VENTILATION GENERAL NOTES

- ALL DUCTWORK SHOWN DOUBLE LINE INSIDE PERIMETER OF DUCT IS TO BE COMPLETE WITH 25mm INTERNAL INSULATION. ALL OTHER DUCTWORK IS TO BE C/W 25mm EXTERNAL INSULATION. SIZES INCLUDE INTERNAL INSULATION WHERE APPLICABLE.

- ALL FITTINGS ON INTERNALLY INSULATED DUCTWORK ARE TO BE C/W INTERNAL INSULATION. ALL OTHERS ARE TO BE EXTERNALLY INSULATED.

- ALL SUPPLY AIR AND EXHAUST AIR BRANCH DUCTS TO GRILLES AND DIFFUSERS ARE TO BE C/W BALANCE DAMPERS IN BRANCH DUCT NEAR MAIN, UNLESS BALANCE DAMPERS ARE PROVIDED IN GRILLE OR DIFFUSER.

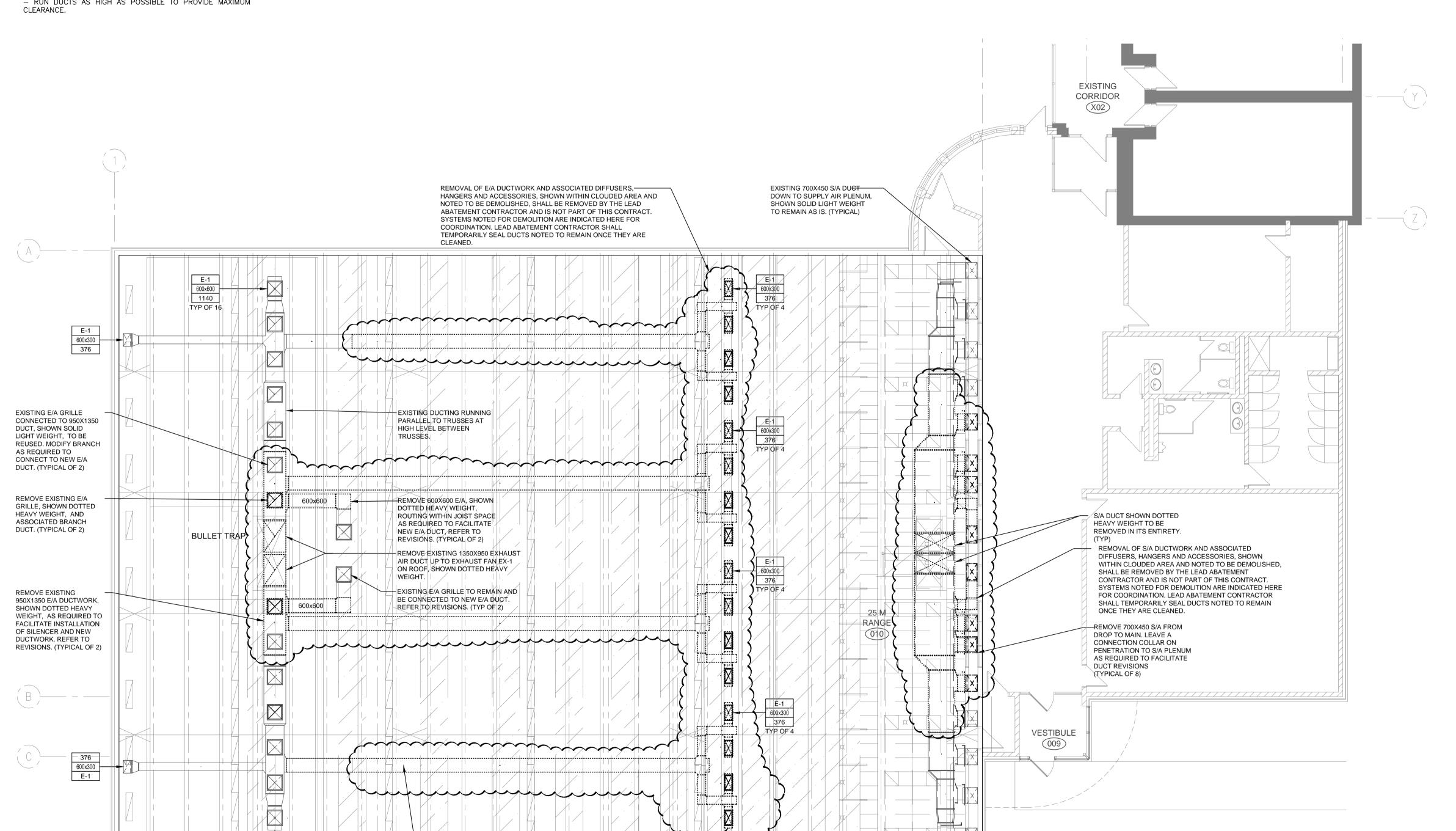
- ALL EXHAUST FANS ARE TO BE SUSPENDED FROM STRUCTURE ON THREADED ROD C/W SPRING ISOLATORS.

- PROVIDE TURNING VANES IN ELBOWS

- PROVIDE ACCESS DOORS FOR ACCESS TO ALL MOTORIZED DAMPERS, FIRE DAMPERS, HUMIDIFIERS AND CONTROL DEVICES, AND TO FACILITATE DUCT CLEANING.

- COORDINATE ALL WORK WITH OTHER TRADES.

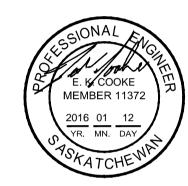
- RUN DUCTS AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM



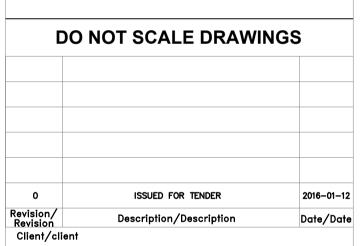




website: www.sepw.ca



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Project title/Titre du projet

25B RANGE RENOVATION REGINA, SK

Designed by/Concept par

Approved by/Approuve par

Drawn by/Dessine par

RCMP Project Manager/Administrateur de Projets GRC RCMP, Architectural and Engineering Resources Manager/

Client/client

Drawing title/Titre du dessin **VENTILATION DEMOLITION**

23/2015

M1.

OF -

MAIN FLOOR PLAN

WASTE

013

—EXISTING E/A DUCTWORK,

SHOWN SOLID LIGHT WEIGHT,

AND ASSOCIATED GRILLES AND

ACCESSORIES TO REMAIN AS IS.

REMOVE EXISTING E/A BRANCH DUCTS AND ASSOCIATED

SHOWN DOTTED HEAVY WEIGHT,

IN THEIR ENTIRETY (TYPICAL OF

GRILLES AND ACCESSORIES,

-REMOVE 600X350 E/A, SHOWN

ROUTING WITHIN JOIST SPACE

NEW EXHAUST GRILLES, REFER

TO REVISIONS. (TYPICAL OF 4)

AS REQUIRED TO FACILITATE

DOTTED HEAVY WEIGHT,

EXISTING S/A DUCTWORK AND DIFFUSERS SHOWN SOLID LIGHTWEIGHT

TO REMAIN AS IS. (TYPICAL)

EXISTING SHOOTING LINE

VENTILATION GENERAL NOTES

- ALL DUCTWORK SHOWN DOUBLE LINE INSIDE PERIMETER OF DUCT IS TO BE COMPLETE WITH 25mm INTERNAL INSULATION. ALL OTHER DUCTWORK IS TO BE C/W 25mm EXTERNAL INSULATION. SIZES INCLUDE INTERNAL INSULATION WHERE APPLICABLE,
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- PROVIDE TURNING VANES IN ELBOWS
- PROVIDE ACCESS DOORS FOR ACCESS TO ALL MOTORIZED DAMPERS, FIRE DAMPERS, HUMIDIFIERS AND CONTROL DEVICES, AND TO FACILITATE DUCT CLEANING.
- COORDINATE ALL WORK WITH OTHER TRADES.
- RUN DUCTS AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCE.

EXIST

CONNECT NEW E/A DUCT

CONNECT EXISTING E/A

SUSPEND NEW ELBOW

CONNECT TO MUA AND EXISTING E/A DUCTWORK.

INTERNALLY INSULATED.

CONNECT EXISTING E/A GRILLE TO NEW E/A DUCT

SILENCERS FROM

DUCTWORK TO BE

STRUCTURE AND

GRILLE TO NEW E/A DUCT

TO EXISTING

DIFFUSERS AND GRILLES:

 $\underline{\mathsf{E}} = 1$: Existing exhaust grille, rebalance in accordance with balancing requirements.

 $\underline{\mathsf{E-2:}}$ E.H. Price, Model 80/TB/B12, eggcrate face return, t—bar lay—in or complete with plaster frame for gypsum ceiling, white powder coat finish. Unit to have integral balancing damper when installed in

AIR BALANCE

E-1 600x600 1140

SIL-3

SIL-4

WASTE

- PROVIDE REPORT ON EXISTING MUA-1 AND EF-1 PERFORMANCE INCLUDING REVIEW OF BUILDING PRESSURE DURING OPERATION PRIOR TO COMMENCING WORK. REPORT TO INCLUDE ESTIMATE ON LEAKAGE OF EXISTING DUCTWORK. REFER TO SPECIFICATIONS.
- UPON COMPLETION OF WORK REBALANCE SUPPLY AIR AND EXHAUST AIR TO TOTAL AIRFLOWS INDICATED.
- ALLOW FOR RESHIEVING EXISTING FANS TO MEET AIRFLOW REQUIREMENTS.
- PROVIDE COMPLETE REPORT ON MUA-1 AND EF-1 POST CONSTRUCTION OPERATION INCLUDING REVIEW OF BUILDING PRESSURE DURING OPERATION. REFER TO SPECIFICATIONS. BALANCE EXHAUST TO ENSURE FIRING RANGE VELOCITIES AS INDICATED IN SPECIFICATIONS WHILE MAINTAINING TOTAL EXHAUST SYSTEM FLOW AND PRESSURE BALANCE.

1000

- CONNECT NEW E/A DUCT

TO EXSTING AND ROUTE WITHIN STRUCTURE TO

SERVE NEW E/A GRILLE.

CONNECT EXISTING 600X600 E/A DUCT AND ASSOCIATED

GRILLE TO NEW DUCT.

CAP AND SEAL EXISTING 600x350 E/A DUCT.

RESEAL ALL JOINTS ON EXISTING E/A AND S/A DUCTWORK. NEW AND EXISTING DUCTWORK SHALL BE PRESSURE TESTED TO ENSURE

COORDINATE ROUTING OF NEW E/A DUCTS WITH STRUCTURAL CROSS

LEAKAGE RATE IS BELOW SPECIFIED REQUIREMENTS.

(TYPICAL OF 2)

BRACES IN TRUSS SPACE.

(TYP OF 4)

600×350

700x600

700x600

600x350

Silencer Schedule																						
General Information										Airflow					Minimum Required Attenuation							
Tag	Location	Unit	Silencer Cross Section	Duct Connection	Silencer	Silencer Leg A	Silencer Leg B	Aiı	rflow	Face Velocity	Velocity Pressure Drop			Octave Band								
		Served	mm	mm	Туре	mm	mm	L/S	(CFM)	m/s	Pa	in. w.c.	63	125	250	500	1k	2k	4k	8k		
SIL-1	Supply Air Duct	MUA-1	1750x850	1750x850	Elbow - Rect	1000	2550	12036	(25516)	8	51	0.20	11	18	19	31	38	32	23	22		
SIL-2	Supply Air Duct	MUA-1	1750x850	1750x850	Elbow - Rect	1000	2550	12036	(25516)	8	51	0.20	11	18	19	31	38	32	23	22		
SIL-3	Exhaust Air Duct	EF-1	950x1350	950x1350	Elbow - Rect	2600	2600	12508	(26517)	9	35	0.14	10	26	23	40	55	42	25	21		
SIL-4	Exhaust Air Duct	EF-1	950x1350	950x1350	Elbow - Rect	2600	2600	12508	(26517)	9	35	0.14	10	26	23	40	55	42	25	21		
				1			1						<u> </u>									

CORRIDOR (X02)

ROUTE NEW S/A DUCT OVER

INSULATION.

(TYPICAL)

VESTIBULE

(009)

-EXISTING S/A DUCTWORK AND

TO REMAIN AS IS. (TYPICAL)

DIFFUSERS SHOWN SOLID LIGHTWEIGHT

EXISTING S/A DISCHARGE TO AIR

WALL COMPLETE WITH INTERNAL

CONNECT EXISTING 700X450 S/A DUCT FROM DISCHARGE PLENUM TO NEW DUCTWORK COMPLETE

WITH BALANCING DAMPER

Pressure Drop listed includes system effect for duct arrangements indicated on drawings. Supplier to ensure Pressure Drop including system affect is not greater than number indicated.

EXISTING 700X450 S/A DUCT -DROPS DOWN TO SUPPLY AIR PLENUM TERMINATE DUCT OPEN ENDED 150mm WITHIN PLENUM.

(TYPICAL OF 16)

CONNECT NEW S/A DUCT

TO EXISTING

SUSPEND NEW ELBOW

CONNECT TO MUA AND EXISTING S/A DUCTWORK

EXTEND INTERNALLY

SUSPEND NEW ELBOW SILENCER FROM

CONNECT TO MUA AND

EXISTING S/A DUCTWORK

STRUCTURE AND

INSULATED DUCT FROM

SILENCER TO EXISTING MUA CONNECTION.

SIL-1

CONNECT NEW S/A DUCT

SHOOTING LINE

SILENCERS FROM STRUCTURE AND





SEPW Architecture Inc.

DA ENGINEERING LTD.

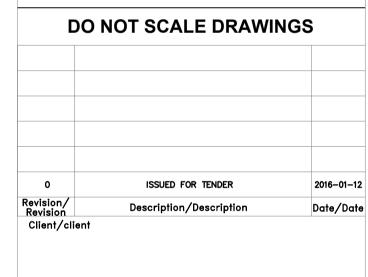
■ 109 - 3725 Pasqua Street, Regina, SK, S4S 6W8 ph: (306) 569-2255

□ 102 - 3718 Kinnear Place, Saskatoon SK, S7P 0A6 ph: (306) 652-6457

1580 Angus Street Regina, Saskatchewan S4T 1Z1 P:306-525-9815 F: 306-525-6369 E: hda@hdaeng.com

website: www.sepw.ca

Association of Professional Engineers & Geoscientists of Saskatchewan CERTIFICATE OF AUTHORIZATION HDA ENGINEERING LTD. Number C981 Permission to Consult Held by: Discipline Sk. Reg. No. Signature



Project title/Titre du projet

25B RANGE RENOVATION REGINA, SK

Approved by/Approuve par Designed by/Concept par Drawn by/Dessine par RCMP Project Manager/Administrateur de Projets GRC RCMP, Architectural and Engineering Resources Manager/ Client/client Drawing title/Titre du dessin **VENTILATION REVISIONS,**

23/2015

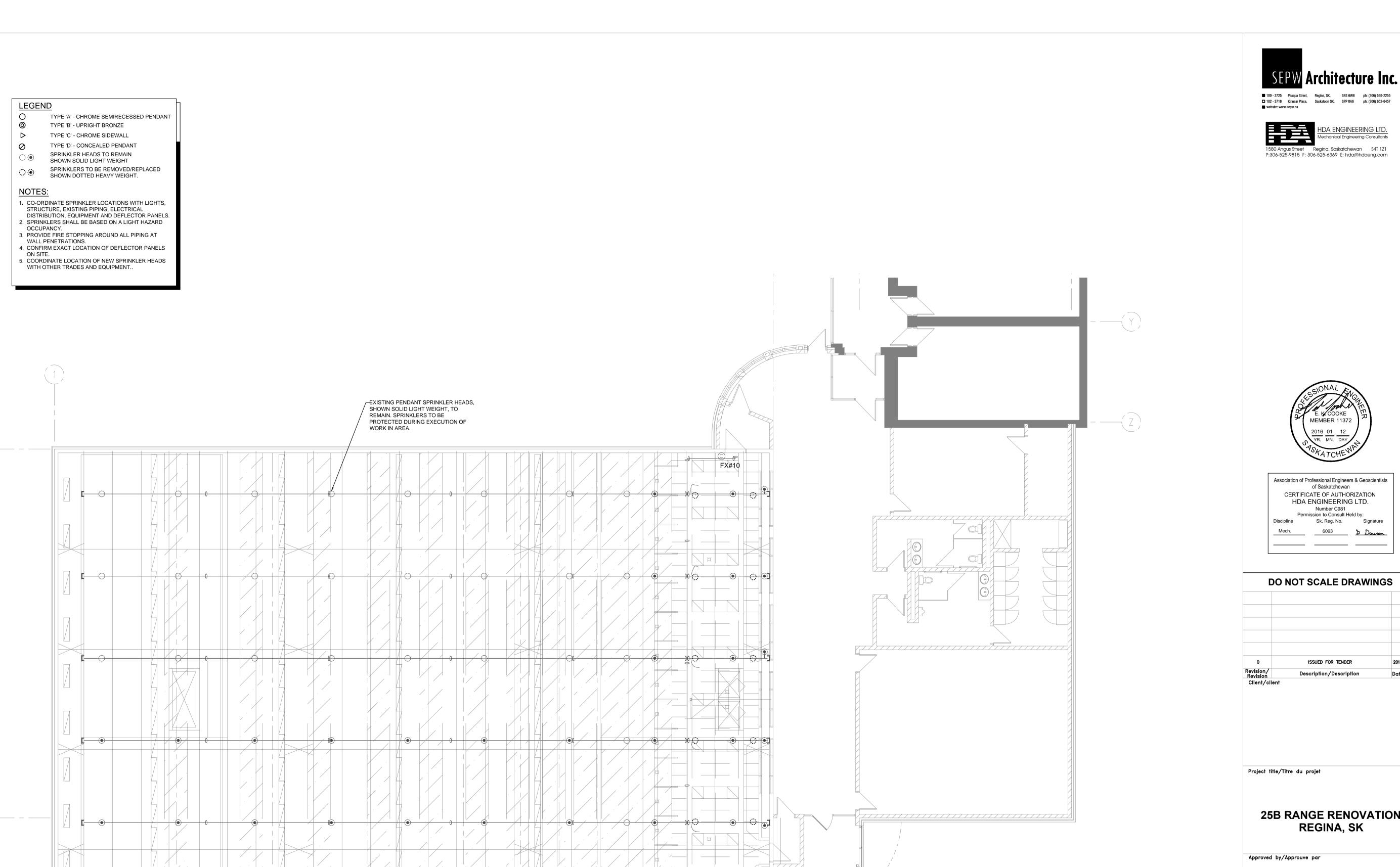
EQUIPMENT SCHEDULES

M1.2 OF -

MAIN FLOOR PLAN

PWGSC - A1 - 841X594

0 10 20 30 40 50 60 70 80 90 100mm



FX#10

REMOVE EXISTING CEILING SPRINKLER HEAD, SHOWN DOTTED HEAVY

WEIGHT, TO FACILITATE MODIFICATION

OF SPRINKLERS TO SUIT NEW CEILING

ELEVATION AND ARRANGEMENT.

25B RANGE RENOVATION

Designed by/Concept par

Drawn by/Dessine par

RCMP Project Manager/Administrateur de Projets GRC

RCMP, Architectural and Engineering Resources Manager/

Client/client

Drawing title/Titre du dessin

FIRE PROTECTION DEMOLITION

23/2015

M2.1 OF -

PWGSC - A1 - 841X594

MAIN FLOOR PLAN

0 10 20 30 40 50 60 70 80 90 100mm

APPROXIMATE LOCATION OF EXISTING SPRINKLER LINES, SHOWN SOLID LIGHT WEIGHT, TO REMAIN. LINES ARE

PLACED IN ACCORDANCE WITH THE

SPRINKLER RECORD DOCUMENTS,

CONTRACTOR TO CONFIRM EXACT

LOCATIONS ON SITE. (TYPICAL)

EXISTING UPRIGHT SPRINKLER HEADS
BELOW CEILING ELEVATION, SHOWN

SOLID LIGHT WEIGHT, TO REMAIN.

SPRINKLERS TO BE PROTECTED

DURING EXECUTION OF WORK IN

LEXISTING RECORD DRAWING INDICATE THE FOLLOWING HYDRAULIC CALCULATION FOR THIS

AREA OF OPERATION: 140.2 SQ.M. HOSE ALLOWANCE: 378 LPM

HAZARD: LIGHT HAZARD

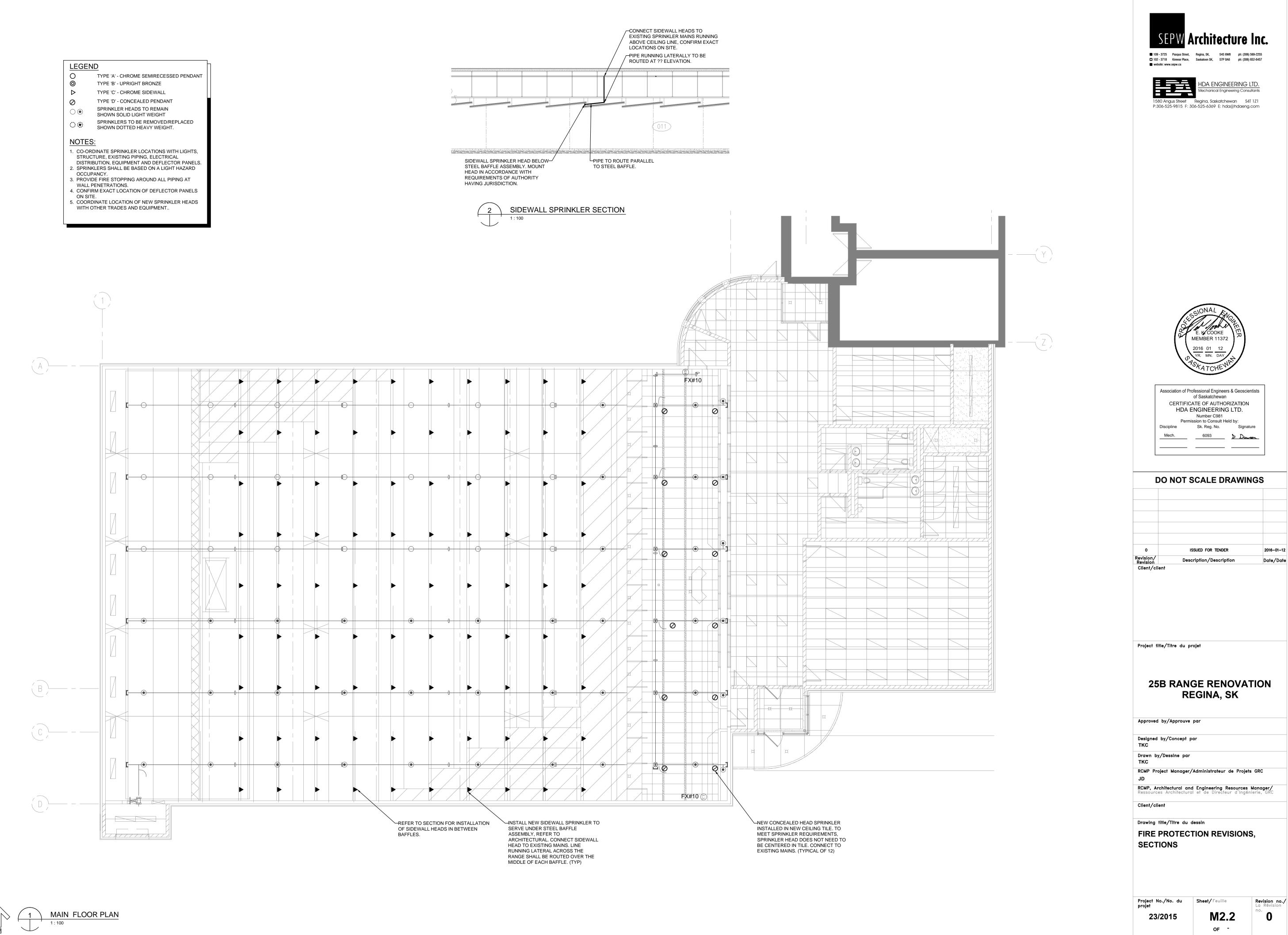
DENSITY: 4.1 LPM/SQ.M.

HYDRAULIC CALCULATION: 650219#A.WX1

DEMAND AT SOURCE: 588.3 LPM @ 3.6 BAR

2016-01-12

Date/Date



2016-01-12 Date/Date

PWGSC - A1 - 841X594

