WINNIPEG FIRE AND PARAMEDIC STATION 9

1083 AUTUMNWOOD DRIVE, WINNIPEG, MANITOBA

ISSUED FOR CONSTRUCTION
03 FEBRUARY 2023

IMAGE: WEST ELEVATION

CONSULTANT LIST

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ELECTRICAL ENGINEERING

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DRAWING LIST

A000 COVER SHEET
TOPOGRAPHIC SURVEY

CIVIL
C00 DEMOLITION PLAN
C01 LOT GRADING PLAN
C02 SITE SERVICING PLAN
C03 DETAILS
C04 SWM CALCULATIONS

LANDSCAPE
L-101 MATERIALS PLAN
L-102 LAYOUT PLAN
L-103 PLANTING PLAN
L-104 SIGNAGE & LINE PAINTING PLAN
L-201 DETAILS 1
L-202 DETAILS 2
L-203 DETAILS 3

ARCHITECTURAL
A001 ASSEMBLIES AND SYMBOLS
A0002 ARCHITECTURAL DEMO SITE PLAN
A002 ARCHITECTURAL SITE PLAN
A100 SLAB PLAN
A101 MAIN FLOOR PLAN
A102 SECOND FLOOR PLAN
A103 ROOF PLAN
A201 MAIN FLOOR REFLECTED CEILING PLAN
A202 SECOND FLOOR REFLECTED CEILING PLAN
A301 EXTERIOR ELEVATIONS
A302 EXTERIOR ELEVATION DETAILS
A401 BUILDING SECTIONS
A501 SECTION DETAILS NORTH WALL
A502 SECTION DETAILS NORTH WALL
A503 SECTION DETAILS SOUTH WALL
A504 SECTION DETAILS WEST WALL
A505 SECTION DETAILS WEST WALL
A506 SECTION DETAILS OUTDOOR AREA
A507 SECTION DETAILS PATIO
A508 SECTION DETAILS EAST WALL
A509 SECTION DETAILS INTERIOR
A510 SECTION DETAILS INTERIOR
A511 SECTION DETAILS HOSE WASH
A512 SECTION DETAILS HOSE WASH
A601 INTERIOR ELEVATIONS
A602 INTERIOR ELEVATIONS
A603 INTERIOR ELEVATIONS
A604 INTERIOR ELEVATIONS
A605 INTERIOR ELEVATIONS
A606 INTERIOR ELEVATIONS
A701 STAIR S-1
A702 STAIR S-2
A703 HOSE WASH STAIR
A704 STAIR DETAILS & MISC. METAL DETAILS
A801 PLAN DETAILS
A802 PLAN DETAILS
A803 PLAN DETAILS
A804 PLAN DETAILS
A805 PLAN DETAILS
A806 PLAN DETAILS
A807 PLAN DETAILS
A808 PLAN DETAILS
A900 MILLWORK
A901 MILLWORK
A902 MILLWORK

STRUCTURAL
S001 GENERAL NOTES
S002 TYPICAL DETAILS
S003 TYPICAL DETAILS
S004 SCHEDULES
S101 PILING PLAN
S102 MAIN FLOOR FRAMING PLAN
S103 SECOND FLOOR FRAMING PLAN
S104 ROOF FRAMING PLAN
S201 PILASTER DETAILS
S401 SECTIONS
S402 SECTIONS
S403 SECTIONS
S404 SECTIONS
S405 SECTIONS
S406 SECTIONS
S407 SECTIONS

MECHANICAL
M0.1 MECHANICAL SYMBOLS
M1.1 MECHANICAL SITE PLAN
M1.2 MECHANICAL ROOF PLAN
MP2.0 MAIN FLOOR BELOW GRADE - PLUMBING PLAN
MP2.1 MAIN FLOOR - PLUMBING PLAN
MP2.2 SECOND FLOOR - PLUMBING PLAN
MP4.1 DETAILS - PLUMBING
MP4.2 DETAILS - PLUMBING
MF2.1 MAIN FLOOR - FIRE PROTECTION PLAN
MF2.2 SECOND FLOOR - FIRE PROTECTION PLAN
MF4.1 DETAILS - FIRE PROTECTION PLAN
MY2.1 MAIN FLOOR - HYDRONIC PLAN
MY2.2 SECOND FLOOR - HYDRONIC PLAN
MY4.1 DETAILS - HYDRONIC
MH2.1 MAIN FLOOR - HVAC PLAN
MH2.2 SECOND FLOOR - HVAC PLAN
MH4.1 DETAILS - HVAC
MH4.2 DETAILS - HVAC
M3.1 MECHANICAL LARGE SCALE PLANS
M4.1 MAIN FLOOR RCP COORDINATION
M4.2 SECOND FLOOR RCP COORDINATION
M5.1 MECHANICAL SCHEMATICS - HYDRONICS
M5.2 MECHANICAL SCHEMATICS - CONTROLS
M5.3 MECHANICAL SCHEMATICS- CONTROLS
M6.1 MECHANICAL 3D VIEWS & SECTIONS
M6.2 MECHANICAL SECTIONS
M7.1 MECHANICAL SCHEDULES
M7.2 MECHANICAL SCHEDULES
M7.3 MECHANICAL SCHEDULES

ELECTRICAL
E0.1 ELECTRICAL SYMBOLS AND ABBREVIATIONS
E1.0 ELECTRICAL SITE PLAN
E1.1 AREA CLASSIFICATION PLAN
ED1.1 ELECTRICAL SITE DEMOLITION PLAN
EL2.1 MAIN FLOOR - LIGHTING PLAN
EL2.2 SECOND FLOOR - LIGHTING PLAN
EP2.1 MAIN FLOOR - POWER PLAN
EP2.2 SECOND FLOOR - POWER PLAN
EP2.3 ROOF - POWER PLAN
E4.1 ELECTRICAL DETAILS
E4.2 ELECTRICAL DETAILS
E4.3 ELECTRICAL DETAILS
E5.1 ELECTRICAL DIAGRAMS
E5.2 ELECTRICAL DIAGRAMS
E5.3 ELECTRICAL DIAGRAMS
E6.1 ELECTRICAL SCHEDULES
E6.2 ELECTRICAL SCHEDULES
E6.3 ELECTRICAL SCHEDULES
E6.4 ELECTRICAL SCHEDULES
E6.5 ELECTRICAL SCHEDULES

BUILDING CODE ANALYSIS

BUILDING IS CLASSIFIED AS A POST DISASTER BULIDING

3.1 GENERAL

3.1.2 MAJOR OCCUPANCY CLASSIFICATION:
GROUP C, RESIDENTIAL
GROUP F2, MEDIUM HAZARD INDUSTRIAL
GROUP A2 ASSEMBLY

3.1.3.1 MAJOR OCCUPANCY FIRE SEPARATIONS:
GROUP C / GROUP F2: 2 HR
GROUP A-2 / GROUP F2 : 2HR
GROUP A-2 / GROUP C: 1HR
GROUP D / GROUP F2 : NONE

3.1.4.6 HEAVY TIMBER CONSTRUCTION: PERMITTED
3.1.5.12 COMBUSTIBLE INSULATION: ALLOWED (BUILDING CAN BE COMBUSTIBLE)
3.1.7.1 AN ALTERNATIVE SOLUTION HAS BEEN PROVIDED TO USE SPRINKLERED GLASS TO ACHEIVE A 2HR FIRE SEPARATION
3.1.8.10 20-MINUTE DOORS ALLOWED ON SLEEPING QUARTERS DOORS TO CORRIDORS

3.1.17 OCCUPANT LOAD
A. FIREFIGHTER AND EMS STAFF: = 14
THE FOLLOWING SPACES ARE OCCUPIED BY THE FIREFIGHTER AND EMS STAFF ON DUTY IN THE FACILITY : 108 FLOOR WATCH, 111 CAPT/LIEUT OFFICE, 114 INVESTIGATOR OFFICE, 114A SLEEPING QUARTERS, 111A SLEEPING QUARTERS, 117 APPARATUS BAYS, 202 KITCHEN, 203 DAY ROOM, 201 OUTDOOR AREA, 215 OFFICE, 205-214 SLEEPING QUARTERS.

B. 111 CAPT/LIEUT OFFICE =2 PER OFFICE (INCLUDED IN STAFF COUNT)
C. 114 INVESTIGATOR OFFICE =2 PER OFFICE (INCLUDED IN STAFF COUNT)
D. 101 LOBBY =18.58SM / 1.85M2 / PERSON = 10
E. 200 FITNESS AREA = 68.6SM / 9.3M2 =7
F. 102 TRAINING CLASSROOM =28 * POSTED SIGN

TOTAL: 59 PEOPLE

3.2 BUILDING FIRE SAFETY

3.2.26 MULTIPLE MAJOR OCCUPANCIES: GROUP C OCCUPANCY IS THE MOST RESTRICTIVE AND APPLIES TO THE WHOLE BUILDING.
3.2.2.7 (2) SUPERIMPOSED MAJOR OCCUPANCIES: FIRE RESISTANCE RATING OF FLOOR ASSEMBLY IS 45MIN FOR THE F2 OCCUPANCY.
3.2.2.8 EXCEPTIONS FOR MAJOR OCCUPANCIES: GROUP A2 IS LESS THAN 10% OF THE MAIN FLOOR AREA AND IS NOT CONSIDERED A MAJOR OCCUPANCY.

3.2.2.53 GROUP C, UP TO 3 STOREYS, SPRINKLERED

SPRINKLER SYSTEM:	REQUIRED
NUMBER OF STOREYS:	2
BUILDING AREA:	1072SM / MAX 2700M2
FACING STREETS:	1
CONSTRUCTION TYPE:	COMBUSTIBLE OR NONCOMBUSTIBLE
FLOOR ASSEMBLIES:	FIRE SEPARATIONS W/ A 45MINR FRR
MEZZANINES:	45MIN RATING IF COMBUSTIBLE
ROOF ASSEMBLIES:	N/A
LOADBEARING ELEMENTS:	45MIN. FIRE RESISTANCE RATING

3.2.3.1 LIMITING DISTANCE AND AREA OF UNPROTECTED OPENINGS: TABLE 3.2.3.1 D

	LIMITING DISTANCE	AREA	MAX AREA (M2)	AREA OF UNPROT.OPEN
NORTH	45 ' / 13.7M	350 SM	150 OR MORE	100%
SOUTH	85 ' / 25.9M	350 SM	150 OR MORE	100%
EAST	102'-1" / 31M	241 SM	150 OR MORE	100%
WEST	51'-9" / 22.5M	241 SM	150 OR MORE	100%

3.2.3.7 CONSTRUCTION OF EXPOSING BUILDING FACE: NOT APPLICABLE – 100% OPENINGS PERMITTED.
3.2.4.1. FIRE ALARM SYSTEM : REQUIRED IF A SPRINKLER IS INSTALLED
3.2.4.9. ANNUNCIATOR PANEL: YES
3.2.4.11. FIRE DETECTORS: NOT REQUIRED IF SPRINKLERED
3.2.4.11.(1) SMOKE DETECTORS: YES – REQUIRED IN EACH PUBLIC CORRIDOR FOR GROUP C ROOF ACCESS REQUIRED.
3.2.5.4. FIRE DEPARTMENT ACCESS ROUTE: REQUIRED TO THE BUILDING FACE HAVING A PRINCIPAL ENTRANCE
3.2.5.5. ACCESS ROUTE LOCATION:BETWEEN ≥3M AND ≤15M FROM PRINCIPAL ENTRANCE
3.2.5.6 (1) ACCESS ROUTE WIDTHMIN. 6 M
3.2.5.8. STANDPIPE SYSTEM:NOT APPLICABLE
3.2.5.15 FIRE DEPARTMENT CONNECTIONS : COMPLIES
3.2.6.1. ADDITIONAL REQUIREMENTS FOR HIGH BUILDINGS N/A - UPPERMOST STOREY LESS THAN 18 M ABOVE GRADE
3.2.8 MEZZANINES AND OPENINGS THROUGH FLOOR ASSEMBLIES: HOSE WASH 220 AREA IS AN INTERCONNECTED FLOOR SPACE WHICH DOES NOT NEED TO COMPLY WITH OF ARTICLES 3.2.8.3 TO 3.2.8.9.

3.3 SAFETY WITHIN FLOOR AREAS

3.3.1.3 (7) MEANS OF EGRESS : NOT APPLICABLE, MECH/ELEC 221 IS 58.5SM.
3.3.1.5 EGRESS DOORWAYS : TWO EGRESS DOORS REQUIRED FROM APPARATUS BAY 116
3.3.1.5.2: EGRESS DOORS AT APPARATUS BAYS 116 NEED TO BE A MIN OF 12163 MM APART.
3.3.1. TRAVEL DISTANCE: 45M
3.3.1.7 PROTECTION OF FLOOR AREAS WITH A BARRIER-FREE PATH OF TRAVEL: N/A – BUILDING IS SPRINKLERED
3.3.1.9: MIN. 1100MM.
3.3.1.11 DOOR SWING: APPARATUS BAYS 116 HAS AN OCCUPANT LOAD <60 DOORS INTO EXITS DO NOT HAVE TO SWING IN THE DIRECTION OF EXIT.
3.3.1.14 RAMPS AND STAIRWAYS : FIREPOLE LANDING, HOSE WASH 123 AND HOSE WASH 220 ARE SERVICES SPACES AND ARE INTENDED FOR OCCASIONAL USE.
3.3.1.21 CAPACITY OF ACCESS TO EXITS : RAMPS, DOORWAYS , CORRIDORS: 6.1MM / PERSON. MIN. WIDTH =1100MM
3.3.1.21.(3) JANITOR'S ROOMS: REQUIRED TO BE SEPARATED BY A ZERO-RATED FIRE SEPARATION IF BUILDING IS SPRINKLERED.
3.3.1.22 COMMON LAUNDRY ROOMS: NOT REQUIRED IF FLOOR AREA IS SPRINKLERED. (GROUP C ONLY)
3.3.4.2 FIRE SEPARATION: GROUP C SUITS NEEDS TO BE SEPARATED FROM THE REMAINDER OF THE BUILDING BY A 45MIN FIRE SEPARATION.

3.4 EXITS

3.4.2.1 MINIMUM NUMBER OF EXITS: 2 EXISTS
3.4.2.3 DISTANCE BETWEEN EXITS: MIN 1/2 DIAGONAL = 24.23
ALTERNATIVE SOLUTION HAS BEEN PROVIDED REDUCE THE DISTANCE BETWEEN STAIR-1 AND STAIR 2 EXITS AT SECOND FLOOR.
3.4.2.5 LOCATION OF EXITS: MAX TRAVEL DISTANCE IS 45M TO AN EXIT.
3.4.3.2 EXIT WIDTH: THE MINIMUM WIDTH OF EXIT CORRIDORS AND STAIRS IS 900 MM CLEAR BETWEEN HANDRAILS
3.4.3.4 HEADROOM CLEARANCE: THE MINIMUM HEADROOM CLEARANCE IS 2050MM.
3.4.4.1 FIRE RESISTANCE RATING OF EXIT SEPARATIONS:
EXITS REQUIRE A 45MIN FIRE SEPARATION.
3.4.4.2 EXITS THROUGH LOBBIES: ONE EXIT IS PERMITTED THROUGH A LOBBY
3.4.6.3.1 WHERE FLOOR-TO-FLOOR DIMENSION > 3.7M, A LANDING IS PROVIDED IN AN EXIT STAIR.
3.4.6.4 LANDINGS ARE MIN. WIDTH OF THE STAIRWAY.
3.4.6.5.3.A HANDRAILS ARE CONTINUOUSLY GRASPABLE WITH A CIRCULAR DIMENSION OF 30 – 43 MM
3.4.6.5.4 HANDRAILS ARE BETWEEN 865 – 965 MM HIGH
3.4.6.5.8 HANDRAILS ARE CONTINUOUS ON BOTH SIDES OF STAIRS AND RAMP INCLUDING LANDINGS
3.4.6.5.11.A HANDRAILS ARE 50 MM CLEAR OF SURFACES BEHIND THEM
3.4.6.6 GUARDS: GUARDS ARE A MIN. OF 1070MM HIGH.
3.4.6.8.1 STAIR TREAD DEPTH IS AT LEAST 280MM.
HOSE WASH 123 STAIR QUALIFIES AS A SERVICE SPACE AND DOES NOT NEED TO COMPLY.
3.4.6.8.2 STAIR RISER HEIGHT IS BETWEEN 125 - 180MM
HOSE WASH 123 STAIR QUALIFIES AS A SERVICE SPACE AND DOES NOT NEED TO COMPLY.
3.4.6.11.1 MIN. 600MM PROVIDED BETWEEN DOOR SWING AND RISER
3.4.6.19: FLOOR NUMBERING: PROVIDED AT EACH EXIT STAIR

3.5 SERVICE FACILITIES:
3.6.2.1 (6) MECH / ELEC ROOM IS SEPARATED FROM THE BUILDING WITH A 2HR FIRE SEPARATION.

3.7 HEALTH REQUIREMENTS

3.7.2.2 WATER CLOSETS:
3.7.2.2.2 IF A SINGLE UTR IS PROVIDED ,THE TOTAL NUMBER OF PERSONS USED TO DETERMINE THE NUMBER OF WATER CLOSETS IS PERMITTED TO BE REDUCED BY 10.
TABLE 3.7.2.2.A GROUP A2 ASSEMBLY OCCUPANCY: TRAINING CLASSROOM 102 + LOBBY 101 = 38 PEOPLE /14 PERSONS OF EACH SEX =MIN. 1 MALE W/C + 1 FEMALE W/C REQUIRED = 2 TOTAL
3.8.2.3. 6(B): A UNIVERSAL TOILET ROOM CAN BE PROVIDED IN LIEU OF ONE GENDER BASED WASHROOM IN SMALL PUBLIC BUILDINGS REQUIRING TWO WASHROOMS. ONE PER GENDER.
(1) UTR + (1) GENDER NEUTRAL W/C PROVIDED FOR A2. = 2 TOTAL
3.7.2.2 (10) GROUP C RESIDENTIAL OCCUPANCY: THE NUMBER OF WATER CLOSETS REQUIRED FOR A CARE OR RESIDENTIAL OCCUPANCY SHALL BE AT LEAST ONE FOR EACH 10 PERSONS OF EACH SEX
= 11 PERSONS OF EACH SEX = MIN. = 2 FEMALE W/C / 2 MALE W/C = 4 TOTAL
(4) GENDER NEUTRAL WASHROOMS PROVIDED.

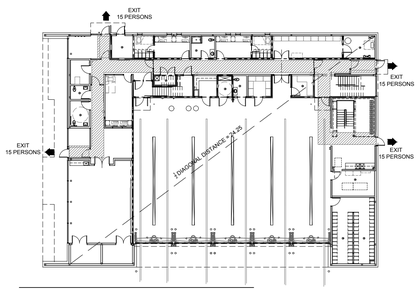
TOTAL WASHROOM COUNT FOR FACILITY = 7

3.7.2.3 LAVATORIES: 7 REQUIRED / 7 PROVIDED

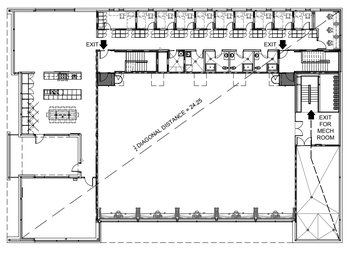
3.8 ACCESSIBILITY

3.8.1.2 ENTRANCES: ALL MAIN FLOOR PEDESTRIAN ENTRANCES ARE DESIGNED TO BE BARRIER FREE.
3.8.1.3 BARRIER FREE PATH OF TRAVEL: BARRIER FREE PATH OF TRAVEL HAS BEEN PROVIDED TO THE MAIN FLOOR.
3.8.2.1 (I) AREAS REQUIRING BARRIER FREE PATH OF TRAVEL:
SECOND FLOOR RESIDENTIAL OCCUPANCY DOES NOT REQUIRE A BARRIER FREE PATH OF TRAVEL. THE SECOND LEVEL IS FOR STAFF ONLY.WINNIPEG FIRE AND PARAMEDIC PROTOCOL IS TO HAVE ABLE BODIED STAFF ONLY IN THE FACILITY.
3.8.2.2 ACCESS TO PARKING AREAS: PROVIDED AT WEST ENTRANCE.
3.8.2.3 WASHROOMS REQUIRED TO BE BARRIER FREE: A UTR HAS BEEN PROVIDED ON THE MAIN FLOOR.
3.8.3.1 ACCESSIBILITY SIGNS: PROVIDED ON THE MAIN FLOOR OF THE BUILDING.
3.8.3.2 EXTERIOR WALKS: COMPLIES.
3.8.3.12 UNIVERSAL TOILET ROOM: A UTR HAS BEEN PROVIDED ON THE MAIN FLOOR NEAR THE PUBLIC LOBBY.
3.8.3.13 SHOWERS: NOT REQUIRED IN A SUITE OF RESIDENTIAL OCCUPANCY.

EXIT SCHEMATICS



MAIN FLOOR EXIT SCHEMATIC
NTS.



SECOND FLOOR EXIT SCHEMATIC
NTS.

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ARCHITECT

NO.	DATE	REVISION / ISSUANCE
00	2023.02.03	ISSUED FOR CONSTRUCTION

Seal

PROVINCE OF MANITOBA
GEORGE CIBINEL
Feb. 3, 2023
REGISTERED ARCHITECT

PROVINCE OF MANITOBA
CIBINEL ARCHITECTURE LTD.
No. 225
APPROVED ARCHITECTURAL CORPORATION

MAA DIGITAL SIGNATURE APPLIED

Project
WFPS STATION 9

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COVER SHEET

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CIBINEL - Arch D - 24" X 36"