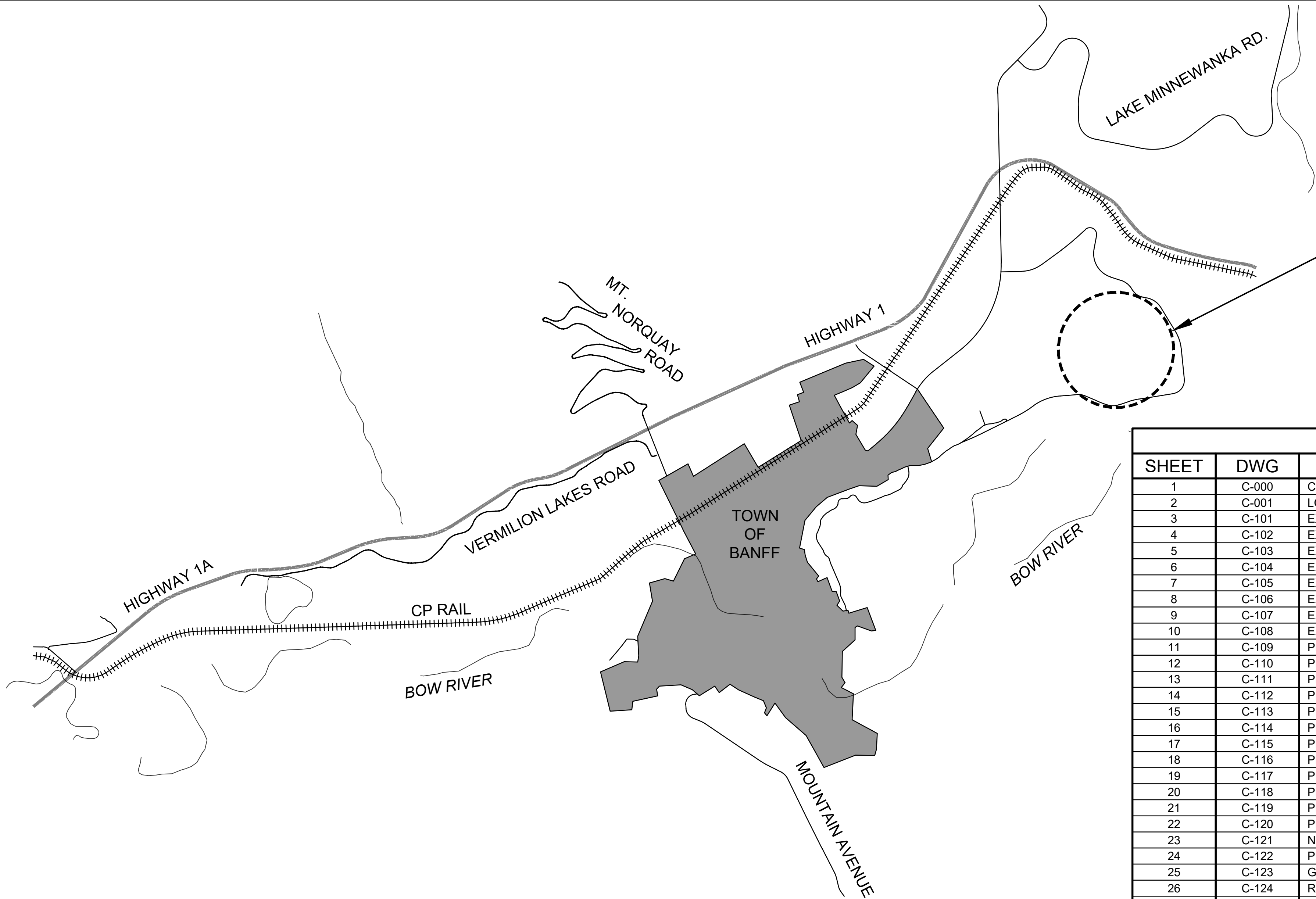


LOCATION PLAN

N.T.S.



TUNNEL MOUNTAIN  
VILLAGE 1

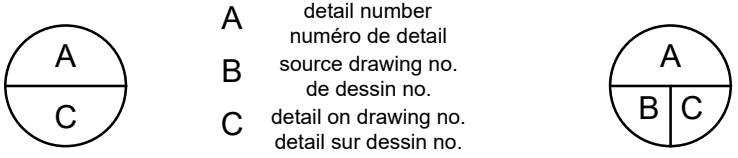
DRAWING INDEX		
SHEET	DWG	DRAWING TITLE
1	C-000	COVER
2	C-001	LOCATION PLAN & INDEX
3	C-101	EXISTING SHALLOW UTILITIES PLAN, SHEET 1 OF 2
4	C-102	EXISTING SHALLOW UTILITIES PLAN, SHEET 2 OF 2
5	C-103	EXISTING SANITARY SEWER PLAN, SHEET 1 OF 2
6	C-104	EXISTING SANITARY SEWER PLAN, SHEET 2 OF 2
7	C-105	EXISTING WATER PLAN, SHEET 1 OF 2
8	C-106	EXISTING WATER PLAN, SHEET 2 OF 2
9	C-107	EXISTING SURFACE PLAN, SHEET 1 OF 2
10	C-108	EXISTING SURFACE PLAN, SHEET 2 OF 2
11	C-109	PROPOSED SANITARY LAYOUT PLAN, SHEET 1 OF 2
12	C-110	PROPOSED SANITARY LAYOUT PLAN, SHEET 2 OF 2
13	C-111	PROPOSED WATER LAYOUT PLAN, SHEET 1 OF 2
14	C-112	PROPOSED WATER LAYOUT PLAN, SHEET 2 OF 2
15	C-113	PROPOSED GAS LAYOUT PLAN, SHEET 1 OF 2
16	C-114	PROPOSED GAS LAYOUT PLAN, SHEET 2 OF 2
17	C-115	PROPOSED DEEP & SHALLOW UTILITIES PLAN WITH AERIAL, SHEET 1 OF 2
18	C-116	PROPOSED DEEP & SHALLOW UTILITIES PLAN WITH AERIAL, SHEET 2 OF 2
19	C-117	PROPOSED DEMOLITION PLAN, SHEET 1 OF 2
20	C-118	PROPOSED DEMOLITION PLAN, SHEET 2 OF 2
21	C-119	PROPOSED UTILITY DISTURBANCE PLAN
22	C-120	PROPOSED HARD REHABILITATION PLAN
23	C-121	NOT USED
24	C-122	PROPOSED FIRE HYDRANT LOCATION AND COVERAGE PLAN
25	C-123	GRAVEL BUS TURNAROUND PLAN
26	C-124	RV DUMP STATION DETAIL PLAN
27	C-125	LANDSCAPE RESTORATION PLAN
28	E-101	POWER AND COMMUNICATIONS LAYOUT PLAN, SHEET 1 OF 2
29	E-102	POWER AND COMMUNICATIONS LAYOUT PLAN, SHEET 2 OF 2
30	E-201	STREET LIGHTING LAYOUT PLAN, SHEET 1 OF 3
31	E-202	STREET LIGHTING LAYOUT PLAN, SHEET 2 OF 3
32	E-203	STREET LIGHTING LAYOUT PLAN, SHEET 3 OF 3
33	E-301	ELECTRICAL SCHEDULES AND DETAILS, SHEET 1 OF 3
34	E-302	ELECTRICAL SCHEDULES AND DETAILS, SHEET 2 OF 3
35	E-302	ELECTRICAL SCHEDULES AND DETAILS, SHEET 3 OF 3
36	C-200	PLAN PROFILE, KEY PLAN
37	C-201	PLAN PROFILE, BLOCK C NORTH CONNECTION TO LOOP K, STA 1+000 TO STA 1+300
38	C-202	PLAN PROFILE, LOOP K TO LOOP F, STA 1+290 TO STA 1+610
39	C-203	PLAN PROFILE, LOOP F TO MAIN, STA 1+590 TO STA 1+890
40	C-204	PLAN PROFILE, BLOCK C SOUTH CONNECTION, STA 2+000 TO STA 2+300
41	C-205	PLAN PROFILE, MAIN AT LOOP A, STA 2+290 TO STA 2+610
42	C-206	PLAN PROFILE, MAIN ON MAIN ACCESS, STA 2+600 TO STA 2+840
43	C-207	PLAN PROFILE, LOOP J TO LOOP K, STA 3+000 TO STA 3+200
44	C-208	PLAN PROFILE, LOOP J TO LOOP H, STA 4+000 TO STA 4+280
45	C-209	PLAN PROFILE, LOOP H TO LOOP F, STA 5+000 TO STA 5+260
46	C-210	PLAN PROFILE, LOOP E TO MAIN, STA 6+000 TO STA 6+200
47	C-211	PLAN PROFILE, LOOP G TO LOOP E, STA 7+000 TO STA 7+280
48	C-212	PLAN PROFILE, LOOP D TO MAIN, STA 8+000 TO STA 8+200 AND STA 9+000 TO STA 9+080
49	C-213	PLAN PROFILE, MAIN TO LIFT STATION, STA 10+000 TO STA 10+260
50	C-214	PLAN PROFILE, LOOP B TO MAIN, STA 11+000 TO STA 11+200 AND STA 12+000 TO STA 12+090
51	C-215	PLAN PROFILE, LOOP A TO MAIN, STA 13+000 TO STA 13+200
52	C-216	PLAN PROFILE, LOOP C SERVICE, STA 14+000 TO STA 14+180
53	C-217	PLAN PROFILE, LOOP C TO MAIN, STA 15+000 TO STA 15+210
NEW	C-218	PLAN PROFILE, EXISTING MAIN REPLACEMENT, STA 17+000 TO STA 17+190
54	C-301	TYPICAL SECTIONS
55	C-302	GAS DETAILS
56	C-303	SANITARY DETAILS
57	C-304	WATER DETAILS, SHEET 1 OF 2
58	C-305	WATER DETAILS, SHEET 2 OF 2
59	C-306	DUMP STATION DETAILS
60	C-307	GENERAL DETAILS
61	C-308	WATER BYPASS FLOW METER CHAMBER

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------




Consultant's Stamp  
Sceau de l'expert-conseil

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

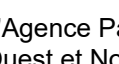
Eng. Stamp  
Sceau de l'ingénieur

PROFESSIONAL ENGINEER  
ALBERTA  
August 15, 2018  
PERMIT NUMBER: P243

Client



Parks Canada Agency  
Western and  
Northern Region



L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil



**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

LOCATION PLAN & INDEX

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.03.26
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	NTS

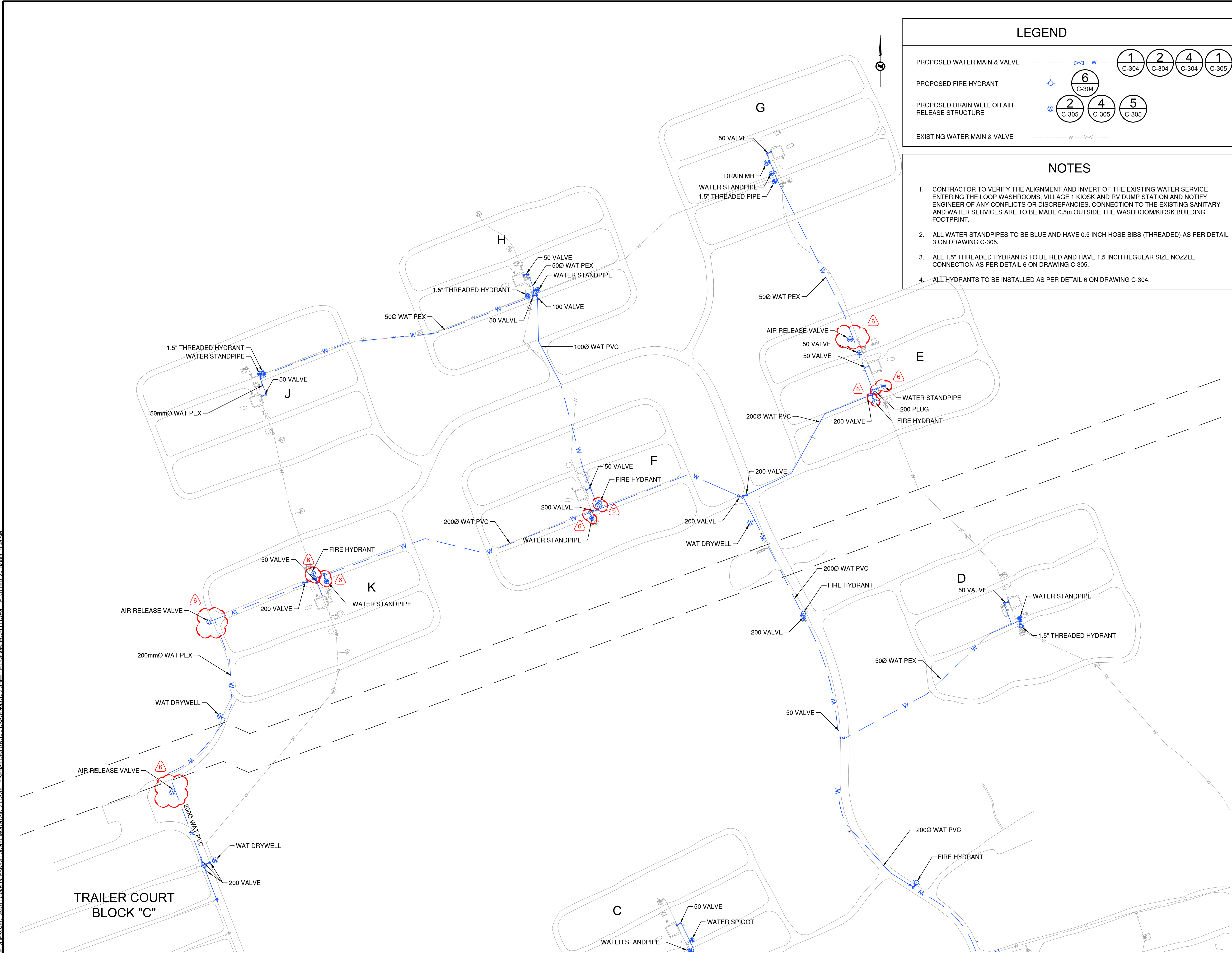
Parks Canada Project Manager / Administrateur de Projets Parcs Canada	
Client Acceptance / Acceptation du client	Approved by / Approuvé par
Parks Canada Responsible Officer / Agent Responsable Parcs Canada	Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Project No. / No. du projet	Asset No. / No. du-bien	Sheet No. / No. de la feuille
2511-00954-00		C-001

Drawing Reference No. / No. de référence du dessin	
--	--



FILE: G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1 - REVISED DESIGN\10-0 DRAWINGS\10-3 SHEET FILES\00954-00-111.DWG - PLOTTED: 20180328 10:59 AM



LEGEND

PROPOSED WATER MAIN & VALVE		1	2	4	1
		C-304	C-304	C-304	C-305
PROPOSED FIRE HYDRANT		6			
		C-304			
PROPOSED DRAIN WELL OR AIR RELEASE STRUCTURE		2	4	5	
		C-305	C-305	C-305	
EXISTING WATER MAIN & VALVE					

NOTES

1. CONTRACTOR TO VERIFY THE ALIGNMENT AND INVERT OF THE EXISTING WATER SERVICE ENTERING THE LOOP WASHROOMS, VILLAGE 1 KIOSK AND RV DUMP STATION AND NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. CONNECTION TO THE EXISTING SANITARY AND WATER SERVICES ARE TO BE MADE 0.5m OUTSIDE THE WASHROOM/KIOSK BUILDING FOOTPRINT.
2. ALL WATER STANDPIPES TO BE BLUE AND HAVE 0.5 INCH HOSE BIBS (THREADED) AS PER DETAIL 3 ON DRAWING C-305.
3. ALL 1.5" THREADED HYDRANTS TO BE RED AND HAVE 1.5 INCH REGULAR SIZE NOZZLE CONNECTION AS PER DETAIL 6 ON DRAWING C-305.
4. ALL HYDRANTS TO BE INSTALLED AS PER DETAIL 6 ON DRAWING C-304.

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM
Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé

A

B

C

detail number  
numéro de detail

source drawing no.  
de dessin no.

detail on drawing no.  
detail sur dessin no.

A

B

C

detail number  
numéro de detail

source drawing no.  
de dessin no.

detail on drawing no.  
detail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

PROFESSIONAL ENGINEER  
INGÉNIEUR  
August 2, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

**TUNNEL MOUNTAIN  
VILLAGE 1**  
  
BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**PROPOSED WATER  
LAYOUT PLAN  
SHEET 1 OF 2**

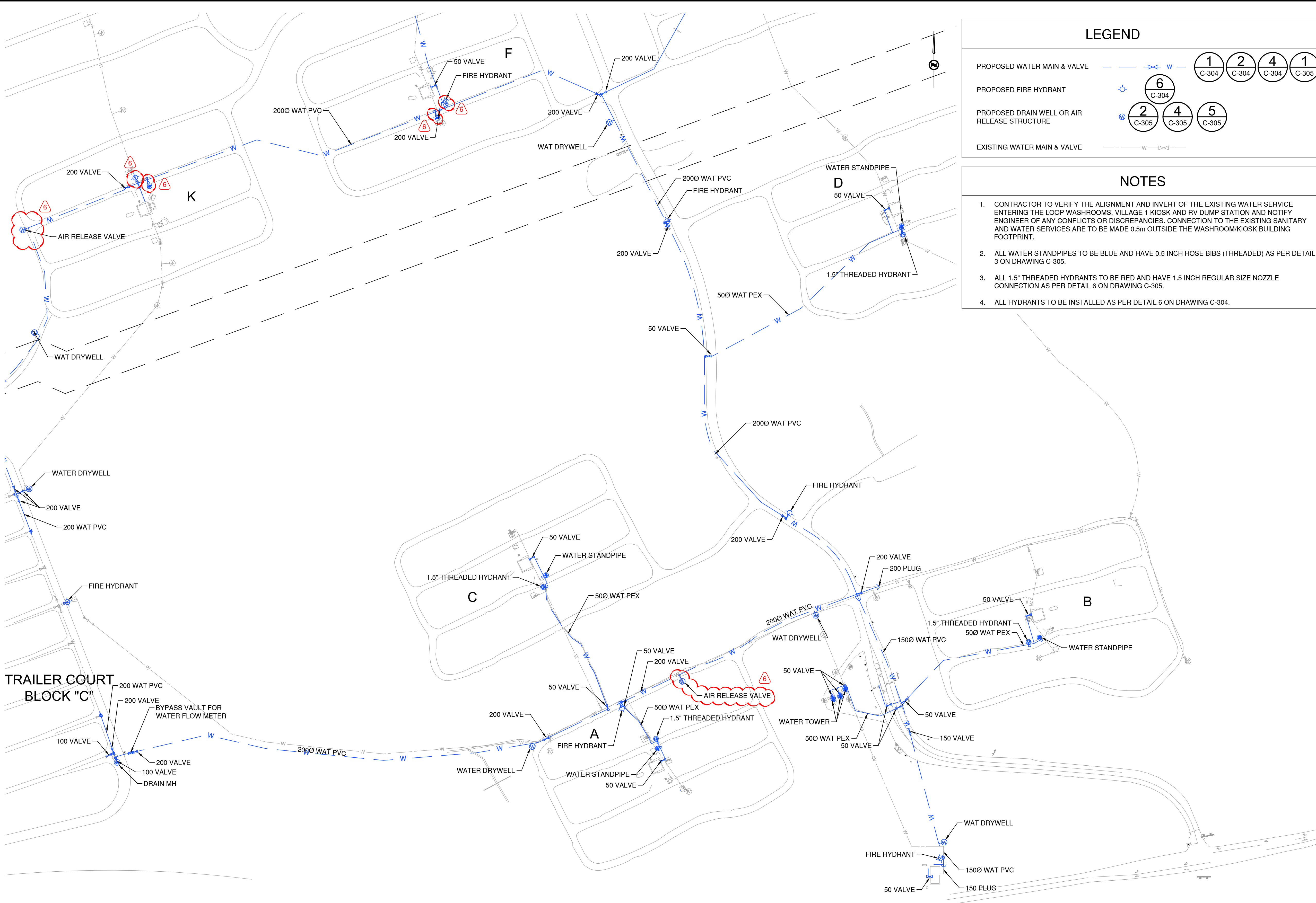
Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.03.26
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	1:1500
Parks Canada Project Manager / Administrateur de Projets Parcs Canada		

Client Acceptance / Acceptation du client		Approved by / Approuvé par	
Parks Canada Responsible Officer / Agent Responsable Parcs Canada		Parks Canada Project Manager / Administrateur de Projets Parcs Canada	
Project No. / No. du projet	Asset No. / No. du bien	Sheet No. / No. de la feuille	
2511-00954-0		C-111	
Drawing Reference No. / No. de référence du dessin			

Paper Size: ANSI D (22 x 34")



FILE: G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1-REHAB DESIGN\10-0 DRAWINGS\10-3 SHEET FILES\00954-00-112.DWG - PLOTTED: 20180328 11:00 AM



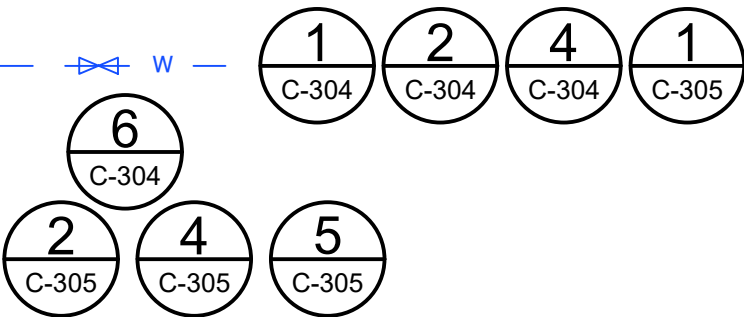
### LEGEND

PROPOSED WATER MAIN & VALVE

PROPOSED FIRE HYDRANT

PROPOSED DRAIN WELL OR AIR  
RELEASE STRUCTURE

EXISTING WATER MAIN & VALVE



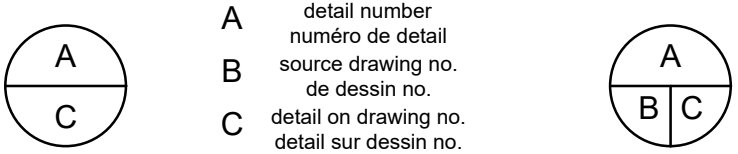
### NOTES

1. CONTRACTOR TO VERIFY THE ALIGNMENT AND INVERT OF THE EXISTING WATER SERVICE ENTERING THE LOOP WASHROOMS, VILLAGE 1 KIOSK AND RV DUMP STATION AND NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. CONNECTION TO THE EXISTING SANITARY AND WATER SERVICES ARE TO BE MADE 0.5m OUTSIDE THE WASHROOM/KIOSK BUILDING FOOTPRINT.
2. ALL WATER STANDPIPES TO BE BLUE AND HAVE 0.5 INCH HOSE BIBS (THREADED) AS PER DETAIL 3 ON DRAWING C-305.
3. ALL 1.5" THREADED HYDRANTS TO BE RED AND HAVE 1.5 INCH REGULAR SIZE NOZZLE CONNECTION AS PER DETAIL 6 ON DRAWING C-305.
4. ALL HYDRANTS TO BE INSTALLED AS PER DETAIL 6 ON DRAWING C-304.

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE  
CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE  
HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.  
THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND  
REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION.  
McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY  
LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY  
CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS,  
CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S  
PRIOR WRITTEN CONSENT.  
INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS  
EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY  
UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED  
FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL  
EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL  
CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------



Consultant's Stamp  
Sceau de l'expert-conseil

**PERMIT TO PRACTICE**  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383

The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

**PROFESSIONAL ENGINEER**  
ALBERTA  
ANGUST 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

**TUNNEL MOUNTAIN  
VILLAGE 1**

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**PROPOSED WATER  
LAYOUT PLAN  
SHEET 2 OF 2**

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.03.26
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	1:1500

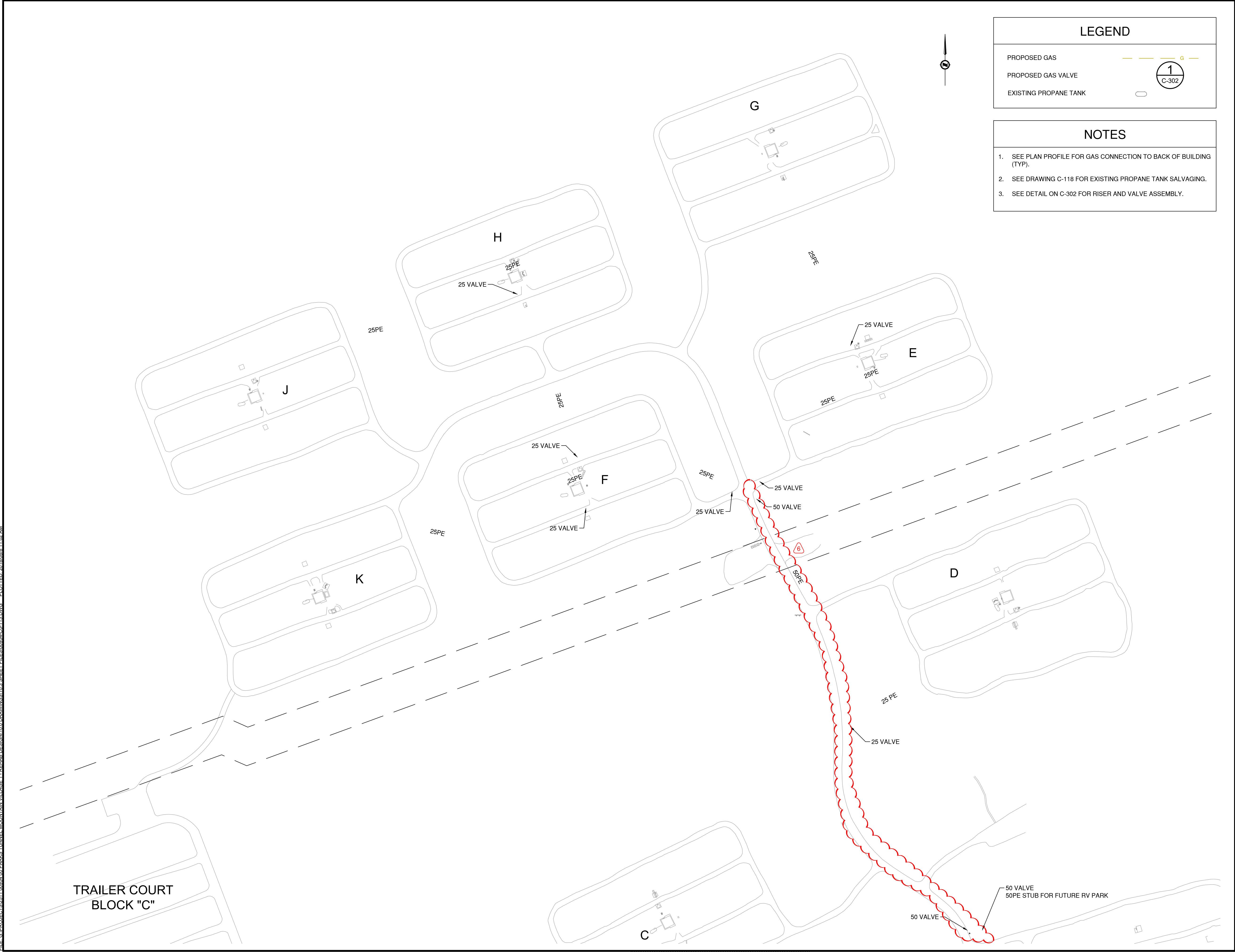
Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par
<hr/>	<hr/>
Parks Canada Responsible Officer / Agent Responsable Parcs Canada	Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Project No. / No. du projet	Asset No. / No. du bien	Sheet No. No. de la feuille
2511-00954-0		C-112
Drawing Reference No. / No. de référence du dessin		



FILE:G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1-REHAB DESIGN\10-0 DRAWINGS\10-3 SHEET FILES\00954-00-113.DWG - PLOTTED: 20180818 11:02 AM



LEGEND

PROPOSED GAS

---

G

PROPOSED GAS VALVE

1

C-302

EXISTING PROPANE TANK

NOTES

1. SEE PLAN PROFILE FOR GAS CONNECTION TO BACK OF BUILDING (TYP).

2. SEE DRAWING C-118 FOR EXISTING PROPANE TANK SALVAGING.

3. SEE DETAIL ON C-302 FOR RISER AND VALVE ASSEMBLY.

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT. INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	RA	KA
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	RA	KA
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	RA	KA
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	RA	KA
1	2018.05.23	ISSUED FOR TENDER	SS	RA	KA

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------

A

C

A

B

C

detail number  
numéro de détail  
source drawing no.  
de dessin no.  
detail on drawing no.  
détail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil

Eng. Stamp  
Sceau de l'ingénieur

PERMIT TO PRACTICE  
ALTIME ENGINEERING LTD.

Signature


Date June 22 2018

PERMIT NUMBER: P 3479

The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

PROFESSIONAL ENGINEER  
ALTIME  
June 22 2018

Client



Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil



**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

PROPOSED GAS  
LAYOUT PLAN  
SHEET 1 OF 2

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.04.10
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par
<div>Parks Canada Responsible Officer / Agent Responsable Parcs Canada</div>	<div>Parks Canada Project Manager / Administrateur de Projets Parcs Canada</div>

Project No. / No. du projet	Asset No. / No. du-bien	Sheet No. No. de la feuille
2511-00954-0		C-113

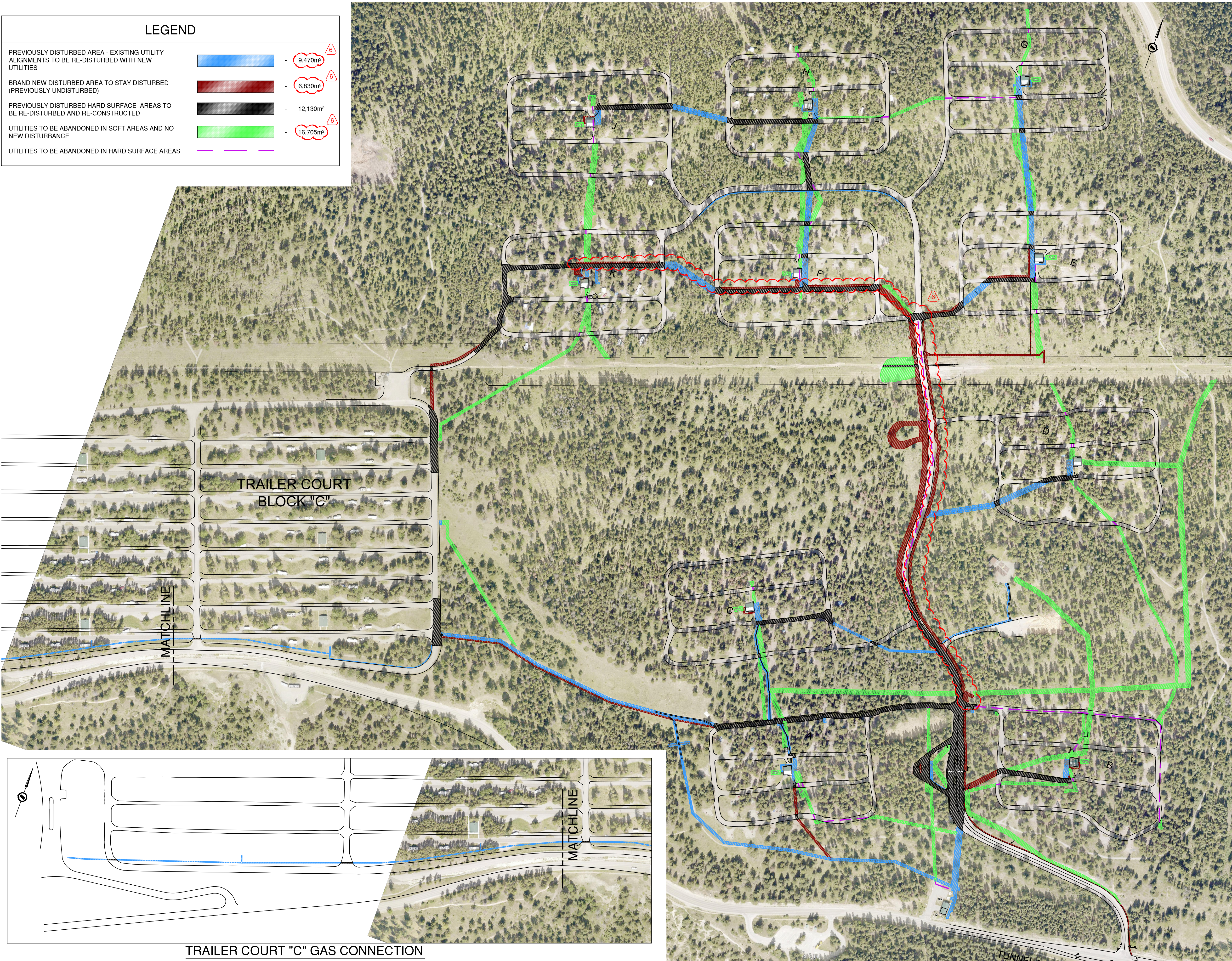
Drawing Reference No. / No. de référence du dessin







FILE G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1-REHAB DESIGN\100 DRAWINGS\103 SHEET FILES\00954-00-119.DWG PLOTTED: 20180818 11:12 AM



THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM
Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé

A

B

C

A

B

C

detail number  
numéro de détail

source drawing no.  
de dessin no.

detail on drawing no.  
détail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil

Eng. Stamp  
Sceau de l'ingénieur

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

PROFESSIONAL ENGINEER  
ALBERTA  
August 18, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

**TUNNEL MOUNTAIN  
VILLAGE 1**  
  
BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**PROPOSED UTILITY  
DISTURBANCE PLAN**

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.04.03
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	1:1000
Parks Canada Project Manager / Administrateur de Projets Parcs Canada		
Client Acceptance / Acceptation du client		Approved by / Approuvé par
Parks Canada Responsible Officer / Agent Responsable Parcs Canada		Parks Canada Project Manager / Administrateur de Projets Parcs Canada
Project No. / No. du projet	Asset No. / No. du-bien	Sheet No. / No. de la feuille
2511-00954-0		C-119
Drawing Reference No. / No. de référence du dessin		



LEGEND

BALSAM POPLAR OR TREMBLING ASPEN WITH SHRUB PLANTINGS FOR SCREENING  
SEE NOTE 1

530m²

GRASS RESTORATION PLANTING  
SEE NOTE 2

19,340m²

SCREENING SHRUB CLUSTER LOCATION  
SEE NOTE 6

- NOTES
1. BALSAM POPLAR OR TREMBLING ASPEN TO BE PLANTED AT 2.0m SPACING IN ROUGH AND LOOSE SOIL WITH WOODY DEBRIS AT 100 m³/ha AND A MINIMUM 300mm ht IN A #1 POT AT TIME OF PLANTING. TOTAL TREES TO BE PLANTED IS 110 TREES.

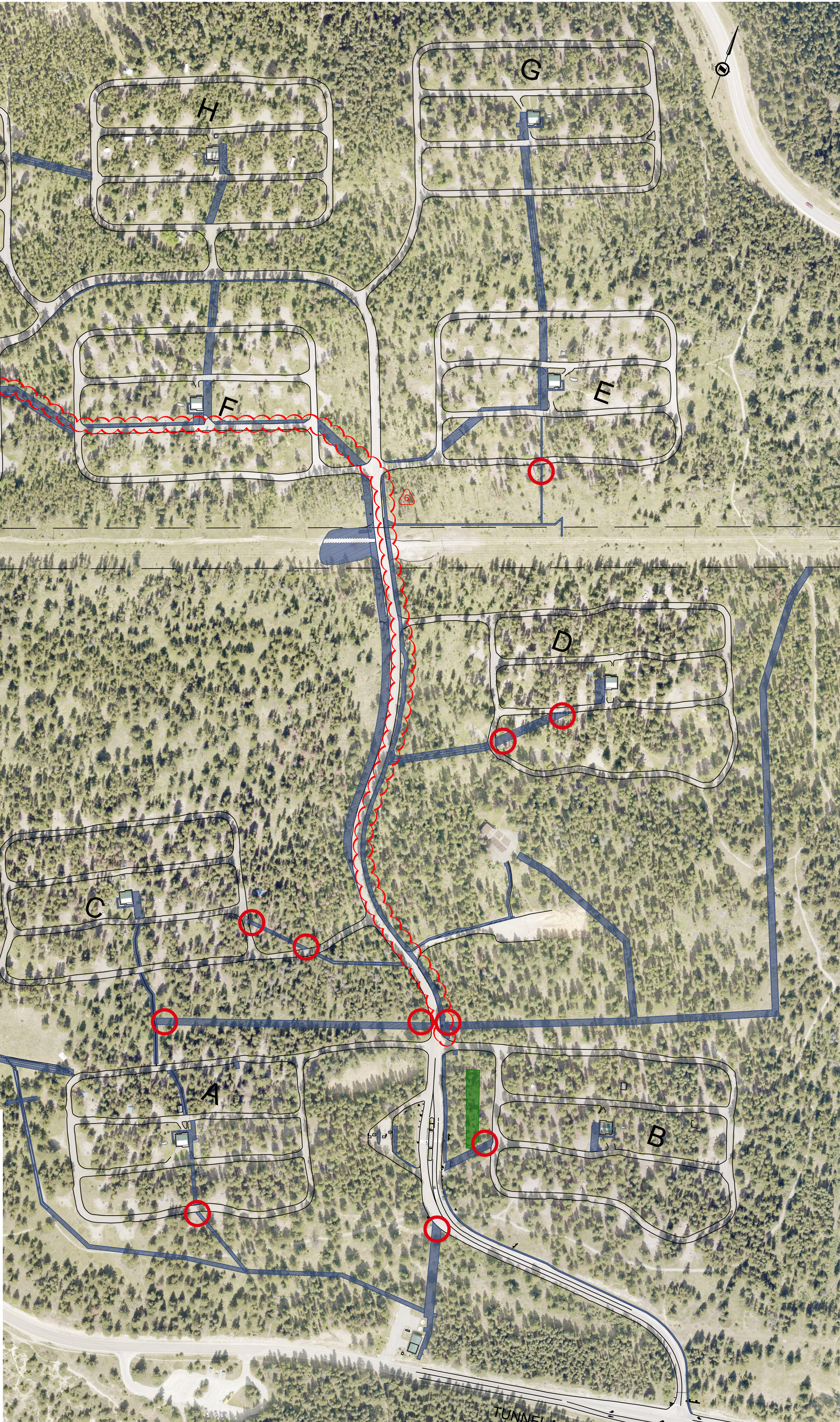
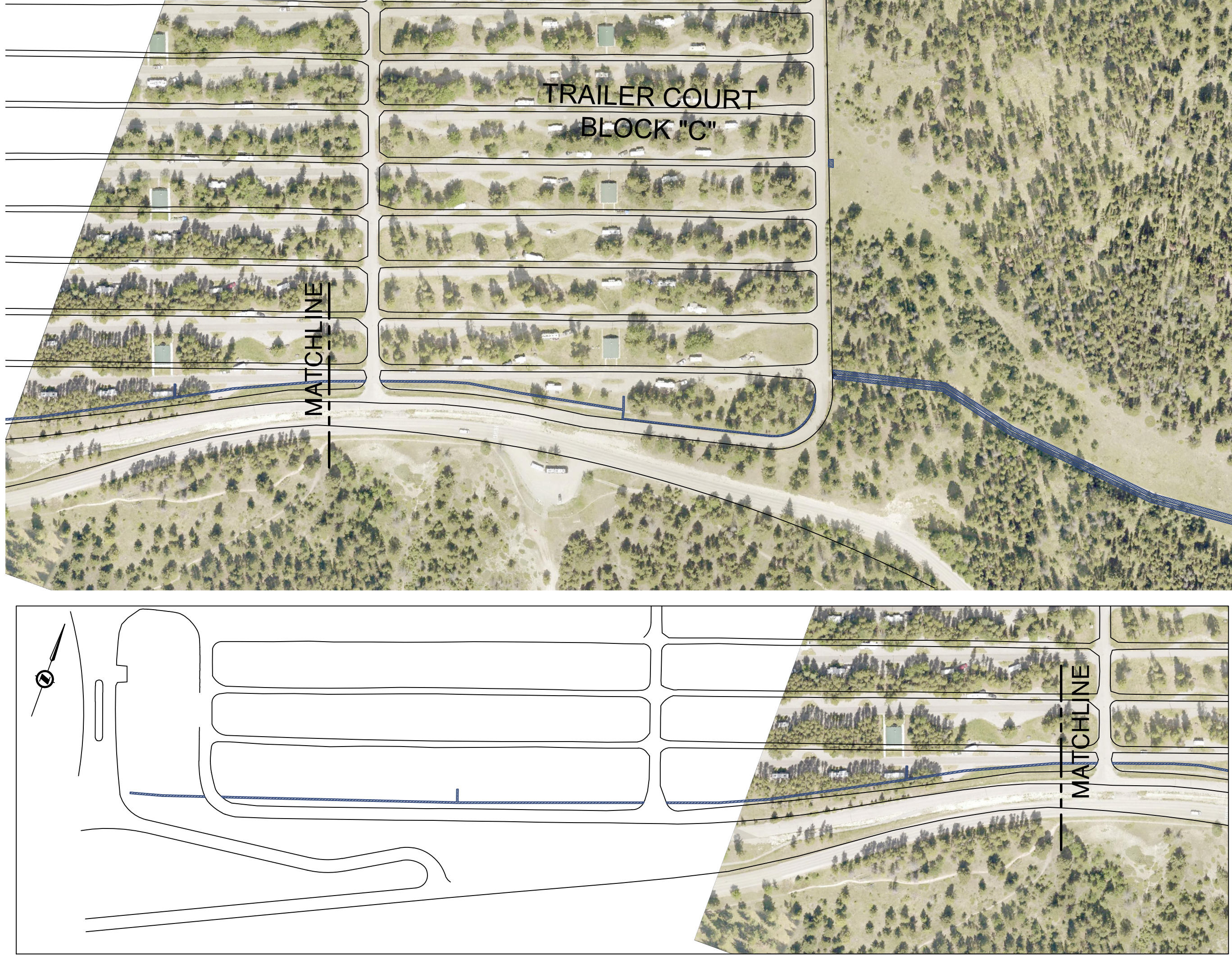
2. SEED OVER MINIMUM 150mm DEPTH LIGHTLY COMPACTED TOPSOIL. SEED MIX AS PER SPECIFICATIONS.

3. RESTORATION PLANTING ZONE TYPE DETERMINED via AERIAL PHOTO. FINAL CONFIGURATION AND PLANTING TYPES TO BE CONFIRMED DURING CONSTRUCTION.

4. ALL PLANT MATERIAL TO BE TRUE TO FORM AND IN GOOD HEALTH AT TIME OF PLANTING.

5. REFER TO SPECIFICATIONS FOR TREE PLANTING INSTRUCTIONS.

6. SCREENING SHRUB CLUSTERS TO CONSIST OF 3 - 5 SHRUBS PER m² WITH A TOTAL OF 15 SHRUBS PER CLUSTER LOCATION. SHRUBS TO BE NATIVE VEGETATION WITH LOW FORAGE VALUE, EG. WOLF WILLOW, SHRUBBY CINQUEFOIL, BEBB'S WILLOW. PREFERABLY, TRANSPLANTING OF EXISTING EXCAVATED SHRUBS FROM UTILITY INSTALLATION TO NEW CLUSTERS SHOULD BE CONSIDERED IF POSSIBLE. PROPOSED LOCATIONS OF SHRUB CLUSTERS AS SHOWN ON THIS DRAWING MAY VARY AND WILL NEED TO BE CONFIRMED BY A PARKS CANADA REPRESENTATIVE BEFORE FINAL INSTALLATION.



THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM
Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé

A

B

C

detail number  
numéro de détail

source drawing no.  
de dessin no.

detail on drawing no.  
détail sur dessin no.

A

B

C

detail number  
numéro de détail

source drawing no.  
de dessin no.

detail on drawing no.  
détail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

PROFESSIONAL ENGINEER  
ALBERTA  
August 15, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

LANDSCAPE  
RESTORATION PLAN

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	1:1000
Parks Canada Project Manager / Administrateur de Projets Parcs Canada		
Client Acceptance / Acceptation du client		Approved by / Approuvé par
Parks Canada Responsible Officer / Agent Responsable Parcs Canada		Parks Canada Project Manager / Administrateur de Projets Parcs Canada
Project No. / No. du projet	Asset No. / No. du-bien	Sheet No. / No. de la feuille
2511-00954-0		C-125
Drawing Reference No. / No. de référence du dessin		





NOTES:

1. CONDUIT ROUTING AND JUNCTION BOX LOCATIONS ARE REPRESENTATIVE OF INTENT AND MAY BE ADJUSTED TO SUIT SITE CONDITION
2. FORTIS METER FOR WASHROOM BUILDING 'G' TO BE MOUNTED OUTSIDE OF WASHROOM BUILDING 'E', ADJACENT TO WASHROOM BUILDING 'E' METER.
3. FORTIS METER FOR WASHROOM BUILDING 'H' & 'J' TO BE MOUNTED OUTSIDE OF WASHROOM BUILDING 'F', ADJACENT TO WASHROOM BUILDING 'F' METER.
4. HIGH VOLTAGE PULL BOXES ARE TO BE AS PER FORTIS STANDARDS (755-0557)
5. PROVIDE PULL BOXES FOR TELUS LINE AS PER TELUS STANDARDS AND TELUS DESIGN.
6. ALL HIGH VOLTAGE WORK AND SECONDARY WORK, UP TO INCLUDING METER(S), TO BE PERFORMED AND INSTALLED TO FORTIS STANDARDS.
- 6.1. INSTALLATION CONTRACTOR MUST BE PRE-APPROVED BY FORTIS.
- 6.2. FINAL INSTALLATION DETAILS FOR HIGH VOLTAGE WORK TO BE AS PER FORTIS DRAWINGS, REFER TO FORTIS DRAWINGS FOR HIGH VOLTAGE TRENCH, PULL BOX, TRANSFORMER PAD & GROUNDING DETAILS.
7. TRANSFORMER PADS TO BE PRECAST CONCRETE PAD FOR SINGLE PHASE MINI - PADMOUNT TRANSFORMER UP TO 167KVA, SEE FORTIS ALBERTA DRAWING 755-0505.
8. DE-ENERGIZING OF EXISTING PRIMARY OVERHEAD (FORTIS) TO BE COORDINATED WITH FORTIS PRIOR TO ANY REMOVAL.

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McElhanney Consulting Services Ltd. (McElhanney). McElhanney will not be held responsible for the improper or unauthorized use of this drawing and design. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McElhanney, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

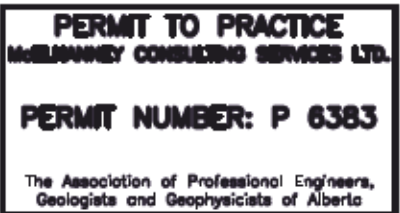
6	2018.08.08	ADDENDUM 1	EH	TI	LL
5	2018.07.20	RE-ISSUED FOR TENDER - FINAL	EH	TI	LL
4	2018.07.03	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
3	2018.06.22	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
2	2018.06.11	ISSUED FOR TENDER - FINAL	RG	TI	LL
1	2018.06.07	ISSUED FOR TENDER	RG	TI	LL

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------

A	detail number numéro de détail
B	source drawing no. de dessin no.
C	detail on drawing no. détail sur dessin no.

A	detail number numéro de détail
B	source drawing no. de dessin no.
C	detail on drawing no. détail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil



Eng. Stamp  
Sceau de l'ingénieur



Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil



Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

POWER AND COMMUNICATIONS  
LAYOUT PLAN  
SHEET 1 OF 2

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	EH/TI	2018.08.08

Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
TI	LL	1:1500

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client

Approved by / Approuvé par

Parks Canada Responsible Officer / Agent Responsable Parcs Canada

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Project No. / No. du projet	Asset No. / No. du bien	Sheet No. No. de la feuille
2511-00954-00		E-101

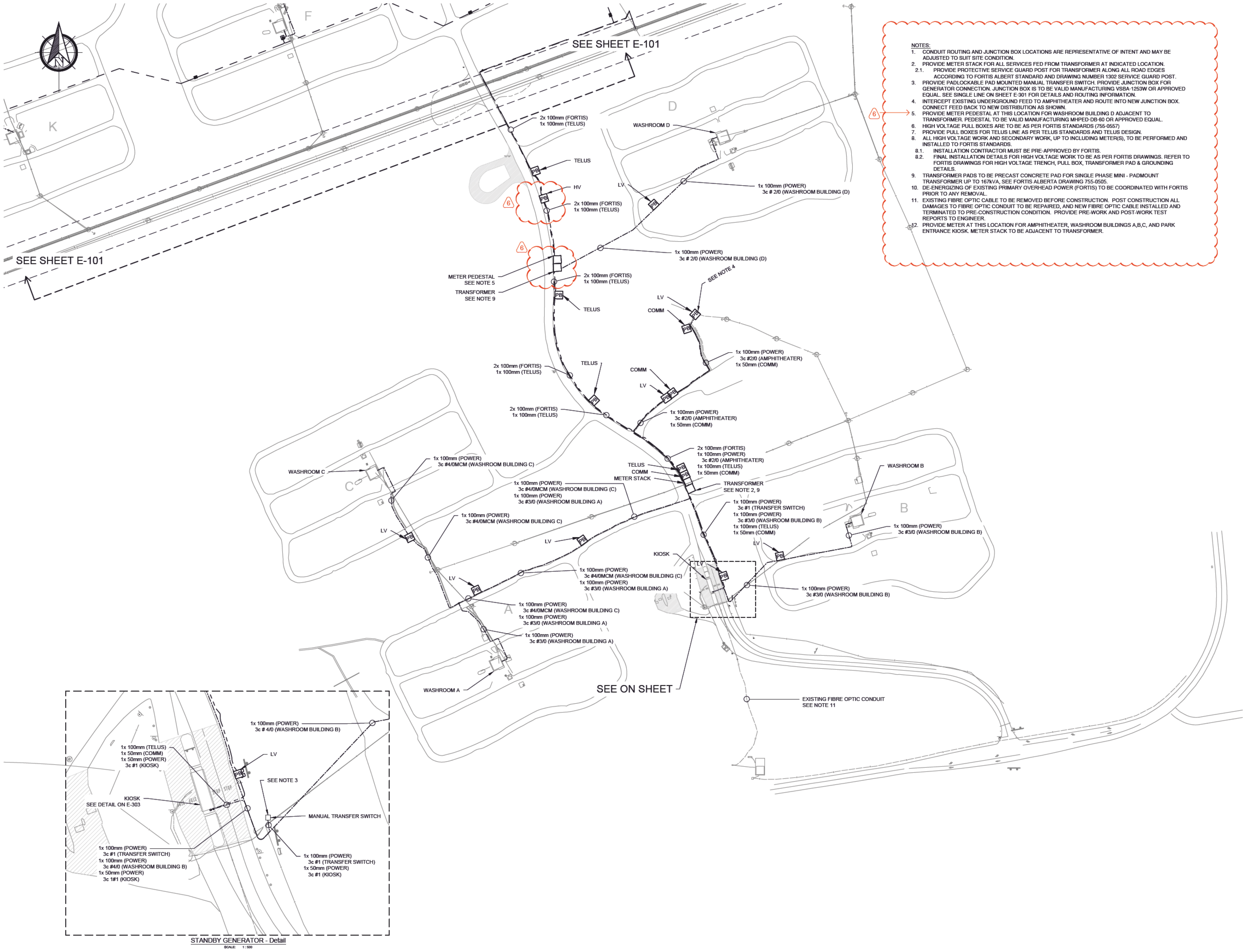
Drawing Reference No. / No. de référence du dessin

E-101

FILE:HPD0045100954-TUNNEL MOUNTAIN VILLAGE 100 DRAWINGS\03 SHEET FILES\00954-E-XX-LAYOUT.DWG PLOTTED: 2018/08/10 08:38 AM



FILE:H:\PROJECTS\TUNNEL MOUNTAIN\TUNNEL MOUNTAIN\DRAWINGS\100 DRAWINGS\103 SHEET E-101.DWG PLOTTED: 2018.08.15 10:38 AM

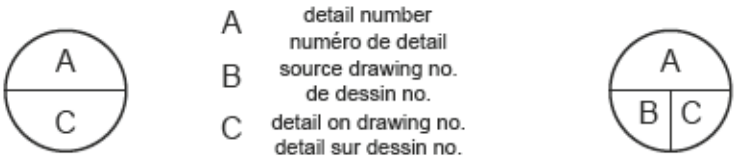


- NOTES:
- CONDUIT ROUTING AND JUNCTION BOX LOCATIONS ARE REPRESENTATIVE OF INTENT AND MAY BE ADJUSTED TO SUIT SITE CONDITION.
  - PROVIDE METER STACK FOR ALL SERVICES FED FROM TRANSFORMER AT INDICATED LOCATION.
  - PROVIDE PROTECTIVE SERVICE GUARD POST FOR TRANSFORMER ALONG ALL ROAD EDGES.
  - PROVIDE PADLOCKABLE PAD MOUNTED MANUAL TRANSFER SWITCH. PROVIDE JUNCTION BOX FOR GENERATOR CONNECTION. JUNCTION BOX IS TO BE VALID MANUFACTURING VSBA-1253W OR APPROVED EQUAL. SEE SINGLE LINE ON SHEET E-301 FOR DETAILS AND ROUTING INFORMATION.
  - INTERCEPT EXISTING UNDERGROUND FEED TO AMPHITHEATER AND ROUTE INTO NEW JUNCTION BOX. CONNECT FEED BACK TO NEW DISTRIBUTION AS SHOWN.
  - PROVIDE METER PEDESTAL AT THIS LOCATION FOR WASHROOM BUILDING D ADJACENT TO TRANSFORMER. PEDESTAL TO BE VALID MANUFACTURING MHPED-DB-80 OR APPROVED EQUAL.
  - HIGH VOLTAGE PULL BOXES ARE TO BE AS PER FORTIS STANDARDS (755-0557).
  - PROVIDE PULL BOXES FOR TELUS LINE AS PER TELUS STANDARDS AND TELUS DESIGN.
  - ALL HIGH VOLTAGE WORK AND SECONDARY WORK, UP TO INCLUDING METER(S), TO BE PERFORMED AND INSTALLED TO FORTIS STANDARDS.
  - INSTALLATION CONTRACTOR MUST BE PRE-APPROVED BY FORTIS.
  - FINAL INSTALLATION DETAILS FOR HIGH VOLTAGE WORK TO BE AS PER FORTIS DRAWINGS. REFER TO FORTIS DRAWINGS FOR HIGH VOLTAGE TRENCH, PULL BOX, TRANSFORMER PAD & GROUNDING DETAILS.
  - TRANSFORMER PADS TO BE PRECAST CONCRETE PAD FOR SINGLE PHASE MINI - PADMOUNT TRANSFORMER UP TO 167KVA, SEE FORTIS ALBERTA DRAWING 755-0505.
  - DE-ENERGIZING OF EXISTING PRIMARY OVERHEAD POWER (FORTIS) TO BE COORDINATED WITH FORTIS PRIOR TO ANY REMOVAL.
  - EXISTING FIBRE OPTIC CABLE TO BE REMOVED BEFORE CONSTRUCTION. POST CONSTRUCTION ALL DAMAGES TO FIBRE OPTIC CONDUIT TO BE REPAIRED, AND NEW FIBRE OPTIC CABLE INSTALLED AND TERMINATED TO PRE-CONSTRUCTION CONDITION. PROVIDE PRE-WORK AND POST-WORK TEST REPORTS TO ENGINEER.
  - PROVIDE METER AT THIS LOCATION FOR AMPHITHEATER, WASHROOM BUILDINGS A,B,C, AND PARK ENTRANCE KIOSK. METER STACK TO BE ADJACENT TO TRANSFORMER.

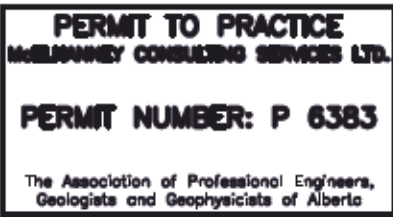
THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McElhanney Consulting Services Ltd. (McElhanney). McElhanney will not be held responsible for the improper or unauthorized use of this drawing and design. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McElhanney, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McElhanney's PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McElhanney, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	EH	TI	LL
5	2018.07.20	RE-ISSUED FOR TENDER - FINAL	EH	TI	LL
4	2018.07.03	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
3	2018.06.22	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
2	2018.06.11	ISSUED FOR TENDER - FINAL	RG	TI	LL
1	2018.06.07	ISSUED FOR TENDER	RG	TI	LL
Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé



Consultant's Stamp  
Sceau de l'expert-conseil



Eng. Stamp  
Sceau de l'ingénieur



Client

 Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil



Project Title  
Titre du projet

**TUNNEL MOUNTAIN  
VILLAGE 1**

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**POWER AND COMMUNICATIONS  
LAYOUT PLAN  
SHEET 2 OF 2**

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	EH/ TI	2018.08.08
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
TI	LL	1:1500

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par
---	----------------------------

Parks Canada Responsible Officer / Agent Responsable Parcs Canada

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Project No. / No. du projet	Asset No. / No. du bien	Sheet No. No. de la feuille
2511-00954-00		E-102

Drawing Reference No. / No. de référence du dessin







- THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF MELHANNY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS. THE USER SHALL BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.
- THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE PROJECT IDENTIFIED. MELHANNY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY ERRORS, OMISSIONS, OR INADEQUACIES OF THE DRAWING OR DESIGN. ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT MELHANNY'S WRITTEN CONSENT, SHALL BE AT THE USER'S SOLE RISK.
- THIS INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. MELHANNY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OR DEPTH OF ANY UTILITIES. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES HAND DIGGING OR HYDROVAC AND ADVISE ENGINEERING OF POTENTIAL CONFLICTS.

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------



Consultant's Name  
Nom de l'expert-conseil



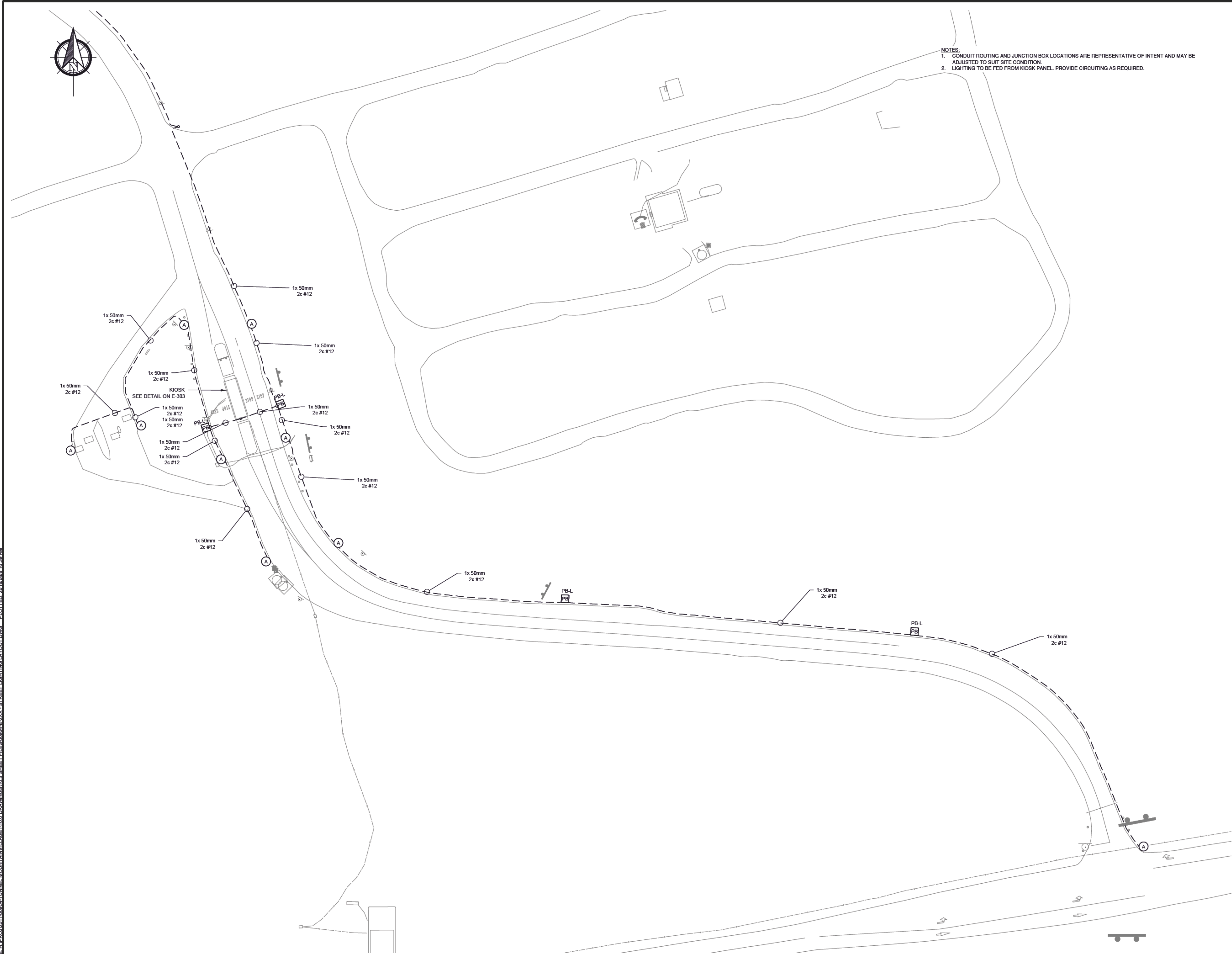
Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Project No. / No. du projet	Asset No. / No. du bien	Sheet No. No. de la feuille
-----------------------------	-------------------------	--------------------------------

Drawing Reference No. / No. de référence du dessin	E-202
--	-------



FILE:H:\PROJECTS\TUNNEL MOUNTAIN VILLAGE\100 DRAWINGS\103 SHEET FILES\0054-00 E-2X4- STREET LIGHTING LAYOUT.DWG PLOTTED: 2018-08-08 10:39 AM

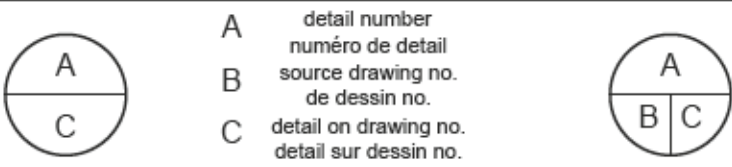


- NOTES:
1. CONDUIT ROUTING AND JUNCTION BOX LOCATIONS ARE REPRESENTATIVE OF INTENT AND MAY BE ADJUSTED TO SUIT SITE CONDITION.
  2. LIGHTING TO BE FED FROM KIOSK PANEL. PROVIDE CIRCUITING AS REQUIRED.

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT. INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	EH	TI	LL
5	2018.07.20	RE-ISSUED FOR TENDER - FINAL	EH	TI	LL
4	2018.07.03	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
3	2018.06.22	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
2	2018.06.11	ISSUED FOR TENDER - FINAL	RG	TI	LL
1	2018.06.07	ISSUED FOR TENDER	RG	TI	LL

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------



Consultant's Stamp  
Sceau de l'expert-conseil

**PERMIT TO PRACTICE**  
McELHANNEY CONSULTING SERVICES LTD.  
**PERMIT NUMBER: P 6383**  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

*[Signature]*  
2018-08-08

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

**TUNNEL MOUNTAIN  
VILLAGE 1**

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**STREET LIGHTING  
LAYOUT PLAN  
SHEET 3 OF 3**

Surveyed by / Arpenté par	Drawn by / Dessiné par EH/TI	Date 2018.08.08
Designed by / Conçu par TI	Reviewed by / Revisé par LL	Scale / Echelle 1:500

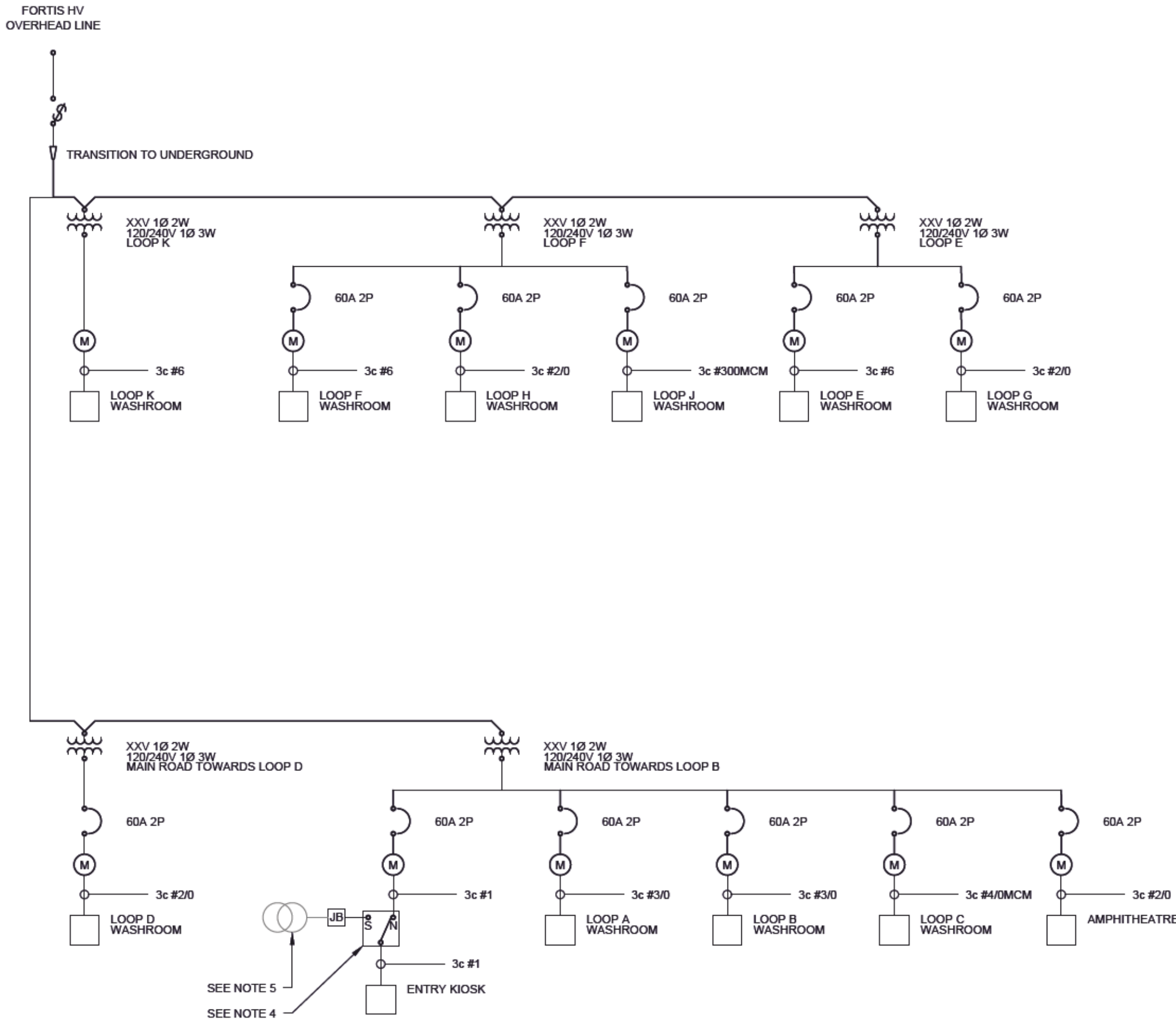
Client Acceptance / Acceptation du client		Approved by / Approuvé par
<div>Parks Canada Responsible Officer / Agent Responsable Parcs Canada</div>		<div>Parks Canada Project Manager / Administrateur de Projets Parcs Canada</div>

Project No. / No. du projet 2511-00954-00	Asset No. / No. du bien	Sheet No. No. de la feuille E-203
--	-------------------------	---

Drawing Reference No. / No. de référence du dessin	
--	--



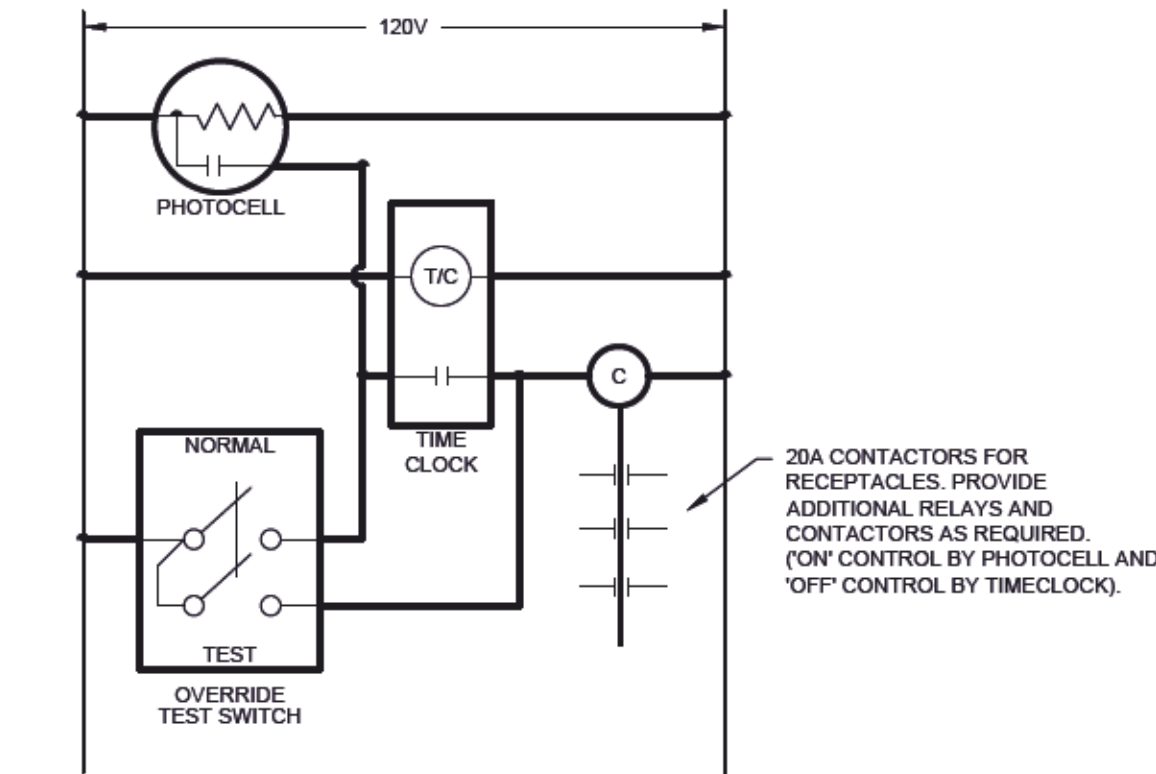
FILE:H:\PROJECTS\10954-TUNNEL MOUNTAIN\10954-TUNNEL MOUNTAIN\10954-1000 DRAWINGS\103 SHEET FILES\10954-1000 SCHEDULES & DETAILS DWG - PLOTTED-20180808 10:58 AM



PROPOSED SINGLE LINE DIAGRAM  
SCALE: NOT TO SCALE

SINGLE LINE NOTES:

1. ALL CONDUCTORS ARE BASED ON VOLTAGE DROP CALCULATIONS BASED ON ESTIMATED DISTANCES. FINAL DISTANCES ARE TO BE CONFIRMED BY CONTRACTOR AND CONFIRMED WITH ENGINEER.
2. ALL CONDUCTORS SHOWN ARE COPPER UNLESS OTHERWISE NOTED.
3. ALUMINUM CONDUCTORS MAY BE USED FOR WIRE SIZES GREATER THAN #6, WITH ENGINEER APPROVAL.
4. MANUAL TRANSFER SWITCH. REFER TO DRAWING E-102.
5. GENERATOR NOT IN CONTRACT.
6. ALL HIGH VOLTAGE WORK AND UP TO INCLUDING METER(S) TO BE PERFORMED AND INSTALLED TO FORTIS STANDARDS, AND CONTRACTOR MUST BE PRE-APPROVED BY FORTIS.



POLE MOUNT RECEPTACLE CONTROL  
WIRING SCHEMATIC  
SCALE: NTS

LUMINAIRE SCHEDULE				
TYPE	DESCRIPTION	LAMPING	MOUNTING	REMARKS
A	DECORATIVE POST TOP AREA LIGHT WITH INTEGRAL PHOTOCELL	LED 6,500 lm 3000 K	POLE 8m AFG	PHILIPS TR10-80W48LED3K-G2-LE3F-240-HS-PH8-BKTX
PC - PHOTOCELL TC - TIMECLOCK DS - DAYLIGHT SENSOR				

SYMBOL SCHEDULE		
SYMBOL	DESCRIPTION	NOTES
	BREAKER	
	FUSED CUTOUT (SERVICE AUTHORITY)	
	METER - LETTER DENOTES TYPE	
	TRANSFORMER	
	TRANSFER SWITCH	
	PANEL - MAIN BREAKER AS INDICATED	
	GENERATOR	
	GROUND	
	3c #1/0	CONDUCTOR/FEEDER INFORMATION
	LUMINAIRE OF TYPE 'A' REFER TO LUMINAIRE SCHEDULE FOR DETAILS	
	PULL BOX	
PC - PHOTOCELL		

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McElhanney Consulting Services Ltd. (McElhanney). McElhanney WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McElhanney, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	EH	TI	LL
5	2018.07.20	RE-ISSUED FOR TENDER - FINAL	EH	TI	LL
4	2018.07.03	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
3	2018.06.22	RE-ISSUED FOR TENDER - FINAL	TI	TI	LL
2	2018.06.11	ISSUED FOR TENDER - FINAL	RG	TI	LL
1	2018.06.07	ISSUED FOR TENDER	RG	TI	LL

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------

	A detail number numéro de détail	
	B source drawing no. de dessin no.	
	C detail on drawing no. détail sur dessin no.	

Consultant's Stamp Sceau de l'expert-conseil	Eng. Stamp Sceau de l'ingénieur

Client		Parks Canada Agency Western and Northern Region	L'Agence Parcs Canada Ouest et Nord du Canada
--------	--	---	---

Consultant's Name Nom de l'expert-conseil
--



Project Title Titre du projet	TUNNEL MOUNTAIN VILLAGE 1
	BANFF, AB BANFF NATIONAL PARK

Drawing Title Titre du dessin	ELECTRICAL SCHEDULES AND DETAILS SHEET 1 OF 3
----------------------------------	---

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	EH/TI	2018.08.08
Designed by / Conçu par	Reviewed by / Revisé par	Scale / Échelle
TI	LL	NOT TO SCALE

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par

Project No. / No. du projet	Asset No. / No. du bien	Sheet No. No. de la feuille
2511-00954-00		E-301

Drawing Reference No. / No. de référence du dessin



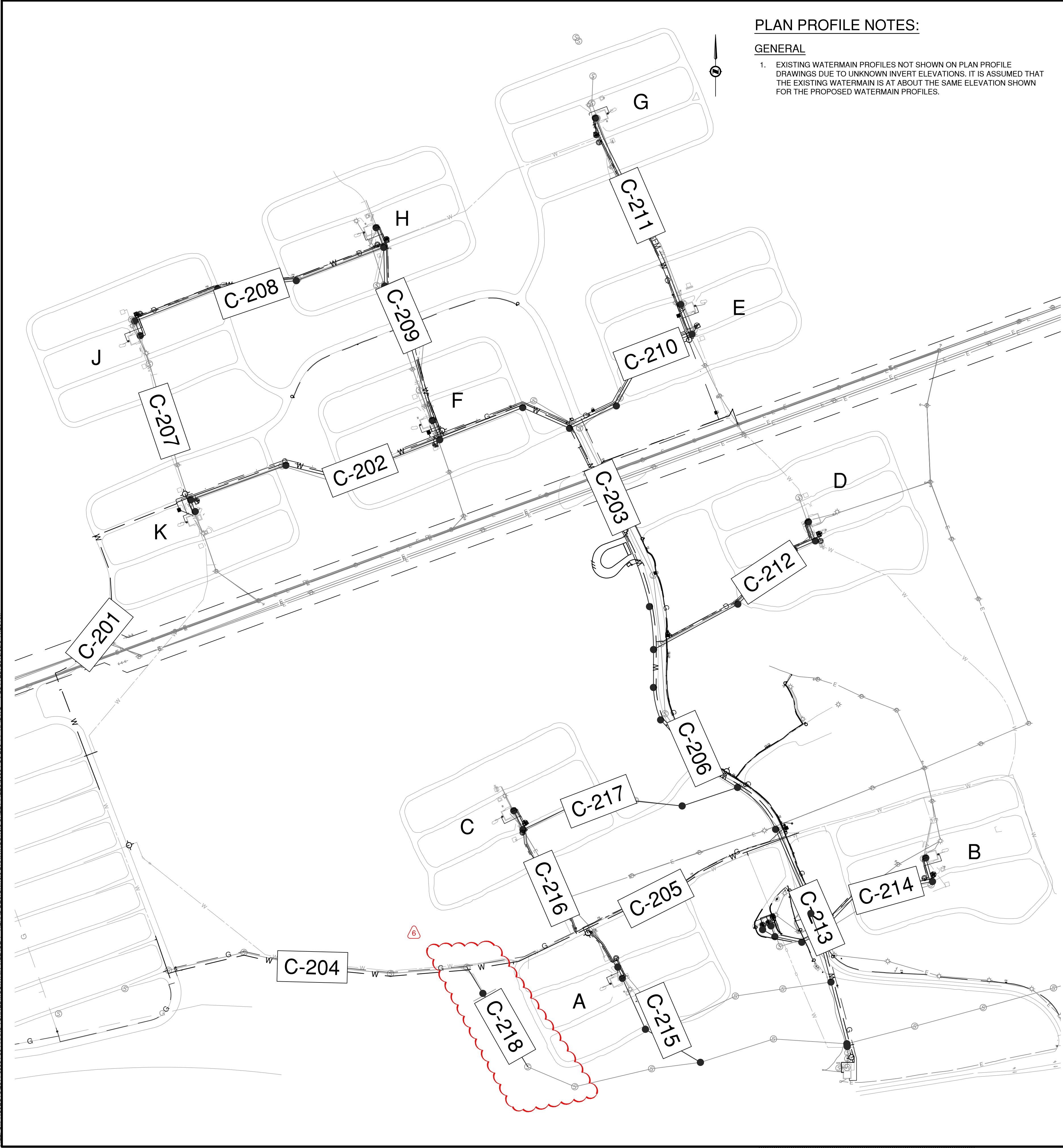
E-302







FILE: G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1 - REHAB DESIGN\10 DRAWINGS\103 SHEET FILES\00954-00-000\_P243.DWG - PLOTTED: 2018/08/14 11:29 AM



PLAN PROFILE NOTES:

GENERAL

1. EXISTING WATERMAIN PROFILES NOT SHOWN ON PLAN PROFILE DRAWINGS DUE TO UNKNOWN INVERT ELEVATIONS. IT IS ASSUMED THAT THE EXISTING WATERMAIN IS AT ABOUT THE SAME ELEVATION SHOWN FOR THE PROPOSED WATERMAIN PROFILES.

PLAN PROFILE LEGEND:

GENERAL

C-212 PLAN PROFILE DRAWING NUMBER

EXISTING FEATURES

- EXISTING ASPHALT ROAD
- EXISTING PROPANE TANK
- EXISTING WASTE DUMPSTER
- EXISTING RECYCLING BIN
- EXISTING FOOD STORAGE LOCKERS
- EXISTING WOODEN PHONE BOOTH
- EXISTING SIGN
- EXISTING SINK
- EXISTING SANITARY MAIN AND MANHOLE
- EXISTING WATERMAIN, VALVE, SEE NOTE 1
- EXISTING WATER MANHOLE
- EXISTING WATER CHAMBER
- EXISTING LIGHT STANDARD
- EXISTING POWER POLE
- EXISTING SURVEYED DOUGLAS FIR TREE
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING COMMUNICATION LINE
- EXISTING GAS LINE

PROPOSED INFRASTRUCTURE

- PROPOSED SANITARY MAIN AND MANHOLE - PLAN
- PROPOSED SANITARY MAIN AND MANHOLE - PROFILE
- PROPOSED STANDPIPE CATCH BASIN DRAIN
- PROPOSED WATERMAIN AND VALVE - PLAN
- PROPOSED WATERMAIN - PROFILE
- PROPOSED WATER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER STANDPIPE
- PROPOSED 1.5" THREADED HYDRANT
- PROPOSED ELECTRICAL LIGHTING
- PROPOSED ELECTRICAL MAIN
- PROPOSED ELECTRICAL SERVICE
- PROPOSED COMMUNICATIONS LINE
- PROPOSED TRANSFORMER
- PROPOSED JUNCTION BOX
- PROPOSED LIGHT POLE TYPE A
- PROPOSED LIGHT POLE TYPE B
- PROPOSED GAS LINE AND VALVE

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT. INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------

A

B

C

A

B

C

detail number  
numéro de detail  
source drawing no.  
de dessin no.  
detail on drawing no.  
detail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

PROFESSIONAL ENGINEER  
INGÉNIEUR  
August 1, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

**TUNNEL MOUNTAIN  
VILLAGE 1**  
  
BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**PLAN PROFILE  
KEY PLAN**

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.03.26
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	1:2000

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par
<div>Parks Canada Responsible Officer / Agent Responsable Parcs Canada</div>	<div>Parks Canada Project Manager / Administrateur de Projets Parcs Canada</div>

Project No. / No. du projet	Asset No. / No. du-bien	Sheet No. No. de la feuille
2511-00954-0		C-200

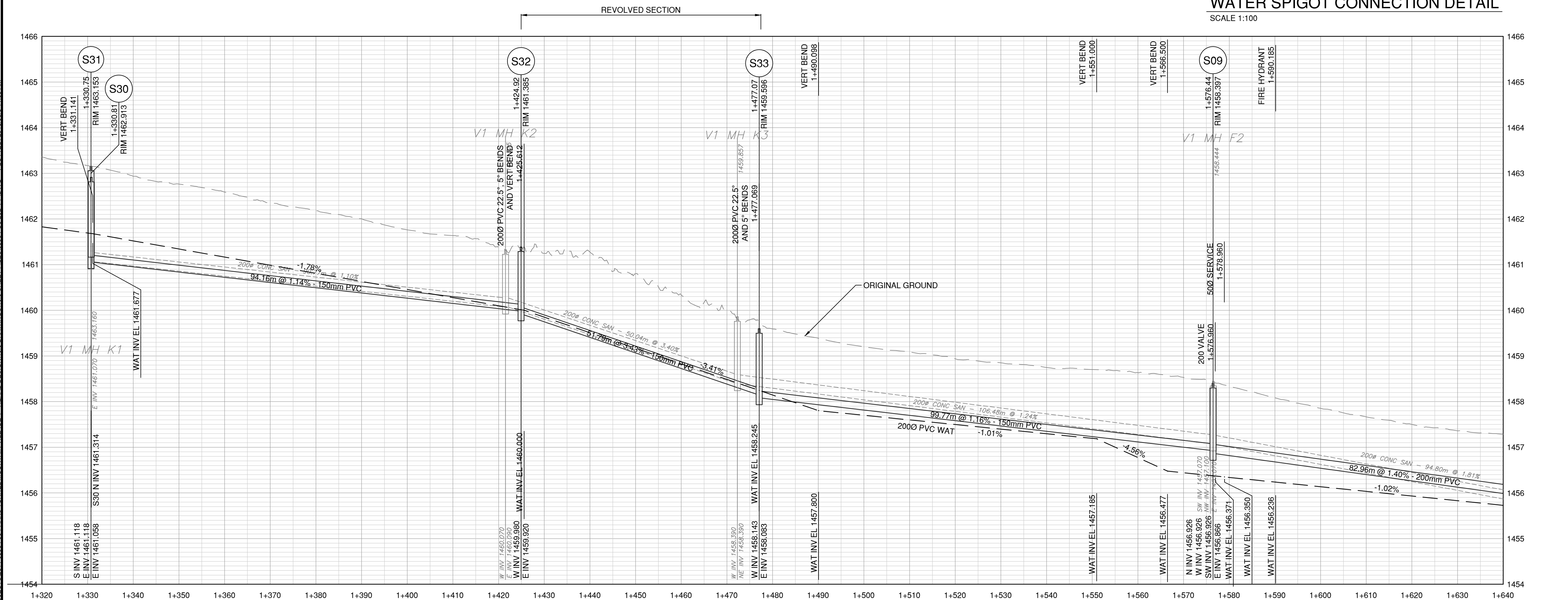
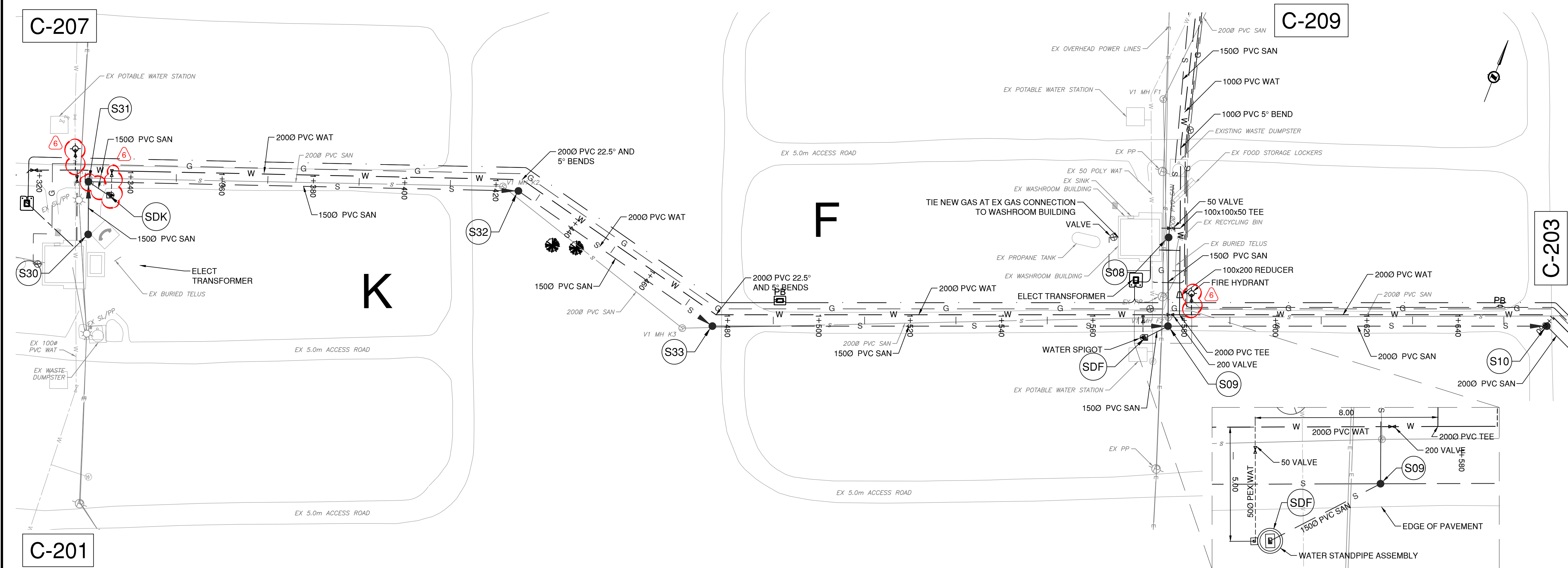
Drawing Reference No. / No. de référence du dessin

Paper Size: ANSI D (22 x 34")









THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------

Consultant's Stamp  
Sceau de l'expert-conseil

**PERMIT TO PRACTICE**  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383

The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

**PROFESSIONAL ENGINEER**  
Daniel F. Fotheringham  
August 15, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and Northern Region

L'Agence Parcs Canada  
Ouest et Nord du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

**TUNNEL MOUNTAIN VILLAGE 1**

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

**PLAN PROFILE  
LOOP K TO LOOP F  
STA 1+320 TO STA 1+640**

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.03.26
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	H 1:500 V 1:50

Parks Canada Project Manager / Administrateur de Projets Parcs Canada	
Client Acceptance / Acceptation du client	Approved by / Approuvé par
<small>Parks Canada Responsible Officer / Agent Responsable Parcs Canada</small>	<small>Parks Canada Project Manager / Administrateur de Projets Parcs Canada</small>

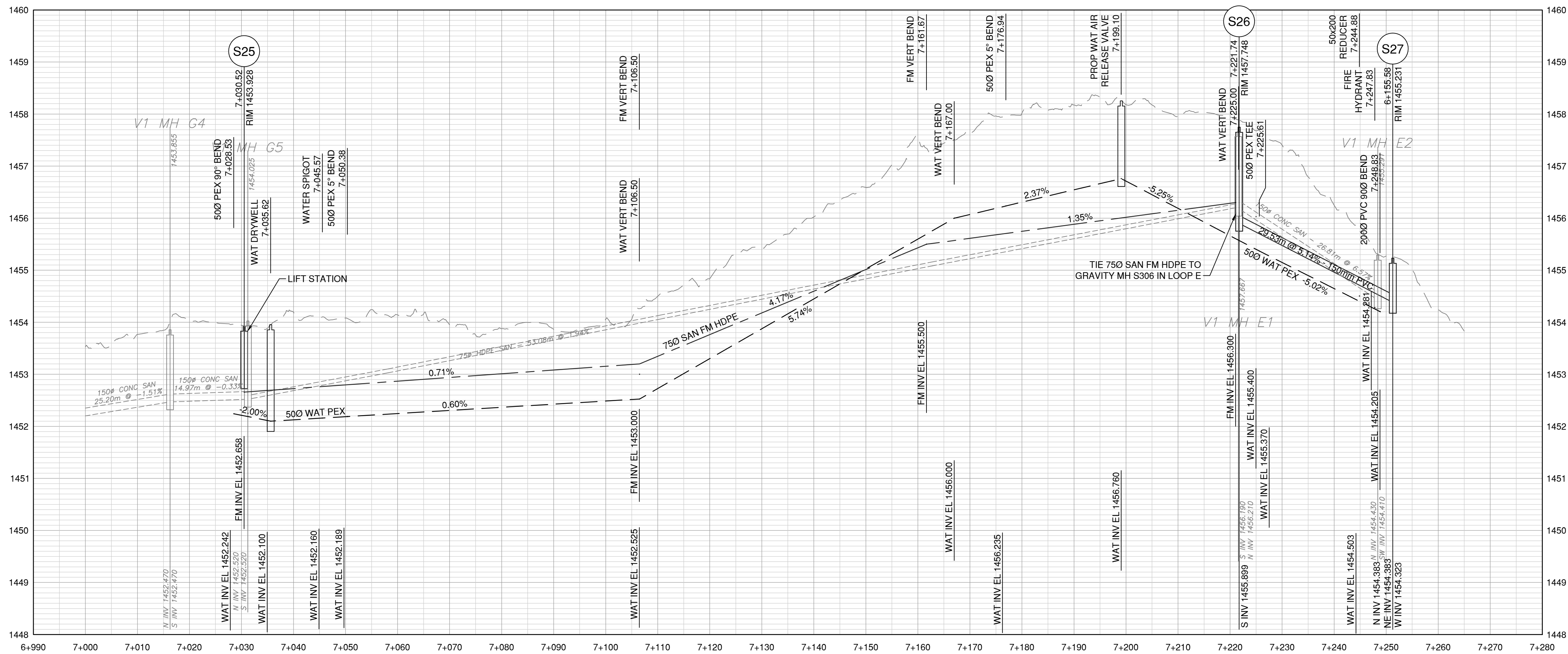
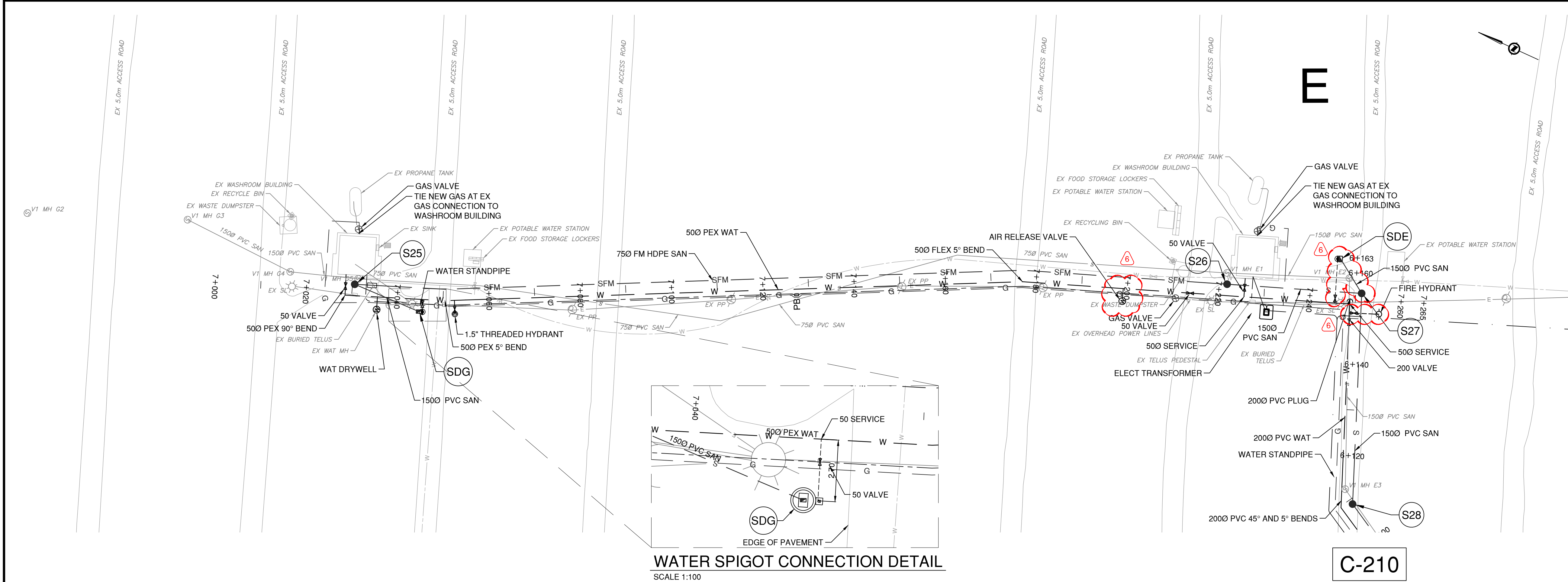
Project No. / No. du projet	Asset No. / No. du bien	Sheet No. / No. de la feuille
2511-00954-0		C-202
Drawing Reference No. / No. de référence du dessin		







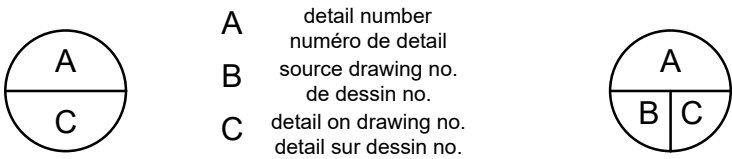
FILE: G:\PROJECTS\2018\00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1 - REHAB DESIGN\10-0 DRAWINGS\10-3 SHEET FILES\00954-00-011.PE.DWG - PLOTTED: 20180808 11:38 AM



THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE  
CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE  
HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.  
THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND  
REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION.  
McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY  
LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY  
CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS,  
CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S  
PRIOR WRITTEN CONSENT.  
INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS  
EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY  
UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED  
FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL  
EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL  
CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM

Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé
------	------	-------------	------------------	-------------------	----------------------



Consultant's Stamp  
Sceau de l'expert-conseil

Eng. Stamp  
Sceau de l'ingénieur

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

PROFESSIONAL ENGINEER  
ALBERTA  
August 8, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

PLAN PROFILE  
LOOP G TO LOOP E  
STA 7+000 TO STA 7+280

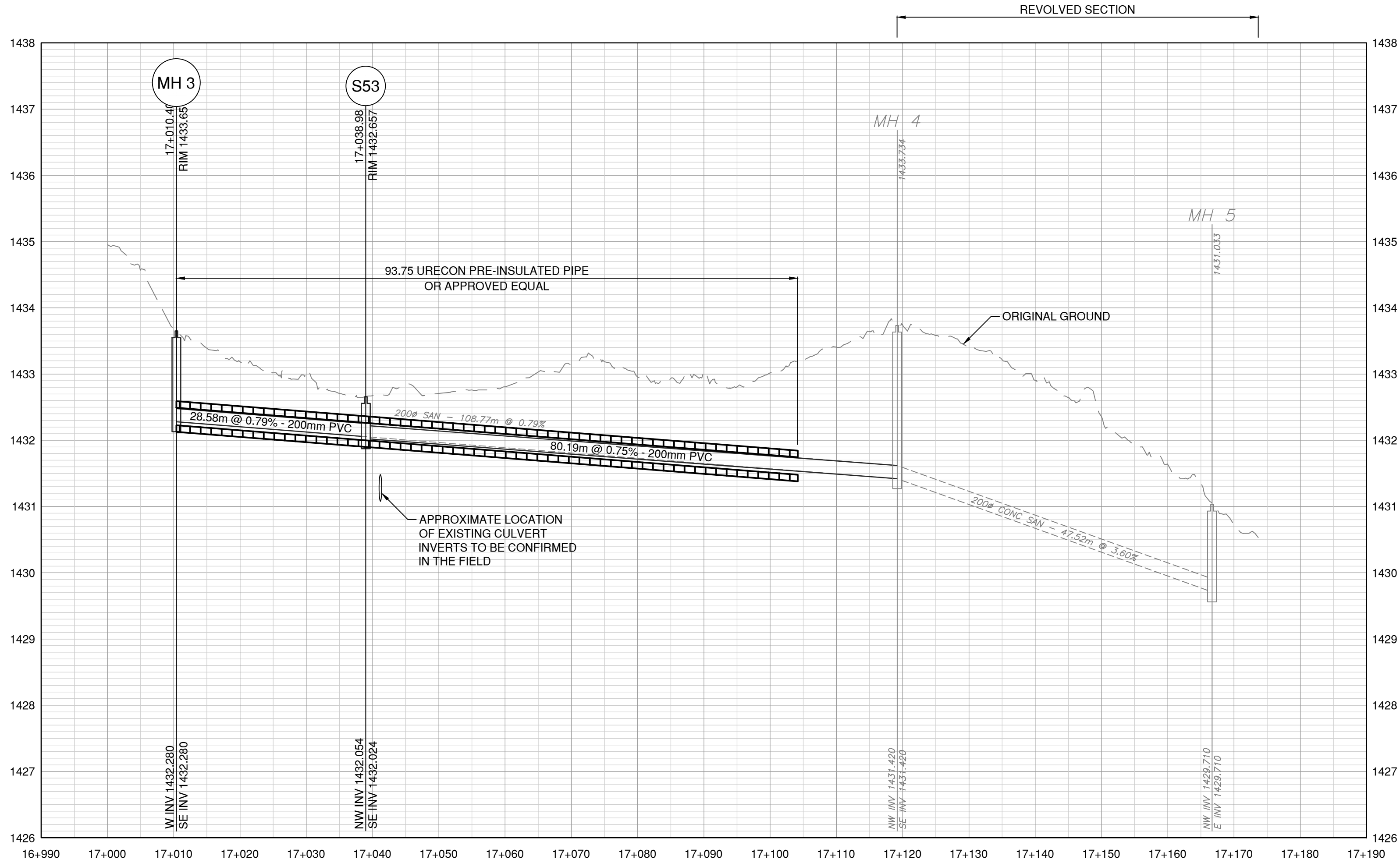
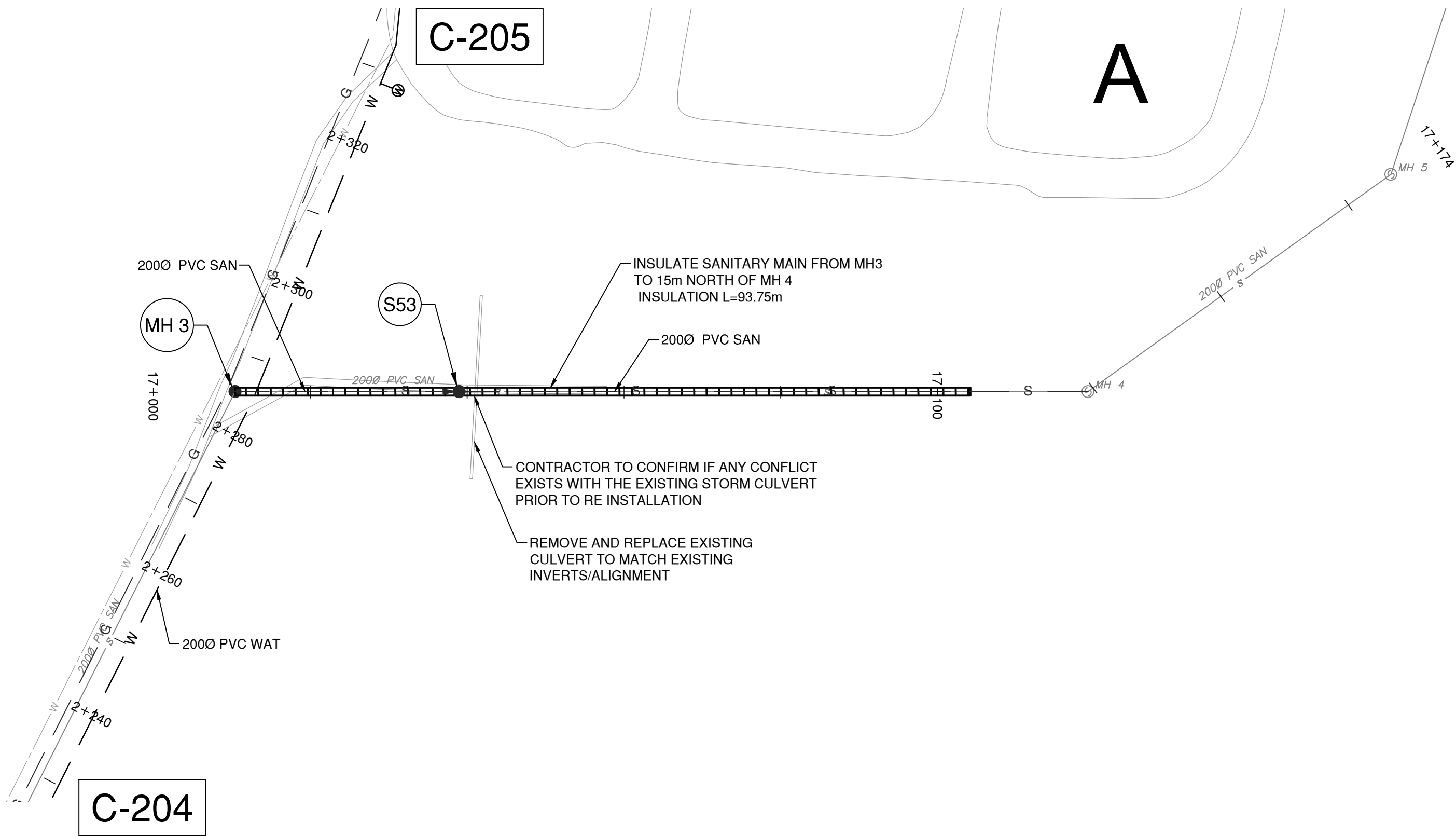
Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.03.26
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	H 1:500 V 1:50

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par

Project No. / No. du projet	Asset No. / No. du bien	Sheet No. No. de la feuille
2511-00954-0		C-211
Drawing Reference No. / No. de référence du dessin		





THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT. INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

1	2018.08.08	ADDENDUM 1	SS	DF	TM
Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé

A

C

A

B

C

A

B

C

A

B

C

A

B

C

A

B

C


Consultant's Stamp  
Sceau de l'expert-conseil

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

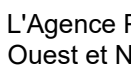
Eng. Stamp  
Sceau de l'ingénieur

PROFESSIONAL ENGINEER  
ALBERTA  
August 15, 2018  
PERMIT NUMBER: P243

Client




Parks Canada Agency  
Western and  
Northern Region



L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil



**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

PLAN PROFILE  
EXISTING MAIN REPLACEMENT  
STA 17+000 TO STA 17+190

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	2018.08.07
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Echelle
DF	TM	H 1:500 V 1:50

Parks Canada Project Manager / Administrateur de Projets Parcs Canada

Client Acceptance / Acceptation du client	Approved by / Approuvé par
<div>Parks Canada Responsible Officer / Agent Responsable Parcs Canada</div>	<div>Parks Canada Project Manager / Administrateur de Projets Parcs Canada</div>

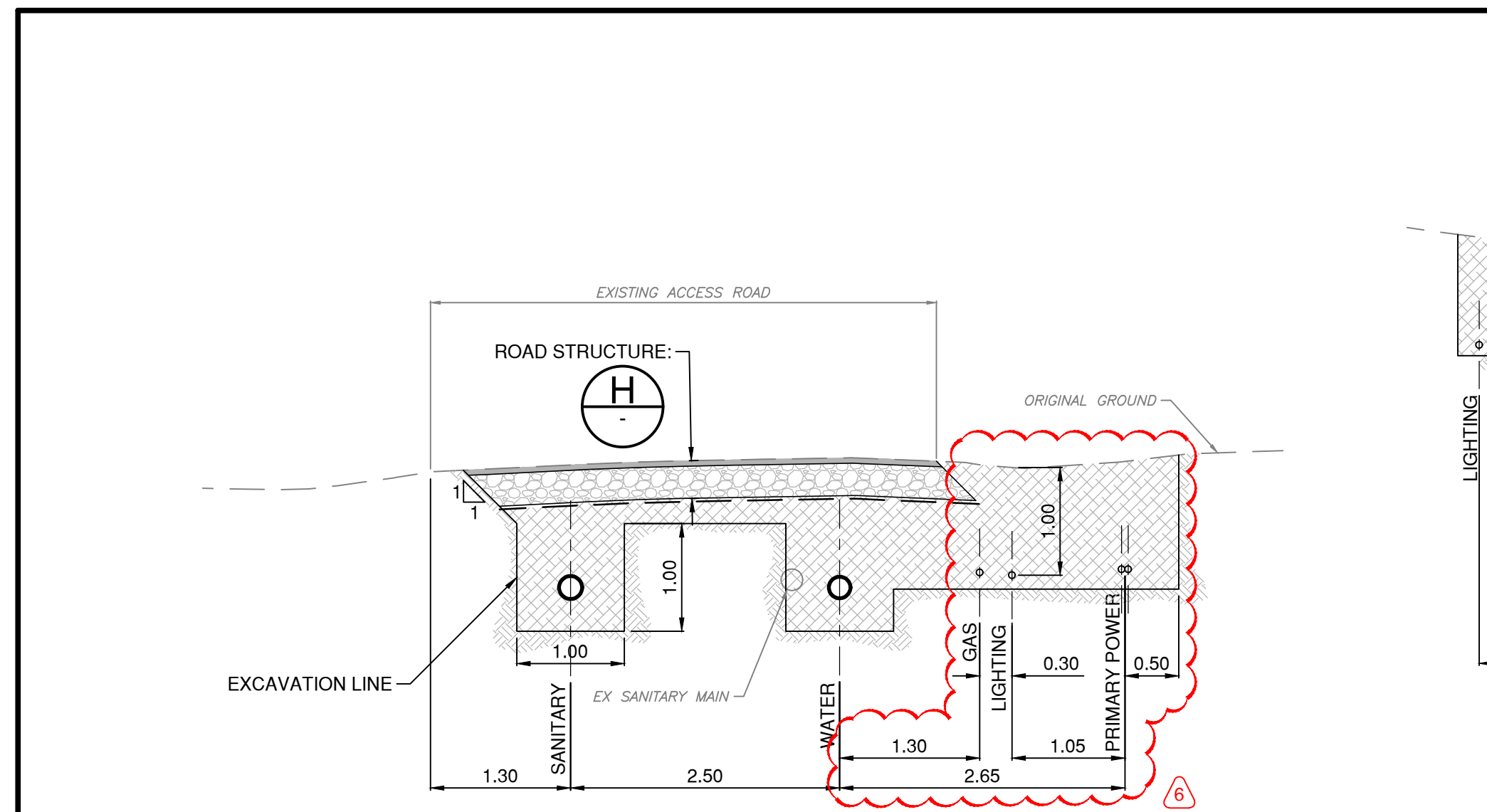
Project No. / No. du projet	Asset No. / No. du-bien	Sheet No. No. de la feuille
2511-00954-0		C-218
Drawing Reference No. / No. de référence du dessin		

FILE G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1-REHAB DESIGN\10-0 DRAWINGS\10-3 SHEET FILES\00954-00-218.PFDVWS - PLOTTED: 20180808 11:43 AM

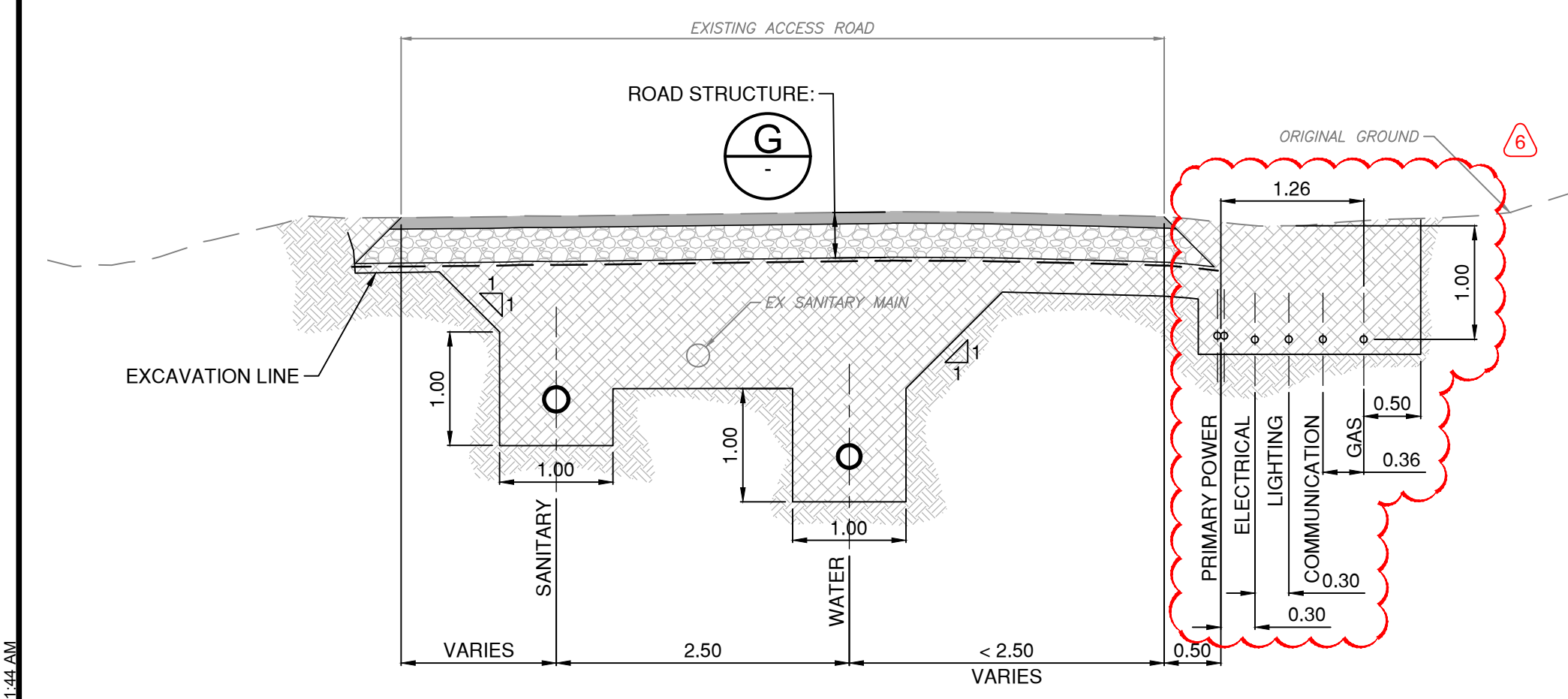
Paper Size: ANSI D (22 x 34")



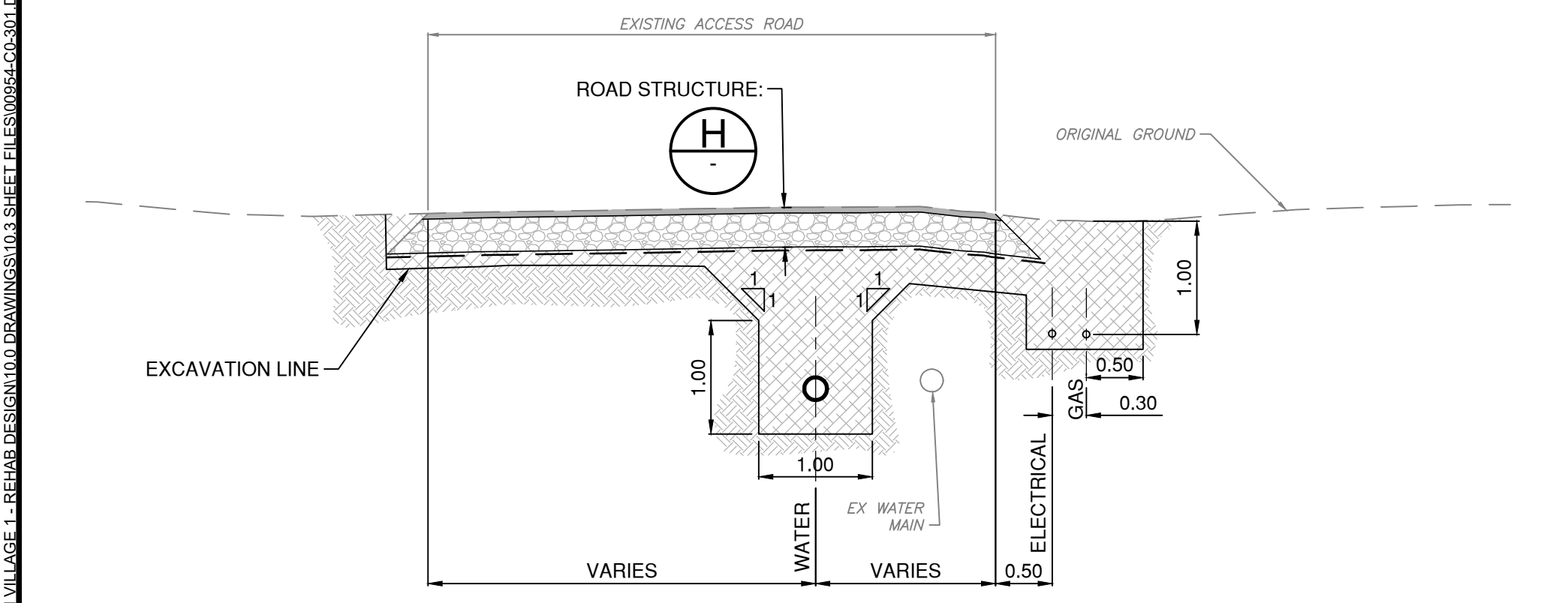
FILE: G:\PROJECTS\2511-00954-00 PARKS TUNNEL MOUNTAIN VILLAGE 1 - REHAB DESIGN\10.0 DRAWINGS\10.3 SHEET FILES\00954-00954.DWG - PLOTTED: 20180818 14:44 AM



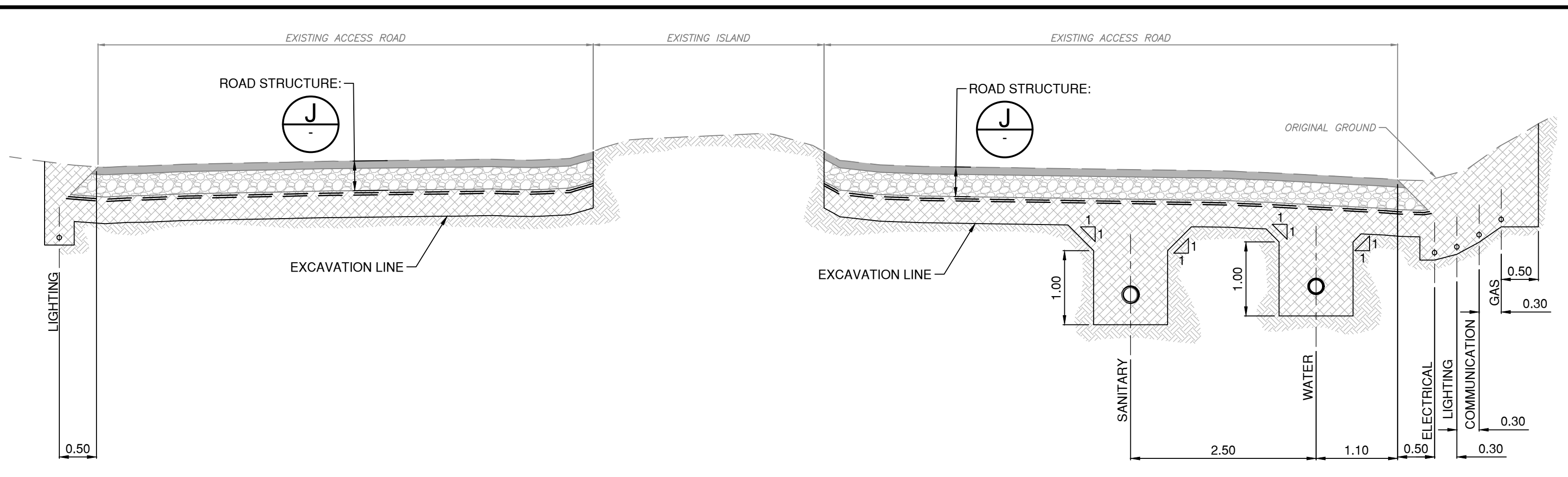
**(A) TYPICAL SECTION - LOOP**  
C-115



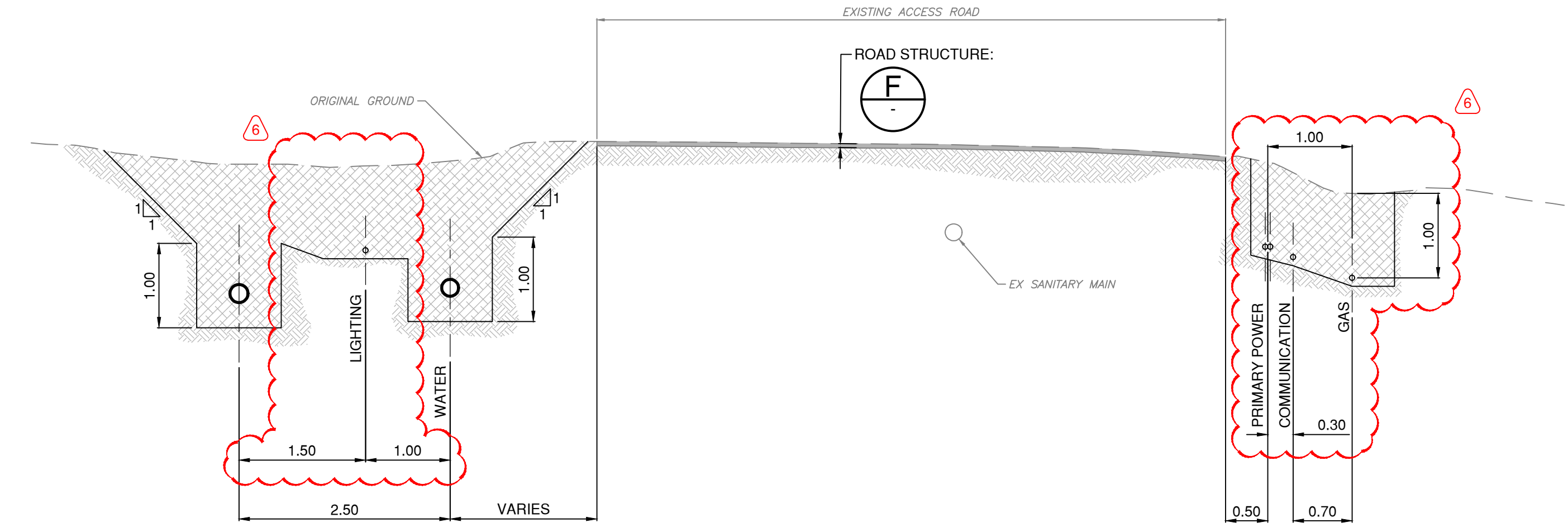
**(B) TYPICAL SECTION - MAIN ROAD SOUTH**  
C-115



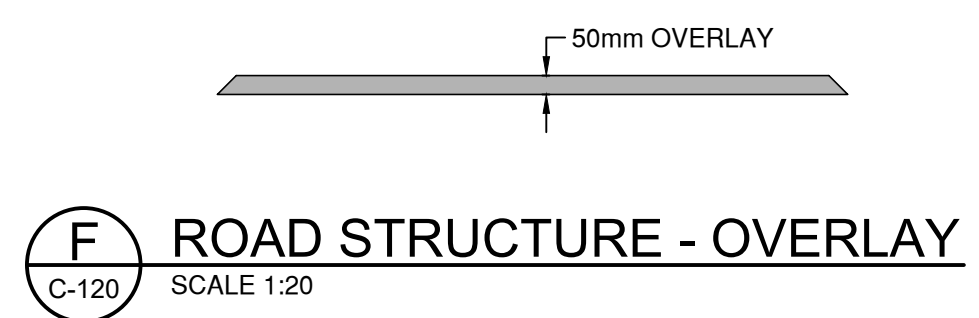
**(C) TYPICAL SECTION - WATERMAIN**  
C-116



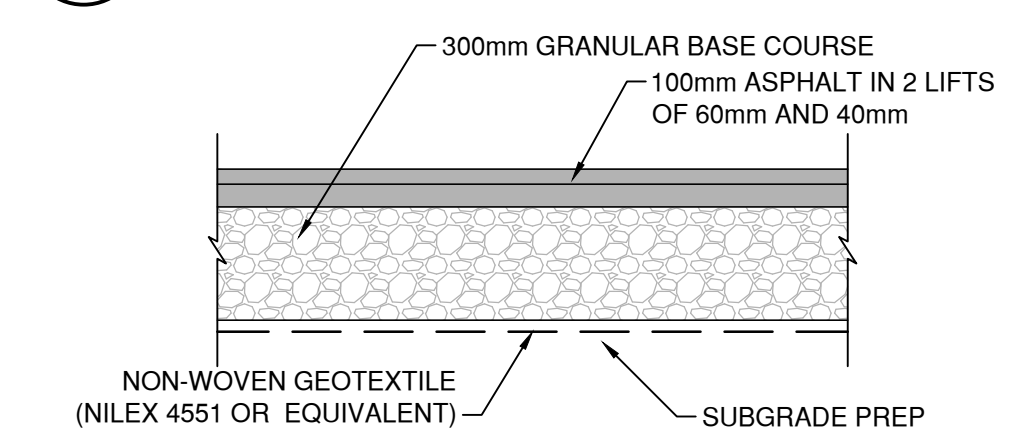
**(D) TYPICAL SECTION - KIOSK**  
C-116



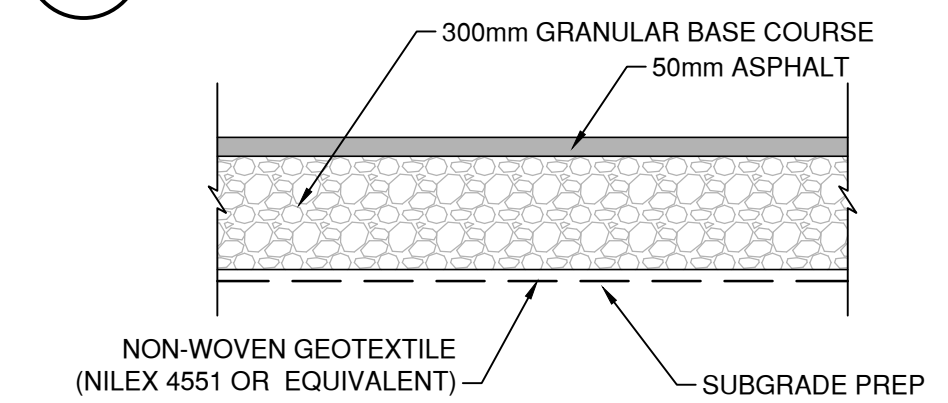
**(E) TYPICAL SECTION - MAIN ROAD NORTH**  
C-115



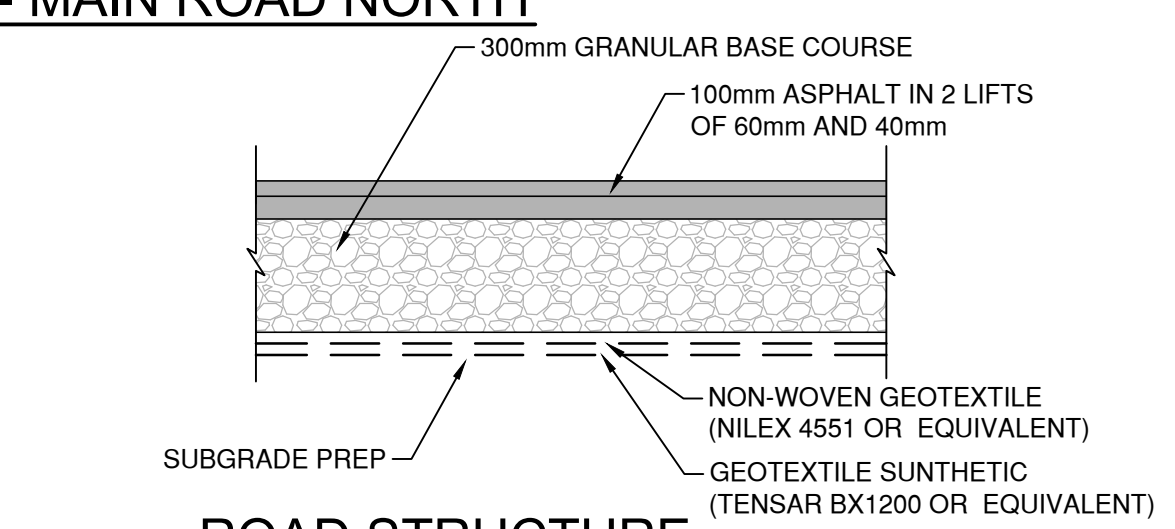
**(F) ROAD STRUCTURE - OVERLAY**  
C-120 SCALE 1:20



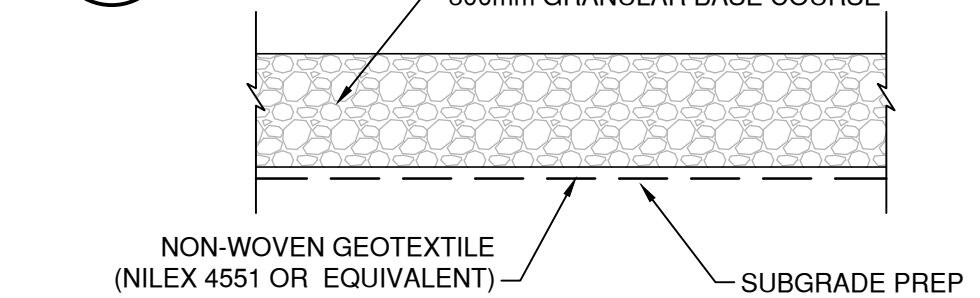
**(G) ROAD STRUCTURE - MAIN ROAD**  
C-120 SCALE 1:20



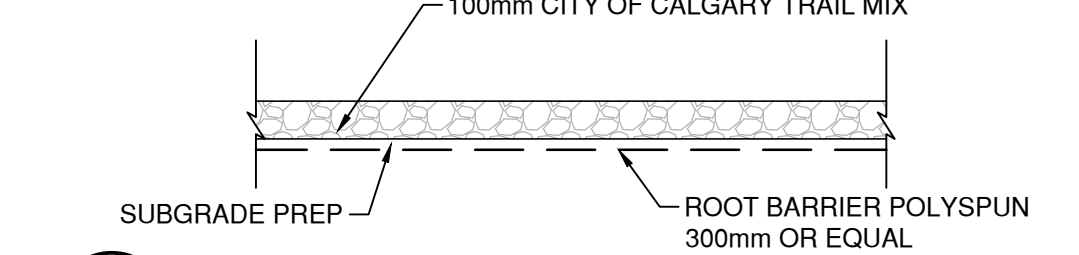
**(H) ROAD STRUCTURE - LOOPS**  
C-120 SCALE 1:20



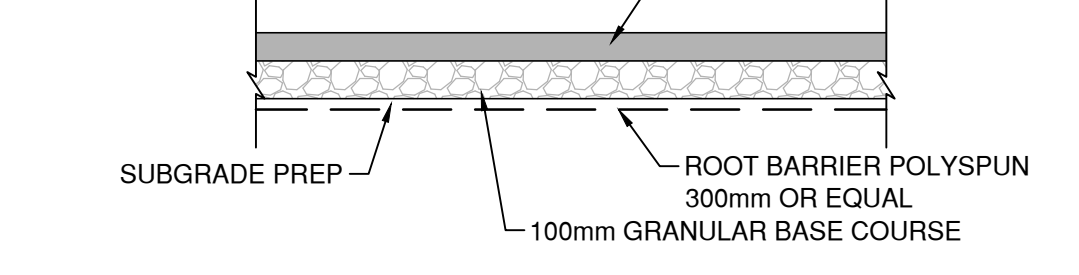
**(J) ROAD STRUCTURE - KIOSK/DUMP STATION/BUS LOOP**  
C-120 SCALE 1:20



**(K) ROAD STRUCTURE - GRAVEL**  
C-120 SCALE 1:20



**(L) PATHWAY STRUCTURE - GRAVEL**  
C-120 SCALE 1:20



**(M) PATHWAY STRUCTURE - PAVED**  
C-120 SCALE 1:20

THIS DRAWING AND DESIGN SHALL NOT BE USED, REUSED, OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY). McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN. THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO THIS DRAWING, BY ANY THIRD PARTY INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS, AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT. INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES, OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS DRAWING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

6	2018.08.08	ADDENDUM 1	SS	DF	TM
5	2018.07.20	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
4	2018.07.03	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
3	2018.06.22	RE ISSUED FOR TENDER - FINAL	SS	DF	TM
2	2018.06.11	ISSUED FOR TENDER - FINAL	SS	DF	TM
1	2018.05.23	ISSUED FOR TENDER	SS	DF	TM
Rev.	Date	Description	Drawn Dessiné	Designed Conçu	Approved Approuvé

A

C

A detail number  
numéro de détail

B

C

B source drawing no.  
de dessin no.

C

C

C detail on drawing no.  
détail sur dessin no.

Consultant's Stamp  
Sceau de l'expert-conseil

PERMIT TO PRACTICE  
McELHANNEY CONSULTING SERVICES LTD.  
PERMIT NUMBER: P 6383  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

Eng. Stamp  
Sceau de l'ingénieur

PROFESSIONAL ENGINEER  
ALBERTA  
August 15, 2018  
PERMIT NUMBER: P243

Client

Parks Canada Agency  
Western and  
Northern Region

L'Agence Parcs Canada  
Ouest et Nord  
du Canada

Consultant's Name  
Nom de l'expert-conseil

**McElhanney**  
McElhanney Consulting Services Ltd.

Project Title  
Titre du projet

TUNNEL MOUNTAIN  
VILLAGE 1

BANFF, AB  
BANFF NATIONAL PARK

Drawing Title  
Titre du dessin

TYPICAL SECTIONS

Surveyed by / Arpenté par	Drawn by / Dessiné par	Date
	SS	
Designed by / Conçu par	Reviewed by / Révisé par	Scale / Échelle
DF	TM	
Parks Canada Project Manager / Administrateur de Projets Parcs Canada		

Client Acceptance / Acceptation du client	Approved by / Approuvé par
<div>Parks Canada Responsible Officer / Agent Responsable Parcs Canada</div>	<div>Parks Canada Project Manager / Administrateur de Projets Parcs Canada</div>
Project No. / No. du projet	Asset No. / No. du bien
2511-00954-0	
Drawing Reference No. / No. de référence du dessin	Sheet No. No. de la feuille
NO	C-301



