

DOOR SCHEDULE													
MARK	DOOR					FRAME					HARDWARE GROUP	RATING (HR)	REMARKS
	WIDTHxHEIGHTxTHICKNESS	TYPE	MAT.	FINISH	GLASS	MAT.	FINISH	TYPE	JAMB	HEAD			
DR101A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR101B	1100x2150x45	D2	HM	PNT	GWG	HM	PNT	F2	J2	H2	3	.75 FRR	EXIT TO LINK
DR102A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR102B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR103B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103C	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103D	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103E	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	
DR103F	2-900x2150x45	D1	HM	PNT	-	HM	PNT	F3	J1	H1	1	-	RH ACTIVE
DR104A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR104B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR105	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR106A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J3	H3	2	-	
DR106B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J3	H3	2	-	
DR106C	5000x7000x45	D4	-	PREFIN	-	-	-	-	-	-	-	-	OVERHEAD DOOR
DR106D	5000x7000x45	D4	-	PREFIN	-	-	-	-	-	-	-	-	OVERHEAD DOOR
DR201A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR201B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR201C	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	
DR202A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR202B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR203	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	
DR204	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	
DR301A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR301B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	1.5 FRR	
DR301C	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR301D	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR301E	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	EXIT TO BRIDGE

**ABBREVIATIONS:**

- ALUM = ALUMINUM
- FR = FIRE RATING
- GYP BD = GYPSUM BOARD
- GWG = GEORGIAN WIRED GLASS
- HM = HOLLOW METAL
- MTL = METAL
- N/A = NOT APPLICABLE
- PNT = PAINTED
- PREFIN = PREFINISHED
- STL = STEEL
- TSG = TEMPERED SAFETY GLASS

**HARDWARE SCHEDULE**

**GROUP 1 (DOUBLE DOOR) D103F**

6 BUTT HINGES	TA 314 115x100mm NRP	McKINNEY	26D
1 LOCKSET	AU5407 x ASA	YALE (W/CONST CYL)	26D
2 FLUSH BOLTS	F65	STANDARD METAL	26D
2 WEATHERSTRIP	W29 1/6 + 2/7	KN CROWDER	CA
2 DOOR SWEEP	W245 - 900 & 600mm	KN CROWDER	CA
1 THRESHOLD	CT11 - 1800	KN CROWDER	CA
1 ASTRAGAL	W40P - 2100	KN CROWDER	CA
1 KICK PLATE	K10C	SSTEEL	689
1 CLOSER	4040	LCN	689

**GROUP 2 (EXTERIOR DOORS)**

3 BUTT HINGES	TA 314 115x100mm NRP	McKINNEY	26D
1 LOCKSET	AU5407 x ASA	YALE (W/CONST CYL)	26D
1 WEATHERSTRIP	W29 1/3 + 2/7	KN CROWDER	CA
1 DOOR SWEEP	W245 - 900mm	KN CROWDER	CA
1 THRESHOLD	CT11 - 900mm	KN CROWDER	CA
1 CLOSER	4040	LCN	689
1 WALL STOP	S123	STANDARD METAL	26D
1 KICK PLATE	K10C	SSTEEL	689

**GROUP 3 (INTERIOR DOORS) 1.5 HOUR FIRE RESISTANCE RATING**

3 BUTT HINGES	TA 314 115x100mm NRP	McKINNEY	26D
1 LOCKSET	AU5402 x ASA	YALE (W/CONST CYLINDER)	26D
1 WALL STOP	S122	STANDARD METAL	26D
1 CLOSER	1461	LCN	689
1 KICK PLATE	K10C	SSTEEL	689

**BUILDING CODE ANALYSIS**

Winnipeg Water Treatment Plant  
Bulk Chemical Building  
Winnipeg, Manitoba

**Building Code Analysis**

**1.0 General**

1. The building is a two-storey, non-combustible structure utilized for the storage of non-combustible chemicals (which are for use in the nearby treatment plant). The building is located to the south of the main water treatment plant by means of a bridge with a two-hour separation at each end. The building is also joined to the "Hypochlorite Building" to the west by means of another bridge which includes a one-hour separation at each end.

**2.0 Description**

- Storeys: Two (2)
- Building Area: 1134.7m<sup>2</sup> (12,209.3 sf)
- Sprinklered: No
- Occupancy Type: Group F, Division 3
- Occupant Load: None (0) (intermittent use only)
- Streets: One (1)

**3.0 Regulation**

1. This project may be regulated under **3.2.2.69., Group F, Division 3, Two Storeys**

**Classification**

1. Requirements:
  - ≤ 5,600 m<sup>2</sup> (60,256 sf) Building Area (Conforms @ 1,134.7m<sup>2</sup>)
  - Two (2) Stories (Conforms)
  - Unsprinklered (Conforms)
  - Type "F-3" Occupancy (Conforms)
  - One (1) Street (Conforms)

**2. Stipulations:**

- May be Combustible or Non-combustible construction
- Floor Assemblies - 45 minutes FRR, (Conforms)
- Load bearing Elements - 45 minutes FRR, (Conforms)

**4.0 General Conformance**

**1. 3.4.2.4 - Travel Distance**

1. Maximum travel distance to an exit is 30 m (98') - Conforms (maximum travel of 25.5 m (83')).

**2. 3.4.2.1 - Number of Exits**

1. Conforms (two (2) required - five (5) provided).

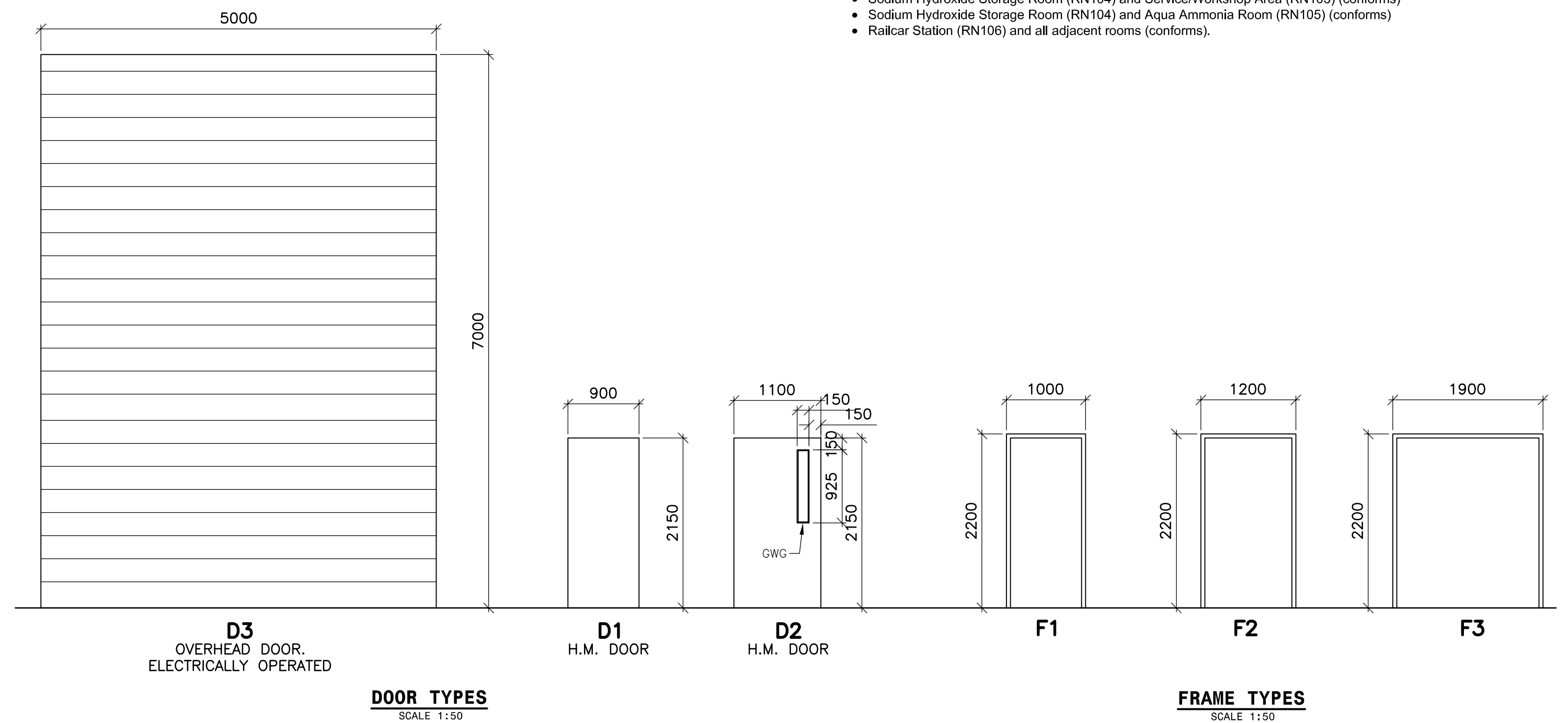
**3. 3.2.3.1 - Limiting Distance**

1. To the west, building has a 4.0m limiting distance to a virtual property line at the east face of the adjacent Hypochlorite building. As such, the west face of the Bulk Chemical building is required to be rated with a 1 HR fire resistance rating (conforms).

**4. Fire Rating Separations**

1. 2 HR FRR separation required between:
  - Ferric Chloride Storage Room (RN101) and Sulphuric Acid Storage Room (RN102) (conforms).
  - Sulphuric Acid Storage Room (RN102) and Service/Workshop Area (RN103) (conforms)
  - Sodium Hydroxide Storage Room (RN104) and Service/Workshop Area (RN103) (conforms)
  - Sodium Hydroxide Storage Room (RN104) and Aqua Ammonia Room (RN105) (conforms)
  - Railcar Station (RN106) and all adjacent rooms (conforms).

ROOM FINISH SCHEDULE																
ROOM No.	ROOM NAME	FLOOR			NORTH WALL		SOUTH WALL		EAST WALL		WEST WALL		CEILING		HGT. AFF	REMARKS
		MAT.	FIN.	BASE	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.		
101	FERRIC CHLORIDE STORAGE RM	CONC	SEAL	SEAL	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	10368	
102	SULPHURIC ACID STORAGE RM	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	10368	
103	SERVICE/WORKSHOP AREA	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	3995	
103A	STAIR WELL AND LANDINGS	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	-	
104	SODIUM HYDROXIDE STORAGE RM	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	10368	
105	AQUA AMMONIA STORAGE RM	CONC	SEAL	SEAL	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	7645	
106	RAILCAR STATION	CONC	SEAL	SEAL	PF METAL	PNT	PF METAL	PNT	PF METAL	PNT	PF METAL	PNT	STL DECK	PNT	7168	
201	ELECTRICAL ROOM	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	4790	
202	WORK STATION	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	4790	
203	WASHROOM	TILES	-	TILES	TILES	-	TILES	-	TILES	-	TILES	-	ACT	PNT	2726	
204	STAIR WELL AND LANDINGS	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	-	



B.M. ELEV.						
DESIGNED BY	NC	CHECKED BY	LK			
DRAWN BY	AL	APPROVED BY	AHL			
SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION BY:	R. SOROKOWSKI			
00 ISSUED FOR TENDER	07/01/31	AL				
NO. REVISIONS	DATE	BY	DATE	2006/09/01	DATE	2007/01/31

<b>CH2M HILL</b>		<b>EarthTech</b>		ENGINEER'S SEAL	
Frederickson Cooper ARCHITECTS		A Two International US Company		ORIGINAL SIGNED BY	
NEIL COOPER		2007/01/31		NEIL COOPER	
CONSULTANT DRAWING NO. WS-B0501					

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION

Winnipeg

WATER TREATMENT PLANT  
BULK CHEMICAL BUILDING  
SODIUM HYPOCHLORITE AND CHEMICAL STORAGE BUILDING

ARCHITECTURAL SCHEDULES AND CODE ANALYSIS

CITY FILE NUMBER  
SHEET OF  
CITY DRAWING NUMBER  
1-0601S-A-B0501-001-000