to the Streets Superintendent. General office space needs for the parks division is limited and similar to the Streets Drainage Division as described in Chapter 8. The Parks Division does not receive many walk-in visitors.

Break room The Parks division hires a large number of seasonal workers. The Parks employees use the Shop Break Area or the Office Building Area. Both spaces are inadequate for the number of people served especially when seasonal workers are added to the work force. Break rooms need to be sized appropriately to allow break room space for them. Using a ratio of 75 DGSF/FTE the break room can be sized for adequate space for seasonal workers.



◀ Shop Break Area

6.3.2 Storage and Shop Space Needs:

The Parks Department does not have adequate covered storage for equipment. Expensive equipment are stored open to the elements, which lead to faster deterioration and hence, a shorter useful life. With additional covered parking, the equipment is protected and the life of these pieces of equipment can be extended.

While some pieces of equipment need to be secured inside an enclosed structure, others can be stored in three sided storage barns.

Chemical storage needs to be in a conditioned space. It is currently stored in an unconditioned container. In addition to covered parking for equipment and vehicles, workshop space is needed for maintaining parts and equipment.



◀ *Tools and Equipment Storage*

Exhibit 6.3 identifies current deficiencies. The Division needs additional equipment storage space. Based on existing designated gross square feet (DGSF) per equipment parked, future needs may be calculated at the rate of 250 DGSF/vehicle.

The division appears to have adequate general storage.



◀ *Small Equipment Parking*

6.3.3 Yard Storage Needs:

Open Storage:

Although existing storage space appears to be adequate, it is poorly organized onsite leading to inefficient parking of equipment and a general sense of site congestion. Reorganizing outdoor storage areas, modifying traffic patterns, and planning future storage areas should be a priority in master planning this site. Per the Parks superintendents, the division needs approximately 1 acre of open storage space for materials storage.

6.4 SECURITY:

Security issues identified are as follows:

- The site is secured by a gated fence. However, there are no backup electronic controls to ensure and notify that the gates are locked after hours. The police evidence storage building and yard is a potential target for security threats.
- Water department and PWD need after hour access to the site and equipment. Proper controls are necessary to ensure that the departments do not compromise each other's security after hours.
- None of the buildings on site have electronic surveillance cameras or a security alarm system. On site surveillance cameras are necessary to protect valuable equipment. A security alarm system should be considered for the main office building.
- The site has experienced several break ins and thefts targeted at the police evidence storage facility and impound yard. Consider relocating police evidence storage to a secure facility.

6.5 PARKING:

Onsite parking is available for employee vehicles but only a limited amount of parking is available for visitors. Additional one visitor parking space may be provided for the Parks Division. New recreational programs will create a need for more visitor spaces.

6.6 FUTURE NEEDS ASSESSMENT:

The current facilities' used by the Parks division are extremely inadequate and in poor condition. It is not cost effective to continue maintain buildings in this condition. The Office building No. 1 and the Shop Building No. 2 should be replaced immediately due to life safety and accessibility issues. Exhibit 6.3 and 6.4 is a space projection summary for the planning horizons of this report. In addition to current deficiencies identified in Section 4.2, future space needs are as follows:

- Break Room: Increase area of break room at the rate of 40 dgsf/FTE added in future years.
- Storage: Additional storage to meet current and future needs have been identified in the space projection summary. This includes chemical storage.
- Vehicle Parking: Additional covered vehicle parking should be planned at the rate of 200 DGSF/vehicle.

Exhibit 6.3- Parks Division Office Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Parks						
Parks Superintendent	145	30	175	175	175	
Parks Maintenance Worker	245	-5	240	320	480	80 sf x No. of Employees. Part time Workers factored as FTE *50%
Break Area	149	11	160	200	280	40dgsf/ FTE
Sub-Total	539	36	575	695	935	
Circulation and Support Spaces (20%)	108	7	115	139	187	
Total		43	690	834	1122	
FTE Staff Projection	4		4	5	7	PT= 0.5FTE
Existing DGSF	647					
DGSF/Employee	216					
Averaged DGSF/Employee Approach						
FTE Staff Projection			4	5	7	
DGSF per FTE			200	200	200	
DGSF for Streets and Parks			800	1,000	1,400	

Exhibit 6.4- Parks Division Shop and Vehicle Storage Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Parks Storage	798		800	1000	1200	
Parks Equipment Parking	1997		2000	3000	4000	
Workshop			300	300	300	
Other (Circulation and Support)	331					
Chemical Storage	2100		2100	2100	3000	
Subtotal	5226		5200	6400	8500	
DGSF Space Projection +20%			6,240	7,680	10,200	

6.7 LOCATION ANALYSIS

This location is generally unsuitable for the same reasons as outlined in Chapter 5 for the Streets Drainage Division..

A 2003 Parks, Recreation and Trails Master Plan Study by EDAW recommends that the City should provide 2 acres per 1,000 population of neighborhood parks and 5 acres per 1,000 population of community parks, and equitably distribute these throughout the community. Over the next 20 years, this will mean acquiring, developing and maintaining approximately several new neighborhood and new community parks. The study also recommends additional recreational facilities as part of the Master plan.

The Parks Division will need to be centrally located to all City Parks and buildings that it serves.

CHAPTER 7 - FLEET MAINTENANCE DIVISION

Function:	The fleet services division of the public works department is responsible for maintaining City owned equipment and vehicles.									
Facilities' Needs and Current Deficiencies	<ul style="list-style-type: none"> • Repair Shop, Inventory Storage, Office, and Break Area • Vehicle Parking • Inadequate Bays. Existing bay configurations are inefficient • Need Higher bays • Need additional storage • Need more security 									
Future Needs	New facility with adequate bays, storage and vehicle parking.									
Growth Factors:	City population growth and city expansion. With additional streets added.									
Historical Personnel Data:	Full Time Employees or Equivalents per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	4	4	5	5	5	5	5	5	5	5
Personnel Projection	Method				2014	2019	2023			
	Historical Percent Change									
	Dept. Manager Projections				6	6	7			
	Comparison Study									
	FTE Staff Projection				6	6	7			
Parking Needs	Item				2014	2019	2023			
	Visitor Parking				2	3	3			
	Employees(not incl. Supt.)				5	5	5			
	Vehicle Parking(=No. of repair Bays)				6	6	8			
	Parking Needs Projection				13	14	16			
Space Needs Projections	Item				2014	2019	2023			
	DGSF Office Space				701	701	931			
	DGSF Storage Space				2400	2600	3400			
	DGSF Repair Shop Space				9,000	9,000	12,000			
Yard Equipment Parking	Need Vehicle Parking as indicated above. Need large parking areas for Fire Trucks and large pieces of equipment needing servicing.									
Critical Adjacencies	None. Beneficial if collocated with other PWD divisions for servicing of equipment.									

7.1 DIVISION OVERVIEW:

The Fleet Maintenance Division provides maintenance for all City vehicles and equipment. The Fleet Maintenance Division is located with the Electric Utility Department at 6745 Southmoor Drive. The Division services all City Departments. The Division maintains approximately 286 vehicles and major equipment units plus numerous small engine equipment units. Fleet Division major responsibilities are as follows:

- City Vehicle & Equipment Purchases & Outfitting
- City Vehicle & Equipment Maintenance & Repairs
- City Vehicle & Equipment Fuel, Oil & Misc. Fluids
- City Vehicle & Equipment Salvage & Disposal
- Small Engine Equipment Maintenance & Repairs
- Emergency Roadside Assistance
- Welding Services

Vehicles & Equipment include: Police Cruisers, Fire Engines, Ladder Truck, Ambulances, Cars, Vans, SUV's, Pick-ups, Motorcycles, Dump Trucks, Aerial Trucks, Tanker Truck, Transit Buses, Street Sanders, Snow Plows, Snow Blowers, Street Sweepers, Tractors, Trailers, Loaders, Trenchers, Backhoes, Attachments, Motor Graders, Asphalt Mill, Sheep Foot Roller, Fork Lifts, ATVs, Pumps, Compressors, Generators, Hydro-Vacs, Crack Sealers, Grinders, Mowers, Chippers, Tillers, Chain Saws and Leaf Blowers.

2013 Distribution of Major Vehicles & Equipment was as follows:

Electric Department	68
Water Department:	41
Utility Customer Services:	8
Public Works Streets:	36
Public Works Parks:	44
Fire Department:	28
Police Department:	63
City Administration:	5
Code Enforcement:	5
Fleet Services:	5
Transit:	6
<u>Housing Department:</u>	<u>10</u>
Total:	319

The Fleet Maintenance Division also provides welding services for internal City use. Welding services include oxygen-acetylene, MIG, TIG, Arc, and plasma welding.

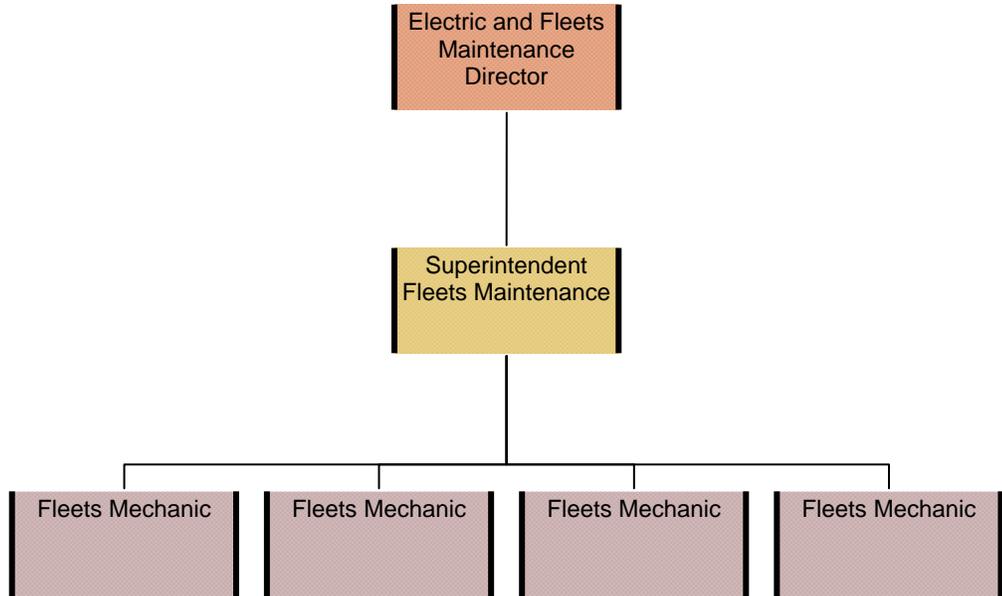


Exhibit 7.1- Organization Chart for Fleets Division

Exhibit 7.1 shows the current organizational structure for the Division

The City fleet composition ranges widely. It is comprised of heavy equipment such as motor graders, fire engines; light equipment such as patrol cars, passenger vehicles and pick up trucks; and small engines such as mowers, chain saws, and portable generators. All repairs are performed by fleet services except for automatic transmission repairs, major body work, and bucket repairs on heavy equipment. Spring is the busiest time of the year when new police vehicles are commissioned. The Fleet Services installs all of the equipment in the police squad cars such as radio, wiring of light bars etc, servicing mowers for Streets and Parks etc. Fall is the slowest time. Winter months can be busy with snow plows and electric department vehicles that are deployed to repair electrical lines.

The division is managed by the fleet services superintendent, who supervises a staff of four employees. The fleet services superintendent reports to the director of the public works department, and is responsible for the day-to-day operations of the division. The superintendent has direct supervision responsibility for the following positions:

Fleet Superintendent

Supervises mechanical staff in fleet services division, coordinates work assignments, and repairs equipment and vehicles.

Fleet Mechanics (4)

Diagnoses mechanical problems, repairs and rebuilds equipment, orders as needed. Spring is the busiest time of the year when new police vehicles are commissioned. The Fleet Services installs all of the equipment in the police squad cars such as radio, wiring of light bars etc, servicing mowers for Streets and Parks etc. Fall is the slowest time.

Winter months can be busy with snow plows and electric department vehicles that are deployed to repair electrical lines.

Transit mechanic

The Transit Mechanic services Transit department vehicles.

7.2 CURRENT SPACE INVENTORY:

Office/Shop Building No. 1:

The Fleet Services is co located with the Electric Department at 6745 Southmoor Dr. The building is 6,800 sf. The building is a precast concrete and added on to the existing Electric Department building in 1986. The building is roughly divided into five bays as shown in Exhibit 7.2.



◀Fleet Repair Bays in Shop Building No. 1

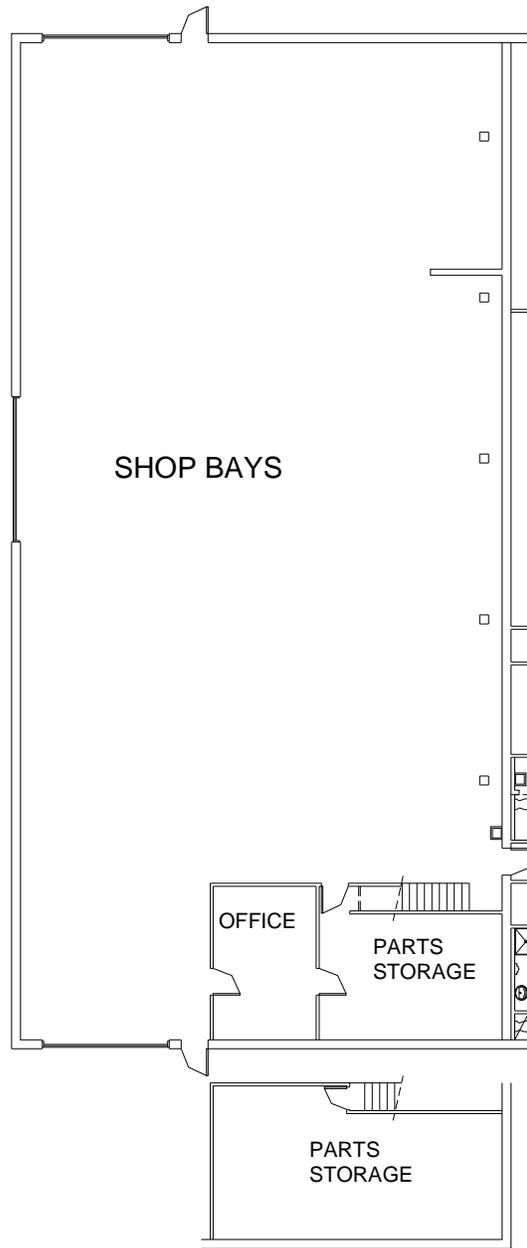


Exhibit 7.2: Fleet Repair Bays in Shop Building No. 1

Vehicle Storage Building No. 2:

Exhibit 7.3 shows the building layout of Storage building no. 2. This is a 3,700 sf. pre-engineered metal building with 4 bays of which one bay of 800 sf is occupied by the Fleets Maintenance division of the Public Works Department. The building is used for vehicle storage. It building is in good condition.

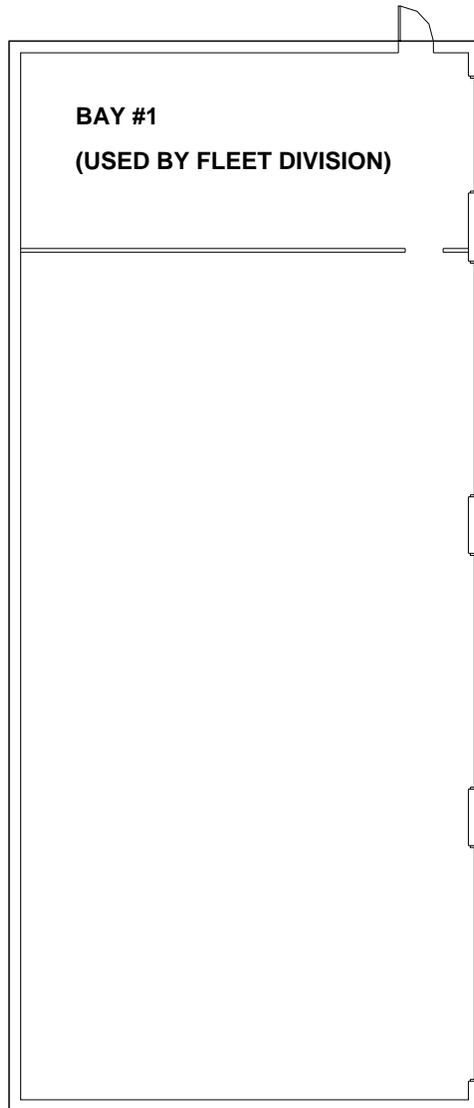


Exhibit 7.3: Fleet Space in Building No. 2

7.3 SPACE DEFICIENCIES:

Current deficiencies were discovered through space measurements and interviews with Fleets Maintenance Division staff.

- The building was designed as a drive thru' facility, where vehicles could enter through an overhead door at one end of the building, and exit through another overhead door at the opposite end of the building. This works well for small vehicles as they can turn into each bay, but does not work for larger vehicles with wider turning radii.
- The interior clear height is approximately 14 feet. Tandem truck beds cannot be raised for servicing, as there is insufficient clear height. Similarly, the city recently purchased a new ladder truck for the fire department. The ladder cannot be raised inside the facility for the same reason. Portable lifts for servicing cannot be obtained because the vehicles cannot be raised too far above the floor.
- There is no outdoor concrete pad available to set a portable lift. These cannot be set on asphalt driveways, as the added load will cause the lift to sink into the pavement, especially on warm days.
- Limited number of parking spaces available so when multiple vehicles need to be serviced, the parking lot gets extremely crowded. A larger parking lot would allow for more staging area for vehicles needing repair.
- Additional bays are needed, for average and growing demand load. With the addition of the Transit department, servicing of Transit vehicles puts a stress on already limited space.

7.3.1 Office Space Needs:

The entire staff except the fleet director shares 200 sf. of office space. The office is crowded and cannot accommodate all staff at the same time. Book shelf space around the room is used to store manuals. More shelving space is needed. The fleet superintendent should be provided an individual office space or work station.

The division shares the Break Room and Restrooms in the Electric Department.

7.3.2 Storage and Shop Space Needs:

Small Parts Storage:

800 sf of small parts inventory is stored in Office/Shop Building No. 1 on the main level and mezzanine level on open shelves in storage containers of varying sizes. This space is not adequate for current needs. The division stores small amount of inventory and buys parts as needed. An additional 200 sf. of storage space is needed

Parts Storage:

Tires for police squad cars, oils and greases, recaps for big equipment, and larger parts are stored outdoors in containers. All container storage should be converted to permanent building storage for easy access, security and to reduce site congestion.

Equipment Storage:

The Welding truck is stored in one bay of Vehicle Storage Building no. 2.

Repair Bays:

As discussed earlier, the repair bays are improperly laid out and therefore not very usable. The bays are also not deep enough for longer vehicles and trucks. The Fleet division needs proper repair bays that are adequately sized in all dimensions for improved productivity.

7.3.3 Yard Storage Needs:Open Storage:

Although existing storage space appears to be adequate, it is poorly organized on the site leading to traffic bottlenecks and a general sense of site congestion. Reorganizing outdoor storage areas, modifying traffic patterns, and planning future storage areas should be a priority in master planning this site.

7.4 SECURITY:

The site perimeter is fenced and gated. However, security is lacking because of inadequate controls over after hours access to equipment. Security would be compromised if staff inadvertently left a gate open and there is no electronic security system to protect against this eventuality. There has been one recent incident of theft of equipment where an intruder cut through fencing.

Security is especially important as squad cars with expensive equipment are often left over night in the lot.

7.5 PARKING:

Employee and visitor parking is available throughout the site with a majority of parking spaces in front of Building No. 1. Parking is inadequate for peak traffic when multiple vehicles are dropped off for repairs. Vehicle/Equipment parking for an additional fifteen vehicles to include fire trucks and large equipment is needed.

7.6 FUTURE NEEDS ASSESSMENT:

Exhibit 7.4 is a space projection summary for the planning horizons of this report. In addition to current deficiencies identified in Section 10.3, future space needs are as follows:

Break Room: Provide break room at the rate of 40 dgsf/person

Storage: Additional storage to meet current and future needs have been identified in the space projection summary.

Office Space: Additional office/workstation space for each employee at the rate of 64 gsf/person is needed.

Repair Bays: Future repair bays have been added at 1500 gsf/bay. One bay is added every five years to reflect a growing City vehicle base.

Exhibit 7.4- Fleet Division Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
Fleet Services Superintendent	232		200	200	200	
Fleet Foreman		64	64	64	64	
Fleet Mechanics		256	320	320	512	
Repair/Service Bays	5,668	1,832	9,000	9,000	12,000	1500 sf per Bay
Vehicle Parking	730	70	800	800	1200	Building #3 Bay occupied by Fleet
Supply Storage	350	150	500	500	500	
Supply Storage (mezannine)	537		500	500	500	
Storage Containers	557					
Future Additional Storage			600	800	1,200	Container Storage moved to permanent storage
No. of Repair Bays	5		6	6	8	
No. of Employees	5	0	6	6	8	
DGSF Office Space	278	320	701	701	931	
DGSF Storage Space	2174	220	2400	2600	3400	
DGSF Repair Shop Space	5,668	1,832	9,000	9,000	12,000	Including support Spaces

7.7 LOCATION ANALYSIS

The Fleets Division services all city vehicles. The Division is located at the far North portion of their service area. The location is convenient for the Electric Department but most other city departments are located about five miles south of this location. However, this is not an unacceptable travel distance.

The site is located in a largely commercial area although equipment has to travel through some residential streets to access the main arterials. There appears to be no serious negative impact from this residential access.

The Electric department has grown rapidly, and its space demands have caused severe congestion at this location. The two departments cannot viably collocate at this location without affecting operations. While the Electric department may have outgrown this location, the overall site and associated buildings is too oversized for the Fleet Division alone. A centralized location to its customer base in Fountain would be most appropriate location for the Fleet maintenance Division. There are strong synergies with locating the Fleets Division with other PWD Divisions for convenient access to equipment repair.

CHAPTER 8 - FACILITIES MAINTENANCE DIVISION

Function:	The Facilities Maintenance Division is responsible for the routine maintenance and cleaning of all City owned Buildings.									
Facilities' Needs and Current Deficiencies	<ul style="list-style-type: none"> • Not enough supply storage and equipment space • Need proper access and egress from existing space 									
Future Needs	New facility with adequate employee space, and supplies and equipment storage.									
Growth Factors:	City population growth and city expansion. As other departments expand, more facilities will be added.									
Historical Personnel Data:	Full Time Employees or Equivalents per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
				3	3	3	3	2	2	2
Personnel Projection	Method				2014	2019	2023			
	Historical Percent Change				2	2	3			
	Dept. Manager Projections				2	2	3			
	Comparison Study				N/A	N/A	N/A			
	FTE Staff Projection				2	2	3			
Parking Needs	Item				2008	2013	2018			
	Visitor Parking				0	0	0			
	Employees				2	2	2			
	Parking Needs Projection				2	2	3			
	Based on parking standards									
Work Areas, Shop and Storage Space projection	Item				2008	2013	2018			
	Workspace				340	340	510			
	Storage				500	500	600			
	DGSF Space Projection *				1,176	1,176	1,554			
	*Including Support Spaces									
Yard Equipment Parking	None									
Critical Adjacencies	None.									

8.1 DEPARTMENT OVERVIEW:

The facilities maintenance division of the public works department is responsible for the daily cleaning, routine maintenance and necessary repairs to all municipal buildings. This includes not only general maintenance, such as vacuum, waxing floors, emptying waste baskets, but also special tasks such as painting, equipment repair and preventive maintenance, and coordinating contract facility repair projects. The Division maintains eight major City facilities and supports all City Departments. Some major building repair projects and services such as heating, ventilation and air conditioning (HVAC) repairs and maintenance are contracted out. Facility Division major responsibilities are as follows:

- Building Remodeling & Repairs
- Custodial Services
- HVAC Services

The division is managed by the Public Works Director, who supervises a staff of two employees. The current organizational structure is shown below in Exhibit 8.1. The Division has one full-time Facility Maintenance Worker and one full-time Facility Custodian.

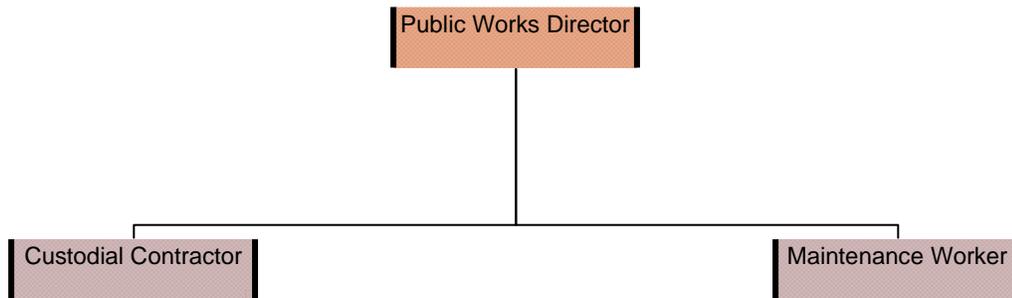


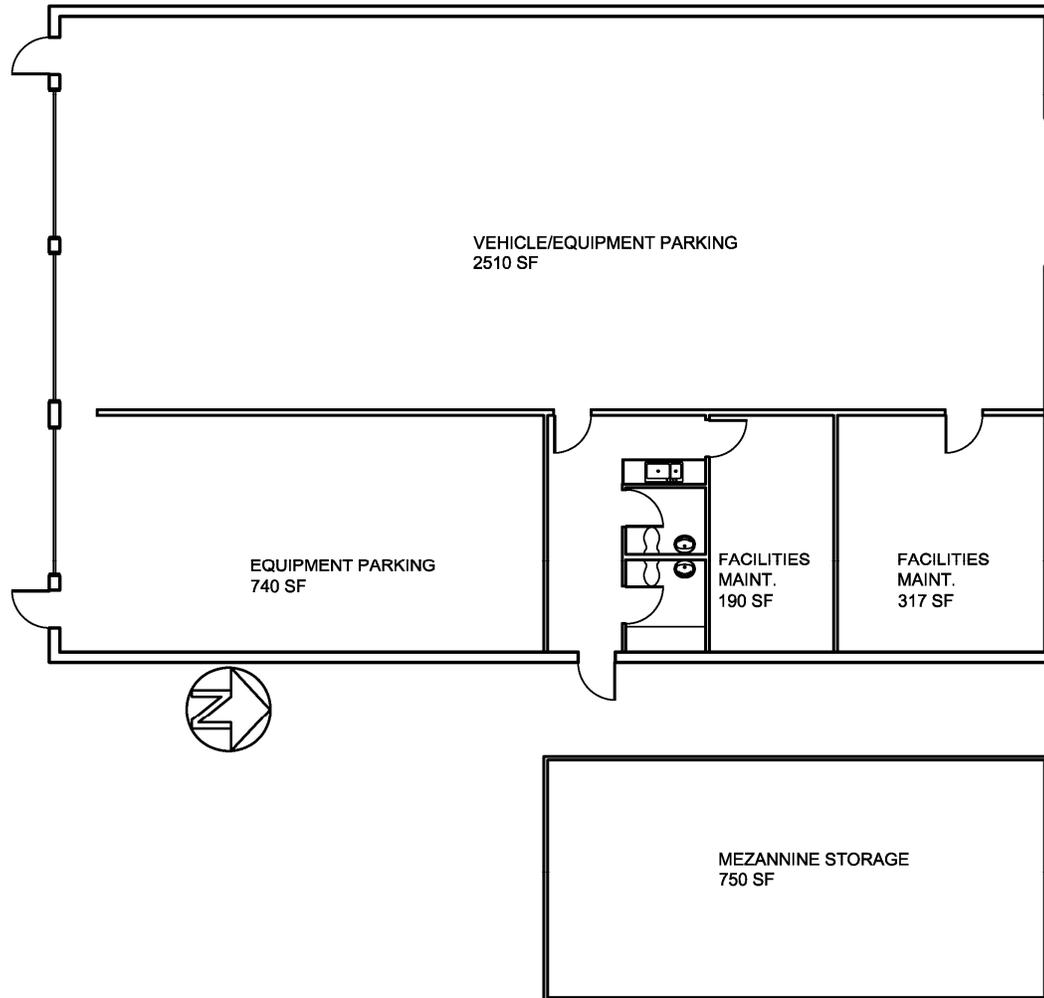
Exhibit 8.1- Organization Chart for Facilities Maintenance Division

8.2 CURRENT SPACE INVENTORY:

The Facilities Maintenance Division is located at 415 Alabama Avenue in Fountain. They are collocated with the Water Department and the Streets and Drainage and Parks Division of the PWD. Exhibit 3.3 is a site plan of the Water department and the Public Works yard. The Facilities maintenance Division occupies a portion of Storage Building No. 6:

Storage Building No. 6

Exhibit 8.2 is a floor plan of this building. It is a 4,250 sf large barrel shaped metal structure, also described as the Quanza hut building. Several large bays are used for vehicle storage by Streets and drainage. Facilities maintenance occupies approximately 500sf of space in the building.

Exhibit 8.2- Floor Plan of Facilities Maintenance space in Building No. 6**8.3 SPACE DEFICIENCIES:**

Current deficiencies were discovered through space measurements, visual observations, and interviews with Facilities Maintenance Staff.

8.3.1 General Space Needs:Restrooms

The office building has a two non-accessible restroom. The facility needs building code compliant plumbing fixture count for each sex that is accessible.

The current access into the Facilities Maintenance area is through a man door in the Vehicle bays, at the opposite end of the building. The Facilities Maintenance Division needs improved access into their space.

8.3.2 Supply Storage and Shop Space Needs:

The Facilities Maintenance Division does not have adequate storage space for supplies and equipment.

Exhibit 8.3 identifies current deficiencies. .

8.4 SECURITY:

Security issues identified for the Water and Public Works Department apply to the Facilities Maintenance Division as well.

8.5 PARKING:

Onsite parking is available for employee vehicles but is limited, and not clearly marked. One space per employee is needed. The division gets no visitors and therefore no visitor parking is required.

8.6 FUTURE NEEDS ASSESSMENT:

In order to create future space projections for the Facilities Maintenance Division, for the reports five (2013), ten (2018) and twenty year (2028) planning horizons, we interviewed the Facilities Maintenance Superintendent; and conducted an informal survey of other similar sized utilities.

The current facilities' used by the Facilities Maintenance Division is inadequate and in poor condition. It is not cost effective to continue to maintain buildings in this condition. It is recommended that the building be replaced as soon as feasible. Exhibit 8.3 is a space projection summary for the planning horizons of this report. In addition to current deficiencies identified in Section 4.2, future space needs are as follows:

- Work Station/Office Space: Dedicated office space is not required although each employee should be provided approximately 60-75 sf work stations.
- Storage: Additional storage to meet current and future needs have been identified in the space projection summary.
- Maintenance Shop: Provide workshop space for maintenance repair work.

Exhibit 8.3- Facilities Maintenance Division Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
No. of Employees	2		2	2	3	
Storage	317	183	500	500	600	
Office Area	190	-50	140	140	210	
Workshop		200	200	200	300	
Support Spaces	101		168	168	222	Restrooms+BreakArea
Subtotal	608	333	1,008	1,008	1,332	
Total DGSF Space Projection			1,176	1,176	1,554	

8.7 LOCATION ANALYSIS

The Facilities Maintenance division is located in close proximity to most City Departments that it serves, such as City Hall, the fire department, Water and Public Works Departments. Daily trips to and from the Division to other buildings are limited to two trips per employee, generating only 6 total trips. The location concerns regarding cross traffic with school children is a not as much of a consideration due to the minimal number of trips. The Alabama Avenue location is therefore considered a location for the Facilities Maintenance Division.

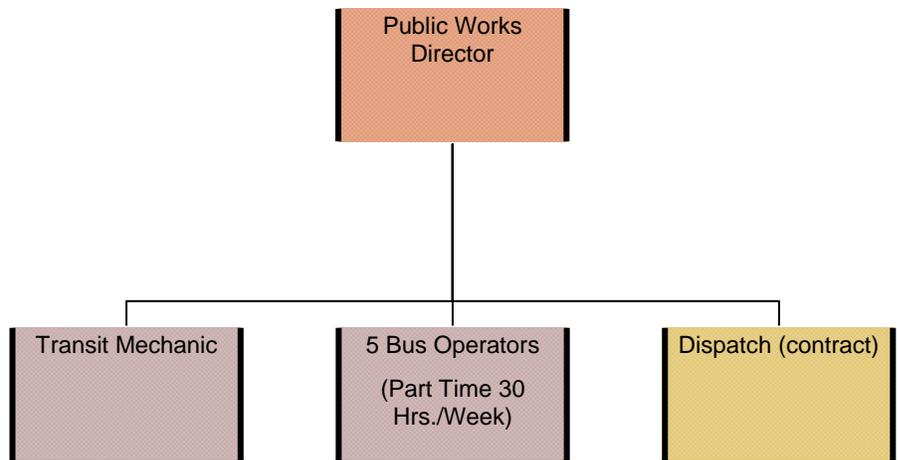
CHAPTER 9 - TRANSIT DIVISION

Function:	The Transit Division operates bus routes within the City limits									
Facilities Needs and Current Deficiencies	<ul style="list-style-type: none"> Current building is a Mobile Temporary Building. Need permanent facilities. 									
Future Needs	New facility with adequate employee space, and administrative space									
Growth Factors:	City population growth and city expansion. As the city expands more routes may be added.									
Historical Personnel Data:	Full Time Employees or Equivalent per year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	0	0	0	0	0	0	0	0	2	2
Personnel Projection	Method				2014	2019	2023			
	Historical Percent Change				N/A	N/A	N/A			
	Dept. Manager Projections				6	6	7			
	Comparison Study				N/A	N/A	N/A			
	Staff Projection (Part Time Staff)				6	6	7			
Parking Needs	Item				2008	2013	2018			
	Visitor Parking				0	0	0			
	Employees				6	6	7			
	Parking Needs Projection				6	6	7			
	Based on parking standards									
Work Areas, Shop and Storage Space projection	Item				2008	2013	2018			
	Workspace				300	300	400			
	Covered parking									
	DGSF Space Projection *				300	300	400			
	*Including Support Spaces									
Yard Equipment Parking	None									
Critical Adjacencies	None.									

9.1 DEPARTMENT OVERVIEW:

The Transit Division was established in 2012. The City Council approved the Fountain Feasibility Transit Model Study May 24, 2011 with recommendation to terminate service with Colorado Springs Mountain Metro Transit. The City of Fountain started a deviated fixed route service in 2012. The route follows previous Mountain Metro Transit Route 3. The division is managed by the Public Works Director, who supervises a staff of six employees. The current organizational structure is shown below in Exhibit 9.1. The Division has one Mechanic, five bus operators, and is contracted with the senior center for dispatch operations.

Exhibit 8.1- Organization Chart for Facilities Maintenance Division



9.2 CURRENT SPACE INVENTORY:

The Transit Division operates out of the Electric/Fleet Department property at 6745 Southmoor Drive. The staff uses a 10feet x 30 feet trailer that is parked near the entrance to the site. The building is occupied briefly during the day by operators at the beginning or end of their shift. The dispatch function is contracted to the Senior Services center, and requires no additional space.

9.3 SPACE DEFICIENCIES:

Current deficiencies were discovered through interviews with the Public Works Director

9.3.1 General Space Needs:

Restrooms

The office building has no restrooms. The facility needs building code compliant plumbing fixture count for each sex that is accessible.

9.4 SECURITY:

Security issues identified for the Fleet Department at this site is relevant to the Transit Division as well.

9.5 PARKING:

Onsite parking is available, but the site is severely congested with Fleet and Electrical department vehicle and customer vehicles that come in for repairs. The bus parking and employee parking adds additional congestion to the site.

9.6 FUTURE NEEDS ASSESSMENT:

The Transit Division has adequate space within the trailer, but permanent building space with restrooms is recommended. As the transit division grows, there may be a need for an onsite dispatcher and administrative staff.

- Work Station/Office Space: Dedicated office space is not required although each employee should be provided approximately 50 sf of break room and storage space.
- Covered Vehicle Parking: The Transit division has 5 buses and one shuttle car. All vehicles are parked in the open. Covered parking will extend the life of the vehicles. Additional covered parking should be provided for the buses at the rate of 500 dgsf/vehicle.

Exhibit 9.1- Transit Division Space Projection Summary

PERSONNEL/ROOM NAME	(E) NET ASSIGNABLE AREA	CURRENT DEFICIENCIES	SPACE PROJECTIONS			REMARKS
			NET ASSIGNABLE AREA 2014	NET ASSIGNABLE AREA 2019	NET ASSIGNABLE AREA 2023	
No. of Employees	6		6	6	7	
Work/Break Area	300		300	300	300	
Support Spaces		100	60	60	60	Restrooms
Subtotal		100	360	360	360	
Existing office DGSF	300					
Existing DGSF/FTE*	100					*PT = 0.5FTE
Bus covered parking	0	3,000	3,000	3,000	3,000	
Office Space DGSF projection			396	396	396	
Vehicle parking DGSF space projection	300		3,000	3,000	3,000	

Averaged Office Space Projection

FTE Staff projection			6	6	7	
Average DGSF/Staff			120	120	120	
DGSF Space Projection			360	360	420	

9.7 LOCATION ANALYSIS

The Transit division is collocated with the Fleet Maintenance division. This allows quick access to repair services for Transit vehicles. The location is also close to the start of the fixed route, and therefore reduces bus travel time and distance. Daily trips to and from the Division are limited to two trips per employee, generating only 12 total trips. The site is severely congested due to Electric and Fleet Maintenance Division needs. The future of the Transit Division at this location is depends ultimately on the future locations of the Fleet and Electric Department.