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Burnsville

Architects CNH

MUNICIPAL FACILITIES PRE-DESIGN REPORT
SEPTEMBER 29TH, 2023

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TABLE OF CONTENTS

CONSULTANT TEAM

This pre-design study was provided by CNH Architects under the leadership of Principals Brooke Jacobson and Quinn Hutson. The team was made up of the following:

CNH Architects, Ltd	Architectural
EDI-Dolejs	Mechanical and Electrical
Larson Engineering	Civil and Structural
HKGi	Landscape and Community Engagement
Kraus Anderson	Cost Estimating

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly licensed architect under the laws of the State of Minnesota
Quinn S. Hutson, AIA, LEED AP

Signature: _____

Date: 10-06-2023 License No: 21234

EXECUTIVE SUMMARY

The City Council authorized the City to enter into a contract with CNH Architects to perform a Municipal facilities Pre-Design Study looking at two city facilities – City Hall / Police and Maintenance facility as well as a Land Analysis for Fire Station No. 2. At the time of the start of this study, Space Needs Studies had recently been completed for each of these facilities. These studies analyzed the condition of each building, compared them to industry standards, developed space needs goals identifying current and future needs for each facility, and provided the need to develop more detailed analysis and schematic plans.

This Municipal Facilities Pre-Design Study was tasked with providing an in-depth review and analysis of the City Hall / Police facility and the Maintenance facility. In addition, the study includes an updated space needs program review and land analysis for several potential new sites for Fire Station No. 2. The City Council provided further direction to provide solutions that meet 95%-100% of known current and future needs for the departments at each of the facilities. With this goal in mind, comprehensive data collection and site analysis was collected. This information was then incorporated into pre-design schematic site plans and floor plans for City Hall / Police and Maintenance facilities. These plans were the result of a multitude of plan options exploring each facility, revised until the best combinations of space relationships and operational functions for each department and facility emerged.

The information provided in this study includes data gathered and analyzed by CNH Architects and our consultant team, as well as extensive and valuable input provided by many members of city staff. The report includes this Executive Summary followed by supporting data, updated space needs program, pre-design schematic plans and images, and cost estimates for each facility. Throughout the study process, the Guiding Principles that were provided at the beginning of the study were used to evaluate programming and design decisions. These principles are listed in the body of this study.

GUIDING PRINCIPLES

The following Guiding Principles were used throughout the study process to identify priorities and make balanced decisions. They were used extensively as an evaluation tool in developing all aspects of the study from space needs to physical building design elements.

- **WELCOMING TO THE COMMUNITY:** designing engaging, community-oriented spaces
- **CLEAR COMMUNICATION:** sharing information and engaging stakeholders to ensure clarity
- **EFFICIENT AND EFFECTIVE:** delivering high quality facilities that reflect our values
- **FUNCTIONAL AND FLEXIBLE:** designing facilities that meet current and future needs
- **SUSTAINABLE:** ensuring our facilities create human, financial and environmental vitality
- **HEALTHY:** focusing on wellbeing, creating facilities for all abilities
- **SAFE:** creating a great public experience that is safe and secure
- **FISCALLY RESPONSIBLE:** being good stewards of our resources

EXECUTIVE SUMMARY

PROCESS For each facility, this Pre-Design Study included the following elements:

City Hall / Police Facility and Maintenance Facility Pre-Design

- Full review of results and additional questions raised by the Space Needs Studies
- Site tours of these Burnsville facilities, as well as tours of newly completed example facilities around the metropolitan area
- Extensive meetings with each city department within the study facilities to gather in-depth understanding of their operations and additional space needs for current and future operations
- Updating the Space Needs Program document for each facility to incorporate the additional space needs identified through the in-depth department interviews, newly available Staffing Studies commissioned by the City, and Best Practices identified by the design team
- Analysis of each facility site, including in-depth review of the site's constraints relating to existing contours, stormwater conditions and interconnection with larger stormwater management, easements, and major utility infrastructure
- Community Engagement efforts connecting to all city staff and, in the case of City Hall / Police, to the broader Burnsville community
- Schematic design options and refinement to detailed schematic site and floor plans
- Schematic image design options and refinement to concept image for City Hall / Police

Fire Station No. 2 Land Analysis

- Updating the Space Needs Program document to incorporate the additional space needs identified based on increased fire department call volumes
- Analysis of multiple potential sites identified by the staff including review of the site's constraints relating to existing contours, stormwater conditions, easements, and major utility infrastructure

SPACE NEEDS ANALYSIS UPDATES

The study reviewed many aspects of the City Hall / Police facility and Maintenance facility. These included completing site tours of new City Hall, Police, and maintenance facilities - gathering extensive research data, conducting a multitude of staff interviews, and reviewed the recently completed Organizational Analysis and Police Staffing Assessment studies. From this data, the Space Needs Program was updated with significant additional space needs identified for many of the departments in each facility. The comparative table below shows the Existing Area, Space Needs Program Area, and the updated Pre-Design Areas for each of the facilities.

	Existing	Initial Study	Pre-design	Differential
Police	51,489	76,295	110,622	34,327
City Hall	44,022	53,053	99,401	46,348
Maintenance	92,674	160,145	172,849	12,704
Fire Station 2	11,254	34,735	40,545	5,810

As there were large increases in space need area, identified by the outside studies and the Pre-Design process, each space needs program was evaluated against the guiding principles and the stated goal of meeting 95%-100% of known current and future needs, confirming the validity of these increases.

EXECUTIVE SUMMARY

CITY HALL / POLICE PRE-DESIGN SCHEMATIC PLAN OVERVIEW

From the beginning of the schematic design process for the combined City Hall / Police building, the space needs and organizational flow of the Police department took the lead as it was understood that, due to site constraints, the expansion of the Police department would need to extend into the existing City Hall building.

After identifying that just under 15,000 square feet of the Police remodeling would extend into the existing City Hall space, the space needs for City Hall were transferred into schematic plans. Throughout the City Hall portion of the design process emphasis was placed on providing a welcoming public experience which led to the positioning of all publicly accessed spaces on the upper floor including providing a large, clearly organized central lobby space with both Council Chambers and large meeting space conveniently located near the main entrance.

The remaining main floor space between the new public area and the expanded Police facility holds almost all of the City Hall staff. This area is organized into departments based on relationships to each other and required access to public service counters.

The lower floor of the City Hall remodeling and addition houses mostly staff support functions including staff break room, wellness room, additional conference rooms, a large amount of required storage, and an enclosed garage to contain city-owned vehicles used by inspections, facilities, communications and other departments. The staff occupied spaces are located along the east side of the lower level looking out onto the pond and woods, providing not only views but opportunities for a staff patio, outdoor meeting area, and a walking trail.

The overall and enlarged schematic floor plans are included in the body of this report for specific review.

After completing the schematic floor plans, the Pre-Design Study looked into schematic interior and exterior perspectives for the front of the City Hall / Police facility as well as the interior lobby element. The design intent was to develop a facility image that presents a welcoming, dignified image both from the exterior and interior of the facility. This is achieved through extensive daylighting and quality exterior and interior materials such as brick, stone, and metal panels. The perspectives are meant only to provide a general idea of the potential aesthetic of the building and will be developed significantly based on input during future phases of the building design. These images are also included in the body of this report.

In conclusion, the existing City Hall / Police site and building is capable of being remodeled and expanded to meet the known current and future space needs for these departments. Further, the design provides for a welcoming, efficient, and forward-looking facility.

FIRE STATION NO. 2 LAND ANALYSIS

The Pre-Design Municipal Facilities Study includes a Land Analysis with the goal of determining potential preferred site for the construction of a replacement building for the existing Fire Station No. 2. The first step in this analysis was to update the space needs analysis for increased future staffing in response to increased call volumes from the response area of Burnsville Fire Station No. 2. The space needs were shown to increase by an additional 5,810 square feet, as noted in the table on the previous page.

The next step in the Fire Station No. 2 study was to evaluate three separate sites, identified by city staff, as being possible locations for the fire station based on potential availability, location in service area to support appropriate response times, and general adjacency to significant roadways. Upon completion of these site fit analysis plans, each site was evaluated to determine the ability for that site to meet the needs of Fire Station No. 2. Both privately owned sites were determined to be poor fits for

the future Fire Station No. 2 building. One site was eliminated based on significant contours and trees that would need to be removed creating both a large added project cost as well as impacting the natural state of the site. This site is also many times larger than needed for the fire station. The other site was determined to have too many bottlenecks in street access, resulting in negative impacts to response time. Fortunately, the remaining city-owned site works well as shown in the following site fit plan.

The selected site is Crosstown East located at the northwest quadrant of Burnsville Parkway and Portland Avenue, which is currently a low-intensity neighborhood park. There is sufficient property to meet the operational needs of the fire apparatus and the building, leaving room for green space and stormwater ponding as shown in the site fit plan in the body of this report. The apparatus response flow onto Burnsville Parkway provides access to a major street and is positioned well away from the Portland Avenue intersection, providing good visibility and safety.

MAINTENANCE FACILITY PRE-DESIGN SCHEMATIC PLAN OVERVIEW

The review of the Maintenance facility began - as with the other facilities - with an overview of the space needs program. As noted in table on the previous page, this facility had only a minor increase in space needs. After that, the site analysis was completed, noting that the entire west side of the Maintenance facility site is not buildable due to an easement held by Dakota Electric Association as a result of a major overhead electrical line and adjacent substation. It was also noted that there is a cell tower on the east side of the site to be considered in any building expansion.

When moving into the schematic design phase of the Pre-Design Study, one of the primary goals was to develop clear zones within the building including a public access area separated from staff zones to increase the security within the facility while also creating a welcoming lobby and service counter, conference room, and public restroom. This new guest area is part of the south building addition also housing the expanded office area identified in the space needs study. The rest of the office space is re-organized to provide more consistent offices, improved daylighting, and sufficient meeting space to accommodate the typical morning team meetings. >>
The other major current space shortage is in the enclosed vehicle garage, which is expanded to the north in the schematic floor plan developed. This garage addition allows for all current and future public works vehicles to be stored inside, for a longer life and reduced ongoing maintenance needs. A drive-through large vehicle wash bay is included at the end of the garage addition, allowing automated washing - as is standard in current public works facilities.

This schematic site and floor plan development shown in the body of this report indicates the maximum development that could occur on this site and meets most of the long-term needs of the maintenance department, but not all future requirements. There may be a need for relocation of some portion of the current operations to another city location in the future, if operational needs expand beyond the amounts currently indicated in the schematic plans shown in this study. It was noted by maintenance staff leadership that there are several operations that could be relocated if this became necessary in the future. In summary, the location and size of this site, along with the ability to use the existing building, still results in this site being the appropriate location for the Maintenance facility in the long-term.

COST ESTIMATE OVERVIEW

Cost estimates for the new and expanded buildings within this Municipal Facility Pre-Design Study were developed by Kraus Anderson. The table below shows the projected total project costs, include both hard and soft costs for these three facilities. Each project cost is shown starting in 2024 with costs escalated by 4% annually providing 10 years of potential project costs to be considered depending on when a project is bid.

EXECUTIVE SUMMARY

	Police / City Hall	Fire Station 2	Maintenance Facility
2024	$93,449,093	$25,140,001	$54,324,480
2025	$97,187,057	$26,145,601	$56,497,459
2026	$101,074,539	$27,191,425	$58,757,358
2027	$105,117,521	$28,279,082	$61,107,652
2028	$109,322,221	$29,410,246	$63,551,958
2029	$113,695,110	$30,586,655	$66,094,036
2030	$118,242,915	$31,810,122	$68,737,798
2031	$122,972,631	$33,082,526	$71,487,310
2032	$127,891,536	$34,405,827	$74,346,802
2033	$133,007,198	$35,782,061	$77,320,674

While the above costs are based on Pre-Design Schematic drawing, the cost estimates include appropriate contingencies for both hard and soft costs to address changes and additional detail available as any of the projects proceeds.

PRE DESIGN STUDY APPROACH

The Burnsville Municipal Facilities Pre-Design Study was commissioned by the City of Burnsville to provide an in-depth review of the City Hall / Police facility and the Maintenance facility as a result of the earlier Space Needs Study. The earlier study identified significant facility needs and affirmed a need to provide a deeper exploration of the City's needs for these facilities using a 40-year timeframe. This in-depth analysis includes developing design concept drawings that would address these more complex needs to provide design solutions that would meet the current and future need for the facilities in a comprehensive "do it right" mindset, with the goal of achieving 95-100% of known current and future needs. The Pre-Design Study also included a land analysis and site fit review to determine a preferred potential site for Fire Station No. 2.

GUIDING PRINCIPLES

The following Guiding Principles were used throughout the study process to identify priorities and make balanced decisions. They were used extensively as an evaluation tool in developing all aspects of the study from space needs to physical building design elements.

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PRE DESIGN STUDY APPROACH

PRE-DESIGN STUDY PROCESS For each facility, this Pre-Design Study included the following elements:

City Hall / Police Facility and Maintenance Facility Pre-Design Fire

• Full review of results and additional questions raised by the Space Needs Studies
• Site tours of these Burnsville facilities, as well as tours of newly completed example facilities around the metropolitan area
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• Updating the Space Needs Program document for each facility to incorporate the additional space needs identified through the in-depth department interviews, newly available Staffing Studies commissioned by the City, and Best Practices identified by the design team
• Analysis of each facility site, including in-depth review of the site's constraints relating to existing contours, stormwater conditions and interconnection with larger stormwater management, easements, and major utility infrastructure
• Community Engagement efforts connecting to all city staff and, in the case of City Hall / Police, to the broader Burnsville community
• Schematic design options and refinement to detailed schematic site and floor plans
• Schematic image design options and refinement to concept image for City Hall / Police

Station No. 2 Land Analysis

• Updating the Space Needs Program document to incorporate the additional space needs identified based on increased fire department call volumes
• Analysis of multiple potential sites identified by the staff, including review of the site's constraints relating to existing contours, stormwater conditions, easements, and major utility infrastructure
• Schematic site fit design options for each site and determination of recommended site and fit option

CITY HALL POLICE FACILITY

The following categories provide an overview from the results of the comprehensive analysis and design process that was implemented for the city departments housed in this combined facility. The section ends with schematic design documents for the site, addition and remodeling floor plans, and concept image development.

EXISTING FACILITY ANALYSIS

The Pre-Design Study for the City Hall / Police facility began with a full review of the previous Space Needs Study to understand the information developed within that document including existing facility condition review, initial space needs program, and review organizational diagrams developed. The Space Needs Study was also reviewed with the executive committee staff to identify the limits of the previous study and determine what additional research and design was needed within this study.

This was followed by a detailed walk-through of the City Hall / Police facility by the entire design team including leadership from each of the design and engineering disciplines. This exploration provided an opportunity for the design team to visually see existing facility deficiencies identified in the prior study, hear staff comments related to ongoing space shortages or maintenance issues, and identify additional concerns to be evaluated.

The final step in the analysis of the existing facilities was to provide an opportunity to tour new facilities around the metropolitan area reviewing both Police and City Hall examples. These tours provided feedback from city council members and leadership staff on both positive impressions of aspects of these facilities as well as elements that does not meet project guiding principles. Extensive notes were gathered and collated after these tours, providing input for upcoming design discussions and decisions.

SPACE NEEDS ANALYSIS

The next step was to update the space needs program for both City Hall and Police operations. The space needs program from the Space Needs Study was downloaded as a starting point for this phase of the study. From there, extensive meetings were setup with each department within the Police Department and City Hall to gather in-depth knowledge of the departmental needs, focusing not just on current shortfalls, but also on long-term staffing and operational requirements. The meetings began with leadership and separate departments within the Police staff as these needs would impact the direction of the Police department addition and remodeling needs, as well as drive the space available for City Hall. These meetings tasked each department with identifying current and future staffing and space needs - resulting in many space needs that were not listed in the original study.

During the Pre-Design Study process, the city also completed two valuable staffing related studies that provided additional clarity on the organization and staffing needs. The first study was an Organizational Analysis which reviewed and provided recommendations on city-wide staff organizational adjustments and staffing needs now and into the future. The second study was a Police staffing Assessment which focused on a detailed analysis of the staffing requirements now and into the future of the Police department. The results of each of these [outside] studies were also incorporated into the space needs program refined within this study.

The resulting space need program was finalized providing the basis for the following schematic design process. The total space needs areas are indicated in the table below including a comparison to both the existing facilities and the areas identified in the earlier Space Needs Study.

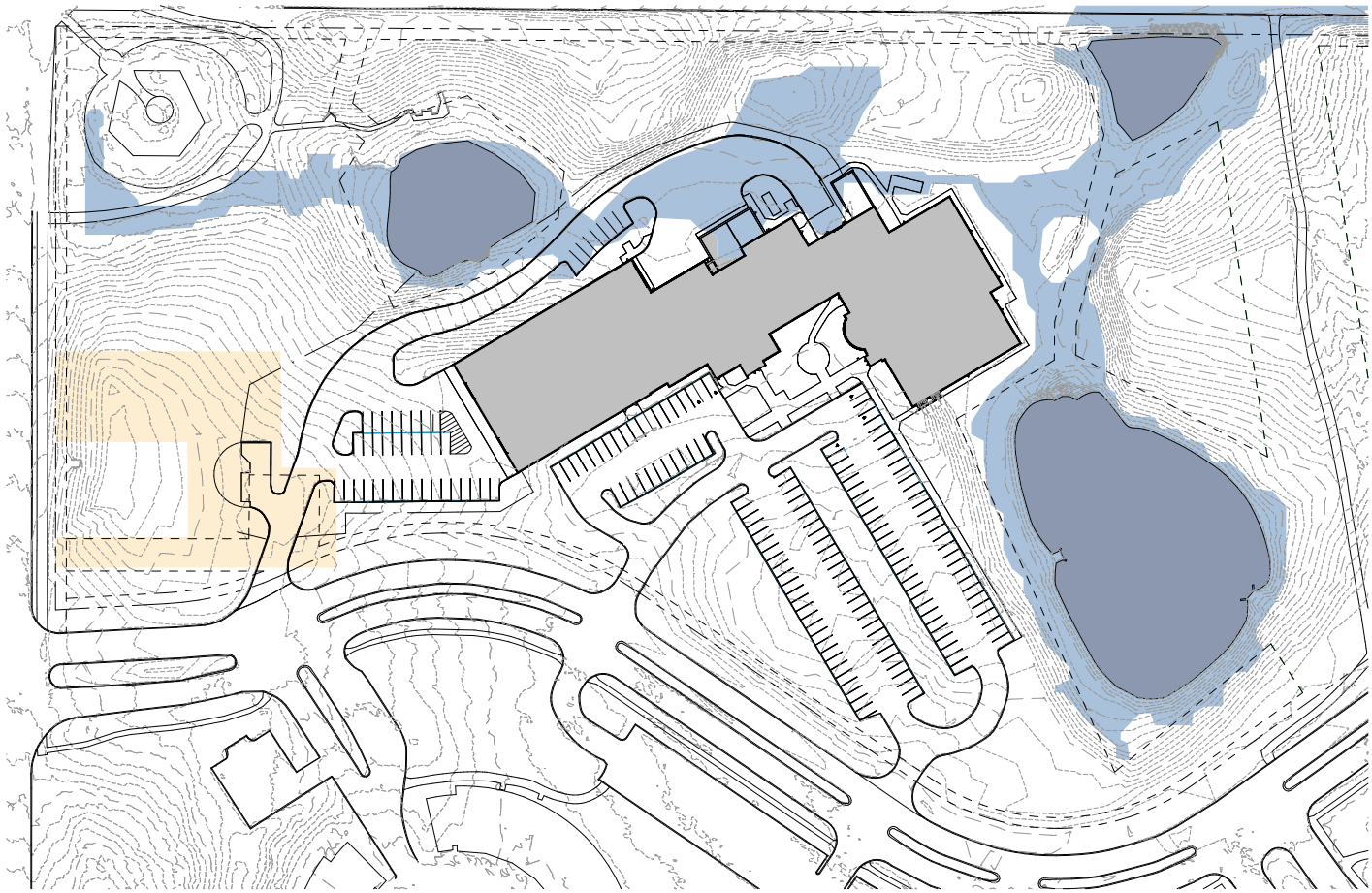
	Existing	Initial Study	Pre-design	Differential
Police	51,489	76,295	110,622	34,327
City Hall	44,022	53,053	99,401	46,348

As noted in the table, this study's in-depth space needs analysis, along with the outside staffing needs studies, identified a significant amount of additional square footage needed to achieve the study goal of meeting 95% - 100% of the long-term needs of the city for this facility.

SITE ANALYSIS

The next step was to evaluate the constraints and opportunities inherent in the existing City Hall / Police facility site to inform the upcoming schematic design phase. The design team, along with input from city staff, gathered background site information including ordering a detailed site survey and a geotechnical soil investigation with multiple soil borings around the site. Added to this information was stormwater data provided by the city engineering department for the on-site stormwater elements, as well as an overview of how these on-site elements fit into the broader regional stormwater system.

From the information gathered, there are several constraints that have been identified that impact the design of any addition and remodeling to the building. These items are graphically indicated in the Existing Site Plan below.



Stormwater features are the most impactful element shown in the site analysis. The dark blue stormwater areas identify the three stormwater ponds on the site - shown at their normal water flow levels. These ponds are classified as protected wetlands, meaning any construction impacts to these areas would need to be mitigated and should be minimized.

The light blue stormwater area identifies the projected water levels as the result of a 100-year rain event. This added area impacts much of the property directly to the east and north of the existing City Hall / Police facility. Further, it was noted that the east two ponds are midpoints in a broader flow of stormwater within this portion of Burnsville. The stormwater enters from neighborhoods to the south of the City Campus through large stormwater utility piping connecting on the south side of the large south on-site >>

pond. This water then flows from the south pond to the northeast pond through a stormwater pipe connecting between them. The stormwater continues off the site from the northeast pond but is limited by grade and existing stormwater pipe size. As indicated in the light blue, the site will fill with stormwater during a 100-year rain event, creating additional stormwater storage as the water works its way to the north. Consequently, impacting either the existing stormwater ponds or the 100-year high-water area should be minimized with any impacts mitigated with other additional storage on site.

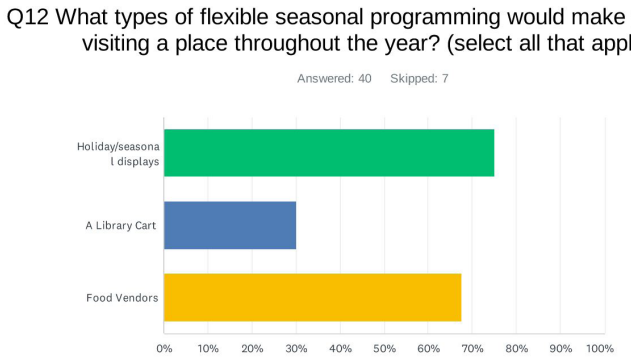
The existing site plan also indicated significant utility piping shown in gold on the west side of the site including the existing utility building just west of the Police department parking. These utility pipes serve the broader community and should be avoided. The soil borings from the geotechnical report provided information on the soil conditions around the existing building where additions might be considered. The general result of these boring show some poor soil conditions within the top 10 feet of existing grades, particularly directly south of the main City Hall entry. The poor soil, however, would only impact additions at the upper floor level as any added basement area would be below the poor soil conditions.

Finally, there were several site related concerns identified in the staff interview process. First, there is some amount of temporary public / staff parking lot flooding during heavier rains that were considered to be undesirable. Secondly, the current delivery and trash removal access to the lower level north side of the building leads through the secured Police parking lot, conflicting with the security goals of this area.

COMMUNITY ENGAGEMENT

An important part of the Pre-Design Study was providing community engagement opportunities to inform the schematic design of the facility. There were two intended audiences for the engagement activities – the city employees working daily at this site and the broader public that might visit the campus.

Opportunities for input into facility and site design preferences for the civic campus from public and staff were provided through two surveys that were placed onto the city website. These survey questionnaires were also represented on boards placed in the City Hall lobby for sticker voting. Some highlights identified for the civic campus include a strong desire for holiday / seasonal display and opportunities for food vendor events. On the “Welcoming City Hall” survey, there was a clear preference for a tall entry with a lot of glass and a bright, open lobby. The complete community engagement survey results are included in the appendix for additional information.



To gather input from city employees, there were several open houses scheduled, providing an overview of the pre-design plans and the opportunity for staff to ask questions and provide comments to the design team or their departmental leadership. These open houses were well attended and provide productive feedback from city employees attending.

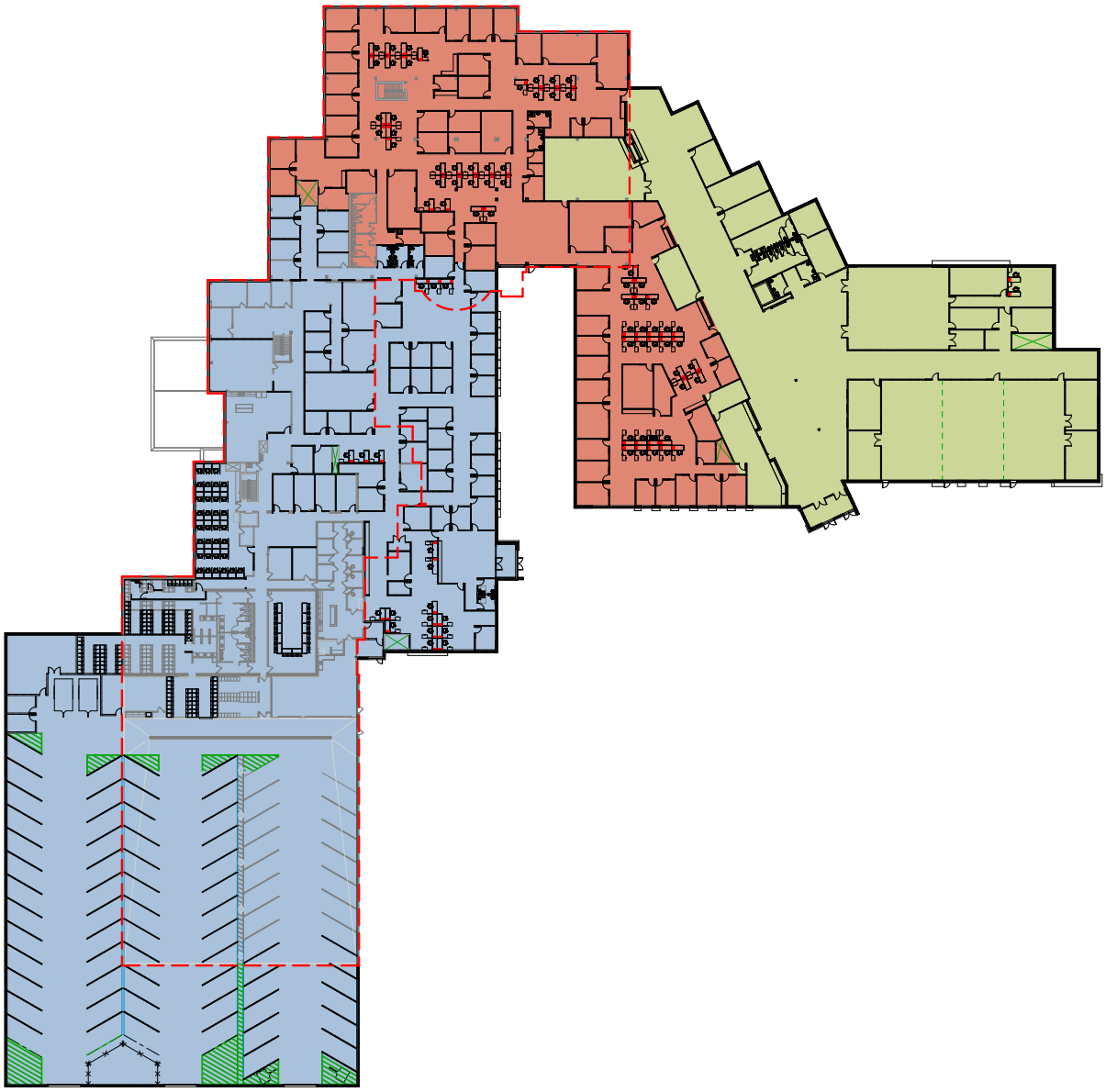
SCHEMATIC PLANS

As the additional space needs program indicated areas for expansion of both Police and City Hall operations, the schematic design process needed to evaluate options where the expansion could be located to meet both the areas needing to expand as well as positioned on the site avoiding stormwater and utility constraints. After many iterations and staff feedback, the following schematic design plans were developed. The expansion of the Police department was designed first as the connections and ability to expand into current City Hall space was of primary importance. These plans, while representing significant design work and staff input, also leave room for further development when additional feedback is provided.

SCHEMATIC SITE PLAN

The plan above shows two Police department additions, one wrapping the existing parking garage and the other in front of the current lobby. There is also a large City Hall addition extending to the south in front of the large stormwater pond. Site access has been revised to provide a connection to 130th Street to the north providing both a delivery access and additional Police staff parking. At the front of the City Hall / Police additions, the parking lot is redesigned to provide clear connection to the front entry and public spaces all located at this level. This design also provides additional parking across Civic Center Parkway reached by an upgraded pedestrian crossing. There are also many exterior improvements suggested on the plans including a public plaza, Homage sculpture site, public gathering area outside the upper level meeting rooms, and lower level exterior staff amenities. In summary, the schematic site plan design confirms that the existing site can successfully meet the current and future needs for the City Hall / Police facility.

SCHEMATIC FLOOR PLANS – OVERALL UPPER LEVEL FLOOR PLAN



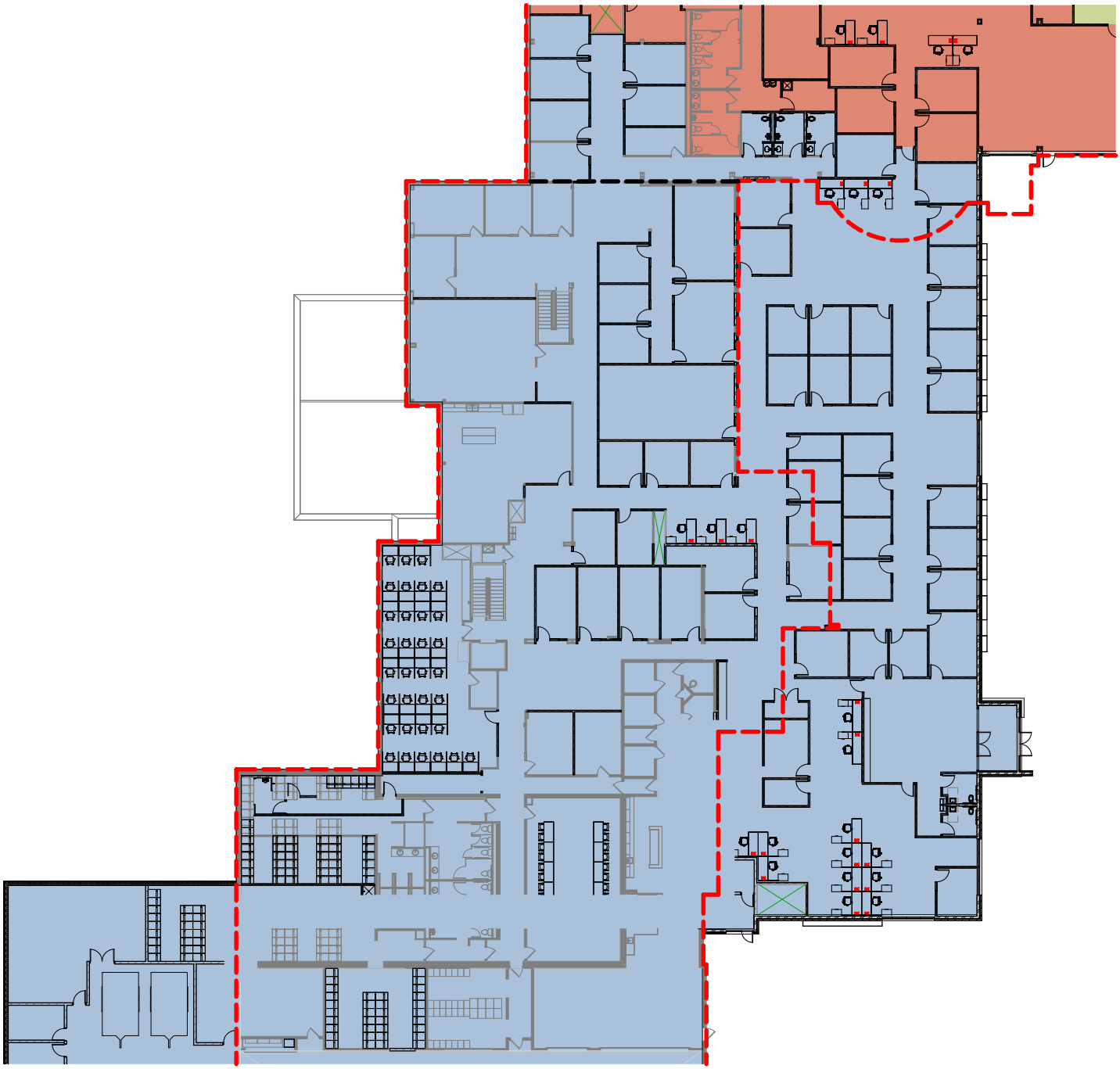
The Overall Upper Level Floor Plan indicates the entire upper level design showing both the existing remodeled building within the red dashed line as well as the additions beyond this outline. The Police department space is indicated in the light blue background color, City Hall staff areas indicated in red, and the public space along with Council Chambers and supporting rooms in the green background color.

As noted earlier, the floor plans were designed starting on the Police department side of the site to ensure that Police space needs were fully met extending into the existing City Hall spaces. Overall between both floors, the Police department expansion occupies almost 15,000 square feet of the current City Hall space.

The following pages will show enlarged upper level floor plans and provides additional information on each general category of the building.

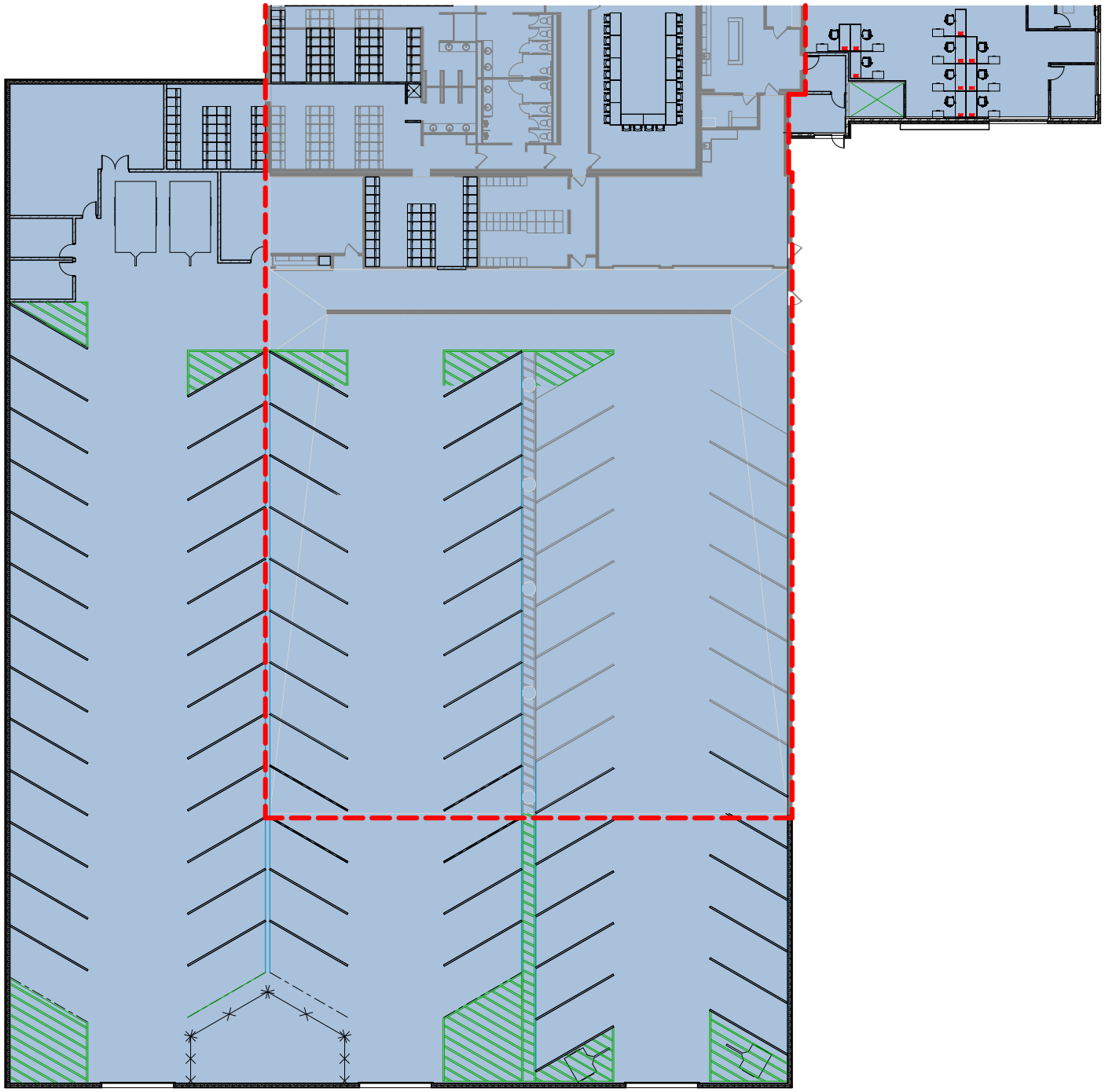
CITY HALL POLICE FACILITY

SCHEMATIC FLOOR PLANS – OVERALL UPPER LEVEL FLOOR PLAN - POLICE OFFICES



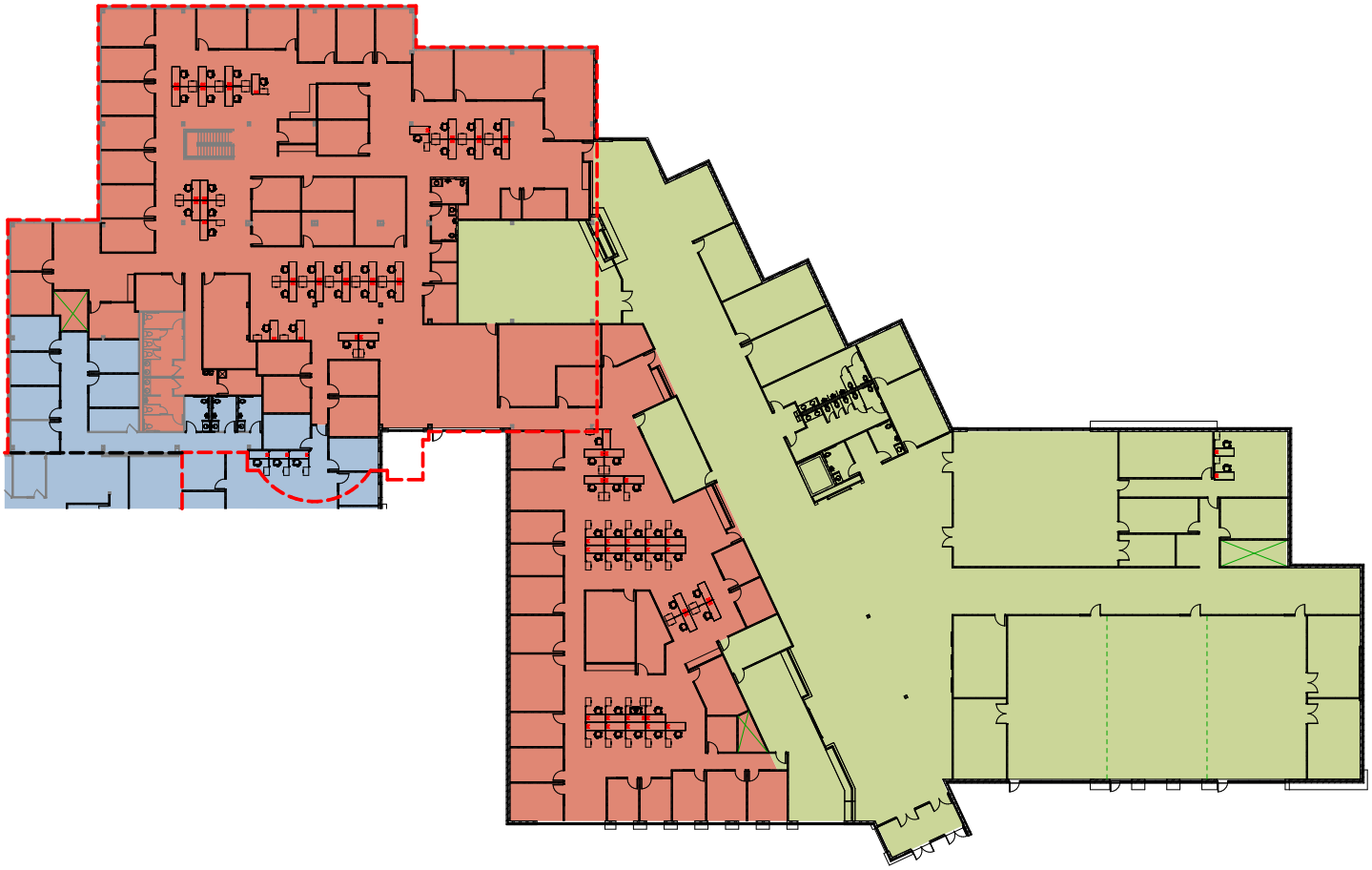
To best meet the expanded needs of each function within the Police office and to provide efficient workflow association, the Police office is designed to expand to the front of the existing building and into the current City Hall portion of the building Expanding in multiple directions allows many areas of the existing Police layout to remain in their current location, creating some efficiency in construction while not sacrificing long-term operations.

SCHEMATIC FLOOR PLANS – UPPER LEVEL FLOOR PLAN – POLICE GARAGE



Based on the significant need for additional parking stalls, the garage addition wraps both the west end and north sides of the existing parking. This addition was designed to allow for the existing precast concrete bearing walls to remain on the south and north sides of the existing parking garage. This layout also avoids the critical utility piping and pump station to the west of the current garage.

SCHEMATIC FLOOR PLANS – UPPER LEVEL FLOOR PLAN – CITY HALL

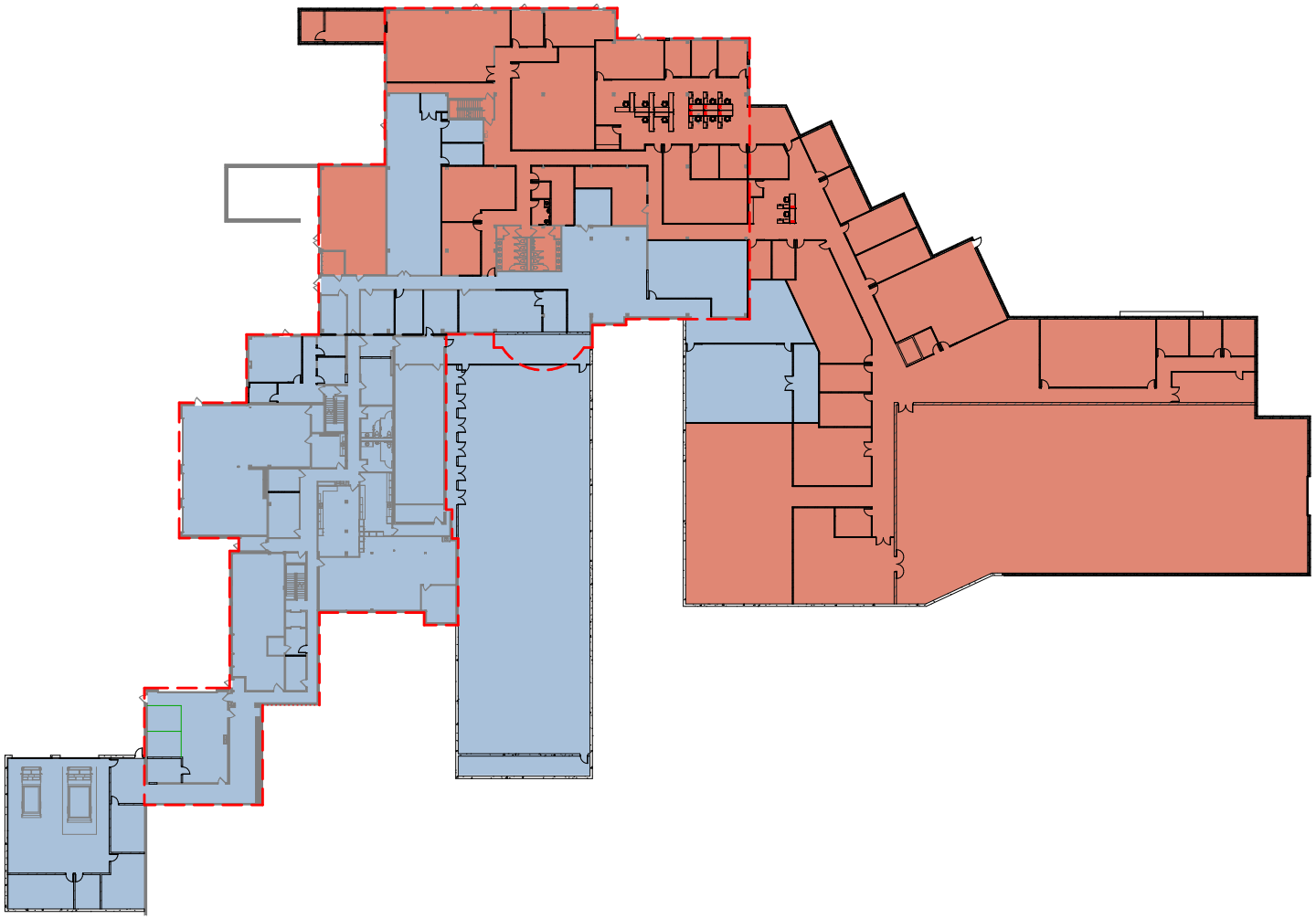


The upper level of the City Hall design is divided into two main regions, the first being the staff zones shown in red to the north side of a new public lobby spine. This lobby provides connection to each of the staff departments that have direct public interaction and creates a clear organization for the City Hall visitors. The south side of the public lobby shown in green includes all the primary public spaces on this upper level. This includes a large three section meeting room on the west side just off the main lobby and opening to a public patio at the front.

The staff offices start in the existing City Hall building from the point which Police expansion ends. To meet the space needs of current and future staffing projects, the space continues through the existing upper level and into an office addition to the west. The City Hall staff departments are organized to meet the results of the resent Organizational Analysis study, providing connection between related departments and also provides a central staff resource library encouraging collaboration.

This design also provides significant focus on creating a Council Chambers that is directly visible to the building entrance while also providing some gathering space outside of the chambers for special events as well as chairs for waiting guests. The chambers are also surrounded by support areas for City Council use including a conference room and small break area. All of these areas are positioned to allow for views out over the lower level pond and woods.

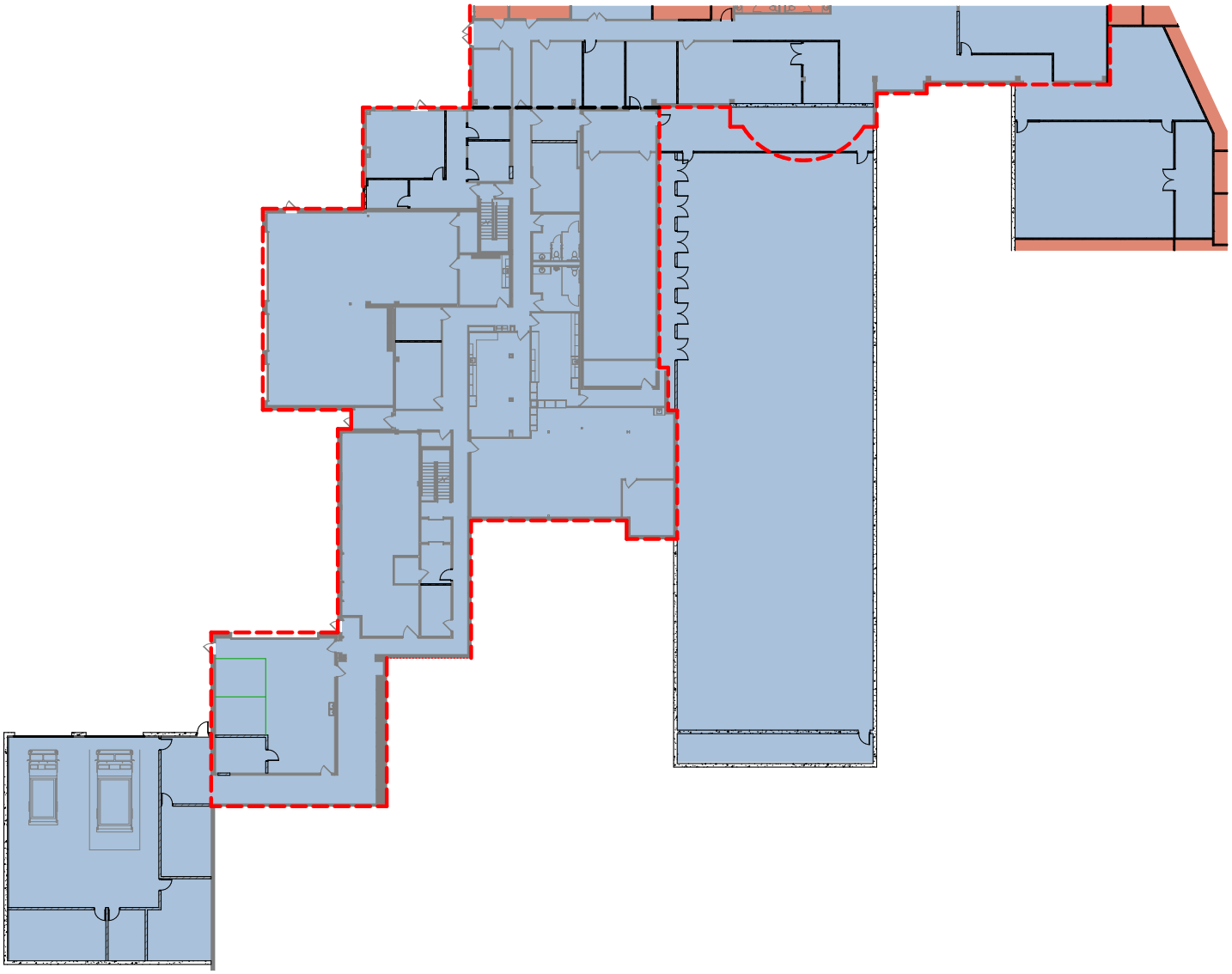
SCHEMATIC FLOOR PLANS – OVERALL LOWER LEVEL FLOOR PLAN



The Overall Lower Level Floor Plan indicates the entire lower level design showing both the existing remodeled building within the red dashed line as well as the additions beyond this outline. The Police department space is indicated in the light blue background color and City Hall staff areas indicated in red background. The space was designed first around the Police department expansion needs and then extended into the rest of the existing and expanded City Hall building. The Police space needs extend significantly into the existing City Hall building on this level.

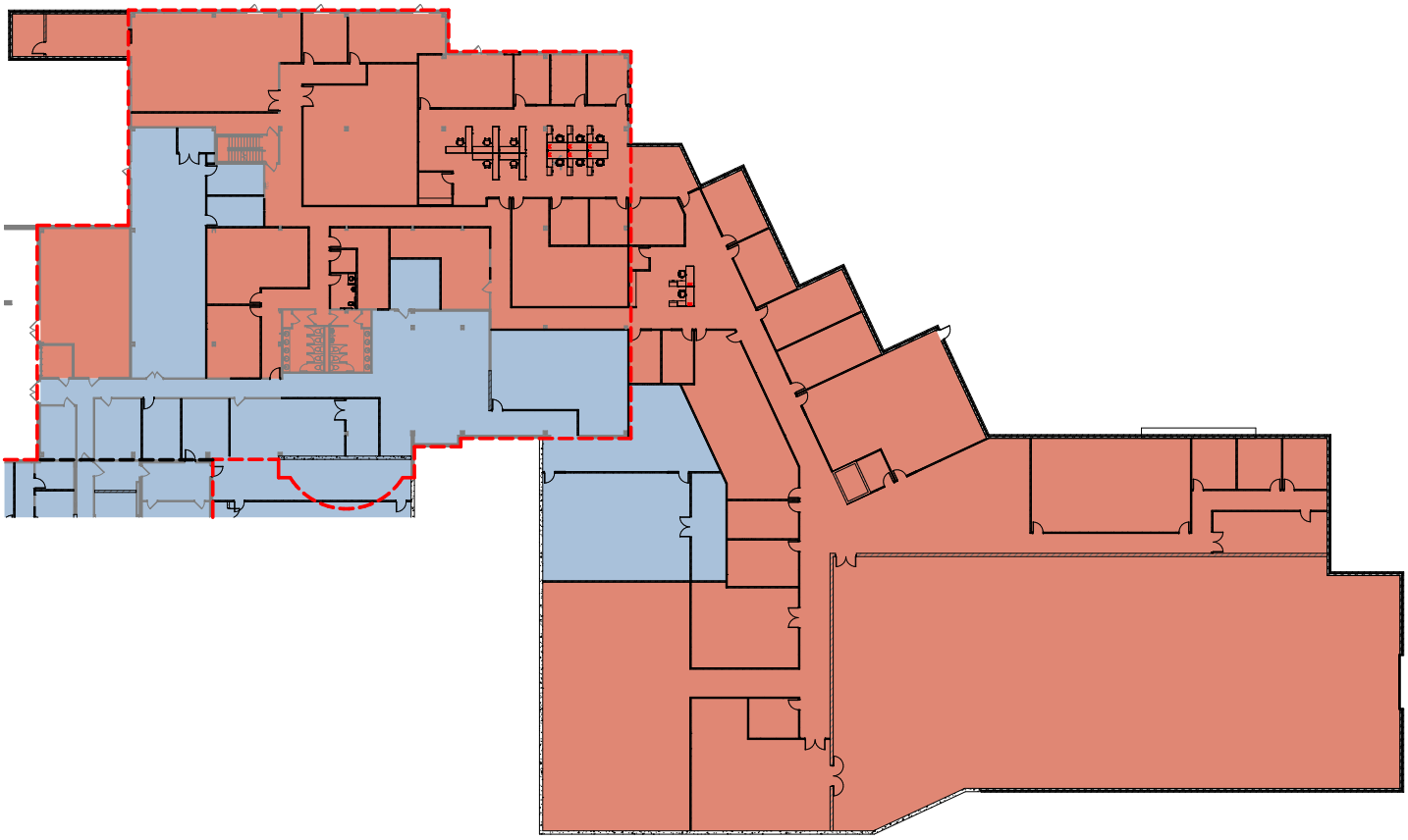
The following pages will show enlarged lower level floor plans and provide additional information on each general category of the building.

SCHEMATIC FLOOR PLANS – LOWER LEVEL FLOOR PLAN - POLICE



While most of the existing lower level of the Police facility remains housing the existing functions with only minor remodeling, there are however two additions designed below upper level expansion areas. The larger of these additions is the expansion of a Police gun range, sized for required rifle training, placed to the south side of the existing building adjoining the existing handgun range. A small lower level addition is also provided for SWAT operations on the northwest corner of this level.

SCHEMATIC FLOOR PLANS –LOWER LEVEL FLOOR PLAN – CITY HALL



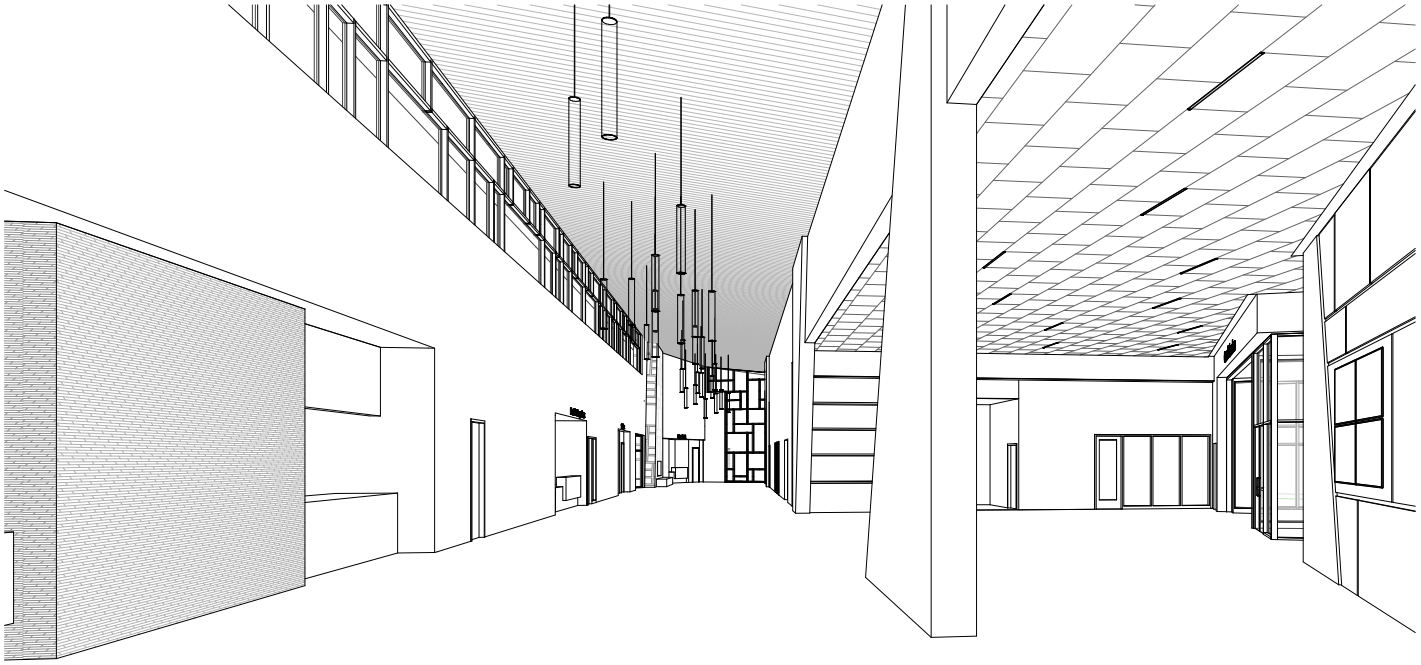
The design of this portion of the building begins with providing a significant amount of Police operations expanded into the City Hall area housing fitness, defensive training room, long-term storage, and many smaller spaces. This lower level includes several areas of building support for mechanical and electrical systems, shipping and receiving, and IT infrastructure. These areas receive only minor remodeling and are located along the north end of the existing City Hall building.

The remainder of the lower level existing building houses the IT and facilities departments in expanded space, to meet their defined needs. The lower level addition provides staff support areas including break room, wellness spaces, and several shared conference rooms all facing the pond and woods to the east, providing opportunities for daylight and connection to the exterior for staff.

The final large section of the lower level consists of a lower level city vehicle parking garage providing improved security, reduced maintenance, and better operations for city vehicles. This parking garage also eliminates the use of on-grade exterior parking lot for city vehicles allowing for more public and staff personal vehicles spaces. The remaining lower level back basement consists of storage areas including secure voting equipment and other required long-term storage needs.

SCHEMATIC IMAGES – CITY HALL INTERIOR PERSPECTIVES

The Pre-Design Study explored the general design of the primary public space within the expanded City Hall, focusing on the development of the main lobby, Council Chambers lobby, welcome desk, and the service desks. The following images provide an understanding of the intended feel and volume of this main public lobby spine; however, the image detail shown is conceptual only and will be further developed during future design phases.

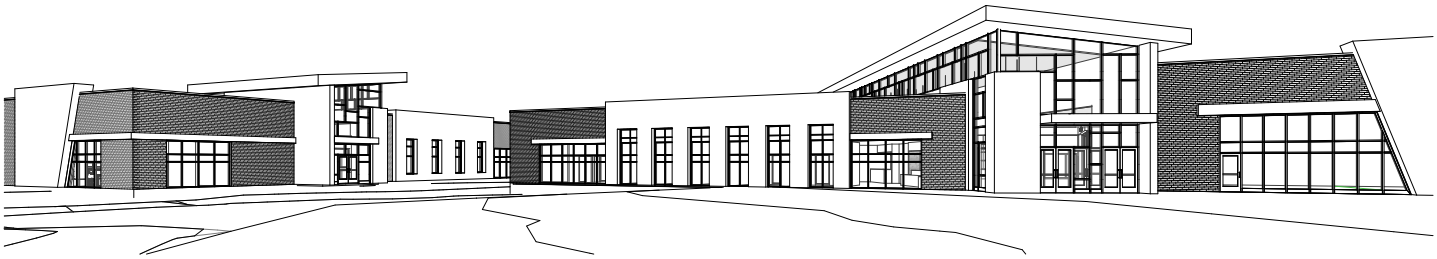


LOBBY PERSPECTIVE FROM ENTRY

COUNCIL CHAMBERS LOBBY PERSPECTIVE

CITY HALL POLICE FACILITY

SCHEMATIC IMAGES – CITY HALL EXTERIOR PERSPECTIVES



CITY HALL & POLICE PERSPECTIVE

CITY HALL ENTRANCE PERSPECTIVE

The exterior perspectives show the concept design intent for the front of the City Hall and Police facility. While this is conceptual only and will be further developed during future design phases, the design direction is to provide a dignified and welcoming aesthetic for the expanded facility. The main City Hall entry and the Police entry are designed both to provide clear identity as entrance points. The exterior materials are envisioned as brick, stone, and metal panels or similar materials appropriate for a municipal facility. The exterior image also includes significant opportunity for daylighting with windows along office and meeting room spaces, as well as the large clerestory glass on the end and north side of the lobby spine element.

FIRE STATION NO. 2 LAND ANALYSIS

The Pre-Design Municipal Facilities Study includes a Land Analysis with the goal of determining potential preferred site for the construction of a replacement building for the existing Fire Station No 2. As determined in the earlier Space Needs Study, the existing fire station site does not provide an appropriate site area to meet the majority of the fire department's needs for this station. This study reviewed and provided update changes to the Space Needs Program document to incorporate the additional space needs identified since the earlier study. From there, the study proceeded with an analysis of multiple potential sites identified by the staff including review of each site's constraints relating to existing contours, stormwater conditions, easements, and major utility infrastructure. Finally, the study included site fit designs to compare the different sites and make a recommendation on the best site to meet the fire department's needs.

SPACE NEEDS ANALYSIS

In review of the space needs analysis created in the earlier Space Needs Study, the fire department determined that some additional space for increased future staffing needed to be added to the program. This was based on increased call volumes from the response area of Burnsville Fire Station No. 2 a rate greater than anticipated in fire department projections that the earlier space needs analysis was based on. It was determined that an additional 5,810 square feet of space needs should be included for this facility in order to provide the expanded operations that will be needed in future years. With this change, the facility is now planned to allow for the minimum 40+ year operational life for Fire Station No. 2 while meeting 95%-100% of the known current and future needs.

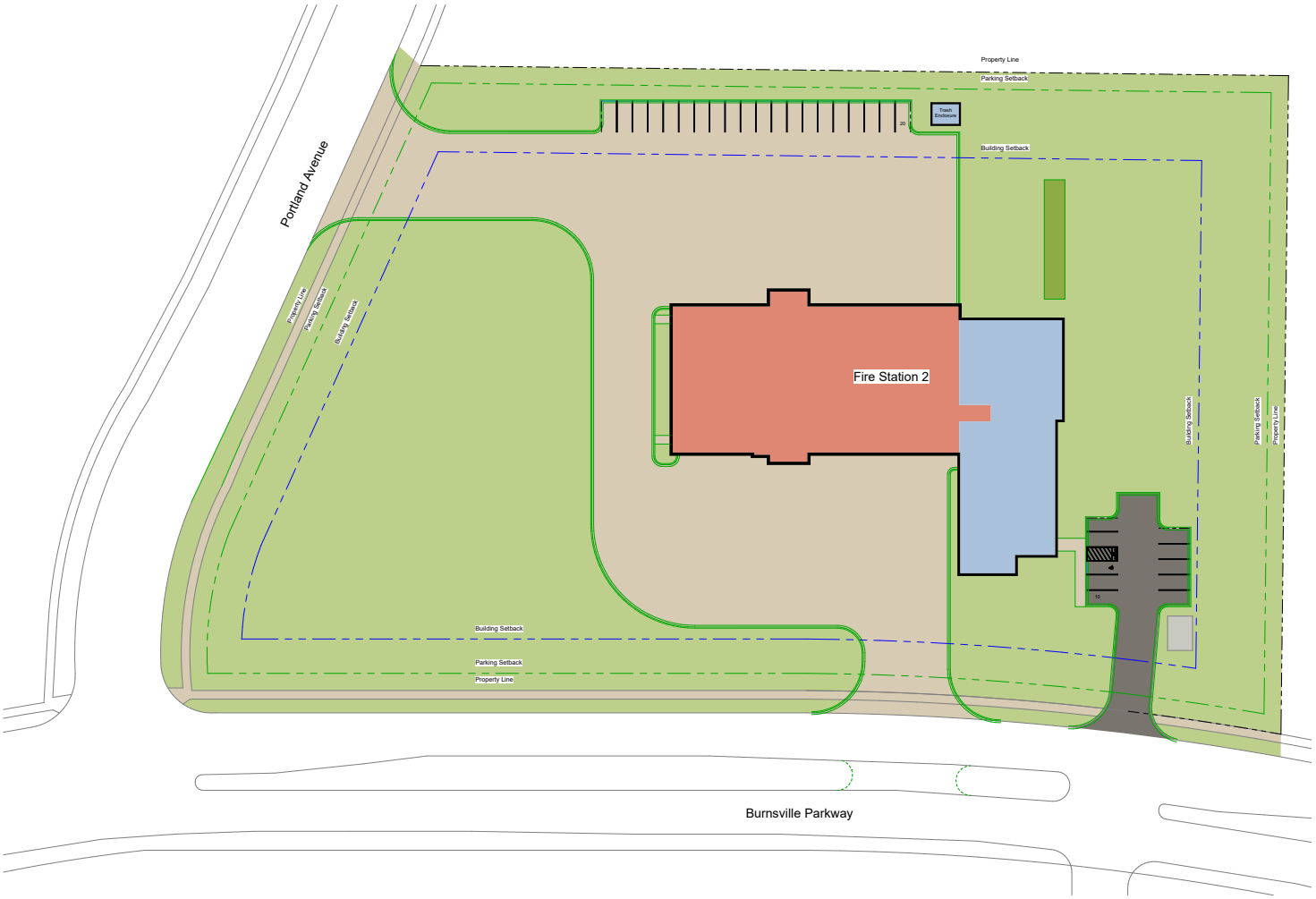
SCHEMATIC SITE PLAN

The next step in the Fire Station No. 2 study was to evaluate three separate sites identified by city staff as being possible locations for the fire station based on potential availability, location in service area to support appropriate response times, and general adjacency to significant roadways. There were three properties identified for review with two of them being privately owned land and the remaining one being city owned property. The addresses of the sites were not indicated in the review, as appropriate when evaluating privately held property.

These three properties were reviewed to identify elements on the site that would impact the design, cost, and operations for Fire Station No. 2 including street access, site contours, stormwater features, trees and woodlands, and utility availability. After gathering that information, several site fit plans were developed for each site to analyze the best site flow and building position for each. Upon completion of these site fit analysis plans, each site was evaluated to determine the ability for that site to meet the needs of Fire Station No. 2. Both privately owned sites were determined to be poor fits for the future Fire Station No. 2 building. One site was eliminated based on significant contours and trees that would need to be removed, creating both a large added project cost as well as impacting the natural state of the site. This site is also many times larger than needed for the fire station. The other site was determined to have too many bottlenecks in street access resulting in negative impacts to response time. Fortunately, the remaining city-owned site works well as shown in the following site fit plan.

FIRE STATION NO. 2 LAND ANALYSIS

SCHEMATIC SITE PLAN – FIRE STATION NO. 2 - CROSSTOWN EAST SITE



The schematic site plan shows that this site is a good fit for the proposed Fire Station No. 2 facility. There is sufficient property to meet the operational needs of the fire apparatus and the building leaving room for green space and stormwater ponding. The apparatus response flow onto Burnsville Parkway provides access to a major street and is positioned well away from the Portland Avenue intersection providing good visibility and safety.

This site also allow for public parking and the main fire station public entrance facing the front at Burnsville Parkway providing for a clearly identifiable entrance and the opportunity for nice aesthetic impact on the neighborhood.

MAINTENANCE FACILITY

The following categories provide an overview of the results from the comprehensive analysis and design process that was implemented for the maintenance departments housed in the Maintenance facility. The section ends with schematic design documents for the site as well as addition and remodeling floor plans.

EXISTING FACILITY ANALYSIS

The Pre-Design Study for the Maintenance facility began with a full review of the previous Space Needs Study to understand the information developed within that document including existing facility condition review, initial space needs program, and review of organizational diagrams developed. The Space Needs Study was also reviewed with the executive committee staff to identify the limits of the previous study and determine what additional research and design was needed within this study.

This was followed by a detailed walk-through of the Maintenance facility by the entire design team including leadership from each of the design and engineering disciplines. This exploration provided an opportunity for the design team to visually see existing facility deficiencies identified in the prior study, hear staff comments related to ongoing space shortages or maintenance issues, and identify additional concerns to be evaluated.

The final step in the analysis of the existing facilities was to provide an opportunity to tour a new facility at a northern metropolitan city maintenance facility to discuss the facility features at this location. This tour provided feedback from leadership staff on both positive impressions, as well as elements that does not meet project guiding principles. Extensive notes were gathered and collated after these tours, providing input for upcoming design discussions and decisions.

SPACE NEEDS ANALYSIS

The next step was to update the space needs program for the Maintenance facility operations. The space needs program from the Space Needs Study was downloaded as a starting point for this phase of the study. From there, extensive meetings were setup with each department within the maintenance department to gather in-depth knowledge of the departmental needs focusing not just on current shortfalls but also on long-term staffing and operational requirements. These meetings tasked each department with identifying current and future staffing and space needs resulting in a few space needs that were not listed in the original study.

The resulting Space Need Program was finalized providing the basis for the following schematic design process. The total space needs areas are indicated in the table below including a comparison to both the existing facilities and the areas identified in the earlier Space Needs Study.

	Existing	Initial Study	Pre-design	Differential
Maintenance	92,674	160,145	172,849	12,704

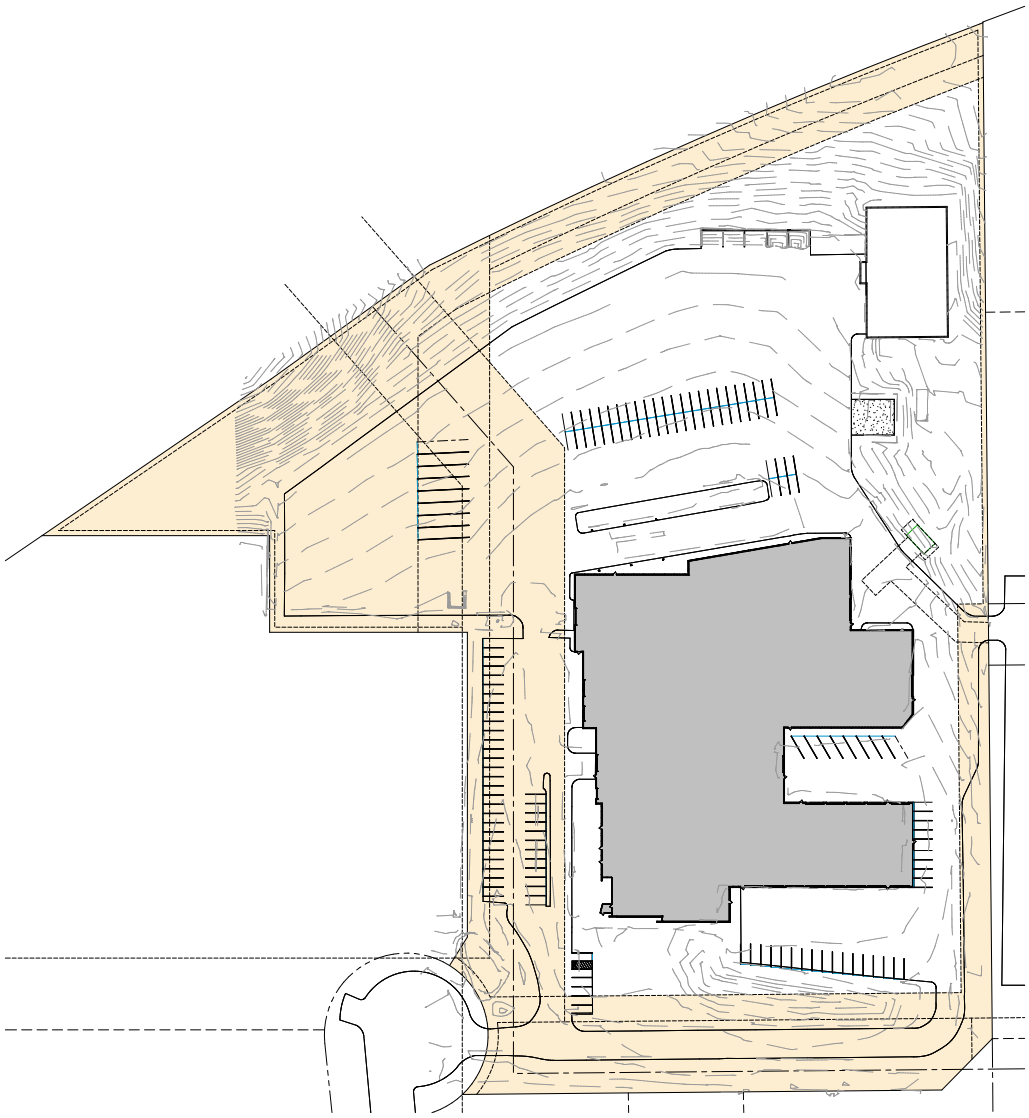
As noted in the table, this study's in-depth space needs analysis, along with the outside staffing needs studies, identified a small amount of additional square footage needed to achieve the study goal of meeting 95% - 100% of the long-term needs of the city for this facility.

MAINTENANCE FACILITY

SITE ANALYSIS

The next step was to evaluate the constraints and opportunities inherent in the existing Maintenance facility site to inform the upcoming schematic design phase. The design team, along with input from city staff, gathered background site information including ordering a detailed site survey and a geotechnical soil investigation with multiple soil borings around the site. Added to this was information gathered regarding the significant utility easements associated with this site due to the adjacent electrical substation operated by Dakota Electric Association and the power lines crossing the maintenance site from the north along the west side of the site.

From the information gathered there are several constraints that have been identified that impact the design of any addition and remodeling to the building. These items are graphically indicated in the Existing Site Plan below.



The electrical easement is the significant impacting element on the site which covers the entire west side of the site starting generally adjacent to the existing west building edge. This site also does not currently include stormwater treatment which will need to be addressed within future additions, although there will be no potential significant change in impervious surface as the majority of the existing site is either building or pavement.

MAINTENANCE FACILITY

COMMUNITY ENGAGEMENT

An important part of the Pre-Design Study was providing community engagement opportunities to inform the schematic design of the facility. For this facility, the main audience for engagement was the city employees working daily at this site.

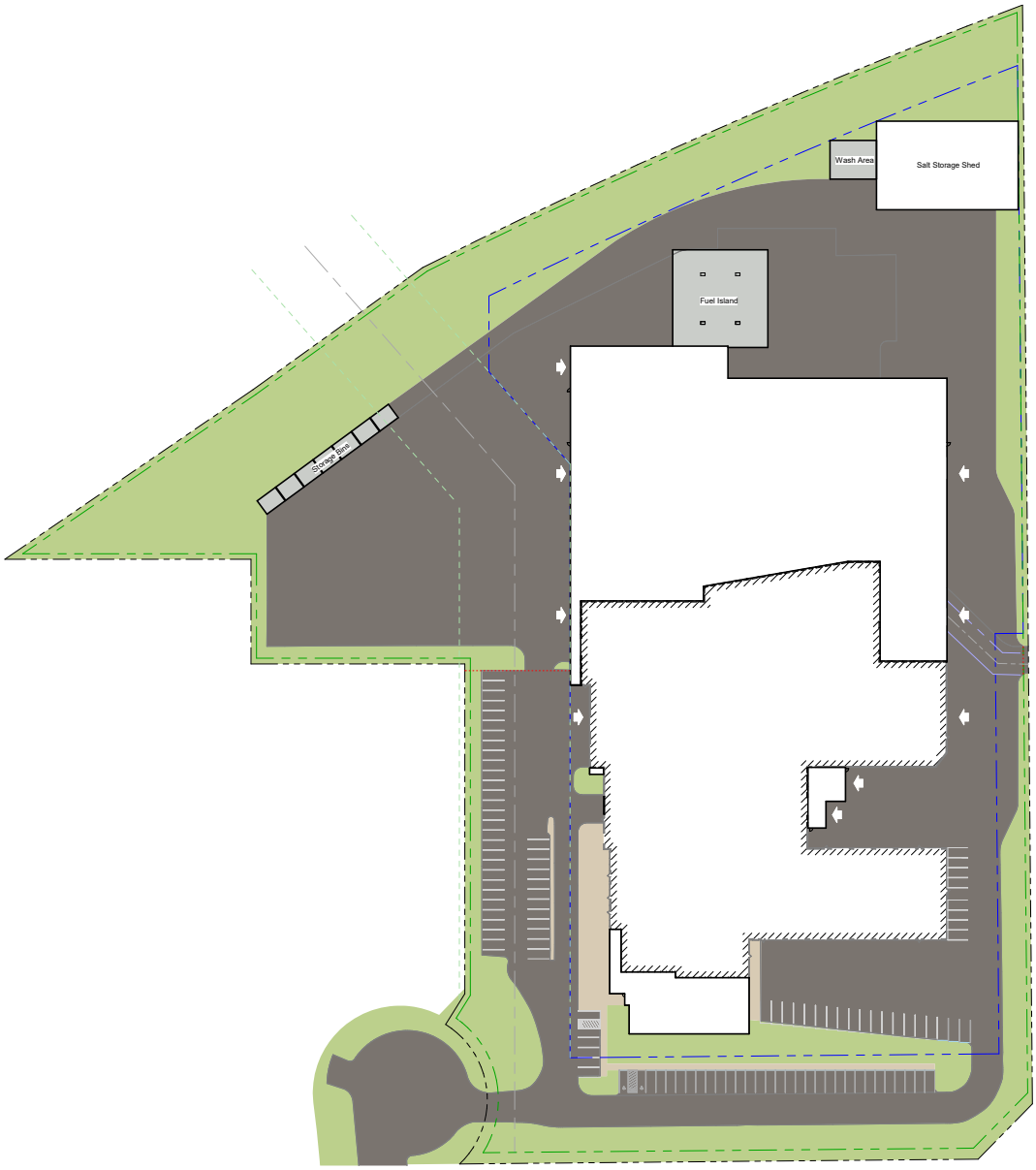
To gather input from city employees, there was an open house providing an overview of the pre-design plans and the opportunity for staff to ask questions and provide comments to the design team or their departmental leadership. This open house was well attended and provided productive feedback from city employees attending.

SCHEMATIC PLANS

As the additional space needs program indicated areas for expansion of maintenance garage and office operations, the schematic design process needed to evaluate options where the expansion could be located to meet both the areas needing to expand as well as positioned on the site avoiding utility and easement constraints. After many iterations and staff feedback, the following schematic design plans were developed. These plans, while representing significant design work and staff input, also leave room for further development when additional feedback is provided.

MAINTENANCE FACILITY

SCHEMATIC SITE PLAN – MAINTENANCE FACILITY

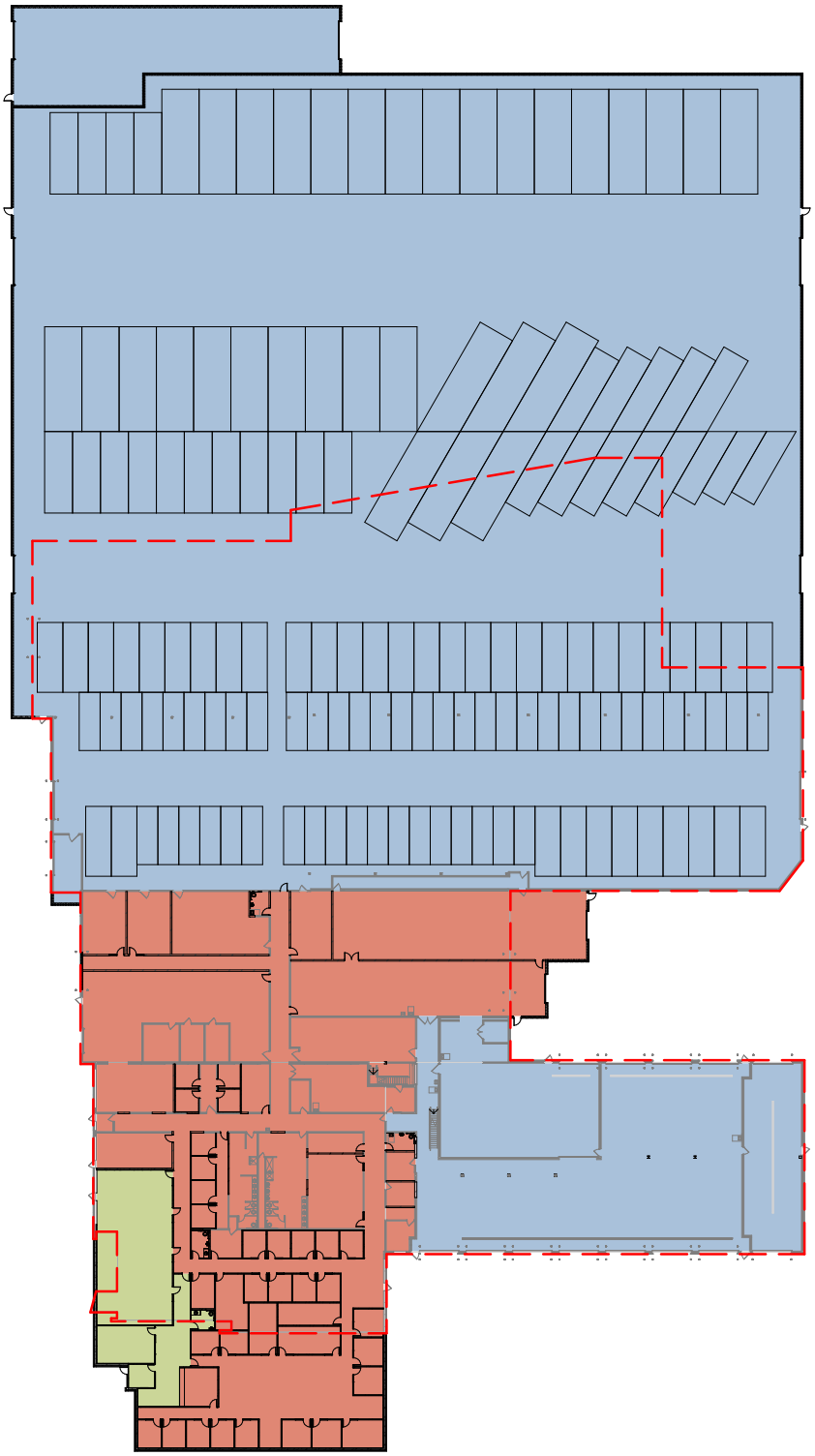


The schematic site plan developed provides for a large vehicle garage addition to the north of the existing building with a new fuel pumping station. There is also a small office addition on the south edge of the existing facility and a new salt storage building in the far northeast corner. This layout provides for sufficient clearances for the circulation of the large vehicles associated with the maintenance department. Finally, the site plan includes additional staff parking along the south facility drive.

This schematic site plan development indicates the maximum development that could occur on this site and meets most of the long-term needs of the maintenance department but not all future requirements. There may be a need for relocation of some portion of the current operations to another city location in the future, if operational needs expand beyond the amounts currently indicated in the schematic plans shown in this study. It was noted by maintenance staff leadership that there are several operations that could be relocated if this became necessary in the future. In summary, the location and size of this site, along with the ability to use the existing building, still results in this site being the appropriate location for the Maintenance facility in the long-term.

MAINTENANCE FACILITY

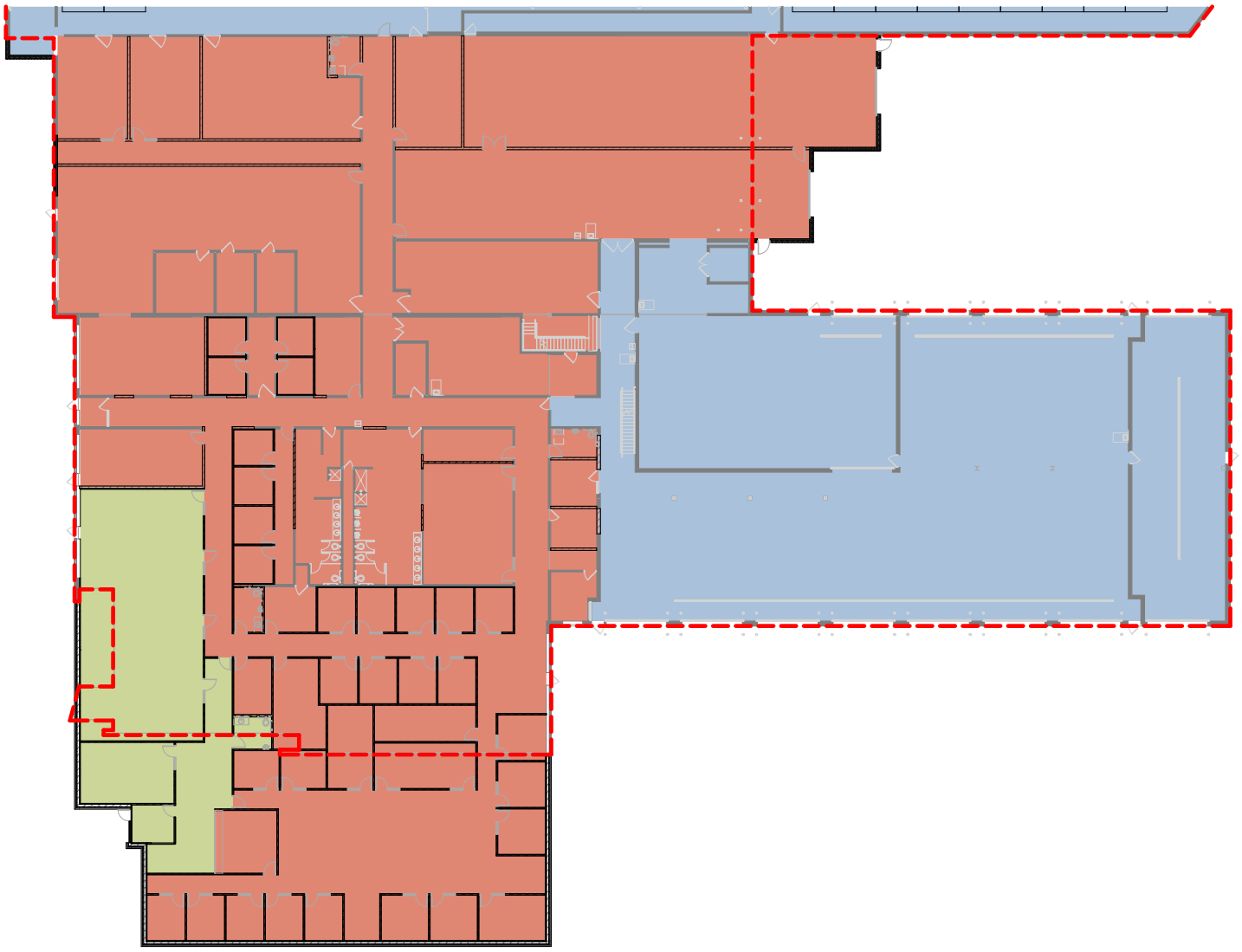
SCHEMATIC FLOOR PLANS – OVERALL MAINTENANCE FACILITY



The Overall Maintenance Facility Floor Plan indicates both the existing remodeled building within the red dashed line as well as the additions beyond this outline. The vehicle storage garage and repair bay space is indicated in the light blue background color, office staff areas are indicated in red, and the public space and supporting rooms in the green background color.

MAINTENANCE FACILITY

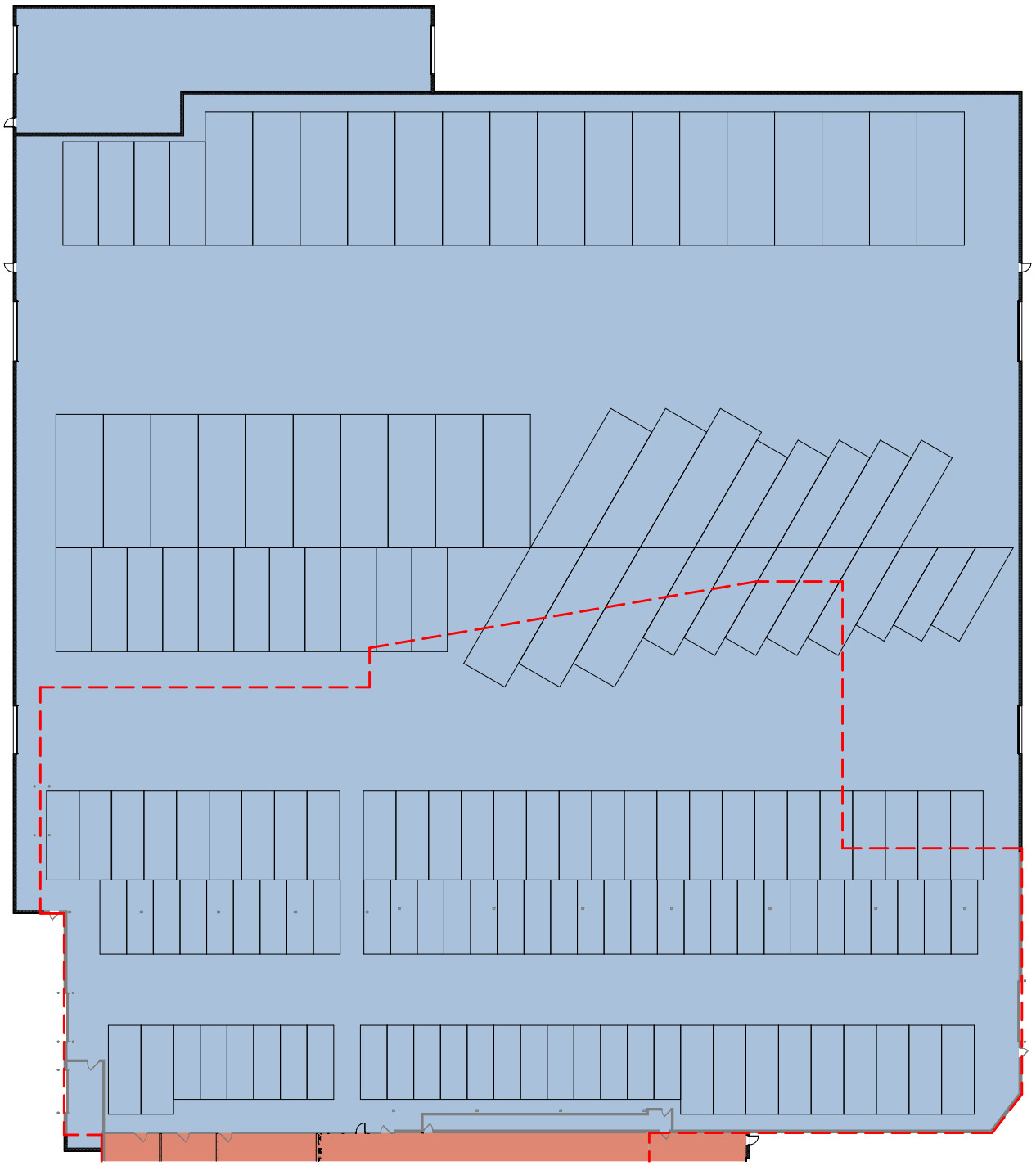
SCHEMATIC FLOOR PLANS – MAINTENANCE FACILITY – OFFICE & SERVICE BAYS



The schematic floor plans for this south portion of the building is mostly remodeled areas within the existing facility with a small office addition on the south end of the building. Approximately half of the existing building in this plan is light remodeling only with the office space receiving the more involved renovation. One of the main upgrades provided in this plan is the provision of a secure public entry area shown in the green background color with lobby, restrooms, and conference rooms available outside of the secure staff portions of the building. Items that are impacted in this plan are providing for a dedicated receiving and storage area adjacent to the service bay allowing for this staff to receive shipments. The other major impact within this portion of the building is the provision of sufficient office and open office space to meet the needs of the current and future staff requiring a desk.

MAINTENANCE FACILITY

MAINTENANCE FACILITY - GARAGE FLOOR PLAN



The garage portion of the schematic floor plan shows a large expansion of the garage space to the north of the existing building. This expansion is needed to house all maintenance vehicles and meet Best Practices and safe operations for this type of vehicle storage. The existing north bay of the maintenance garage will need to be demolished and rebuilt to the new bay widths in order to maximize the storage capacity of the overall garage bay to meet the current and future fleet needs of the department on this site. In addition to garage space, the addition includes a drive-through large vehicle wash bay, sized to fit a multi-arch wash system along with undercarriage cleaning.

PRE DESIGN COST ESTIMATES

Cost estimates for the new and expanded buildings within this Municipal Facility Pre-Design Study were developed by Kraus Anderson (KA). The costs shown below represent the total project costs, including all hard costs for actual building construction - as well as typical project soft costs. Soft costs are items purchased or services provided directly to the City outside of the actual building construction. These include typical items such as furniture, equipment, design fees, testing, audio/visual systems and other similar items.

The cost estimate table shows current costs for bidding each project in 2024 and annual escalations through 2033, providing an estimated construction cost for each building over a variety of bid dates. These cost use a 4% construction escalation rate compounded annually which is the industry standard for averaging construction escalation over an extended period of time.

	Police / City Hall	Fire Station 2	Maintenance Facility
2024	$93,449,093	$25,140,001	$54,324,480
2025	$97,187,057	$26,145,601	$56,497,459
2026	$101,074,539	$27,191,425	$58,757,358
2027	$105,117,521	$28,279,082	$61,107,652
2028	$109,322,221	$29,410,246	$63,551,958
2029	$113,695,110	$30,586,655	$66,094,036
2030	$118,242,915	$31,810,122	$68,737,798
2031	$122,972,631	$33,082,526	$71,487,310
2032	$127,891,536	$34,405,827	$74,346,802
2033	$133,007,198	$35,782,061	$77,320,674

While the above costs are based on Pre-Design Schematic drawing, the cost estimates include appropriate contingencies for both hard and soft costs to address changes and additional detail available as any of the projects proceeds. Refer to the appendix for a more detailed breakout of these cost estimate for each facility.

APPENDICES

Space Needs Programs
- City Hall / Police
- Fire Station No. 2
- Maintenance Facility

Community Engagement Survey Results
- City Hall / Police

Construction Cost Estimates
- City Hall / Police
- Fire Station No. 2
- Maintenance Facility