

**LEGEND**

	BLOCK PROFILE DRAWING NUMBER
	PROPOSED SANITARY CONSTRUCTION BOUNDARY
	PROPOSED WATER CONSTRUCTION BOUNDARY
	PROPOSED WATER HYDRANT REPLACEMENT LOCATION

5				
4	2020JUL15	ISSUED FOR TENDER	PVD	CC
3	2020MAY25	90% SUBMISSION	PVD	CC
2	2020APR24	75% SUBMISSION	PVD	CC
1	2020JAN27	50% SUBMISSION	PVD	CC
No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé

Revision / Revision

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

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

**wsp**

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Canmore, AB, Canada T1W 2K4  
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**PROFESSIONAL ENGINEER ALBERTA**  
CHRIS CONNER

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

Client Services Team / Le Client Entretien l'Équipe Operations Branch / Alberta Méridional Branche d'Opérations

**Canada**

Client/client: Parks Canada Agency / L'Agence Parcs Canada

Western and Northern Region / Ouest et Nord du Canada

Project title/Titre du projet

**LAKE LOUISE TOWNSITE PHASE 2-2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK**

Drawing title/Titre du dessin

**OVERALL SITE LOCATION PLAN**

Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Echelle 1:4000

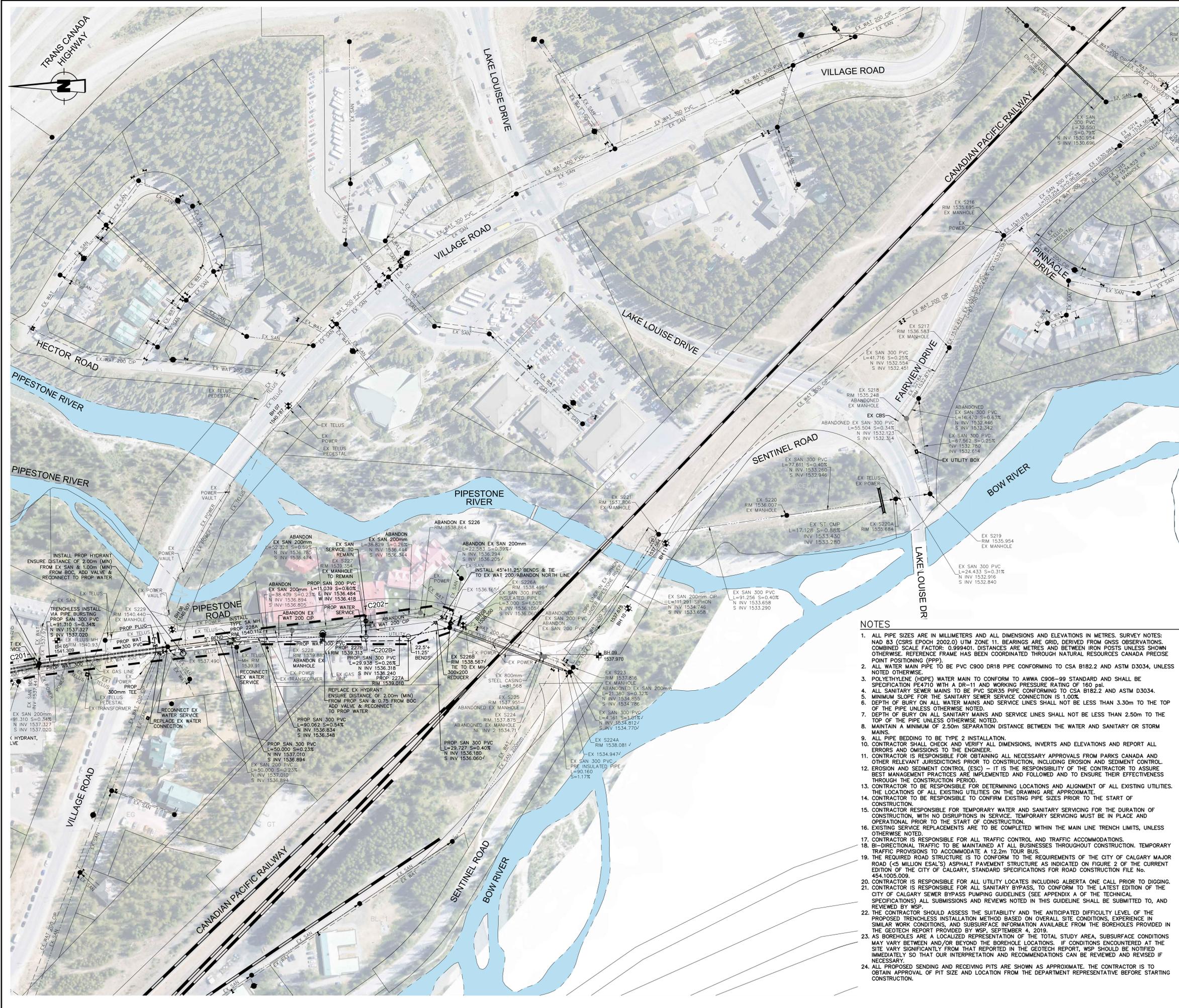
PWSC Project Manager/Administrateur de Projets TPSSC  
KD

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

Project No./No. du projet 181-13597-14	Asset No./No. du-bien -	Sheet No./No. de la feuille 2
Drawing Reference No./No. de référence du dessin C101		17

Last Saved: 2020-06-07 2:25:20 PM, By: Ven, Dja, Pds, Proj, Syle, PWSC-WR-BWweb  
 WSP Files \181-13597-14 Lake Louise Utilities Upgrades\020 - Proj. Services\060 - I & E\510 Drawings\513 Drawings (Sheet)\1 - WSP\Layouts\_PWS\181-13597-14\_C101\_SITE\_PL2.dwg





**LEGEND**

-C100-	BLOCK PROFILE DRAWING NUMBER
---	CONSTRUCTION BOUNDARY
---	EXISTING PROPERTY LINE
EX_WAT_300	EXISTING WATERMAIN & VALVE
PROP_WAT_300_PVC	PROPOSED WATERMAIN & VALVE
PROP_WAT_300_PVC	PROPOSED WATERMAIN REPLACEMENT VIA PIPE BURSTING
EX_SAN_200_PVC	EXISTING SANITARY SEWER & 5A MH
PROP_SAN_200_PVC	PROPOSED SANITARY SEWER & 5A MH
PROP_SAN_200_PVC	PROPOSED SANITARY SEWER REPLACEMENT VIA PIPE BURSTING
EX_POWER	EXISTING POWER - UNDERGROUND
OH	EXISTING POWER - OVERHEAD
EX_TELUS	EXISTING TELUS
EX_GAS	EXISTING GAS LINE
⊕	EXISTING POWER POLE w/ GUY WIRE
⊙	EXISTING STREET LIGHT
⊕	EXISTING HYDRANT
W	EXISTING WATER MANHOLE
⊕	SENDING & RECEIVING PITS
⊕	BOREHOLE LOCATION
BH 05 1582.80	BOREHOLE NUMBER & ELEVATION SEE DWG No. C403 & C404 FOR BOREHOLE LOG

No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
5				
4	2020JUL15	ISSUED FOR TENDER	PVD	CC
3	2020MAY25	90% SUBMISSION	PVD	CC
2	2020APR24	75% SUBMISSION	PVD	CC
1	2020JAN27	50% SUBMISSION	PVD	CC

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Consultant's Name  
Nom de l'expert-conseil

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ALBERTA

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada

Client Services Team  
Northern Alberta Operations Branch

Le Client Entretien l'Équipe  
Alberta Méridionale  
Branche d'Opérations

**Canada**

Client/client  
Parks Canada Agency  
L'Agence Parcs Canada

Western and Northern Region  
Ouest et Nord du Canada

Project title/Titre du projet

# LAKE LOUISE TOWNSITE PHASE 2 - 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK

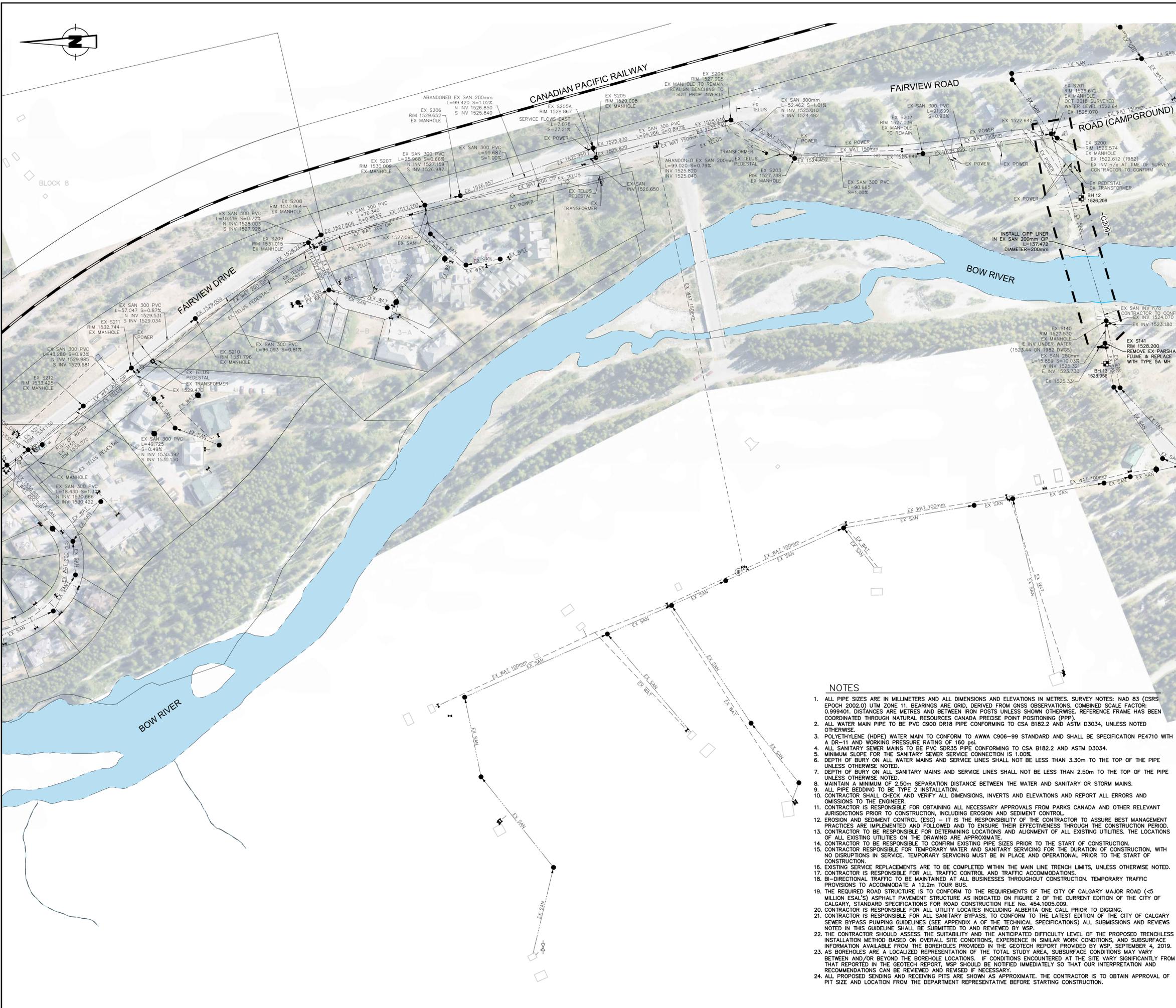
Drawing title/Titre du dessin

## UNDERGROUND UTILITIES PLAN SHEET 2 OF 3

Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Échelle 1:1250
PWGSC Project Manager/Administrateur de Projets TPSSC KD		
Client Acceptance/Acceptation du client Approved by/Approuvé par		
Park Responsible Officer/Agent Responsable PWGSC Project Manager/Administrateur de Projets TPSSC		
Project No./No. du projet 181-13597-14	Asset No./No. du-bien -	Sheet No./ No. de la feuille 4
Drawing Reference No./No. de référence du dessin C103		17

- NOTES**
- ALL PIPE SIZES ARE IN MILLIMETERS AND ALL DIMENSIONS AND ELEVATIONS IN METRES. SURVEY NOTES: NAD 83 (CSRS EPOCH 2002.0) UTM ZONE 11, BEARINGS ARE GRID, DERIVED FROM GNSS OBSERVATIONS. COMBINED FACTOR: 0.999401. DISTANCES ARE METRES AND BETWEEN IRON POSTS UNLESS SHOWN OTHERWISE. REFERENCE FRAME HAS BEEN COORDINATED THROUGH NATURAL RESOURCES CANADA PRECISE POINT POSITIONING (PPP).
  - ALL WATER MAIN PIPE TO BE PVC C900 DR18 PIPE CONFORMING TO CSA B182.2 AND ASTM D3034, UNLESS NOTED OTHERWISE.
  - POLYETHYLENE (HDPE) WATER MAIN TO CONFORM TO AWWA C906-99 STANDARD AND SHALL BE SPECIFICATION PE4710 WITH A DR-11 AND WORKING PRESSURE RATING OF 160 psi.
  - ALL SANITARY SEWER MAINS TO BE PVC SDR35 PIPE CONFORMING TO CSA B182.2 AND ASTM D3034.
  - MINIMUM SLOPE FOR THE SANITARY SEWER CONNECTION IS 1.00%.
  - DEPTH OF BURY ON ALL WATER MAINS AND SERVICE LINES SHALL NOT BE LESS THAN 3.30m TO THE TOP OF THE PIPE UNLESS OTHERWISE NOTED.
  - DEPTH OF BURY ON ALL SANITARY MAINS AND SERVICE LINES SHALL NOT BE LESS THAN 2.50m TO THE TOP OF THE PIPE UNLESS OTHERWISE NOTED.
  - MAINTAIN A MINIMUM OF 2.50m SEPARATION DISTANCE BETWEEN THE WATER AND SANITARY OR STORM MAINS.
  - ALL PIPE BEDDING TO BE TYPE 2 INSTALLATION.
  - CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, INVERTS AND ELEVATIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ENGINEER.
  - CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FROM PARKS CANADA AND OTHER RELEVANT JURISDICTIONS PRIOR TO CONSTRUCTION, INCLUDING EROSION AND SEDIMENT CONTROL.
  - EROSION AND SEDIMENT CONTROL (ESC) - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED AND FOLLOWED AND TO ENSURE THEIR EFFECTIVENESS THROUGH THE CONSTRUCTION PERIOD.
  - CONTRACTOR TO BE RESPONSIBLE FOR DETERMINING LOCATIONS AND ALIGNMENT OF ALL EXISTING UTILITIES. THE LOCATIONS OF ALL EXISTING UTILITIES ON THE DRAWING ARE APPROXIMATE.
  - CONTRACTOR TO BE RESPONSIBLE TO CONFIRM EXISTING PIPE SIZES PRIOR TO THE START OF CONSTRUCTION.
  - CONTRACTOR RESPONSIBLE FOR TEMPORARY WATER AND SANITARY SERVICING FOR THE DURATION OF CONSTRUCTION, WITH NO DISRUPTIONS IN SERVICE. TEMPORARY SERVICING MUST BE IN PLACE AND OPERATIONAL PRIOR TO THE START OF CONSTRUCTION.
  - EXISTING SERVICE REPLACEMENTS ARE TO BE COMPLETED WITHIN THE MAIN LINE TRENCH LINES, UNLESS OTHERWISE NOTED.
  - CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AND TRAFFIC ACCOMMODATIONS.
  - BI-DIRECTIONAL TRAFFIC TO BE MAINTAINED AT ALL BUSINESSES THROUGHOUT CONSTRUCTION. TEMPORARY TRAFFIC PROVISIONS TO ACCOMMODATE A 12.2m TOUR BUS.
  - THE REQUIRED ROAD STRUCTURE IS TO CONFORM TO THE REQUIREMENTS OF THE CITY OF CALGARY MAJOR ROAD (<5 MILLION ESAL'S) ASPHALT PAVEMENT STRUCTURE AS INDICATED ON FIGURE 2 OF THE CURRENT EDITION OF THE CITY OF CALGARY, STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION FILE NO. 454.1005.009.
  - CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES INCLUDING ALBERTA ONE CALL PRIOR TO DIGGING.
  - CONTRACTOR IS RESPONSIBLE FOR ALL SANITARY BYPASS, TO CONFORM TO THE LATEST EDITION OF THE CITY OF CALGARY SEWER BYPASS PUMPING GUIDELINES (SEE APPENDIX A OF THE TECHNICAL SPECIFICATIONS) ALL SUBMISSIONS AND REVIEWS NOTED IN THIS GUIDELINE SHALL BE SUBMITTED TO, AND REVIEWED BY WSP.
  - THE CONTRACTOR SHOULD ASSESS THE SUITABILITY AND THE ANTICIPATED DIFFICULTY LEVEL OF THE PROPOSED TRENCHLESS INSTALLATION METHOD BASED ON OVERALL SITE CONDITIONS, EXPERIENCE IN SIMILAR WORK CONDITIONS, AND SUBSURFACE INFORMATION AVAILABLE FROM THE BOREHOLES PROVIDED IN THE GEOTECH REPORT PROVIDED BY WSP, SEPTEMBER 4, 2019.
  - AS BOREHOLES ARE A LOCALIZED REPRESENTATION OF THE TOTAL STUDY AREA, SUBSURFACE CONDITIONS MAY VARY BETWEEN AND/OR BEYOND THE BOREHOLE LOCATIONS. IF CONDITIONS ENCOUNTERED AT THE SITE VARY SIGNIFICANTLY FROM THAT REPORTED IN THE GEOTECH REPORT, WSP SHOULD BE NOTIFIED IMMEDIATELY SO THAT OUR INTERPRETATION AND RECOMMENDATIONS CAN BE REVIEWED AND REVISED IF NECESSARY.
  - ALL PROPOSED SENDING AND RECEIVING PITS ARE SHOWN AS APPROXIMATE. THE CONTRACTOR IS TO OBTAIN APPROVAL OF PIT SIZE AND LOCATION FROM THE DEPARTMENT REPRESENTATIVE BEFORE STARTING CONSTRUCTION.

Last Saved: 2020-07-15 9:26:05 AM, By: Ven, Dm, Pds, Proj: STW/MS/SC-WR-BW-UB  
 WSP Plans (181-13597-14) Lake Louise Utilities Upgrade (C400) - Proj: Services (C400) - Proj: Services (C400) - I & E (C410)  
 Drawn by: SWS  
 Design: SWS  
 DWG No.: C103



LEGEND	
-C100-	BLOCK PROFILE DRAWING NUMBER
---	CONSTRUCTION BOUNDARY
---	EXISTING PROPERTY LINE
EX WAT 300	EXISTING WATERMAIN & VALVE
PROP WAT 300 PVC	PROPOSED WATERMAIN & VALVE
---	PROPOSED WATERMAIN REPLACEMENT VIA PIPE BURSTING
EX SAN 200 PVC	EXISTING SANITARY SEWER & 5A MH
PROP SAN 200 PVC	PROPOSED SANITARY SEWER & 5A MH
---	PROPOSED SANITARY SEWER REPLACEMENT VIA PIPE BURSTING
EX POWER	EXISTING POWER - UNDERGROUND
OH	EXISTING POWER - OVERHEAD
EX TELUS	EXISTING TELUS
EX GAS	EXISTING GAS LINE
⊗	EXISTING POWER POLE w/ GUY WIRE
⊙	EXISTING STREET LIGHT
⊕	EXISTING HYDRANT
W	EXISTING WATER MANHOLE
□	SENDING & RECEIVING PITS
⊠	BOREHOLE LOCATION
⊠	EX W BOREHOLE NUMBER & ELEVATION
⊠	SEE DWG No. C403 & C404 FOR BOREHOLE LOG

No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
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4	2020JUL15	ISSUED FOR TENDER	PVD	CC
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Consultant's Name  
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**PROFESSIONAL ENGINEER**  
CHRIS COWNER  
2020-07-15

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada

Client Services Team Southern Alberta Operations Branch  
Le Client Entretien l'Équipe Alberta Méridionale Branche d'Opérations

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Western and Northern Region  
Ouest et Nord du Canada

Project title/Titre du projet

## LAKE LOUISE TOWNSITE PHASE 2 - 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK

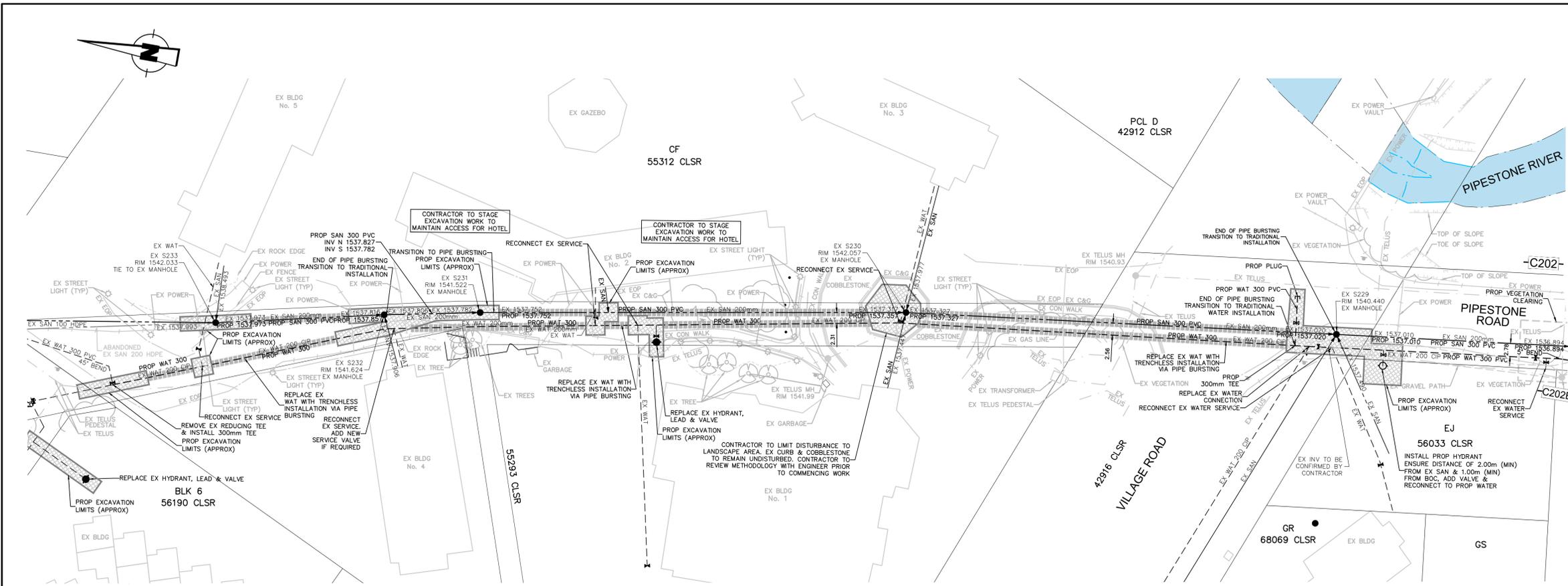
Drawing title/Titre du dessin

### UNDERGROUND UTILITIES PLAN SHEET 3 OF 3

Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Échelle 1:1250
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Client Acceptance/Acceptation du client Approved by/Approuvé par		
Park Responsible Officer/Agent Responsable		PWGSC Project Manager/Administrateur de Projets TPSSC
Project No./No. du projet 181-13597-14	Asset No./No. du bien -	Sheet No./No. de la feuille 5
Drawing Reference No./No. de référence du dessin C104		17

- #### NOTES
- ALL PIPE SIZES ARE IN MILLIMETERS AND ALL DIMENSIONS AND ELEVATIONS IN METRES. SURVEY NOTES: NAD 83 (CSRS EPOCH 2002.0) UTM ZONE 11. BEARINGS ARE GRID, DERIVED FROM GNSS OBSERVATIONS. COMBINED SCALE FACTOR: 0.999401. DISTANCES ARE METRES AND BETWEEN IRON POSTS UNLESS SHOWN OTHERWISE. REFERENCE FRAME HAS BEEN COORDINATED THROUGH NATURAL RESOURCES CANADA PRECISE POINT POSITIONING (PPP).
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  - MAINTAIN A MINIMUM OF 2.50m SEPARATION DISTANCE BETWEEN THE WATER AND SANITARY OR STORM MAINS.
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  - CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, INVERTS AND ELEVATIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ENGINEER.
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  - CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES INCLUDING ALBERTA ONE CALL PRIOR TO DIGGING.
  - CONTRACTOR IS RESPONSIBLE FOR ALL SANITARY BYPASS, TO CONFORM TO THE LATEST EDITION OF THE CITY OF CALGARY INFORMATION AVAILABLE FROM THE BOREHOLES PROVIDED IN THE GEOTECH REPORT PROVIDED BY WSP, SEPTEMBER 4, 2019.
  - SEWER BYPASS PUMPING GUIDELINES (SEE APPENDIX A OF THE TECHNICAL SPECIFICATIONS) ALL SUBMISSIONS AND REVIEWS NOTED IN THIS GUIDELINE SHALL BE SUBMITTED TO AND REVIEWED BY WSP.
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  - AS BOREHOLES ARE A LOCALIZED REPRESENTATION OF THE TOTAL STUDY AREA, SUBSURFACE CONDITIONS MAY VARY BETWEEN AND/OR BEYOND THE BOREHOLE LOCATIONS. IF CONDITIONS ENCOUNTERED AT THE SITE VARY SIGNIFICANTLY FROM THAT REPORTED IN THE GEOTECH REPORT, WSP SHOULD BE NOTIFIED IMMEDIATELY SO THAT OUR INTERPRETATION AND RECOMMENDATIONS CAN BE REVIEWED AND REVISED IF NECESSARY.
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Last Saved: 2020-07-15 9:20:10 AM. By: Dan P. File Size: 1065000. WSP-181-13597-14-C104-SEWER\_PIPES.dwg  
 Plot: 181-13597-14 Lake Louise Utilities Upgrades (C104) - P.01 - Services (C104) - I & E.dwg  
 Drawn by: S113  
 Design: S113  
 Date: 2019-08-07  
 Project: 181-13597-14 Lake Louise Utilities Upgrades (C104) - P.01 - Services (C104) - I & E.dwg



**LEGEND**

BH 05	BOREHOLE LOCATION
1582.80	c/w BOREHOLE NUMBER & ELEVATION
	SEE DWG No. C403 & C404 FOR BOREHOLE LOGS

- NOTES:**
1. THE REQUIRED ROAD STRUCTURE IS TO CONFORM TO THE REQUIREMENTS OF THE CITY OF CALGARY MAJOR ROAD (<5 MILLION EQUALS) ASPHALT PAVEMENT STRUCTURE AS INDICATED ON FIGURE 2 OF THE CURRENT EDITION OF THE CITY OF CALGARY, STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION FILE No. 454.1005.009.
  2. THE CONTRACTOR SHOULD ASSESS THE SUITABILITY AND THE ANTICIPATED DIFFICULTY LEVEL OF THE PROPOSED TRENCHLESS INSTALLATION METHOD BASED ON OVERALL SITE CONDITIONS, EXPERIENCE IN SIMILAR WORK CONDITIONS, AND SUBSURFACE INFORMATION AVAILABLE FROM THE BOREHOLES PROVIDED IN THE GEOTECHNICAL REPORT PROVIDED BY WSP, SEPTEMBER 04, 2019.
  3. AS BOREHOLES ARE A LOCALIZED REPRESENTATION OF THE TOTAL STUDY AREA, SUBSURFACE CONDITIONS MAY VARY BETWEEN AND/OR BEYOND THE BOREHOLE LOCATIONS. IF CONDITIONS ENCOUNTERED AT THE SITE VARY SIGNIFICANTLY FROM THAT REPORTED IN THE GEOTECHNICAL REPORT, WSP SHOULD BE NOTIFIED IMMEDIATELY SO THAT OUR INTERPRETATION AND RECOMMENDATIONS CAN BE REVIEWED AND REVISED IF NECESSARY.
  4. LIMIT OF DISTURBANCE FOR TRENCHLESS WORKS SHOWN FOR DISCUSSION ONLY. CONTRACTOR RESPONSIBLE TO MINIMIZE SIZE OF EXCAVATION AND LOCATE PITS TO MINIMIZE DISTURBANCE TO LOCAL BUSINESSES.

No.	Date/Date	Description/Description	Drawn by	Approved
5				
4	2020JUL15	ISSUED FOR TENDER	PVD	CC
3	2020MAY25	90% SUBMISSION	PVD	CC
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Revision / Revision

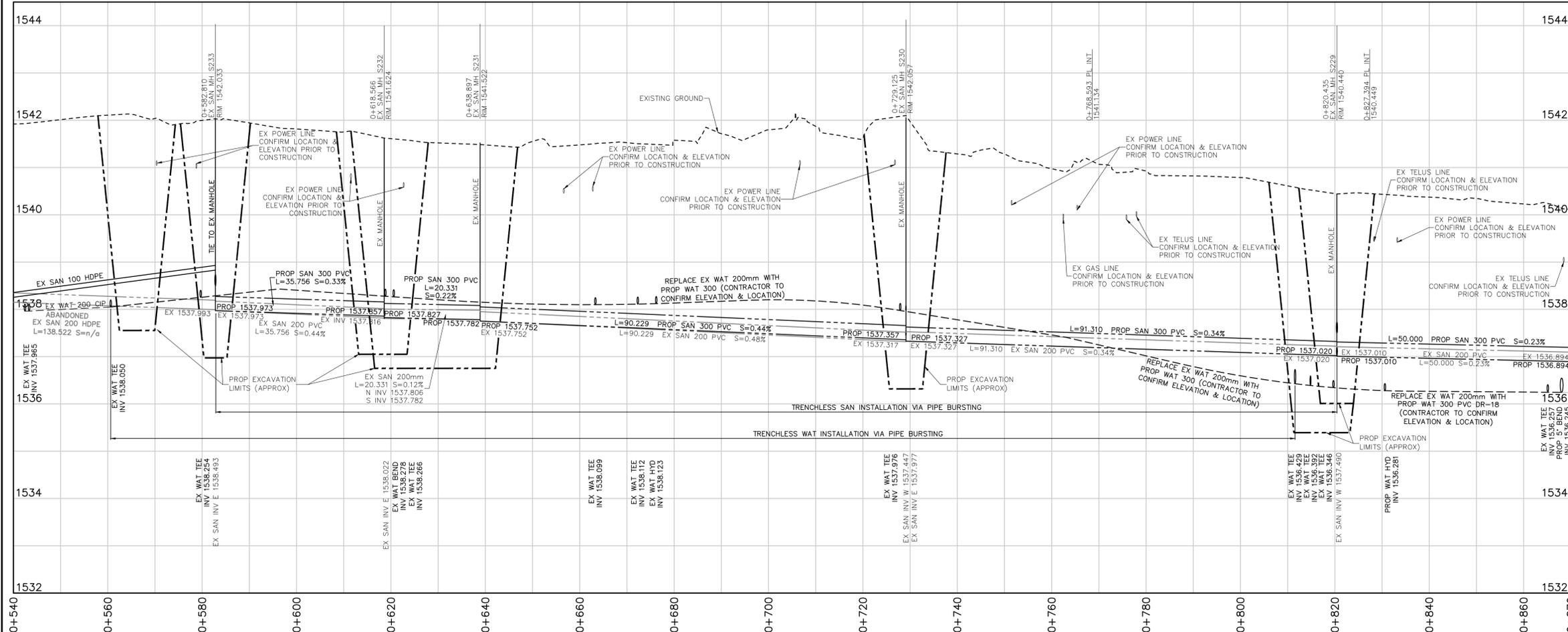
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CHRIS COWDER

SERVICE LOCATIONS AND VALVES ARE APPROXIMATE. CONTRACTOR TO CONFIRM LOCATION AND ELEVATION OF ALL SERVICE LATERALS IN THE FIELD AND REVIEW WITH THE ENGINEER PRIOR TO CONSTRUCTION.



Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada

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Le Client Entretien l'Équipe Alberta Méridionale  
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Western and Northern Region  
Ouest et Nord du Canada

Project title/Titre du projet

## LAKE LOUISE TOWNSITE PHASE 2 - 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK

Drawing title/Titre du dessin

### PLAN PROFILE FROM STA 0+545 TO STA 0+870

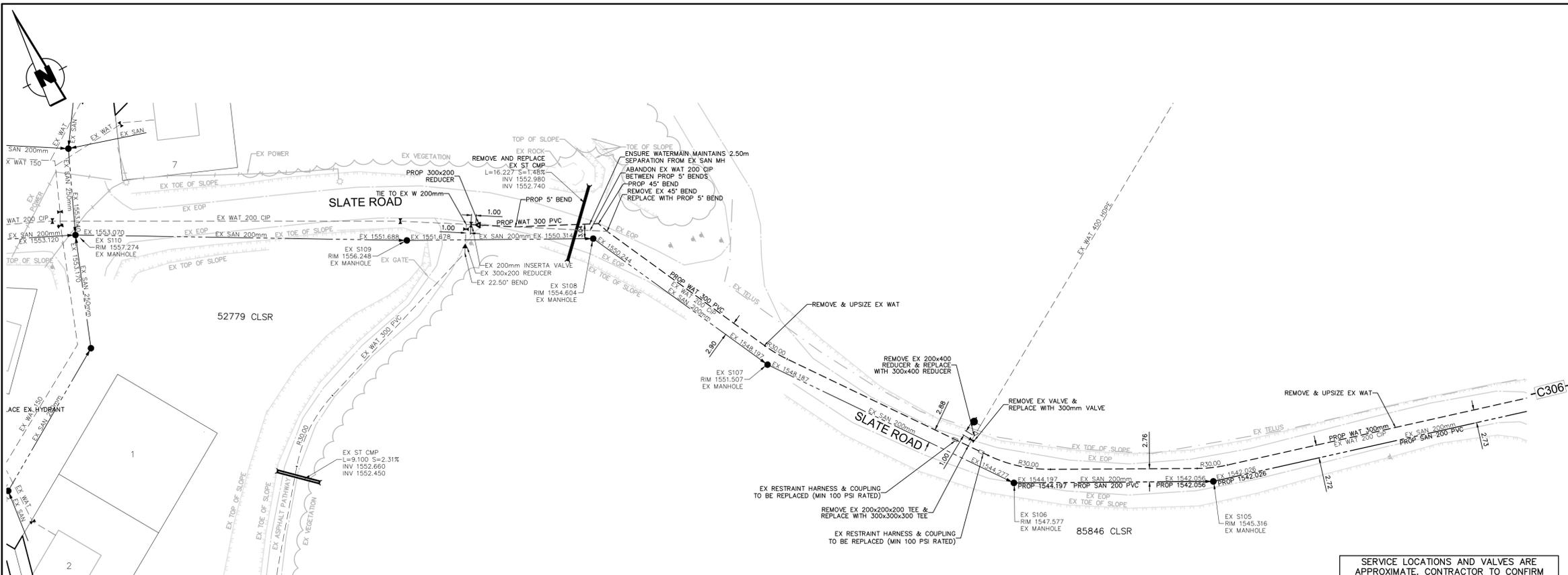
Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Échelle 1:500 HOR, 1:50 VER
PWGSC Project Manager/Administrateur de Projets TPSSC KD		
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Project No./No. du projet 181-13597-14	Asset No./No. du bien -	Sheet No./No. de la feuille 6

Unit Source: 2020-06-20 3:21:18 PM, By: Van, Dc, Pth, Proj: S:\P\2020-06-20-14-Lake Louise Utilities Upgrade\0200 - P\01 - Services C400 - P\01 - Services C400 - I & E\C401  
 Drawn: 2019-08-07 10:53:14 AM, By: PVD, Proj: S:\P\2020-06-20-14-Lake Louise Utilities Upgrade\0200 - P\01 - Services C400 - P\01 - Services C400 - I & E\C401  
 WSP Reference: PWS (181-13597-14)\_PROP-MAJ-C-PWS-SM-Ang

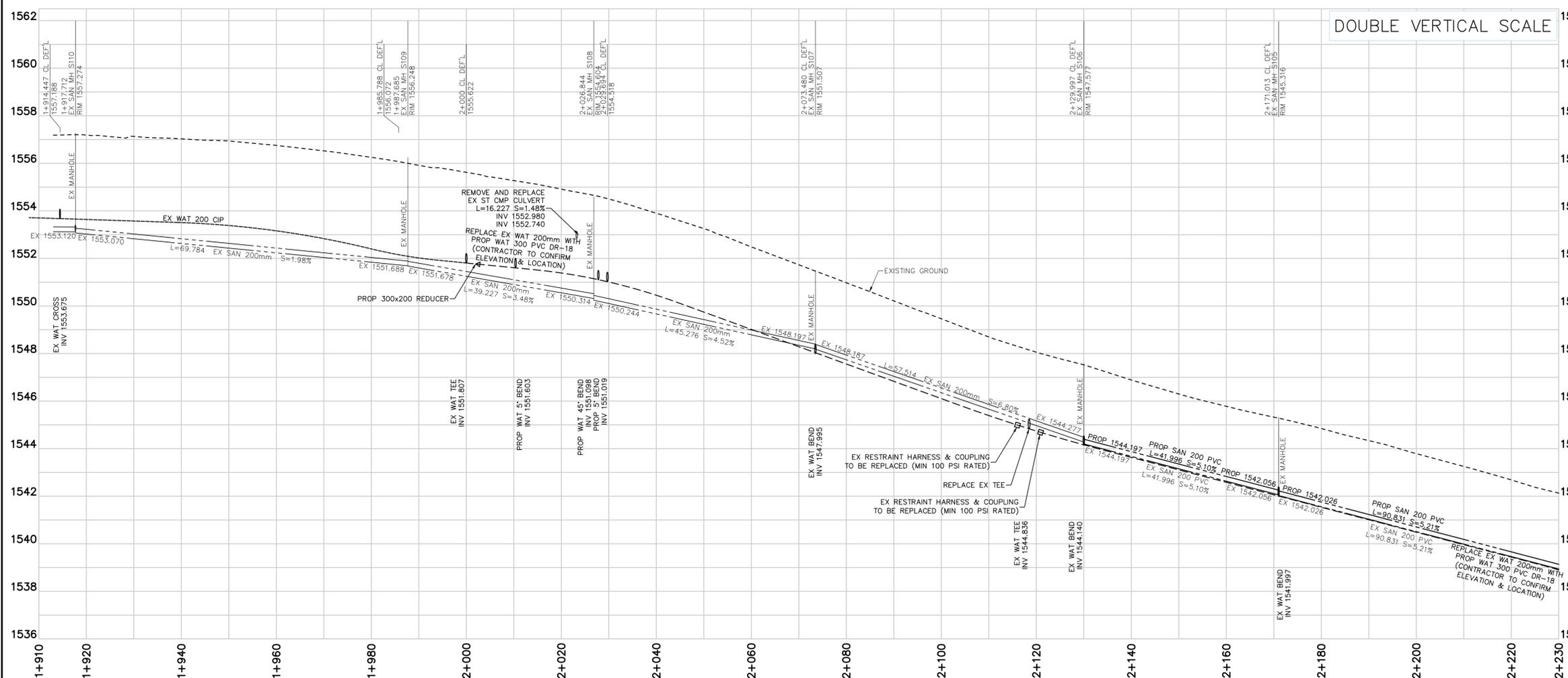








SERVICE LOCATIONS AND VALVES ARE APPROXIMATE. CONTRACTOR TO CONFIRM LOCATION AND ELEVATION OF ALL SERVICE LATERALS IN THE FIELD AND REVIEW WITH THE ENGINEER PRIOR TO CONSTRUCTION.



- LEGEND**
- BH 05 1582.80 BOREHOLE LOCATION c/w BOREHOLE NUMBER & ELEVATION SEE DWG No. C403 & C404 FOR BOREHOLE LOGS
- NOTES:**
- THE REQUIRED ROAD STRUCTURE IS TO CONFORM TO THE REQUIREMENTS OF THE CITY OF CALGARY MAJOR ROAD (<5 MILLION ESALS) ASPHALT PAVEMENT STRUCTURE AS INDICATED ON FIGURE 2 OF THE CURRENT EDITION OF THE CITY OF CALGARY, STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION FILE No. 454.1005.009.
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No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
5				
4	2020JUL15	ISSUED FOR TENDER	PVD	CC
3	2020MAY25	90% SUBMISSION	PVD	CC
2	2020APR24	75% SUBMISSION	PVD	CC
1	2020JAN27	50% SUBMISSION	PVD	CC

Revision / Revision	
A	detail number
B	source drawing no. de dessin no.
C	detail on drawing no. detail sur dessin no.

Consultant's Name  
Nom de l'expert-conseil

WSP Canada Group Limited  
729 10 Street, Suite 201  
Camrose, AB, Canada T1W 2A2  
1-403-678-3500 | 1-403-678-3501  
www.wsp.com

Professional Engineer  
Chris Cowner  
2020-07-15

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada

Client Services Team Southern Alberta Operations Branch  
Le Client Entretien l'Équipe Alberta Méridionale Branche d'Opérations

Canada

Client/client  
Parks Canada Agency  
L'Agence Parcs Canada

Western and Northern Region  
Ouest et Nord du Canada

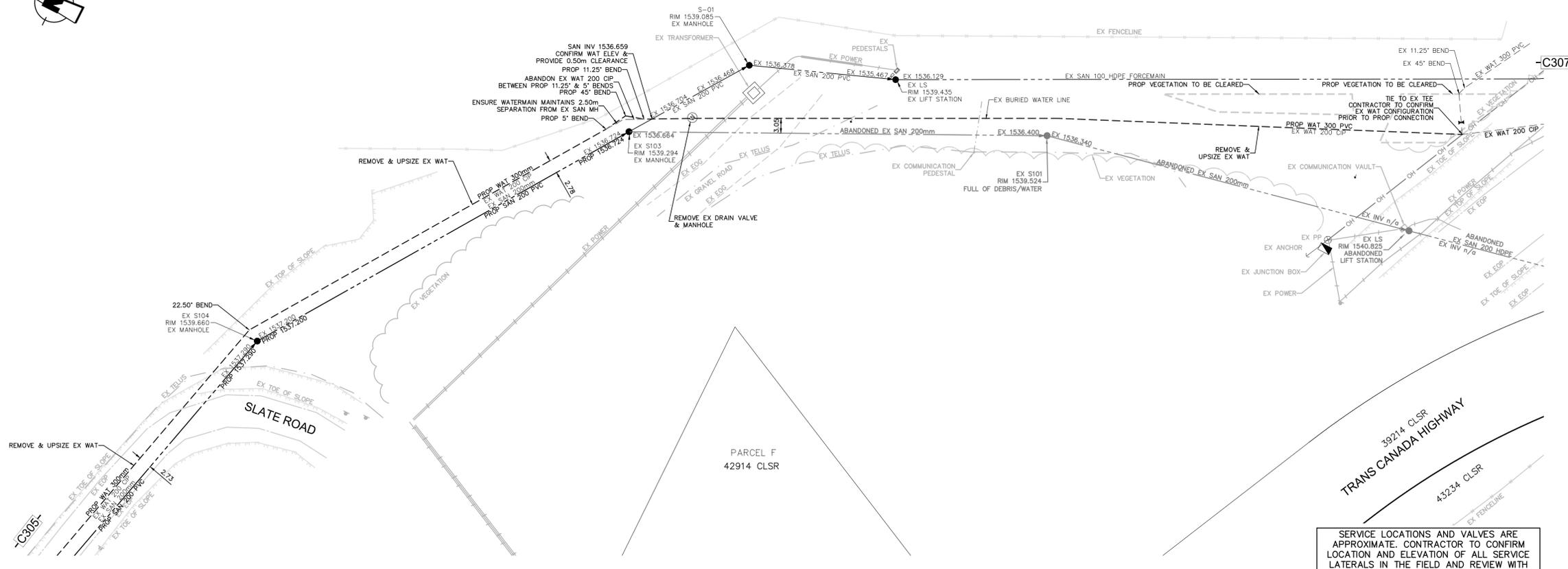
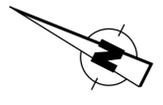
Project title/Titre du projet  
**LAKE LOUISE TOWNSITE PHASE 2 – 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK**

Drawing title/Titre du dessin  
**PLAN PROFILE FROM STA 1+910 TO STA 2+230**

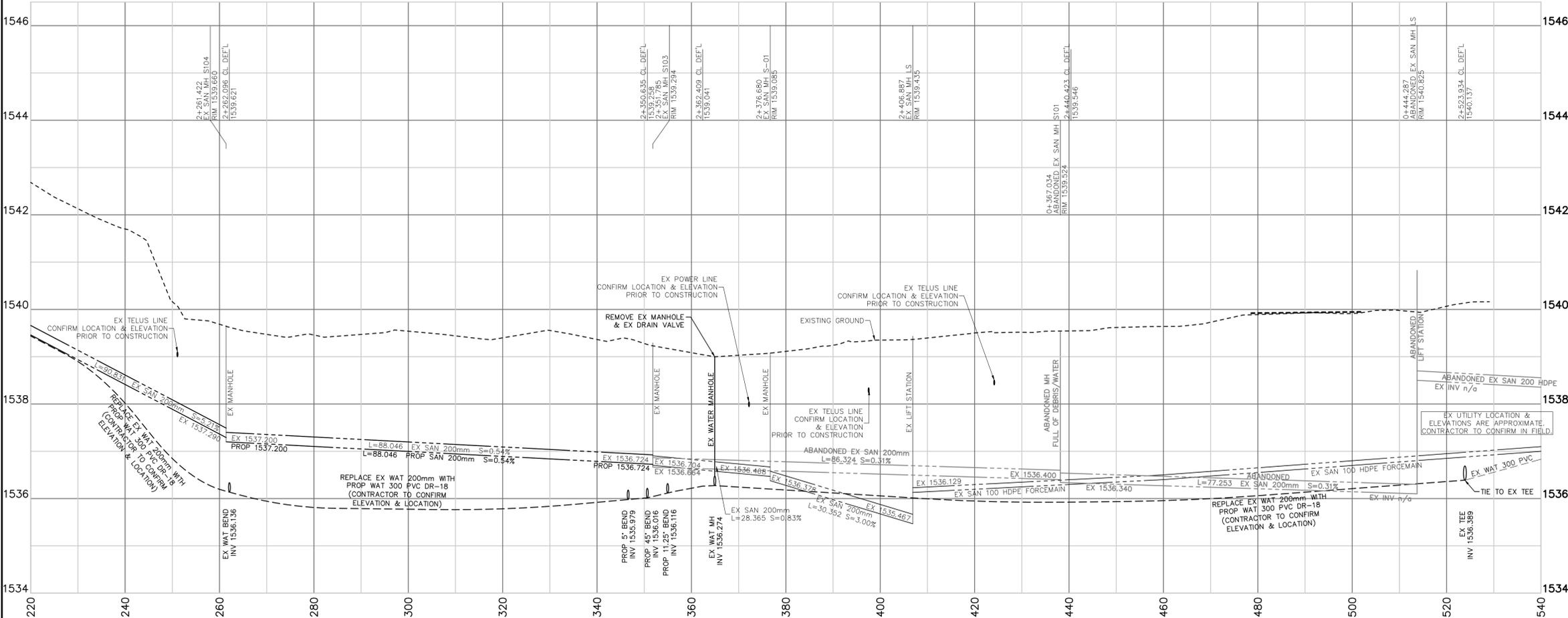
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Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Échelle 1:500 HOR, 1:100 VER
PWSC Project Manager/Administrateur de Projets TPSCC KD		
Client Acceptance/Acceptation du client Approved by/Approuvé par		

Project No./No. du projet 181-13597-14	Asset No./No. du bien -	Sheet No./No. de la feuille 10
Drawing Reference No./No. de référence du dessin C305		17

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SERVICE LOCATIONS AND VALVES ARE APPROXIMATE. CONTRACTOR TO CONFIRM LOCATION AND ELEVATION OF ALL SERVICE LATERALS IN THE FIELD AND REVIEW WITH THE ENGINEER PRIOR TO CONSTRUCTION.



**LEGEND**

	<b>BOREHOLE LOCATION</b>
BH 05	c/w BOREHOLE NUMBER & ELEVATION
1582.80	SEE DWG No. C403 & C404 FOR BOREHOLE LOGS

- NOTES:**
1. THE REQUIRED ROAD STRUCTURE IS TO CONFORM TO THE REQUIREMENTS OF THE CITY OF CALGARY MAJOR ROAD (<5 MILLION ESAL'S) ASPHALT PAVEMENT STRUCTURE AS INDICATED ON FIGURE 2 OF THE CURRENT EDITION OF THE CITY OF CALGARY, STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION FILE No. 454.1005.009.
  2. THE CONTRACTOR SHOULD ASSESS THE SUITABILITY AND THE ANTICIPATED DIFFICULTY LEVEL OF THE PROPOSED TRENCHLESS INSTALLATION METHOD BASED ON OVERALL SITE CONDITIONS, EXPERIENCE IN SIMILAR WORK CONDITIONS, AND SUBSURFACE INFORMATION AVAILABLE FROM THE BOREHOLES PROVIDED IN THE GEOTECHNICAL REPORT PROVIDED BY WSP, SEPTEMBER 04, 2019.
  3. AS BOREHOLES ARE A LOCALIZED REPRESENTATION OF THE TOTAL STUDY AREA, SUBSURFACE CONDITIONS MAY VARY BETWEEN AND/OR BEYOND THE BOREHOLE LOCATIONS. IF CONDITIONS ENCOUNTERED AT THE SITE VARY SIGNIFICANTLY FROM THAT REPORTED IN THE GEOTECHNICAL REPORT, WSP SHOULD BE NOTIFIED IMMEDIATELY SO THAT OUR INTERPRETATION AND RECOMMENDATIONS CAN BE REVIEWED AND REVISED IF NECESSARY.

No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
5				
4	2020JUL15	ISSUED FOR TENDER	PVD	CC
3	2020MAY25	90% SUBMISSION	PVD	CC
2	2020APR24	75% SUBMISSION	PVD	CC
1	2020JAN27	50% SUBMISSION	PVD	CC

Revision / Revision

A	detail number	A
B	numero de detail	B/C
C	source drawing no. de dessin no.	
	detail on drawing no. detail sur dessin no.	

Consultant's Name  
Nom de l'expert-conseil

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**PROFESSIONAL ENGINEER ALBERTA**  
CHRIS CONNER

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada

Client Services Team Southern Alberta Operations Branch  
Le Client Entretien l'Équipe Alberta Méridionale Branche d'Opérations

**Canada**

Client/client  
Parks Canada Agency  
L'Agence Parcs Canada

Western and Northern Region  
Ouest et Nord du Canada

Project title/Titre du projet  
**LAKE LOUISE TOWNSITE PHASE 2 – 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK**

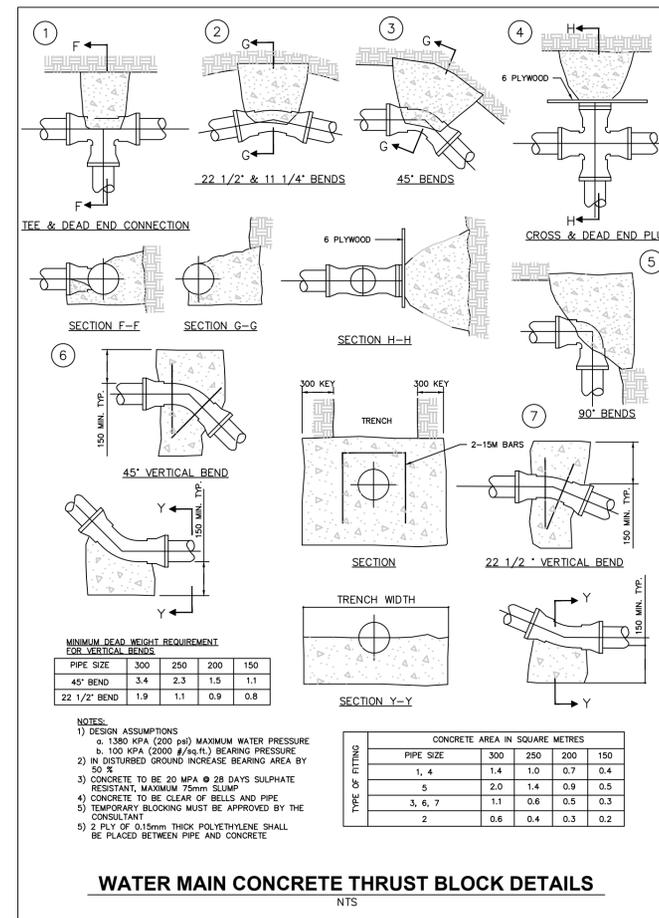
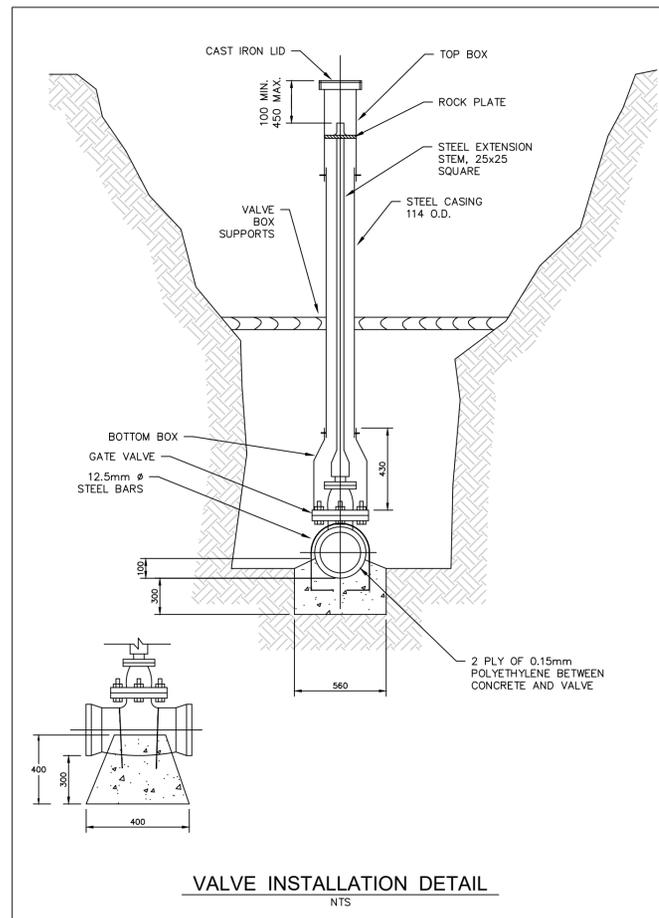
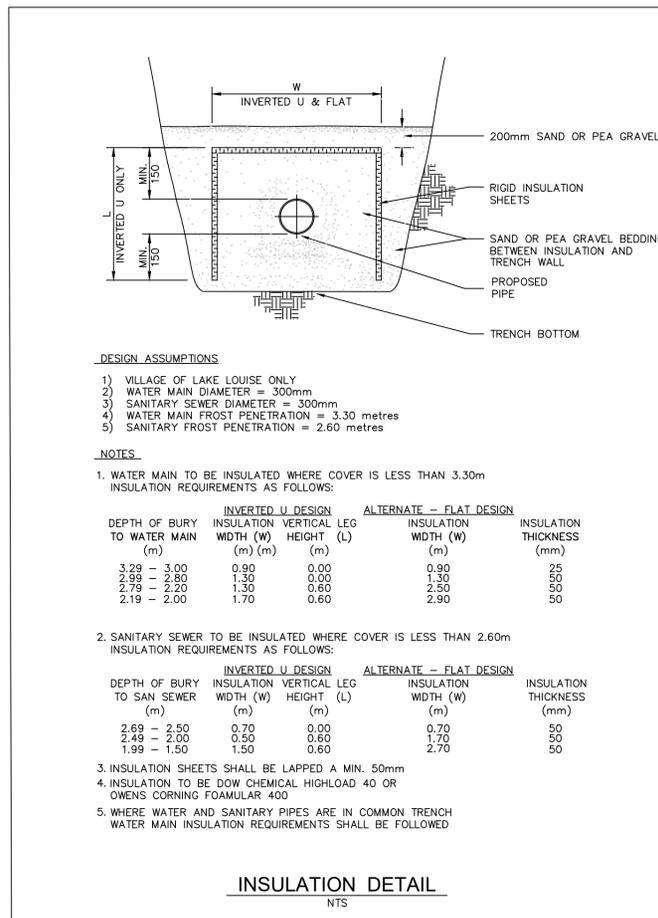
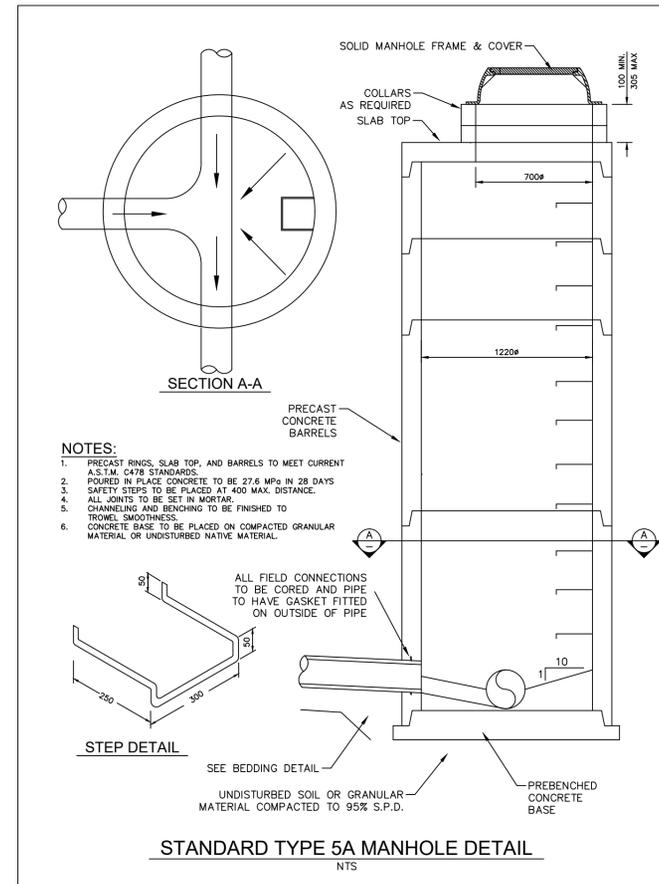
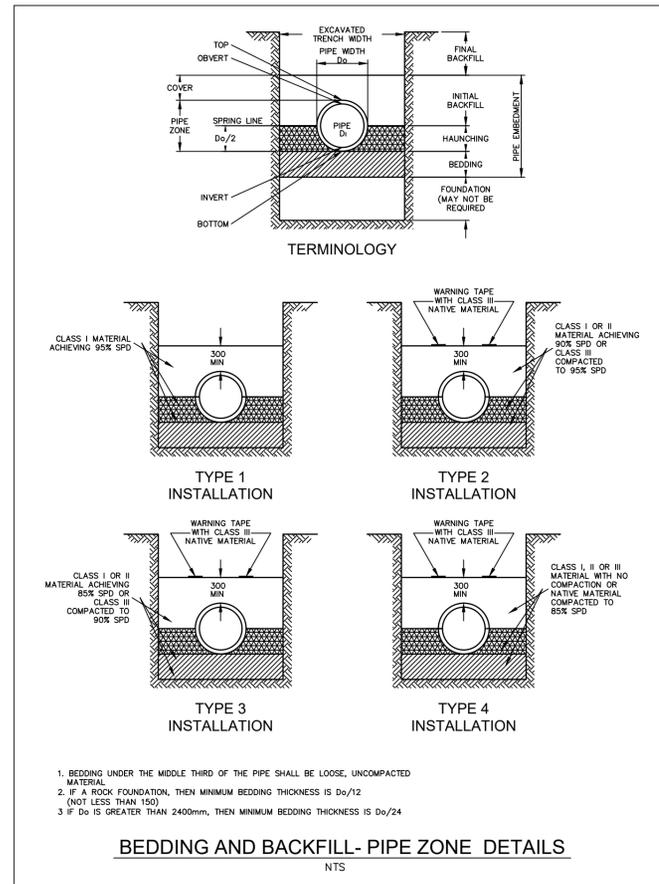
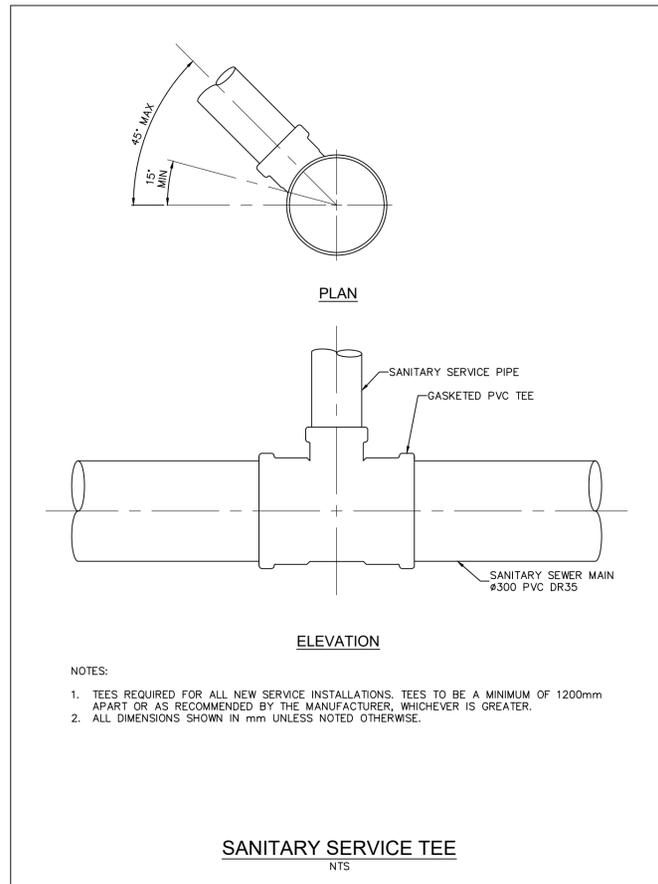
Drawing title/Titre du dessin  
**PLAN PROFILE FROM STA 2+230 TO STA 2+540**

Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Échelle 1:500 HOR, 1:50 VER
PWGSC Project Manager/Administrateur de Projets TPSSC KD		
Client Acceptance/Acceptation du client Approved by/Approuvé par		

Project No./No. du projet 181-13597-14	Asset No./No. du-bien -	Sheet No./No. de la feuille 11
Drawing Reference No./No. de référence du dessin C306		17

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**LEGEND**

5				
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3	2020MAY25	90% SUBMISSION	PVD	CC
2	2020APR24	75% SUBMISSION	PVD	CC
1	2020JAN27	50% SUBMISSION	PVD	CC

No. Date/Date Description/Description Drawn by Dessiné par Approved Approuvé

Revision / Revision

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

Consultant's Name  
Nom de l'expert-conseil

Eng. Stamp  
Sceau de l'ingénieur

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Client Services Team Southern Alberta Operations Branch  
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**Canada**

Client/client  
Parks Canada Agency  
L'Agence Parcs Canada

Western and Northern Region  
Ouest et Nord du Canada

Project title/Titre du projet  
**LAKE LOUISE TOWNSITE PHASE 2 - 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK**

Drawing title/Titre du dessin  
**DETAILS (TYPICAL)**

Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Échelle AS SHOWN

PWGS Project Manager/Administrateur de Projets TPSSC  
KD

Client Acceptance/Acceptation du client  
Approved by/Approuvé par

Project No./No. du projet  
181-13597-14

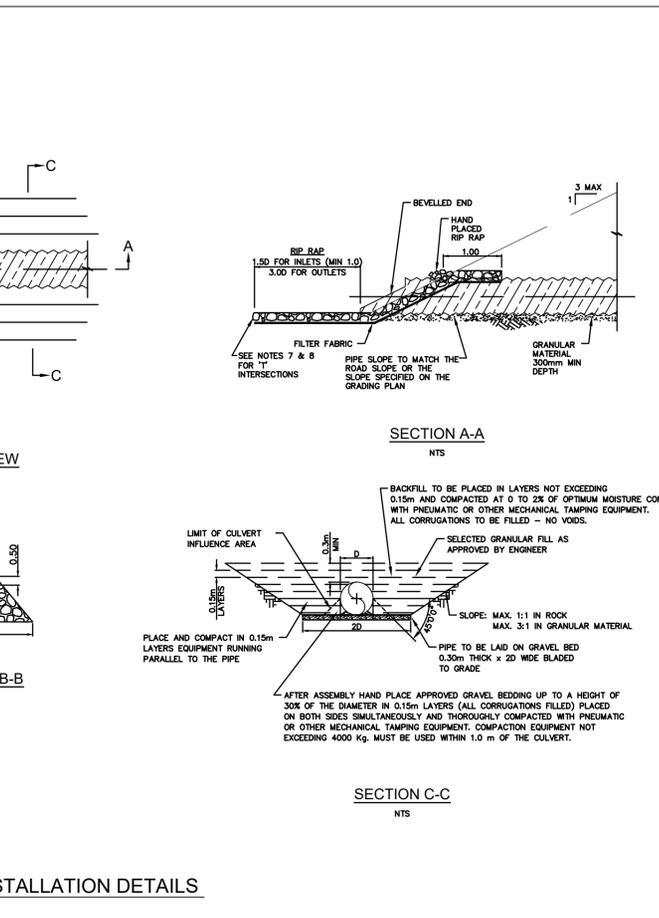
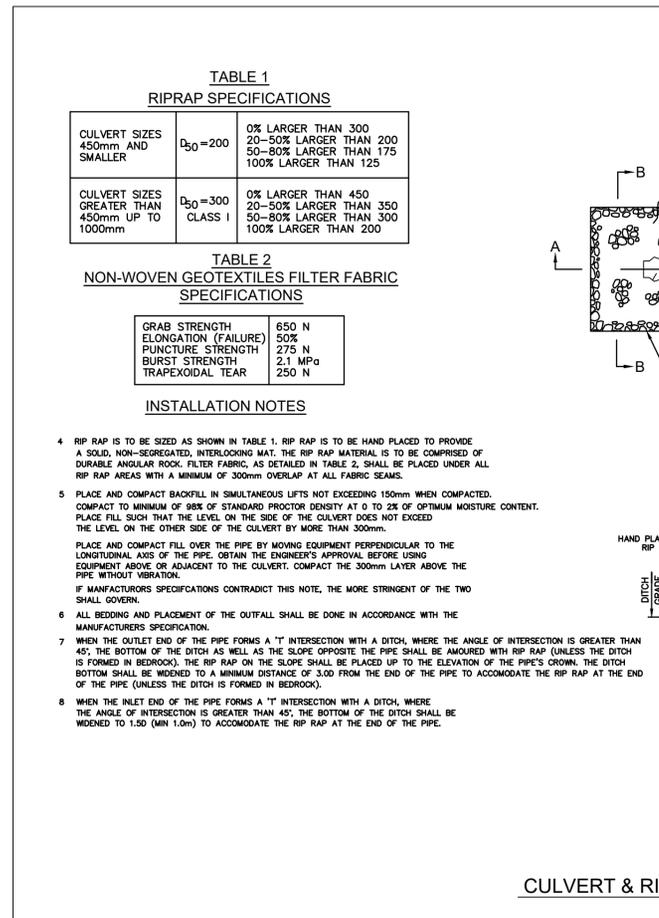
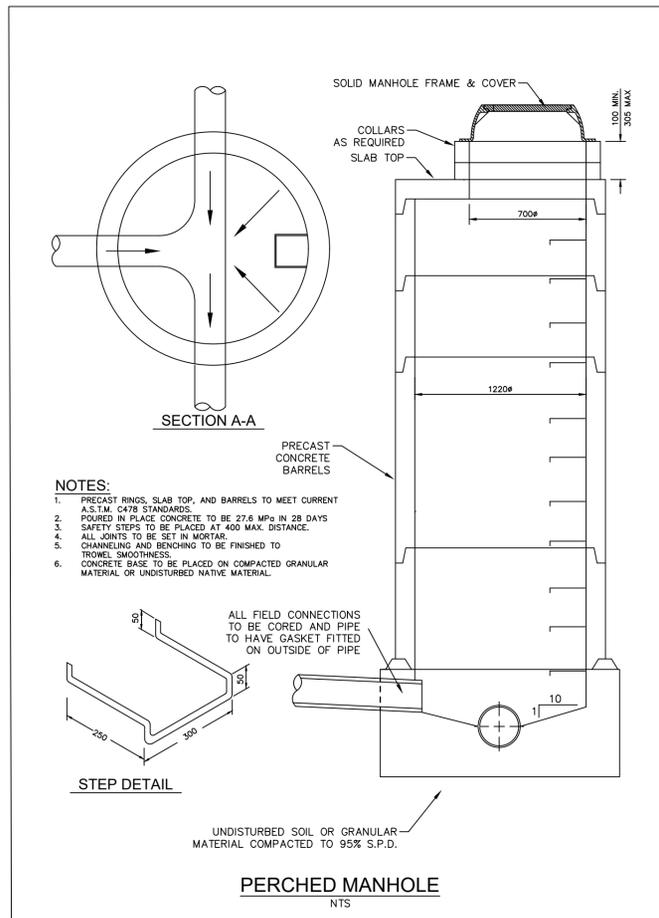
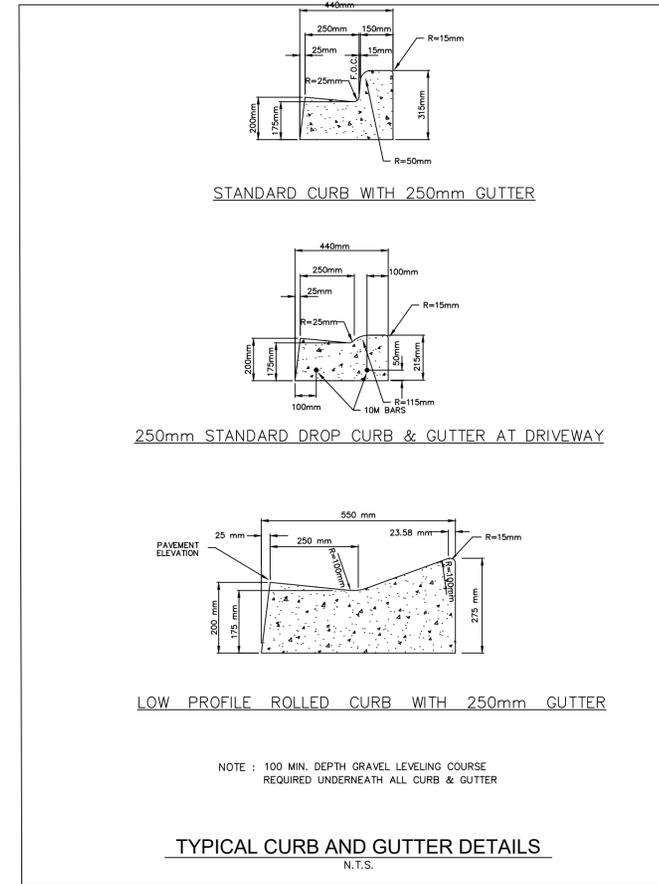
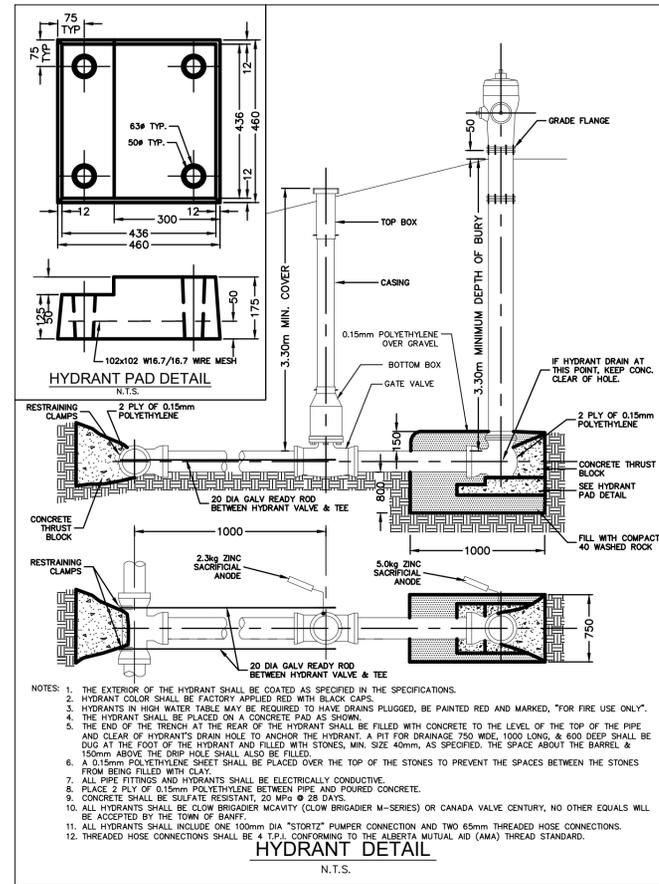
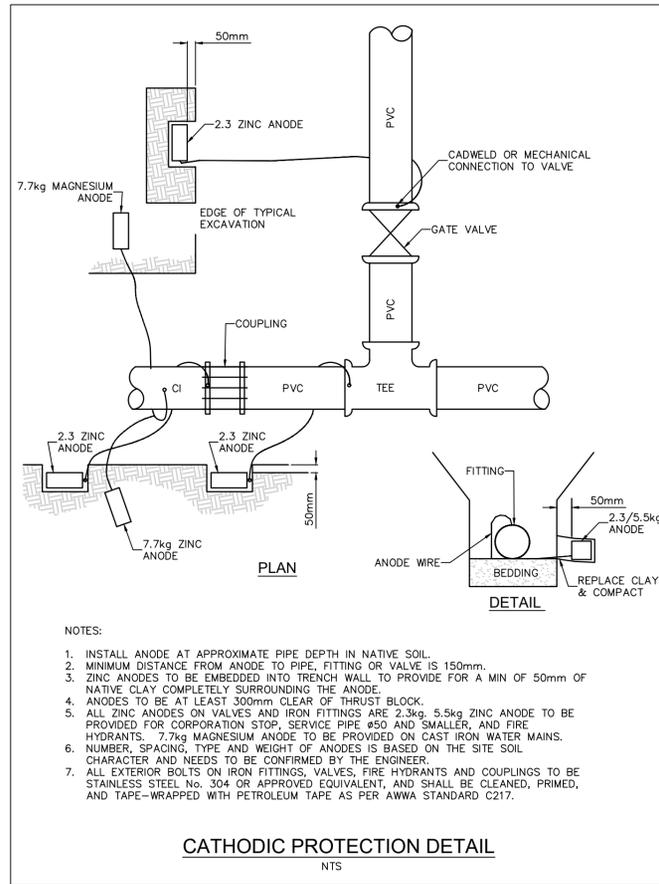
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Sheet No./No. de la feuille  
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Drawing Reference No./No. de référence du dessin  
C400

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No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
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2	2020APR24	75% SUBMISSION	PVD	CC
1	2020JAN27	50% SUBMISSION	PVD	CC

Revision / Revision	
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C	detail on drawing no. / detail sur dessin no.

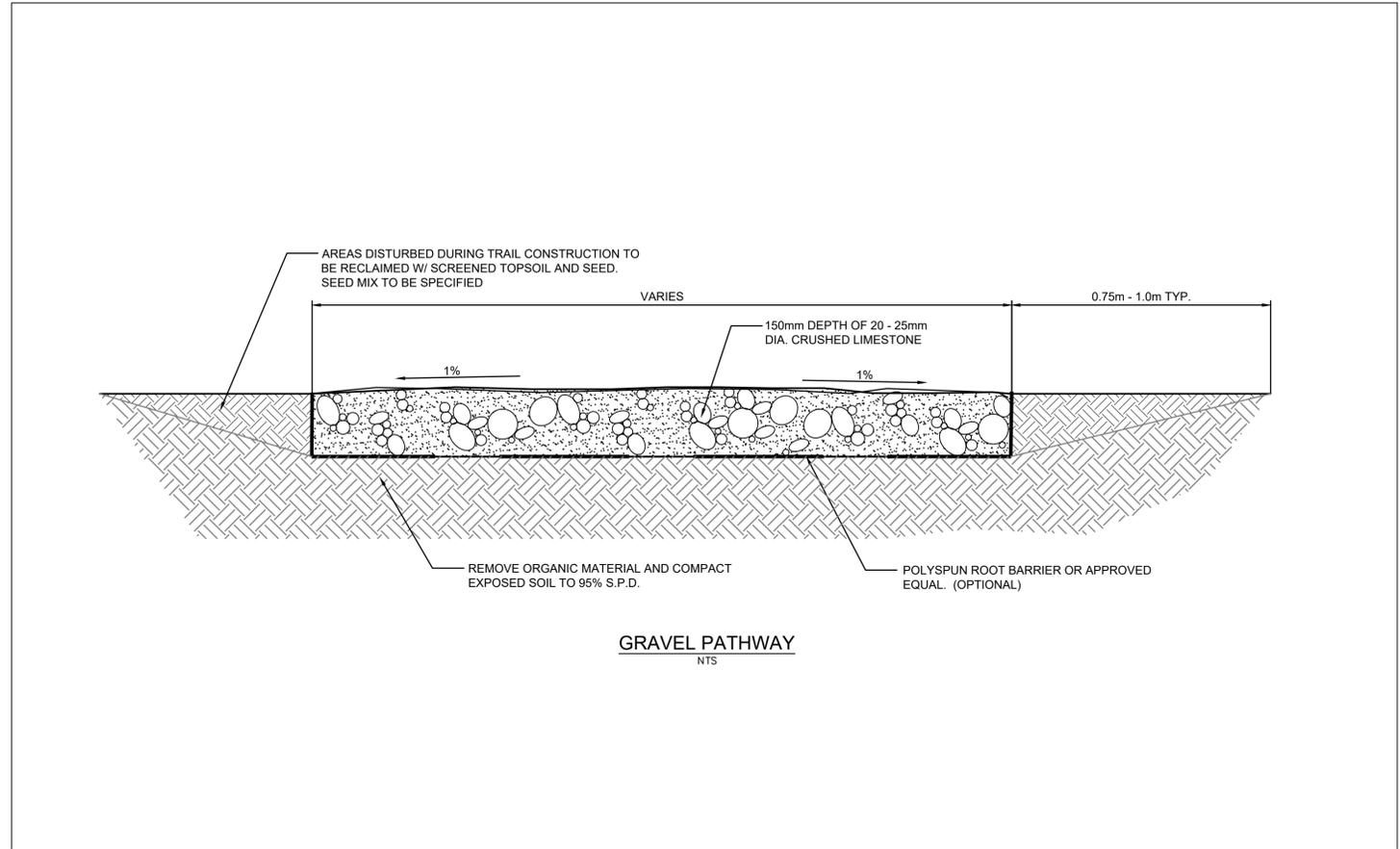
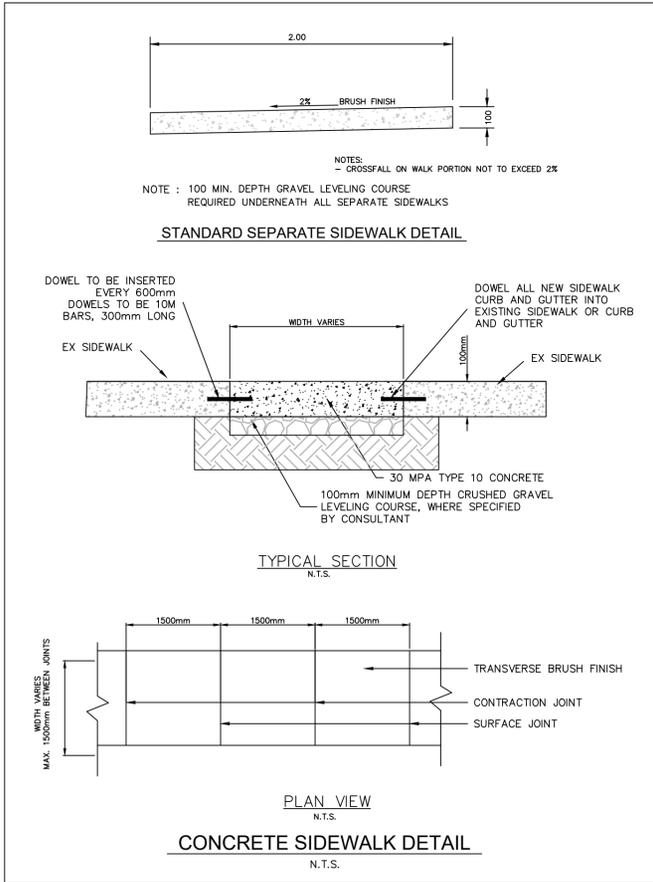
Consultant's Name / Nom de l'expert-conseil: **wsp**  
 Eng. Stamp / Sceau de l'ingénieur: [Stamp]  
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 Client Services Team / Le Client Entretien l'Équipe Operations Branch / Alberta Méridionale Branche d'Opérations  
**Canada**  
 Client/client: Parks Canada Agency / L'Agence Parcs Canada  
 Western and Northern Region / Ouest et Nord du Canada

Project title/Titre du projet: **LAKE LOUISE TOWNSITE PHASE 2 - 2018 WATER & SEWER UPGRADES BANFF NATIONAL PARK**  
 Drawing title/Titre du dessin: **DETAILS (TYPICAL)**

Surveyed by/Arpenté par: WSP GEOMATICS	Drawn by/Dessiné par: PVD	Date/Date: 2019AUG07
Designed by/Concept par: CC	Reviewed by/Revisé par: SC/JW	Scale/Echelle: AS SHOWN
PWGSC Project Manager/Administrateur de Projets TPSGC: KD		
Client Acceptance/Acceptation du client: Approved by/Approuvé par		
Park Responsible Officer/Agent Responsable: PWGSC Project Manager/Administrateur de Projets TPSGC		
Project No./No. du projet: 181-13597-14	Asset No./No. du bien: -	Sheet No./No. de la feuille: 14
Drawing Reference No./No. de référence du dessin: C401		17

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3	2020MAY25	90% SUBMISSION	PVD	CC
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1	2020JAN27	50% SUBMISSION	PVD	CC
No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé

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

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

Eng. Stamp / Sceau de l'ingénieur

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**Canada**

Client/client

Parks Canada Agency / L'Agence Parcs Canada

Western and Northern Region / Ouest et Nord du Canada

Project title/Titre du projet

**LAKE LOUISE TOWNSITE  
PHASE 2 – 2018 WATER  
& SEWER UPGRADES  
BANFF NATIONAL PARK**

Drawing title/Titre du dessin

**DETAILS (TYPICAL)**

Surveyed by/Arpenté par WSP GEOMATICS	Drawn by/Dessiné par PVD	Date/Date 2019AUG07
Designed by/Concept par CC	Reviewed by/Revisé par SC/JW	Scale/Echelle 1:500

PWOSC Project Manager/Administrateur de Projets TPSSC  
KD

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

Project No./No. du projet 181-13597-14	Asset No./No. du-bien -	Sheet No./No. de la feuille 15
Drawing Reference No./No. de référence du dessin C402		17

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