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Project Title
HIGHLAND PARK FIRE STATION AND TRAINING
CENTRE
960 HAMILTON BOULEVARD NE, AIRDRIE AB,
T4A 2L5

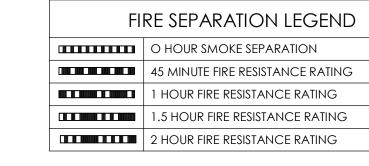
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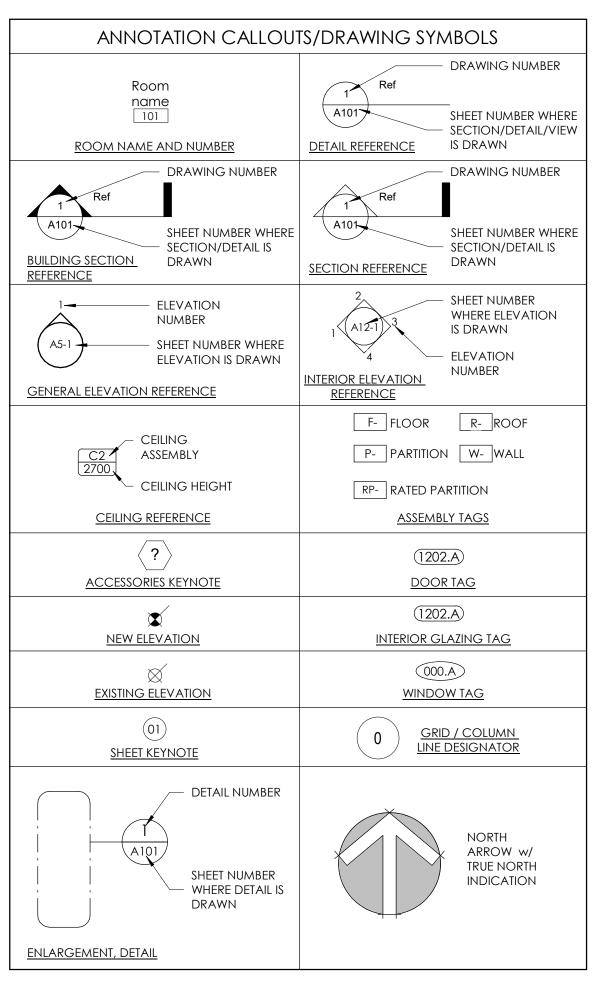
# HIGHLAND PARK FIRE STATION

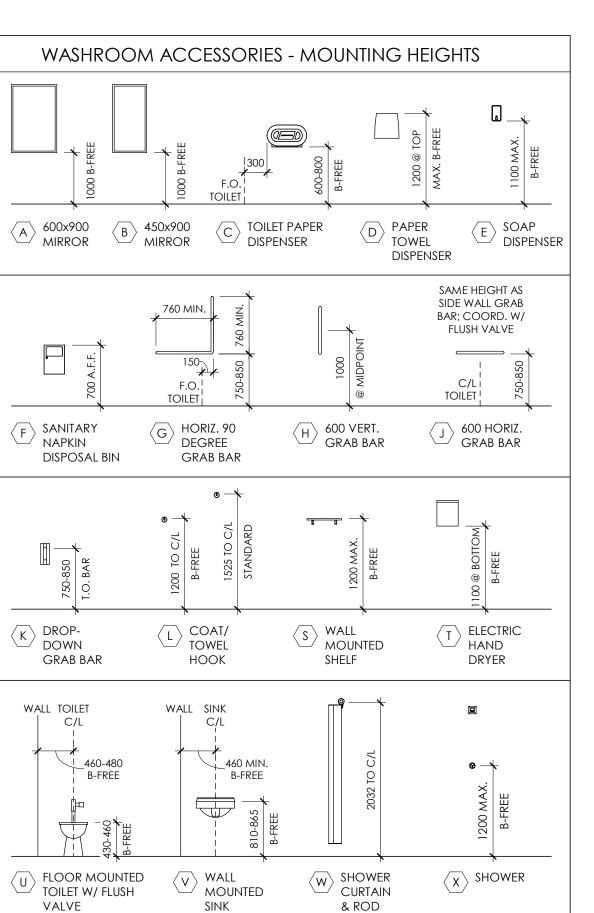


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TYPICAL ABBREVIATIONS			
AFF	ABOVE FINISHED	O/C	ON CENTRE
	FLOOR	O/H	OVERHEAD
CJ	CONTROL JOINT	OPP	OPPOSITE
CLNG	CEILING	OSB	ORIENTED STRAND
CLR	CLEAR		BOARD
CMU	CONCRETE	PLY	PLYWOOD
	MASONRY UNIT	PF	PREFINISHED
COL	COLUMN	PT	PRESSURE TREATED
CONC	CONCRETE	REV	REVISION
CONT	CONTINUOUS	R	RADIUS
C/W	COMPLETE WITH	RD	<b>ROOF DRAIN</b>
DJ	DEFLECTION JOINT	RO	<b>ROUGH OPENING</b>
FD	FLOOR DRAIN	SIM	SIMILAR
FE	FIRE EXTINGUISHER	STL	STEEL
FEC	FIRE EXTINGUISHER	SS	STAINLESS STEEL
	CABINET	THK	THICK
FO	FACE OF	T/O	TOP OF
HORZ	HORIZONTAL	TP	TURNING POINT
HP	HIGH POINT	TYP	TYPICAL
HT	HEIGHT	U/G	UNDERGROUND
IF	INSIDE FACE	U/S	UNDERSIDE
LP	LOW POINT	VERT	VERTICAL
MAX	MAXIMUM	W/	WITH
MIN	MINIMUM		
NIC	NOT IN CONTRACT		





#### **GENERAL NOTES**

# I. DRAWINGS ARE NOT TO BE SCALED.

2. ALL CONSTRUCTION, INCLUDING MEANS & METHODS, MUST MEET OR EXCEED THE REQUIREMENTS OF THE ALBERTA BUILDING CODE (ABC) 2023 PLUS ANY AND ALL AUTHORITIES HAVING JURISDICTION DURING ALL PHASES OF WORK.

B. CONTRACTOR TO COMPLY TO THE REQUIREMENTS OF ANY AND ALL AUTHORITIES HAVING JURISDICTION DURING ALL PHASES OF WORK.

4. ALL DIMENSIONS AND INSTALLATIONS ARE TO BE VERIFIED ON SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BRING ALL OMISSIONS, DISCREPANCIES, INCLUDING DIMENSIONS, TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCING OF ANY WORK.

5. ANY PATCHING, REPAIR, REFINISHING, RECONSTRUCTION AND REPAINTING WORK REQUIRED AS A RESULT OF PERFORMANCE OF WORK OF THIS CONTRACT SHALL INCORPORATE AND BE PERFORMED WITH MATERIALS TO MATCH SAME AND SHALL MAINTAIN REQUIRED FIRE RATINGS.

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT WHEREVER A FIRE SEPARATION IS REQUIRED AS INDICATED BY THE CONSTRUCTION TYPE ON THE DRAWINGS, ALL COMPONENTS OF THE ASSEMBLY ARE TO BE APPROVED MATERIALS WITH INSTALLATION/FABRICATION PROCEDURES PER DIRECTIONS OF THE U.L.C. NUMBER AND/OR REQUIREMENTS OF THE ABC 2014. ALL FIRE SEPARATIONS MUST BE CONTINUOUS WITHIN THEIR EXTENT, AND ALL JOINTS TO BE AIR TIGHT.

7. DIMENSIONS INDICATED ON FLOOR PLANS ARE TO GRID LINE, EXTERIOR FACE OF SHEATHING FOR EXTERIOR WALLS, OR FACE OF METAL STUD, OR FACE OF MASONRY. SEE FLOOR PLANS FOR ADDITIONAL DIMENSION NOTES.

8. WHERE TYPE "X" OR TYPE "C" GYPSUM BOARD IS NOTED ON DRAWINGS, PROVIDE FIRE-RESISTANT GYPSUM BOARD C/W

. WHEN A PARTITION OCCURS ALONG A CONTROL JOINT, FASTEN THE TRACK TO ONE SIDE ONLY.

U.L.C. LABEL.

10. GYPSUM BOARD CONTROL JOINTS ARE TO BE AT 9000mm O.C. MAXIMUM, OR AS OTHERWISE SHOWN.

11. PROVIDE 19mm PLYWOOD BACKING AT TELEPHONE AND SURFACE MOUNTED ELECTRICAL PANELS LOCATIONS. PAINT USING INTUMESCENT PAINT PRIOR TO INSTALLATION.

12. PROVIDE SOLID BACKING IN STEEL STUD PARTITIONS BEHIND GYPSUM BOARD AT ALL RECESSED OR SURFACE MOUNTED EQUIPMENT, MILLWORK, AND ACCESSORIES AT ALL ANCHOR POINTS. BACKING TO BE 19mm FIR PLYWOOD, A MINIMUM OF 300mm WIDE FASTENED TO 3 STUDS MINIMUM.

13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS OWN FORCES AND HIS SUB TRADES TO ENSURE THAT HOLES CUT FOR PENETRATIONS THROUGH THE EXTERIOR WALL SYSTEMS ARE NOT OVERSIZED. AFTER INSTALLATION OF ANY PENETRATIONS, THE VOIDS BETWEEN THE PENETRATION OPENING AND THE PENETRATED MATERIALS SHALL BE COMPLETELY SEALED TO ENSURE THE INTEGRITY OF THE AIR/VAPOUR BARRIER.

14. WHERE ARCHITECTURAL, STRUCTURAL, MECHANICAL OR ELECTRICAL INSTALLATIONS PENETRATE WALL AND/OR FLOOR ASSEMBLIES AS A RESULT OF WORK OF THIS CONTRACT SEAL ANY SUCH PENETRATIONS WITH FIRE RATED ACOUSTICAL SEALANT AND MAINTAIN REQUIRED FIRE RATING AND ACOUSTICAL MINIMUMS.

CONJUNCTION WITH CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

16. WHERE NEW SITE GRADING IS CALLED FOR ON THESE DRAWINGS SLOPE NEW ELEVATIONS UP/DN TO MEET EXISTING GRADE ELEVATIONS (TO REMAIN) AT A MAXIMUM SLOPE OF 1:3.5 AND BLEND NEW TO EXISTING. PROVIDE LANDSCAPING AS INDICATED ON THE DRAWINGS. MAKE GOOD TO EXISTING SITE FINISHES, LANDSCAPING AND ELEVATIONS WHERE AFFECTED BY CONSTRUCTION.

17. ALL CEILING HEIGHTS SHOWN ON THE REFLECTED CEILING PLANS ARE RELATED TO A CLEAR DIMENSION ABOVE THE FLOOR AND DIRECTLY BELOW THE CEILING. 18. ALL INTERIOR FRAMED PARTITIONS ARE TO BE BRACED

BACK TO THE STRUCTURE ABOVE THE SUSPENDED CEILING SYSTEM USING METAL STUD @ MAXIMUM 1200mm O.C. EACH 19. WHERE FRAMED DRYWALL PARTITIONS ARE TO EXTEND UP

TO THE UNDERSIDE OF ROOF FRAMING OR STRUCTURES PROVIDE A TRACK ASSEMBLY TO ALLOW FOR A ROOF DEFLECTION OF 25mm, TYPICAL. TRACK ASSEMBLY SHALL CONSIST OF A 50mm DEEP TRACK AND STANDARD TRACK IN COMBINATION OR SLOTTED TOP TRACK WITH WALL BOARD FASTENED TO STUD ONLY. THE JUNCTIONS OF THE TRACK TO STRUCTURE AND GYPSUM BOARD TO THE TRACK MUST BE CAULKED AIR TIGHT.

20. WHERE WALLS, BULKHEADS, ETC. ARE CALLED FOR TO EXTEND UP TO THE U/S OF THE STRUCTURE OR DECK ABOVE IT IS THE INTENTION OF THESE DRAWINGS THAT THE ASSEMBLIES IN QUESTION ARE TO EXTEND UP TO THE U/S OF THE DECK, SUBSTRATE, BOARDING OR BEAM DIRECTLY ABOVE THE SAID ASSEMBLY UNLESS INDICATED OTHERWISE ON THE STRUCTURAL DRAWINGS. THE HEAD OF THE ASSEMBLY SHALL BE CONSTRUCTED TO INCORPORATE A DEFLECTION SPACE OF UP TO 25mm. THE DEFLECTION SPACE SHALL BE FILLED WITH FIRE STOP MATERIAL AND, WHERE THE ASSEMBLY IS REQUIRED TO BE FIRE RATED, PROVIDE A FIRE RATED SEALANT TO SPAN THE JOINT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE APPROPRIATE SOLUTION TO MAINTAIN FIRE RATING.

21. IN FRAMED DRYWALL PARTITIONS PROVIDE HORIZONTAL SHEET METAL STRAPPING AT ALL HORIZONTAL DRYWALL JOINTS. WHERE FITMENTS OR INSTALLATIONS ARE SECURED/MOUNTED TO FRAMED WALL ASSEMBLIES PROVIDE HORIZONTAL SHEET METAL STRAPPING FOR ANCHORING PURPOSES.

22. IN EXTERIOR WALLS WHERE DISSIMILAR SUBSTRATE MATERIALS MEET ON THE CAVITY FACE OF THE INNER WALL LAP THE JOINT OF THE DISSIMILAR MATERIALS WITH AIR/MOISTURE BARRIER (AMB/AVB) MEMBRANE TO MINIMUM 150mm EACH SIDE OF THE JOINT, TYPICAL AT ALL HORIZONTAL AND VERTICAL JOINTS. REFER ALSO TO SECTION AND PLAN DETAILS, TYPICAL.

23. DOORS AND/OR WINDOWS THAT ARE NOT DIMENSIONED ARE 100mm FROM THE NEAREST FACE OF A PERPENDICULAR WALL TO THE EDGE OF THE ROUGH OPENING.

24. ALL UNITS IN mm UNLESS NOTED OTHERWISE

25. PROVIDE PAINTED 19mm PLYWOOD BACKING AT ALL FOUR WALLS IN SERVER/ DATA/ IT ROOMS, TYPICAL. 26. PROVIDE 19mm PLYWOOD BACKING BEHIND ALL

TACKBOARD, WHITEBOARD, SMARTBOARD LOCATIONS.

#### 1. BUILDING USE AND OCCUPANCY MAJOR OCCUPANCIES:

GROUP C - DORMATORIES

GROUP A, DIVISION 2 – KITCHEN, EXERCISE, MEETING ROOMS, LOUNGE, TRAINING GROUP F, DIVISION 3 – STORAGE GARAGE GROUP C – DORMITORIES GROUP D – OFFICES

#### 2. FACILITY DESCRIPTION

THIS FACILITY FALLS UNDER PART 3 OF THE ALBERTA BUILDING CODE 2023.

THE WORK DESCRIBED IN THESE DOCUMENTS WILL BE CONSTRUCTED AS PER THE

 $= 2052 \, \text{SQ.M}$ 

# 3. BUILDING CLASSIFICATION & CONSTRUCTION REQUIREMENTS

REQUIREMENTS OF ARTICLE 3.2.2.55 GROUP C,

- GROUP C, UP TO 3 STOREYS, SPRINKLERED - 3.2.2.55

PROPOSED MAIN FLOOR AREA = 2052 SQ.M.PROPOSED SECOND FLOOR AREA  $= 531 \, \text{SQ.M.}$ PROPOSED MEZZANINE AREA  $= 167 \, \text{SQ.M.}$ PROPOSED SECOND FLOOR BALCONY AREA = 26 SQ.M. TOTAL PROPOSED AREA  $= 2776 \, \text{SQ.N}$ 

- 2 STOREYS - MAXIMUM BUILDING AREA OF 2700 SQ.M IF 2 STOREYS

**NEW BUILDING AREA (MAIN FLOOR)** 

- ACTUAL BUILDING AREA

TOTAL BUILDING AREA

BUILDING AREA MEANS THE GREATEST HORIZONTAL AREA OF A BUILDING ABOVE GRADE WITHIN THE OUTSIDE SURFACE OF EXTERIOR WALLS OR WITHIN THE OUTSIDE SURFACE OF EXTERIOR WALLS AND THE CENTRE LINE OF FIREWALLS – 1.4.1.2

- COMBUSTIBLE OR NONCOMBUSTIBLE CONSTRUCTION

FLOOR ASSEMBLIES – 45 MINUTES F.R.R. \*SEE NOTE \*NOTE: THE SPATIAL SEPARATION BETWEEN A2 (KITCHEN, MEETING ROOMS, TRAINING) & C (DORMS), OR D (OFFICES) & C (DORMS) IS 1 HOUR F.R.R. THEREFORE THE FLOOR WOULD NEED TO BE 1 HOUR.

MEZZANINES – 45 MINUTES F.R.R. IF OF COMBUSTIBLE CONSTRUCTION - ROOF - NO RATING REQUIRED - LOADBEARING WALLS, COLUMNS, AND ARCHES – 45 MINUTES

#### 1) COMPONENT FIRE SEPARATIONS

JANITOR ROOMS - O MINUTE FIRE SEPARATION (IF SPRINKLERED THROUGHOUT) -3.3.1.22 (3)

- CLOSURES - 0 MINUTE - TABLE 3.1.8.4 - STORAGE ROOMS – NO RATING REQUIRED – 3.3.2.16 - CLOSURES - NO RATING REQUIRED - TABLE 3.1.8.4 SERVICE ROOMS - 1 HOUR F.R.R. - 3.6.2.1

- CLOSURES – 45 MINUTE – TABLE 3.1.8.4

VERTICAL SERVICE SPACES – 45 MINUTES F.R.R. - 3.6.3.1 - HORIZONTAL SERVICE SPACES - 30 MINUTES MINIMUM F.R.R. - 3.6.4.2 - CORRIDORS - NO RATING REQUIRED IF SPRINKLERED THROUGHOUT & UNDER TRAVEL **DISTANCE - 3.3.2.6** \* CORRIDOR RATING NOT REQUIRED PROVIDED MAX. TRAVEL DISTANCE FROM ANY

PART OF THE FLOOR TO AN EXIT IS NOT MORE THAN 45m. - CLOSURES IN CORRIDORS - 20 MINUTE FIRE PROTECTION RATING IF CLOSURE IS IN A FIRE SEPARATION NOT REQUIRED TO HAVE A F.R.R. MORE THAN 1 HOUR - 3.1.8.12

- STORAGE GARAGE – 1.5 HOUR F.R.R. – 3.3.5.6 - CLOSURES – 1 HOUR – TABLE 3.1.8.4 LIFT/ ELEVATOR SHAFT – 1 HOUR F.R.R. - 3.5.3.1(1)(a) & TABLE 3.5.3.1 - CLOSURES - 45 MINUTE - TABLE 3.1.8.4

- EXITS – 45 MINUTE F.R.R. – 3.4.4.1(1) - EXITS THROUGH LOBBY — THE LOBBY MUST BE SEPARATED FROM ADJACENT DCCUPANCIES BY A SMOKE SEPARATION (IF SPRINKLERED, OTHERWISE THE SAME RATING AS FOR EXITS) – 3.4.4.2(e)(iii) DORM ROOMS – 1 HOUR F.R.R. – 3.3.4.2(1) - STORAGE OF DANGEROUS GOODS (SCBA ROOM) – 2 HOUR F.R.R. – 3.3.6.3(1)(a)

- CLOSURES - 1.5 HOURS - TABLE 3.1.8.4 - LAUNDRY ROOM – 0 HOUR FIRE SEPARATION – 3.3.1.23(3)

#### 2) FLAME SPREAD RATINGS

3) WHERE THE FLOOR AREA IS SPRINKLERED THROUGHOUT, THE FLAME SPREAD RATINGS FOR INTERIOR WALL FINISH SHALL NOT BE MORE THAN 150 6) WHERE THE FLOOR AREA IS SPRINKLERED THROUGHOUT, THE FLAME SPREAD RATING

OF THE INTERIOR CEILING FINISH OF CORRIDORS SHALL NOT BE MORE THAN 150 1) A CONCEALED SPACE USED AS A PLENUM WITHIN A FLOOR ASSEMBLY OR WITHIN A

ROOF ASSEMBLY NEED NOT CONFORM TO SENTENCE 3.1.5.18.(1) AND ARTICLE 3.6.5.1. A) ALL MATERIALS WITHIN THE CONCEALED SPACE HAVE A FLAME-SPREAD RATING NOT MORE THAN 25 AND A SMOKE DEVELOPED CLASSIFICATION NOT

MORE THAN 50, EXCEPT FOR I) TUBING FOR PNEUMATIC CONTROLS, II) OPTICAL FIBRE CABLES AND ELECTRICAL WIRES AND CABLES WITH COMBUSTIBLE INSULATION, JACKETS OR SHEATHES THAT ARE USED FOR THE TRANSMISSION OF VOICE, SOUND OR DATA AND CONFORM TO

SENTENCES 3.1.4.3.(2) AND 3.1.5.21.(2), III) TOTALLY ENCLOSED NON-METALLIC RACEWAYS WITH AN FT6 RATING, WHEN TESTED IN ACCORDANCE WITH CLAUSE 3.1.5.23.(1)(A), IN BUILDINGS REQUIRED TO BE OF NONCOMBUSTIBLE CONSTRUCTION, 3.2.3.14 WALL EXPOSED TO ANOTHER WALL IV) TOTALLY ENCLOSED NON-METALLIC RACEWAYS WITH AN FT4

RATING, WHEN TESTED IN ACCORDANCE WITH CLAUSE 3.1.5.23.(1)(A),

IN BUILDINGS PERMITTED TO BE OF COMBUSTIBLE CONSTRUCTION, B) THE SUPPORTS FOR THE CEILING MEMBRANE ARE OF NONCOMBUSTIBLE MATERIAL HAVING A MELTING POINT NOT BELOW 760°C. 2) IF A CONCEALED SPACE REFERRED TO IN SENTENCE (1) IS USED AS A RETURN-AIR PLENUM AND INCORPORATES A CEILING MEMBRANE THAT FORMS PART OF THE REQUIRED FIRE-RESISTANCE RATING OF THE ASSEMBLY, EVERY OPENING THROUGH THE MEMBRANE SHALL BE PROTECTED BY A FIRE STOP FLAP THAT

> A) STOPS THE FLOW OF AIR INTO THE CONCEALED SPACE IN THE EVENT OF A B) IS SUPPORTED IN A MANNER THAT WILL MAINTAIN THE INTEGRITY OF THE CEILING MEMBRANE FOR THE DURATION OF TIME REQUIRED TO PROVIDE THE REQUIRED FIRE-RESISTANCE RATING, C) CONFORMS TO CAN/ULC-S112.2, "FIRE TEST OF CEILING FIRESTOP FLAP ASSEMBLIES," AND D) ACTIVATES AT A TEMPERATURE APPROXIMATELY 30°C ABOVE THE NORMAL

> MAXIMUM TEMPERATURE THAT OCCURS IN THE RETURN-AIR PLENUM, WHETHER

THE AIR DUCT SYSTEM IS OPERATING OR SHUT DOWN. THEREFORE, ANYWHERE THERE IS A NEW ENCLOSED PLENUM SPACE A FLAME SPREAD RATING OF NOT MORE THAN 25 IS REQUIRED. ONE LAYER OF 15.9mm TYPE 'X' GYPSUM BOARD WOULD

PROVIDE THE REQUIRED FLAME SPREAD RATING PER TABLE D-3.1.1.A

### 3.1.13. INTERIOR FINISH

3.1.13.1. INTERIOR FINISHES, FURNISHINGS AND DECORATIVE MATERIALS 1) EXCEPT AS OTHERWISE PROVIDED BY THIS SUBSECTION, INTERIOR FINISHES, FURNISHINGS AND DECORATIVE MATERIALS SHALL CONFORM TO SECTION 2.3. OF DIVISION B OF THE NFC (AE). 2) INTERIOR FINISH MATERIAL SHALL INCLUDE ANY MATERIAL THAT FORMS PART OF THE INTERIOR SURFACE OF A FLOOR, WALL, PARTITION OR CEILING,

> A) INTERIOR CLADDING OF PLASTER, WOOD OR TILE, B) SURFACING OF FABRIC, PAINT, PLASTIC, VENEER OR WALLPAPER, C) DOORS, WINDOWS AND TRIM, D) LIGHTING ELEMENTS SUCH AS LIGHT DIFFUSERS AND LENSES FORMING PART OF THE FINISHED SURFACE OF THE CEILING, AND E) CARPET MATERIAL THAT OVERLIES A FLOOR THAT IS NOT INTENDED

AS THE FINISHED FLOOR. 3.1.13.2. FLAME-SPREAD RATING

1) EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS SUBSECTION, THE FLAME-SPREAD RATING OF INTERIOR WALL AND CEILING FINISHES, INCLUDING GLAZING AND SKYLIGHTS, SHALL BE NOT MORE THAN 150 AND SHALL CONFORM TO TABLE 3.1.13.2.

THEREFORE, A FLAME SPREAD RATING OF 150 OR LESS IS REQUIRED IN ALL AREAS, EXCEPT IN THE LOBBY A FLAME SPREAD RATING OF 25 OR LESS IS REQUIRED, IN A SPRINKLERED BUILDING.

3) AUTOMATIC FIRE SUPPRESSION SYSTEM

FULLY SPRINKLERED MEETING THE REQUIREMENTS OF 3.2.4.1

4) FIRE ALARM SYSTEM

FULLY ALARMED MEETING THE REQUIREMENTS OF 3.2.4.1

5) INTERCONNECTED FLOOR SPACE

#### **BUILDING CODE REVIEW**

6) OCCUPANT LOAD - 3.1.17 BASED ON INFORMATION PROVIDED BY FIRE DEPARTMENT

) MAIN FLOOR: NO. OF TRAINEES NO. OF TRAINING OFFICERS NO. OF ADMIN. NO. OF EMERGENCY MGMT. = 3 NO. OF FIRE PREVENTION

NOTE: THE MAIN FLOOR & SECOND FLOOR OCCUPANTS ARE THE SAME PERSONS OCCUPYING THE KITCHEN, EXERCISE ROOM, AND VEHICLE BAYS.

# NO. OF FIRE FIGHTERS = 8

NOTE: THE SECOND FLOOR OCCUPANTS (FIRE FIGHTERS) ARE THE SAME PERSONS IN THE DAY USE ROOM.

7) EXISTING AND EGRESS TRAVEL DISTANCE: MAXIMUM 45m TO NO LESS THAN 1 EXIT PER FLOOR AREA (SPRINKLERED) AS NOTE: EXITS ARE CALCULATED @ 6.1mm PER PERSON AS PER 3.4.3.2 (1) (A)

**EXIT WIDTH REQUIREMENTS:** UNITS OF EXIT WIDTH REQUIRED - 76 PERSONS @ 6.1 mm / PERSON = 464mm. UNITS OF EXIT WIDTH PROVIDED = 11,128 mm (BASED ON 13 X 856 mm (900 mm - 44 mm (DOOR LEAF)). CORRIDORS – 1100mm – 3.3.1.9 & TABLE 3.4.3.2.-A

RAMPS - 1100mm - TABLE 3.4.3.2.-A 4. WASHROOM FIXTURE REQUIREMENTS - 3.7.2.2

STAIRS – 900mm - TABLE 3.4.3.2.-A

BASED ON STIPULATED OCCUPANT LOAD

MAIN FLOOR OCCUPANT LOAD = 68 FIXTURES REQUIRED: 68 PERSONS (34 MALE, 34 FEMALE)

PER TABLE 3.7.2.2.-A 34 MALES REQUIRE 1 WATER CLOSET 34 FEMALES REQUIRE 2 WATER CLOSETS

FIXTURES PROVIDED: 3 MALE STAFF WASHROOM (2 ARE BARRIER-FREE)

3 FEMALE STAFF WASHROOM (2 ARE BARRIER-FREE) SECOND FLOOR (FIRE FIGHTERS) OCCUPANT LOAD = 8 FIXTURES REQUIRED: 8 PERSONS (4 MALE, 4 FEMALE) PER 3.7.2.2(8): 4 MALES REQUIRE 1 WATER CLOSET 4 FEMALES REQUIRE 1 WATER CLOSET BARRIER-FREE NOT APPLICABLE

FIXTURES PROVIDED: 2 MALE STAFF WASHROOM 2 FEMALE STAFF WASHROOM

#### 5. MISCELLANEOUS

- LIFT/ FLEVATOR

3.5.3.1 FIRE SEPARATIONS FOR ELEVATOR HOISTWAYS 45 MINUTE F.R.R. REQUIRED FOR VERTICAL SERVICE SPACE FOR ELEVATOR HOISTWAY -3.5.3.1(1)(a) & TABLE 3.5.3.1

#### MEZZANINE 3.2.1.1. EXCEPTIONS IN DETERMINING BUILDING HEIGHT

3) EXCEPT AS REQUIRED BY SENTENCE (5), THE SPACE ABOVE A MEZZANINE NEED NOT BE CONSIDERED AS A STOREY IN CALCULATING THE BUILDING HEIGHT, PROVIDED a) THE AGGREGATE AREA OF MEZZANINES THAT ARE NOT SUPERIMPOSED DOES NOT EXCEED 40% OF THE OPEN AREA OF THE ROOM IN WHICH THEY ARE LOCATED (SEE NOTE A-3.2.1.1.(3)(A)), AND b) EXCEPT AS PERMITTED IN SENTENCES (7) AND 3.3.2.13.(3), THE SPACE ABOVE THE MEZZANINE IS USED AS AN OPEN AREA WITHOUT PARTITIONS OR SUBDIVIDING WALLS HIGHER THAN 1070 MM ABOVE THE MEZZANINE FLOOR.

3.2.1.1.(3)(a) PROPOSED MEZZANINE AREA = 145 SQ.M AREA BELOW MEZZANINE (NOT ENCLOSED) = 781 SQ.M 145 SQ.M / 781 SQ.M = 18.6% THEREFORE, THE PROPOSED MEZZANINE IS COMPLIANT.

A-3.2.1.1.(3)(A) MEZZANINE AREA. THE PERMITTED AREA OF THE MEZZANINE FOR THE PURPOSES OF DETERMINING THE ALLOWABLE PERCENTAGE IS TO BE BASED ON THE OPEN AREA OF THE FLOOR OF THE SPACE IN WHICH THE MEZZANINE IS LOCATED. THE CODE DOES NOT RESTRICT THE ENCLOSING OF SPACE BELOW THE MEZZANINE BUT THE ENCLOSED AREA MUST BE DEDUCTED FROM THE AREA OF THE OVERALL SPACE BEFORE APPLYING THE PERCENTAGE ALLOWANCE.

3.2.3.13 PROTECTION OF EXIT FACILITIES (3) IF AN EXTERIOR EXIT DOOR IN ONE FIRE COMPARTMENT IS WITHIN 3m HORIZONTALLY OF AN OPENING IN ANOTHER FIRE COMPARTMENT AND THE EXTERIOR WALLS OF THESE FIRE COMPARTMENTS INTERSECT AT AN EXTERIOR ANGLE OF LESS THAN 135°, THE OPENING SHALL BE PROTECTED IN CONFORMANCE WITH THE REQUIREMENTS OF SENTENCE (4) (4) THE OPENING PROTECTION REFERRED TO IN SENTENCES (1) TO (3) SHALL CONSIST

(c) A CLOSURE CONFORMING TO THE REQUIREMENTS OF SUBSECTION 3.1.8.

(2) THE EXTERIOR WALL OF EACH FIRE COMPARTMENT REFERRED TO IN SENTENCE (1) WITHIN THE DISTANCE, Do., SHALL HAVE A FIRE RESISTANCE RATING NOT LESS THAN THAT REQUIRED FOR THE INTERIOR VERTICAL FIRE SEPARATION BETWEEN THE FIRE COMPARTMENT AND THE REMAINDER OF THE BUILDING.

THEREFORE, THE EXTERIOR WALLS, BETWEEN BAY & STAIRWELL EXIT DOORS ON WEST & EAST SIDE OF BAY 1, SHALL HAVE 1.5 HOUR F.R.R.

COMPARTMENTS WITHIN A BUILDING THAT IS SPRINKLERED THROUGHOUT Therefore, the doors shall have 1 hour f.r.r. (1.5 hour wall fire separation) and

(3) SENTENCE (1) DOES NOT APPLY TO UNPROTECTED OPENINGS OF FIRE

6. ENERGY EFFICIENCY NECB 2017 TABLE 3.2.2.2 WALLS - R=27

PROVIDED WITH CLOSERS.

ROOF – R= 41

FLOOR – R= 35

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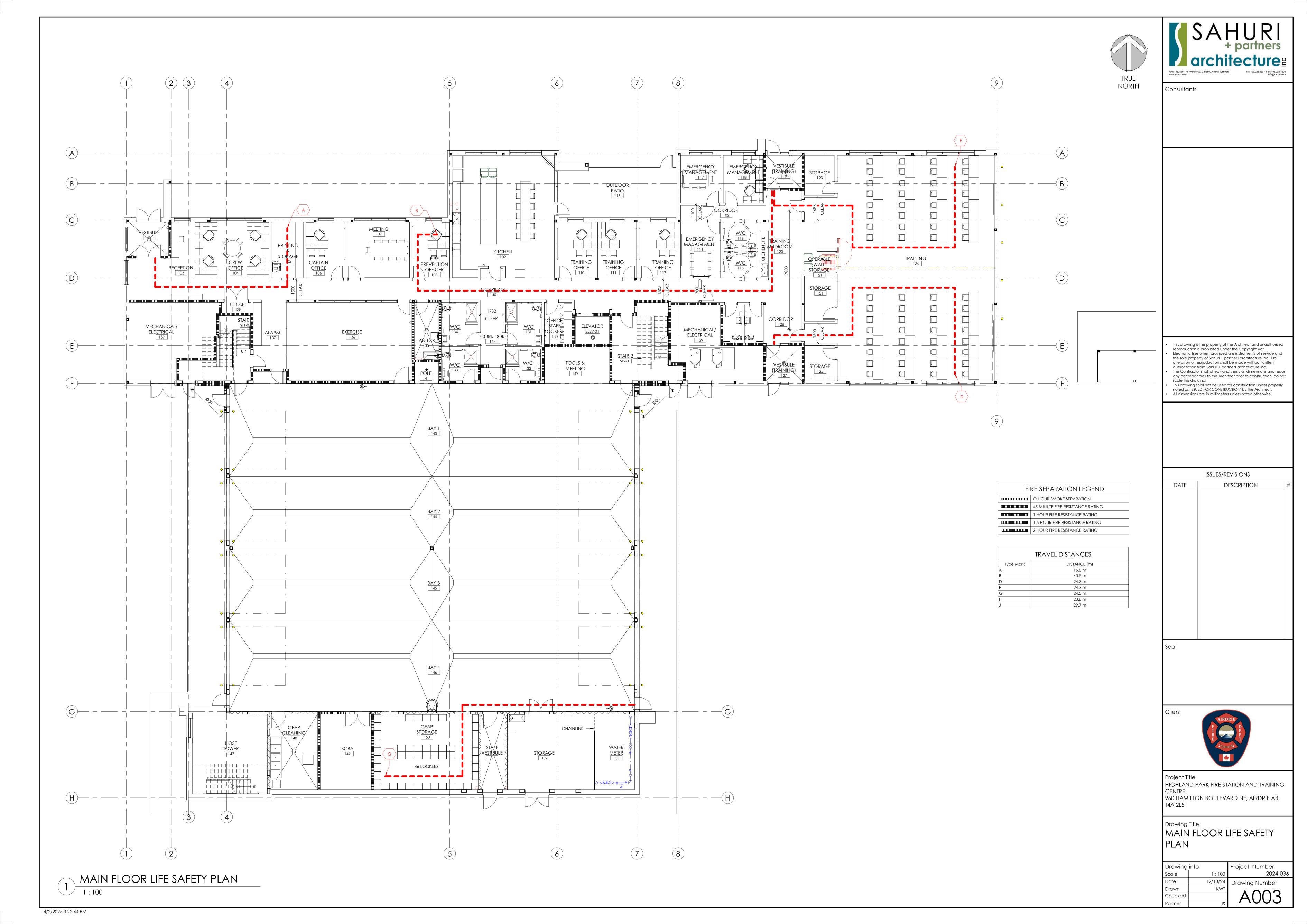
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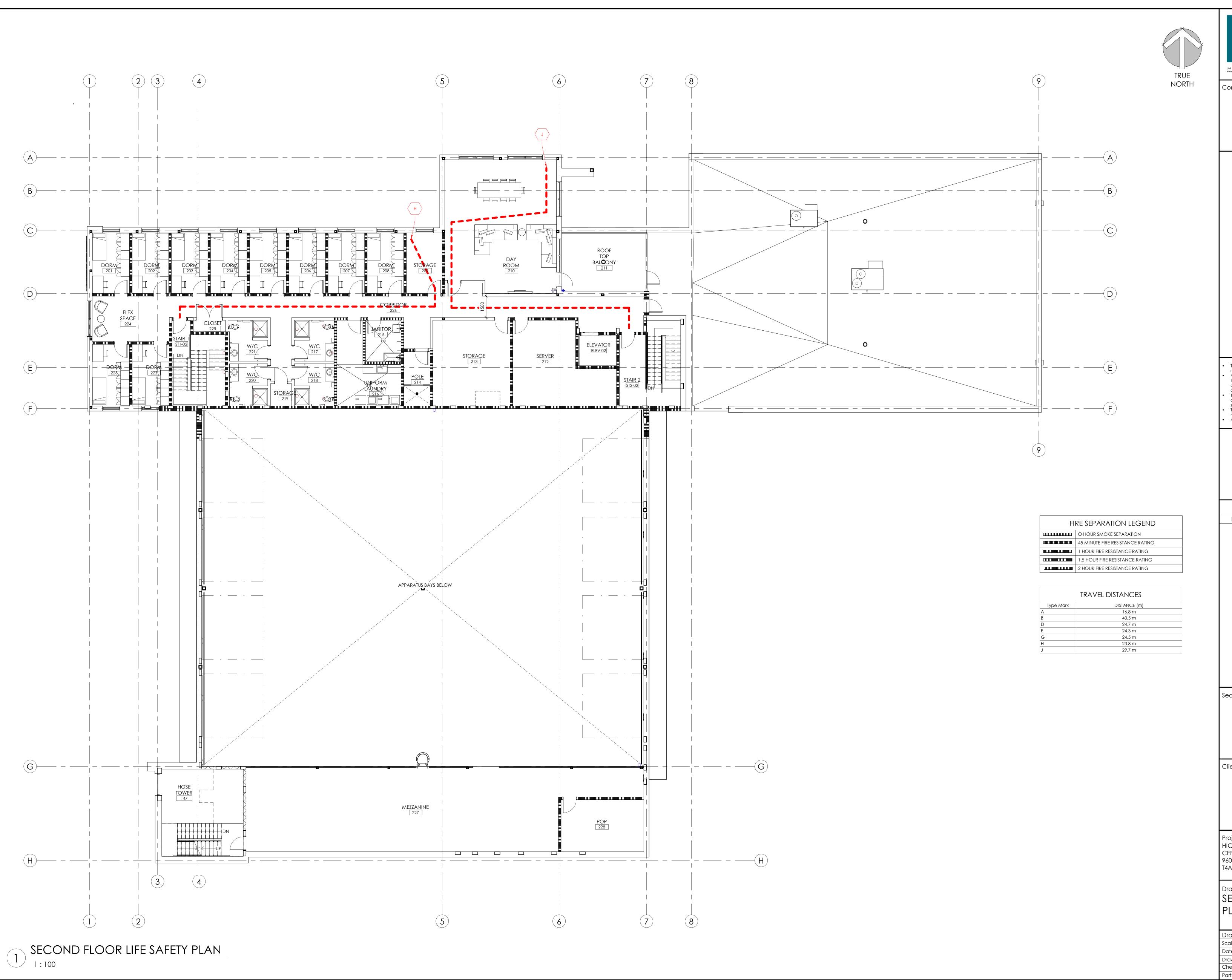
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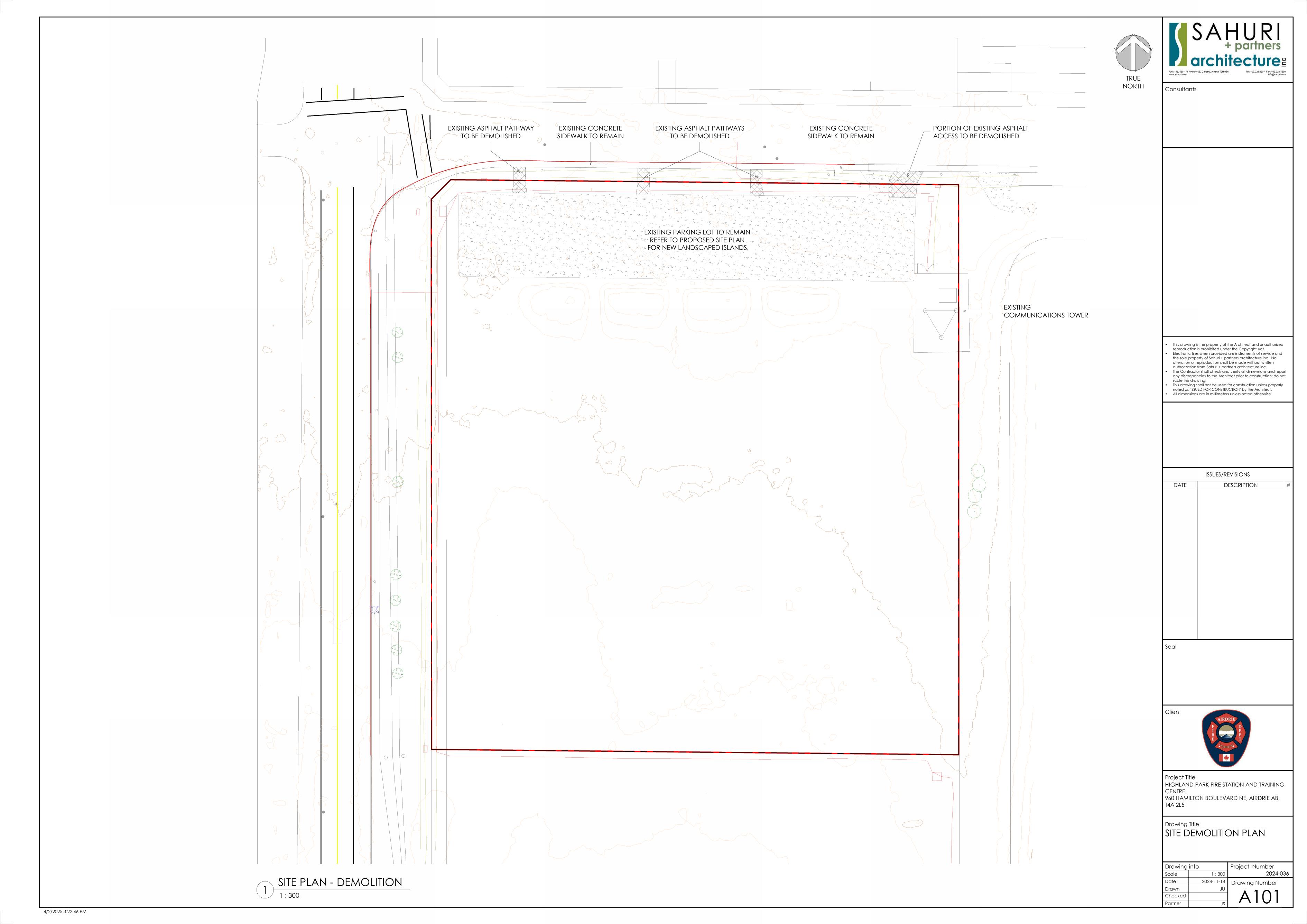
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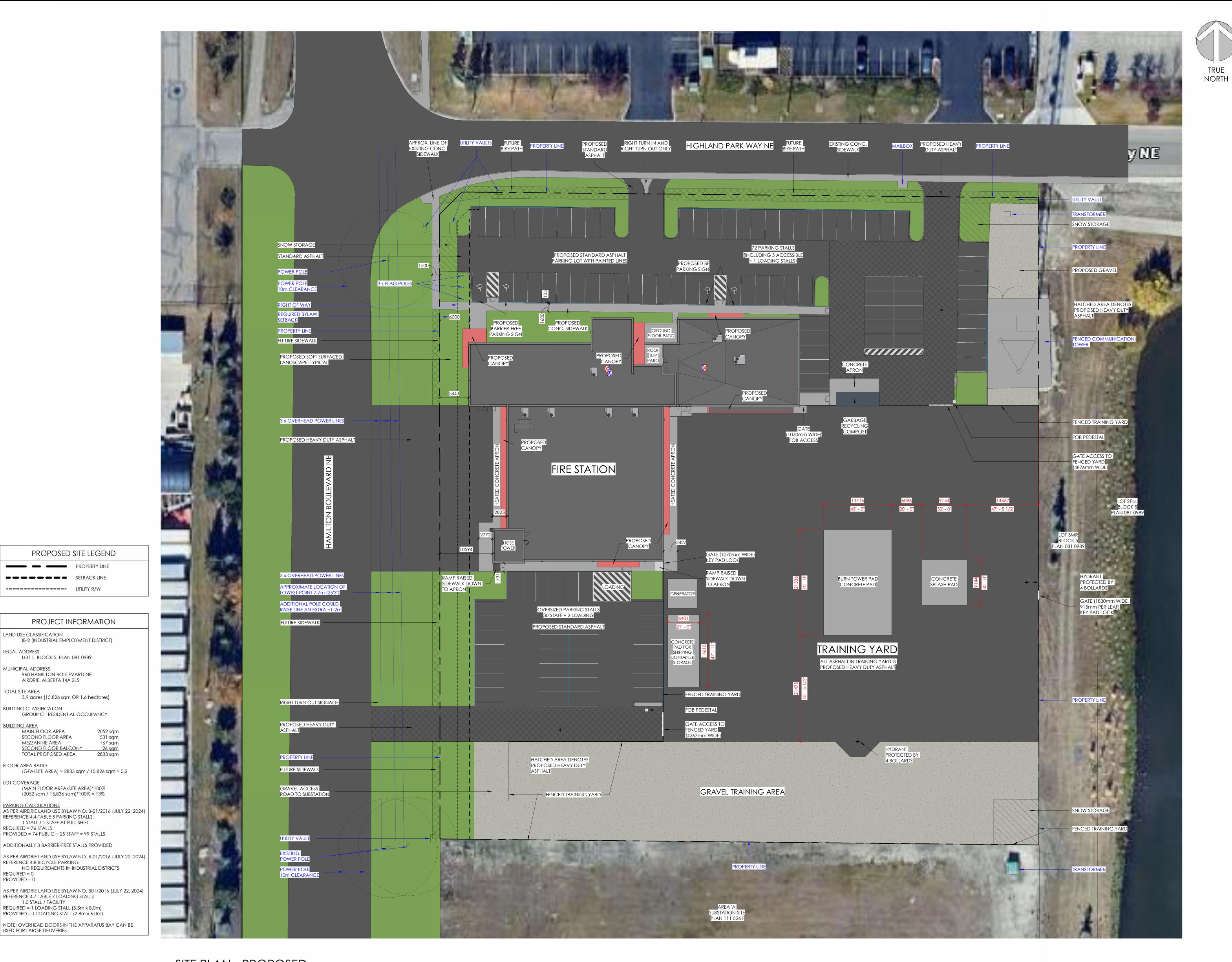
Drawing Title
SECOND FLOOR LIFE SAFETY
PLAN

Drawing info
Scale 1:100
Project Number
2024-036
Date 12/13/24
Drawn KWT
Checked

Project Number
2024-036

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scale this drawing.

ISSUES/REVISIONS DESCRIPTION

HIGHLAND PARK FIRE STATION AND TRAINING 960 HAMILTON BOULEVARD NE, AIRDRIE AB, T4A 2L5

Drawing Title PROPOSED SITE PLAN

Drawing info Project Number As indicated 2024-11-1 Drawing Number Drawn Checked

PROPOSED SITE LEGEND

PROJECT INFORMATION

IB-2 (INDUSTRIAL EMPLOYMENT DISTRICT)

3.9 acres (15,826 sqm OR 1.6 hectares)

GROUP C - RESIDENTIAL OCCUPANCY

(GFA/SITE AREA) = 2833 sqm / 15,826 sqm = 0.2

(MAIN FLOOR AREA/SITE AREA)\*100%

(2052 sqm / 15,836 sqm)\*100% = 13%

2052 sqm

531 sqm

167 sqm

26 sqm

LOT 1, BLOCK 5, PLAN 081 0989

960 HAMILTON BOULEVARD NE AIRDRIE, ALBERTA T4A 2L5

SETBACK LINE

LAND USE CLASSIFICATION

LEGAL ADDRESS

TOTAL SITE AREA

BUILDING AREA

FLOOR AREA RATIO

REQUIRED = 76 STALLS

REQUIRED = 0 PROVIDED = 0

LOT COVERAGE

BUILDING CLASSIFICATION

MAIN FLOOR AREA

MEZZANINE AREA

SECOND FLOOR AREA

SECOND FLOOR BALCONY

TOTAL PROPOSED AREA

REFERENCE 4.4-TABLE 5 PARKING STALLS 1 STALL / 1 STAFF AT FULL SHIFT

REFERENCE 4.7-TABLE 7 LOADING STALLS 1.0 STALL / FACILITY

USED FOR LARGE DELIVERIES.

REQUIRED = 1 LOADING STALL  $(3.5m \times 8.0m)$ PROVIDED = 1 LOADING STALL (2.8 m x 6.0 m)

PROVIDED = 74 PUBLIC + 25 STAFF = 99 STALLS

ADDITIONALLY 3 BARRIER-FREE STALLS PROVIDED

NO REQUIREMENTS IN INDUSTRIAL DISTRICTS

MUNICIPAL ADDRESS







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ISSUES/REVISIONS DESCRIPTION

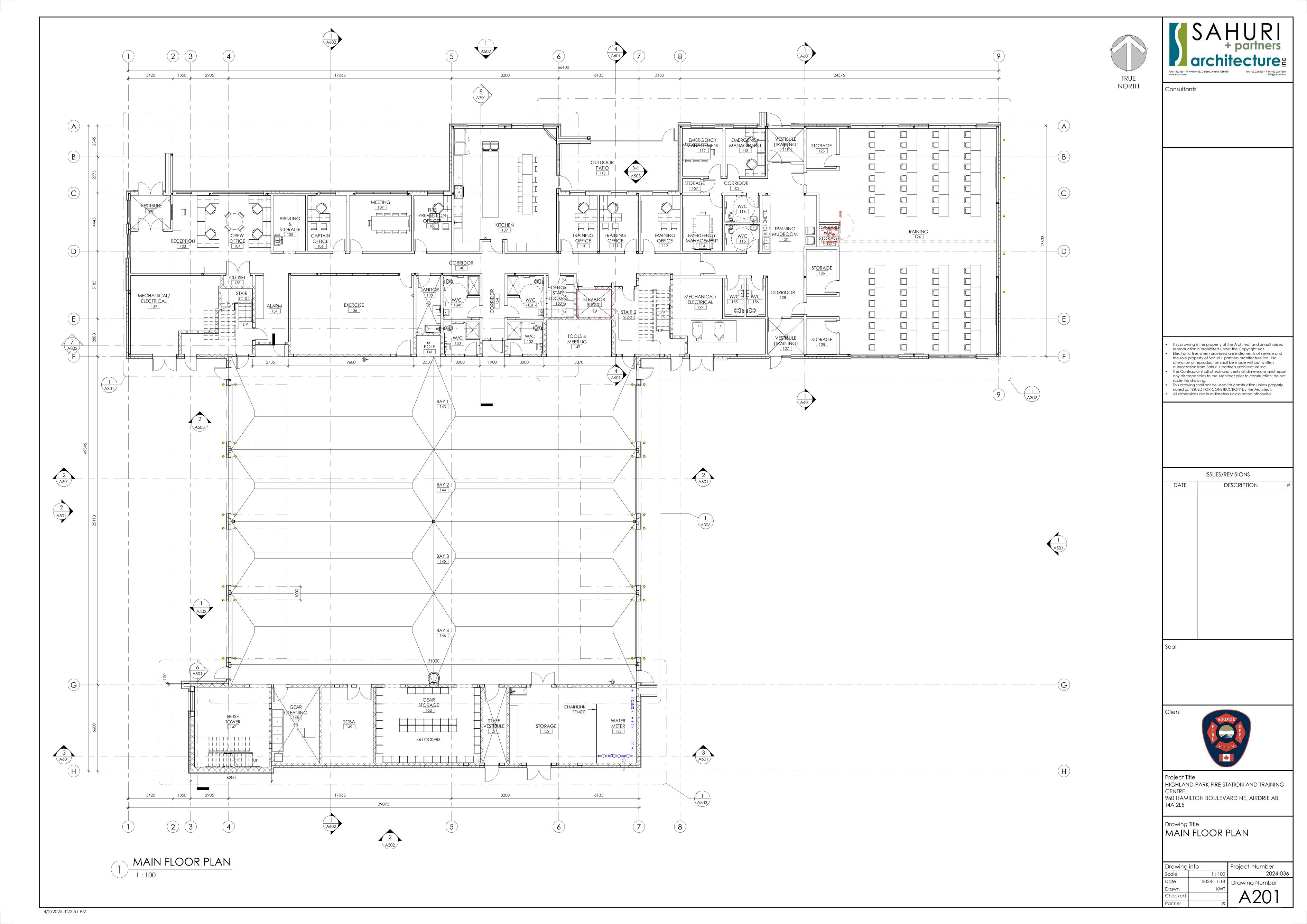
Project Title HIGHLAND PARK FIRE STATION AND TRAINING CENTRE
960 HAMILTON BOULEVARD NE, AIRDRIE AB,
T4A 2L5

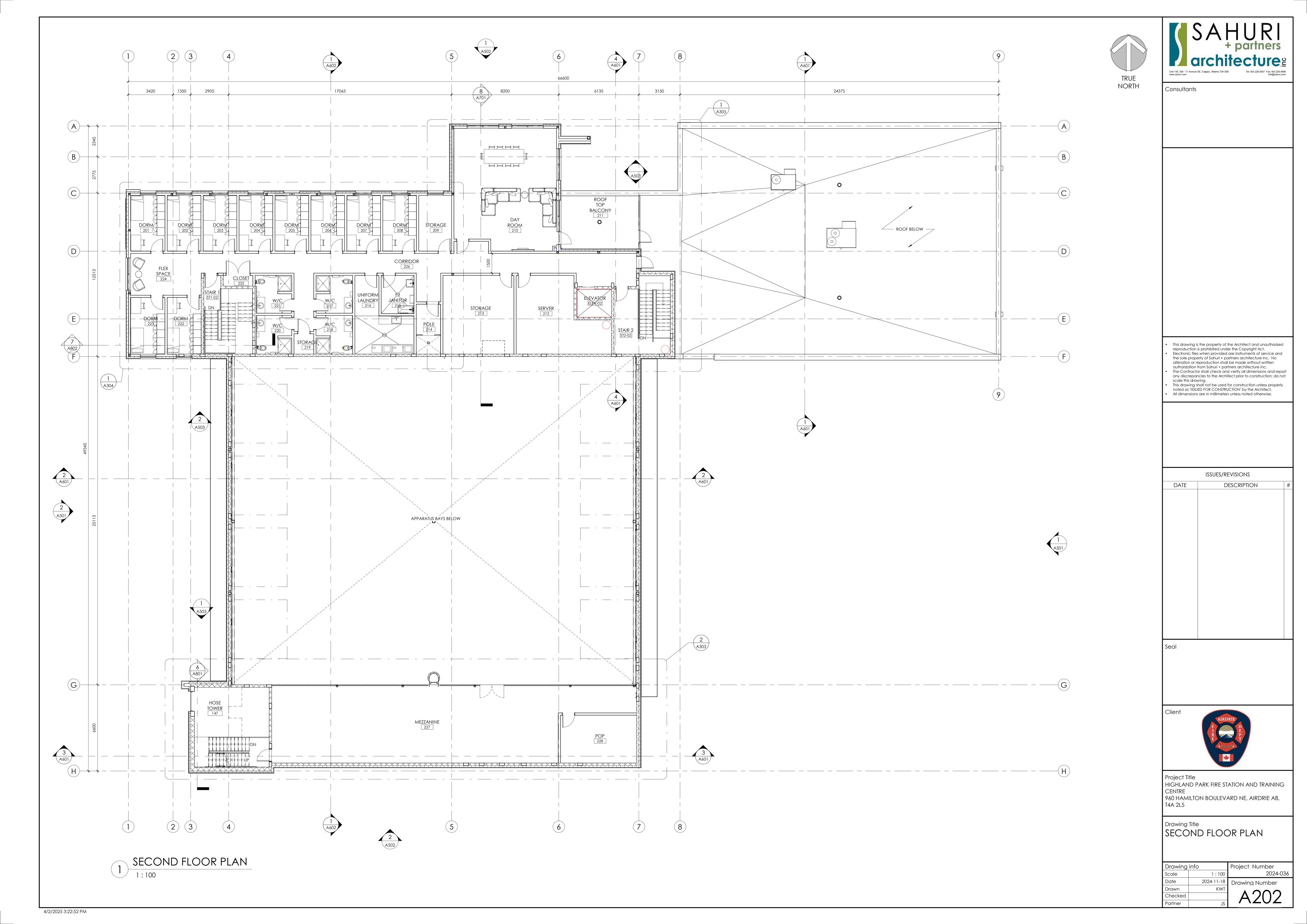
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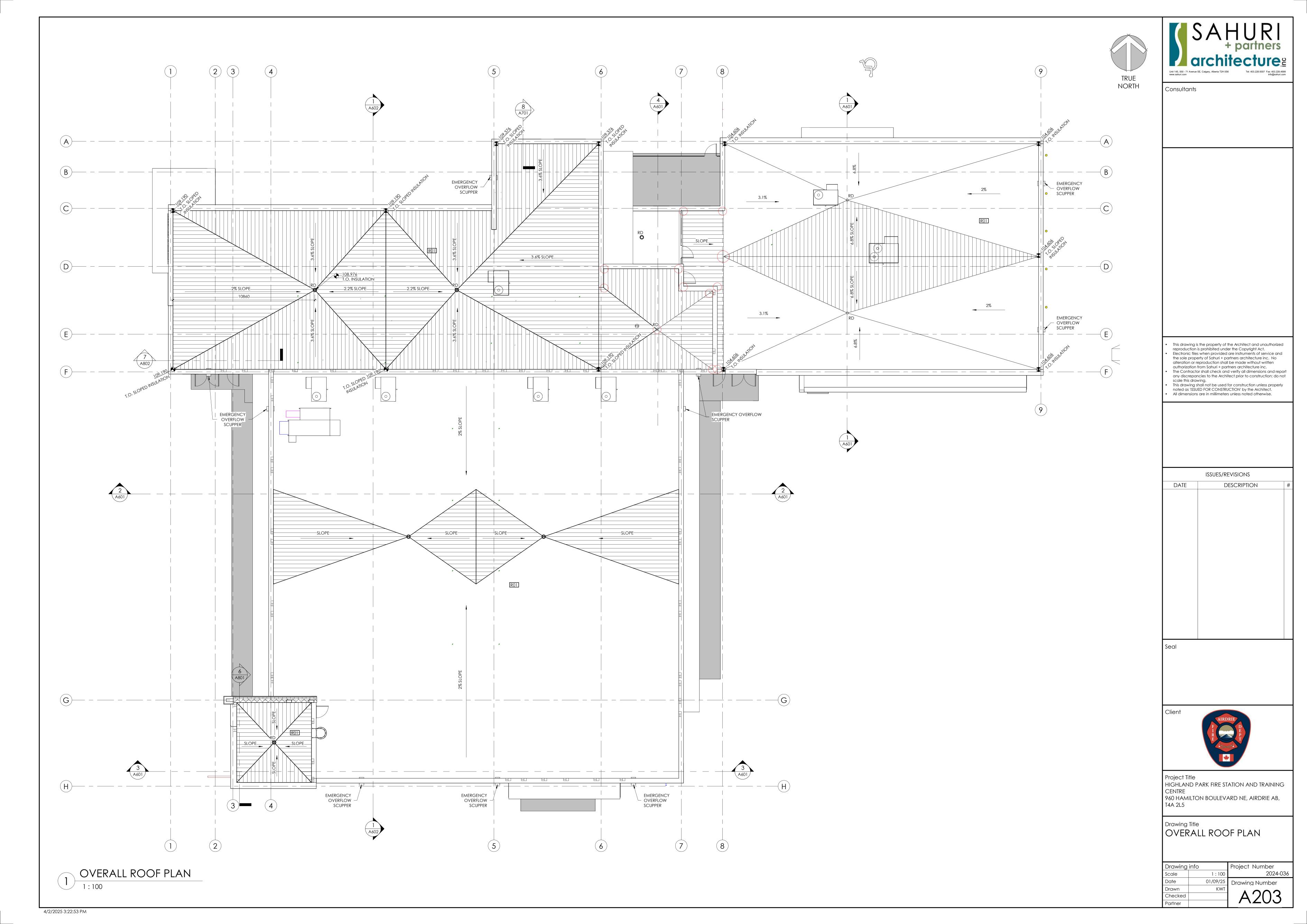
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Date 2 Project Number 2024-036 As indicated 2024-11-18 Drawing Number Drawn Checked Partner

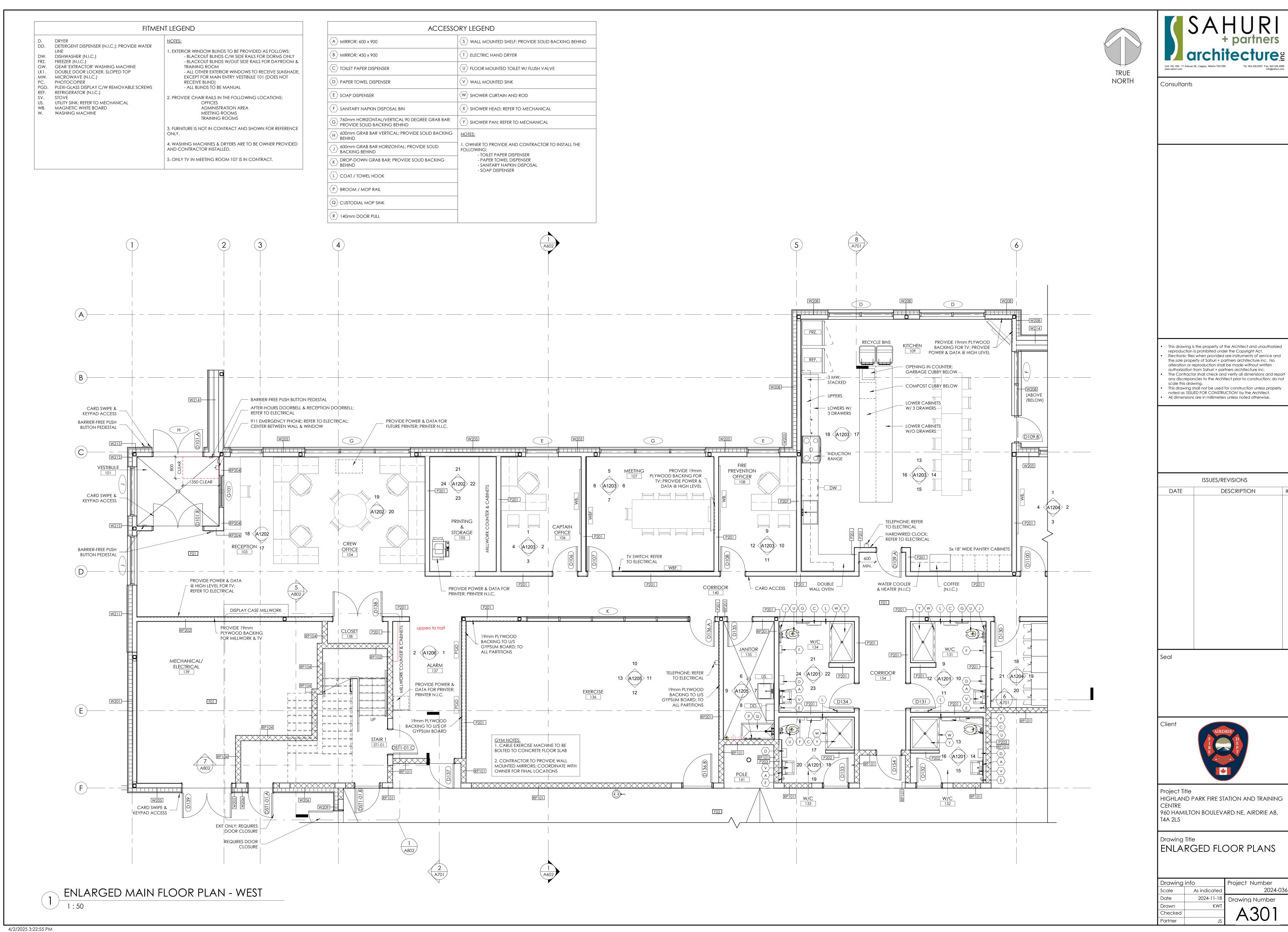
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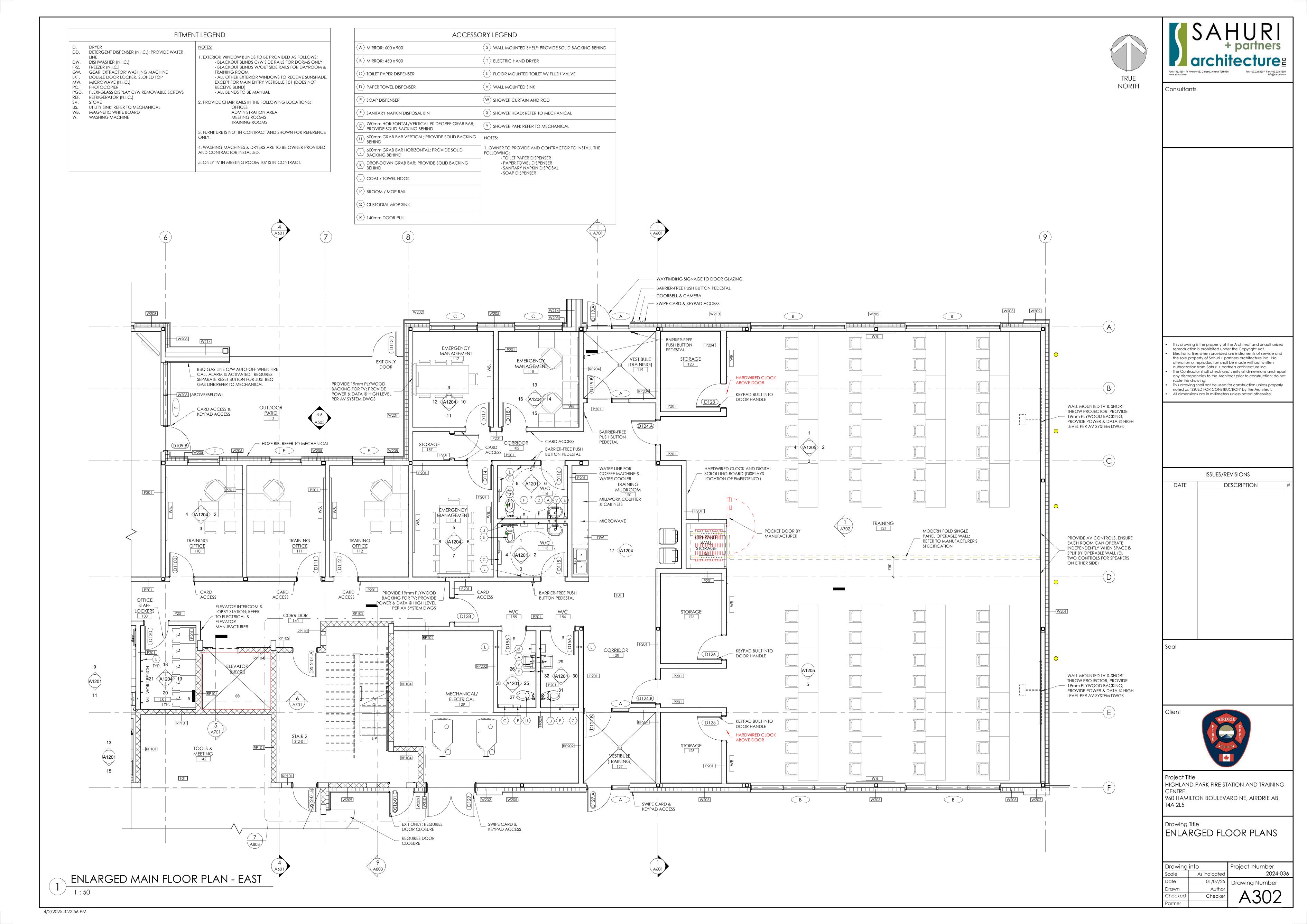
PROPOSED SITE LEGEND

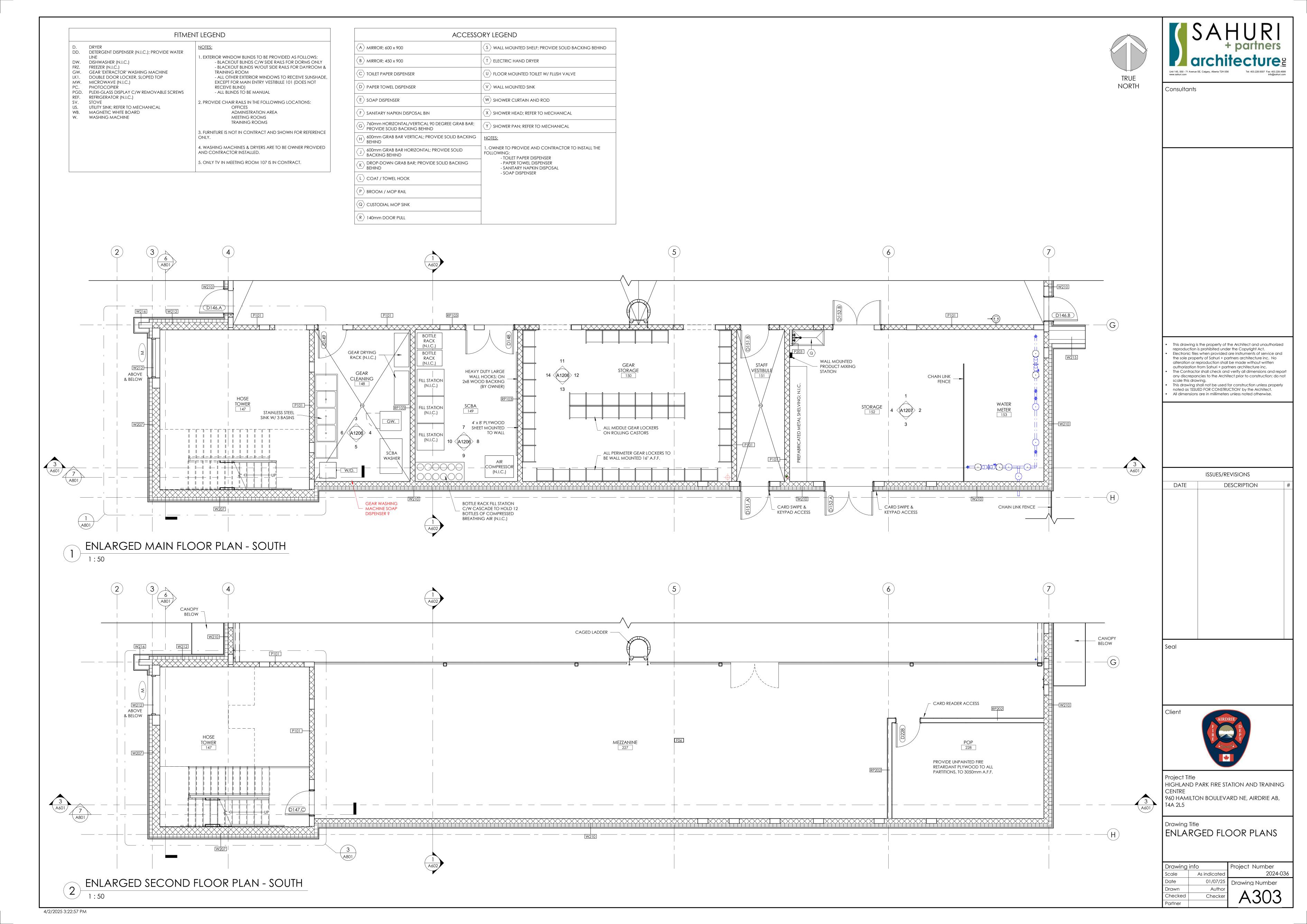






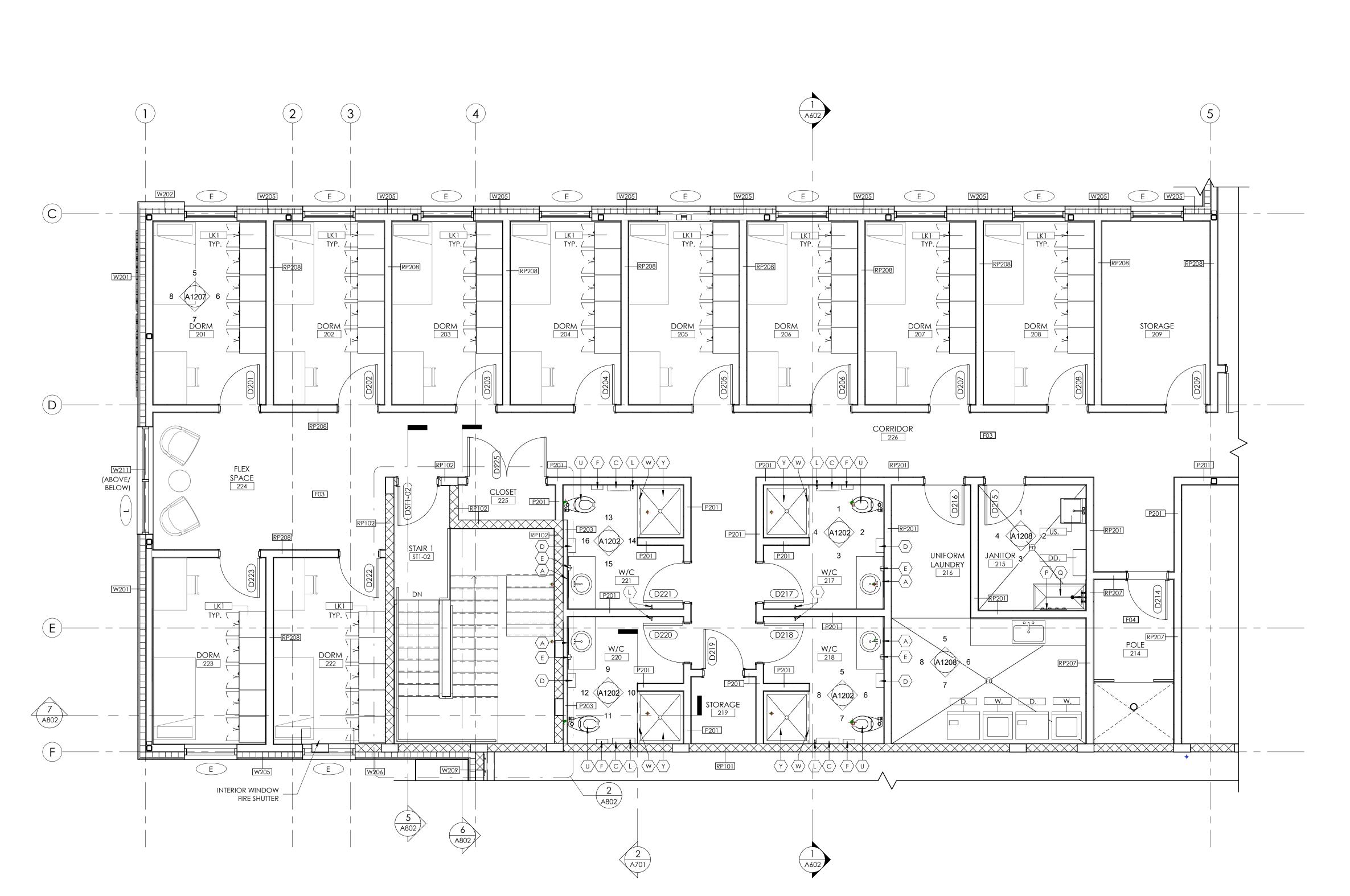


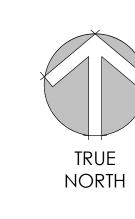




	FITMENT LEGEND		
D. DW. FRZ. GW. LK1. MW. PC. PGD. REF. SV. US. WB. W.	DRYER DETERGENT DISPENSER (N.I.C.); PROVIDE WATER LINE DISHWASHER (N.I.C.) FREEZER (N.I.C.) GEAR 'EXTRACTOR' WASHING MACHINE DOUBLE DOOR LOCKER, SLOPED TOP MICROWAVE (N.I.C.) PHOTOCOPIER PLEXI-GLASS DISPLAY C/W REMOVABLE SCREWS REFRIGERATOR (N.I.C.) STOVE UTILITY SINK; REFER TO MECHANICAL MAGNETIC WHITE BOARD WASHING MACHINE	NOTES:  1. EXTERIOR WINDOW BLINDS TO BE PROVIDED AS FOLLOWS:  - BLACKOUT BLINDS C/W SIDE RAILS FOR DORMS ONLY  - BLACKOUT BLINDS W/OUT SIDE RAILS FOR DAYROOM &  TRAINING ROOM  - ALL OTHER EXTERIOR WINDOWS TO RECEIVE SUNSHADE,  EXCEPT FOR MAIN ENTRY VESTIBULE 101 (DOES NOT  RECEIVE BLIND)  - ALL BLINDS TO BE MANUAL  2. PROVIDE CHAIR RAILS IN THE FOLLOWING LOCATIONS:  OFFICES  ADMINISTRATION AREA  MEETING ROOMS  TRAINING ROOMS  3. FURNITURE IS NOT IN CONTRACT AND SHOWN FOR REFERENCE ONLY.  4. WASHING MACHINES & DRYERS ARE TO BE OWNER PROVIDED AND CONTRACTOR INSTALLED.  5. ONLY TV IN MEETING ROOM 107 IS IN CONTRACT.	

ACCESSORY LEGEND		
(A) MIRROR; 600 x 900	S WALL MOUNTED SHELF; PROVIDE SOLID BACKING BEHIND	
B MIRROR; 450 x 900	T ELECTRIC HAND DRYER	
C TOILET PAPER DISPENSER	U FLOOR MOUNTED TOILET W/ FLUSH VALVE	
D PAPER TOWEL DISPENSER	V WALL MOUNTED SINK	
E SOAP DISPENSER	W SHOWER CURTAIN AND ROD	
F SANITARY NAPKIN DISPOSAL BIN	X SHOWER HEAD; REFER TO MECHANICAL	
G 760mm HORIZONTAL/VERTICAL 90 DEGREE GRAB BAR; PROVIDE SOLID BACKING BEHIND	Y SHOWER PAN; REFER TO MECHANICAL	
H 600mm GRAB BAR VERTICAL; PROVIDE SOLID BACKING BEHIND	NOTES:	
J 600mm GRAB BAR HORIZONTAL; PROVIDE SOLID BACKING BEHIND	1. OWNER TO PROVIDE AND CONTRACTOR TO INSTALL THE FOLLOWING:	
K DROP-DOWN GRAB BAR; PROVIDE SOLID BACKING BEHIND	- TOILET PAPER DISPENSER - PAPER TOWEL DISPENSER - SANITARY NAPKIN DISPOSAL	
L COAT / TOWEL HOOK	- SOAP DISPENSER	
P BROOM / MOP RAIL	1	
Q CUSTODIAL MOP SINK	1	
R 140mm DOOR PULL	1	







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ISSUES/REVISIONS

DESCRIPTION

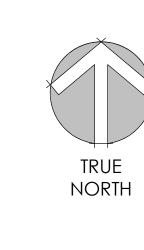


Project Title
HIGHLAND PARK FIRE STATION AND TRAINING
CENTRE
960 HAMILTON BOULEVARD NE, AIRDRIE AB,
T4A 2L5

Drawing Title
ENLARGED FLOOR PLANS

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(A) MIRROR; 600 x 900	S WALL MOUNTED SHELF; PROVIDE SOLID BACKING BEHIND
B MIRROR; 450 x 900  C TOILET PAPER DISPENSER  D PAPER TOWEL DISPENSER  E SOAP DISPENSER  F SANITARY NAPKIN DISPOSAL BIN  G 760mm HORIZONTAL/VERTICAL 90 DEGREE GRAB BAR; PROVIDE SOLID BACKING BEHIND  H 600mm GRAB BAR VERTICAL; PROVIDE SOLID BACKING BEHIND  J 600mm GRAB BAR HORIZONTAL; PROVIDE SOLID BACKING BACKING BEHIND  DROP-DOWN GRAB BAR; PROVIDE SOLID BACKING	T ELECTRIC HAND DRYER  U FLOOR MOUNTED TOILET W/ FLUSH VALVE  V WALL MOUNTED SINK  W SHOWER CURTAIN AND ROD  X SHOWER HEAD; REFER TO MECHANICAL  Y SHOWER PAN; REFER TO MECHANICAL  NOTES:  1. OWNER TO PROVIDE AND CONTRACTOR TO INSTALL THE FOLLOWING:  - TOILET PAPER DISPENSER - PAPER TOWEL DISPENSER
	D PAPER TOWEL DISPENSER  E SOAP DISPENSER  F SANITARY NAPKIN DISPOSAL BIN  G 760mm HORIZONTAL/VERTICAL 90 DEGREE GRAB BAR; PROVIDE SOLID BACKING BEHIND  H 600mm GRAB BAR VERTICAL; PROVIDE SOLID BACKING BEHIND  J 600mm GRAB BAR HORIZONTAL; PROVIDE SOLID BACKING BACKING BEHIND





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DATE DESCRIPTION #

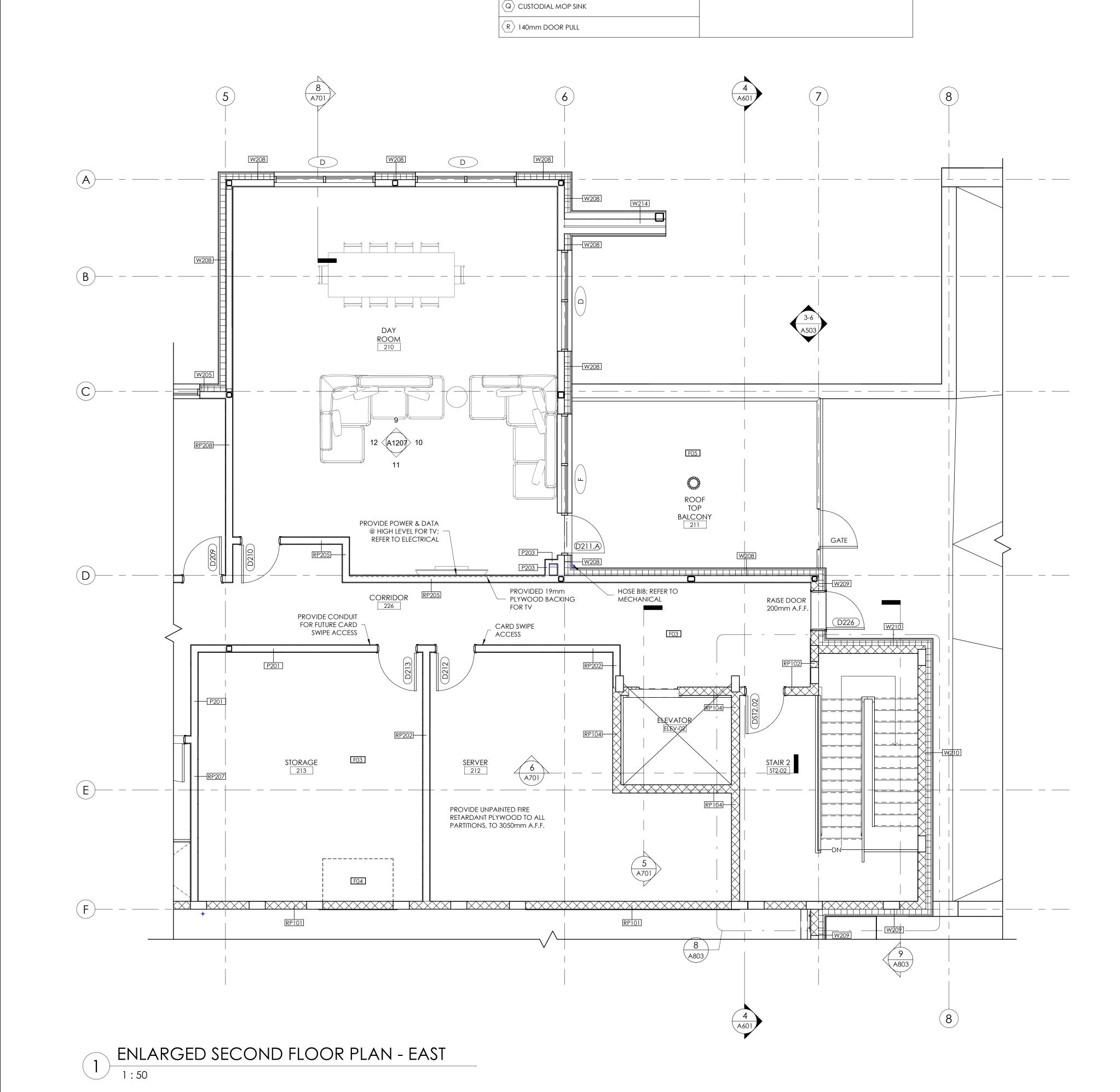
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AIRDRIE D E P T

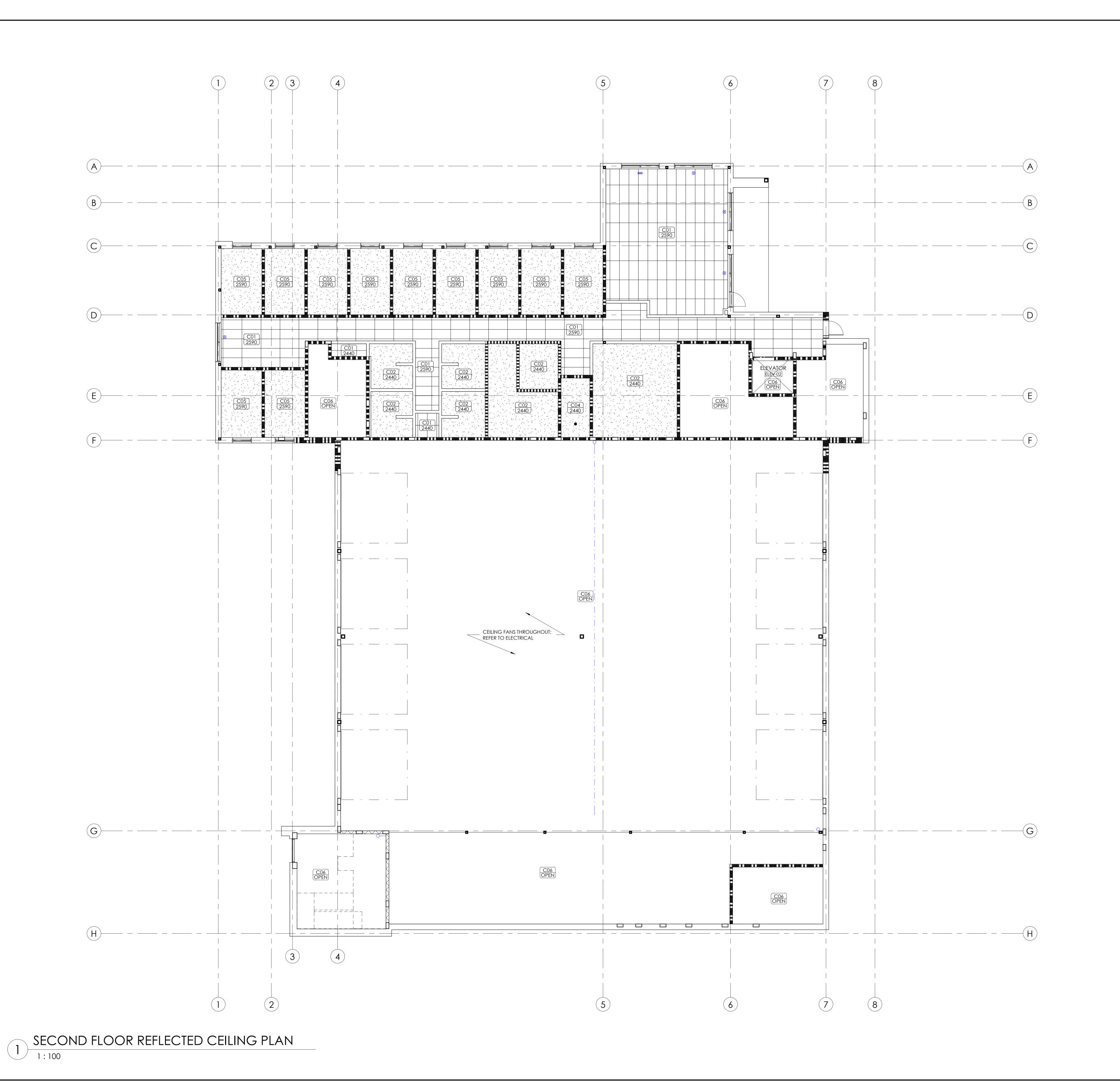
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HIGHLAND PARK FIRE STATION AND TRAINING
CENTRE
960 HAMILTON BOULEVARD NE, AIRDRIE AB,
T4A 2L5

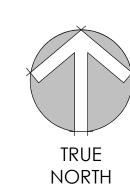
Drawing Title
ENLARGED FLOOR PLANS

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le	As indicated	2024-036
е	01/07/25	Drawing Number
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FIRE SEPARATION LEGEND		
	o hour smoke separation	
	45 MINUTE FIRE RESISTANCE RATING	
	1 HOUR FIRE RESISTANCE RATING	
	1.5 HOUR FIRE RESISTANCE RATING	
	2 HOUR FIRE RESISTANCE RATING	

CEILING ASSEMBLIES		
TYPE	DESCRIPTION	
C01	ACOUSTIC SUSPENDED CEILING 610 x 1220 ACOUSTIC LAY-IN-TILE T-BAR SUSPENSION SYSTEM	
C02	GYPSUM BOARD CEILING/BULKHEAD FINISH AS SCHEDULED 15.9 GYPSUM BOARD 64/92/152 METAL STUD FRAMING @ 406 O/C MAX. OR SUSPENDED METAL FRAMING SYSTEM SUPPORT ON ADJACENT WALL FRAMING	
C03	GYPSUM BOARD CEILING/ BULKHEAD 1 HOUR F.R.R. AS PER D-2.3.12 FINISH AS SCHEDULED 2 LAYERS 15.9 TYPE 'X' GYPSUM BOARD 64/ 92/ 152 METAL STUD FRAMING @ 406 O/C MAX. OR SUSPENDED METAL FRAMING SYSTEM SUPPORT ON ADJACENT WALL FRAMING	
C04	GYPSUM BOARD CEILING/BULKHEAD 1.5 HOUR F.R.R. AS PER D-2.3.12 FINISH AS SCHEDULED 3 LAYERS 15.9 TYPE 'X' GYPSUM BOARD 75 MINERAL WOOL INSULATION HEAVY GAUGE METAL STUD FRAMING; REFER TO STRUCTURAL	
C05	GYPSUM BOARD CEILING/ BULKHEAD  1 HOUR F.R.R. AS PER D-2.3.12 & TO MEET STC RATING FINISH AS SCHEDULED  2 LAYERS 15.9 TYPE 'X' GYPSUM BOARD  64/ 92/ 152 METAL STUD FRAMING @ 406 O/C MAX. OR SUSPENDED METAL FRAMING SYSTEM	

SUPPORT ON ADJACENT WALL FRAMING

EXPOSED CEILING FINISH AS SCHEDULED

MINERAL WOOL ACOUSTIC BATT INSULATION

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DATE DESCRIPTION #

Seal

AIRDRIE D E P T

Project Title
HIGHLAND PARK FIRE STATION AND TRAINING
CENTRE
960 HAMILTON BOULEVARD NE, AIRDRIE AB,
T4A 2L5

Drawing Title
SECOND FLOOR REFLECTED
CEILING PLAN

 Drawing info
 Project Number

 Scale
 1:100

 Date
 01/07/25

 Drawn
 KWT

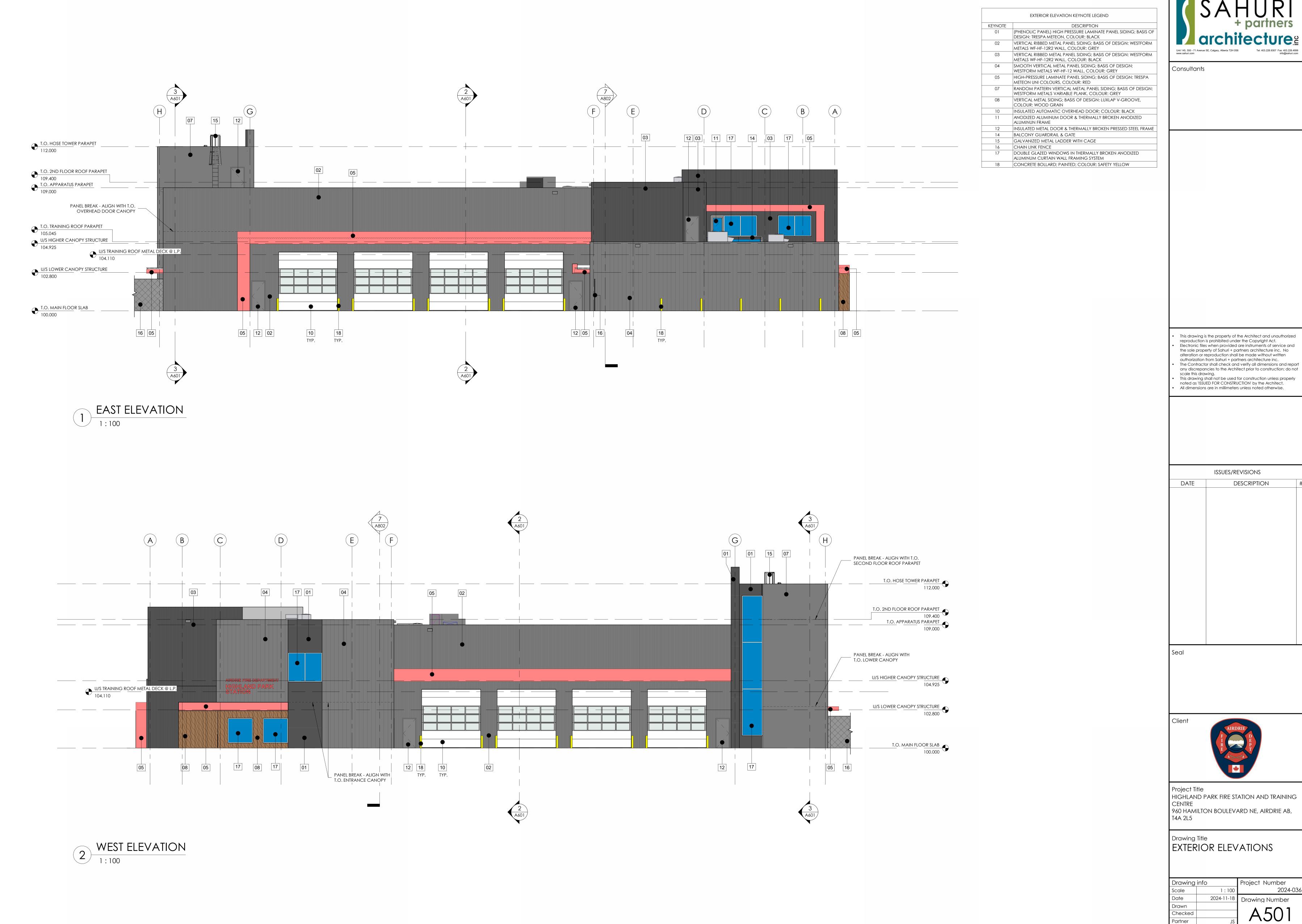
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Project Number

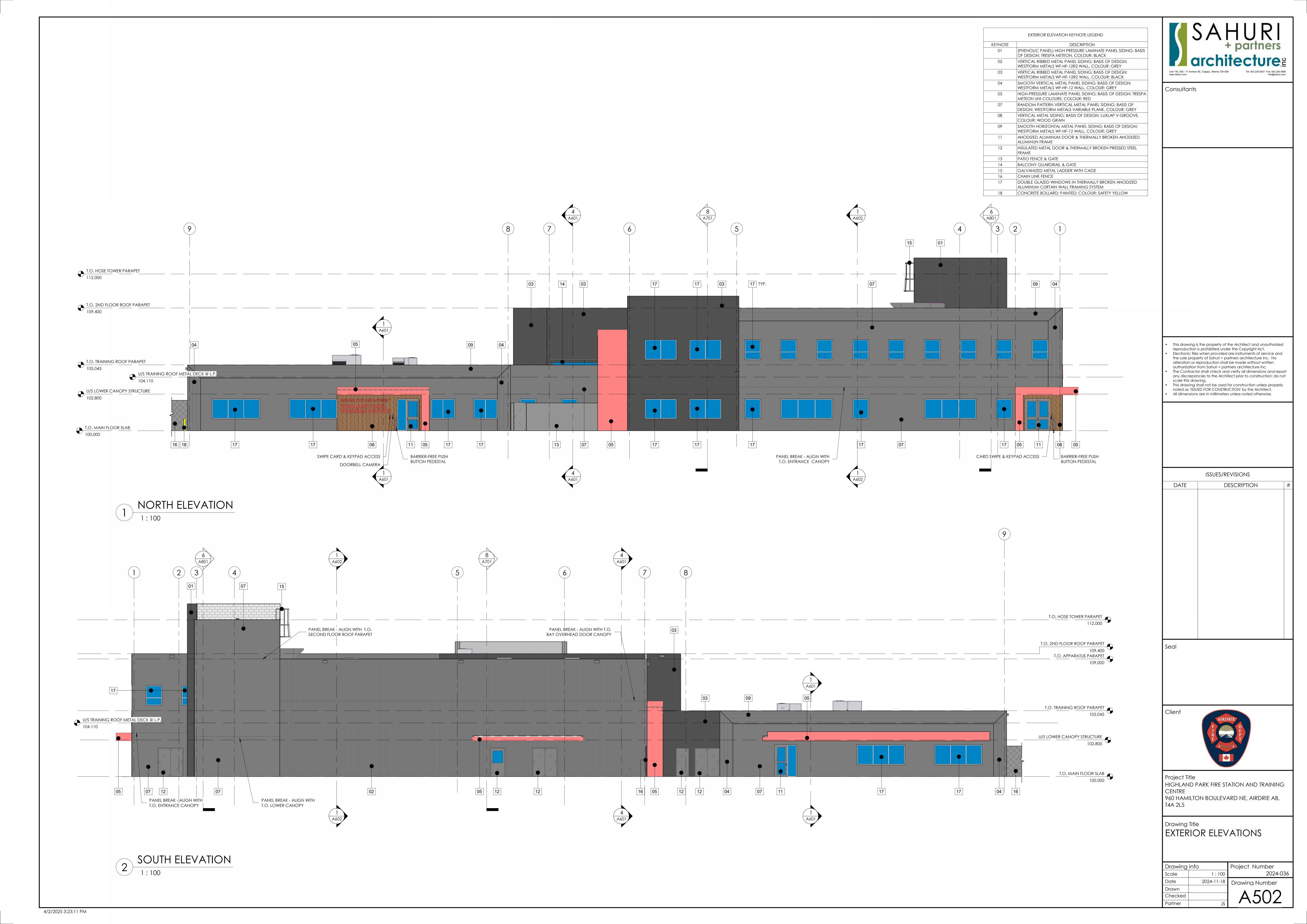
2024-036

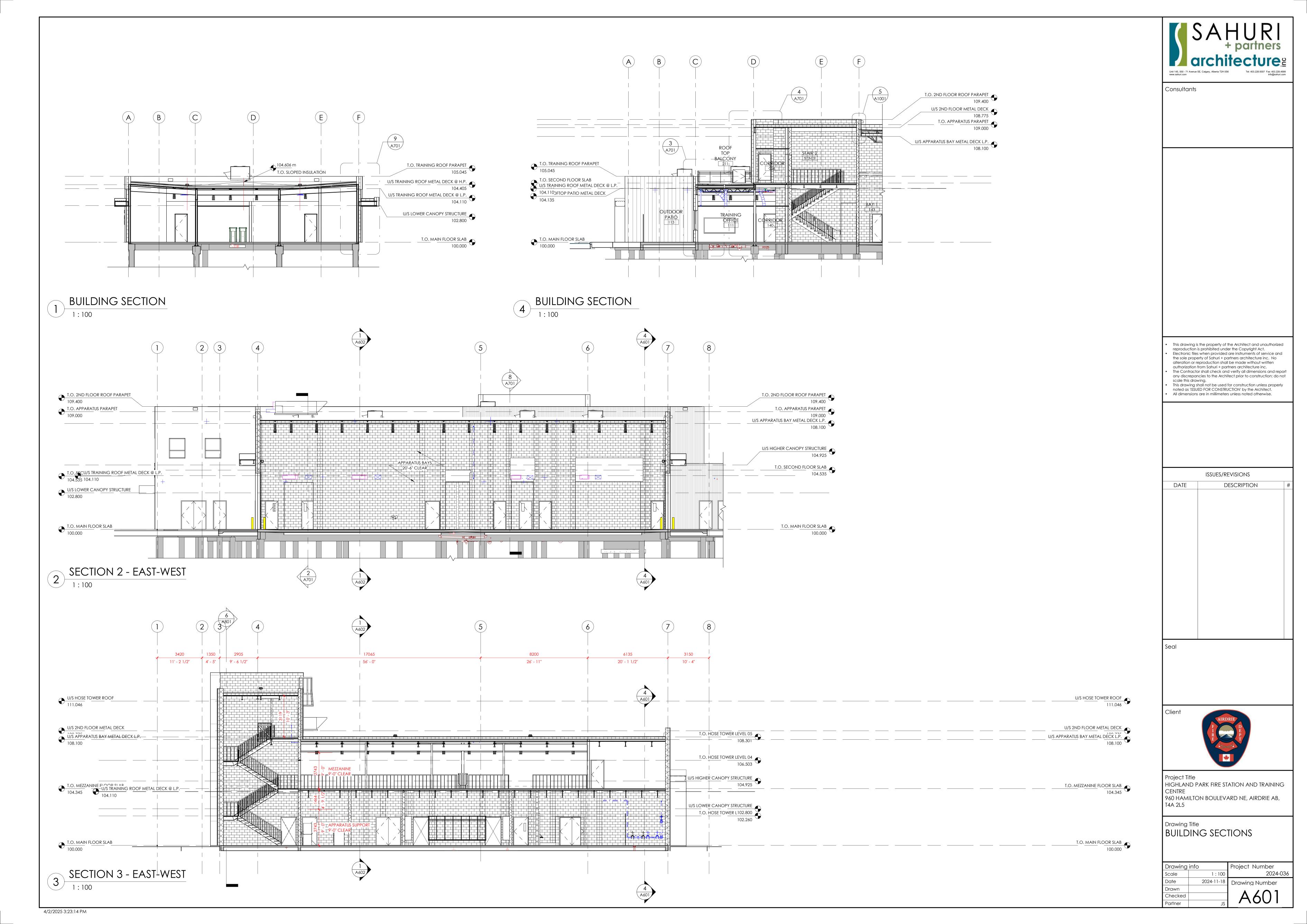
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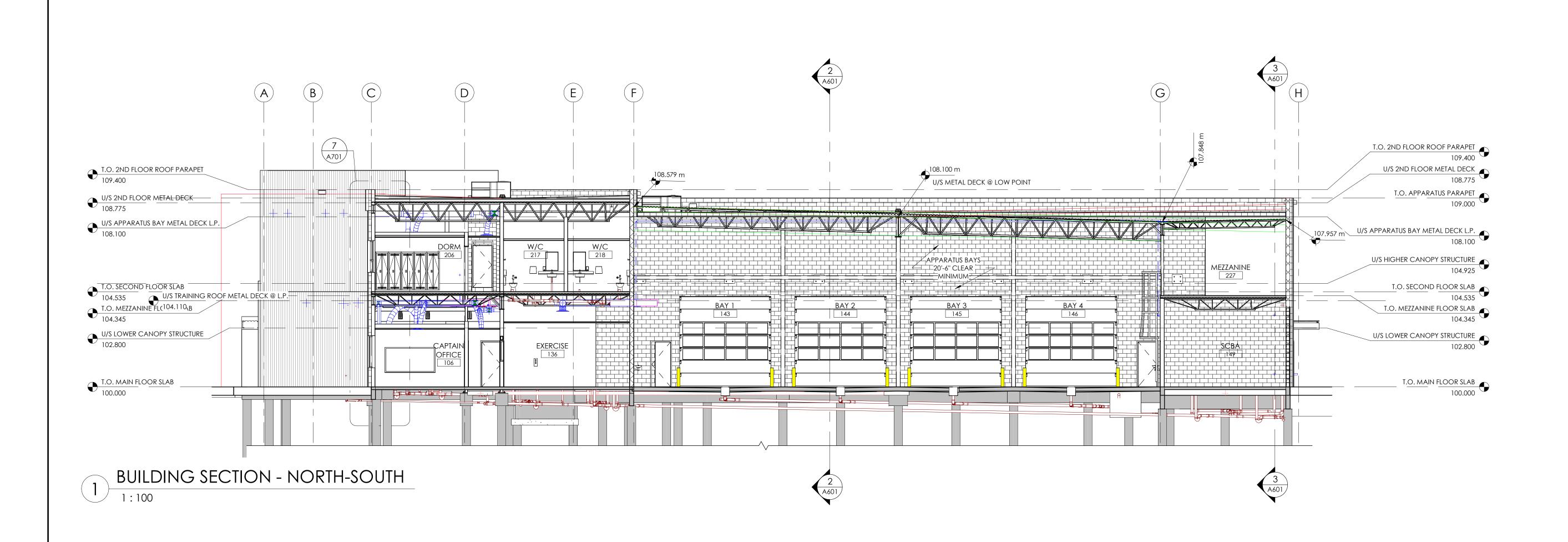
A402



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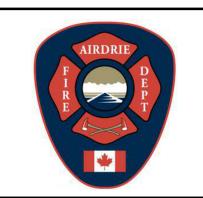
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ISSUES/REVISIONS DESCRIPTION



HIGHLAND PARK FIRE STATION AND TRAINING 960 HAMILTON BOULEVARD NE, AIRDRIE AB, T4A 2L5

Drawing Title BUILDING SECTIONS

Drawing info
Scale 2024-11-18 Drawing Number Drawn Checked Partner

