

FIRE STATION SCOPING STUDY

Prepared for City of Fort Saskatchewan

February 24, 2025



PREPARED BY

ACI Architecture Inc.

PREPARED FOR

City of Fort Saskatchewan

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ISSUED

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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

In September 2024, ACI Architecture Inc. was retained by City of Fort Saskatchewan to conduct a Fire Hall Scope Feasibility Study which will help evaluate the growing requirements of the city. The Study will provide details to consider for the addition of a second fire hall, located on the parcel at Southridge Boulevard and Southview Way.

The purpose of the study is for the design team to present three alternative design concepts of a second fire station for the City of Fort Saskatchewan including:

- Conceptual renderings,
- Class D costing,
- Operational cost projections,

Three fire hall facility concept concepts were explored using previous studies:

- City of Fort Saskatchewan Fire Services Master Plan (completed in February 2023 by Behr Integrated Solutions, Inc.)
- 2023-2026 Fire Services Department Business Plan, City of Fort Saskatchewan
- City of Fort Saskatchewan Land Use Bylaw C23-20
- Fire Underwriters Survey (FUS)

The studies above were used as referent documents along with interviews with staff of the Fire Department and City Administration. Fire halls are not public buildings unless invited in for tours, school or public education programs so public engagement was not considered relevant for this work.

The three design concepts are all located on the same site, with modifications to the layout in response to each design and requirements. The three concepts will offer distinct changes to program showing minimum, moderate and optimum designed programming to accommodate the anticipated growth of Fire Saskatchewan Fire Department (FSFD).

The study will consider the following factors:

- Community growth and risk,
- Response boundaries,
- Verify appropriate allocation of space for staff and equipment,
- Emergency service and response effectiveness and efficiency,
- Emergency management constraints and challenges,
- Training needs and challenges,
- Facility opportunities.



CITY OF FORT SASKATCHEWAN
FIRE STATION #1

1.2 BACKGROUND

The Fort Saskatchewan Fire Department (FSFD) is a Composite Fire Department with a combination of 45 dedicated professionals of career full-time and casual firefighters. These qualified and trained individuals provide both emergency and non-emergency services. The City of Fort Saskatchewan, as a community, has ensured that the services provided by FSFD align with the identified risks and needs of the citizenry.

The Emergency Services provided by FSFD respond to:

- Fire suppression,
- Motor vehicle related collisions,
- Emergency medical incidents,
- Hazardous material spills or releases,
- Water, ice, and river incidents.

In addition to Emergency Services, the FSFD provides incident prevention training, education strategies for the community, and staff training. Fire Services also leads the City in municipal emergency and disaster planning and preparedness strategies through collaboration with other City of Fort Saskatchewan departments, industry partners and organizations.

A City of Fort Saskatchewan Fire Services Master Plan was completed in February 2023 by Behr Integrated Solutions, Inc. This document serves as a comprehensive guide for the City's long-term strategic plan for the next ten years. It identifies policy development requirements, personal and amenity growth suggestions and evaluating the delivery and services of FSFD.

Stakeholder Engagement

ACI Architecture Inc. in collaboration with the City of Fort Saskatchewan, had undertaken three (3) stakeholder engagement, one on October 4, 2024 and two on November 7, 2024. The stakeholder engagements included full-time and casual staff. The engagement session consisted of discussions on critical aspects within the program/building, puzzle piecing exercises of the site plan and program elements, and vision boards to gain an understanding of how the user groups perceive certain elements. Staff unable to

partake the in-person engagements had the opportunity to provide feedback via online platforms.

The City of Fort Saskatchewan employees in attendance were able to discuss issues and concerns around the programming and site, and brainstorming design solutions that align with the day-to-day activities and meets the operational requirements.

City of Fort Saskatchewan and FSFD participants included:

- **Todd Martens**, Fire Chief/Director of Emergency Management
- **Paul Edginton**, General Manager/Community and Protective Services
- **Sandy Bugeja**, General Manager, Corporate Services
- **Janel Smith-Duguid**, Deputy City Manager, Infrastructure & Planning Services
- **Troy Fleming**, City Manager
- **Trevor Harder**, Director Information Technology
- **Joey Farebrother**, Senior Engineering Coordinator
- **Sadie Miller**, Director, Utilities & Sustainability
- **Brad McDonald**, Manager, Utility Services
- **Richard Gagnon**, Director, Public Works
- **Brian Rogers**, Manager, Roads Services
- **Joey Farebrother**, Coordinator, Senior Engineering
- **Grant Schaffer**, Director Fleet, Facilities & Engineering
- **Stacey Ofstie**, Senior Development Planner
- **Dean McCartney**, Manager, Development Planning
- **Quinn Gillard**, Deputy Chief Emergency Management
- **Fire Rescue Services Members**, Platoons A, B, C, D / Full-Time and Casual Staff

1.3 Study Objectives

The objective of this scope study is to identify and assess three design concepts capable of supporting the operational needs of both current and potential growth requirements. The selected site provides a generous space for the facility itself, ample parking, and area for a live training facility. Ensuring that the facility has the capacity to adapt over time is a priority to maintain efficiency and readiness for fire personnel.

The site chosen is an ideal location which will allow fire rescue to quickly reach key areas of the city, that is not feasible to meet response time with the current Fire Hall, while also considering future road developments that could impact traffic patterns.

Given anticipated population growth and an increasing demand for community services, we have worked with City of Fort Saskatchewan to find out projected staffing needs to ensure the proposed facility can support a scalable workforce that evolves in line with Fort Saskatchewan's future demands.

To further support the scoping study, conceptual floor plans will be developed based on the program requirements provided. These plans will outline spatial allocations, functional adjacencies, and circulation efficiencies to ensure the facility meets operational needs. The layouts will prioritize firefighter response times, training areas, and administrative functions while allowing for future adaptability. This design approach ensures the station is not only efficient upon completion but also remains flexible to accommodate evolving service demands.

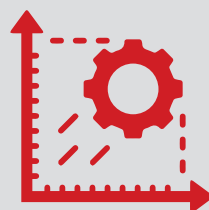
Preliminary budget estimates are provided for each concept to ensure that proposed solutions are financially viable and aligned with funding resources. These budget considerations encompass not only the construction and development of the facility but also anticipated costs for infrastructure, utilities, and other essential support systems required to establish a high-functioning fire station for the City of Fort Saskatchewan as the city continues to expand.



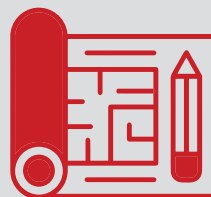
Identify and assess potential sites to provide flexibility, adaptability overtime on the changing needs.



Ideal location for efficient and effective response times.



Assessing staffing requirements and operations.



Conceptual floor plans developed based on program requirements.



Preliminary budget estimates to ensure financial viability.

CITY OF FORT SASKATCHEWAN



2.0 EXISTING FACILITY

The Fort Saskatchewan Fire Department (FSFD) was established in 1905, marking the beginning of organized fire services in the city. A year later, in 1906, a combined fire and town hall was constructed at the northwest corner of 100 Avenue and 103 Street. The fire department occupied the ground floor, while the town hall and council chambers were situated on the upper level. This arrangement remained in place until 1958 when FSFD relocated to a new facility to better accommodate its growing operational needs.

As Fort Saskatchewan continued to expand, FSFD evolved to meet the increasing demands of the community. In 1983, Fire Hall Number 1 was constructed at 10099 93 Ave to serve as the department's primary station. Designed to support the operational needs of the time, the facility has been the central hub for emergency services in the city for over four decades. For many years, Fire Hall Number 1 also housed Emergency Medical Services (EMS), reinforcing its role as a critical response center for both fire and medical emergencies; however, as service demands increased and operational requirements evolved, EMS relocated to a separate facility to better serve the growing community.

Fire Hall Number 1 is a two-story facility designed to support the Fort Saskatchewan Fire Department's 24/7 operations. Spanning 1,519 m² (16,350 sq. ft.), the station is divided into 1,386 m² (14,919 sq. ft.) on the main floor and 133 m² (1,431 sq. ft.) on the second floor. The facility features multiple apparatus bays, administrative offices, training rooms, and firefighter living quarters, ensuring both operational efficiency and crew support.

The living quarters include two separate areas for on duty firefighters, one area is on the second floor and the other area is in an attached modular trailer. The firehall also has a kitchen, and communal areas, providing necessary spaces for firefighters on duty.

The apparatus bays house fire engines, rescue units, and other emergency response vehicles, allowing for rapid deployment across Fort Saskatchewan. Additionally, the station includes maintenance areas and storage for critical firefighting equipment, ensuring readiness for any emergency.

The outdoor space around the firehall is used for employee parking and on-site training for some aspects of the ongoing maintenance of firefighter competencies. It also stores practice equipment for training and drills. The space is not secured, and the public can drive through and around the station which is a concern for safety of the public and firefighters.

In 2023, FSFD celebrated its 118th anniversary, reflecting on its long-standing commitment to public safety. However, as Fort Saskatchewan experiences continued growth, assessments have been conducted to evaluate Fire Hall Number 1's ability to meet current and future service demands. These evaluations aim to ensure the facility remains efficient, adaptable, and capable of providing timely fire protection and emergency response services for the city's residents.

As of 2025, FSFD continues to operate from their current Fire Hall, upholding its dedication to protecting the community while planning for the needs of Fort Saskatchewan's fire services.



CITY OF FORT SASKATCHEWAN
FIRE STATION #1 AREA VIEW - GOOGLE MAPS



93 AVENUE

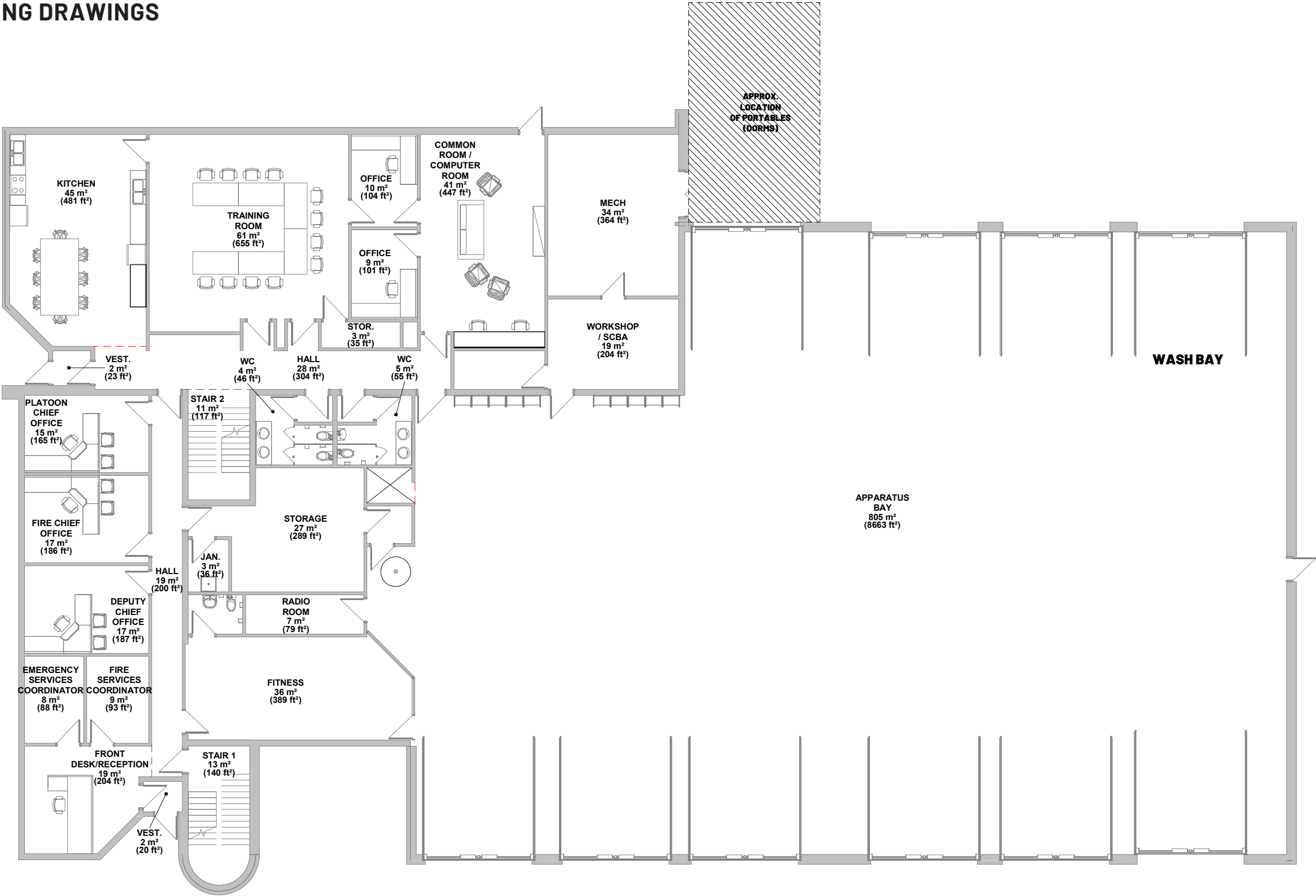
101 STREET

VETERANS WAY

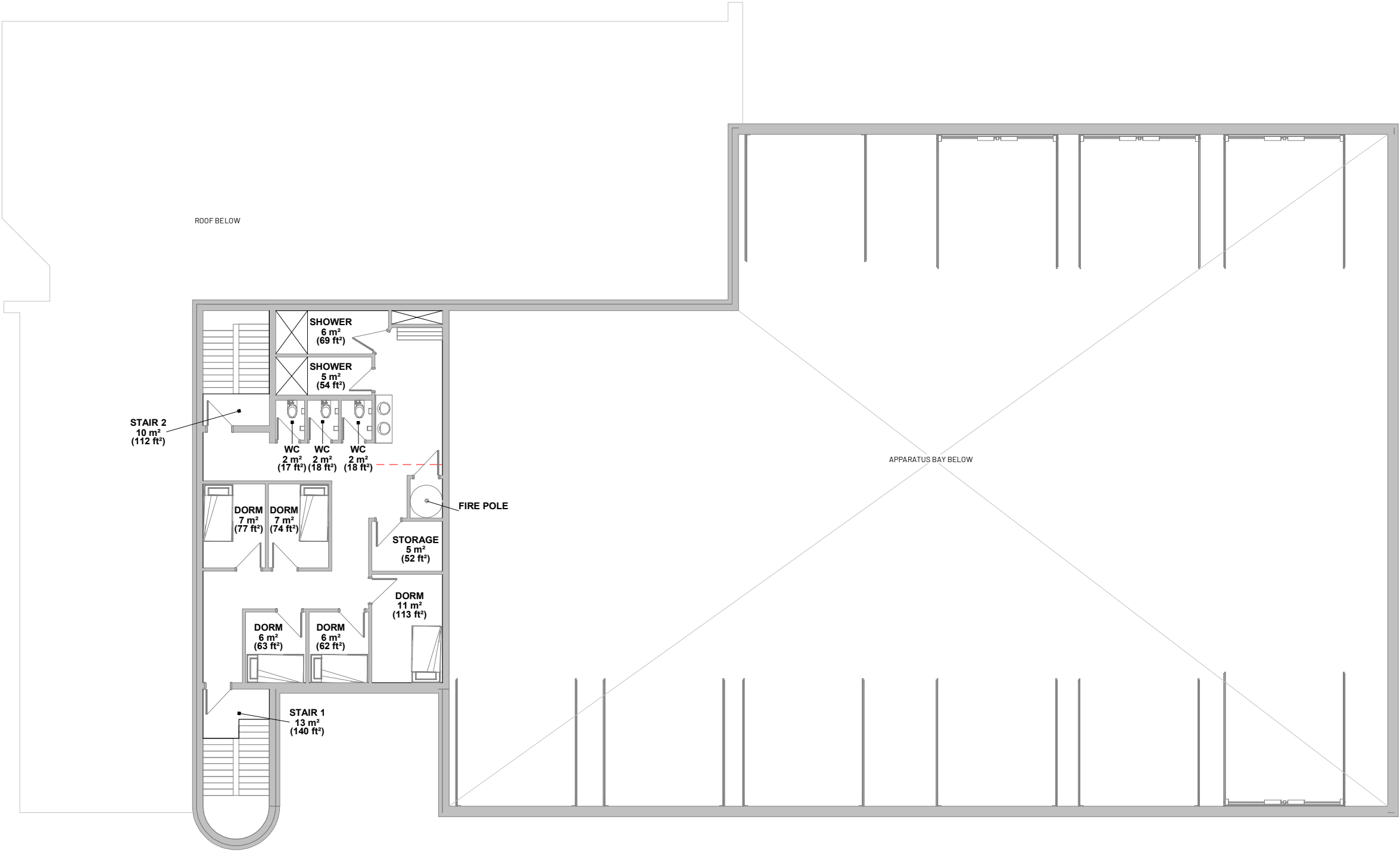
FIRE STATION #1
10099 93 Avenue
Fort Saskatchewan,
AB T8L 1N5
1,519 sq. m.
(16,350 sq. ft.)



2.1 EXISTING DRAWINGS



MAIN FLOOR PLAN - EXISTING
NTS



SECOND FLOOR PLAN - EXISTING
NTS

2.2 EXISTING FACILITY CONSTRAINTS

2.2.1 CURRENT SITE ANALYSIS

Space Limitations: The original facility's layout and size (1,519 m²) was built for a casual fire service and not a 24 hour service. Administration has provided renovations over the years to adjusting the space to meet current needs at the time, but the building has reached its capacity of being able to be adapted for future needs. Due to the site's size and urban location, there is limited capacity for expanding or reconfiguring the building to accommodate future growth as the site is constrained by roads, residential dwellings and community-based facilities. The current location also has limitations in getting emergency responses to the cities south regions.

Aging Infrastructure: The building is 42 years old and as the fire service evolves its sophistication with technology and improved safety measures the building will require upgrades to meet modern standards for fire protection and emergency response.

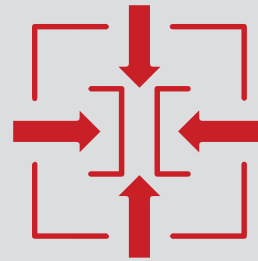
Traffic and Accessibility: The fire hall's proximity to busy roads and dense urban areas impacts response times or vehicle access during peak hours due to vehicular traffic. Seasonal conditions, such as winter's ice and snow, will also impact traffic conditions where the existing facility is located.

Lack of Modern Amenities: The current design lacks features that could improve crew welfare, such as larger common areas or dedicated spaces for training, fitness, and detoxification.

Unsecured Parking Areas for Firefighters: The current station lacks secure and designated parking for firefighting personnel, which could pose safety concerns and hinder efficient access to emergency vehicles during high-priority situations.

Energy Efficiency: The building does not meet current energy efficiency standards, requiring improvements to reduce operating costs and environmental impact.

Lack of Secured Storage: The facility does not have sufficient secure storage space for essential firefighting equipment, personal protective gear, and sensitive materials, which could impact readiness and safety.



Constraints in future growth and limited expansion capability



Proximity of facility may impact response times, especially during rush hour.



Unsecured parking areas for the fire fighters pose safety concerns and hinder access efficiencies. Lack of secured storage.



Existing facility does not meet current energy efficiency standards.

2.2.2 CURRENT BUILDING ANALYSIS

Fragmented Floor Plan: Extensive reconfigurations over time to meet growing needs have resulted in a fragmented layout, making efficient circulation and space utilization challenging.

Modular Addition for Bunks: The addition of bunk rooms in a modular structure located away from the main living quarters creates inefficiencies and challenges for firefighter coordination and response times during emergencies.

Lack of Dedicated Laundry/Drying Rooms: The facility does not have a dedicated laundry and drying space for cleaning firefighting gear. It is critical that bunker gear is properly cleaned and dried to reduce the carcinogens that are on bunker gear after emergency responses. This preventive measure reduces the chance of firefighter cancers and facilitates the gear being properly and promptly ready for the next response.

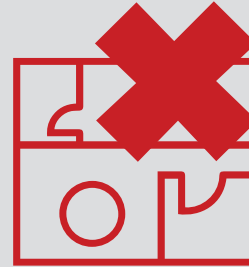
Inadequate Workshop Size: The current workshop space is too small to properly maintain and repair fire equipment and tools, limiting operational efficiency.

Apparatus Bay Utilization: The apparatus bay is utilized to its maximum capacity, limiting space for maneuvering vehicles and storing additional emergency response units.

Lack of Detoxification Facilities: More recent studies are showing that among fire fighters, serious health concerns are becoming more prevalent. Researchers are investigating natural remedies and approaches that include detoxification through sweat for removal of toxic substances from the body.

Longer Call Times Due to City Growth: As the City of Fort Saskatchewan continues to grow, response times will increase, and will affect the station's ability to reach certain areas of the city within optimal time frames.

Public Entrance and Area Separation: Although fire halls are not public facilities, but when community programs are offered, the current design lacks a distinct public lobby, with offices and gyms exposed to public access. This creates potential security concerns, as areas meant for personnel use are not adequately separated from public spaces, impacting both safety and operational efficiency.



Fragmented layout makes space utilization challenging. Particularly with addition of modulars for additional dorms which create inefficiencies.



Longer call times due to the City's population growth and expansion.



Lack of distinct public lobby leaves private and secure areas exposed, posing security and safety concerns.



Existing facility has insufficient space and dedicated facilities, which hinders operational efficiencies and affecting safety.

2.3 EXISTING FACILITY OPERATIONS

	EXISTING HALL	
OPERATIONS		\$m2
TOTAL AREA	1,519 m ²	
UTILITIES WATER/SEWER/ SOLID WASTE	\$4,639.72	\$3.05
UTILITIES NATURAL GAS	\$10,117.09	\$6.66
UTILITIES ELECTRICITY	\$33,687.87	\$22.18

Disclaimer:

The facility operation budget for utilities presented herein is based on data derived from the City of Fort Saskatchewan's 2023 utility information. Please note that these figures are subject to change based on fluctuations in utility rates, consumption patterns, and other factors that may affect future costs.

2.4 INTRODUCTION TO CONCEPTS

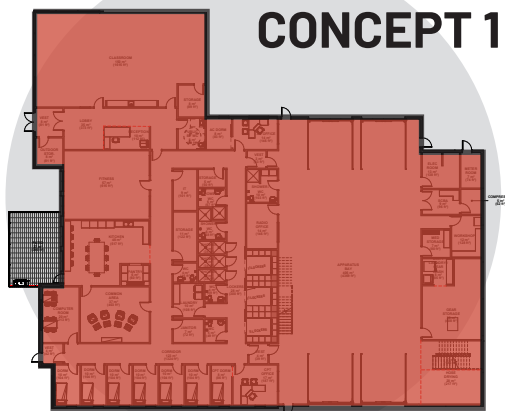
The following three concepts represent distinct approaches to meeting the growing operational and staffing needs of the Fort Saskatchewan Fire Department (FSFD). Each concept is designed to address the evolving demands of the community while ensuring that the facility can adapt to future growth, technological advancements, and changing operational requirements.

Concept #1 offers a stand-alone, single-use fire station featuring a live fire training tower and dedicated training grounds. The efficient design focuses on a modest layout and future scalability, allowing for the potential addition of extra apparatus bays as needed. However, operational efficiency could be impacted due to the division created by the layout. The facility includes dormitory space for eight staff members, a small business area for administrative offices, and 15 visitor parking, and 31 fire rescue staff (secured) and fourteen visitors (non-secured). While this concept is cost-effective and suitable for addressing the immediate operational needs, its design may present challenges in terms of overall functionality as the department continues to grow. The future cost of construction and escalation is prohibitive of future renovations.

Concept #2 explores a dual-use facility that combines the fire station with expanded training and classroom areas. It includes a three-bay fire station, a one-story layout, and space for 10 dorms, providing greater capacity for staff. The building also includes medium-sized administrative offices and additional parking spaces for staff and training purposes. This design concept balances operational needs with enhanced training capabilities and a larger space for administrative functions.

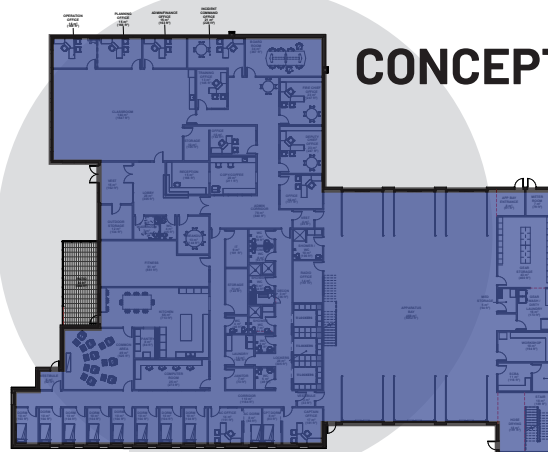
Concept #3 outlines an optimized multi-use facility that integrates the fire station with a permanent space for Emergency Coordination Center (ECC), fire prevention/inspection areas, and extensive training grounds. This concept includes a three-bay fire station, two stories of operational administrative space, and ample parking for staff and visitors. The addition of the dedicated ECC and fire prevention areas enhances the department's ability to respond to large-scale emergencies while supporting a broader community role in fire prevention and public safety.

CONCEPT 1



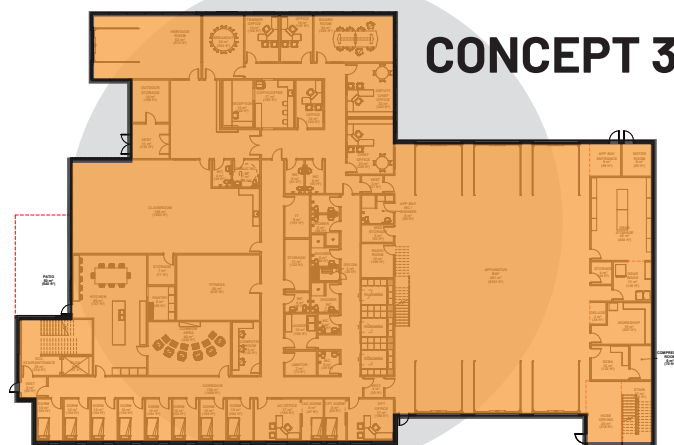
Main Floor Area = 1,388 sqm / 14,940 sqf
 Second Floor Area = 214 sqm / 2304 sqf
 Total Area = 1,602 sqm / 17244 sqf

CONCEPT 2



Main Floor Area = 1,857 sqm / 19,989 sqf
 Second Floor Area = 245 sqm / 2637 sqf
 Total Area = 2,102 sqm / 22,626 sqf

CONCEPT 3



Main Floor Area = 1,917 sqm / 20,635 sqf
 Second Floor Area = 869 sqm / 9354 sqf
 Total Area = 2,786 sqm / 29,989 sqf

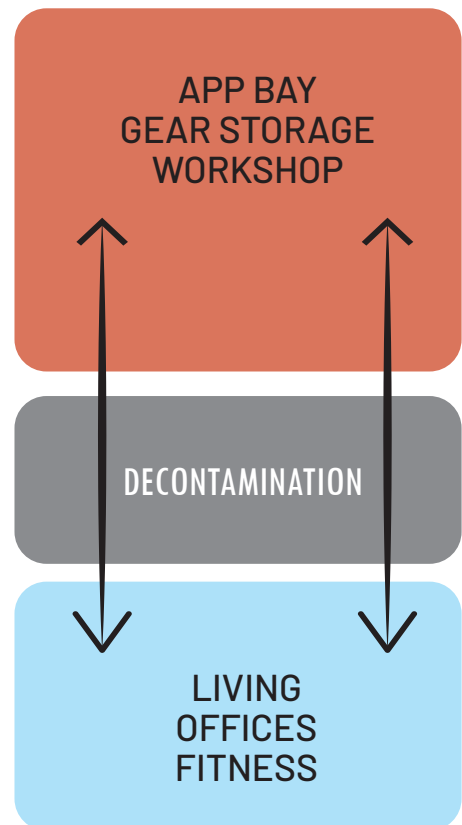
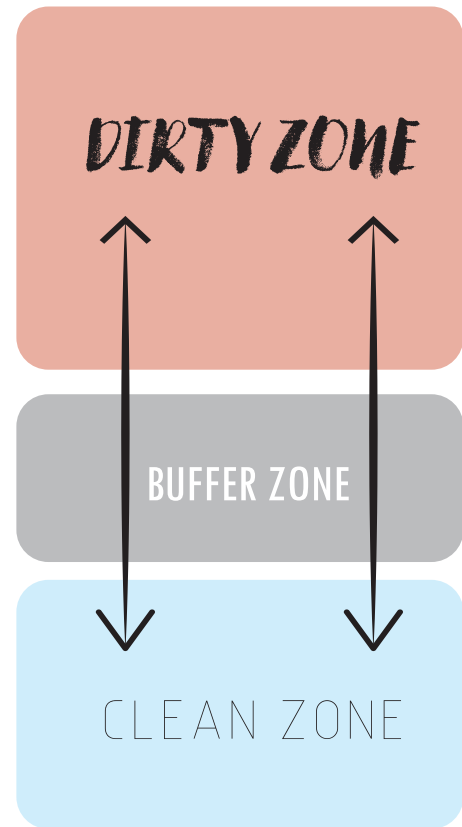
2.4.1 Importance of Dirty to Clean Spaces

In designing a fire station, it's essential to consider the separation between "dirty" and "clean" spaces within the facility. "Dirty" spaces, including the apparatus bay and rooms dedicated to firefighting operations, are where equipment and personnel interact with hazardous materials, including smoke, soot, and other contaminants. These areas are designed for efficiency in fire response and must be equipped to handle the cleaning, maintenance, and immediate use of fire apparatus.

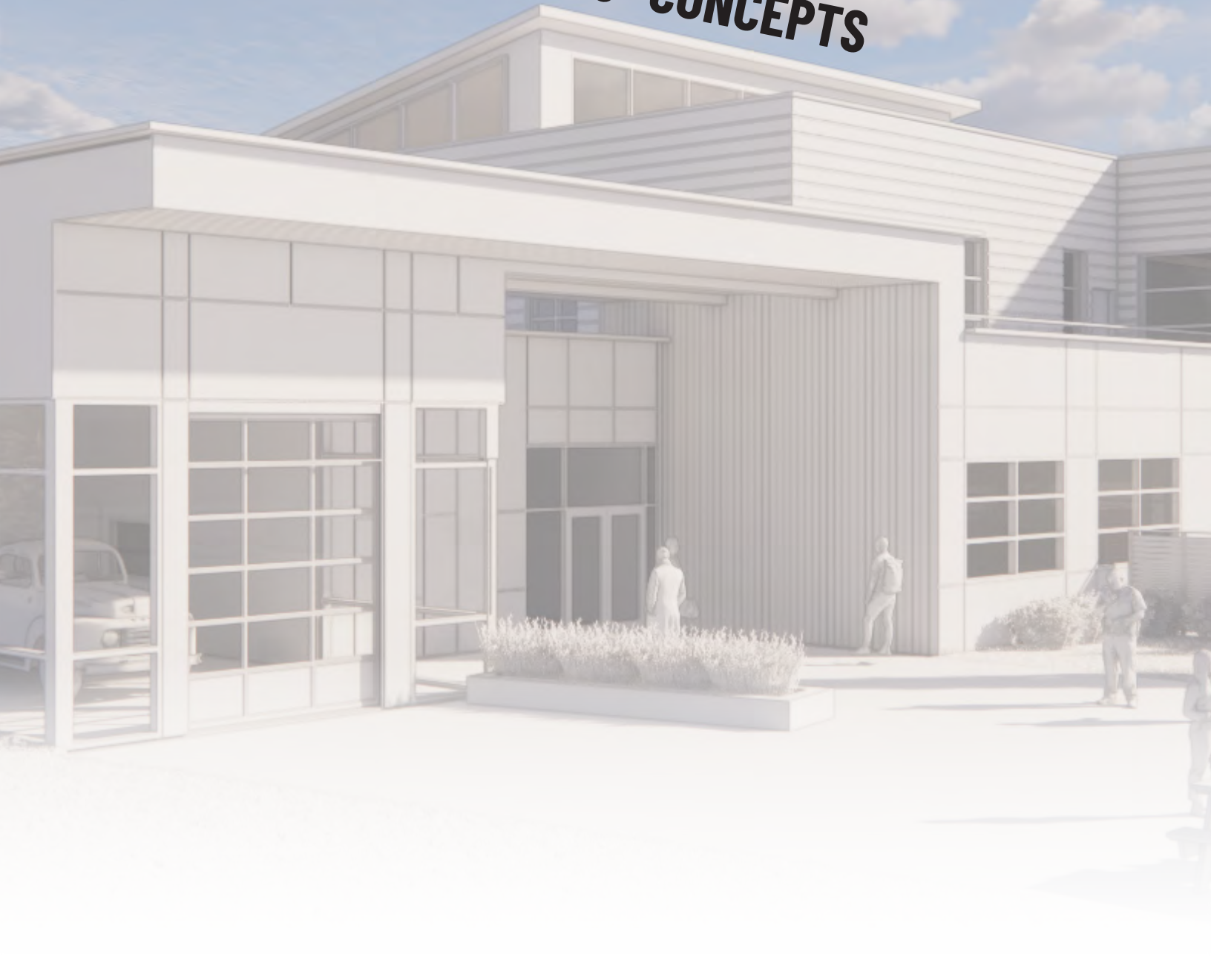
On the other hand, "clean" spaces include offices, living quarters, and fitness areas, which need to remain separate from the hazardous environments of the dirty spaces to ensure both the safety and comfort of the personnel. Clean areas promote well-being, health, and productivity for the staff, offering spaces for rest, administrative duties, and physical fitness. Maintaining a clear division between these spaces enhances operational efficiency, prevents contamination, and creates a safer, more functional environment for the personnel. Proper planning for this separation is a critical factor in fire station design, ensuring that each space can support its intended purpose without compromising the integrity of the facility.

This balance of functionality, safety, and comfort is central to the effectiveness of any fire station design, and each of the proposed concepts carefully considers how to best integrate these essential components.

Each of the three proposed concepts offers a unique approach to meeting the operational and growth needs of the Fort Saskatchewan Fire Department. From the modest design and scalability of Concept #1 to the more expansive capabilities of Concepts #2 and #3, each design reflects a balance between functionality, future growth, and cost-effectiveness. While each concept presents its own advantages, careful consideration of long-term operational demands, site conditions, and departmental needs will be crucial in selecting the most appropriate solution. These concepts are intended to provide a comprehensive framework for advancing the facility's design and ensuring that the FSFD can continue to serve the community effectively.



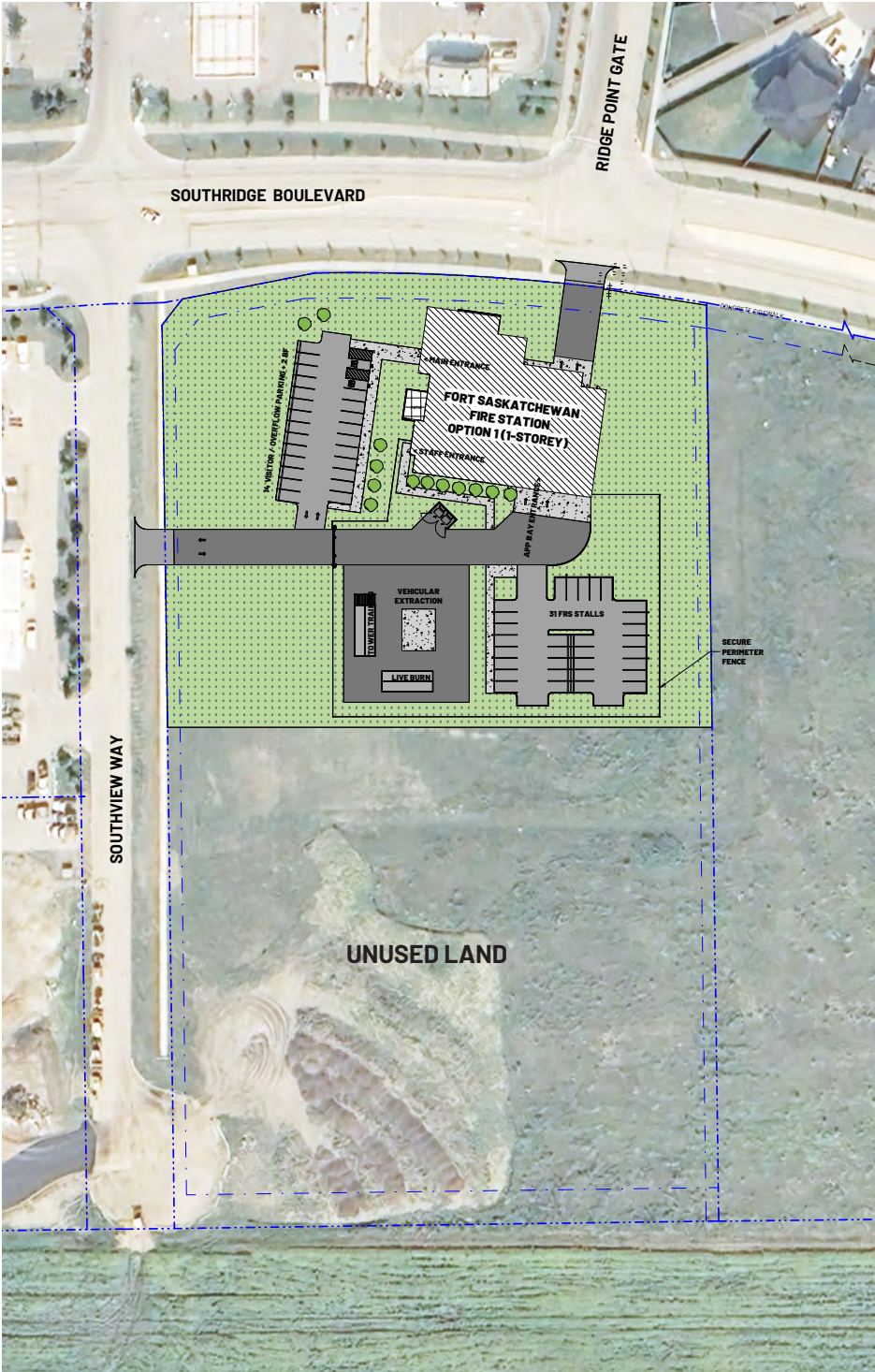
3.0 CONCEPTS





3.1 **CONCEPT 1**

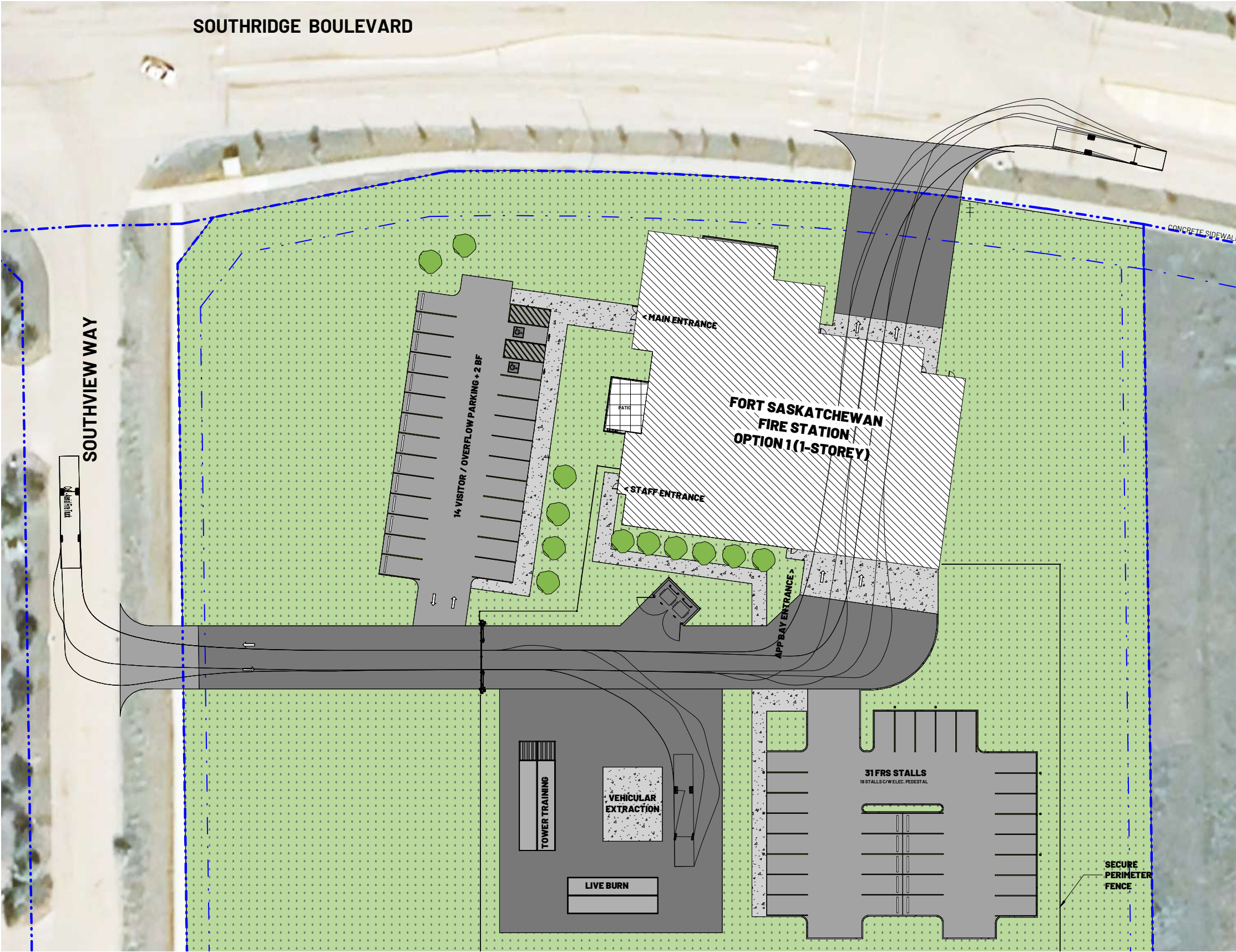
3.1.1 CONCEPT 1 - DRAWINGS



 **SITE PLAN - CONCEPT 1 > OVERALL PARCEL**
NTS



 **SITE PLAN - CONCEPT 1**
NTS



SITE PLAN - CONCEPT 1 > SWEEP PATH OF FIRE TRUCKS ON SITE
NTS

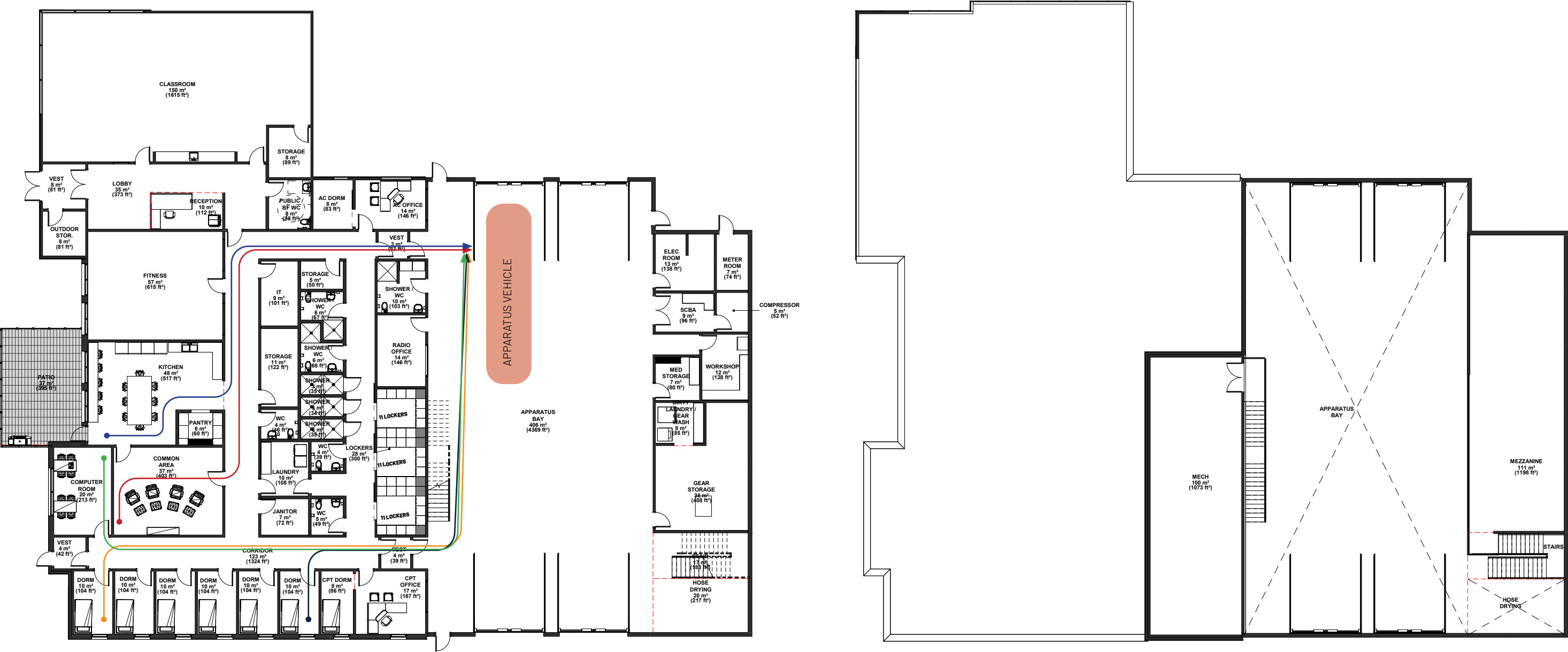


MAIN FLOOR PLAN - CONCEPT 1
NTS



SECOND FLOOR PLAN - CONCEPT 1
NTS

3.1.2 CONCEPT 1 - TRAVEL TIMES



	TYPE	DOOR TO APP BAY	L1 CORRIDOR (m)	L1 CORRIDOR (s)	APP BAY TO DRIVER (m)	APP BAY TO DRIVER (s)	TOTAL (m)	TOTAL (s)	NOTES
●	Dayroom	Front	32.1	22.50	4.4	2.20	36.5	24.7	
●	Kitchen	Front	27.4	13.70	4.4	2.20	31.8	15.9	
●	Dorm	Rear	21.1	10.55	21.8	10.90	42.9	21.5	Furthest Dorm
●	Dorm	Rear	9.4	4.70	21.8	10.90	31.2	15.6	Closest Dorm (Non-Cpt)
●	Computer Room	Rear	23.7	11.85	21.8	10.90	45.5	22.8	
	Avg Dorm						35.12	18.03181818	Average Dorm

LEGEND

(m) - meters

(s) - seconds

3.1.3 CONCEPT 1: ADVANTAGES / DISADVANTAGES

Concept 1 proposes a stand-alone, single-use fire station with the inclusion of a live fire training tower and training grounds. This concept emphasizes a straightforward design, cost-effectiveness, and focuses primarily on meeting the immediate needs of the Fort Saskatchewan Fire Department. However, it also presents several challenges that will impact operational efficiency and long-term viability. Below are the key advantages and disadvantages associated with this concept:

ADVANTAGES:

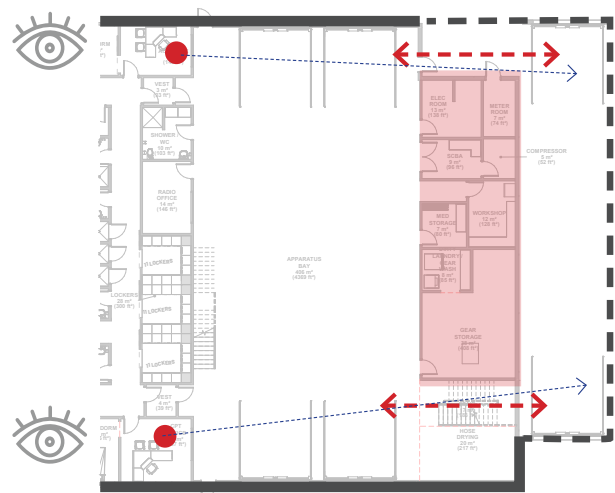
- **Cost-Effective:** The concept is efficient in design which will make the build simple compared to larger, more complex alternatives.
- **Efficiency:** A straightforward layout with a focus only essential fire station functions, making it easier to plan and construct.
- **Dedicated Training Area:** Space will provide a smaller scale live fire training tower and grounds designed for training and operational readiness.
- **Clear Focus on Firefighting Operations:** A specialized space dedicated to fire response and personnel housing without additional complexities.

DISADVANTAGES:

- **Limited Capacity for Future Growth:** The facility will not be large enough to accommodate future staffing and equipment needs. Any expansion will require costly renovations and a disruption to operations. If this concept gets expanded and a third apparatus bay is built, there will be immense operational setbacks with flow, supervision and circulation to the expanded bay, leaving little visibility into third bay (refer to adjacent diagram). If more administration offices are required and expansion is considered, the station will become fragmented in circulation and operational efficiencies will be lost.

- **Lack of Integrated Multi-Purpose Spaces:** Unlike the other concepts presented, this concept does not provide room for additional community-serving functions such as an Emergency Coordination Center or fire prevention education areas.
- **Lack of Community Engagement Opportunities:** In this concept, the space lacks community-oriented learning which does not align with FSFD involvement with providing incident prevention training and educational strategies for the community.
- **Reduced Flexibility:** As a stand-alone facility, it will not offer the flexibility needed to meet evolving departmental needs and community demands over time. The lack of administrative offices will require co-location for when more staffing positions are introduced.

This overview of advantages and disadvantages provides insight into how Concept 1 aligns with the immediate requirements of FSFD; however, there is very limited opportunity for expansion and growth. This concept will not align with the projected growth based on the City of Fort Saskatchewan Fire Rescue's Master Plan.



Expansion Diagram
Concept #1

3.1.4 CONCEPT 1 - RENDERINGS



Exterior Render - NW Corner from South Ridge Blvd.



Exterior Render - SW View



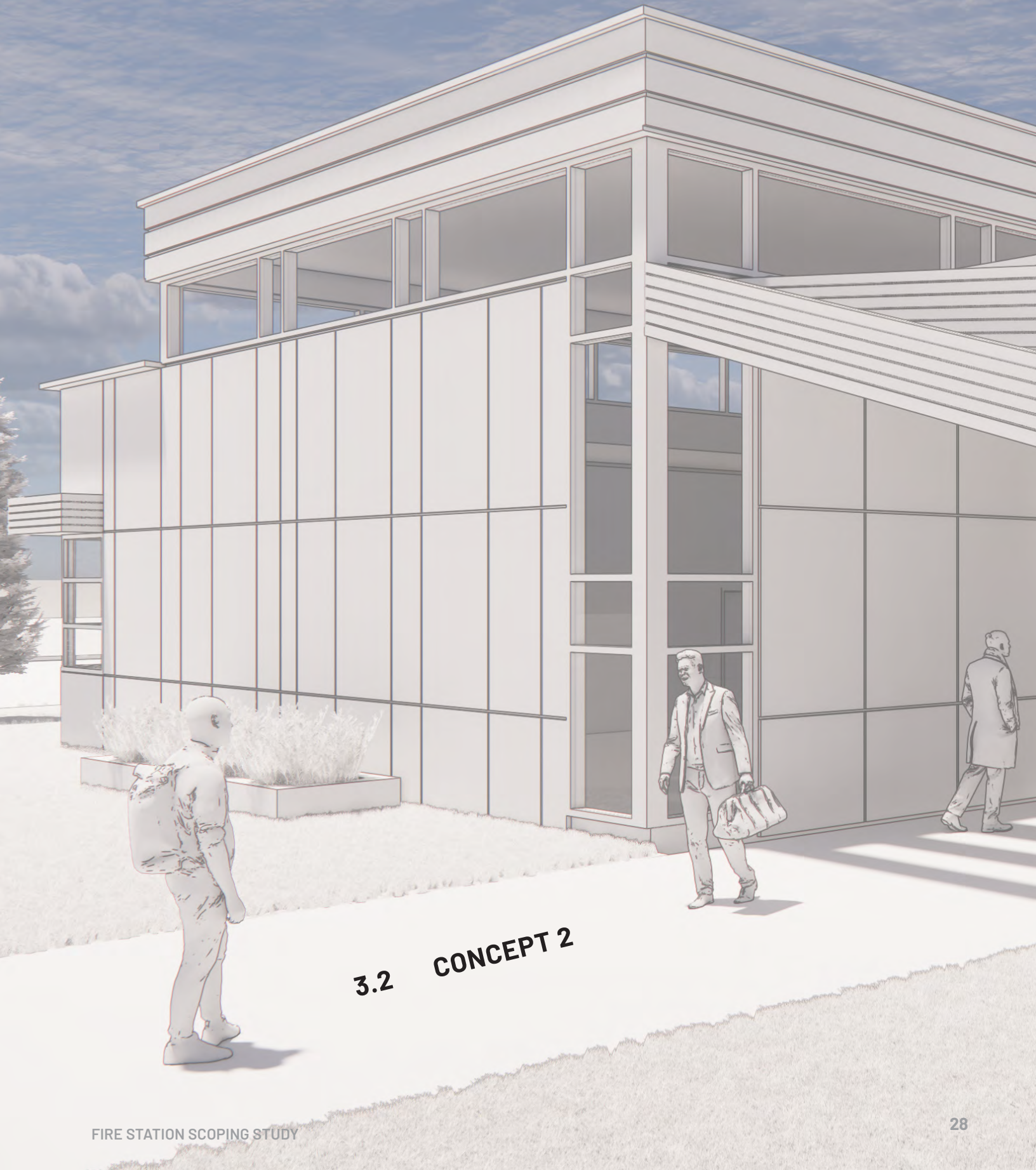
Exterior Render - NE view from South Ridge Blvd.



Exterior Render - SE view at the rear

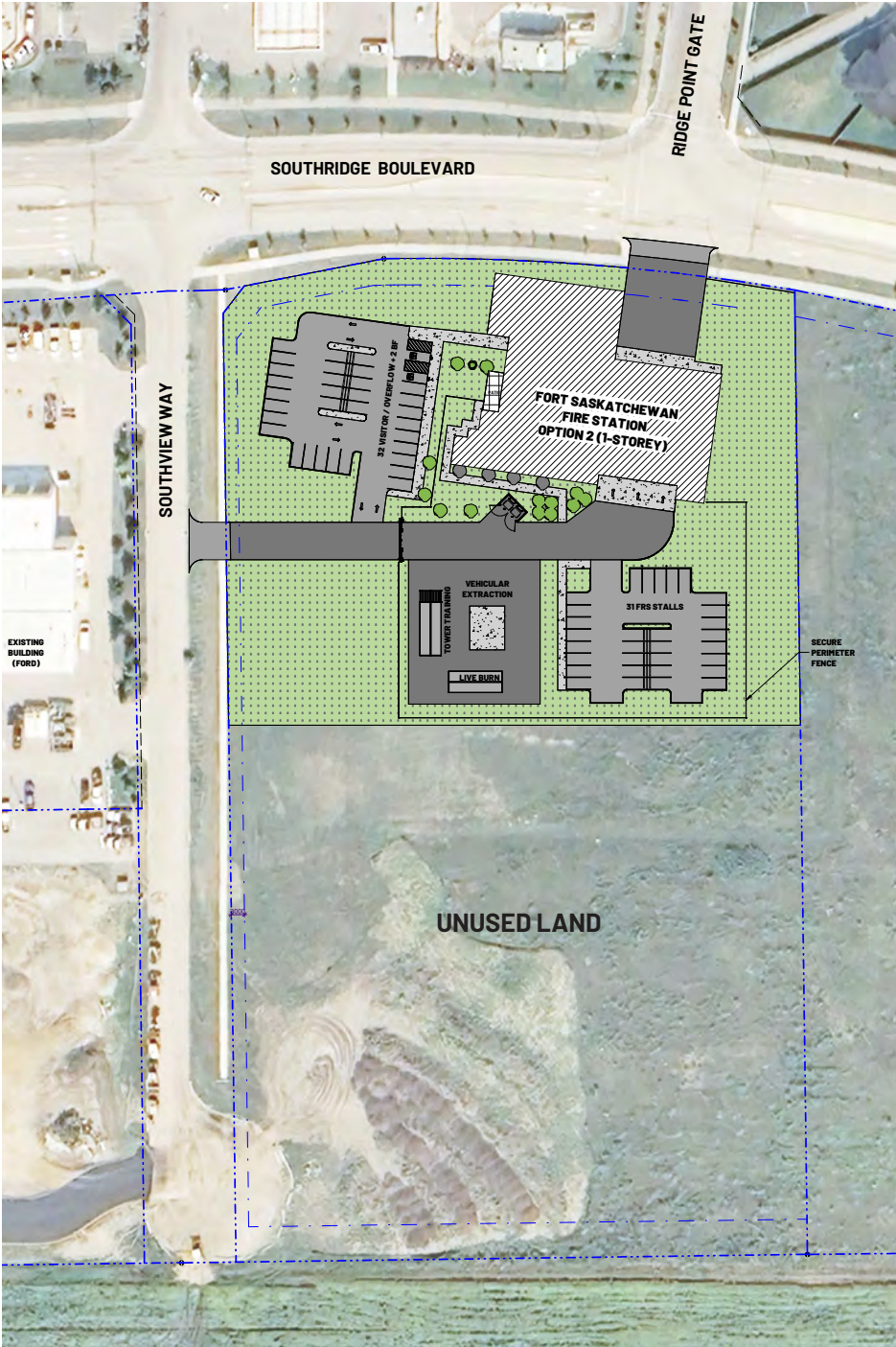


Exterior Aerial View - Context from Above

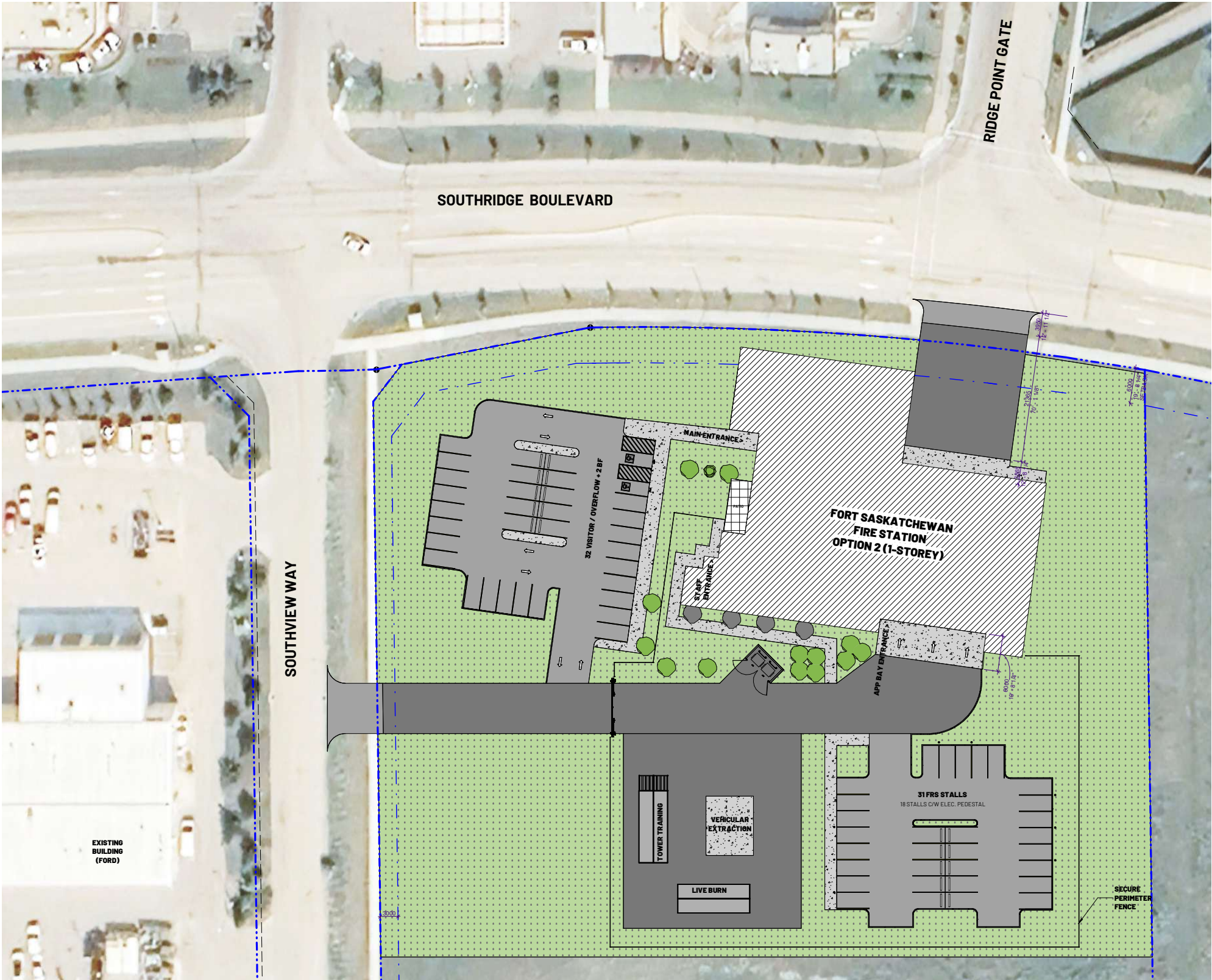


3.2 CONCEPT 2

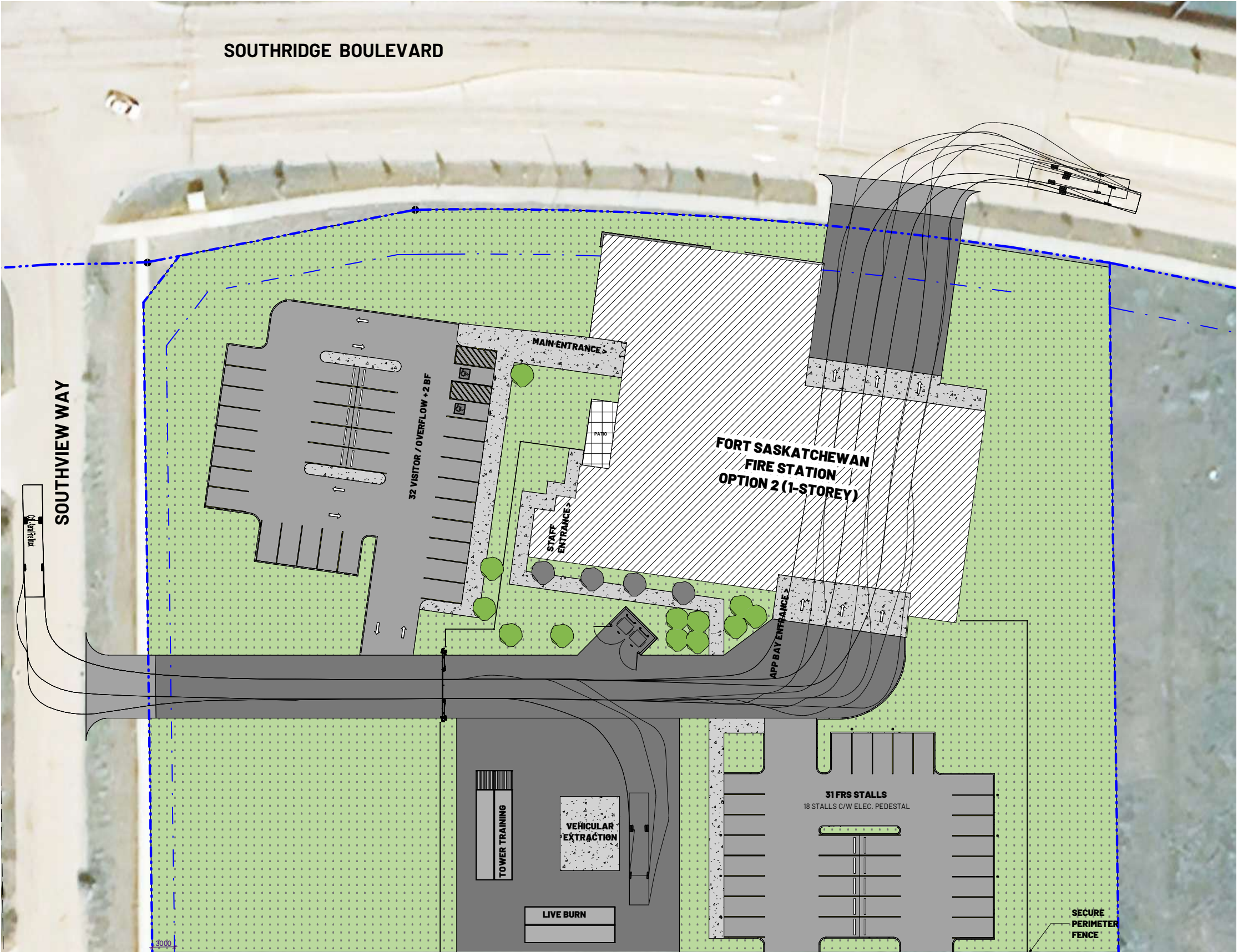
3.2.1 CONCEPT 2 - DRAWINGS



 **SITE PLAN - CONCEPT 2 > OVERALL PARCEL**
NTS

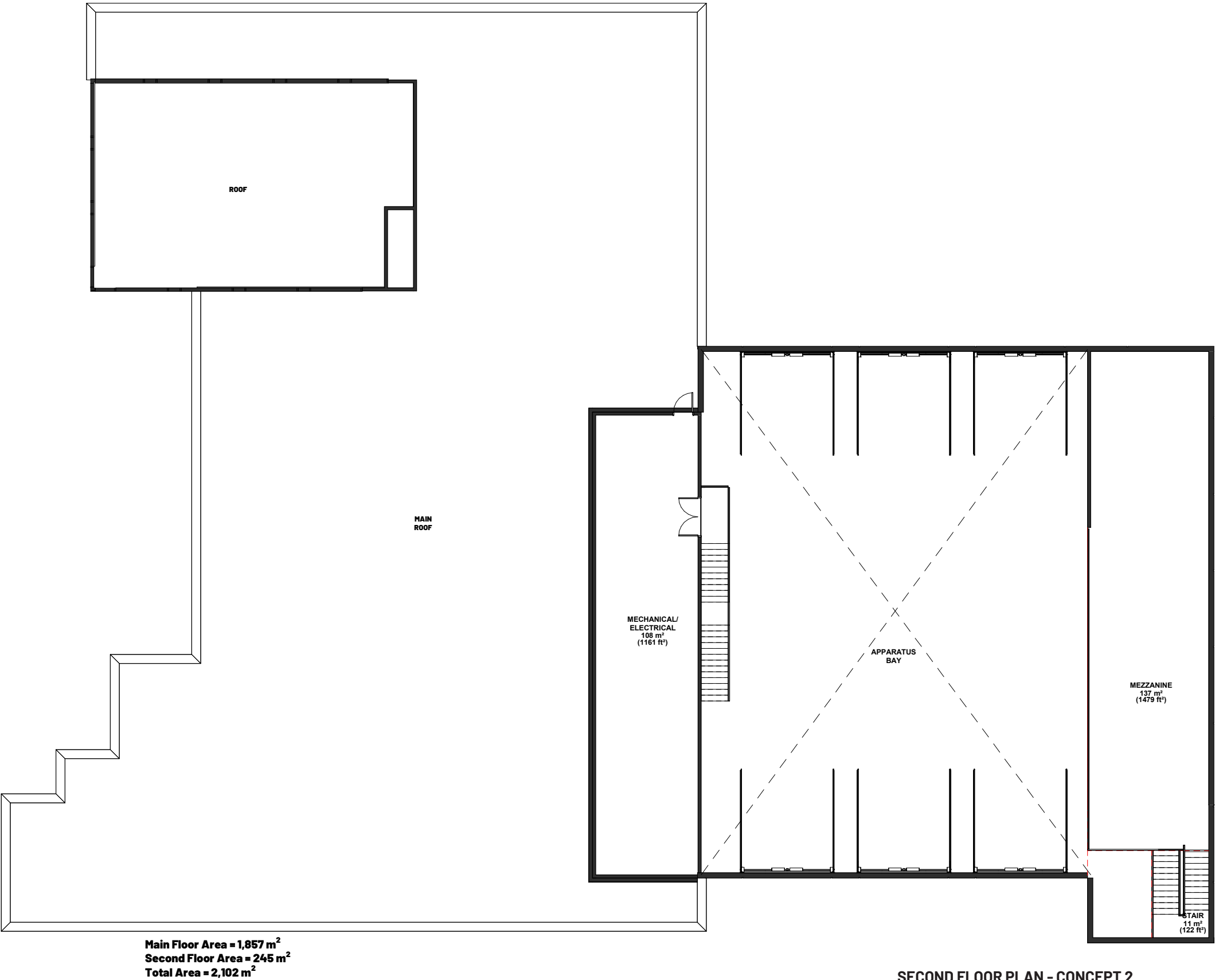


 **SITE PLAN - CONCEPT 2**
NTS



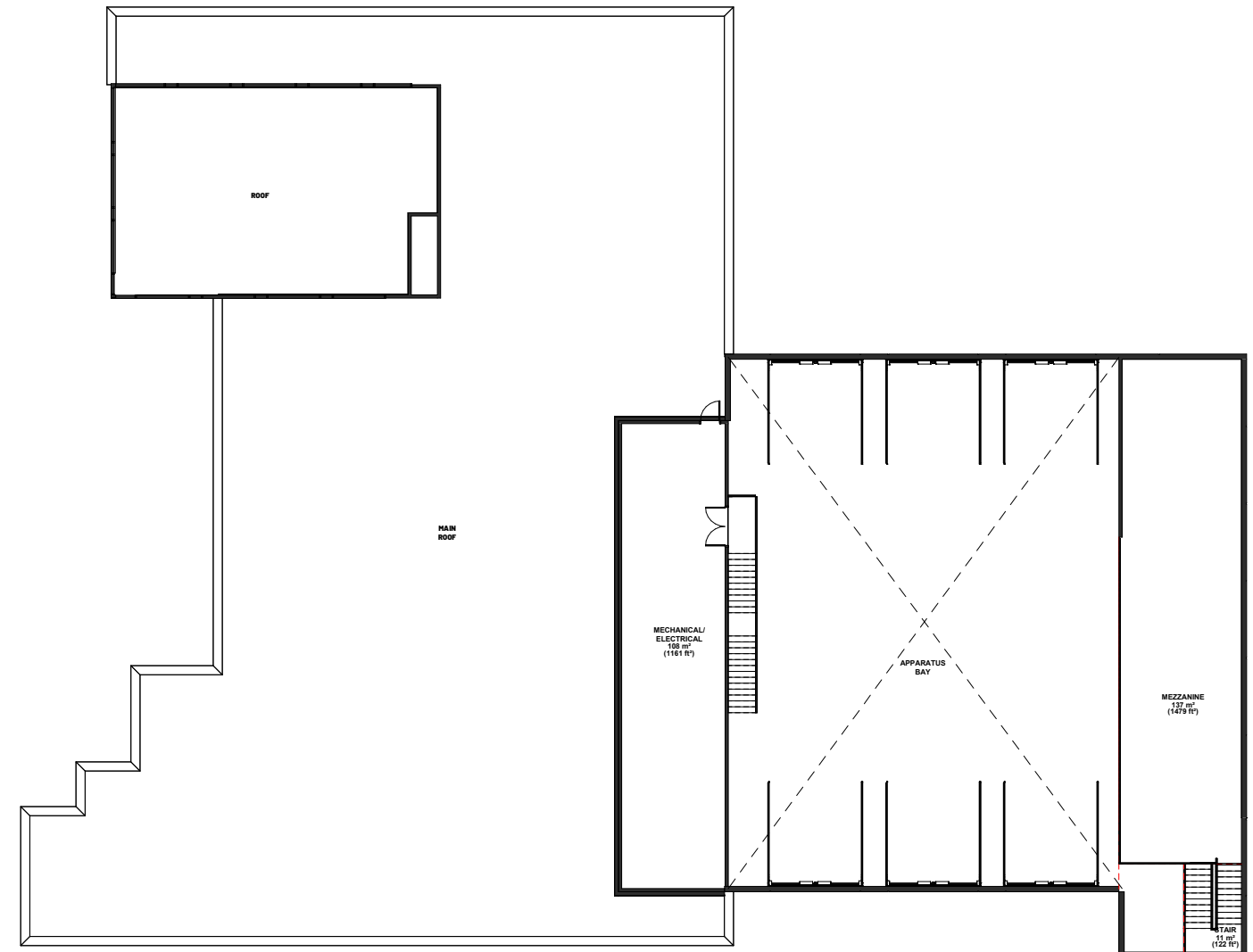
SITE PLAN - CONCEPT 2 > SWEPT PATH OF FIRE TRUCKS ON SITE
NTS





SECOND FLOOR PLAN - CONCEPT 2
NTS

3.2.2 CONCEPT 2 - TRAVEL TIMES



	Type	Door to App Bay	L1 Corridor (m)	L1 Corridor (s)	App Bay to Driver (m)	App Bay to Driver (s)	Total (m)	Total (s)	Notes
Red	Dayroom	Front	25.9	22.50	22.2	1.90	48.1	24.4	
Blue	Kitchen	Front	29.5	14.75	3.8	1.90	33.3	16.7	
Orange	Classroom	Front	35.7	17.85	3.8	1.90	39.5	19.8	
Dark Blue	Dorm	Rear	32.5	16.25	21.8	10.90	54.3	27.2	Furthest Dorm
Green	Dorm	Rear	15.1	7.55	21.8	10.90	36.9	18.5	Closest Dorm (Non-Cpt)
Cyan	Computer Room	Rear	18.7	9.35	21.8	10.90	40.5	20.3	
	Avg Dorm						37.07272727	18.67916667	Average Dorm

LEGEND
(m)- meters
(s)- seconds

3.2.3 CONCEPT 2: ADVANTAGES / DISADVANTAGES

Concept 2 proposes a multi-use fire station with the inclusion of a live fire training tower, dedicated training grounds, and a mezzanine in the Apparatus bay that has flexibility to provide training and storage. Building on concept 1, this second concept provides the flexibility to facilitate Emergency Call Centre (ECC) in case of special events as the classroom is integrated with additional office spaces that can be converted to workrooms or breakout spaces. Some additional offices are included in this concept to provide spaces for the increase of staffing positions for FSFD. Although there is more programming included in the second concept, this concept remains to emphasize efficiency, cost-effectiveness, while also meeting some of the future demands as well as meeting the immediate needs of the Fort Saskatchewan Fire Department. Below are the key advantages and disadvantages associated with this concept:

ADVANTAGES:

- **Cost-Effective Design Layout:** The design is more affordable to build and maintain compared to larger, more complex alternatives.
- **Dedicated Training Area:** A live fire training tower and grounds specifically designed for training, enhancing operational readiness. In addition, a mezzanine is available in the Apparatus Bay which will provide additional opportunity for training.
- **Parking:** Additional on-site parking spaces are provided for events in which the classroom is rented and for any community-based engagements, education and training.
- **Cost Effective Recovery and More Community Engagements:** With the large classroom integrated with offices (that also acts as breakout spaces), this will provide FSFD opportunity to rent out the classroom for any community engagements and training, conferences, or special events where ECC is required.
- **Flexibility for Expansion and Growth:** Additional offices are integrated with the classroom for special events and accommodate ECC if required,

as well as providing some additional office spaces for the increase of FSFD staffing positions. Operationally, with the inclusion of the third apparatus bay, space will be available for more rescue vehicles and trucks. Larger gear storage and gear wash room to accommodate increase of staff members. Ten dorms are provided to allow more staffing on rotation which will enhance response times and availability.

DISADVANTAGES:

- **Limited Capacity for Future Growth:** Although there are more administration offices in this concept in comparison to Concept #1, the facility will not be large enough to accommodate the projected future staffing and equipment needs. This will require renovations and additional construction down the line. Any renovations will require operational disruptions.
- **Reduced Flexibility for ECC:** Although equipped with additional space for special events, a permanent location for ECC would not be feasible with this concept. If the demand for a dedicated ECC is required after the construction is completed, there will be high cost associated with the renovation. Additionally, renovation will disrupt services and operations. The floor plan will become fragmented.
- **Increased Distance Between Functions:** With a larger footprint, separation of key operational spaces, such as dormitories, administration, and apparatus bays, could result in longer response times within the facility, reducing some efficiency during emergencies.

This overview of advantages and disadvantages provides insight into how Concept 2 aligns with the department's needs in both the immediate needs and capacity to accommodate moderately the growth projected as noted in the Fire Master Planning Document. Although this concept offers more administrative spaces to accommodate some future growth compared to Concept 1, the space is remains limited. A dedicated ECC cannot be accommodated with Concept 2.

3.2.4 CONCEPT 2 - RENDERINGS



Exterior Render - NW Corner from South Ridge Blvd.



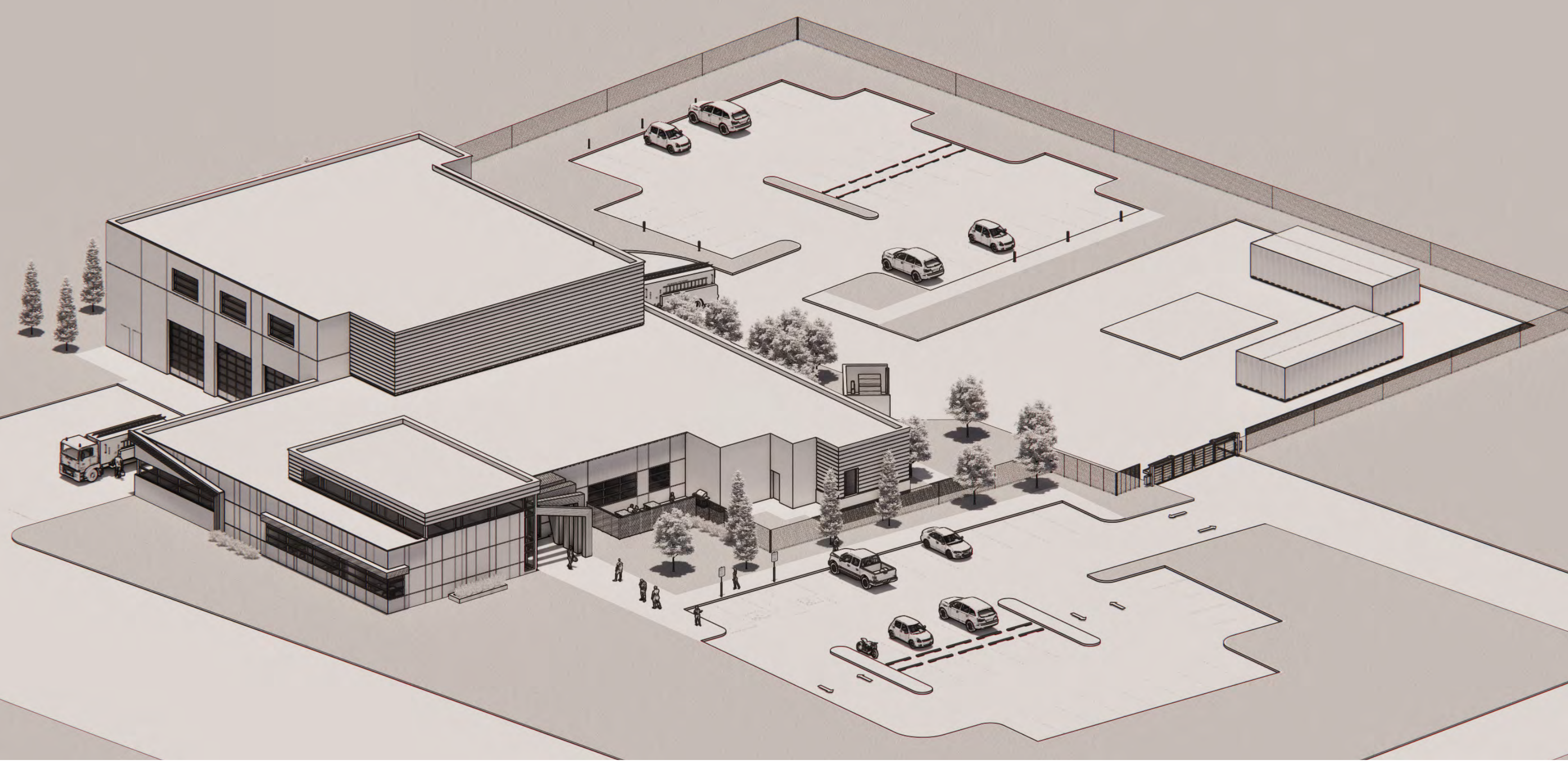
Exterior Render - SW View



Exterior Render - NE view from South Ridge Blvd.



Exterior Render - SE view at the rear

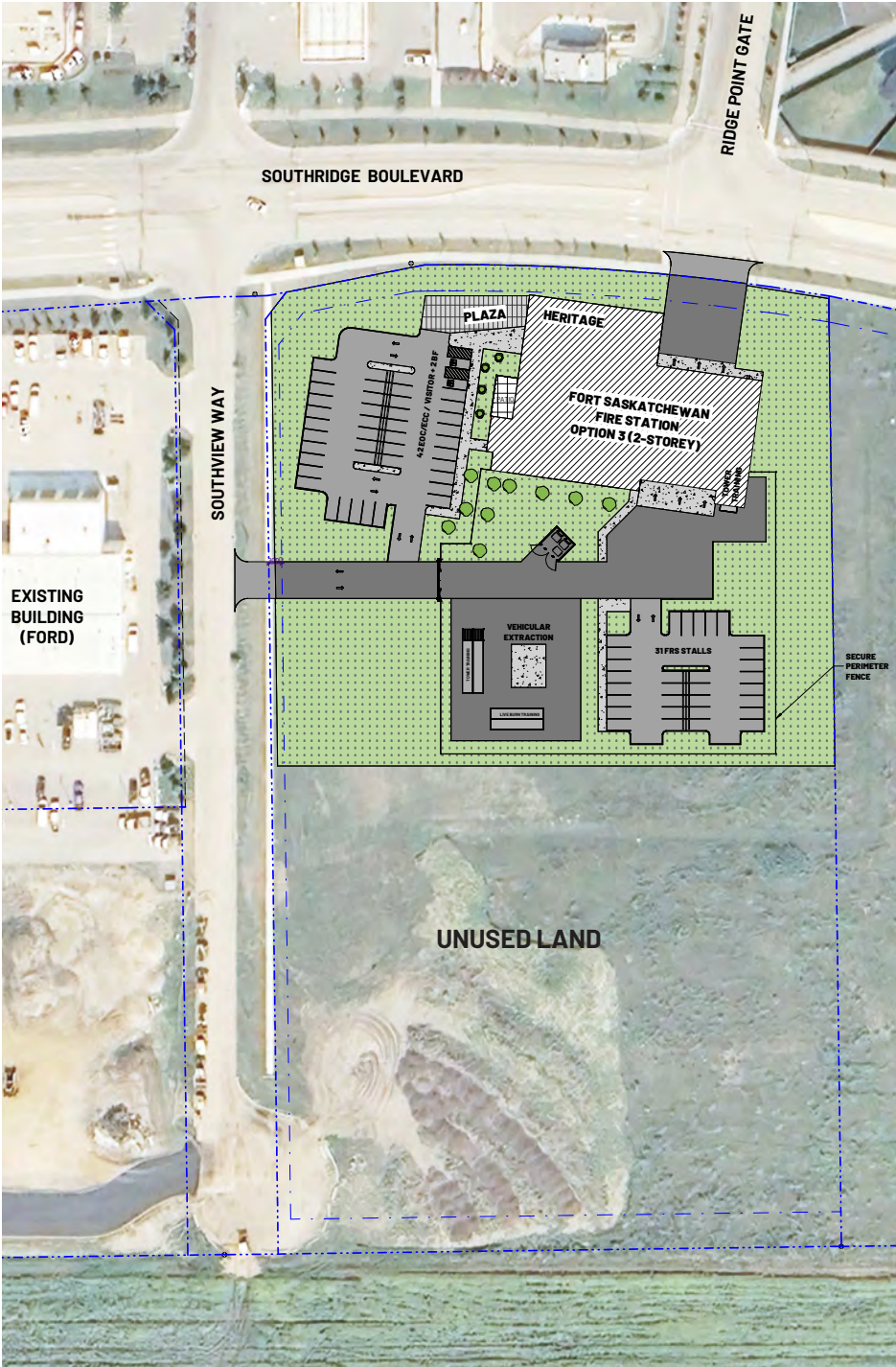


Exterior Aerial View - Context from Above



3.3 **CONCEPT 3**

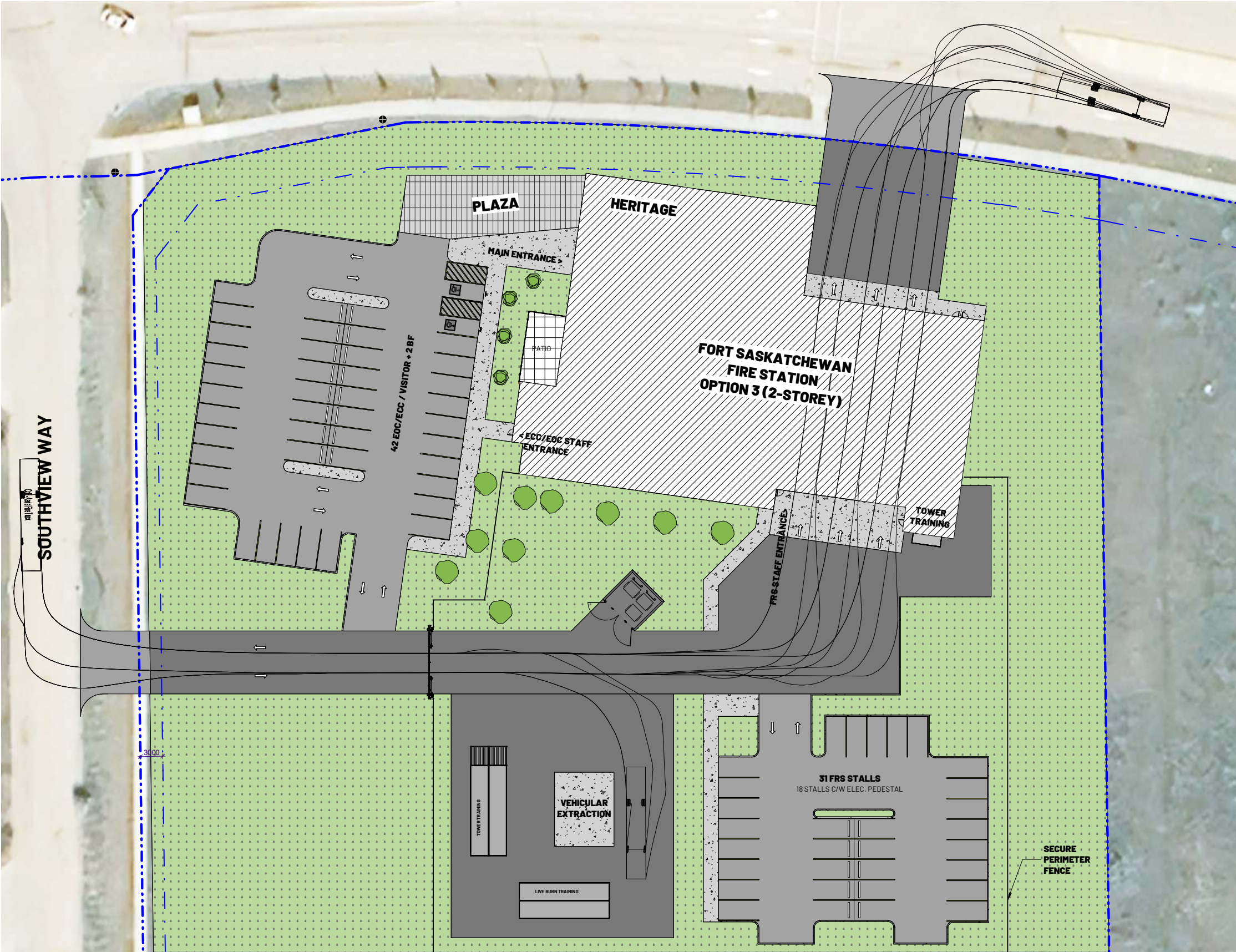
3.3.1 CONCEPT 3 - DRAWINGS



 SITE PLAN - CONCEPT 3 > OVERALL PARCEL
NTS



 SITE PLAN - CONCEPT 3
NTS

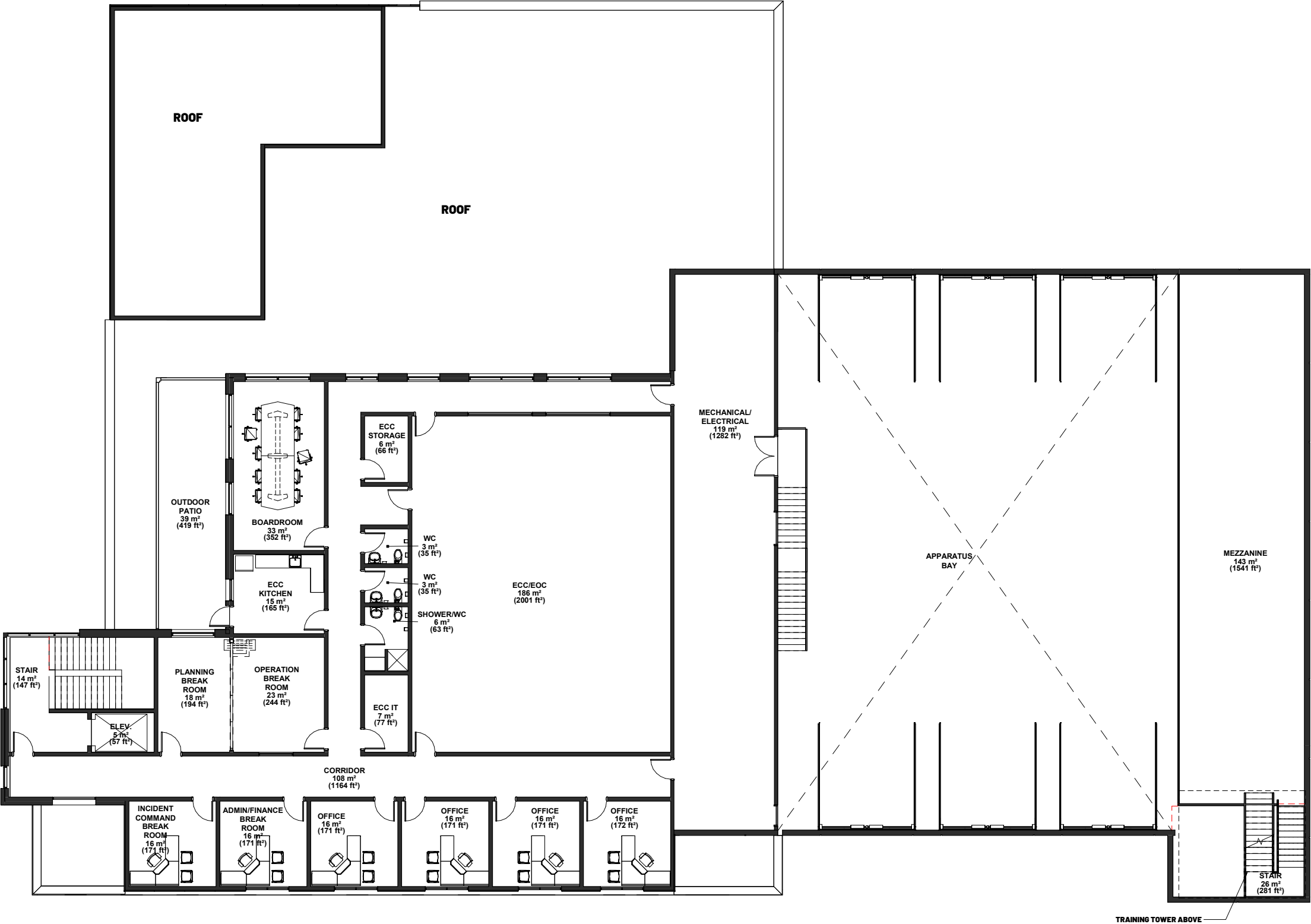


 **SITE PLAN - CONCEPT 3 > SWEEP PATH OF FIRE TRUCKS ON SITE**
NTS



Main Floor Area = 1,917 m²
Second Floor Area = 869 m²
Total Area = 2,786 m²

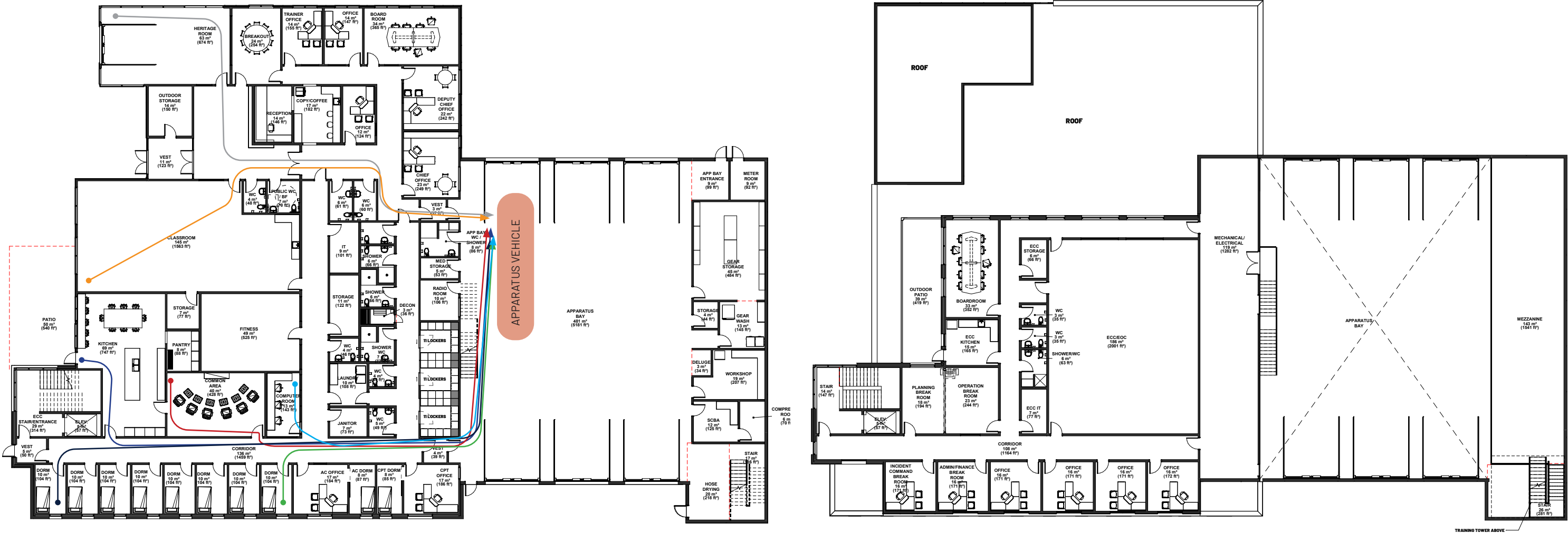
MAIN FLOOR PLAN - CONCEPT 3
NTS



Main Floor Area = 1,917 m²
Second Floor Area = 869 m²
Total Area = 2,786 m²

SECOND FLOOR PLAN - CONCEPT 2
NTS

3.3.2 CONCEPT 3 - TRAVEL TIMES



TYPE	DOOR TO APP BAY	L1 CORRIDOR (m)	L1 CORRIDOR (s)	APP BAY TO DRIVER (m)	APP BAY TO DRIVER (s)	TOTAL (m)	TOTAL (s)	NOTES
Dayroom	Rear	21.4	22.50	21.8	10.90	43.2	33.4	
Kitchen	Rear	37.3	18.65	21.8	10.90	59.1	29.6	
Heritage	Front	35.8	17.90	3.8	1.90	39.6	19.8	
Classroom	Front	41	20.50	3.8	1.90	44.8	22.4	
Dorm	Rear	33.7	16.85	21.8	10.90	55.5	27.8	Furthest Dorm
Dorm	Rear	16.2	8.10	21.8	10.90	38	19.0	Closest Dorm (Non-Cpt)
Computer Room	Rear	18.7	9.35	21.8	10.90	40.5	20.3	
Avg Dorm						37.91666667	19.05769231	Average Dorm

LEGEND
(m) - meters
(s) - seconds

3.3.3 CONCEPT 3: ADVANTAGES / DISADVANTAGES

Concept 3 proposes the most flexibility as multi-use fire station with the inclusion of permanent ECC space, a live fire training tower with dedicated training grounds, a mezzanine in the Apparatus Bay connected with a training tower. Building on concept 2, this third concept provides a space that meets the requirements for ECC; allowing this to be in operation 365 days. ECC is located on the second floor, channeled with workrooms, break rooms, washroom/shower, kitchen and patio. Additional administrative offices are included on the main floor to provide spaces for the increase of staffing positions for FSFD. This concept not only meets the current and immediate demands of FSFD, but contains the most flexibility in meeting the future demands of the Fort Saskatchewan Fire Department. Below are the key advantages and disadvantages associated with this concept:

ADVANTAGES:

- **Enhanced Dedicated Training Area:** A live fire training tower and grounds specifically designed for training, enhancing operational readiness. In addition, a mezzanine is available in the Apparatus Bay connected with an internal stair training tower with repel training. The benefit of having this additional training component within the station provides opportunity for additional cost effective recovery for FSFD to rent out the live training grounds without impacting FSFD's internal training schedule.
- **Parking:** Additional on-site parking spaces are provided for events in which the classroom is rented and for any community-based engagements, education and training. Parking is also provided for ECC staff, leaving the secured parking for FSFD staff only.
- **Cost Effective Recovery and More Community Engagements:** With the large classroom, this will provide FSFD opportunity to rent out the classroom for any community engagements and training, and conferences.

- **Heritage Room:** Based on the long withstanding legacy that FSFD has developed over 100 years in service, the Heritage Room will provide a prominent showcase of all the exemplary hard work and service provided to the City of Fort Saskatchewan. The location of this space will be most visible on Southridge Boulevard.
- **Flexibility for Expansion and Growth:** Concept 3 provides the most administrative spaces, which will accommodate the growing requirements prescribed in the Master Plan. Operationally, with the inclusion of the third apparatus bay, space will be available for more rescue vehicles and trucks. Larger gear storage and gear wash room to accommodate increase of staff members. Ten dorms are provided to allow more staffing on rotation which will enhance response times and availability. Although renovations are costly, the layout of the dorms can accommodate expansion without fragmenting the layout if additional staffing is required in the future.

DISADVANTAGES:

- **Increased Distance Between Functions:** With a larger footprint, separation of key operational spaces, such as dormitories, administration, and apparatus bays, could result in longer response times within the facility, reducing some efficiency during emergencies.

This overview of advantages and disadvantages provides insight into how Concept 3 aligns with the department's needs in both the immediate needs and capacity to accommodate the growth projected as noted in the Fire Master Planning Document. This concept offers sufficient administrative spaces to accommodate future growth compared to Concept 1 and 2. With a dedicated ECC, this partnership will provide positive operational synergies to FSFD.

3.3.4 CONCEPT 3 - RENDERINGS



Exterior Render - NW Corner from South Ridge Blvd.



Exterior Render - SW View



Exterior Render - NE view from South Ridge Blvd.



Exterior Render - SE view at the rear with tower training



Exterior Aerial View - Context from Above

4.0 AFFILIATED STAKEHOLDERS' NEEDS

Preparation of this report involved consultation with front-line City of Fort Saskatchewan Fire Rescue Service members, full-time and casual staff, and with representatives of the City of Fort Saskatchewan leadership team acknowledged on page 2.

Should the project proceed through feasibility planning, it is recommended that the opinions, needs, and concerns of third-party stakeholders be solicited and considered.

It is not expected that such input would have a significant impact on project scope nor on the costs presented in this report, however the project process could be accelerated and further validated by such engagement.

Although included in the stakeholder engagements, those groups for possible consideration may include City of Fort Saskatchewan Public Works, Fire Services, and community groups and support resources to the public among others.



5.0 BUDGETS

PROJECT PLAN YEAR
Sale UP Increase Sales

STEP	2018	2019	2020
STEP1	A	A	A
STEP2	A	A	A
STEP3	A	A	A
STEP4	A	A	A
STEP5	A	A	A
STEP6	A	A	A
STEP7	A	A	A
STEP8	A	A	A
STEP9	A	A	A
STEP10	A	A	A
STEP11	A	A	A

5.1 CONSTRUCTION COSTS

5.1.1 CONCEPT 1

Fort Saskatchewan Fire Hall Concept No. 1

Price per Sq. Meter	\$7,000.00 m2
Overall Sq. Meter	1,602
Overall Budget	\$11,214,000.00

	Group %	Group	% of Division	Division \$/m2
A SUBSTRUCTURE				
Foundations	4.50%	\$504,630.00		
Standard Foundations			15%	\$75,694.50
Special Foundations			45%	\$227,083.50
Slab on Grade			40%	\$201,852.00
B SHELL				
Superstructure	3%	\$336,420.00		
Floor Construction			90%	\$302,778.00
Roof Construction			10%	\$33,642.00
Exterior Enclosure	9%	\$1,009,260.00		
Exterior Walls			82%	\$827,593.20
Exterior Windows			12%	\$121,111.20
Exterior Doors			6%	\$60,555.60
Roofing	4.5%	\$504,630.00		
Roofing Coverings			100%	\$504,630.00
C INTERIORS				
Interior Construction	4.5%	\$504,630.00		
Partitions			62%	\$312,870.60
Interior Doors			18%	\$90,833.40
Fittings			20%	\$100,926.00
Stairs	0.25%	\$28,035.00		
Stairs Construction			100%	\$28,035.00
Interior Finishes	2.75%	\$308,385.00		
Wall Finishes			40%	\$123,354.00
Floor Finishes			38%	\$117,186.30
Ceiling			22%	\$67,844.70

D SERVICES				
Conveying	1.0%	\$112,140.00		
Elevator				
Plumbing	5.5%	\$616,770.00		
Plumbing Fixtures			19%	\$117,186.30
Domestic Water Distribution			27%	\$166,527.90
Sanitary Waste			30%	\$185,031.00
Rain Water Drainage			5%	\$30,838.50
Other Plumbing Systems			19%	\$117,186.30
Heating Ventilating and Air Conditioning (HVAC)	13%	\$1,401,750.00		
Energy Supply			6%	\$84,105.00
Heat Generation			10%	\$140,175.00
HVAC Distribution			65%	\$911,137.50
Terminal and Packaged Units			9%	\$126,157.50
HVAC Instrumentation and Controls			9%	\$126,157.50
Testing, Adjusting, and Balancing			1%	\$14,017.50
Fire Protection	1%	\$112,140.00		
Sprinklers			98%	\$109,897.20
Fire Protection Specialities			2%	\$2,242.80
Electrical	11.5%	\$1,289,610.00		
Electrical Service and Distribution			54%	\$696,389.40
Lighting and Branch Wiring			26%	\$335,298.60
Communications and Security			20%	\$257,922.00
E BUILDING SITEWORK				
Site Preparation	5%	\$560,700.00		
Site Clearing			82%	\$459,774.00
Site Demolition			8%	\$44,856.00
Site Improvements	10%	\$1,121,400.00		
Roadways			43%	\$482,202.00
Parking Lots			6%	\$67,284.00
Pedestrian Paving			5%	\$56,070.00
Site Development			22%	\$246,708.00
Landscaping			24%	\$269,136.00
Site Civil / Mechanical Utilities	2%	\$224,280.00		
Water Supply Sanitary			52%	\$116,625.60
Sewer Storm Sewer			40%	\$89,712.00
Heating Distribution			9%	\$20,185.20
Site Electrical Utilities	1%	\$112,140.00		
Electrical Distribution			100%	\$112,140.00

F GENERAL REQUIREMENTS & CONTINGENCY

Construction General Requirements	15%	\$1,682,100.00
Construction Contingency	7%	\$784,980.00

H CONSTRUCTION FEES

Total	100.00%	\$ 11,214,000.00
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H PROJECT FEES

Consultants Fee	10%	\$ 1,121,400.00
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I LIVE FIRE TRAINING

Total		\$ 1,500,000.00
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J OVERALL PROJECT BUDGET

Construction		\$ 11,214,000.00
Design		\$ 1,121,400.00
Live Fire Training		\$ 1,500,000.00

Grand Total		\$ 13,835,400.00
(CLASS D) ESTIMATE		

5.2 CONSTRUCTION COSTS

5.2.1 CONCEPT 2

Fort Saskatchewan Fire Hall Concept No. 2

Price per Sq. Meter	\$7,500.00 m2
Overall Sq. Meter	2,102
Overall Budget	\$15,765,000.00

	Group %	Group	% of Division	Division \$/m2
A SUBSTRUCTURE				
Foundations	4.50%	\$709,425.00		
Standard Foundations			15%	\$106,413.75
Special Foundations			45%	\$319,241.25
Slab on Grade			40%	\$283,770.00
B SHELL				
Superstructure	3%	\$472,950.00		
Floor Construction			90%	\$425,655.00
Roof Construction			10%	\$47,295.00
Exterior Enclosure	9%	\$1,418,850.00		
Exterior Walls			82%	\$1,163,457.00
Exterior Windows			12%	\$170,262.00
Exterior Doors			6%	\$85,131.00
Roofing	4.5%	\$709,425.00		
Roofing Coverings			100%	\$709,425.00
C INTERIORS				
Interior Construction	4.5%	\$709,425.00		
Partitions			62%	\$439,843.50
Interior Doors			18%	\$127,696.50
Fittings			20%	\$141,885.00
Stairs	0.25%	\$39,412.50		
Stairs Construction			100%	\$39,412.50
Interior Finishes	2.75%	\$433,537.50		
Wall Finishes			40%	\$173,415.00
Floor Finishes			38%	\$164,744.25
Ceiling			22%	\$95,378.25

D SERVICES				
Conveying	1.0%	\$157,650.00		
Elevator				
Plumbing	5.5%	\$867,075.00		
Plumbing Fixtures			19%	\$164,744.25
Domestic Water Distribution			27%	\$234,110.25
Sanitary Waste			30%	\$260,122.50
Rain Water Drainage			5%	\$43,353.75
Other Plumbing Systems			19%	\$164,744.25
Heating Ventilating and Air Conditioning (HVAC)	13%	\$1,970,625.00		
Energy Supply			6%	\$118,237.50
Heat Generation			10%	\$197,062.50
HVAC Distribution			65%	\$1,280,906.25
Terminal and Packaged Units			9%	\$177,356.25
HVAC Instrumentation and Controls			9%	\$177,356.25
Testing, Adjusting, and Balancing			1%	\$19,706.25
Fire Protection	1%	\$157,650.00		
Sprinklers			98%	\$154,497.00
Fire Protection Specialties			2%	\$3,153.00
Electrical	11.5%	\$1,812,975.00		
Electrical Service and Distribution			54%	\$979,006.50
Lighting and Branch Wiring			26%	\$471,373.50
Communications and Security			20%	\$362,595.00
E BUILDING SITEWORK				
Site Preparation	5%	\$788,250.00		
Site Clearing			82%	\$646,365.00
Site Demolition			8%	\$63,060.00
Site Improvements	10%	\$1,576,500.00		
Roadways			43%	\$677,895.00
Parking Lots			6%	\$94,590.00
Pedestrian Paving			5%	\$78,825.00
Site Development			22%	\$346,830.00
Landscaping			24%	\$378,360.00
Site Civil / Mechanical Utilities	2%	\$315,300.00		
Water Supply Sanitary			52%	\$163,956.00
Sewer Storm Sewer			40%	\$126,120.00
Heating Distribution			9%	\$28,377.00
Site Electrical Utilities	1%	\$157,650.00		
Electrical Distribution			100%	\$157,650.00

F GENERAL REQUIREMENTS & CONTINGENCY

Construction General Requirements	15%	\$2,364,750.00
Construction Contingency	7%	\$1,103,550.00

H CONSTRUCTION FEES

Total	100.00%	\$ 15,765,000.00
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H PROJECT FEES

Consultants Fee	10%	\$ 1,576,500.00
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I LIVE FIRE TRAINING

Total		\$ 1,500,000.00
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J OVERALL PROJECT BUDGET

Construction		\$ 15,765,000.00
Design		\$ 1,576,500.00
Live Fire Training		\$ 1,500,000.00
Grand Total		\$ 18,841,500.00
(CLASS D) ESTIMATE		

5.3 CONSTRUCTION COSTS

5.3.1 CONCEPT 3

Fort Saskatchewan Fire Hall Concept No. 3

Price per Sq. Meter	\$7,500.00 m2
Overall Sq. Meter	2,786
Overall Budget	\$20,895,000.00

	Group %	Group	% of Division	Division \$/m2
A SUBSTRUCTURE				
Foundations	4.50%	\$940,275.00		
Standard Foundations			15%	\$141,041.25
Special Foundations			45%	\$423,123.75
Slab on Grade			40%	\$376,110.00
B SHELL				
Superstructure	3%	\$626,850.00		
Floor Construction			90%	\$564,165.00
Roof Construction			10%	\$62,685.00
Exterior Enclosure	9%	\$1,880,550.00		
Exterior Walls			82%	\$1,542,051.00
Exterior Windows			12%	\$225,666.00
Exterior Doors			6%	\$112,833.00
Roofing	4.5%	\$940,275.00		
Roofing Coverings			100%	\$940,275.00
C INTERIORS				
Interior Construction	4.5%	\$940,275.00		
Partitions			62%	\$582,970.50
Interior Doors			18%	\$169,249.50
Fittings			20%	\$188,055.00
Stairs	0.25%	\$52,237.50		
Stairs Construction			100%	\$52,237.50
Interior Finishes	2.75%	\$574,612.50		
Wall Finishes			40%	\$229,845.00
Floor Finishes			38%	\$218,352.75
Ceiling			22%	\$126,414.75

D SERVICES				
Conveying	1.0%	\$208,950.00		
Elevator				
Plumbing	5.5%	\$1,149,225.00		
Plumbing Fixtures			19%	\$218,352.75
Domestic Water Distribution			27%	\$310,290.75
Sanitary Waste			30%	\$344,767.50
Rain Water Drainage			5%	\$57,461.25
Other Plumbing Systems			19%	\$218,352.75
Heating Ventilating and Air Conditioning (HVAC)	13%	\$2,611,875.00		
Energy Supply			6%	\$156,712.50
Heat Generation			10%	\$261,187.50
HVAC Distribution			65%	\$1,697,718.75
Terminal and Packaged Units			9%	\$235,068.75
HVAC Instrumentation and Controls			9%	\$235,068.75
Testing, Adjusting, and Balancing			1%	\$26,118.75
Fire Protection	1%	\$208,950.00		
Sprinklers			98%	\$204,771.00
Fire Protection Specialities			2%	\$4,179.00
Electrical	11.5%	\$2,402,925.00		
Electrical Service and Distribution			54%	\$1,297,579.50
Lighting and Branch Wiring			26%	\$624,760.50
Communications and Security			20%	\$480,585.00
E BUILDING SITEWORK				
Site Preparation	5%	\$1,044,750.00		
Site Clearing			82%	\$856,695.00
Site Demolition			8%	\$83,580.00
Site Improvements	10%	\$2,089,500.00		
Roadways			43%	\$898,485.00
Parking Lots			6%	\$125,370.00
Pedestrian Paving			5%	\$104,475.00
Site Development			22%	\$459,690.00
Landscaping			24%	\$501,480.00
Site Civil / Mechanical Utilities	2%	\$417,900.00		
Water Supply Sanitary			52%	\$217,308.00
Sewer Storm Sewer			40%	\$167,160.00
Heating Distribution			9%	\$37,611.00
Site Electrical Utilities	1%	\$208,950.00		
Electrical Distribution			100%	\$208,950.00

F GENERAL REQUIREMENTS & CONTINGENCY			
	Construction General Requirements	15%	\$3,134,250.00
	Construction Contingency	7%	\$1,462,650.00
H CONSTRUCTION FEES			
	Total	100.00%	\$ 20,895,000.00
H PROJECT FEES			
	Consultants Fee	10%	\$ 2,089,500.00
I LIVE FIRE TRAINING			
	Total		\$ 1,500,000.00
J OVERALL PROJECT BUDGET			
	Construction		\$ 20,895,000.00
	Design		\$ 2,089,500.00
	Live Fire Training		\$ 1,500,000.00
	Grand Total		\$ 24,484,500.00
	(CLASS D) ESTIMATE		

5.4 OPERATIONAL COSTS

5.4.1 EXISTING / CONCEPT 1 / CONCEPT 2 / CONCEPT 3

	EXISTING HALL		CONCEPT 1			CONCEPT 2			CONCEPT 3		
OPERATIONS		\$m2	COST BASED ON \$/M2	15% REDUCTION	ESTIMATED OPERATIONS COST	COST BASED ON \$/M2	15% REDUCTION	ESTIMATED OPERATIONS COST	COST BASED ON \$/M2	15% REDUCTION	ESTIMATED OPERATIONS COST
TOTAL AREA	1,519 m²		1,602 m²			2,102 m²			2,786 m²		
UTILITIES WATER/SEWER/ SOLID WASTE	\$4,639.72	\$3.05	\$4,893.24	\$733.99	\$4,159.25	\$6,420.47	\$963.07	\$5,457.40	\$8,509.72	\$1,276.46	\$7,233.26
UTILITIES NATURAL GAS	\$10,117.09	\$6.66	\$10,669.90	\$1,600.49	\$9,069.42	\$14,000.08	\$2,100.01	\$11,900.07	\$18,555.77	\$2,783.37	\$15,772.40
UTILITIES ELECTRICITY	\$33,687.87	\$22.18	\$35,528.62	\$5,329.29	\$30,199.32	\$46,617.45	\$6,992.62	\$39,624.83	\$61,786.97	\$9,268.05	\$52,518.92

ALL SCENARIOS INCLUDE A 15% REDUCTION IN UTILITY COSTS (AFTER SQUARE FOOTAGE GROSS UP) BASED ON EXPECTED EFFICIENCIES.

5.4.2 ADDITIONAL OPERATION COSTS DATA

BUILDING & HOURS (4771 SQ. FT)	HOURS PER YEAR	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	CUSTODIAL WAGES WITH BENEFITS (BASED ON 2025 WAGES)	ANNUAL COST
Firehall Admin Area Only	1274	3.5	3.5	3.5	3.5	3.5	3.5	3.5	\$29.88	\$38,064.32
Transfer Station Waxing Floors and Window Washing (Interior only) twice yearly - Spring and Fall. Exterior Window washing is contracted and will be allocated separately	60	-	-	-	-	-	-	-	\$29.88	\$1,792.67
Cleaning Supplies	-	-	-	-	-	-	-	-	-	\$4,000.00
Total Hours per Year	1334	-	-	-	-	-	-	-	\$29.88	\$39,856.99

5.4.3 CONSTRUCTION COST (INFLATION - 5 YEARS)

	CONSTRUCTION COST (2025)	CONSTRUCTION COST (2026)	CONSTRUCTION COST (2027)	CONSTRUCTION COST (2028)	CONSTRUCTION COST (2029)	CONSTRUCTION COST (2030)
CONCEPT #1	\$13,835,400.00	\$ 14,388,816.00	\$ 14,964,368.64	\$ 15,562,943.39	\$ 16,185,461.12	\$16,832,879.57
CONCEPT #2	\$18,841,500.00	\$ 19,595,160.00	\$ 20,378,966.40	\$ 21,194,125.06	\$ 22,041,890.06	\$ 22,923,565.66
CONCEPT #3	\$24,484,500.00	\$ 25,463,880.00	\$ 26,482,435.20	\$ 27,541,732.61	\$ 28,643,401.91	\$ 29,789,137.99

CONSTRUCTION COSTS SHOWN IN TABLE ABOVE DEMONSTRATES AN ASSUMPTION OF 4% INCREASE PER YEAR.

APPENDIX A

STAKEHOLDER ENGAGEMENT

6.0 APPENDIX A: STAKEHOLDER ENGAGEMENT

6.1 ENGAGEMENT SESSIONS

ACI Architecture Inc. in collaboration with the City of Fort Saskatchewan, had undertaken three (3) stakeholder engagement, one on October 4, 2024 and two on November 7, 2024. The engagement session consisted of discussions on critical aspects within the program/building, puzzle piecing exercise of the site plan and program elements, and vision boards to gain an understanding of how the user groups perceive certain elements.

The City of Fort Saskatchewan employees in attendance were able to discuss issues and concerns around the programming and site, and brainstorming design solutions that align with the day-to-day activities and meets the operational requirements.

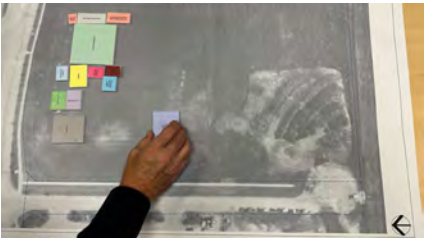
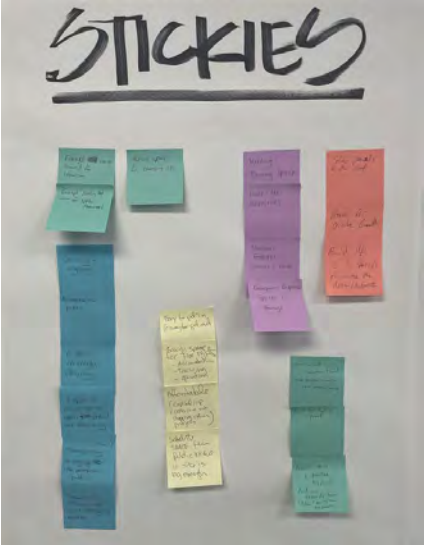
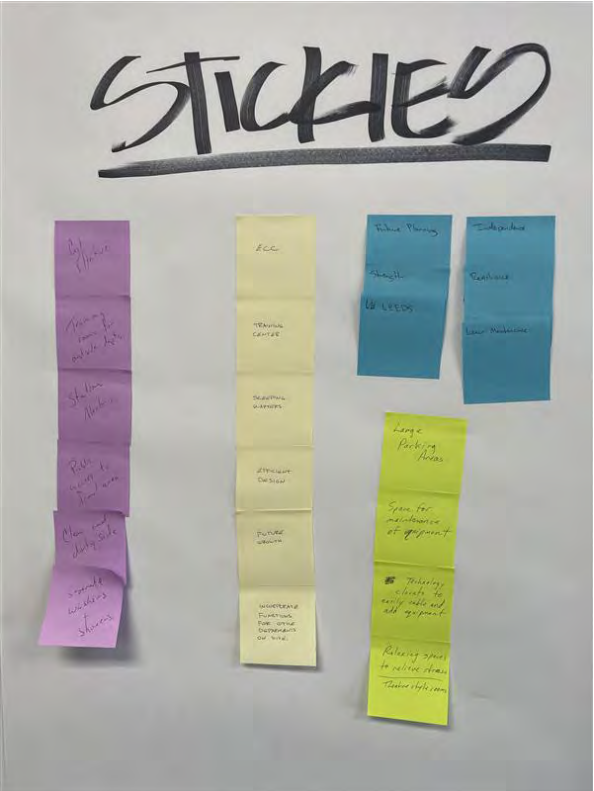
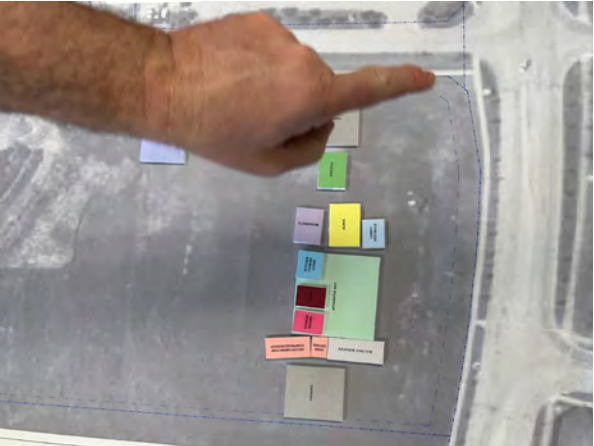
Exercises include:

- **Synectics:** brainstorming activity in which all members of the group are encouraged to write down ideas without constraints based on words and questions presented on screen.
- **Stickies:** Participatory workshop that encourages collaboration and idea generation by having participants share individual thoughts and ideas on sticky notes based on categories. The categories were designed to capture a range of perspectives.
- **Image Exercise:** Images were presented on the screen to elicit thoughts and ideas to help design team to determine key attributes that emerge from both functional requirements and aesthetics.
- **Architectural Puzzling:** Interactive workshop that engages participants in spatial planning and design by using physical representation (blocks) to explore different layout options.

With the collection of discussion points and information gathered from the exercises, ACI has compiled the data to create the three design concepts.

City of Fort Saskatchewan and FSFD participants included:

- **Todd Martens**, Fire Chief/Director of Emergency Management
- **Paul Edginton**, General Manager/Community and Protective Services
- **Sandy Bugeja**, General Manager, Corporate Services
- **Janel Smith-Duguid**, Deputy City Manager, Infrastructure & Planning Services
- **Troy Fleming**, City Manager
- **Trevor Harder**, Director Information Technology
- **Joey Farebrother**, Senior Engineering Coordinator
- **Sadie Miller**, Director, Utilities & Sustainability
- **Brad McDonald**, Manger, Utility Services
- **Richard Gagnon**, Director, Public Works
- **Brian Rogers**, Manager, Roads Services
- **Joey Farebrother**, Coordinator, Senior Engineering
- **Grant Schaffer**, Director Fleet, Facilities & Engineering
- **Stacey Ofstie**, Senior Development Planner
- **Dean McCartney**, Manager, Development Planning
- **Quinn Gillard**, Deputy Chief Emergency Management
- **Fire Rescue Services Members**, Platoons A, B, C, D / Full-Time and Casual Staff



DIRECTIONS: Write your response to the question from your own perspective.

R1. Response

- work space
- living space / second home
- part of emergency system
- training facility
- community asset
- house / facility for specialized equipment

R2. Response

- egress + ingress may be challenging?
- darker + quieter
- less obvious / prominent
- snow clearance removal

R3. Response

- integrated technology
- environmental focus
- optimal use of space
- integrated green space
- multi-functional design

R4. Response

- out reach + education
- fire prevention focus
- community supports

SYNECTICS

DIRECTIONS: Write your response to the question from your own perspective.

R1. Response

- Central base for fire operations

R2. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
- fire development
- fire innovation
- fire leadership
- fire vision
- fire mission
- fire values
- fire culture
- fire identity
- fire reputation
- fire brand
- fire image
- fire perception
- fire attitude
- fire behavior
- fire belief
- fire opinion
- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose
- fire mission
- fire vision
- fire values
- fire culture
- fire identity
- fire reputation
- fire brand
- fire image
- fire perception
- fire attitude
- fire behavior
- fire belief
- fire opinion
- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

R3. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
- fire development
- fire innovation
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- fire behavior
- fire belief
- fire opinion
- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

R4. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
- fire development
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- fire belief
- fire opinion
- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

DIRECTIONS: Write your response to the question from your own perspective.

R1. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
- fire development
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- fire behavior
- fire belief
- fire opinion
- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

R2. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
- fire development
- fire innovation
- fire leadership
- fire vision
- fire mission
- fire values
- fire culture
- fire identity
- fire reputation
- fire brand
- fire image
- fire perception
- fire attitude
- fire behavior
- fire belief
- fire opinion
- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

R3. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
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- fire view
- fire thought
- fire feeling
- fire emotion
- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

R4. Response

- fire operations
- fire training
- fire storage
- fire equipment
- fire maintenance
- fire support
- fire communication
- fire coordination
- fire management
- fire planning
- fire safety
- fire prevention
- fire education
- fire research
- fire development
- fire innovation
- fire leadership
- fire vision
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- fire passion
- fire desire
- fire need
- fire want
- fire goal
- fire purpose

SYNECTICS