BKV GROUP

Architecture
Interior Design
Landscape Architecture
Engineering

222 North Second Street
Minneapolis, MN 55401
Telephone: 612.339.3752
Facsimilie: 612.339.6212
www.bkvgroup.com
EOE

City of RAMSEY

PUBLIC WORKS STUDY
CITY OF RAMSEY, MN

Contact:
Bruce Schwartzman, AIA
Partner-in-Charge
Direct: 612.373.9104
Mobile: 612.790.7605
bschwartzman@bkvgroup.com

November 24, 2015

Table of Contents

A. INTRODUCTION

The intent of this Study is to provide well developed and comprehensive information that enable the Ramsey City leadership in making informed decisions regarding the City's Public Works Department infrastructure and operational requirements. The goal is that this information will clearly identify the issues and possible solutions to existing deficiencies, resulting in a plan that supports the City and the department's long range operational requirements.

The culmination of the report by BKV Group provides the City Council with an assessment of your current public works facilities. It was a thoughtful and collaborative process that analyzed operations and growth to accurately project facility space requirements. These space requirements are the basis for the concept plans that were developed. The plans were vetted out with City input to address space requirements and operational efficiency. Each concept plan was evaluated based on its ability to allow for proper movement and flow of operations. From the plans project cost estimates were prepared that reflect appropriate construction cost based on similar facilities in Minnesota. To help establish a "next steps" track a preliminary project schedule is included that defines a progression to implement a future plan.

The Executive Summary briefly describes the methodology that produced this report and its components, as well as provides a snap-shot of each of the sections identified within the report. The conclusion of the Executive Summary includes recommendations and next steps for the City to consider moving forward.

The study started with a discovery process where BKV Group obtained all necessary and available information from the City. This information included existing plans of the buildings, sites, utility information, previous reports, staffing data, activities performed, maintenance, and fleet data. This information provided an initial understanding of Ramsey's Public Works facilities, staffing, operations and overall objectives.

The report is sequentially developed building on the information and analysis of each subsequent phase.

The sections of the report are as follows:

Section 2 - Facility Assessment (Physical Conditions)

Section 3 - Operational / Functional Observations

Section 4 - Space Programming

Section 5 - Facility Comparisons

Section 6 - Master Planning Concepts

Section 7 – Project Cost Estimates

Section 8 – Project Schedule

Appendices

- Appendix A: Space Standards
- Appendix B: Acknowledgements
- Appendix C: Existing Building Plans (Electronic format only)

An initial team kick off meeting including the entire planning team and City officials was held on July 30, 2015. The objective of the meeting was to review the objectives for the study, timelines, and discovery information obtained and most importantly identify and discuss the primary goals and requirements for the study. Following the kick off meeting, the BKV team toured the public works facilities and site with the Public Works Director starting the on-site facility assessment and documentation.

B. FACILITY ASSESSMENTS

Section 2 of this report, the Facility Assessments started with meeting the Public Works Director to review general information on the buildings, operations, staff and equipment. The only buildings on site that were built specifically for public works is the administration trailer and the salt storage building. The other 3 buildings were existing buildings that were on the property when the City acquired the land. The vehicle and fleet storage buildings were previously built for Minnesota Sawdust operations when they owned the property. Like most public works departments around the state they adapt and use the existing buildings to the best of their ability. In general the buildings are showing wear that is typical for buildings that are 45 +/- year old and under the type of use that public works activities involve.

The assessment included on-site observation of the existing facility and is intended to provide an indication of existing conditions, possible capital improvement upgrades, potential code compliance items or other building maintenance requirement which should be considered in any building renovation / addition project or as planned facility capital improvement projects.

The facility assessment portion is not intended to be exhaustive analysis but rather to assess and highlight the major building deficiencies observed visually during the tours.

The following information is a summary of the primary condition and code issues identified within each of the buildings.

1. Utility and Sign Shop:

The building was built in the early to mid-1970's and is approximately 5,000 sf. The building is a pre-engineered metal building with metal wall panels and roof. The following are some of the major issues identified.

- Exit door not compliant with code requirements
- Damaged exterior siding in spots
- Rusting exterior doors and frames
- Damaged insulation and vapor barrier
- Evidence of roof leaks
- Non-accessible bathroom

2. Vehicle Storage

The Vehicle Storage building consists of a pre-engineered metal structure with insulated metal wall panels. The building is 13,228 sf and was built in the mid 1970's to early 1980's. An addition was added on the West side and the year of constructed is unknown. The following are some of the major issues identified.

- Rusting exterior doors and frames
- Exit door not compliant with code requirements
- No internal floor drainage for vehicles
- Structural configuration limits efficient storage capacities of large vehicles
- Damaged insulation and vapor barrier
- Exterior damage to metal panel cladding
- Rusting of limited locations on the structural steel

3. Fleet Storage

The Fleet Storage building is a concrete masonry block building with precast double T's for the roof structure. The building is 12,258 sf and was built in the mid 1970's to early 1980's. The following are some of the major issues identified.

- Rusting exterior doors and frames
- Portions of the exterior masonry have been repaired but lack proper finish coatings
- Significant cracks in exterior masonry walls exist
- Interior concrete slab is heavily worn, spalled, and cracked
- Concrete apron at overhead doors is cracked
- Evidence of moisture intrusion at masonry wall along grade

4. Salt Storage Enclosure

The salt storage enclosure consists of a fabric roof structure supported by aluminum space frame set on round concrete foundation posts with precast form perimeter walls. The salt storage building covers 6,000 sf and was built in 2006.

- The enclosure is in good condition

5. Administration Trailer

The Administration Trailer is a 10 year old double-wide temporary trailer of approximately 1,600 sf. The entirety of the administrative and personnel areas are located within the trailer, including break area, offices, and crew areas.

- Interior finishes are heavily worn
- Exterior paint finish is peeling and aged
- Accessible entrance is not clearly labeled

6. Site

The current site encompasses two parcels separated by 142nd Avenue Northwest. The Northern parcel is 2.07 acres and is used for granular material storage along with the Utility and Sign Shops building located at the far North end. The southern parcel is 3.17 acres and contains the Administration Trailer, Fleet Storage and Salt Storage.

- Site is small and cramped negatively affecting operations and movement of vehicles
- The existing site and buildings are unable to store all the department's equipment and vehicles; additional storage is currently being used to store larger equipment off-site at 6710 Hwy 10. Operationally this is inefficient.
- Site functions are spread out and separated making communication and operations less efficient.
- Existing asphalt pavement is in fair condition with multiple cracks

7. Fuel Island

The fuel island consists of two above-ground storage tanks for on-road and off-road diesel fuel.

- The tanks appear to be in good condition but the metering technology is dated.

Summary of Facility Assessment

The buildings are generally in fair condition. The administration trailer is more of a temporary facility and not suitable for the requirements of the City's public works staff. Based on age and the intense use of public works activities they are showing wear and tear that would be anticipated. The main issue is that some of the buildings that Public Works utilizes were not built for public works operations. They have been adapted to work as best as possible but they do not have the required areas need for an efficient and appropriate public works department.

C. OPERATIONAL / FUNCTIONAL OBSERVATIONS

The space needs analysis and the site walk through provided an opportunity for the study team to assess the functionality and operational efficiency of the complex. Based on the planning team's familiarity with public works departments along with input from the public works department the team evaluated the operational conditions of the department. The following is a summary of issues observed.

1. General Site Observations

The total available site is more than sufficient to meet the needs for the Department.

Operational/Functional Deficiencies:

- The road that bi-sects the site is a public road with no separation from the Public Works yard and facility components which could create conflicts.
- No site security, due to the fact that there is no perimeter fence the department has over the years experienced theft and vandalism.
- Employee and visitor parking is located in a manner that creates conflict with department vehicle movement.
- Proximity of building creates operational inefficiency.
- No "front door" to the site.
- Public related activities (recycling, water sales) are located in areas of the site that force public vehicles deep into Public Works activities.

2. Exterior Material Storage

The site contains storage areas for a variety of materials and vehicles/equipment. These include stockpiles of granular materials, waste construction materials, construction materials, police impound and public works equipment and equipment implements.

Operational/Functional Deficiencies:

- Lack of site constraint results in materials stored in non-uniform manner and location.
- Lack of site constraint results in continued storage of items no longer required.

3. Administration / Personnel Areas

The entirety of the administrative and personnel areas is located in a trailer near the entrance to the site. The building houses offices, break room and crew areas.

Operational/Functional Deficiencies:

- Space inadequate for functions required on site.
- Building does not house all personnel.

4. Fleet Storage Building

This building houses the Streets, Parks and Fleet Maintenance operations.

Operational/Functional Deficiencies:

- Shops and storage areas are poorly defined and are not segregated from areas that generate vehicle exhaust fumes.
- Inadequate fleet maintenance area.
- There is no appropriate drainage system in the building
- The building clear height is not sufficient for lifting large vehicles.
- There are no personnel support areas in the building

5. Utilities & Sign Shop Building

The Utilities Operation and Sign Operation are located in a separate building located remotely on the site. The building houses the offices and personnel areas for the Utilities Crew, Utilities shops and storage, Utilities vehicle storage, Utilities material storage and the Sign Shop operation.

Operational/Functional Deficiencies:

- The remoteness of the building reduces the ability for good communication between Utilities staff and other Public Works groups.
- The spaces are inadequate to support the needs.

- The Sign production area is located on the second floor of the space with limited access.
- Storage of vehicles in shops creates exhaust/ventilation issues.

6. Vehicle Storage Building

The building consists of a two bay structure with overhead doors on each end of two circulation aisles. The building is used for vehicle and material storage.

Operational/Functional Deficiencies:

- The configuration of building does not lend itself to efficient use as vehicle storage.

7. Salt Storage Enclosure

The sand and salt storage building is a fabric covered steel structure.

Positive Features:

- The structure is sufficient for the amount of material stored.
- Circulation to and from the structure appears efficient

Operational/Functional Deficiencies:

- The structure is located adjacent to a wetlands area. Runoff must be carefully controlled.

Summary of Operational and Functional Observations:

The buildings do not provide the required spaces to support the City's public works operations. The locations / separations of the buildings creates inefficient staff communication and interaction. The overall site has adequate area but is not currently configured to provide appropriate vehicle and material movement. Public access creates vehicle movement problems and the site lacks a security perimeter.

D. SPACE PROGRAM ANALYSIS

Space Programming Methodology

The goal of the programming analysis is to assist the City in determining what spaces are needed and appropriate sizes of those spaces based on Ramsey's specific department activities. The Space Program documentation is presented in two forms; Space Program Spreadsheets and Space Standards. The spreadsheets identify operational areas and the square footage requirements for each. The Space Standards are diagrammatic drawings of some of the spaces which help to diagrammatically illustrate the space, its equipment and general proportions to meet function, building code and accessibility guidelines.

Summary of the Program Requirements

As detailed in Section 4 of this report, the space needs are documented in a program which identifies the individual spaces required of the department. The program is based on requirements for a 15-20 year projected space need.

The program sheets are broken into the main operations of the department;

- Administration / Personnel
- Vehicle Maintenance
- Parks / Streets & Utilities Shops and Storage
- Fleet Storage (these areas are under the Building Type heading as "enclosed")

The following chart is a summary of the existing total department area compared to the required program area.

Department	2015 Current Space	2030 Projected Need	Space Deficiency	% of Change
Public Works	32,000 sf	66,205 sf	34,205 sf	206.9%

Summary of Space Programing

The programming analysis defined required and appropriately sized spaces for public works. In summary this exercise further confirmed that the existing buildings do not currently have the needed floor space. A large portion of the inadequate area deals with the storage of the City's equipment. The city has a large investment in this equipment. Housing this equipment indoors, as is standard in the industry extends the life of the equipment and reduces maintenance requirements.

E. FACILITY COMPARISONS

In Section 5 of the report provides a comparative analysis between the characteristics of the Ramsey Public Works facilities and the characteristics of the same departments in other comparable Minnesota municipalities.

This assessment is done to help provide a comparison of the size of other public works facilities in Minnesota. This comparison looks at 15 Minnesota cities are listed ranging in population from 16,500 to 39,000. With public works facilities that range in size from 44,900 square feet to 86,680 square feet, with the average facility being more in the 64,500 square feet range. As a snap shot Ramsey's existing public works facilities totals at approximately 32,000 square feet. The required programmed area is 66,205 square feet, which is in line with current area requirements for public works operations as demonstrated in this comparison.

F. CONCEPT PLAN DEVELOPMENT

The concept plans and the site masterplan options were developed based upon achieving the identified priorities, goals and proper area requirements and work flows to support the public works department. The four concept planning options identified some core planning principals:

1. Provide adequate and appropriate building / operational area required for the Public Works Department
2. Provide adequate and appropriate site area and circulation needed for public works equipment & operations
3. Allow for future expansion
4. Site layouts that create operational efficiency
5. Separate public and public works traffic flow and access

A major issue in the planning of the proposed site centered on extending McKinley Street through to connect with Jasper. The planning commission reviewed this issue and it was determined in their November 12, 2015 meeting that extending McKinley Street through would not be a requirement of the City's comprehensive plan.

The following is a summary of the four options developed:

- **Option A** – construct a new public works operations east of Jasper and utilize some existing structures for storage.
- **Option B** - construct an entirely new public works facility east of Jasper.
- **Option C** – construct a new public works operations east of Jasper and utilize some existing structures for storage.
- **Option D** - construct a new public works operations on the west side of Jasper and utilize some existing structures for storage.

Summary of Concept Planning

Of the four site options studied two of them lacked the required work flow needed to foster operational efficiency. Options A and B produced the most efficient area configurations. The primary difference between options A and B is that in option A existing building are utilized for general storage needs while option B proposes construction all new facilities east of Jasper. From a land use perspective:

- **Option A** – utilized 15.5 acres for public works and allows 18 acres for other development.
- **Option B** - utilized 11.4 acres for public works and allows roughly 23 acres for other development.

In summary while both options have a number of positive features it was determined that option A would provide the best current and long range area to best support the City's public works activities.

G. PROJECT COST ANALYSIS

Section 7 of the report looks at the cost associated with each of the concept planning options. These estimates are general in nature, however the estimated costs are based on historic and current cost data for public works construction in our region.

The square foot cost shown in the body of the report represent the mean range that we would anticipate for construction to occur in 2016. These values have been inflated to anticipate construction cost in 2017.

The estimated cost for each of the four options with inflation added are as follows:

Option A

- Construction $11,563,571
- Soft Cost Estimate $1,500,000
- **Estimated 2017 Total Project Cost $13,063,571**

Option B

- Construction $12,226,835
- Soft Cost Estimate = $1,500,000
- **Estimated 2017 Total Project Cost $13,726,835**

Option C

- Construction $11,508,446
- Soft Cost Estimate = $1,500,000
- **Estimated 2017 Total Project Cost $13,008,446**

Option D

- Construction $11,343,071
- Soft Cost Estimate = $1,500,000
- **Estimated 2017 Total Project Cost $12,843,071**

The difference between the high and low estimated is $883,764. Since all concept plans are based on providing the same core building area the primary differences in the cost are based on the following:

1. Reuse or new of existing storage buildings
2. Relocation of the existing salt storage shed
3. Amount of site development required

H. PROPOSED PROJECT SCHEDULE

Section 8 of the report is a detailed schedule identifying dates that have occurred throughout the study as well as possible future action items. In our professional opinion that the City's public works department is lacking in a number of standards that are typical and appropriate for public works operations. If the City Council approves and adopts the report the process is defined to allow the required activities to occur for construction to start in spring of 2017.

Some of the major dates / timelines are:

- December 8, 2015 - City Council adoption of the study
- May 2016 to March 2017 - Design & Document Process
- March 2017 to May 2017 – Bid & Award the Construction Project
- May 2017 to June 2018 – Construction

BKV Group has enjoyed and valued the opportunity to be part of the planning team for the City and the Public Works department. Our goal was to provide you with a well-developed and comprehensive analysis that addresses the issues, provides clear and appropriate options and a path to achieve them. We welcome the opportunity to address any questions that the City or the community might have.

Our behalf of the planning team we are available to provide any additional support the City may need.

Bruce Schwartzman, AIA – Partner with BKV Group

Craig Carter, AIA – Senior Architect and Planner with BKV Group

Michael Healy – Project Planner with BKV Group

Ron Hilton - Senior Vice President with Maintenance Facility Consultants, a division of Whitman, Requardt & Associates, LLP

END OF SECTION

II. Facility Assessment

A. INTRODUCTION

The purpose of this section of the study is to assess the condition of the existing Ramsey Public Works facilities. This information provides the necessary data to assist the City Leadership to make informed decisions regarding how to best address the existing city infrastructures for long range planning. With this information the report identifies possible repairs, upgrades and/or replacement of these facilities based on conditions as well as operational requirements.

The process starts with the BKV Group team becoming familiar with previous data, studies, documents and drawings for the buildings to be studied. The next step is an on-site meeting and tour of each facility with BKV Group's team of architects and engineers to tour the buildings and site. Following these visits, BKV Group documents the conditions.

The Facility Assessments were conducted on July 30, 2015.

The individuals present for the tour were:

- Grant Riemer
  Public Works Superintendent
- Bruce Schwartzman, AIA
  Partner & Managing Architect with BKV Group
- Ron Hilton
  Senior Vice President with Maintenance Facility Consultants, a division of Whitman, Requardt & Associates, LLP
- Craig Carter, AIA
  Senior Project Architect with BKV Group

The assessments included on-site observations of the existing facilities and review with key staff regarding the functional operation of the buildings. This portion of the process identified assets and deficiencies. The physical conditions of the buildings were assessed, as well as the way in which the building's design affects staff operations. A physical condition review of the buildings is performed to determine maintenance issues, safety and code concerns, and review how conditions affect building system operations and energy costs.

The assessments are intended to provide an indication of capital maintenance requirements, potential code and regulatory required upgrades, and other building conditions which should be considered as part of the facility's general upkeep as well as part of any building project. The study does not address potential environmental issues such as asbestos or deconstructive testing for unseen conditions. The facility assessments are not intended to be exhaustive, but rather to assess and highlight the major building deficiencies in four major categories:

1. Functional accommodations
2. Safety / security of staff and visitors
3. Code related deficiencies
4. Capital maintenance / building envelope

B. FACILITY ASSESSMENT REPORT

A brief summary of the existing conditions and deficiencies identified within each facility follows.

B.1. Utility and Sign Shop

B.2. Vehicle Storage

B.3. Fleet Maintenance and Shops

B.4. Salt Storage Building

B.5. Administration Trailer

B.6. Site

B.7. Fuel Island

B.8. Police Impound

Existing Site Conditions

B.1. UTILITY AND SIGN SHOP

The utility and sign shop building was built in the early to mid 1970's and is approximately 5,000 sf. It consists of a pre-engineered metal building with metal wall panels and roof. The exterior wall has approximately a 8 ft high concrete masonry unit base course.

The following photographs and captions summarize our findings:

Figure B.1.2: No code-required exit door

Figure B.1.3: Overhead door opening infilled with metal panel and wood studs

Figure B.1.1: Overall view of Utility and Sign Shop Building

Figure B.1.4: Overhead door jamb damaged and rusting

Figure B.1.5: Damaged / torn insulation and vapor barrier


Figure B.1.6: Damaged metal gutter at overhead door


Figure B.1.7: Depressed asphalt at door threshold causing ponding and drainage issues

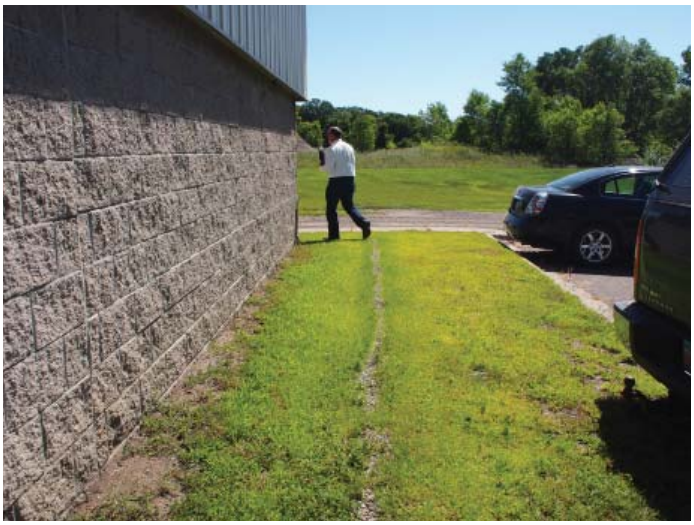


Figure B.1.8: Soil erosion at perimeter of building suggests evidence of gutters overflowing


Figure B.1.9: Hollow metal door and frame rusting and signs of moisture damage at masonry wall along grade

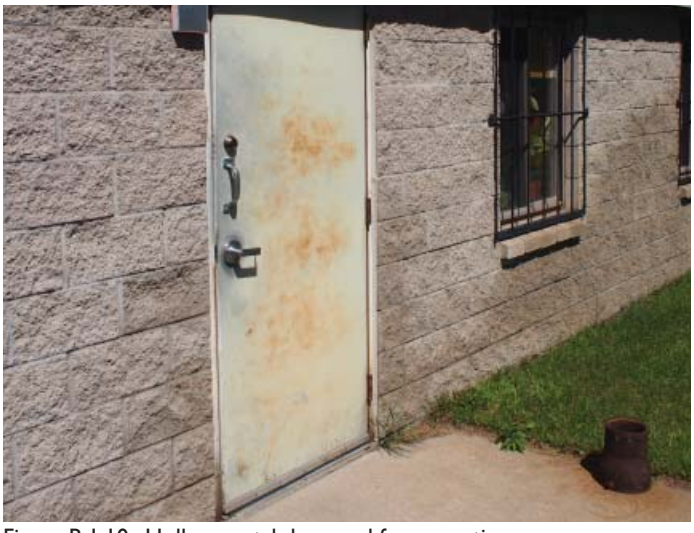


Figure B.1.10: Hollow metal door and frame rusting

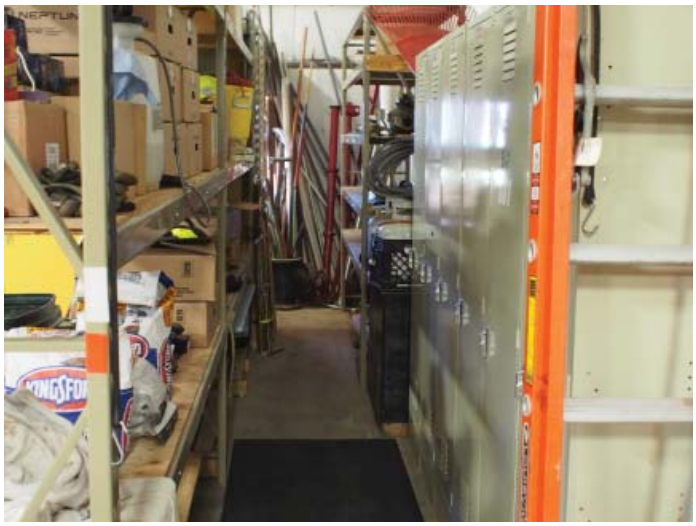


Figure B.1.11: Storage shelving placed too close together for safe access

Figure B.1.14: Evidence of roof leaks in sign shop area

Figure B.1.12: Exit door has deadbolt with thumb-turn which is not allowed by code

Figure B.1.15: Restroom is not handicap accessible

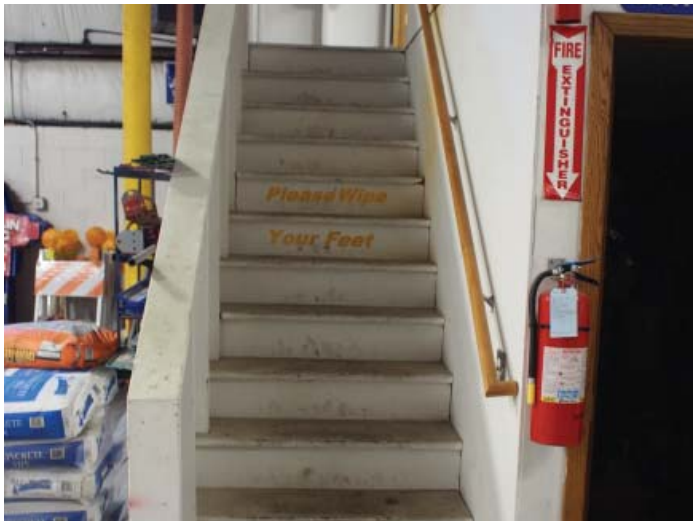


Figure B.1.13: Sign shop is not handicap accessible

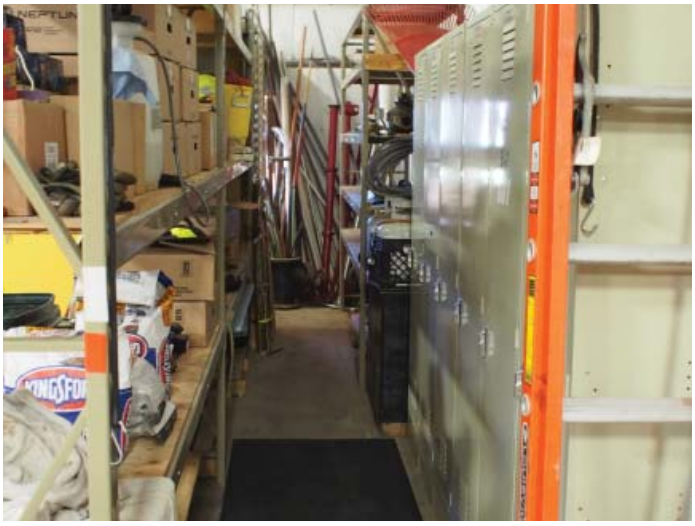


Figure B.1.16: Staff lockers are not handicap accessible

B.2 VEHICLE STORAGE

The Vehicle Storage building consists of a pre-engineered metal structure with insulated metal wall panels. The building is 13,228 sf and was built in the mid 1970's to early 1980's. An addition to the West end of the building was constructed similarly, the year of the addition is unknown.

The following photographs and captions summarize our findings:

Figure B.2.1: Overall view of Cold Storage Building

Figure B.2.2: Hollow metal door and frame on South facade is rusting

Figure B.2.3: Northwest exit door is stuck in closed position, does not meet code

Figure B.2.4: Building lacks floor drains in main storage area creating slip hazards from wet vehicles

Figure B.2.5: Condensate drain is located high on the wall causing rust stains on South facade

Figure B.2.8: Steel structure is showing evidence a failing finish and rusting

Figure B.2.6: Insulation and vapor barrier is damaged

Figure B.2.9: Settling of concrete apron at North overhead door has necessitated asphalt patching

Figure B.2.7: Exit door is locked with deadbolt, does not meet code

Figure B.2.10: Exterior metal panel cladding is damaged at North facade

B.3 FLEET MAINTENANCE AND SHOPS

The Fleet Maintenance and Shops Building is a concrete masonry block building with precast double T's for the roof structure. The building is 12,258 sf and was built in the mid 1970's to early 1980's.

The following photographs and captions summarize our findings:

- Existing restroom is not handicap accessible
- Exit doors are being locked using thumb-turn style deadbolt which does not meet code

Figure B.3.2: Exterior masonry jambs have been repaired at overhead door but lack proper sealing/finishing

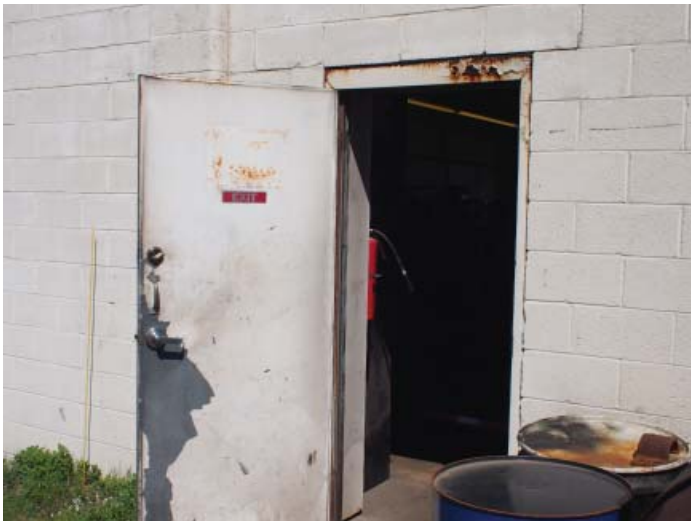


Figure B.3.3: Exterior hollow metal doors and frames are rusting

Figure B.3.1: Overall view of Fleet Storage Building

Figure B.3.4: Concrete apron at overhead doors is cracking and spalled

Figure B.3.5: Cracks are visible in exterior masonry walls on North and South facades

Figure B.3.6: Vertical cracks are visible in masonry pilaster at West facade

Figure B.3.7: Downspouts have eroded soil at base of wall/foundation causing potential drainage issues

Figure B.3.8: Moisture damage is visible at base of masonry wall, exterior finish is failing and chipping off

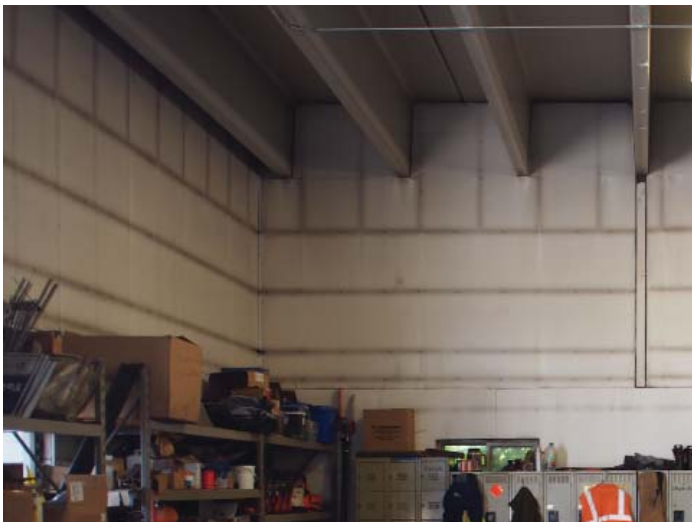


Figure B.3.9: Evidence of thermal bridging throughout the building as dirt has accumulated at areas of condensation aligning with the studs

Figure B.3.10: Staff lockers are not handicap accessible and are located in main storage area

Figure B.3.11: Concrete slab on grade is heavily worn, spalling and cracking

B.4 SALT STORAGE BUILDING

The salt storage building consists of a fabric roof structure supported by aluminum space frame set on round concrete foundation posts. The salt is kept from spilling out by precast concrete walls cantilevered up from the ground. The salt storage building covers 6,000 sf and was built in 2006. The building is in good shape and could be relocated if necessary.

The following photographs and captions summarize our findings:

Figure B.4.2: Precast wall panels and concrete foundation piers along exterior wall are in good condition

Figure B.4.3: Aluminum space frame structure appears in good condition

Figure B.4.1: Overall view of Salt Storage Building

Figure B.4.4: Overall fabric roof structure is in good condition

B.5 ADMINISTRATION TRAILER

The Administration Trailer is a 10 year old double-wide temporary trailer of approximately 1,600 sf.

The following photographs and captions summarize our findings:

Figure B.5.2: Main entrance lacks signage directing to accessible entrance

Figure B.5.3: Ceiling is starting to sag and separate at seam of trailer

Figure B.5.1: Overall view of Administration Trailer

Figure B.5.4: Exterior cladding is showing age and needs to be painted

Figure B.5.5: Hole in floor is covered with sheet metal

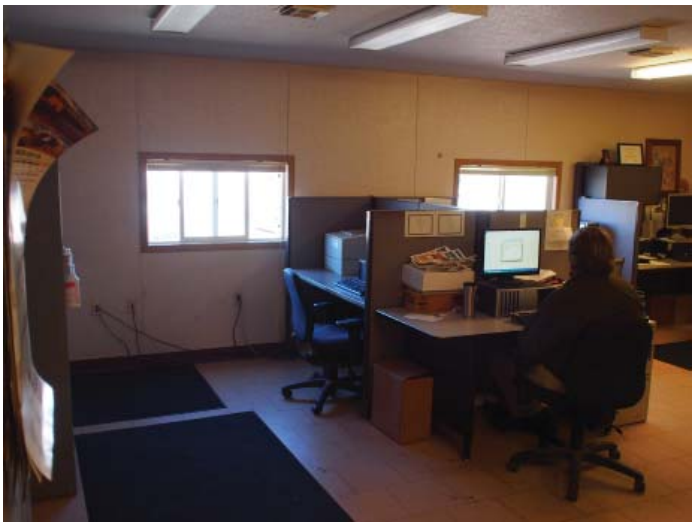


Figure B.5.8: Office space is insufficient for staff needs

Figure B.5.6: Areas of missing VCT floor finish

Figure B.5.9: Staff lockers are not handicap accessible

Figure B.5.7: VCT floor finish shows extensive wear

Figure B.5.10: Supply and waste pipes at lavatory are not insulated

Figure B.5.11: Mechanical systems are in good condition

Figure B.5.12: Electrical systems are adequate and in good condition

B.6 SITE

The current site encompasses two parcels separated by 142nd Avenue Northwest. The Northern parcel is 2.07 acres and is used for granular material storage along with the Utility and Sign Shops building located at the far North end. The southern parcel is 3.17 acres and contains the Administration Trailer, Fleet Storage Buildings and Salt Storage.

The following photographs and captions summarize our findings:

Figure B.6.1: Aerial view of Public Works site

Figure B.6.2: Major streets around the site are in good condition

Figure B.6.3: On-site pavement has multiple cracks and has less than 10 years of useful service life remaining

Figure B.6.4: Unpaved areas of site are in good condition with no signs of deep rutting

Figure B.6.5: Granular storage areas do not meet current EPA standards for cover

Figure B.6.6: Granular material storage bins are in good condition

Figure B.6.7: Yard storage is located throughout the grounds

B.7 FUEL ISLAND

The fuel island consists of two above-ground storage tanks for on-road and off-road diesel fuel. The tanks appear to be in good condition but the metering technology is dated.

The following photographs and captions summarize our findings:

Figure B.7.1: Above ground fuel storage tank

B.8 POLICE IMPOUND LOT

The police impound lot adjacent to Fleet Storage had no security cameras and insufficiently tall fences to prevent people from breaking into the vehicles, thus it has been temporarily moved to another location.

Figure B.8.1: Police Impound Lot

END OF SECTION

III. Operational and Functional Observations

A. INTRODUCTION

The space needs analysis and the site walk through provided an opportunity for the study team to assess the functionality and operational efficiency of the complex. The following represent observations from the site visit and pursuant space needs evaluation. The following is divided by building/site area and includes observed positive features and operational/functional deficiencies.

B. OBSERVATIONS

1. Administration/Personnel Areas

The entirety of the administrative and personnel areas is located in a trailer near the entrance to the site. The building houses offices, break room and crew areas.

Positive Features

- None

Operational Deficiencies

- Space inadequate for functions required on site.
- Building does not house all personnel.

2. Fleet Maintenance and Shops Building

The Fleet Maintenance and Shops building houses the Streets, Parks and Fleet Maintenance operations. It is configured as a drive through building with a large overhead door on each end and a central circulation aisle. Shop spaces are located on both sides of the aisle with Streets and Park shops, materials storage and vehicle storage located at the entry end of the building and Fleet Maintenance located on one side of the aisle at the exit end of the building.

Positive Features

- None

Operational/Functional Deficiencies

- Shops and storage areas are poorly defined and are not segregated from areas that generate vehicle exhaust fumes.
- The Fleet Maintenance area is insufficient for the fleet size.
- The current wash location is behind the vehicle repair bays which causes the bays to be blocked and water to flow into the bays.
- There is no efficient drainage system in the building
- The building clear height is not sufficient for lifting large vehicles.
- There are no personnel support areas in the building.

3. Utilities Shops Building

The Utilities Operation and Sign Operation are located in a separate building located remotely on the site. The building houses the offices and personnel areas for the Utilities Crew, Utilities shops and storage, Utilities vehicle storage, Utilities material storage and the Sign Shop operation.

Positive Features

- None

Operational/Functional Deficiencies

- The remoteness of the building reduces the ability for good communication between Utilities staff and other Public Works groups.
- The work spaces are inadequate to support the department's needs. Currently, six staff are working out of an space designed for roughly two individuals.
- The Sign production area is located on the second floor of the space with limited access.
- Storage of vehicles in shops creates exhaust/ventilation issues.
- Limited room for efficient storage of vehicles and equipment; vehicles require stacking causing operational inefficiency. and building does not fit all required equipment.

4. Vehicle Storage Building

The Vehicle Storage building consists of a two bay structure with overhead doors on each end of two circulation aisles. The building is used for vehicle and material storage.

Positive Features

- The building has sufficient clear heights for most activities.
- The building includes substantial square footage that has capability for use as storage or possibly use for another function.
- The building is heated.

Operational/Functional Deficiencies

- The structural configuration of building does not lend itself to efficient use as vehicle storage.
- The space is lacks a drainage system for vehicle run-off.

5. Salt Storage Building

The Salt Storage building is a fabric covered aluminum structure.

Positive Features

- The structure is sufficient for the amount of material stored.
- Circulation to and from the structure appears efficient, with ample maneuvering space for equipment.

Operational/Functional Deficiencies

- The structure is located adjacent to a wetlands area and runoff must be carefully controlled.

6. Exterior Material Storage

The site contains storage areas for a variety of materials and vehicles/equipment. These include stockpiles of granular materials, waste construction materials, construction materials, police impound and public works equipment and equipment implements.

Positive Features

- Sufficient space for storage of all assessed needs.

Operational/Functional Deficiencies

- Lack of site constraint results in materials stored in non-uniform manner and location.
- Lack of site constraint results in continued storage of items no longer required.

7. General Site Observations

The current site size and configuration limits the department's operational efficiency and opportunity for growth. The inefficient layout and shape of the site has facilitated the need to spread operational functions throughout the site creating increased site circulation and separation of functions. Site operational/functional deficiencies noted include the following.

- The road that bi-sects the site is virtually a public road with no separation from the Public Works yard and facility components.
- Site security is at a minimum/non-existent
- Employee and visitor parking is located in a manner forcing integration of private vehicle traffic with department vehicle traffic.
- Movement between buildings does not flow efficiently due to the location of the drive areas and entrances to the buildings.
- Building locations and elevations create inefficiencies in movement of materials and vehicles.
- There is no "front door" to the site.
- Public related activities (recycling, water sales) are located in areas of the site that force public vehicles deep into Public Works activities.
- Site size limits the ability to store large equipment. Equipment is typically stored off-site because of site constraints affecting operational efficiency.

END OF SECTION

IV. Space Programming

A. INTRODUCTION

The Space Program documentation is presented in two forms; Space Program Spreadsheets and Space Standards. The spreadsheets are summaries which identify personnel by position as well as support spaces necessary to accommodate efficient operations of the department. The Space Standards are diagrammatic drawings of each space which include the equipment that can be accommodated within the space to meet function, building code and accessibility guidelines. The Space Standards are included in the appendix at the end of this report. Both parts together form "The Program", a term used within the architectural industry to describe the inventory of all spaces to be accommodated in the future planning, budget definition and physical building design.

Assumptions made in developing the program:

The development of the program is based on planning for a 15-20 year projected need. The projection of the program for a 15-20 year time-frame is within a reasonable range to accurately project future needs. It is important to note, however, that as time passes, particularly if funding for a project is not immediately available or a capital campaign will be in process over the next few years, the original program should be reviewed, refined and re-assessed to keep up with changing growth patterns and refined time frame. These considerations will affect the size and costs of future facility projects.

How to read the Program Summaries:

Each space required for the department is listed along with the area required for those spaces. The usable Square footage of a facility includes all areas that are within the interior walls of each individual function. If a facility was planned according to only the net number, the building would be too small to accommodate all functions listed. The reason for this is that space is consumed by components of the building including columns, structure, thickness of walls, plumbing and mechanical shafts, efficiency of the circulation or corridor system and other areas that cannot be easily projected at this phase of the project. To accommodate space for those functions, we have provided a CIRCULATION FACTOR of an additional 20 to 35% of the Net area to be dedicated toward these uses. Generally speaking, buildings that require greater circulation, wide public waiting areas, or large public interface functions require larger efficiency factors. A factor of 35% is reasonable for this project type but could be considered conservative, depending upon the amount of open circulation space desired. The final row, TOTAL PROPOSED / USABLE SF is the number that should be used in the planning and space allocation for each department.

Summary of the Program Requirements:

The space needs are documented in a program which identifies the individual spaces required of the department. The program is based on requirements for a 15-20 year projected space need.

The program sheets are broken into the main operations of the department;

- Administration / Personnel
- Vehicle Maintenance
- Parks / Streets & Utilities Shops and Storage
- Fleet Storage (these areas are under the Building Type heading as "enclosed")

Summary of Existing Space Deficiency

Department	2015 Current Space	2030 Projected Need	Space Deficiency	% of Change
Public Works	32,000 sf	66,205 sf	34,205 sf	206.9%

Analysis / Summary of Findings:

Public Works Findings:

The existing Public Works facility is currently located just east of the Municipal Complex on the south edge of the City limits.

- Current operational offices are in a temporary trailer that lacks required operational areas
- Lack of adequate storage area
- Lack of fleet space (equipment stored outside)
- Lack of adequate and appropriate fleet maintenance area
- Lacks meeting and break areas
- No staff locker area
- Lacking required office areas
- Lacks Maintenance bay areas
- Operational/functional relationships of areas is disjointed
- The configuration of the buildings (office/shops/vehicle storage) results in most vehicles travelling through a very confined area causing significant congestion and a mix of pedestrian and vehicular traffic.

City of Ramsey Department of Public Works

Program of Space Needs

Space Description	Area	Dimension	Qty	Area	Remarks	Building Type enclosed	covered	exterior
ADMINISTRATION/PERSONNEL AREAS								
Reception/Waiting	100		1	100		100	-	-
Public Works Superintendent	225		1	225		225	-	-
Parks and Asst PW Superintendent	168		1	168		168	-	-
Utilities Department Supervisor	168		1	168	includes SCADA workstation	168	-	-
Parks Lead Person	120		1	144		144	-	-
Streets Lead Person	120		1	144		144	-	-
Spare Office	120		1	144		144	-	-
Copy/Work Room	100		1	100		100	-	-
Streets Assembly Room	198		1	198	includes lockers	198	-	-
Parks Assembly Room	254		1	254	includes lockers	254	-	-
Utilities Assembly Room	152		1	152	includes lockers	152	-	-
Break Room/Training	525		1	525	includes kitchenette	525	-	-
Male Restroom/Shower	300		1	300		300	-	-
Female Restroom/Shower	120		1	120		120	-	-
Mud Room/Alcove	80		1	80	at employee entry	80	-	-
Mechanical Rooms	400		1	400		400	-	-
Electrical Rooms	350		1	350		350	-	-
LAN/IT Room	100		1	100		100	-	-
Fitness / Storage Room	750		1	750	current size of fire station	750	-	-
Administration/Personnel Areas subtotal				4,422		4,422	-	-
circulation	35%			1,548		1,548	-	-
ADMINISTRATION/PERSONNEL AREAS TOTAL				**5,970**		**5,970**	**-**	**-**

City of Ramsey Department of Public Works

Program of Space Needs

Space Description	Area	Dimension	Qty	Area	Remarks	Building Type enclosed	covered	exterior
VEHICLE MAINTENANCE FACILITY								
Administration/Personnel								
Mechanic Office/Library	120		1	120		120	-	-
Male Restroom	80		1	80		80	-	-
Female Restroom	80		1	80		80	-	-
Administration/Personnel Areas subtotal				280		280	-	-
circulation	35%			98		98	-	-
Administration/Personnel Total				**378**		**378**	**-**	**-**
Repair Bays								
Truck Repair Bay		20 x 55	2	2,200		2,200	-	-
Auto Repair Bay		16 x 35	2	1,120		1,120	-	-
Repair Bays subtotal				3,320		3,320	-	-
circulation	20%			664		664	-	-
Repair Bays Total				**3,984**		**3,984**	**-**	**-**
Shops/Support/Parts								
Common Work Area	300		1	300	includes tire equip.	300	-	-
Lube/Compressor Room	500		1	500		500	-	-
Equipment Storage	300		1	300		300	-	-
Tool Crib	100		1	100		100	-	-
Tire Storage	300		1	300		300	-	-
Parts Storeroom	464		1	464		464	-	-
Shops/Support/Parts subtotal				1,964		1,964	-	-
circulation	20%			393		393	-	-
Shops/Support/Parts Total				***2,357***		***2,357***	**-**	**-**
VEHICLE MAINTENANCE FACILITY TOTAL				**6,719**		**6,719**	**-**	**-**

City of Ramsey Department of Public Works

Program of Space Needs

Space Description	Area	Dimension	Qty	Area	Remarks	Building Type enclosed	covered	exterior
PARKS SHOPS/STORAGE								
General Shop	1,000		1	1,000		1,000	-	-
Tool Storage	200		1	200		200	-	-
Small Equipment Storage	200		1	200		200	-	-
Consumables Storage	200		1	200		200	-	-
Material Storage	-		1	-	See Cold Storage	-	-	-
Parks Shops/Storage subtotal				1,000		1,000	-	-
circulation	20%			200		200	-	-
PARKS SHOPS/STORAGE TOTAL				**1,200**		**1,200**	**-**	**-**
STREETS SHOPS/STORAGE								
Sign Design	400		1	400	conditioned	400	-	-
Sign Fabrication	500		1	500		500	-	-
Sign Storage	500		1	500		500	-	-
Carpentry Shop	1,000		1	1,000		1,000	-	-
Welding Shop		30 x 50	1	1,500	could be in VMF	1,500	-	-
General Shop	1,000		1	1,000		1,000	-	-
Tool Storage	200		1	200		200	-	-
Consumables Storage	200		1	200		200	-	-
Material Storage	-		1	-	see cold storage	-	-	-
Streets Shops/Storage subtotal				5,300		5,300	-	-
circulation	35%			1,855		1,855	-	-
STREETS SHOPS/STORAGE TOTAL				**7,155**		**7,155**	**-**	**-**
UTILITIES SHOPS/STORAGE								
General Shop	1,000		1	1,000		1,000	-	-
Parts Storage	300		1	300		300	-	-
Tool/Equipment Storage	200		1	200		200	-	-
Material Storage	-		1	-	See Cold Storage	-	-	-
Utilities Shops/Storage subtotal				1,500		1,500	-	-
circulation	35%			525		525	-	-
UTILITIES SHOPS/STORAGE TOTAL				**2,025**		**2,025**	**-**	**-**

City of Ramsey Department of Public Works

Program of Space Needs

Space Description	Area	Dimension	Qty	Area	Remarks	Building Type enclosed	covered	exterior
COLD STORAGE								
Streets Materials	1,000		1	1,000		1,000	-	-
Utilities Materials	1,000		1	1,000		1,000	-	-
Parks Materials	1,000		1	1,000		1,000	-	-
Implements/Blades/etc	2,500		1	2,500	includes circulation	2,500	-	-
Shared Materials	2,000		1	2,000	barricades/cones/etc	2,000	-	-
Lumber Storage	400		1	400		400	-	-
Paving Materials - palletized	400		1	400		400	-	-
Cold Storage subtotal				8,300		8,300	-	-
circulation	20%			1,660		1,660	-	-
COLD STORAGE TOTAL				**9,960**		**9,960**	**-**	**-**
YARD STORAGE								
Truck Wash		20 x 50	2	2,000		2,000	-	-
Mower Blow Down		10 x 20	1	200		-	-	200
Antenna	40		1	40		-	-	40
Scrap Bins	200		4	800		-	-	800
Used Tire Storage	100		1	100		-	100	-
Salt Storage		70 x 100	1	7,000		-	7,000	-
Granular Material Storage		15 x 20	6	1,800		-	1,800	-
Granular Material Stockpiles		100 x 100	3	30,000		-	-	30,000
Material Storage	800		1	800	pipe, structures, etc	-	-	800
Generator		10 x 15	1	150		-	-	150
Fuel Island		14 x 30	2	840		-	840	-
Above Ground Fuel Storage	400		1	400		-	-	400
Recycling Center	43,560		1	43,560	containers near site entrance	-	-	43,560
Recycling Center Office/RR	140		1	140		140	-	-
Drying Bed		20 x 50	1	1,000		-	1,000	-
Impound Lot		10 x 20	20	4,000		-	4,000	-
Yard Storage subtotal				92,830		2,140	14,740	75,950
circulation	100%			92,830		2,140	14,740	75,950
YARD STORAGE TOTAL				**185,660**		**4,280**	**29,480**	**151,900**

City of Ramsey Department of Public Works

Program of Space Needs

Space Description	Area	Dimension	Qty	Area	Remarks	Building Type enclosed	covered	exterior
PARKING								
Employee		10 x 20	50	10,000		-	-	10,000
Visitor		10 x 20	2	400		-	-	400
Accessible		15 x 20	2	600		-	-	600
Agency Vehicles								
Interior Conditioned								
X-Small Equipment		8 x 8	18	1,152		1,152	-	-
Small Equipment		10 x 20	33	6,600		6,600	-	-
Medium Equipment		15 x 30	15	6,750		6,750	-	-
Large Equipment		15 x 40	7	4,200		4,200	-	-
Covered								
X-Small Equipment		8 x 8	0	-		-	-	-
Small Equipment		10 x 20	0	-		-	-	-
Medium Equipment		12 x 30	0	-		-	-	-
Large Equipment		12 x 40	0	-		-	-	-
Exterior								
X-Small Equipment		8 x 8	0	-		-	-	-
Small Equipment		10 x 20	3	600		-	-	600
Medium Equipment		12 x 30	5	1,800		-	-	1,800
Large Equipment		12 x 40	0	-		-	-	-
Down/Ready Line								
Auto/Light Truck		10 x 20	4	800		-	-	800
Truck		12 x 40	1	480		-	-	480
Parking subtotal				33,382		18,702	-	14,680
circulation - interior/heated storage	80%			14,962		14,962	-	-
circulation - exterior storage	100%			1,280		-	-	1,280
PARKING TOTAL				**49,624**		**33,664**	**-**	**15,960**
Site Subtotal				***268,313***		***70,973***	***29,480***	***167,860***
Site Circulation, Setbacks				201,235				
Stormwater Management				43,560				
SITE TOTAL				***513,108***				
				11.78	acres			

Department	Job Title	Duties	No.	
			Full Time	Seasonal
Administration				
PW/Streets	PW Superintendent	Department Head	1	
Parks	Parks and Asst PW Superintendent	Park Dept Supervisor/Asst. PW Superintendent	1	
Parks				
Parks	Parks Lead Person	Parks Maintenance/Manage seasonal staff	1	
Parks	Parks Maintenance Worker	Park Maintenance	1	
Parks	Parks Maintenance Worker	Park Maintenance	1	
Parks	Parks Maintenance Worker	Park Maintenance	1	
Parks	Parks Maintenance Worker	Park Maintenance/Irrigation Maintenance	1	
Parks	Future		2	
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Seasonal Staff	Park Maintenance		1
Parks	Intern	Park Administration/Event Coordination	1	
Streets				
Streets	Streets Lead Person	Supervise streets projects/staff	1	
Streets	PW Maintenance Worker	Street Maintenance/Traffic Signs	1	
Streets	PW Maintenance Worker	Street Maintenance	1	
Streets	PW Maintenance Worker	Street Maintenance/Fleet Maintenance	1	
Streets	PW Mechanic	Fleet Maintenance	1	
Streets	PW Maintenance Worker	Street Maintenance	1	
Streets	PW Maintenance Worker	Street Maintenance	1	
Streets	Future		2	
Streets	Seasonal Staff	Street Maintenance		1
Streets	Seasonal Staff	Street Maintenance		1
Streets	Seasonal Staff	Street Maintenance		1
Snow/Ice	Seasonal Staff	Snow Removal		1
Snow/Ice	Seasonal Staff	Snow Removal		1
Snow/Ice	Seasonal Staff	Snow Removal		1
Snow/Ice	Seasonal Staff	Snow Removal		1
Utilities				
Utilities	Utilities Supervisor	Utilities Dept Supervisor	1	
Utilities	Utilities Maintenance Worker	Utility Maintenance	1	
Utilities	Utilities Maintenance Worker	Utility Maintenance	1	
Utilities	Utilities Maintenance Worker	Utility Maintenance	1	
Utilities	Future		2	
Utilities	Seasonal Staff	Utility Maintenance		1
Utilities	Seasonal Staff	Utility Maintenance		1
Totals			25	19

#	Year	Make	Description	Department	Location	EQUIVALENT	SIZE	LARGE	SMALL	Enclosed/Tempered				Covered				Exterior				Down/Ready	
										12X40	12X30	10X20	8X8	12X40	12X30	10X20	8X8	12X40	12X30	10X20	8X8	12X30	10X20
301	2010	Ford	Crown Vic	Public Works	Public Works Shop	2.0	s	0	2			1											
303	2010	Ford	Crown Vic	Public Works	Public Works Shop	2.0	s	0	2			1											
316	2011	Ford	Crown Vic	Public Works	Public Works Shop	2.0	s	0	2			1											
317	2011	Ford	Crown Vic	Public Works	Public Works Shop	2.0	s	0	2			1											
318	2011	Ford	Crown Vic	Public Works	Public Works Shop	2.0	s	0	2			1											1
321	2012	Chevy	Tahoe	Police	Police Department	1.5	s	0	1.5														1
322	2012	Chevy	Caprice-Black	Police	Police Department	2.0	s	0	2														1
323	2012	Chevy	Caprice	Police	Police Department	2.0	s	0	2														1
328	2003	Haulin	Safety Trailer	Police	Police Department	0.5	s	0	0.5														1
331	2014	Chevy	Caprice	Police	Police Department	2.0	s	0	2														1
332	2013	Chevy	Tahoe 2WD	Police	Police Department	2.0	s	0	2														1
333	2013	Chevy	Tahoe 4WD	Police	Police Department	2.0	s	0	2														1
334	2013	Chevy	Malibu	Police	Police Department	2.0	s	0	2														1
339	2013	RC	Trailer	Police	Police Department	0.5	s	0	0.5														1
341	2014	Chevy	Caprice	Police	Police Department	2.0	s	0	2														1
342	2014	Chevy	Caprice	Police	Police Department	2.0	s	0	2														1
343	2015	Chevy	Tahoe	Police	Police Department	2.0	s	0	2														1
348	2004	Sled Bed	Trailer	Police	Police Department	0.5	s	0	0.5														1
351	2015	Ford	Explorer	Police	Police Department	2.0	s	0	2														1
352	2005	Ford	Taurus	Police	Municipal Center	2.0	s	0	2														1
353	2005	Ford	F150 Crew Cab	Police	Public Works Shop	1.5	s	0	1.5			1											
362	2006	Ford	Crown Vic	Police	Public Works Shop	2.0	s	0	2			1											
364	2006	Chevy	Impala	Police	Police Department	2.0	s	0	2														1
365	2006	Chevy	Impala	Police	Police Department	2.0	s	0	2														1
375	2007	Chevy	Impala	Police	Police Department	2.0	s	0	2														1
376	2007	Lincoln	MKZ	Police	Police Department	1.0	s	0	1														1
386	2008	Ford	Expedition	Police	Police Department	1.5	s	0	1.5														1
391	2009	Ford	Crown Vic	Police	Police Department	2.0	s	0	2														1
393	2009	Ford	Crown Vic	Police	Police Department	2.0	s	0	2														1
399	1999	Radar	Trailer	Police	Police Department	0.5	s	0	0.5														1
401	2005	Chevy	Colorado PU	Building Inspections	Municipal Center	1.5	s	0	1.5														1
402	2006	Chevy	1500 Ext Cab 4x4	Engineering	Public Works Shop	1.5	s	0	1.5			1											
403	2005	Ford	Taurus	Admin	Municipal Center	0.5	s	0	0.5														1
404	2005	Ford	Taurus	Admin	Municipal Center	0.5	s	0	0.5														1
405	2006	Ford	Staff Car	General PW	Public Works Shop	1.0	s	0	1			1											
409		Holder	Utility Tractor	Building Maintenance	Municipal Center	1.0	s	0	1														1
410	2012	Ford	Pick-up	Building Maintenance	Municipal Center	1.5	s	0	1.5														1
411	2015	GMC	Pick-up	Engineering	Public Works Shop	1.5	s	0	1.5			1											
501	1994	Ford	LNT-8000 Tanker 2	Fire	Fire Station #2	3.0	l	3	0													1	
504	1989	Ford	F250 Grass 1	Fire	Fire Station #1	2.5	l	2.5	0													1	
556	1999	HME	Engine 2	Fire	Fire Station #2	3.0	l	3	0													1	
557	2000	Ford	F450 Rescue 1	Fire	Fire Station #1	2.5	l	2.5	0													1	
558	2002	Ford	F150	Fire	Off Site	1.5	s	0	1.5													1	
559	2004	Ford	F550 Crew Rescue 2	Fire	Fire Station #2	2.5	l	2.5	0													1	
560	2003	Spartan	General Aerial	Fire	Fire Station #2	2.5	l	2.5	0													1	
561			SCBA Trailer	Fire	Fire Station #1	1.0	s	0	1													1	
562	2003	Ford	F350 Grass 2	Fire	Fire Station #2	2.5	l	2.5	0													1	
563	2005	Ford	F150 4x4 PU	Fire	Off Site	1.5	s	0	1.5														1
564	2008	Ford	Expedition Chief	Fire	Off site	1.5	s	0	1.5														1
565	2008	Spartan	Fire Engine 21	Fire	Fire Station #2	3.0	l	3	0													1	
566	2011	Ford	F150	Fire	Off Site	1.5	s	0	1.5														1
567	2014	Rosenbaurer	Tanker	Fire	Fire Station #2	3.0	l	3	0													1	
603	1999	John Deere	Motor Grader	Streets	Public Works Shop	3.0	l	3	0			1											
607	1998	Felling	Trailer	Streets	Public Works Shop	0.5	s	0	0.5												1		
612	1984	Elgin	3 Wheel Sweeper	Storm Water	Public Works Shop	0.5	l	0.5	0		1												
613		Spaulding	Asphalt Trailer	Streets	Public Works Shop	0.5	s	0	0.5										1				
619	1991	Brush Bandit	Brush Chipper	Parks	Public Works Shop	0.5	s	0	0.5				1										
621		Roll-Pac	Steel Drum Compactor	Streets	Public Works Shop	0.5	s	0	0.5				1										
622	1998	Kawasaki	Utility Vehicle	Parks	Public Works Shop	0.5	s	0	0.5			1											
628	1998	John Deere	Mower	General PW	Public Works Shop	0.5	s	0	0.5				1										
632	1999	Sterling	Single Axle Plow Truck	Streets	Public Works Shop	2.5	l	2.5	0		1												
634	2001	Case	Tractor Backhoe	Storm Water	Public Works Shop	2.0	l	2	0		1												
635	2001	John Deere	Mower	General PW	Public Works Shop	0.5	s	0	0.5				1										
636	2002	Sterling	Single Axle Plow Truck	Streets	Public Works Shop	2.5	l	2.5	0		1												
637	2002	Chevrolet	Pick-up	Streets	Public Works Shop	1.5	s	0	1.5			1											
638	2003	Chevrolet	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
639	2003	Kawasaki	Utility Vehicle	Parks	Public Works Shop	1.5	l	1.5	0			1											
640	2003	Ford	Pick-up	Streets	Public Works Shop	1.5	l	1.5	0			1											
641	1995	Chevrolet	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
642	2004	Elgin	3 Wheel Sweeper	Storm Water	Public Works Shop	2.5	l	2.5	0		1												
644	2004	International	Single Axle Plow Truck	Streets	Public Works Shop	2.5	l	2.5	0		1												
645	2004	Bobcat	Tool cat	Parks	Public Works Shop	1.5	s	0	1.5				1										
648	2006	Bison	Trailer	Parks	Public Works Shop	0.5	s	0	0.5												1		
650	1989		Trailer	Parks	Public Works Shop	0.5	s	0	0.5												1		
651	2005	Chevrolet	Pick-up	Utility	Public Works Shop	1.5	s	0	1.5			1											
652	2005	Chevrolet	1-Ton	Utility	Public Works Shop	2.0	l	2	0		1												
653	2006	Ford	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
654	2006	Ford	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
655	2006	Trackless	Utility Tractor	Snow	Public Works Shop	0.5	s	0	0.5				1										
659	2006	Exmark	Mower	Parks	Public Works Shop	0.5	s	0	0.5				1										
660	2003	Gilcrest	Self Propelled Paver	Streets	Public Works Shop	1.5	s	0	1.5				1										
661	2007	Stone	Steel Drum Compactor	Streets	Public Works Shop	0.5	s	0	0.5				1										
662	2006	Sterling	Tandem Axle Plow Trucl	Streets	Public Works Shop	3.0	l	3	0	1													

#	Year	Make	Description	Department	Location	EQUIVALENT	SIZE	LARGE	SMALL	Enclosed/Tempered				Covered				Exterior				Down/Ready	
										12X40	12X30	10X20	8X8	12X40	12X30	10X20	8X8	12X40	12X30	10X20	8X8	12X30	10X20
663	2007	Kawasaki	Utility Vehicle	Parks	Public Works Shop	1.5	s	0	1.5			1											
664	2007	Chevrolet	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
665	2007	Chevrolet	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
667	2007	Chevrolet	Pick-up	Utility	Public Works Shop	1.5	s	0	1.5			1											
668	2007	Sterling	Tandem Axle Plow Trucl	Streets	Public Works Shop	3.0	l	3	0	1													
669	2007	International	Single Axle Water Truck	Parks	Public Works Shop	2.5	l	2.5	0		1												
671	2008	Bobcat	Skid Steer	General PW	Public Works Shop	0.5	s	0	0.5				1										
672	2009	Sterling	Single Axle Plow Truck	Streets	Public Works Shop	2.5	l	2.5	0		1												
673	2009	Sterling	Tandem Axle Jetter Truc	Utility	Public Works Shop	3.0	l	3	0	1													
674	2009	Ford	Pick-up	Parks	Public Works Shop	1.5	s	0	1.5			1											
675	2010	Chevrolet	1-Ton	Parks	Public Works Shop	2.0	l	2	0		1												
676	2010	Chevrolet	1-Ton	Streets	Public Works Shop	2.0	l	2	0		1												
678	2013	Ford	1-Ton	Parks	Public Works Shop	2.0	l	2	0		1												
679	2014	Toro	Large Area Mower	Parks	Public Works Shop	1.0	s	0	1			1											
680	2014	Ford	1-Ton	Streets	Public Works Shop	2.0	l	2	0		1												
681	2015	Ford	1-Ton	Utility	Public Works Shop	2.0	l	2	0		1												
682	2015	International	Single Axle Plow Truck	Streets	Public Works Shop	2.5	l	2.5	0		1												
683	2015	ExMark	Mower	Parks	Public Works Shop	0.5	s	0	0.5				1										
684	2015	ExMark	Mower	Parks	Public Works Shop	0.5	s	0	0.5				1										
685	2015	ExMark	Mower	Parks	Public Works Shop	0.5	s	0	0.5				1										
686	2015	Kubota	AG Tractor	Streets	Public Works Shop	0.5	s	0	0.5										1				
687	2015	Bobcat	Tool cat	Parks	Public Works Shop	0.5	s	0	0.5				1										
688	2015	Case	Wheel Loader	Streets	Public Works Shop	2.0	s	0	2			1											
689	2015	Kubota	Utility Vehicle	Parks	Public Works Shop	1.5	s	0	1.5			1											
690	2015	Kubota	Mower	Streets	Public Works Shop	0.5	s	0	0.5				1										
801		Cat	Portable Generator	Utility	Public Works Shop	0.5	s	0	0.5				1										
			Programmable Display B	Streets	Public Works Shop	0.5	s	0	0.5				1										
			Culvert Trailer	Streets	Public Works Shop	0.5	s	0	0.5										1				
			Roller Trailer	Streets	Public Works Shop	0.5	s	0	0.5										1				
		Zodiac Fire Boat	Boat	Fire	Fire Station #1								1										
		2003 Mercury 25 HP Motor																					
		& Karavan Trailer																					
	2004	Police ATV Pola	ATV	Police	Police Department																		
		Police Single AT	Trailer	Police	Police Department																		
	2007	Felling Trailer	Trailer	Streets	Public Works Shop														1				
	2015	Polaris Ranger 5	ATV	Police	Police Department																		
	2013	Police Range Tra	ATV	Police	Police Department																		
	2013	Felling Trailer	Trailer	Streets	Public Works Shop														1				
	2011	Old Town Twin	Canoe	Parks	Public Works Shop																		
	2011	Old Town Twin	Canoe	Parks	Public Works Shop																		
	2011	Old Town Saran	Kayak	Parks	Public Works Shop																		
	2011	Johnson Rouge I	Kayak	Parks	Public Works Shop																		
		Future small vehicles				1.0	s	0	1			1											
		Future small vehicles				1.0	s	0	1			1											
		Future small vehicles				1.0	s	0	1			1											
		Future small vehicles				1.0	s	0	1			1											
		Future large vehicles				3.0	l	3	0	1													
		Future large vehicles				3.0	l	3	0	1													
								78	107	5	15	32	18	0	0	0	0	0	6	3	0	11	32
								185		79												1.1	3.2

V. Facility Comparisons

A. INTRODUCTION

This section of the report provides a comparative analysis between the characteristics of the Ramsey Public Works facilities and the characteristics of the same departments in other comparable Minnesota municipalities. A comparative analysis of other municipalities, if used as a checks-and-balances comparison to the developed space program, can provide a quick snap-shot of the overall range of facilities that meet relatively similar requirements. The selection of comparable cities is primarily established based on population. Therefore it should be noted that variables in staffing, area of the city and age of existing facilities can create a range in the facilities. We do not utilize a facility comparison as the only means of projected space needs and a direct comparison is never truly possible, as no two cities are identical, the process can identify irregularities and areas to consider or reconsider or can confirm the projected program numbers, providing validity to the developed program.

One item to be particularly aware of when comparing similar city's facilities is to recognize that these figures may not represent current planning that is underway to expand those facilities. The asterisks and key notes, noted at the bottom of each analysis, provide further information to qualify the information provided in the spreadsheet. Projected or in-process expansion is an indicator of current space deficiencies, particularly important in weighing the relevance of their current facilities sizes to those projected for the City of Ramsey. The total of the comparative studies are averaged for ease of quick review, however each municipality's characteristics should be reviewed individually to best understand how their facility size (with projected expansion, if indicated) supports the population, and then compared with the projected numbers for the Ramsey's facilities.

B. COMPARATIVE ANALYSIS METHODOLOGY

The methodology for identifying the municipalities to be considered for the analysis consists of collecting a variety of information. BKV Group researched and identified a few municipalities, or "sister-cities", that seem to be similar in nature, size or community demographics from which to base the comparisons. In our analysis, a range of near-metro and out-state municipalities was used to provide a broad cross-section of comparative information. Other criteria used to select comparison information included geographic location along a major highway system or major transportation corridor.

The cities in this comparison were identified and ranked by municipality with a population range of 16,000 to 40,000. The population differentiation is an important designation, as it often correlates with the facility size, number of employees it is supporting, and square footage per capita of residents served. However, the size of a municipal public works facility can vary greatly from one to another depending on the types of services provided and the geographic size of the area serviced.

C. ANALYSIS / SUMMARY OF FINDINGS

Comparison of Existing Facility:

The comparative analysis for the public works facility indicates that the City of Ramsey's Public Work's facility is similar to the comparable municipalities' facilities. A major factor in considering the usefulness of a public works facility is the efficiency of the layout and movement of vehicles and materials. The layout of the existing facility creates inefficiency in operation flow, segregating personnel and provides marginal fleet maintenance and storage. Overall, the facility is greatly undersized when compared to similar municipalities.

Projections:

When comparing Ramsey's projections for the 2030 timeframe, the projected facility size is within the range of other municipalities in the area. The projected requirements for the Ramsey Public Works facility is primarily based on providing adequate vehicle storage, service bays and proper staff support space.

In the comparison below 15 Minnesota cities are listed ranging in population from 16,500 to 39,000. With public works facilities that range in size from 44,900 square feet to 86,680 square feet, with the average facility size being 64,537 square feet. As a snap shot Ramsey's existing public works facilities totals at approximately 32,000 square feet which is well below the current public works standards. The programmed area based on the size and operations of the City of Ramsey is 66,205 square feet, which is in line with current area requirements for public works operations.

Public Works - Space Comparison

Municipality	Population (2013)	Municipality Area (sq m.)	Site Size (acres)	Facility Size (gsf) [1]	Notes
Red Wing	16,513	41.19	8.03	57,310	
Willmar	19,680	15.95	16.96	68,600	
Northfield	20,581	8.61	10.82	52,400	
Golden Valley	20,845	10.55	1.68	54,400	
Farmington	22,167	14.94	6.76	44,970	
Crystal	22,588	5.88	5.30	63,000	Built in 2015, $12.8M
Elk River	23,447	43.82	17.47	83,244	Fleet 44,144 sf, Mechanics 13,300 sf, Shops 18,400 sf, Office 7,400 sf
Prior Lake	24,408	18.33	11.40	48,453	
Chanhassen	24,432	22.88	7.52	85,250	
White Bear Lake	24,555	8.66	4.23	55,259	
Austin	24,763	10.84	14.04	68,960	
Savage	28,639	16.45	14.51	66,600	29,000 sf addition in 2012
Andover	31,709	34.83	14.99	86,680	Size reflects 2015 needs assessment, current size is 43,680 sf
Cottage Grove	35,339	37.48	11.27	63,922	
Shakopee	39,167	29.32	12.52	69,000	
Average	**25,256**	**21.32**	**10.50**	**64,537**	

Ramsey (Existing)	**24,935**	**29.79**	**7.74**	**32,000**	
(Proposed GSF)			**11.59**	**66,205**	

General Notes:

1. Facility size does not include area for granular storage buildings.

END OF SECTION

VI. Master Planning Concept Options

A. INTRODUCTION

This portion of the study is the next step after the completion of the assessment of the existing facilities, operational analysis and space programming. This process involves the planning team and the City discussing all possible options to address operational space, as detailed in the program analysis, that will address the long term requirements of the City's Public Works department. Site options consider a variety of selection criteria such as: existing infrastructure locations, expansion capabilities, staff access, parking, zoning, easements, public access to a recycling center, existing and anticipated roadway improvements, etc. And while not a driver for study, the team did assess each plan and pros and cons associated with possible overall area development. The potential options were reviewed with the City planning team to assure that all viable options are being considered.

Concept Plan Development

The concept plans and the site master plan options were developed based upon achieving the identified priorities, goals and common vision of the city and public works department. The four concept planning options identified some core planning principals:

1. Provide adequate and appropriate building / operational area required for the Public Works Department
2. Provide adequate and appropriate site area and circulation needed for public works equipment & operations
3. Allow for future expansion
4. Create site layouts that promote operational efficiency
5. Separate public and public works traffic flow and access

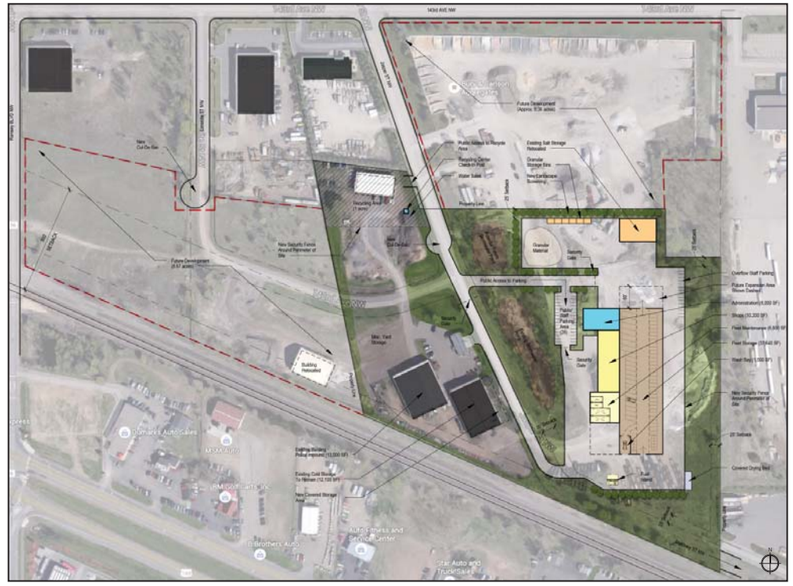
The following is a summary of the four options developed:

- **Option A** – construct a new public works operations east of Jasper and utilize some existing structures for storage.
- **Option B** - construct an entirely new public works facility east of Jasper.
- **Option C** – construct a new public works operations east of Jasper and utilize some existing structures for storage.
- **Option D** - construct a new public works operations on the west side of Jasper and utilize some existing structures for storage.

END OF SECTION

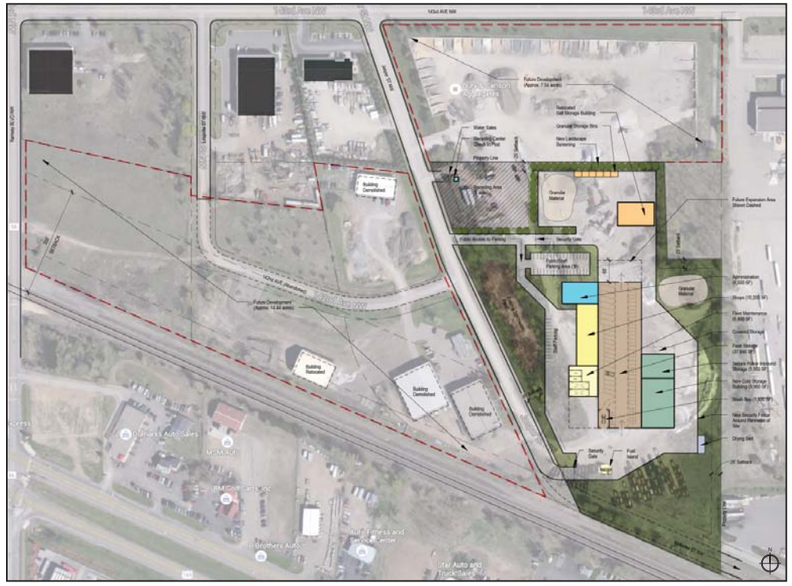
Preferred Options

Option A



Total Site Area: 15.50 acres
Total Developable Area: 18.03 acres

Option B



Total Site Area: 11.40 acres
Total Developable Area: 21.98 acres

Additional Options Studied

Option C

Total Site Area: 13.62 acres
Total Developable Area: 19.80 acres

Option D

Total Site Area: 9.68 acres
Total Developable Area: 23.91 acres

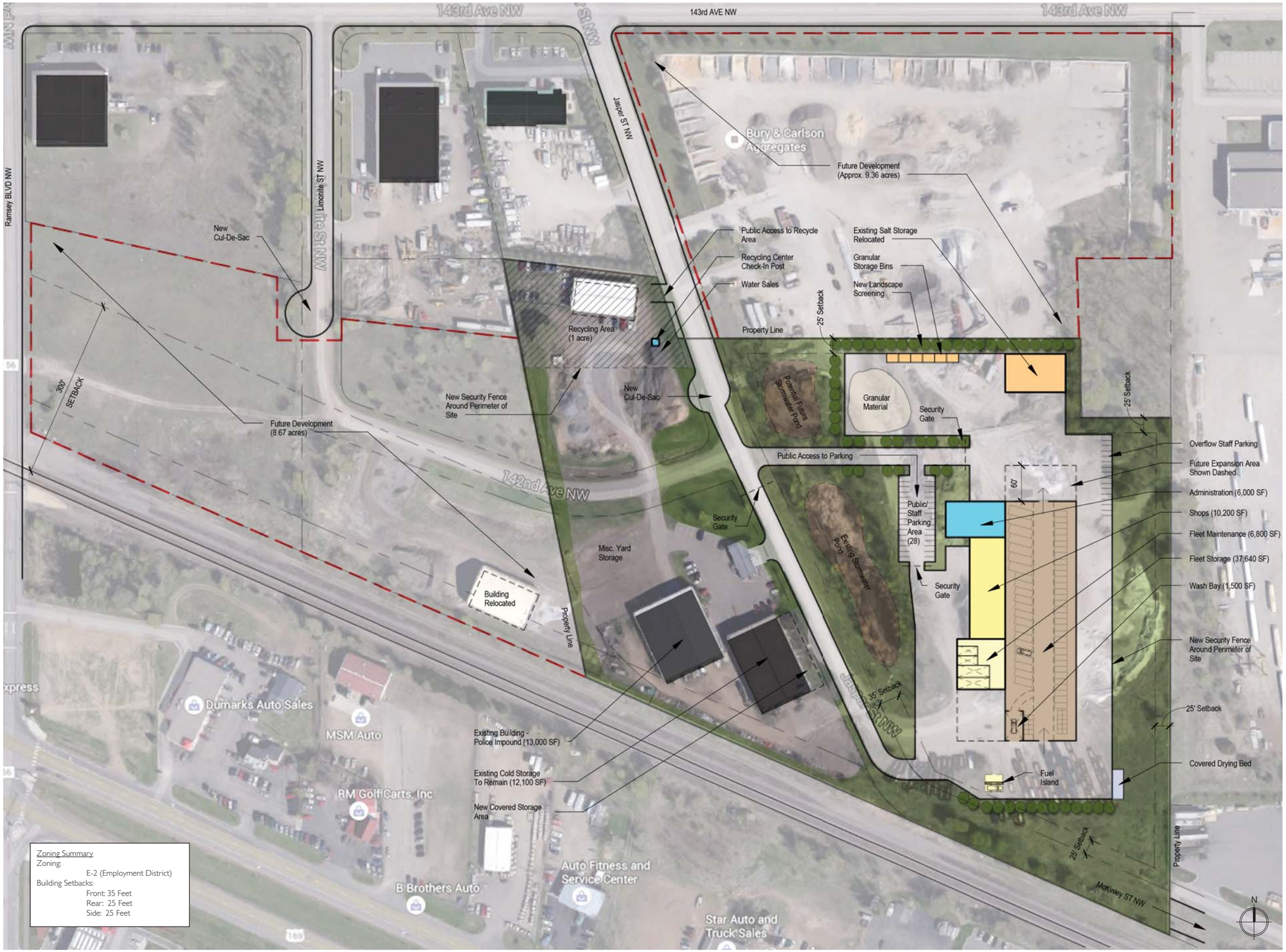
BKV GROUP

Project #: 1937.02

City of Ramsey, MN

Public Works Study

11/18/2015



Option A

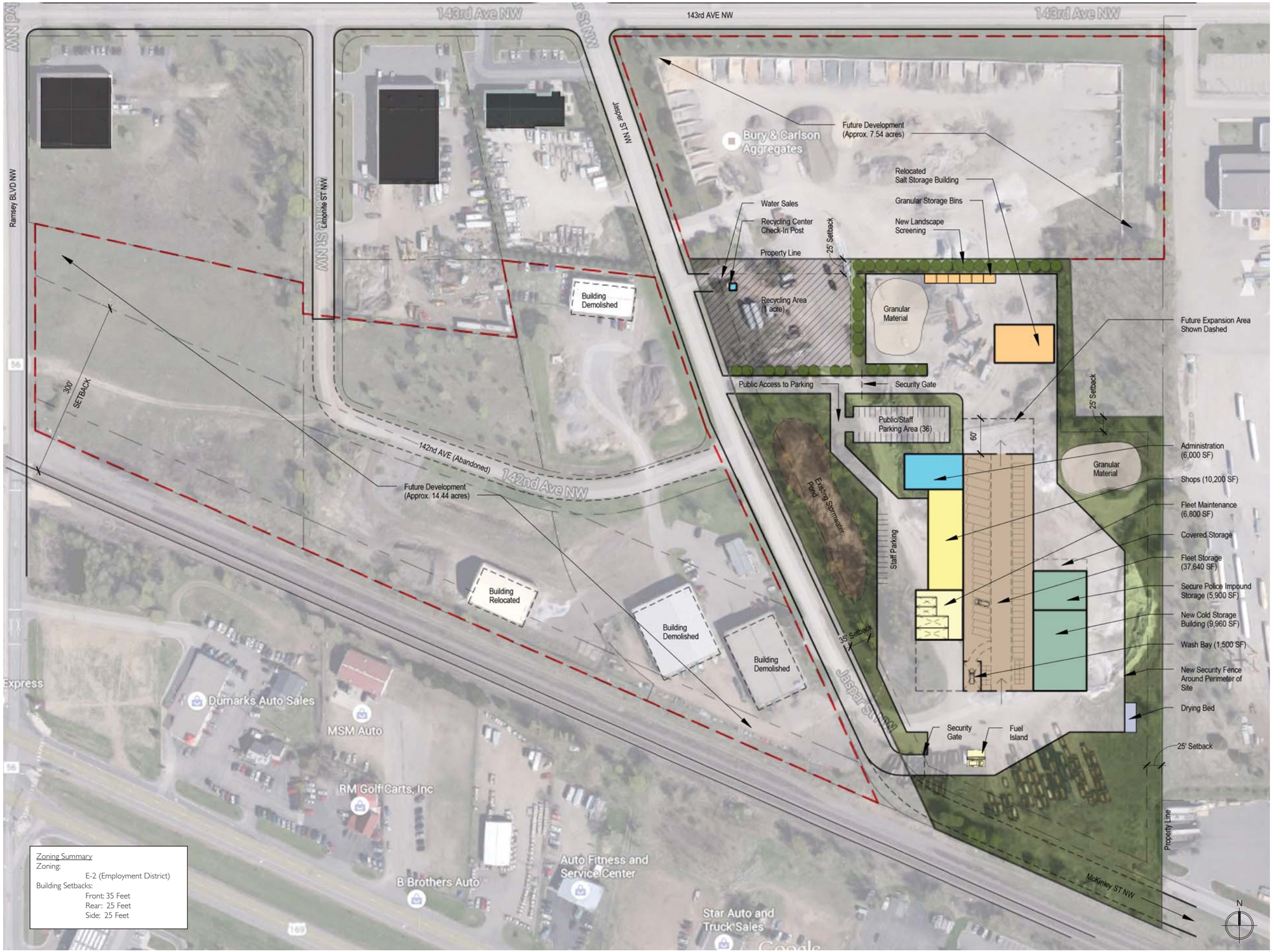
15.50 acres

Pros:

- Utilizes existing cold storage buildings
- Efficient centralized operation / circulation
- Room for future growth / expansion
- Existing stormwater pond can remain in-place

Cons:

- Salt storage building needs to be relocated



Pros:

- Operations are centralized with efficient circulation
- Room for future expansion
- Existing stormwater pond can remain in-place

Cons:

- New cold storage/police impound building required
- Salt storage building needs to be relocated

Option B

11.40 acres

City of Ramsey, MN
Public Works Study
11/18/2015

Project #: 1937.02

VII. Project Cost Estimates

A. INTRODUCTION

This section of the report looks at the cost associated with each of the master plan options. These estimates are general in nature at this early stage of planning. However the estimated costs are based on historic cost for public works construction in our region.

There are a number of possible project aspects that can affect the cost of a project, such as:

- Poor soil conditions
- Contaminated soil conditions from previous uses
- Level of ground water is high
- Restrictive development standards
- Higher requirement for sustainability such as LEED

In general the square foot cost shown in the following estimates represent the mean range that we would anticipate for construction to occur in 2016. The construction industry is currently indicating anticipated inflation higher than what has occurred over the past 5 years. While there are many factors that can effect bidding climates , it is anticipated that yearly escalation cost will be in the 4% to 6% range. In the last year we have seen a dramatic spike in construction cost as we came out of the recession. For this reason we would suggest that the City move ahead with project planning this upcoming year with the goal to start construction in spring of 2017.

The estimated cost for each of the four options with inflation added are as follows:

Option A

- Construction $11,563,571
- Soft Cost Estimate $1,500,000
- **Estimated 2017 Total Project Cost $13,063,571**

Option B

- Construction $12,226,835
- Soft Cost Estimate = $1,500,000
- **Estimated 2017 Total Project Cost $13,726,835**

Option C

- Construction $11,508,446
- Soft Cost Estimate = $1,500,000
- **Estimated 2017 Total Project Cost $13,008,446**

Option D

- Construction $11,343,071
- Soft Cost Estimate = $1,500,000
- **Estimated 2017 Total Project Cost $12,843,071**

The difference between the high and low estimate is $883,764. Since all concept plans are based on providing the same amount of building area the primary difference in the cost is based on:

1. Reuse of existing or new cold storage buildings
2. Relocation of the existing salt storage shed
3. Amount of site development required

Site Option A:

A. Construction Estimate:

1. 6,000 SF Office Building at $250 / SF = $1,500,000
2. 10,200 SF Shop Space at $180 / SF = $1,836,000
3. 6,800 SF Fleet Maintenance at $200 / SF = $1,360,000
4. 39,140 SF Fleet Storage at $125 / SF = $4,892,500
5. Remodel Cold Storage Buildings = $250,000
6. New Fueling Island with above ground tanks = $200,000
7. Move Salt Storage = $50,000
8. Demolition, Fence and Site Development = $400,000
9. Design & Construction contingency at 5% = $524,425

Construction Estimate = $11,012,925

B. Soft Cost Estimate (Typically Include**):**

1. A/E Fees
2. Legal Counsel Review
3. Reimbursable Expenses
4. Geotechnical Report
5. Data / Telecom Wiring
6. A/V Systems for Training Room
7. Survey
8. CM / Project Management Fees
9. FF&E (Furniture, Fixtures and equipment)
10. SAC (sewer connection fees through Met Council)
11. WAC (water connection fees)
12. Bond costs
13. Plan review fee
14. Bid Advertising
15. Special Testing (construction)
16. Bid document printing
17. Builders Risk Insurance
18. General Project Contingency

Soft Cost Estimate = $1,400,000

Estimated Total Project Cost for 2016 = $12,412,925

This estimate is based on 2016 construction values.

Based on construction occurring in 2017 cost should be adjusted by 5% to allow for anticipated inflation.

Inflated Construction Estimate for 2017 = $11,012,925 x 5% = $11,563,571
Soft Cost Estimate = $1,500,000

Estimated 2017 Total Project Cost $13,063,571

Site Option B:

A. Construction Estimate:

1. 6,000 SF Office Building at $250 / SF = $1,500,000
2. 10,200 SF Shop Space at $180 / SF = $1,836,000
3. 6,800 SF Fleet Maintenance at $200 / SF = $1,360,000
4. 39,140 SF Fleet Storage at $125 / SF = $4,892,500
5. 15,860 SF Cold Storage Building at $60 / SF = $951,600
6. New Fueling Island with above ground tanks = $200,000
7. Move Salt Storage = $50,000
8. Demolition, Fence and Site Development = $300,000
9. Design & Construction contingency at 5% = $554,505

Construction Estimate = $11,644,605

B. Soft Cost Estimate (Typically Include**):**

1. A/E Fees
2. Legal Counsel Review
3. Reimbursable Expenses
4. Geotechnical Report
5. Data / Telecom Wiring
6. A/V Systems for Training Room
7. Survey
8. CM / Project Management Fees
9. FF&E (Furniture, Fixtures and equipment)
10. SAC (sewer connection fees through Met Council)
11. WAC (water connection fees)
12. Bond costs
13. Plan review fee
14. Bid Advertising
15. Special Testing (construction)
16. Bid document printing
17. Builders Risk Insurance
18. General Project Contingency

Soft Cost Estimate = $1,400,000

Estimated Total Project Cost for 2016 = $13,044,605

This estimate is based on 2016 construction values.

Based on construction occurring in 2017 cost should be adjusted by 5% to allow for anticipated inflation.

Inflated Construction Estimate for 2017 = $11,644,605 x 5% = $12,226,835
Soft Cost Estimate = $1,500,000

Estimated 2017 Total Project Cost $13,726,835

Site Option C:

A. Construction Estimate:

1. 6,000 SF Office Building at $250 / SF = $1,500,000
2. 10,200 SF Shop Space at $180 / SF = $1,836,000
3. 6,800 SF Fleet Maintenance at $200 / SF = $1,360,000
4. 39,140 SF Fleet Storage at $125 / SF = $4,892,500
5. Remodel Cold Storage Buildings = $250,000
6. New Fueling Island with above ground tanks = $200,000
7. Move Salt Storage = $50,000
8. Demolition, Fence and Site Development = $350,000
9. Design & Construction contingency at 5% = $521,925

Construction Estimate = $10,960,425

B. Soft Cost Estimate (Typically Include**):**

1. A/E Fees
2. Legal Counsel Review
3. Reimbursable Expenses
4. Geotechnical Report
5. Data / Telecom Wiring
6. A/V Systems for Training Room
7. Survey
8. CM / Project Management Fees
9. FF&E (Furniture, Fixtures and equipment)
10. SAC (sewer connection fees through Met Council)
11. WAC (water connection fees)
12. Bond costs
13. Plan review fee
14. Bid Advertising
15. Special Testing (construction)
16. Bid document printing
17. Builders Risk Insurance
18. General Project Contingency

Soft Cost Estimate = $1,400,000

Estimated Total Project Cost for 2016 = $12,360,425

This estimate is based on 2016 construction values.

Based on construction occurring in 2017 cost should be adjusted by 5% to allow for anticipated inflation.

Inflated Construction Estimate for 2017 = $10,960,425 x 5% = $11,508,446
Soft Cost Estimate = $1,500,000

Estimated 2017 Total Project Cost $13,008,446

Site Option D:

A. Construction Estimate:

1. 6,000 SF Office Building at $250 / SF = $1,500,000
2. 10,200 SF Shop Space at $180 / SF = $1,836,000
3. 6,800 SF Fleet Maintenance at $200 / SF = $1,360,000
4. 39,140 SF Fleet Storage at $125 / SF = $4,892,500
5. Remodel Cold Storage Buildings = $250,000
6. New Fueling Island with above ground tanks = $200,000
7. Demolition, Fence and Site Development = $250,000
8. Design & Construction contingency at 5% = $514,425

Construction Estimate = $10,802,925

B. Soft Cost Estimate (Typically Include**):**

1. A/E Fees
2. Legal Counsel Review
3. Reimbursable Expenses
4. Geotechnical Report
5. Data / Telecom Wiring
6. A/V Systems for Training Room
7. Survey
8. CM / Project Management Fees
9. FF&E (Furniture, Fixtures and equipment)
10. SAC (sewer connection fees through Met Council)
11. WAC (water connection fees)
12. Bond costs
13. Plan review fee
14. Bid Advertising
15. Special Testing (construction)
16. Bid document printing
17. Builders Risk Insurance
18. General Project Contingency

Soft Cost Estimate = $1,400,000

Estimated Total Project Cost for 2016 = $12,202,925

This estimate is based on 2016 construction values.

Based on construction occurring in 2017 cost should be adjusted by 5% to allow for anticipated inflation.

Inflated Construction Estimate for 2017 = $10,802,925 x 5% = $11,343,071
Soft Cost Estimate = $1,500,000

Estimated 2017 Total Project Cost $12,843,071

END OF SECTION

City of Ramsey
Public Works Study
Proposed Project ImplementationSchedule
November 12, 2015

BKV GROUP

Task Name	2015	2016	2017	2018
	Jun Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun Jul
Public Works Study + Project				
BKV Group Study				
Development Review Team Meeting	10/7			
Public Works Committee Meeting	10/20			
Planning Commission Meeting	11/12			
Public Works Planning Committee Review	11/17			
City Council Workshop	11/24			
City Council Regular Session	12/8			
Issue Request for Proposals		1/25		
RFP Interview and Selection Process				
Award & Start Design Process		5/17		
Schematic Design Phase				
Design Development Phase				
Construction Document Phase				
Bidding & Award Phase				
Construction Phase				
Move Into New Facility				6/4

Task	Project Summary	Inactive Summary	Manual Summary	External Milestone			
Split	External Tasks	Manual Task	Start-only	Progress			
Milestone	External Milestone	Duration-only	Finish-only	Deadline			
Summary	Inactive Milestone	Manual Summary Rollup	External Tasks				

Appendix B. Acknowledgments

ACKNOWLEDGMENTS

BKV Group would like to thank and acknowledge the time, commitment, and important contributions made by the City's staff and leadership, throughout this process, which included:

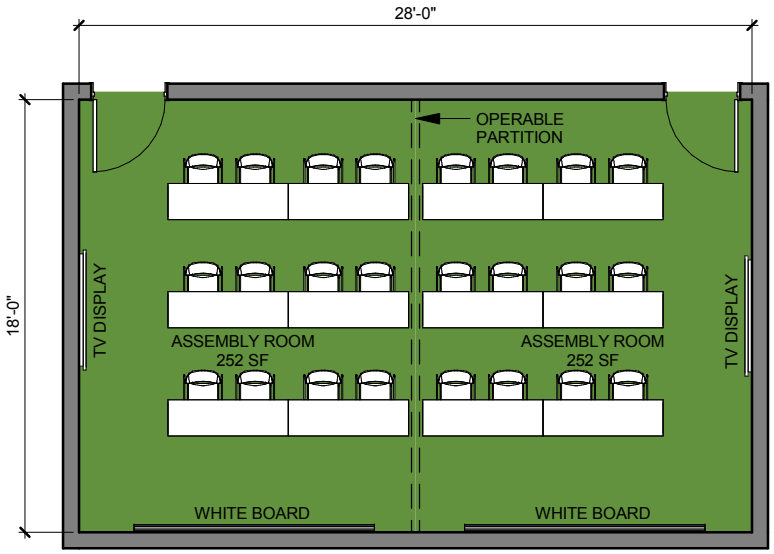
Grant Riemer - Public Works Superintendent

Kurt Ulrich - City Administrator

Patrick Brama - Assistant City Administrator & Economic Development Manager

Bruce Westby - City Engineer

We would also like to thank the City and all the staff that we met, for their assistance and time involved in helping us to better understand the City, your facilities and ultimately in developing a study that is thorough and will serve as a roadmap for your long-term planning.



Critical Physical Adjacencies:
- Staff break room

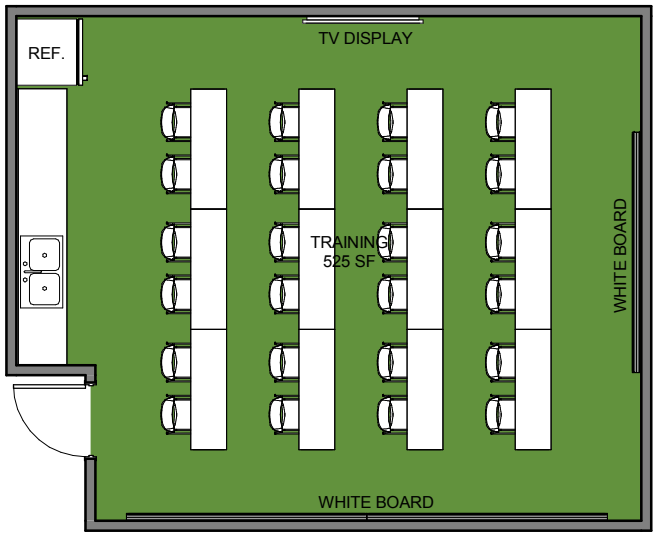
Finishes:
- Painted Gyp Bd wall finish
- Acoustic ceiling tile

Other Requirements:
- Room identification signage
- Windows preferred

In-contract Systems and Equipment:
- Operable partition wall

Separate-contract Systems and Equipment:
-

Owner-supplied Systems and Equipment:
- TV display monitor
- White Board



Critical Physical Adjacencies:

•

Finishes:

- Suspended acoustical tile ceiling
- Textured and painted gypsum board walls
- No chair rail required
- Rubber wall base
- Vinyl tile floor

Other Requirements:

- Room identification signage
- Windows preferred, not operable
- Acoustic separation, STC 65

In-contract Systems and Equipment:

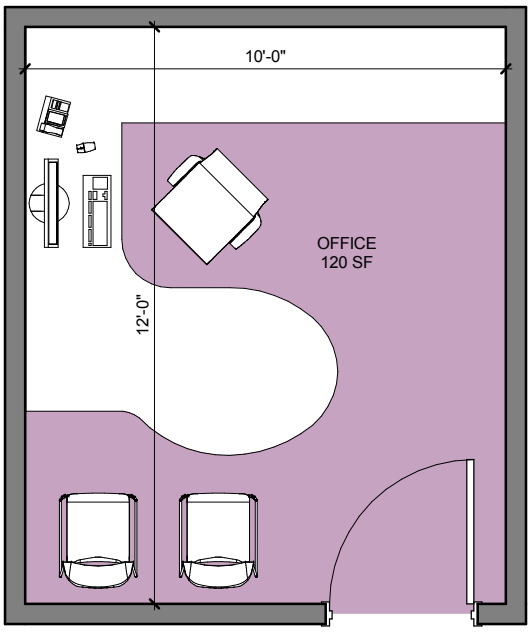
- Data and power at walls
- Public address speaker at ceiling
- Direct/indirect lighting with occupancy sensor and override
- Dedicated VAV with CO2 sensor demand ventilation

Separate-contract Systems and Equipment:

- Tables
- Task chairs, rolling
- 3 Markerboards (120"x48")

Owner-supplied Systems and Equipment:

- CPU, mouse, keyboard, webcam, 60" monitor
- Conference phone
- Trash and recycle bins



Critical Physical Adjacencies:
- Reception

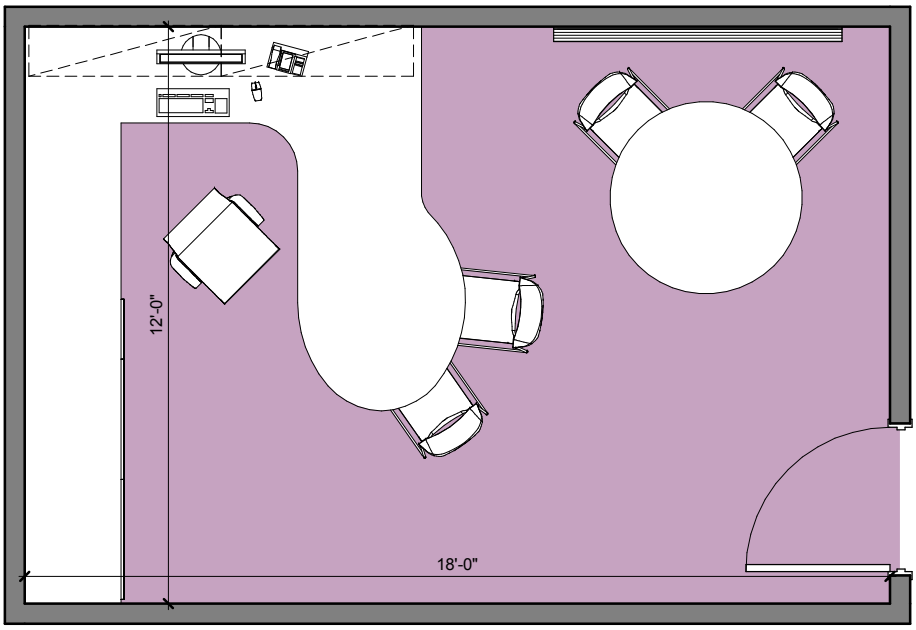
Finishes:
- Suspended acoustical tile ceiling
- Textured and painted gypsum board walls
- No chair rail required
- Rubber wall base
- Carpet tile floor

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- Acoustic separation, STC 65

In-contract Systems and Equipment:
- Data and power at walls
- Public address speaker at ceiling
- Direct/indirect lighting with occupancy sensor and override
- Dedicated VAV with CO2 sensor demand ventilation

Separate-contract Systems and Equipment:
- Workstation
- 1 work chair, 2 side chairs

Owner-supplied Systems and Equipment:
- CPU, mouse, keyboard, webcam, 60" monitor
- Workstation phone
- Trash and recycle bins



Critical Physical Adjacencies:
- Reception
- Copy Room

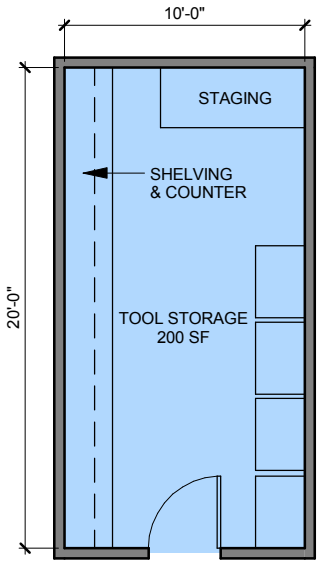
Finishes:
- Suspended acoustical tile ceiling
- Textured and painted gypsum board walls
- No chair rail required
- Rubber wall base
- Carpet tile floor

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- Acoustic separation, STC 65

In-contract Systems and Equipment:
- Data and power at walls and table center
- Public address speaker at ceiling
- Direct/indirect lighting with occupancy sensor and override
- Dedicated VAV with CO2 sensor demand ventilation

Separate-contract Systems and Equipment:
- Workstation
- 1 work chair, 4 side chairs
- 1 round conference table

Owner-supplied Systems and Equipment:
- CPU, mouse, keyboard, webcam, monitor
- Workstation phone
- Trash and recycle bins



Critical Physical Adjacencies:
- Adjacent to shops area

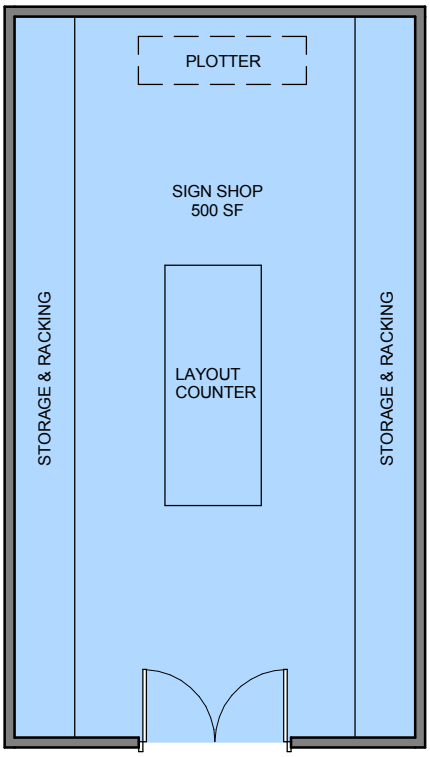
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage

In-contract Systems and Equipment:
- Power at walls and work tables

Separate-contract Systems and Equipment:
- Compressed air supply

Owner-supplied Systems and Equipment:
- Shelving
- Work tables



Critical Physical Adjacencies:
- Access to exterior for loading/unloading materials
- Clean environment

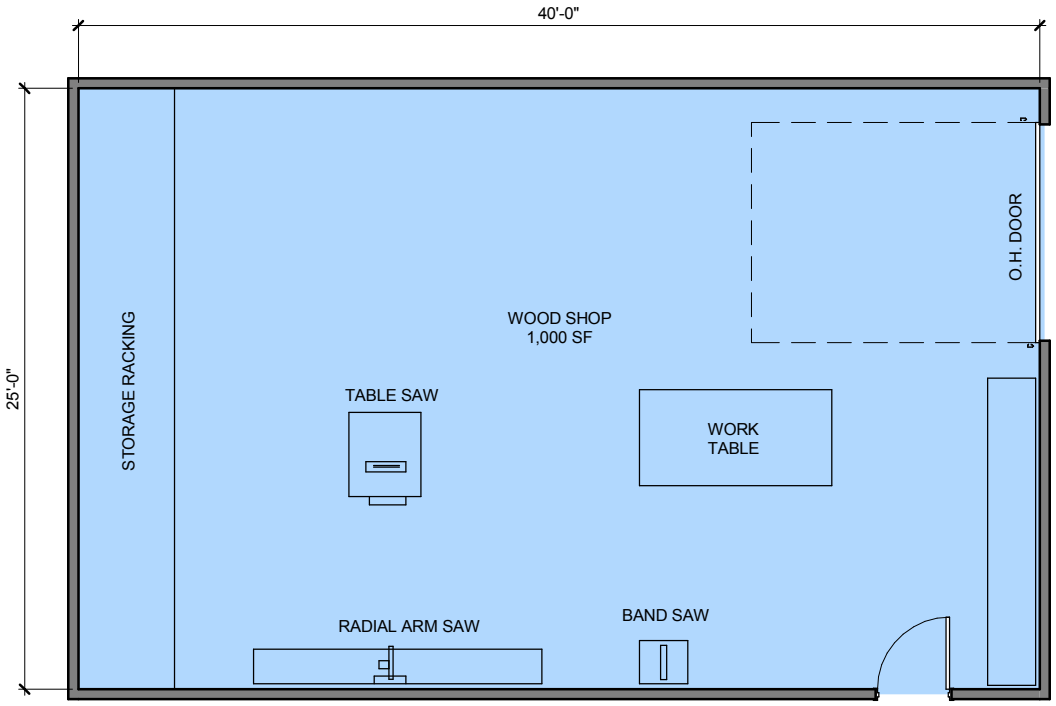
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- 6ft wide min. access door

In-contract Systems and Equipment:
- Power at walls and work tables

Separate-contract Systems and Equipment:
-

Owner-supplied Systems and Equipment:
- Shelving
- Layout Counter
- Plotter



Critical Physical Adjacencies:
- Access to exterior for loading/unloading materials

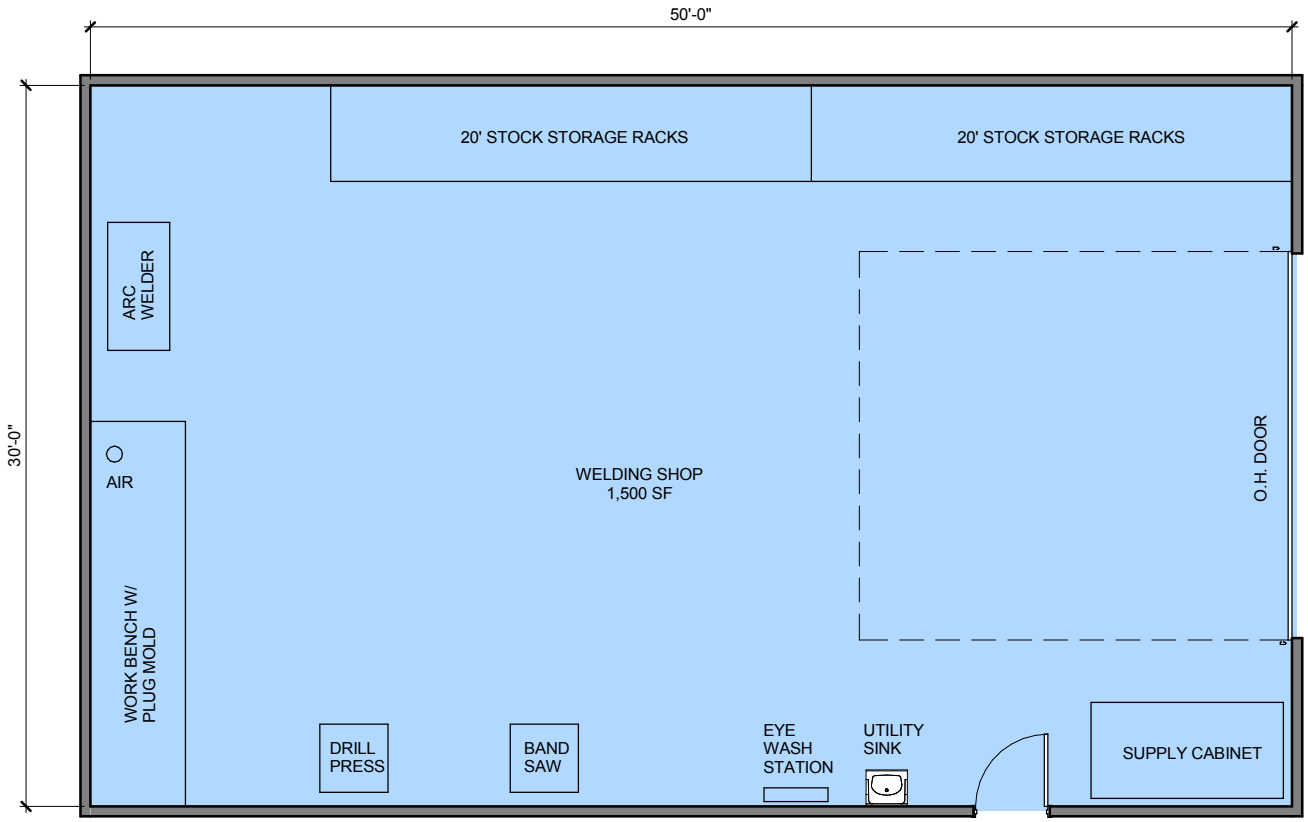
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- 8ft high min. overhead door for forklift access, preferred

In-contract Systems and Equipment:
- Power at walls and work tables

Separate-contract Systems and Equipment:
- Compressed air supply

Owner-supplied Systems and Equipment:
- Shelving and work tables
- Woodworking equipment
- Dust collection system



Critical Physical Adjacencies:
- Access to exterior for loading/unloading materials
- Near fleet maintenance bays

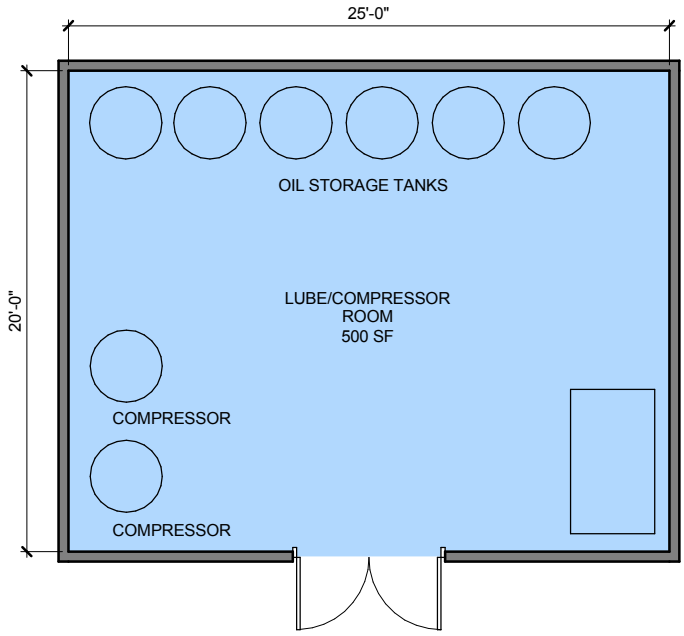
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- Overhead door for forklift access, preferred

In-contract Systems and Equipment:
- Power at walls and work tables
- Utility hand sink

Separate-contract Systems and Equipment:
- Compressed air supply
- Eye wash station

Owner-supplied Systems and Equipment:
- Shelving
- Work tables
- Welding equipment (Arc Welder, Band Saw, Drill Press)



Critical Physical Adjacencies:
- Access to exterior for loading/unloading materials
- Near fleet maintenance bays

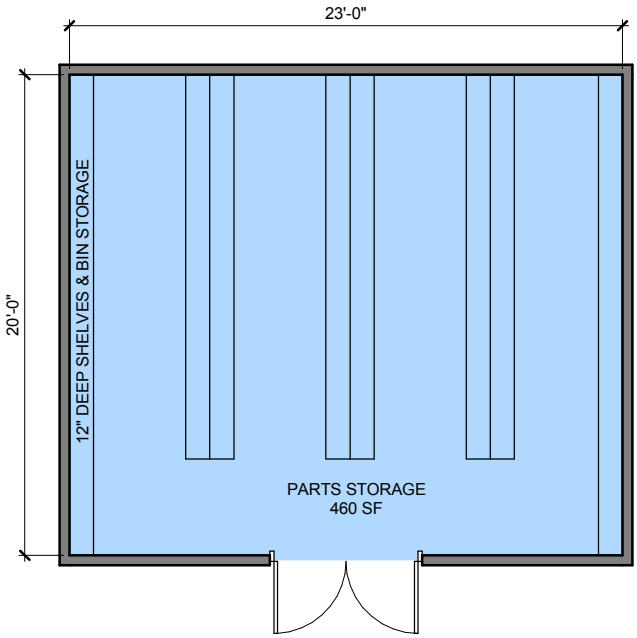
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage
- 6ft wide min. access door, preferred

In-contract Systems and Equipment:
- Power

Separate-contract Systems and Equipment:
- Compressed air supply
- Lube storage system

Owner-supplied Systems and Equipment:



Critical Physical Adjacencies:
- Access to fleet maintenance area

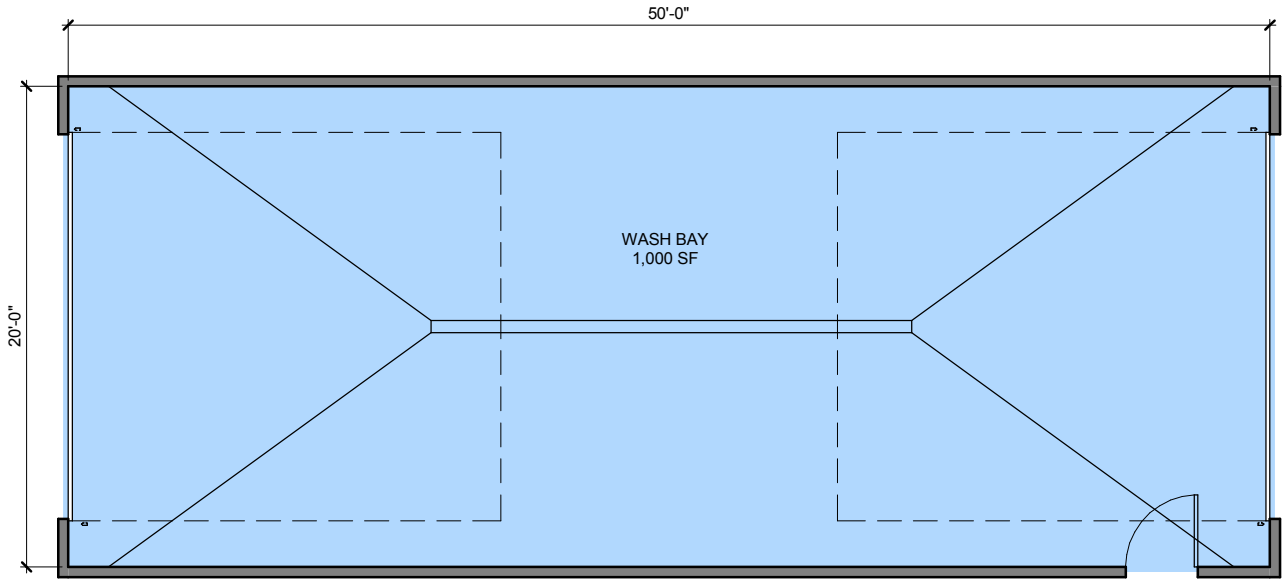
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage

In-contract Systems and Equipment:
-

Separate-contract Systems and Equipment:
-

Owner-supplied Systems and Equipment:
- Shelving



Critical Physical Adjacencies:
- Exterior access door
- Exit into fleet storage

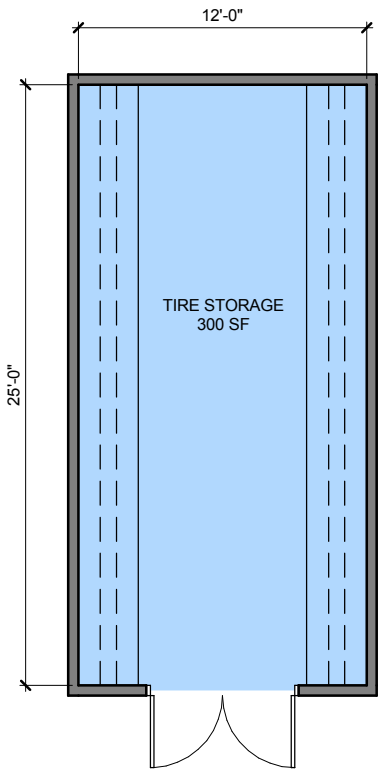
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage
- Water-proof light fixtures as required
- Floor drain
- (2) Two weatherproof power receptacles

In-contract Systems and Equipment:
-

Separate-contract Systems and Equipment:
- Compressed air supply at two locations

Owner-supplied Systems and Equipment:
- Wash equipment
- Work tables



Critical Physical Adjacencies:
- Fleet maintenance bay

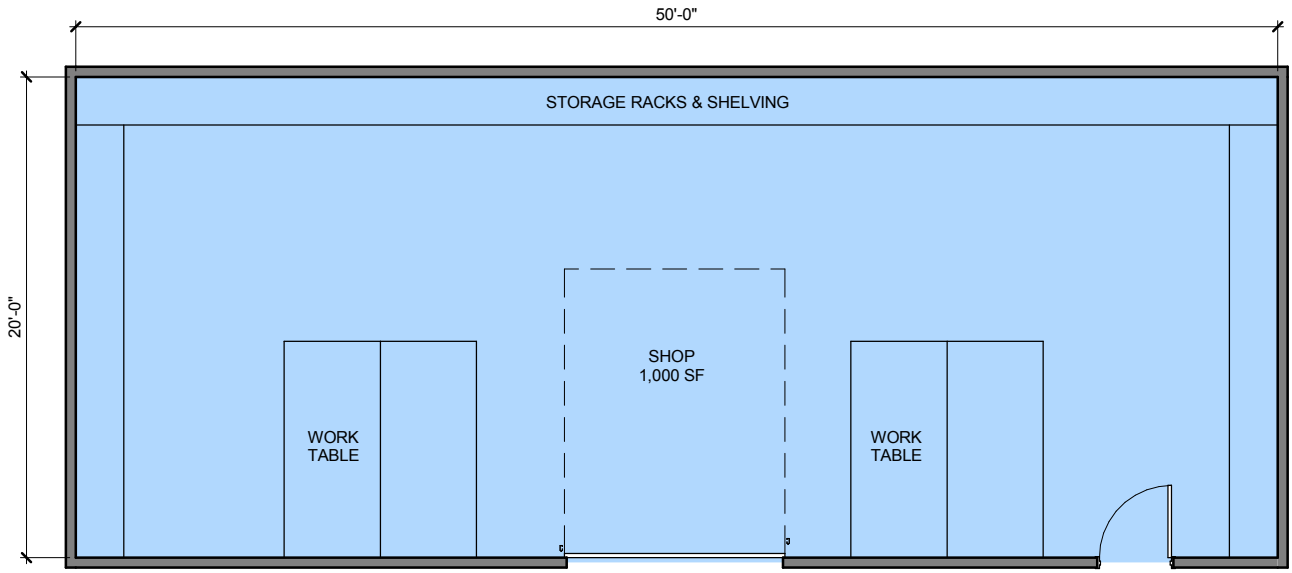
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage
- 6ft wide door for moving carts and materials

In-contract Systems and Equipment:
-

Separate-contract Systems and Equipment:
-

Owner-supplied Systems and Equipment:
- Shelving



Critical Physical Adjacencies:
- Access to exterior for loading/unloading materials

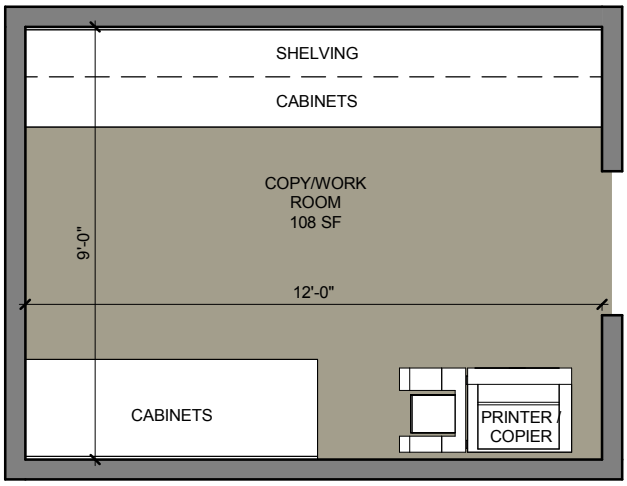
Finishes:
- Durable wall and floor finishes
- Sealed concrete floor
- Painted CMU/Masonry wall finishes
- Exposed ceiling structure

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- 8ft high min. overhead door for forklift access, preferred

In-contract Systems and Equipment:
- Power at walls and work tables

Separate-contract Systems and Equipment:
- Compressed air supply

Owner-supplied Systems and Equipment:
- Shelving
- Work tables



Critical Physical Adjacencies:
- Reception
- Manager's Office

Finishes:
- Suspended acoustical tile ceiling
- Textured and painted gypsum board walls
- No chair rail required
- Rubber wall base
- Carpet tile floor

Other Requirements:
- Room identification signage
- Windows preferred, not operable
- Acoustic separation, STC 65

In-contract Systems and Equipment:
- Data and power at walls and table center
- Public address speaker at ceiling
- Direct/indirect lighting with occupancy sensor and override
- Dedicated VAV with CO2 sensor demand ventilation

Separate-contract Systems and Equipment:
- Cabinets
- Copier / printer

Owner-supplied Systems and Equipment:
- CPU, mouse, keyboard, webcam, 60" monitor
- Conference phone
- Trash and recycle bins