CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB

CSC EMSI
NATURAL GAS
DISTRIBUTION UPGRADE

CIVIL DRAWING INDEX

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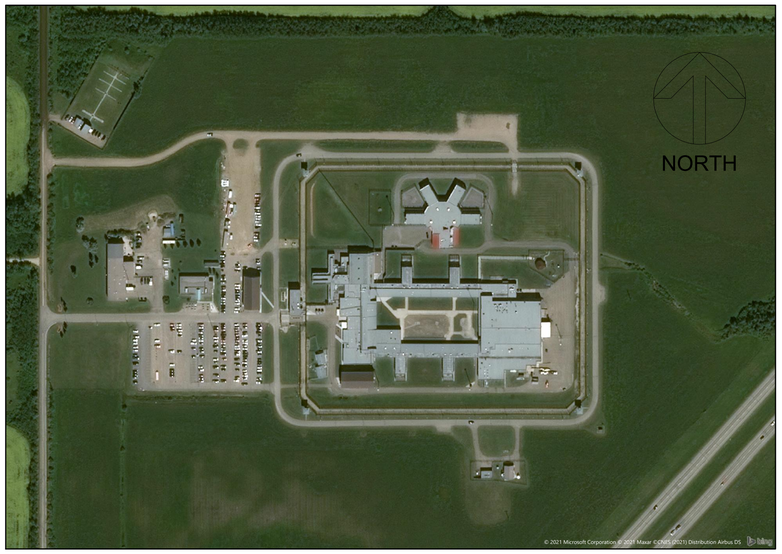
C110	CONSTRUCTION DETAILS



KEY PLAN

N.T.S.

ISSUED FOR TENDER

Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

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Revision	Description	Date
5	-	-
4	-	-
3	-	-
2	ISSUED FOR TENDER	2021-05-14
1	99% DESIGN SUBMISSION	2021-03-26
0	66% DESIGN SUBMISSION	2021-02-26

Client / client
PUBLIC WORKS & GOVERNMENT SERVICES
.
9700 JASPER AVENUE, SUITE 1000
EDMONTON, AB T5J 4C3

Project title / Projet
CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB
CSC EMSI
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DISTRIBUTION UPGRADE

Designed by / Conçu par: **DMD**
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**
Drawing title / Titre du dessin: **INDEX**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	INDEX . OF .	R00

NATURAL GAS METER SCHEDULE

Location Number	Building Name	Connected Load (kWH)	Requried Flow NM3/hr	Incoming Pressure	Meter Replacement
R01	Boiler Room/Main Building	4.2	369.68	138 kPag	MT-1
R02	GI Building	0.6	57.09	14 kPag	MT-2
R03.1	Private Family Visit Building	17.4	1.56	1.74 kPag	MT-4
R03.2	Private Family Visit Building	17.4	1.56	1.74 kPag	MT-4
R04	Gym	34.8	3.11	35 kPag	MT-1
R05	Gatehouse	272.6	24.39	1.74 kPag	MT-3
R06	NW Guard Tower	23.2	2.08	1.74 kPag	MT-5
R07	NE Guard Tower	23.2	2.08	1.74 kPag	MT-5
R08	SE Guard Tower	23.2	2.08	1.74 kPag	MT-5
R09	Commissionaire Trailer	23.2	2.08	1.74 kPag	MT-4
R10	Genset Building	29.0	2.59	1.74 kPag	MT-6
R11	Pumphouse	13.1	1.17	1.74 kPag	MT-3
R12	SW Guard Tower	23.2	2.08	1.74 kPag	MT-5
R13	Administration Building	198.9	17.80	1.74 kPag	MT-7
R14	GO Building	638.0	57.09	14 kPag	MT-2
R15	Weapons Range Building	17.4	1.56	1.74 kPag	MT-8
R16	Warehouse/Garbage Building	329.2	29.45	14 kPag	MT-9

WALL REPAIR AND BOLLARD SCHEDULE

Location Number	Building Name	Wall Repair Type	Protection Type
R01	Boiler Room/Main Building	WP-1	PD-1
R02	GI Building	WP-2	None
R03.1	Private Family Visit Building	WP-3	None
R03.2	Private Family Visit Building	WP-3	None
R04	Gym	WP-1	None
R05	Gatehouse	WP-1	PD-1
R06	NW Guard Tower	WP-4	None
R07	NE Guard Tower	WP-4	None
R08	SE Guard Tower	WP-4	None
R09	Commissionaire Trailer	WP-2	None
R10	Genset Building	WP-2	None
R11	Pumphouse	WP-1	PD-1
R12	SW Guard Tower	WP-4	None
R13	Administration Building	WP-1	PD-1
R14	GO Building	WP-2	PD-1
R15	Weapons Range Building	WP-2	PD-1
R16	Warehouse/Garbage Building	WP-2	PD-1

NATURAL GAS REGULATOR SCHEDULE

Location Number	Building Name	Regulator Tag	Requried Flow NM3/hr	Incoming Pressure	Outgoing Pressure	MAOP
R01	Boiler Room/Main Building	RT-4	369.68	690 kPag	138 kPag	1200 kPag
R02	GI Building	RT-1	57.09	690 kPag	14 kPag	1200 kPag
R03.1	Private Family Visit Building	RT-2	1.56	690 kPag	1.74 kPag	1200 kPag
R03.2	Private Family Visit Building	RT-2	1.56	690 kPag	1.74 kPag	1200 kPag
R04	Gym	RT-3	3.11	690 kPag	35 kPag	1200 kPag
R05	Gatehouse	RT-2	24.39	690 kPag	1.74 kPag	1200 kPag
R06	NW Guard Tower	RT-2	2.08	690 kPag	1.74 kPag	1200 kPag
R07	NE Guard Tower	RT-2	2.08	690 kPag	1.74 kPag	1200 kPag
R08	SE Guard Tower	RT-2	2.08	690 kPag	1.74 kPag	1200 kPag
R09	Commissionaire Trailer	None	2.08	690 kPag	1.74 kPag	1200 kPag
R10	Genset Building	RT-2	2.59	690 kPag	1.74 kPag	1200 kPag
R11	Pumphouse	RT-2	1.17	690 kPag	1.74 kPag	1200 kPag
R12	SW Guard Tower	RT-2	2.08	690 kPag	1.74 kPag	1200 kPag
R13	Administration Building	RT-2	17.80	690 kPag	1.74 kPag	1200 kPag
R14	GO Building	RT-1	57.09	690 kPag	14 kPag	1200 kPag
R15	Weapons Range Building	RT-2	1.56	690 kPag	1.74 kPag	1200 kPag
R16	Warehouse/Garbage Building	RT-2	29.45	690 kPag	14 kPag	1200 kPag

Public Services and Procurement Canada (PSPC)
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2021-05-17
Permit to Practice #P-6498

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EDMONTON, AB

CSC EMSI NATURAL GAS DISTRIBUTION UPGRADE

Designed by / Conçu par: **DMD**

Drawn by / Dessiné par: **KKM**

Approved by / Approuvé par: **RLG**

PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin

SCOPE OF WORK

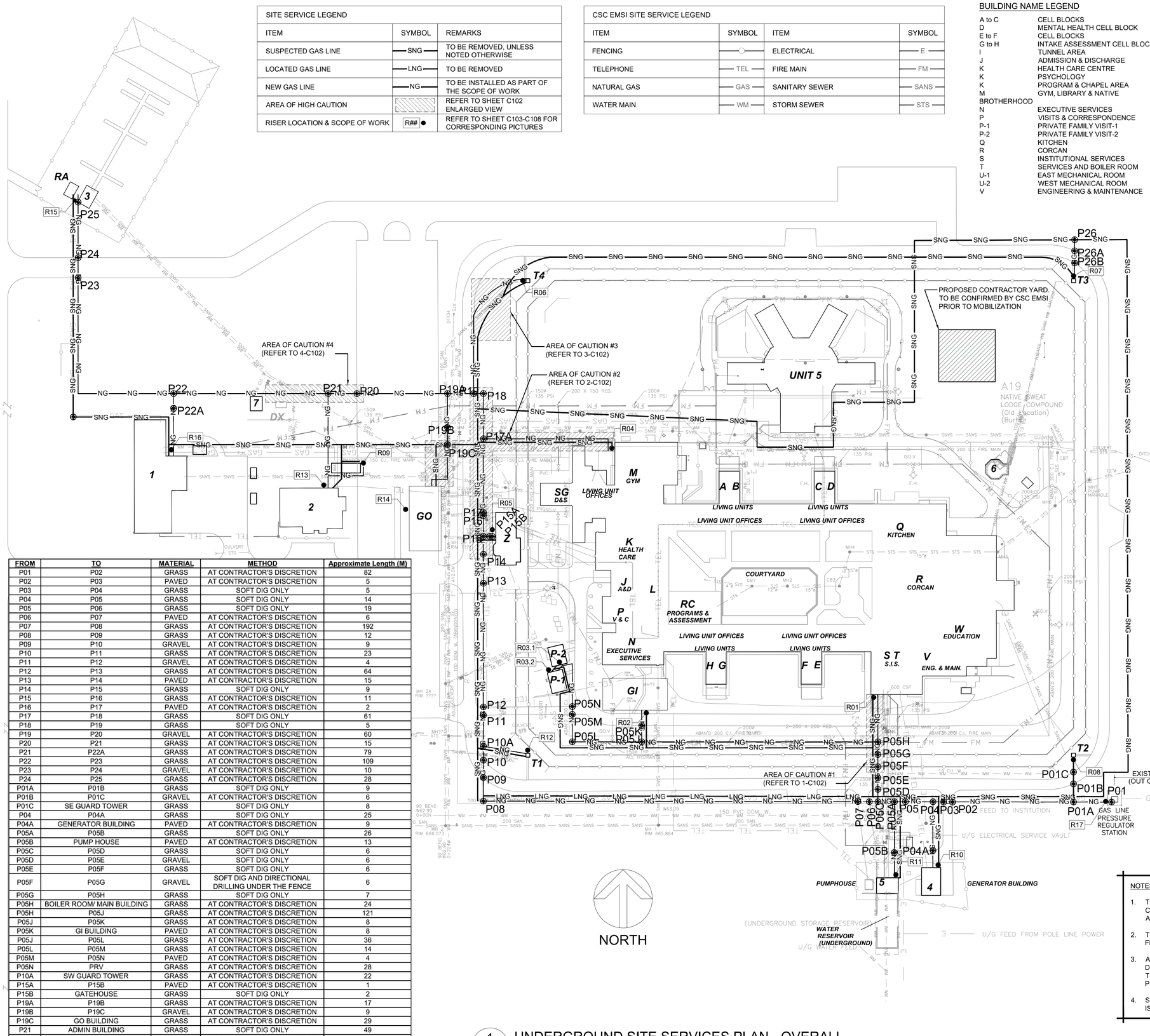
Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C100 1 OF 11	R00

SITE SERVICE LEGEND		
ITEM	SYMBOL	REMARKS
SUSPECTED GAS LINE	—SNG—	TO BE REMOVED, UNLESS NOTED OTHERWISE
LOCATED GAS LINE	—LNG—	TO BE REMOVED
NEW GAS LINE	—NG—	TO BE INSTALLED AS PART OF THE SCOPE OF WORK
AREA OF HIGH CAUTION		REFER TO SHEET C102 ENLARGED VIEW
RISER LOCATION & SCOPE OF WORK	R## ●	REFER TO SHEET C103-C108 FOR CORRESPONDING PICTURES

CSC EMSI SITE SERVICE LEGEND			
ITEM	SYMBOL	ITEM	SYMBOL
FENCING	—○—	ELECTRICAL	—E—
TELEPHONE	—TEL—	FIRE MAIN	—FM—
NATURAL GAS	—GAS—	SANITARY SEWER	—SANS—
WATER MAIN	—WM—	STORM SEWER	—STS—

BUILDING NAME LEGEND

A to C	CELL BLOCKS	W	SCHOOL
D	MENTAL HEALTH CELL BLOCK	X	SWEAT LODGE
E to F	CELL BLOCKS	Z	GATEHOUSE
G to H	INTAKE ASSESSMENT CELL BLOCKS	DX	DOG KENNELS & RUNS
I	TUNNEL AREA	RC	INTAKE ASSESSMENT PROGRAMS
J	ADMISSION & DISCHARGE	BUILDING	
K	HEALTH CARE CENTRE	SG	DISSOCIATION & SEGRATION
K	PSYCHOLOGY	T1	GUARD TOWER
K	PROGRAM & CHAPEL AREA	T2	GUARD TOWER
M	GYM, LIBRARY & NATIVE	T3	GUARD TOWER
BROTHERHOOD		T4	GUARD TOWER
N	EXECUTIVE SERVICES	RA	GAS/FIRE TRAINING
P	VISITS & CORRESPONDENCE	1	WAREHOUSE/GARAGE
P-1	PRIVATE FAMILY VISIT-1	2	ADMINISTRATION
P-2	PRIVATE FAMILY VISIT-2	3	WEAPONS RANGE
Q	KITCHEN	4	GENERATION BUILDING
R	CORCAN	5	PUMP HOUSE
S	INSTITUTIONAL SERVICES	6	CULTURAL CENTRE
T	SERVICES AND BOILER ROOM	7	FIRE TRAINING CENTRE
U-1	EAST MECHANICAL ROOM	UNIT 5	CELL BLOCKS O-R
U-2	WEST MECHANICAL ROOM	GI	GENERAL INSIDE BUILDING
V	ENGINEERING & MAINTENANCE	G0	GENERAL OUTSIDE BUILDING



FROM	TO	MATERIAL	METHOD	Approximate Length (M)
P01	P02	GRASS	AT CONTRACTOR'S DISCRETION	82
P02	P03	PAVED	AT CONTRACTOR'S DISCRETION	5
P03	P04	GRASS	SOFT DIG ONLY	5
P04	P05	GRASS	SOFT DIG ONLY	14
P05	P06	GRASS	SOFT DIG ONLY	19
P06	P07	PAVED	AT CONTRACTOR'S DISCRETION	6
P07	P08	GRASS	AT CONTRACTOR'S DISCRETION	192
P08	P09	GRASS	AT CONTRACTOR'S DISCRETION	12
P09	P10	GRAVEL	AT CONTRACTOR'S DISCRETION	9
P10	P11	GRASS	AT CONTRACTOR'S DISCRETION	23
P11	P12	GRAVEL	AT CONTRACTOR'S DISCRETION	4
P12	P13	GRASS	AT CONTRACTOR'S DISCRETION	64
P13	P14	PAVED	AT CONTRACTOR'S DISCRETION	15
P14	P15	GRASS	SOFT DIG ONLY	9
P15	P16	GRASS	AT CONTRACTOR'S DISCRETION	11
P16	P17	PAVED	AT CONTRACTOR'S DISCRETION	2
P17	P18	GRASS	SOFT DIG ONLY	61
P18	P19	GRASS	SOFT DIG ONLY	5
P19	P20	GRAVEL	AT CONTRACTOR'S DISCRETION	60
P20	P21	GRASS	AT CONTRACTOR'S DISCRETION	15
P21	P22A	GRASS	AT CONTRACTOR'S DISCRETION	79
P22	P23	GRASS	AT CONTRACTOR'S DISCRETION	109
P23	P24	GRAVEL	AT CONTRACTOR'S DISCRETION	10
P24	P25	GRASS	AT CONTRACTOR'S DISCRETION	28
P01A	P01B	GRASS	SOFT DIG ONLY	9
P01B	P01C	GRAVEL	AT CONTRACTOR'S DISCRETION	6
P01C	SE GUARD TOWER	GRASS	SOFT DIG ONLY	8
P04	P04A	GRASS	SOFT DIG ONLY	25
P04A	GENERATOR BUILDING	PAVED	AT CONTRACTOR'S DISCRETION	9
P05A	P05B	GRASS	SOFT DIG ONLY	26
P05B	PUMP HOUSE	PAVED	AT CONTRACTOR'S DISCRETION	13
P05C	P05D	GRASS	SOFT DIG ONLY	6
P05D	P05E	GRAVEL	SOFT DIG ONLY	6
P05E	P05F	GRASS	SOFT DIG ONLY	6
P05F	P05G	GRAVEL	SOFT DIG AND DIRECTIONAL DRILLING UNDER THE FENCE	6
P05G	P05H	GRASS	SOFT DIG ONLY	7
P05H	BOILER ROOM/ MAIN BUILDING	GRASS	AT CONTRACTOR'S DISCRETION	24
P05H	P05J	GRASS	AT CONTRACTOR'S DISCRETION	121
P05J	P05K	GRASS	AT CONTRACTOR'S DISCRETION	8
P05K	GI BUILDING	PAVED	AT CONTRACTOR'S DISCRETION	8
P05J	P05L	GRASS	AT CONTRACTOR'S DISCRETION	36
P05L	P05M	GRASS	AT CONTRACTOR'S DISCRETION	14
P05M	P05N	PAVED	AT CONTRACTOR'S DISCRETION	4
P05N	PRV	GRASS	AT CONTRACTOR'S DISCRETION	28
P10A	SW GUARD TOWER	GRASS	AT CONTRACTOR'S DISCRETION	22
P15A	P15B	PAVED	AT CONTRACTOR'S DISCRETION	1
P15B	GATEHOUSE	GRASS	SOFT DIG ONLY	2
P19A	P19B	GRASS	AT CONTRACTOR'S DISCRETION	17
P19B	P19C	GRAVEL	AT CONTRACTOR'S DISCRETION	9
P19C	GO BUILDING	GRASS	AT CONTRACTOR'S DISCRETION	29
P21	ADMIN BUILDING	GRASS	SOFT DIG ONLY	49
P22	P22A	GRASS	AT CONTRACTOR'S DISCRETION	8
P22A	WAREHOUSE/GARAGE	GRAVEL	AT CONTRACTOR'S DISCRETION	24
P19	NW GUARD TOWER	GRASS	AT CONTRACTOR'S DISCRETION	75
P17A	GYM	GRASS	DIRECTIONAL DRILLING	70
P26	P26A	GRASS	AT CONTRACTOR'S DISCRETION	6
P26A	P26B	GRAVEL	AT CONTRACTOR'S DISCRETION	6
P26B	NE GUARD TOWER	GRASS	AT CONTRACTOR'S DISCRETION	8

NODE COORDINATES:

NODE DESCRIPTION	X-COORDINATE (METERS)	Y-COORDINATE (METERS)
P01	0	0
P01A	-0.196	0.030
P01B	-19.558	9.342
P01C	-19.558	15.394
P02	-81.753	-0.012
P03	-86.317	-0.012
P04	-91.770	0.138
P04A	-91.770	-24.826
P05	-105.903	0.165
P05A	-111.541	0.138
P05B	-111.681	-25.943
P05C	-120.097	0.138
P05D	-120.097	6.494
P05E	-120.101	12.442
P05F	-120.097	18.156
P05G	-120.097	24.396
P05H	-120.097	30.935
P05J	-241.443	30.935
P05K	-241.423	39.303
P05L	-277.088	30.935
P05M	-277.088	45.066
P05N	-277.088	49.082
P06	-124.459	0.191
P07	-130.411	0.203
P08	-322.736	0.502
P09	-322.736	12.526
P10	-322.736	21.564
P10A	-322.736	28.732
P11	-322.736	44.618
P12	-322.736	48.841
P13	-322.736	112.424
P14	-322.736	127.367
P15	-322.736	136.511
P15A	-319.478	136.511
P15B	-318.258	136.511
P16	-322.736	147.240
P17	-322.736	148.740
P17A	-322.736	186.642
P18	-322.736	209.926
P19	-327.772	209.926
P19A	-341.261	209.926
P19B	-341.261	192.451
P19C	-341.261	183.715
P20	-387.770	209.926
P21	-402.564	209.926
P22	-481.910	209.926
P22A	-481.910	202.335
P23	-531.028	269.421
P24	-531.028	279.763
P25	-531.028	308.245
P26	-18.960	288.957
P26A	-18.960	283.220
P26B	-18.960	276.994
R01	-122.205	53.779
R02	-239.072	45.853
R03.1	-283.671	71.952
R03.2	-289.262	68.022
R04	-256.770	181.912
R05	-318.171	139.972
R06	-302.501	267.966
R07	-19.486	270.361
R08	-19.531	21.728
R09	-384.402	174.252
R10	-89.089	-32.332
R11	-110.774	-37.342
R12	-299.995	26.665
R13	-404.741	162.908
R14	-362.721	150.440
R15	-532.774	309.179
R16	-483.071	181.036

NOTES:

1. THE CONTRACTOR IS TO SOFT DIG ANY UTILITY CROSSINGS BETWEEN THE NATURAL GAS SERVICE AND ALL OTHER SERVICES ON SITE.
2. THE CONTRACTOR IS TO REPAIR ALL DISRUPTED FINISHED GRADE.
3. AT THE CONTRACTOR'S DISCRETION, HORIZONTAL DIRECTION DRILL, OPEN TRENCH, OR CHAIN TRENCH CAN BE UTILIZED. CONTRACTOR TO PROVIDE WORK PLAN WITH PROPOSED METHOD.
4. SUSPECTED GAS LINE (SNG) FROM R17 TO UNIT #5 IS TO REMAIN.

1 / C101 UNDERGROUND SITE SERVICES PLAN - OVERALL

SCALE: 1:1000

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
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Permit to Practice #P-6498

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PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin

UNDERGROUND SITE SERVICES PLAN

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C101 2 OF 11	R00

PWGSC – A1 – 841X594

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

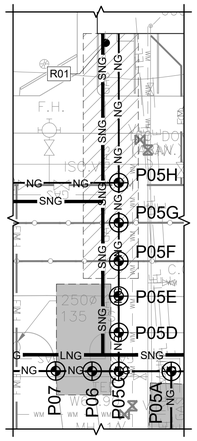
1020-047 C101.dwg

SITE SERVICE LEGEND		
ITEM	SYMBOL	REMARKS
SUSPECTED GAS LINE	SNG	TO REMAIN
LOCATED GAS LINE	LNG	TO BE REMOVED
NEW GAS LINE	NG	TO BE INSTALLED AS PART OF THE SCOPE OF WORK
AREA OF HIGH CAUTION		
RISER LOCATION & SCOPE OF WORK	R## ●	REFER TO SHEET C103-C108 FOR CORRESPONDING PICTURES

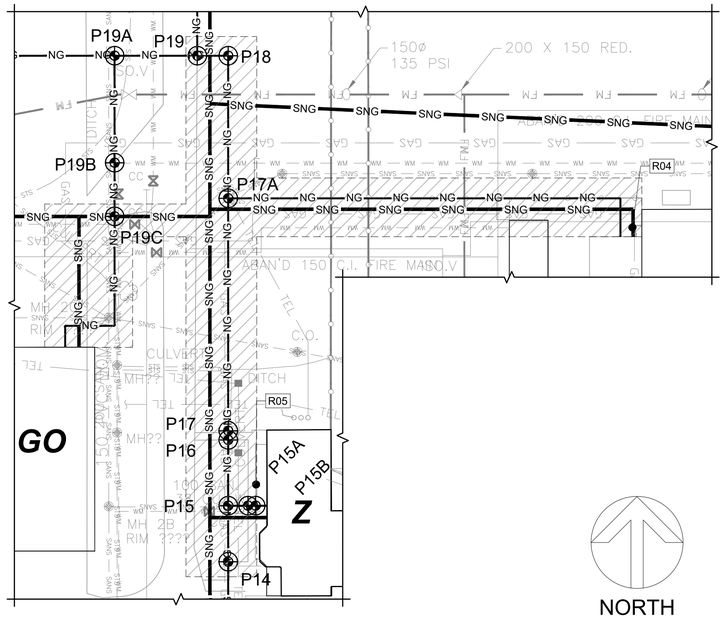
CSC EMSI SITE SERVICE LEGEND			
ITEM	SYMBOL	ITEM	SYMBOL
FENCING		ELECTRICAL	E
TELEPHONE	TEL	FIRE MAIN	FM
NATURAL GAS	GAS	SANITARY SEWER	SANS
WATER MAIN	WM	STORM SEWER	STS

BUILDING NAME LEGEND

A to C	CELL BLOCKS	X	SWEAT LODGE
D	MENTAL HEALTH CELL BLOCK	Z	GATEHOUSE
E to F	CELL BLOCKS	DX	DOG KENNELS & RUNS
G to H	INTAKE ASSESSMENT CELL BLOCKS	RC	INTAKE ASSESSMENT PROGRAMS
I	TUNNEL AREA	BUILDING	
J	ADMISSION & DISCHARGE	SG	DISSOCIATION & SEGRATION
K	HEALTH CARE CENTRE	T1	GUARD TOWER
K	PSYCHOLOGY	T2	GUARD TOWER
K	PROGRAM & CHAPEL AREA	T3	GUARD TOWER
M	GYM, LIBRARY & NATIVE BROTHERHOOD	T4	GUARD TOWER
N	EXECUTIVE SERVICES	RA	GAS/FIRE TRAINING
P	VISITS & CORRESPONDENCE	1	WAREHOUSE/GARAGE
P-1	PRIVATE FAMILY VISIT-1	2	ADMINISTRATION
P-2	PRIVATE FAMILY VISIT-2	3	WEAPONS RANGE
Q	KITCHEN	4	GENERATION BUILDING
R	CORCAN	5	PUMP HOUSE
S	INSTITUTIONAL SERVICES	6	CULTURAL CENTRE
T	SERVICES AND BOILER ROOM	7	FIRE TRAINING CENTRE
U-1	EAST MECHANICAL ROOM	UNIT 5	CELL BLOCKS O-R
U-2	WEST MECHANICAL ROOM	GI	GENERAL INSIDE BUILDING
V	ENGINEERING & MAINTENANCE	G0	GENERAL OUTSIDE BUILDING
W	SCHOOL		

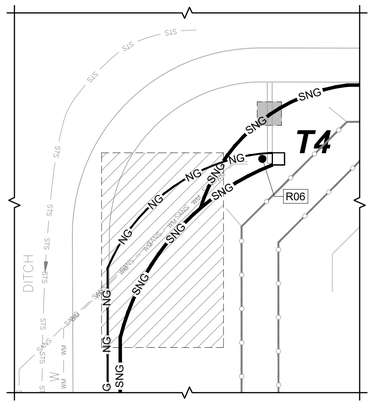


1 C102 **AREA OF CAUTION #1** (ENGLARGED)
SCALE: 1:500

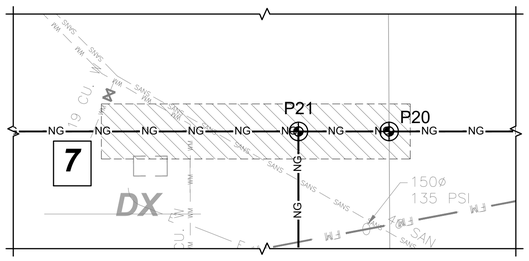


2 C102 **AREA OF CAUTION #2** (ENGLARGED)
SCALE: 1:500

FROM	TO	MATERIAL	METHOD	Approximate Length (M)
P01	P02	GRASS	AT CONTRACTOR'S DISCRETION	82
P02	P03	PAVED	AT CONTRACTOR'S DISCRETION	5
P03	P04	GRASS	SOFT DIG ONLY	5
P04	P05	GRASS	SOFT DIG ONLY	14
P05	P06	GRASS	SOFT DIG ONLY	19
P06	P07	PAVED	AT CONTRACTOR'S DISCRETION	6
P07	P08	GRASS	AT CONTRACTOR'S DISCRETION	192
P08	P09	GRASS	AT CONTRACTOR'S DISCRETION	12
P09	P10	GRAVEL	AT CONTRACTOR'S DISCRETION	9
P10	P11	GRASS	AT CONTRACTOR'S DISCRETION	23
P11	P12	GRAVEL	AT CONTRACTOR'S DISCRETION	4
P12	P13	GRASS	AT CONTRACTOR'S DISCRETION	64
P13	P14	PAVED	AT CONTRACTOR'S DISCRETION	15
P14	P15	GRASS	SOFT DIG ONLY	9
P15	P16	GRASS	AT CONTRACTOR'S DISCRETION	11
P16	P17	PAVED	AT CONTRACTOR'S DISCRETION	2
P17	P18	GRASS	SOFT DIG ONLY	61
P18	P19	GRASS	SOFT DIG ONLY	5
P19	P20	GRAVEL	AT CONTRACTOR'S DISCRETION	60
P20	P21	GRASS	AT CONTRACTOR'S DISCRETION	15
P21	P22A	GRASS	AT CONTRACTOR'S DISCRETION	79
P22	P23	GRASS	AT CONTRACTOR'S DISCRETION	109
P23	P24	GRAVEL	AT CONTRACTOR'S DISCRETION	10
P24	P25	GRASS	AT CONTRACTOR'S DISCRETION	28
P01A	P01B	GRASS	SOFT DIG ONLY	9
P01B	P01C	GRAVEL	AT CONTRACTOR'S DISCRETION	6
P01C	SE GUARD TOWER	GRASS	SOFT DIG ONLY	8
P04	P04A	GRASS	SOFT DIG ONLY	25
P04A	GENERATOR BUILDING	PAVED	AT CONTRACTOR'S DISCRETION	9
P05A	P05B	GRASS	SOFT DIG ONLY	26
P05B	PUMP HOUSE	PAVED	AT CONTRACTOR'S DISCRETION	13
P05C	P05D	GRASS	SOFT DIG ONLY	6
P05D	P05E	GRAVEL	SOFT DIG ONLY	6
P05E	P05F	GRASS	SOFT DIG ONLY	6
P05F	P05G	GRAVEL	SOFT DIG AND DIRECTIONAL DRILLING UNDER THE FENCE	6
P05G	P05H	GRASS	SOFT DIG ONLY	7
P05H	BOILER ROOM/ MAIN BUILDING	GRASS	AT CONTRACTOR'S DISCRETION	24
P05H	P05J	GRASS	AT CONTRACTOR'S DISCRETION	121
P05J	P05K	GRASS	AT CONTRACTOR'S DISCRETION	8
P05K	GI BUILDING	PAVED	AT CONTRACTOR'S DISCRETION	8
P05J	P05L	GRASS	AT CONTRACTOR'S DISCRETION	36
P05L	P05M	GRASS	AT CONTRACTOR'S DISCRETION	14
P05M	P05N	PAVED	AT CONTRACTOR'S DISCRETION	4
P05N	PRV	GRASS	AT CONTRACTOR'S DISCRETION	28
P10A	SW GUARD TOWER	GRASS	AT CONTRACTOR'S DISCRETION	22
P15A	P15B	PAVED	AT CONTRACTOR'S DISCRETION	1
P15B	GATEHOUSE	GRASS	SOFT DIG ONLY	2
P19A	P19B	GRASS	AT CONTRACTOR'S DISCRETION	17
P19B	P19C	GRAVEL	AT CONTRACTOR'S DISCRETION	9
P19C	GO BUILDING	GRASS	AT CONTRACTOR'S DISCRETION	29
P21	ADMIN BUILDING	GRASS	SOFT DIG ONLY	49
P22	P22A	GRASS	AT CONTRACTOR'S DISCRETION	8
P22A	WAREHOUSE/GARAGE	GRAVEL	AT CONTRACTOR'S DISCRETION	24
P19	NW GUARD TOWER	GRASS	AT CONTRACTOR'S DISCRETION	75
P17A	GYM	GRASS	DIRECTIONAL DRILLING	70
P26	P26A	GRASS	AT CONTRACTOR'S DISCRETION	6
P26A	P26B	GRAVEL	AT CONTRACTOR'S DISCRETION	6
P26B	NE GUARD TOWER	GRASS	AT CONTRACTOR'S DISCRETION	8



3 C102 **AREA OF CAUTION #3** (ENGLARGED)
SCALE: 1:500



4 C102 **AREA OF CAUTION #4** (ENGLARGED)
SCALE: 1:500

NODE DESCRIPTION	X-COORDINATE (METERS)	Y-COORDINATE (METERS)
P01	0	0
P01A	-0.196	0.030
P01B	-19.558	9.342
P01C	-19.558	15.394
P02	-81.753	-0.012
P03	-86.317	-0.012
P04	-91.770	0.138
P04A	-91.770	-24.826
P05	-105.903	0.165
P05A	-111.541	0.138
P05B	-111.681	-25.943
P05C	-120.097	0.138
P05D	-120.097	6.494
P05E	-120.101	12.442
P05F	-120.097	18.156
P05G	-120.097	24.396
P05H	-120.097	30.935
P05J	-241.443	30.935
P05K	-241.423	39.303
P05L	-277.088	30.935
P05M	-277.088	45.066
P05N	-277.088	49.082
P06	-124.459	0.191
P07	-130.411	0.203
P08	-322.736	0.502
P09	-322.736	12.526
P10	-322.736	21.564
P10A	-322.736	28.732
P11	-322.736	44.618
P12	-322.736	48.841
P13	-322.736	112.424
P14	-322.736	127.367
P15	-322.736	136.511
P15A	-319.478	136.511
P15B	-318.258	136.511
P16	-322.736	147.240
P17	-322.736	148.740
P17A	-322.736	186.642
P18	-322.736	209.926
P19	-327.772	209.926
P19A	-341.261	209.926
P19B	-341.261	192.451
P19C	-341.261	183.715
P20	-387.770	209.926
P21	-402.564	209.926
P22	-481.910	209.926
P22A	-481.910	202.335
P23	-531.028	269.421
P24	-531.028	279.763
P25	-531.028	308.245
P26	-18.960	288.957
P26A	-18.960	283.220
P26B	-18.960	276.994
R01	-122.205	53.779
R02	-239.072	45.853
R03.1	-283.671	71.952
R03.2	-289.262	68.022
R04	-256.770	181.912
R05	-318.171	139.972
R06	-302.501	267.966
R07	-19.486	270.361
R08	-19.531	21.728
R09	-384.402	174.252
R10	-89.089	-32.332
R11	-110.774	-37.342
R12	-299.995	26.665
R13	-404.741	162.908
R14	-362.721	150.440
R15	-532.774	309.179
R16	-483.071	181.036

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2021-05-17
Permit to Practice #P-6498

SEAL

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0	66% DESIGN SUBMISSION	2021-02-26

Client / client

PUBLIC WORKS & GOVERNMENT SERVICES

9700 JASPER AVENUE, SUITE 1000
EDMONTON, AB T5J 4C3

Project title / Projet
CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB

CSC EMSI
NATURAL GAS
DISTRIBUTION UPGRADE

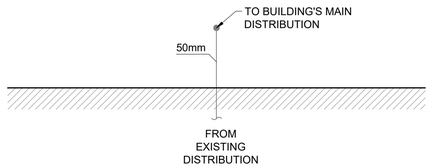
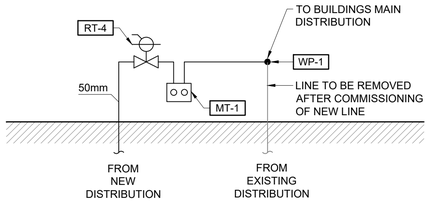
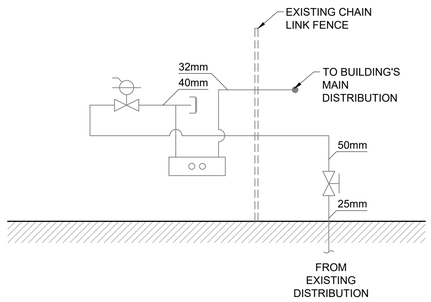
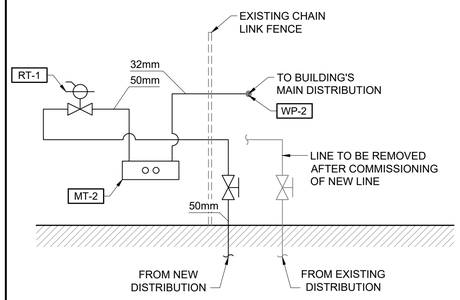
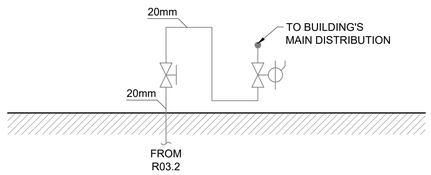
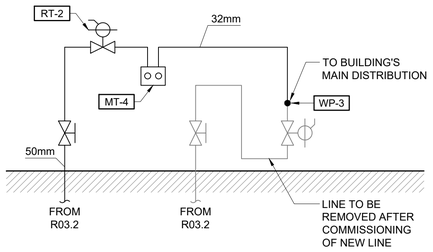
Designed by / Conçu par: **DMD**
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin
AREA OF CAUTION
(ENLARGED VIEWS)

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C102 3 OF 11	R00

PWGSC – A1 – 841X594
0 10 20 30 40 50 60 70 80 90 100mm
1020-047 C102.dwg

NATURAL GAS RISERS

LOCATION # & BUILDING NAME	EXISTING CONDITION PHOTOS	EXISTING CONDITIONS SCHEMATIC	PROPOSED SCHEMATICS	CONSTRUCTION NOTES
R01 BOILER ROOM / MAIN BUILDING				• ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-1". • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • REMOVE THE NATURAL GAS METER AND BUILDING REGULATOR THAT IS INSTALLED ON THE INTERIOR OF THE BUILDING. • REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R02 GI BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING, IN THE LOCATION OF THE EXISTING CONDITION LOCATION. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-2". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R03.1 PFV BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-3". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.

SCHEMATIC LEGEND

ITEM	SYMBOL	ITEM	SYMBOL
GAS LINE (EXISTING)		GAS LINE	
FITTING - GATE VALVE (EXISTING)		FITTING - GATE VALVE	
FITTING - GAS PRESSURE REGULATOR (EXISTING)		FITTING - GAS PRESSURE REGULATOR	
DEVICE - GAS METER (EXISTING)		DEVICE - GAS METER	
FITTING - END CAP (EXISTING)			

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Client / client

PUBLIC WORKS & GOVERNMENT SERVICES

9700 JASPER AVENUE, SUITE 1000
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Project title / Projet

CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB

CSC EMSI
NATURAL GAS DISTRIBUTION UPGRADE

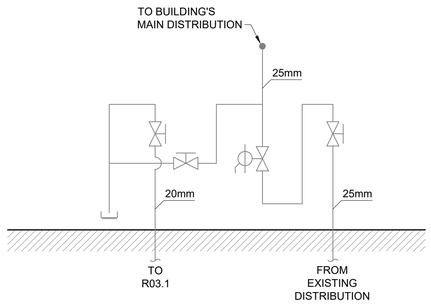
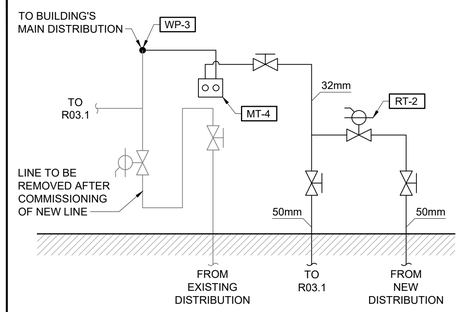
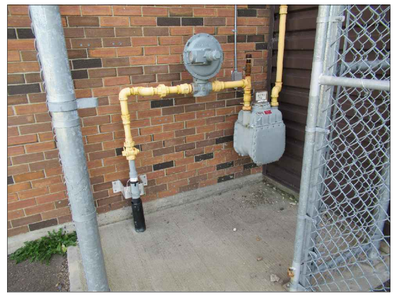
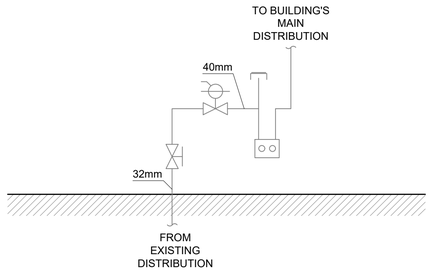
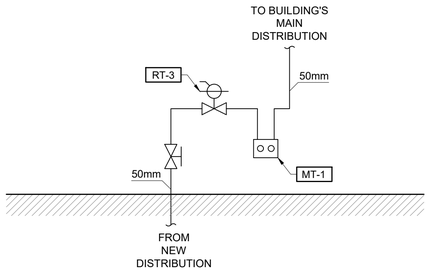
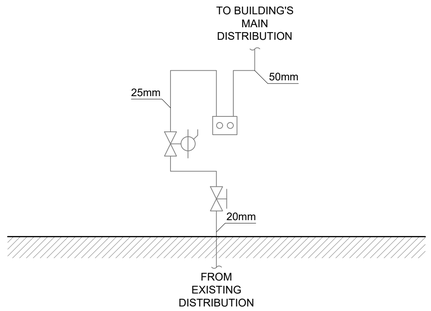
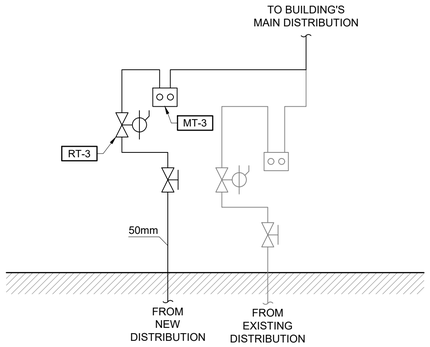
Designed by / Conçu par: **DMD**
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin

NATURAL GAS RISER LOCATIONS & SCHEMATIC DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C103 4 OF 11	R00

NATURAL GAS RISERS

LOCATION # & BUILDING NAME	EXISTING CONDITION PHOTOS	EXISTING CONDITIONS SCHEMATIC	PROPOSED SCHEMATICS	CONSTRUCTION NOTES
R03.2 PFV BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-3". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R04 GYM				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING, IN THE LOCATION OF THE EXISTING CONDITION LOCATION. • CORE A HOLE THROUGH THE EXISTING CONCRETE SLAB TO ACCOMMODATE A CONNECTION TO THE FACILITY SUPPLY AND PROVIDE SLEEVE. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. NOTE THE NEW NATURAL GAS DISTRIBUTION MUST BE CONTAINED WITHIN THE EXISTING FENCING. • COMMISSION THE NEW GAS SERVICE.
R05 GATEHOUSE				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.

SCHEMATIC LEGEND

ITEM	SYMBOL	ITEM	SYMBOL
GAS LINE (EXISTING)		GAS LINE	
FITTING - GATE VALVE (EXISTING)		FITTING - GATE VALVE	
FITTING - GAS PRESSURE REGULATOR (EXISTING)		FITTING - GAS PRESSURE REGULATOR	
DEVICE - GAS METER (EXISTING)		DEVICE - GAS METER	
FITTING - END CAP (EXISTING)			

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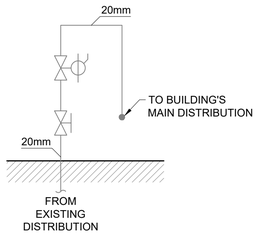
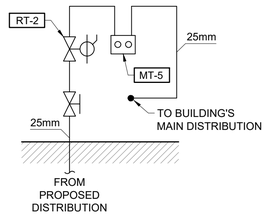
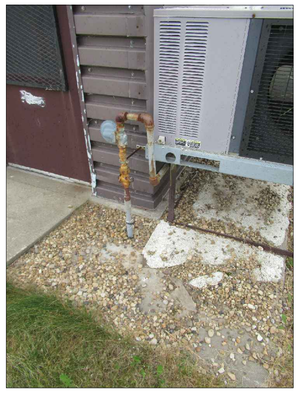
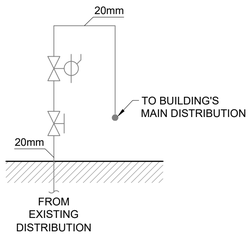
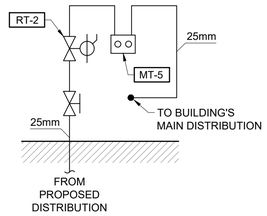
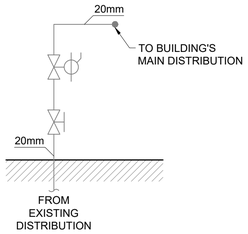
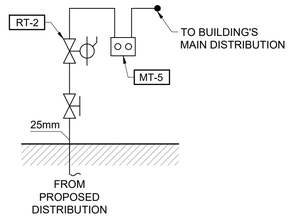
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin

NATURAL GAS RISER LOCATIONS & SCHEMATIC DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C104 5 OF 11	R00

NATURAL GAS RISERS

LOCATION # & BUILDING NAME	EXISTING CONDITION PHOTOS	EXISTING CONDITIONS SCHEMATIC	PROPOSED SCHEMATICS	CONSTRUCTION NOTES
R06 NORTH WEST GUARD TOWER				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R07 NORTH EAST GUARD TOWER				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R08 SOUTH EAST GUARD TOWER				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.

SCHEMATIC LEGEND			
ITEM	SYMBOL	ITEM	SYMBOL
GAS LINE (EXISTING)		GAS LINE	
FITTING - GATE VALVE (EXISTING)		FITTING - GATE VALVE	
FITTING - GAS PRESSURE REGULATOR (EXISTING)		FITTING - GAS PRESSURE REGULATOR	
DEVICE - GAS METER (EXISTING)		DEVICE - GAS METER	
FITTING - END CAP (EXISTING)			

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2021-05-17
Permit to Practice #P-6498

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5	-	-
4	-	-
3	-	-
2	ISSUED FOR TENDER	2021-05-14
1	99% DESIGN SUBMISSION	2021-03-26
0	66% DESIGN SUBMISSION	2021-02-26

Client / client
PUBLIC WORKS & GOVERNMENT SERVICES
9700 JASPER AVENUE, SUITE 1000
EDMONTON, AB T5J 4C3

Project title / Projet
CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB

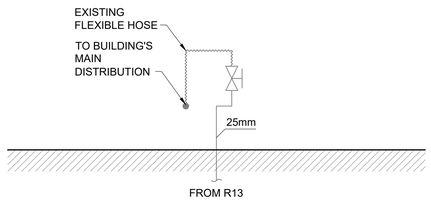
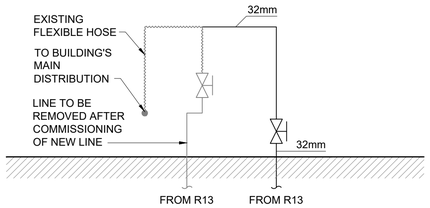
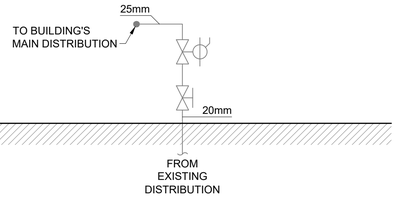
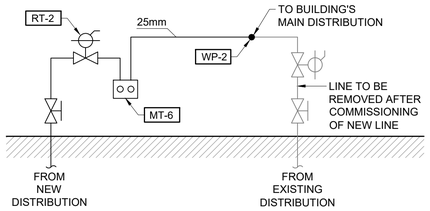
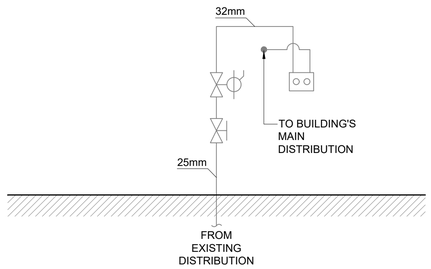
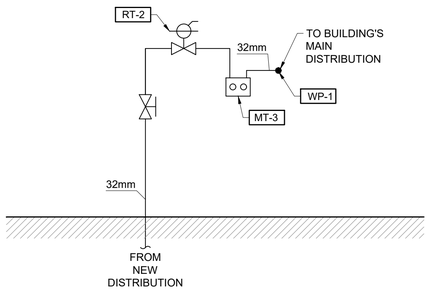
CSC EMSI
NATURAL GAS
DISTRIBUTION UPGRADE

Designed by / Conçu par: **DMD**
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin
NATURAL GAS RISER LOCATIONS & SCHEMATIC DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C105 6 OF 11	R00

NATURAL GAS RISERS

LOCATION # & BUILDING NAME	EXISTING CONDITION PHOTOS	EXISTING CONDITIONS SCHEMATIC	PROPOSED SCHEMATICS	CONSTRUCTION NOTES
R09 COMMISSIONAIRE TRAILER				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • CONNECT THE NEW GAS METER TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R10 GENSET BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-2". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R11 PUMPHOUSE				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-1". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.

SCHEMATIC LEGEND

ITEM	SYMBOL	ITEM	SYMBOL
GAS LINE (EXISTING)		GAS LINE	
FITTING - GATE VALVE (EXISTING)		FITTING - GATE VALVE	
FITTING - GAS PRESSURE REGULATOR (EXISTING)		FITTING - GAS PRESSURE REGULATOR	
DEVICE - GAS METER (EXISTING)		DEVICE - GAS METER	
FITTING - END CAP (EXISTING)			

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CSC EMSI
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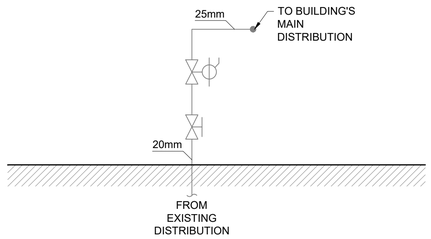
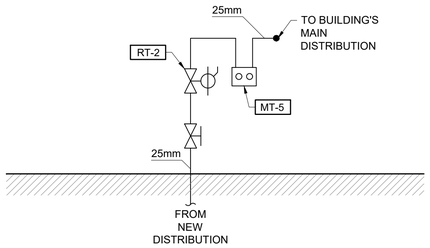
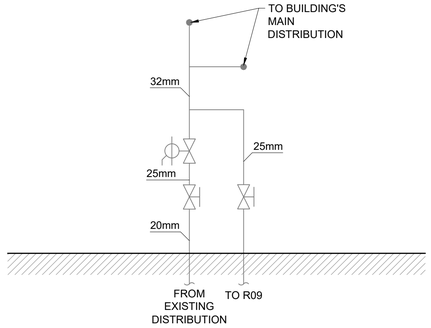
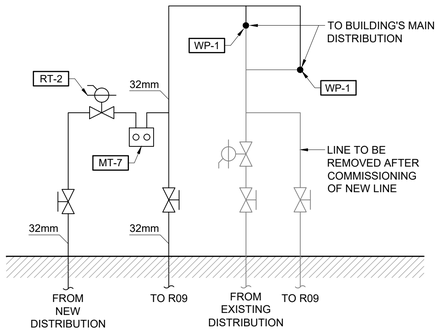
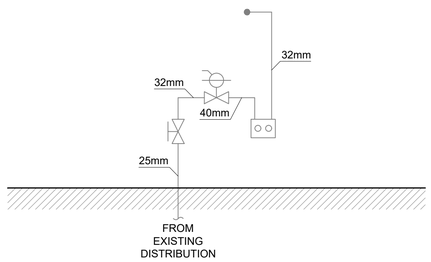
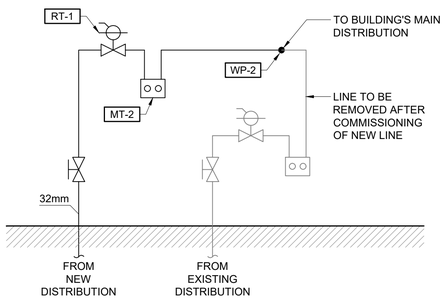
Designed by / Conçu par: **DMD**
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin
NATURAL GAS RISER LOCATIONS & SCHEMATIC DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C106 7 OF 11	R00

NATURAL GAS RISERS

LOCATION # & BUILDING NAME	EXISTING CONDITION PHOTOS	EXISTING CONDITIONS SCHEMATIC	PROPOSED SCHEMATICS	CONSTRUCTION NOTES
R12 SOUTH WEST GUARD TOWER				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R13 ADMINISTRATION BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-1". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE.
R14 GO BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-1". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE. • REMOVE EXISTING CONCRETE BARRIERS. • INSTALL NEW BOLLARDS TO PROTECT THE NEW NATURAL GAS DISTRIBUTION.

SCHEMATIC LEGEND

ITEM	SYMBOL	ITEM	SYMBOL
GAS LINE (EXISTING)		GAS LINE	
FITTING - GATE VALVE (EXISTING)		FITTING - GATE VALVE	
FITTING - GAS PRESSURE REGULATOR (EXISTING)		FITTING - GAS PRESSURE REGULATOR	
DEVICE - GAS METER (EXISTING)		DEVICE - GAS METER	
FITTING - END CAP (EXISTING)			

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Client / client
PUBLIC WORKS & GOVERNMENT SERVICES
9700 JASPER AVENUE, SUITE 1000
EDMONTON, AB T5J 4C3

Project title / Projet
CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB

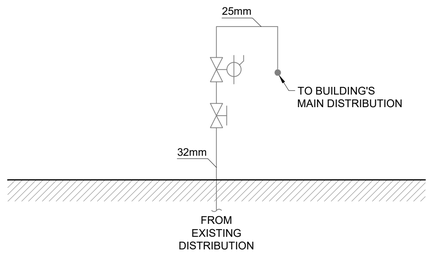
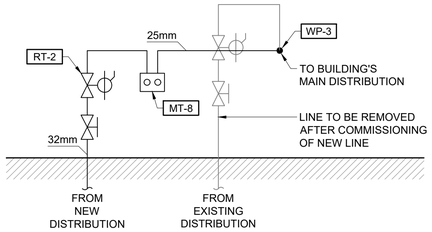
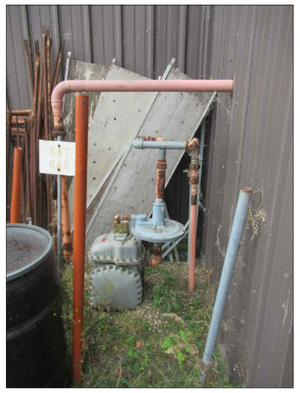
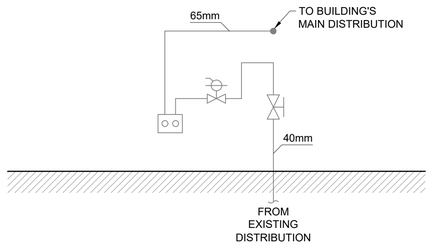
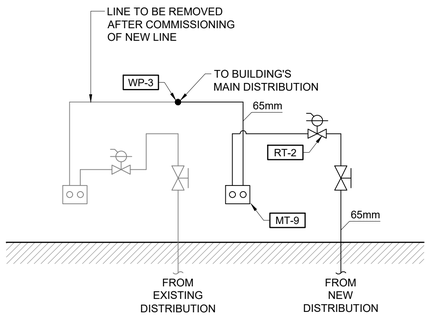
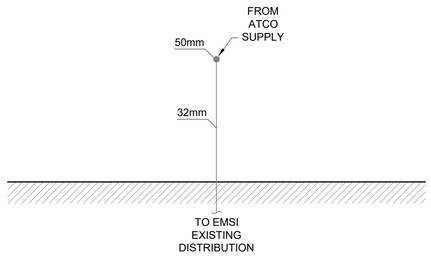
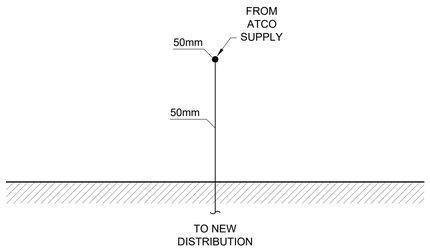
CSC EMSI
NATURAL GAS
DISTRIBUTION UPGRADE

Designed by / Conçu par: **DMD**
Drawn by / Dessiné par: **KKM**
Approved by / Approuvé par: **RLG**
PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin
NATURAL GAS RISER LOCATIONS & SCHEMATIC DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.109089.001 CSC:539-4623	C107 8 OF 11	R00

NATURAL GAS RISERS

LOCATION # & BUILDING NAME	EXISTING CONDITION PHOTOS	EXISTING CONDITIONS SCHEMATIC	PROPOSED SCHEMATICS	CONSTRUCTION NOTES
R15 SOUTH WEST GUARD TOWER				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-3". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE. • REMOVE EXISTING METAL BARRIERS. • INSTALL NEW BOLLARDS TO PROTECT THE NEW NATURAL GAS DISTRIBUTION.
R16 WAREHOUSE/GARBAGE BUILDING				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL A NATURAL GAS METER AND REGULATOR ON THE EXTERIOR OF THE BUILDING. • ENLARGE THE EXISTING WALL PENETRATION FOR THE NEW NATURAL GAS PIPING. • SLEEVE THE NATURAL GAS PIPING PENETRATION PER WALL PENETRATION DETAIL, "WP-3". • CONNECT THE NEW GAS METER AND REGULATOR TO THE BUILDING'S DISTRIBUTION AND NEW FACILITY SUPPLY. • COMMISSION THE NEW GAS SERVICE. • REMOVE EXISTING METAL BARRIERS. • INSTALL NEW BOLLARDS TO PROTECT THE NEW NATURAL GAS DISTRIBUTION.
R17 MAIN SERVICE ENTRANCE				• REMOVE EXISTING NATURAL GAS PIPING SHOWN IN THE EXISTING CONDITIONS SCHEMATIC. • INSTALL PROPOSED NATURAL GAS LINE AS SHOWN IN THE PROPOSED SCHEMATIC.

SCHEMATIC LEGEND			
ITEM	SYMBOL	ITEM	SYMBOL
GAS LINE (EXISTING)		GAS LINE	
FITTING - GATE VALVE (EXISTING)		FITTING - GATE VALVE	
FITTING - GAS PRESSURE REGULATOR (EXISTING)		FITTING - GAS PRESSURE REGULATOR	
DEVICE - GAS METER (EXISTING)		DEVICE - GAS METER	
FITTING - END CAP (EXISTING)			

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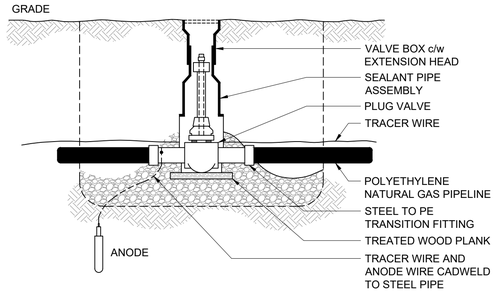
R.109089.001 CSC:539-4623	C108 9 OF 11	R00

NOTE:

MARKER POST TO BE PLACED WITHIN 0.25m OF VALVE ASSEMBLY.

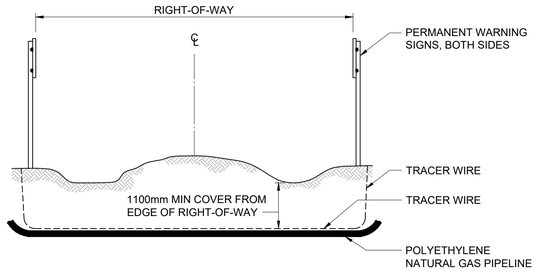


1 C109 TYPICAL U/G ISOLATION VALVE DETAIL

SCALE: NTS

NOTE:

AN ADDITIONAL TRACER WIRE SHOULD BE LAID CONTINUOUSLY ACROSS THE R.O.W. AND, WHERE PRACTICAL, CAN BE BROUGHT TO THE SURFACE IN A PROTECTIVE SLEEVE ON ONE SIDE OF THE R.O.W.

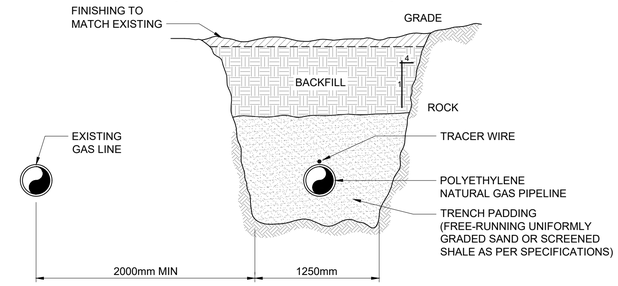


2 C109 TYPICAL ROAD CROSSING DETAIL

SCALE: NTS

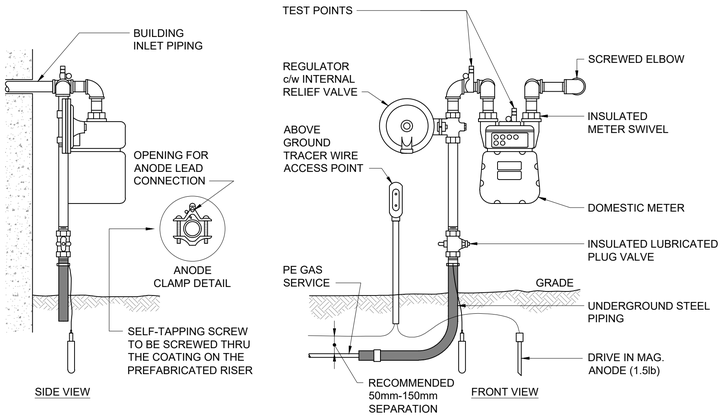
NOTE:

COMPACTED BEDDING AND BACKFILL MATERIAL AS PER SPECIFICATIONS.



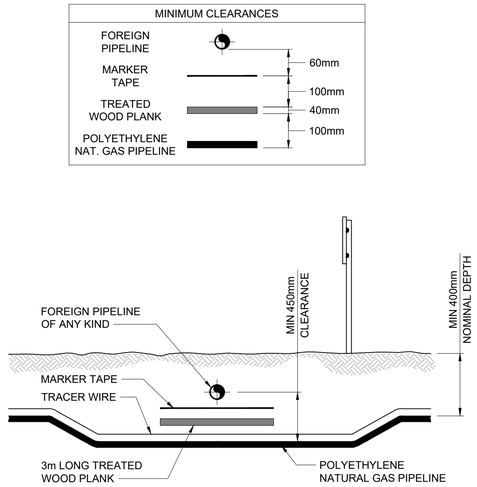
3 C109 TYPICAL SAND-PADDED ROCK DITCH CROSS SECTION DETAIL

SCALE: NTS



4 C109 TYPICAL DOMESTIC METER SET

SCALE: NTS

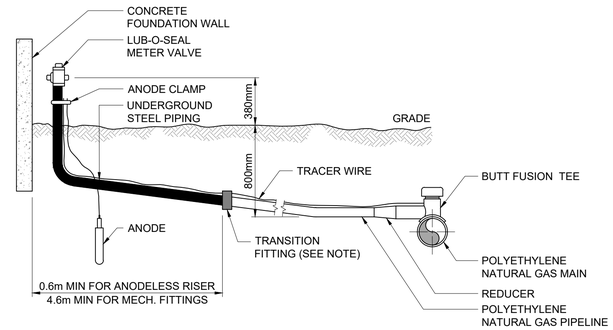


5 C109 TYPICAL PIPELINE CROSSING DETAIL

SCALE: NTS

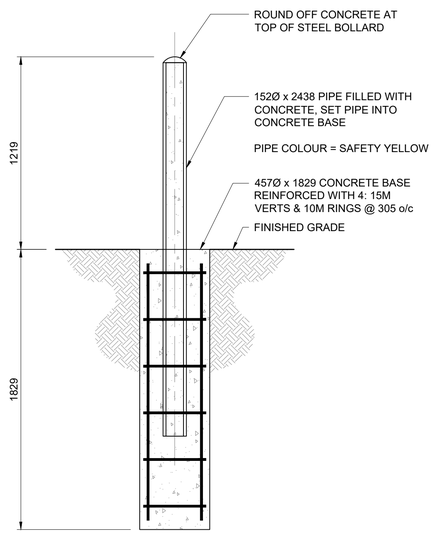
NOTE:

IN ACCORDANCE WITH CSA B149 AND THE NEW ALBERTA GAS CODE REGULATION, MECHANICAL TRANSITION FITTINGS (STEEL TO POLYETHYLENE) ARE NOT PERMITTED WITHIN 4.6m (15ft) OF A BUILDING.



6 C109 TYPICAL RISER ASSEMBLY DETAIL

SCALE: NTS

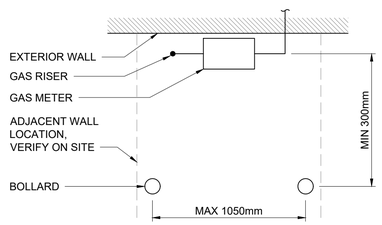


7 C109 TYPICAL BOLLARD DETAIL

SCALE: 1:20

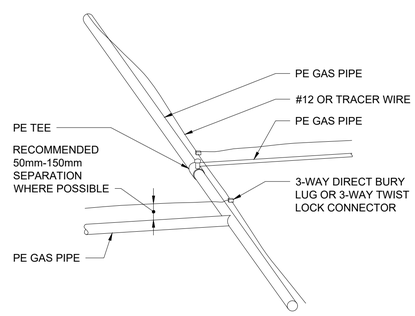
NOTES:

1. BOLLARDS ARE REQUIRED IN ABSENCE OF ADJACENT WALLS (SHOWN AS DASHED LINE).
2. MAXIMUM DISTANCE BETWEEN BOLLARD AND WALL IS 1050mm.
3. MINIMUM WIDTH BETWEEN BOLLARDS MUST ENSURE ENTIRE GAS LINE IS PROTECTED BY BOLLARDS. IF SERVICE EXTENDS OUTSIDE A MAXIMUM DISTANCE OF 1050mm, A THIRD BOLLARD MUST BE ADDED.



8 C109 TYPICAL BOLLARD LOCATION DETAIL

SCALE: NTS



9 C109 TYPICAL TRACER WIRE: PE MAIN WITH PE TAP TEE DETAIL

SCALE: NTS

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2021-05-17
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SEAL

Revision	Description	Date
5	-	-
4	-	-
3	-	-
2	ISSUED FOR TENDER	2021-05-14
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0	66% DESIGN SUBMISSION	2021-02-26

Client / client

PUBLIC WORKS & GOVERNMENT SERVICES

9700 JASPER AVENUE, SUITE 1000
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Project title / Projet

CORRECTIONAL SERVICE OF CANADA
EDMONTON INSTITUTION
EDMONTON, AB

CSC EMSI
NATURAL GAS
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Designed by / Conçu par: **DMD**

Drawn by / Dessiné par: **KKM**

Approved by / Approuvé par: **RLG**

PWGSC Project Manager / Administrateur de Projets TPSGC: **SHAUN HUGHES**

Drawing title / Titre du dessin

CONSTRUCTION DETAILS

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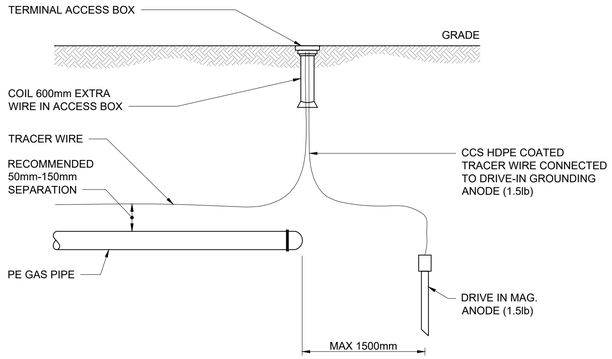
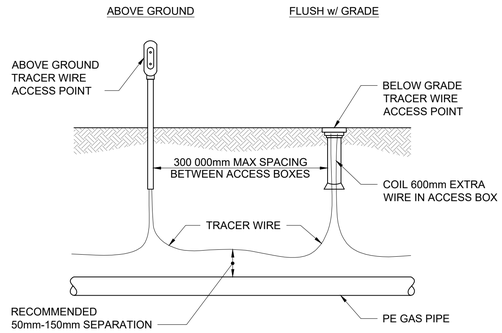
R.109089.001 CSC:539-4623	C109 10 OF 11	R00



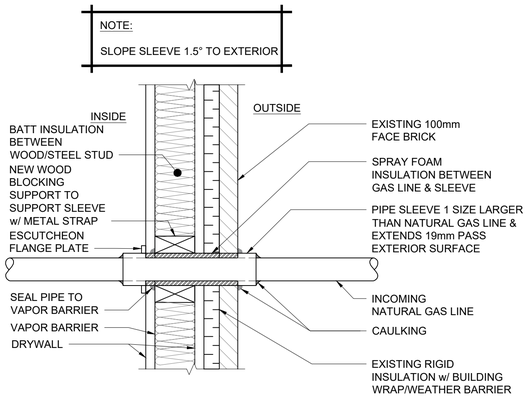
1 C110 TYPICAL END OF MAIN/STUB DETAIL

SCALE: NTS



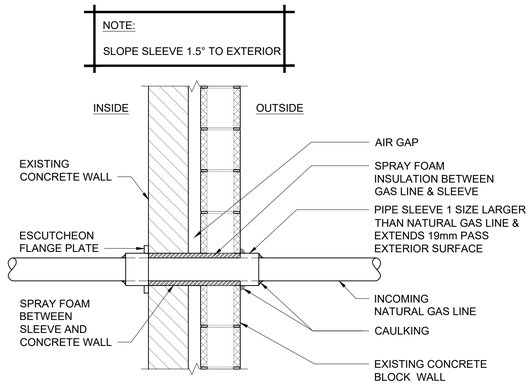
2 C110 TRACER WIRE ACCESS BOX DETAIL

SCALE: NTS



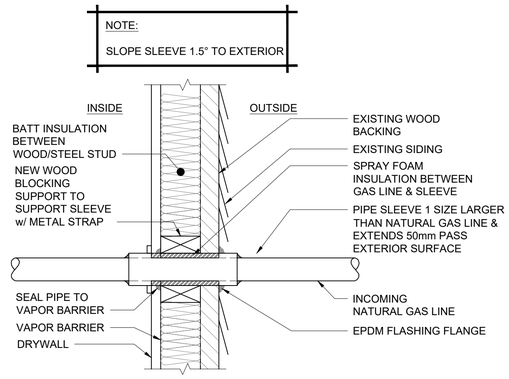
3 C110 WP-1: WALL PENETRATION #1 DETAIL (FOR BRICK WALLS w/ WOOD OR STEEL STUDS)

SCALE: NTS



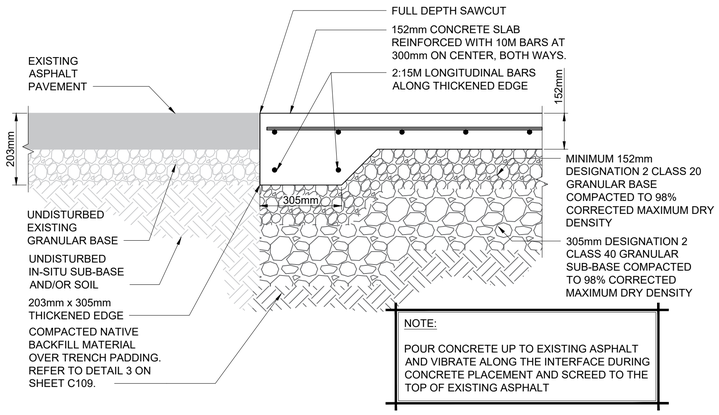
4 C110 WP-2: WALL PENETRATION #2 DETAIL (FOR CONCRETE WALLS)

SCALE: NTS



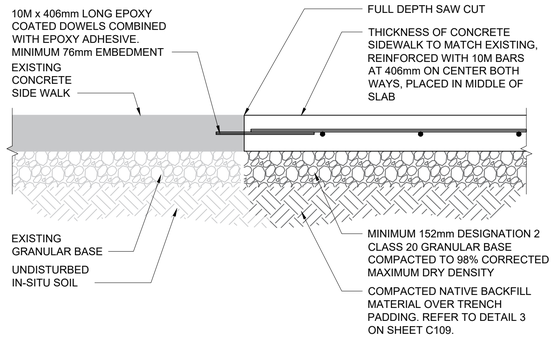
5 C110 WP-3: WALL PENETRATION #3 DETAIL (FOR WALLS w/ EXTERIOR SIDING)

SCALE: NTS



6 C110 TYPICAL CONCRETE PAVEMENT PATCH DETAIL

SCALE: NTS



7 C110 TYPICAL CONCRETE SIDEWALK/PAD INSTALLATION DETAIL

SCALE: NTS

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R.109089.001 CSC:539-4623	C110 11 OF 11	R00

PWGSC – A1 – 841X594

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