



McElhanney

for / pour



**Parks Canada
Agency
Western and
Northern Region**

**L'Agence Parcs
Canada
Ouest et Nord
Région**

**WILDLIFE UNDERPASS
AT km 83.1
TCH TWINNING**

YOHO NATIONAL PARK, BRITISH COLUMBIA

DRAWING REFERENCE NO. 2511-00545-01

JUNE 2016

GENERAL NOTES

1. THE METRIC SYSTEM OF MEASUREMENT IS USED ON ALL DRAWINGS, ELEVATIONS AND STATIONS ARE SHOWN IN METRES AND ALL OTHER DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. CONSTRUCTION OF WORKS SHALL COMPLY WITH THE FOLLOWING IN ORDER OF PRECEDENCE.

a. PROJECT SPECIAL PROVISIONS

b. DESIGN DRAWINGS

c. BRITISH COLUMBIA MINISTRY OF TRANSPORT & INFRASTRUCTURE STANDARD SPECIFICATIONS

DESIGN DATA

1. DESIGN LIFE: 75 YEARS.
2. DESIGN STANDARD: CAN/CSA – S6–14
3. DESIGN LIVE LOAD: CL–800
4. FATIGUE DESIGN: CLASS A HIGHWAY AADT 6080 (2014)
5. WIND LOAD: 50 YEAR RETURN PERIOD = 1.66 kPa
6. SEISMIC DESIGN:

– BRIDGE CLASSIFICATION:

– SITE CALSS:

– SEISMIC CATEGORY:

– PGA:

MAJOR ROUTE

D

2

0.127g
7. DESIGN TEMPERATURE RANGE: MAX. 36°C / MIN. –40°C
8. PROJECT SPECIAL PROVISIONS

FOUNDATION NOTES

1. FOR GEOTECHNICAL DESIGN PARAMETERS SEE GEOTECHNICAL INVESTIGATION "TRANS–CANADA HIGHWAY (TCH) KM 81+300 TO 85+500 ANIMAL UNDERPASS STRUCTURE" PREPARED BY EBA (AUGUST 2011).
2. UPON EXCAVATION TO THE DESIGN ELEVATIONS, THE BEARING SURFACE OF DISTURBED NATIVE SOILS SHALL BE COMPACTED TO 100% OF THE STANDARD PROCTOR DENSITY, BEFORE CONSTRUCTION OF OTHER WORKS.
3. GIRDERS, DECK, AND CONCRETE ABUTMENT DIAPHRAGM SHALL BE COMPLETE BEFORE ANY BACKFILLING CAN OCCUR.
4. HEAVY EARTH COMPACTING EQUIPMENT OR OTHER HEAVY CONSTRUCTION EQUIPMENT SHALL NOT BE USED WITHIN 3.0m OF THE ABUTMENTS OR WING WALLS. HAND TAMPING EQUIPMENT MUST BE USED IN THESE AREAS.

CONCRETE NOTES

1. ALL CONCRETE SHALL BE IN ACCORDANCE WITH CSA A23.2–14 CONCRETE SHALL HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOW.

a. ABUTMENT AND FOOTING

b. DECK AND DIAPHRAGMS

c. APPROACH SLABS

d. BARRIERS

e. PRECAST GIRDER

35MPa

45MPa

45MPa

45MPa

65MPa
2. CONCRETE COVER TO REINFORCEMENT FOR CAST–IN–PLACE CONCRETE SHALL BE PROVIDED AS FOLLOWS UNLESS NOTED OTHERWISE:

a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

b. CONCRETE CAST AGAINST FORMWORK AND SUBSEQUENTLY EXPOSED TO EARTH OR WEATHER

c. BRIDGE DECK TOP MAT

d. PRECAST GIRDER

e. ALL OTHER SURFACES

100mm

70mm

70mm

35mm

60mm
3. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 20mm UNLESS NOTED OTHERWISE.
4. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, SUPPLY, INSTALLATION AND REMOVAL OF ALL TEMPORARY WORKS REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT THE TEMPORARY WORKS DESIGN AND ERECTION PLANS FOR REVIEW BY THE ENGINEER BEFORE CONSTRUCTION.
5. CONCRETE FINISHES SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIAL PROVISIONS.
6. CONCRETE DECK SHALL BE MOIST CURED FOR A MINIMUM OF 14 DAYS BY CONTINUOUS SPRINKLING AND ABSORPTIVE MAT OR FABRIC APPLIED AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT DAMAGE.
7. BONDING SURFACE BETWEEN NEW AND PREVIOUSLY POURED CONCRETE SHALL BE SATURATED SURFACE DRY.
8. ALL CONSTRUCTION JOINTS SHALL BE CLEAN AND FREE OF LAITANCE AND INTENTIONALLY ROUGHENED TO FULL AMPLITUDE OF 5mm.

REINFORCEMENT NOTES

1. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CAN/CSA–G30.18–M GRADE 400W.
2. REINFORCING STEEL IN THE DECK, DIAPHRAGMS, DECK BARRIERS, APPROACH SLABS AND REINFORCING STEEL INDICATED ON THE DRAWINGS AS "G" SHALL BE GALVANIZED.
3. SPLICING OF TRANSVERSE DECK REINFORCING BARS, SHALL BE AS PER CAN/CSA S6–14.
4. LONGITUDINAL SPLICES ARE TO BE STAGGERED SO THAT NOT MORE THAN EVERY SECOND BAR IS SPLICED AT ANY CROSS SECTION OF THE DECK. ALTERNATE SPLICES SHALL BE STAGGERED BY MINIMUM Ld DISTANCE. ALL LAPS OF REINFORCING BARS FOR SPLICES SHALL BE AS BELOW:

BAR	Ld (mm)
15M	400
20M	550
25M	850
30M	1000

5. LEGENDS:

NEAR FACE REINFORCEMENT

FAR FACE REINFORCEMENT

PRECAST CONCRETE GIRDER NOTES

MATERIALS

1. CONCRETE FOR GIRDERS SHALL BE STANDARD WEIGHT AND CONTAIN SILICA FUME AS PER PROJECT SPECIAL PROVISIONS.
2. MINIMUM CONCRETE COMPRESSIVE STRENGTHS SHALL BE 45 MPa AT RELEASE AND 65MPa AT 28 DAYS.
3. REINFORCING STEEL SHALL CONFORM TO CAN/CSA – G30.18 M (R2014); GRADE 400W.
4. PRESTRESSING STEEL SHALL BE 15.2mm DIAMETER – 7 WIRE LOW RELAXATION STRAND (fpu = 1860 MPa). INITIAL JACKING FORCE SHALL BE 203 KN/STRAND.

FABRICATION

1. GIRDER SHALL BE MANUFACTURED IN ACCORDANCE WITH CAN/CSA–A23.4 AND CSA–A251.
2. THE GIRDER MANUFACTURER'S PLANT SHALL BE CERTIFIED TO CSA A251.
3. ALL SURFACES OF THE GIRDERS THAT WILL BE IN CONTACT WITH CAST–IN–PLACE CONCRETE SHALL BE SANDBLAST ROUGHENED. THE TOP SURFACE OF THE TO FLANGE OF EACH GIRDER SHALL BE CLEAN AND FREE OF LAITANCE AND INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 5mm WITH A SPACING OF 15Mgm.
4. THE FABRICATOR'S NAME, YEAR OF MANUFACTURE, SERIAL NUMBER AND "CL–800" SHALL BE CAST INTO THE BOTTOM OF EACH GIRDER, LOCATED APPROXIMATELY 1000mm FROM THE FACE OF THE ABUTMENT.
5. AN APPROVED PENETRATING SILANE SEALER SHALL BE APPLIED TO THE EXTERIOR VERTICAL SIDES OF EXTERIOR GIRDERS.

ERECTION

1. GIRDER SHALL BE ERECTED IN ACCORDANCE WITH CAN/CSA–A23.4.
2. PROVISIONS FOR LIFTING, HANDLING, TRANSPORT AND TEMPORARY SUPPORT ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE STRENGTH & STABILITY OF STRUCTURE FOR ALL STAGES OF THE CONSTRUCTION.
3. THE CONTRACTOR SHALL ENSURE THAT ALL GIRDERS ARE ADEQUATELY SUPPORTED DURING ALL ASPECTS OF HANDLING, ERECTION AND DECK CONSTRUCTION. THE CONTRACTOR SHALL DESIGN, SUPPLY AND INSTALL TEMPORARY DIAPHRAGMS AND/OR BRACING TO KEEP THE GIRDERS Laterally AND TORSIONALLY STABLE UNTIL THE DECK SLAB AND ABUTMENT DIAPHRAGMS HAVE BEEN COMPLETELY CAST AND CURED TO WORK COMPOSITELY WITH THE GIRDERS.
4. LIFTING FORCES AT EACH HOOK MUST BE VERTICAL AT ALL TIMES.
5. TOP SURFACE AT EACH GIRDER SHALL BE LEVEL AT ALL TIMES.

MISCELLANEOUS METAL NOTES

1. ARMOUR PLATES SHALL CONFORM TO CAN/CSA–G40.21 M–300W.
2. BARRIER TRANSITION ANCHORS SHALL CONFORM TO CAN/CSA–G40.21 GRADE 260W.
3. STUD SHEAR CONNECTORS FOR ARMOUR PLATES SHALL CONFORM TO CSA W59, ANNEX H TYPE B.
4. ALL MISCELLANEOUS METALS INCLUDING ARMOUR PLATES, RAILINGS AND ATTACHMENTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO CSA STANDARD CAN/CSA–G164–M MINIMUM COATING OF 600 g/m².
5. WHERE GALVANIZING IS DAMAGED. REPAIR WITH TWO COATS OF A ONE COMPONENT ZIC–RICH COATING CONTAINING 96% NON–TOXIC ELECTROLYTIC ZINC POWDER (PURE TO 99.995%) AND NON–TOXIC SOLVENT.
6. ALL PLATE STEEL AND STRUCTURAL SHAPES SHALL CONFORM TO CSA G40.21 GRADE 300W OR ASTM A36 EXCEPT STRUCTURAL TUBING SHALL CONFORM TO ASTM A500.
7. ALL WELDING SHALL CONFORM TO CSA W59–13.

STRIPPING, EXCAVATION AND BACKFILL NOTES


1. THE CONTRACTOR SHALL STRIP TOP SOIL FORM AREAS WHERE EXCAVATION OF BACKFILLING WILL BE REQUIRED AND STOCKPILE THE STRIPPING WITHIN THE CLEARED AREA UNTIL REQUIRED. THE STRIPPED MATERIAL SHALL BE PLACED ON THE NEW EMBANKMENTS AFTER THE EMBANKMENTS ARE COMPLETE.
2. THE CONTRACTOR SHALL INSTALL ALL BACKFILL REQUIRED TO COMPLETE THE ROADWAY GRADE WITHIN THE CONSTRUCTION LIMITS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. BACKFILLING BEHIND ABUTMENTS SHALL BE PLACED SIMULTANEOUSLY BEHIND BOTH ABUTMENTS KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN RELATIVE ELEVATIONS BE GREATER THEN 0.5m. NO BACKFILL SHALL BE PLACED UNTIL ABUTMENT DIAPHRAGM CONCRETE HAS CURED FOR MINIMUM OF 24 HOURS.

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1	2016.06.07	ISSUED FOR TENDER	JANP	JP
No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé

Revision / Revision	
<div><div><div>A</div><div>C</div></div></div>	<div>A detail number numero de detail</div> <div>B source drawing no. de dessin no.</div> <div>C detail on drawing no. detail sur dessin no.</div>
Consultant's Stamp Sceau de l'expert-conseil	Eng. Stamp Sceau de l'ingenieur

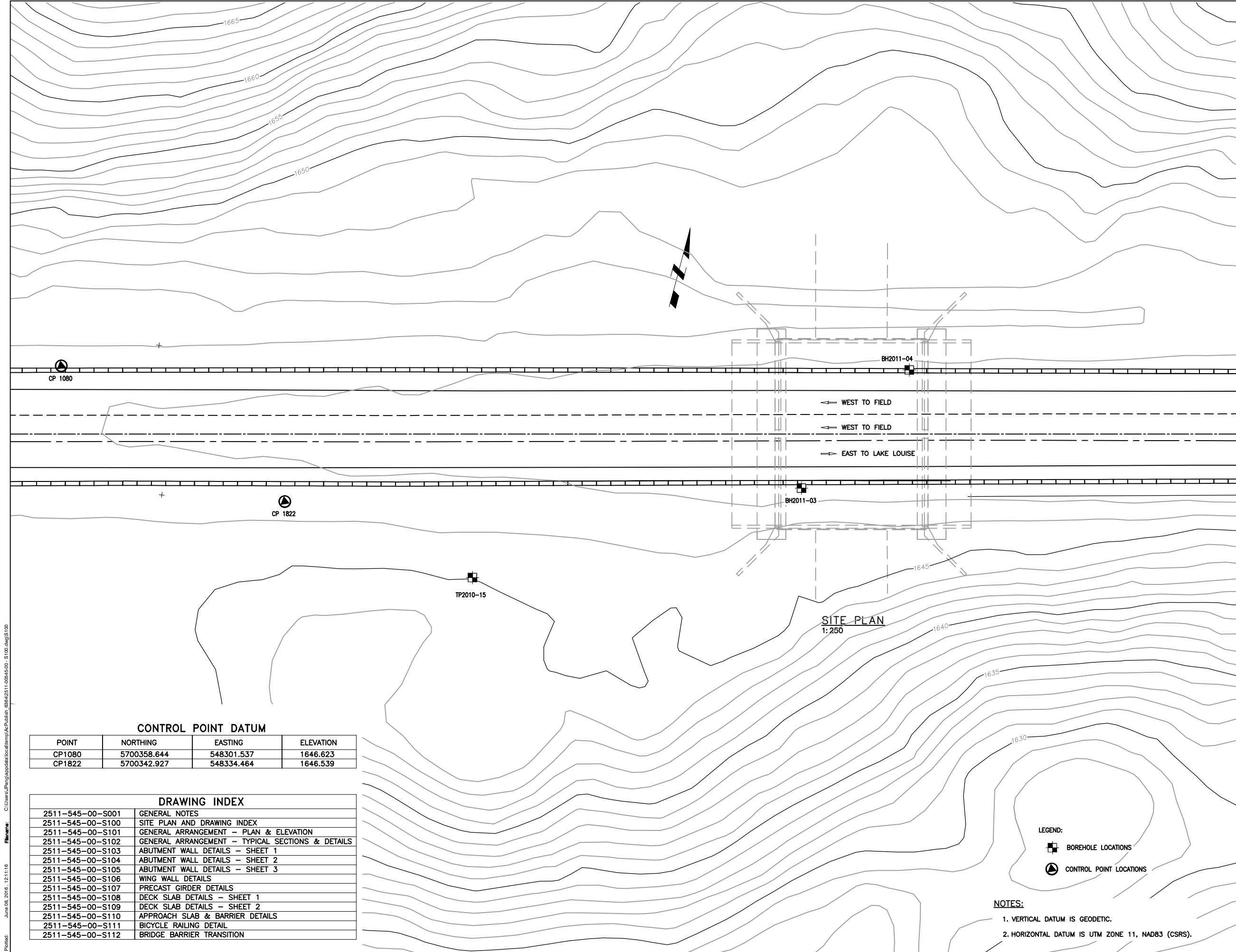
Client/client		
	<div>Parks Canada Agency Western and Northern Region</div>	<div>L'Agence Parcs Canada Ouest et Nord Région</div>

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

Project title/Titre du projet
<div>WILDLIFE UNDERPASS</div> <div>AT km 83.1</div> <div>TCH TWINNING</div> <div>YOHO NATIONAL PARK</div>

Drawing title/Titre du dessin		
GENERAL NOTES		
NOT FOR CONSTRUCTION		
Surveyed by/Arpente par	Drawn by/Dessine par	Date/Date
-	JANP	2016.05.17
Designed by/Concept par	Reviewed by/Revise par	Scale/l'échelle
GS	JP	AS NOTED
Parks Canada Project Manager/Administrateur de Projets Parcs Canada		
Client Acceptance/Acceptation du client		Approved by/Approuve 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
201612		S001
Drawing Reference No./No. de reference du dessin		
2511-00545-00		

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Plotted: June 08, 2016, 12:11:16



CONTROL POINT DATUM


POINT	NORTHING	EASTING	ELEVATION
CP1080	5700358.644	548301.537	1646.623
CP1822	5700342.927	548334.464	1646.539

DRAWING INDEX

2511-545-00-S001	GENERAL NOTES
2511-545-00-S100	SITE PLAN AND DRAWING INDEX
2511-545-00-S101	GENERAL ARRANGEMENT - PLAN & ELEVATION
2511-545-00-S102	GENERAL ARRANGEMENT - TYPICAL SECTIONS & DETAILS
2511-545-00-S103	ABUTMENT WALL DETAILS - SHEET 1
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2511-545-00-S105	ABUTMENT WALL DETAILS - SHEET 3
2511-545-00-S106	WING WALL DETAILS
2511-545-00-S107	PRECAST GIRDER DETAILS
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2511-545-00-S111	BICYCLE RAILING DETAIL
2511-545-00-S112	BRIDGE BARRIER TRANSITION

LEGEND:

 BOREHOLE LOCATIONS

 CONTROL POINT LOCATIONS

NOTES:

1. VERTICAL DATUM IS GEODETIC.
2. HORIZONTAL DATUM IS UTM ZONE 11, NAD83 (CSRS).

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SITE PLAN & DRAWING INDEX

NOT FOR CONSTRUCTION

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GS	SZ	2016.05.17

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GS	JP	AS NOTED

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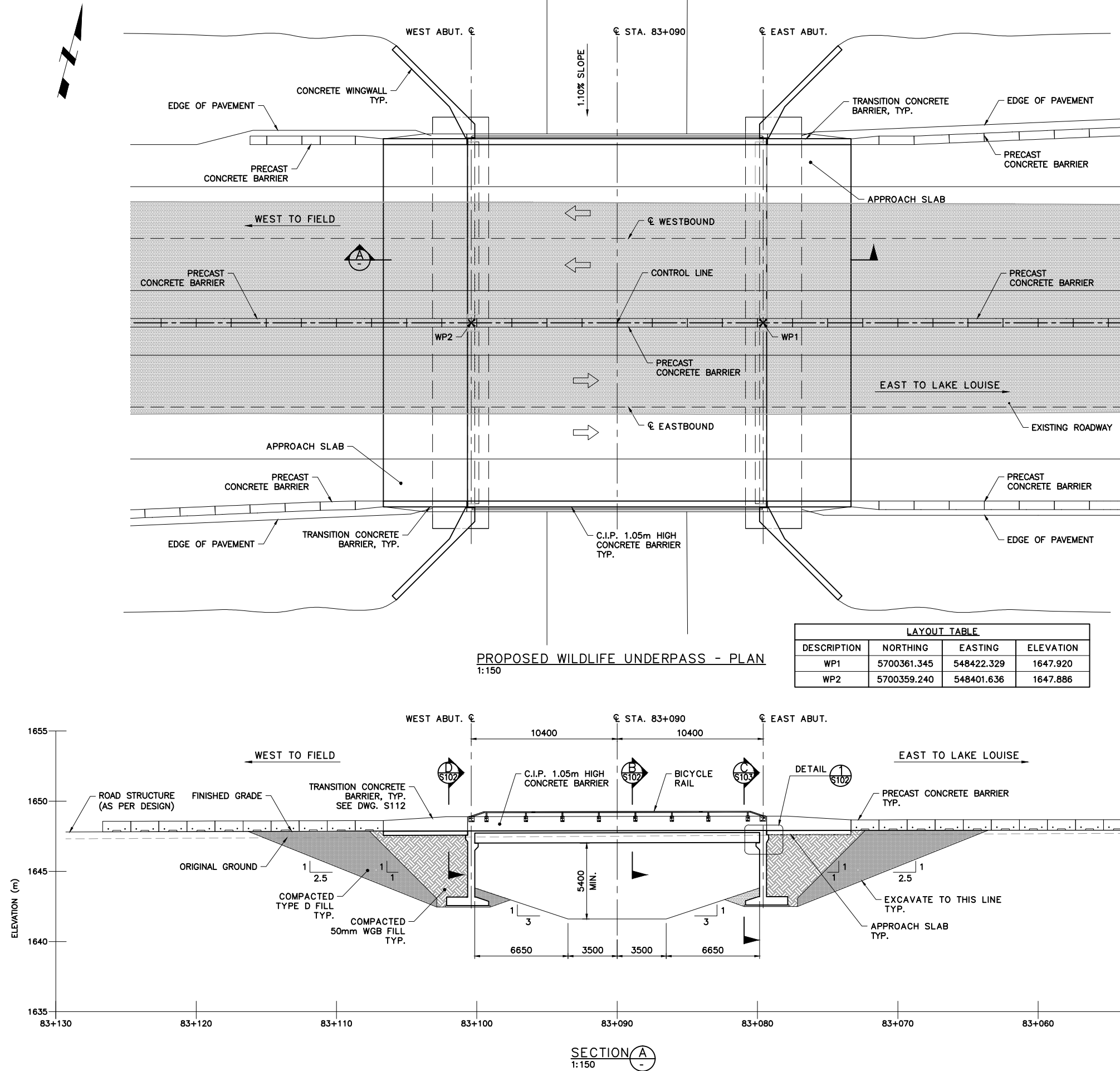
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McElhanney

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**WILDLIFE UNDERPASS
AT km 83.1
TCH TWINNING
YOHO NATIONAL PARK**

Drawing title/Titre du dessin
**GENERAL ARRANGEMENT
PLAN & ELEVATION
NOT FOR CONSTRUCTION**

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
	SZ	2016.05.17

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GS	JP	AS NOTED

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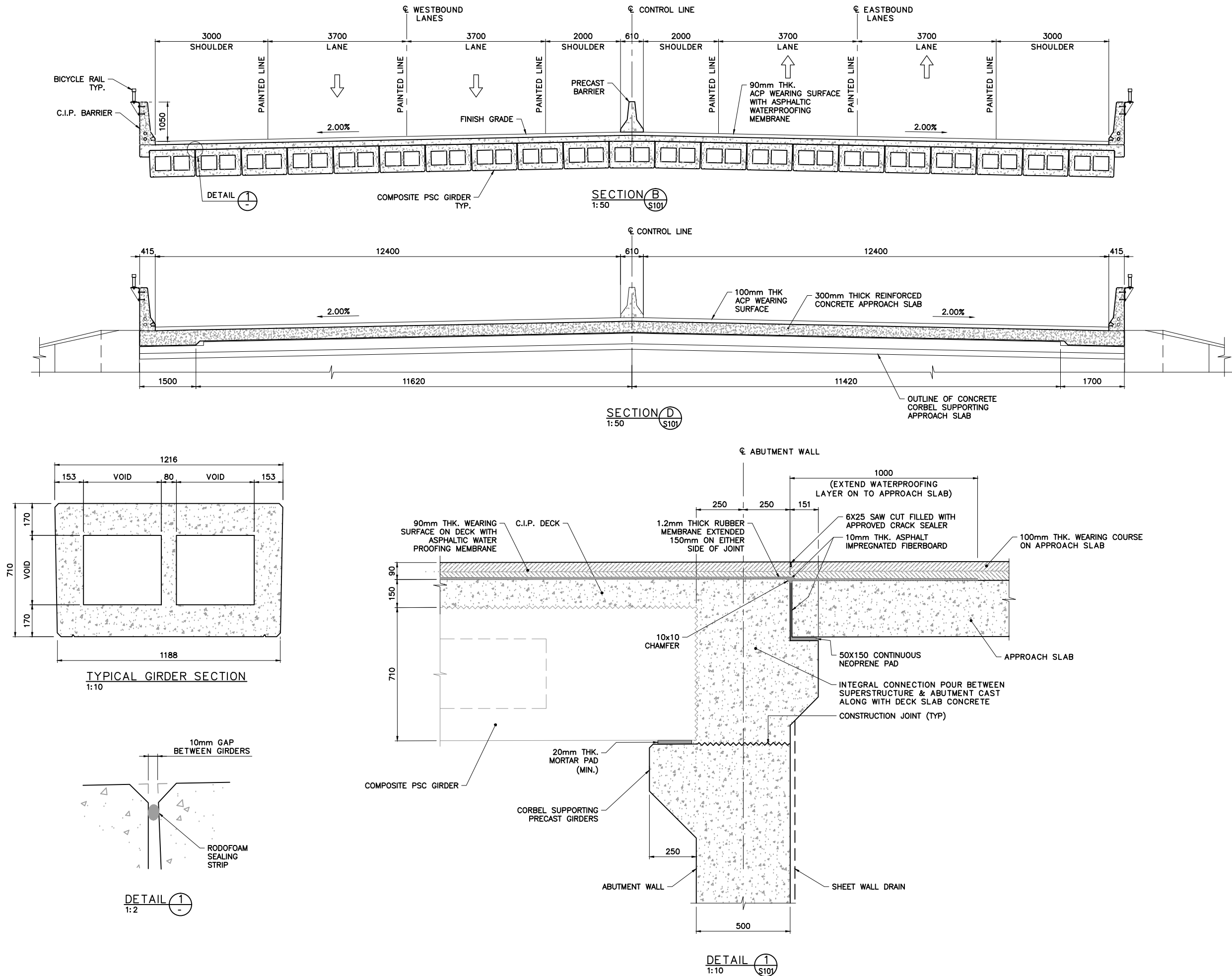
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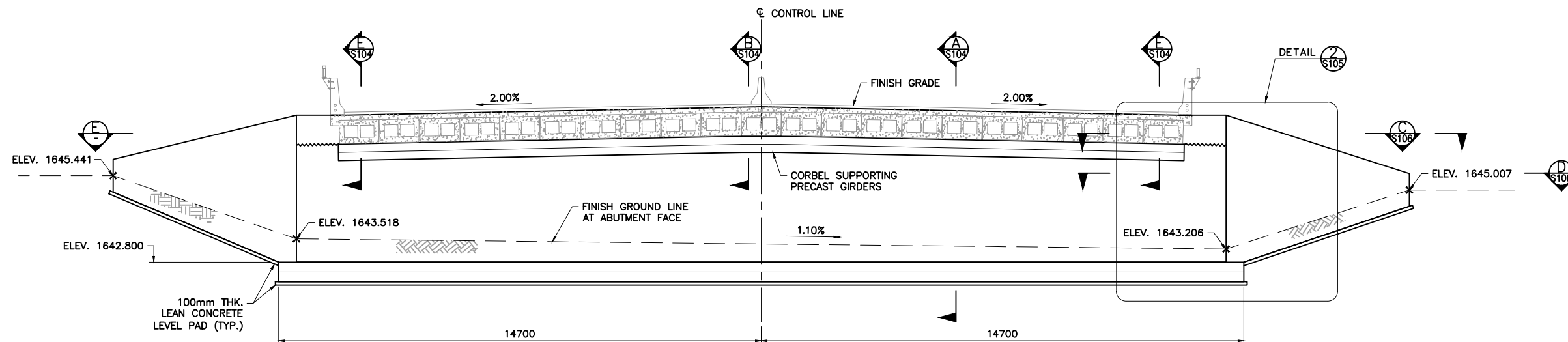
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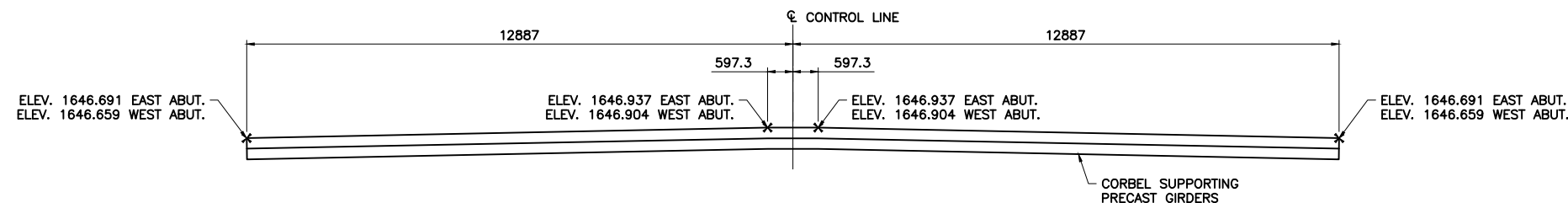


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Consultant's Stamp Sceau de l'expert-conseil			Eng. Stamp Sceau de l'ingénieur	
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Consultant's Name Nom de l'expert-conseil				
<div><div></div><div>McElhanney</div></div>				
Project title/Titre du projet				
WILDLIFE UNDERPASS AT km 83.1 TCH TWINNING YOHO NATIONAL PARK				
Drawing title/Titre du dessin				
GENERAL ARRANGEMENT TYPICAL SECTIONS & DETAILS <div>NOT FOR CONSTRUCTION</div>				
Surveyed by/Arpenté par -		Drawn by/Dessiné par JANP		Date/Date 2016.05.17
Designed by/Concept par GS		Reviewed by/Revisé par JP		Scale/Échelle AS NOTED
Parks Canada Project Manager/Administrateur de Projets Parcs Canada				
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Drawing Reference No./No. de référence du dessin 2511-00545-00				

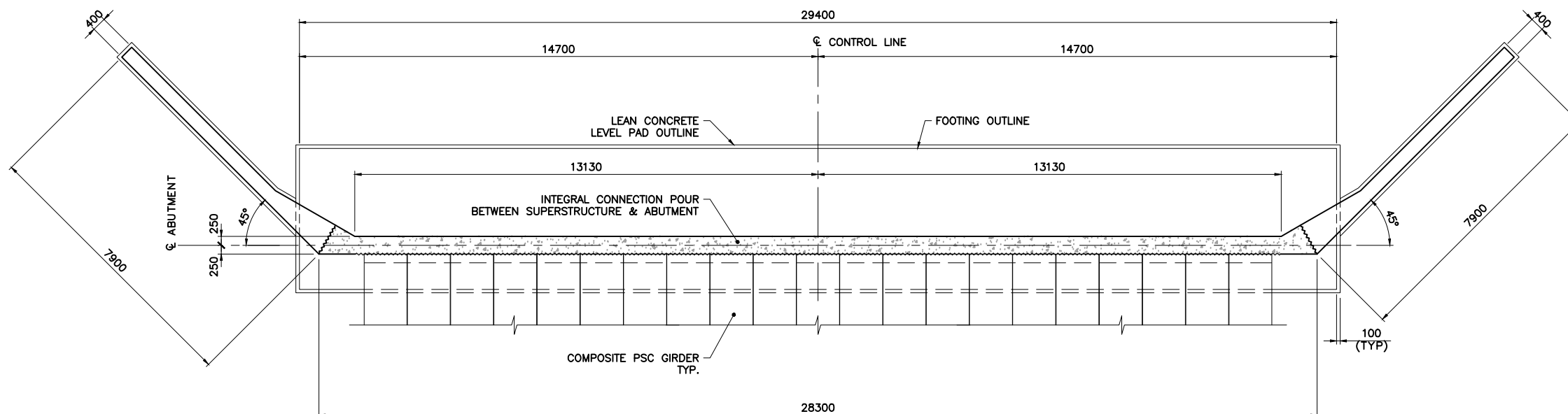
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

GIRDER SEATING ELEVATIONS
1:75



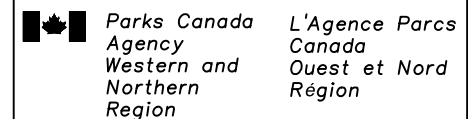
SECTION E
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SIMILAR FOR WEST ABUTMENT

1	2016.06.07	ISSUED FOR TENDER	SZ	JP
No.	Date/Date	Description/Description	Drawn by Dessine par	Approved Approuve

Revision / Revision	
 <p>A detail number numero de detail</p> <p>B source drawing no. de dessin no.</p> <p>C detail on drawing no. detail sur dessin no.</p>	
Consultant's Stamp Sceau de l'expert-conseil	Eng. Stamp Sceau de l'ingenieur

Client/client



Consultant's Name Nom de l'expert-conseil	
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ABUTMENT WALL DETAILS

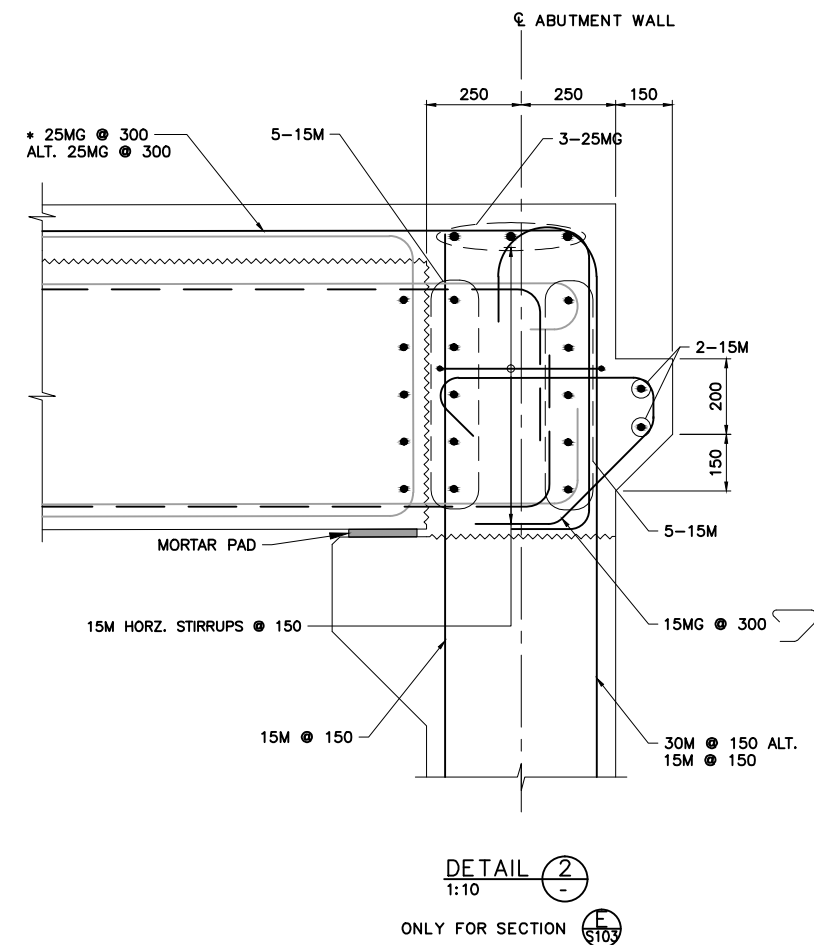
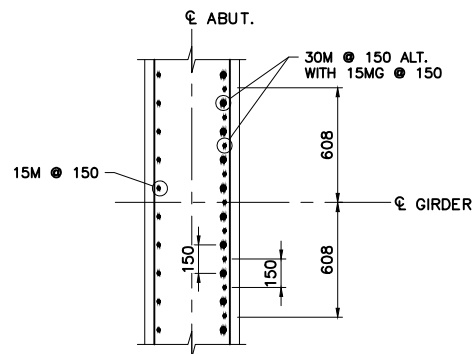
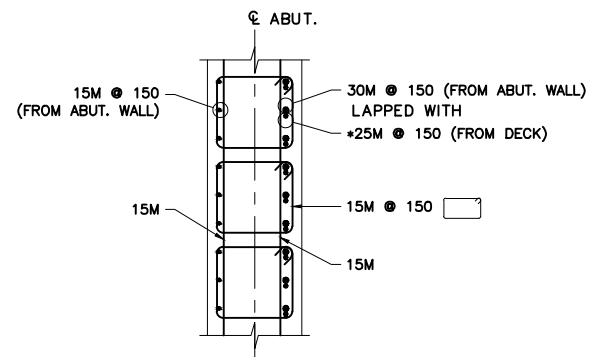
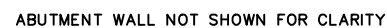
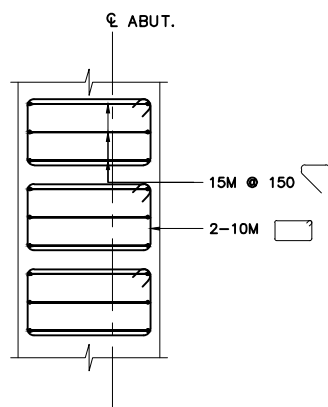
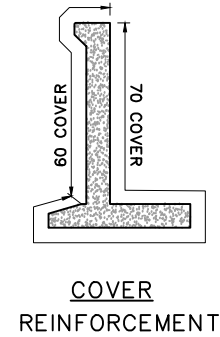
SHEET 1

NOT FOR CONSTRUCTION

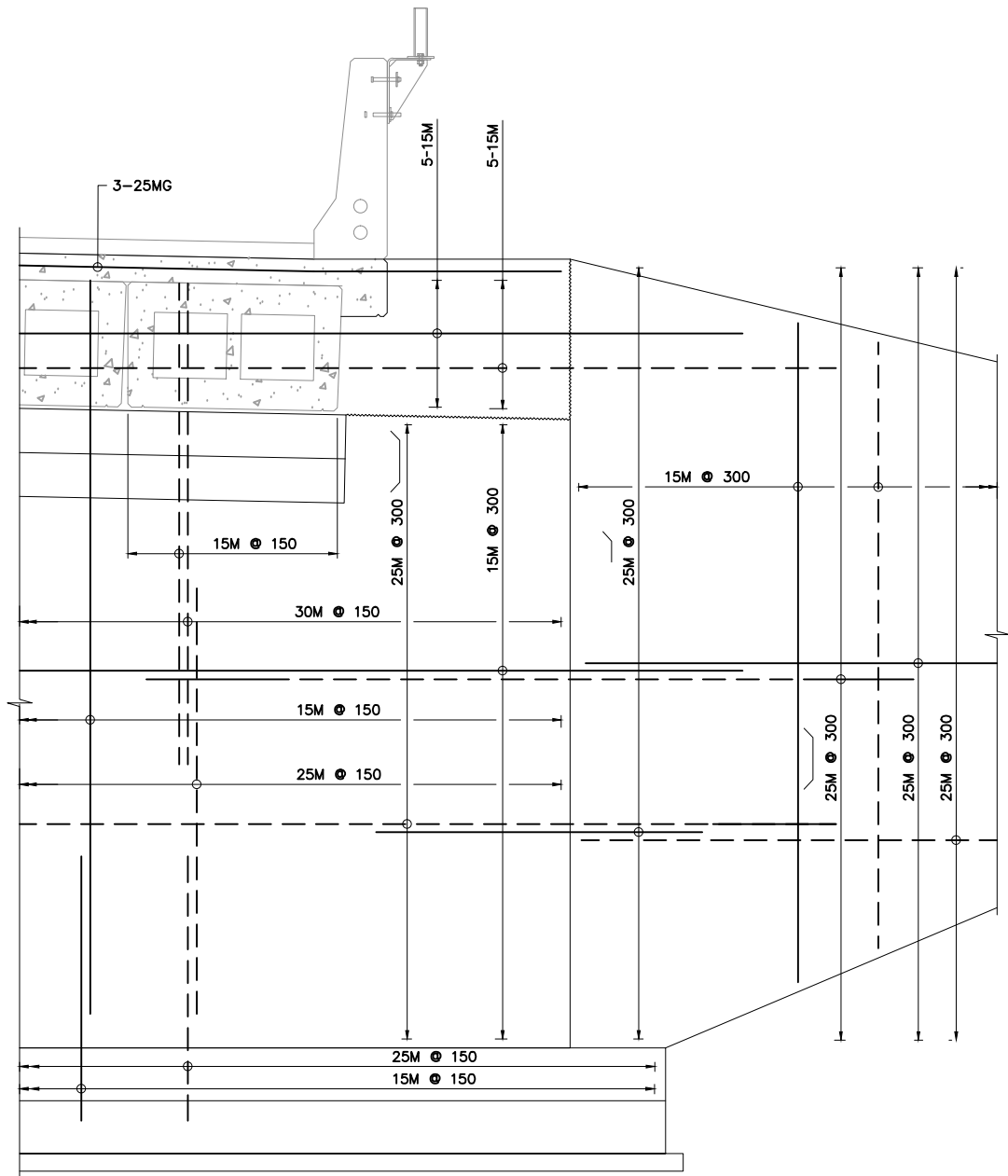
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Designed by/Concept par GS	Reviewed by/Revise par JP	Scale/1/6chelle AS NOTED

	Parks Canada Project Manager/Administrateur de Projets Parcs Canada	
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Client Acceptance/Acceptation du client		Approved by/Approuve par	
Parla Canada Responsible Officer/Agree Responsable Parla Canada		Parla Canada Project Manager/Administrateur de Projets Parla Canada	
Project No./No. du projet	Asset No./No. du bien	Sheet No./No. de la feuille	
201612		S103	
Drawing Reference No./No. de reference du dessin			
2511-00545-00			



Drawing Reference No./No. de reference du dessin	S104
2511-00545-00	



DETAIL 2
1:20
S103
STIRRUPS NOT SHOWN FOR CLARITY


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1	2016.06.07	ISSUED FOR TENDER	JANP	JP
No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé

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

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

Client/client	
 Parks Canada Agency Western and Northern Region	L'Agence Parcs Canada Ouest et Nord Région

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

Project title/Titre du projet
WILDLIFE UNDERPASS AT km 83.1 TCH TWINNING YOHO NATIONAL PARK

Drawing title/Titre du dessin
ABUTMENT WALL DETAILS SHEET 3 NOT FOR CONSTRUCTION

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
-	JANP	2016.05.17
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
GS	JP	AS NOTED

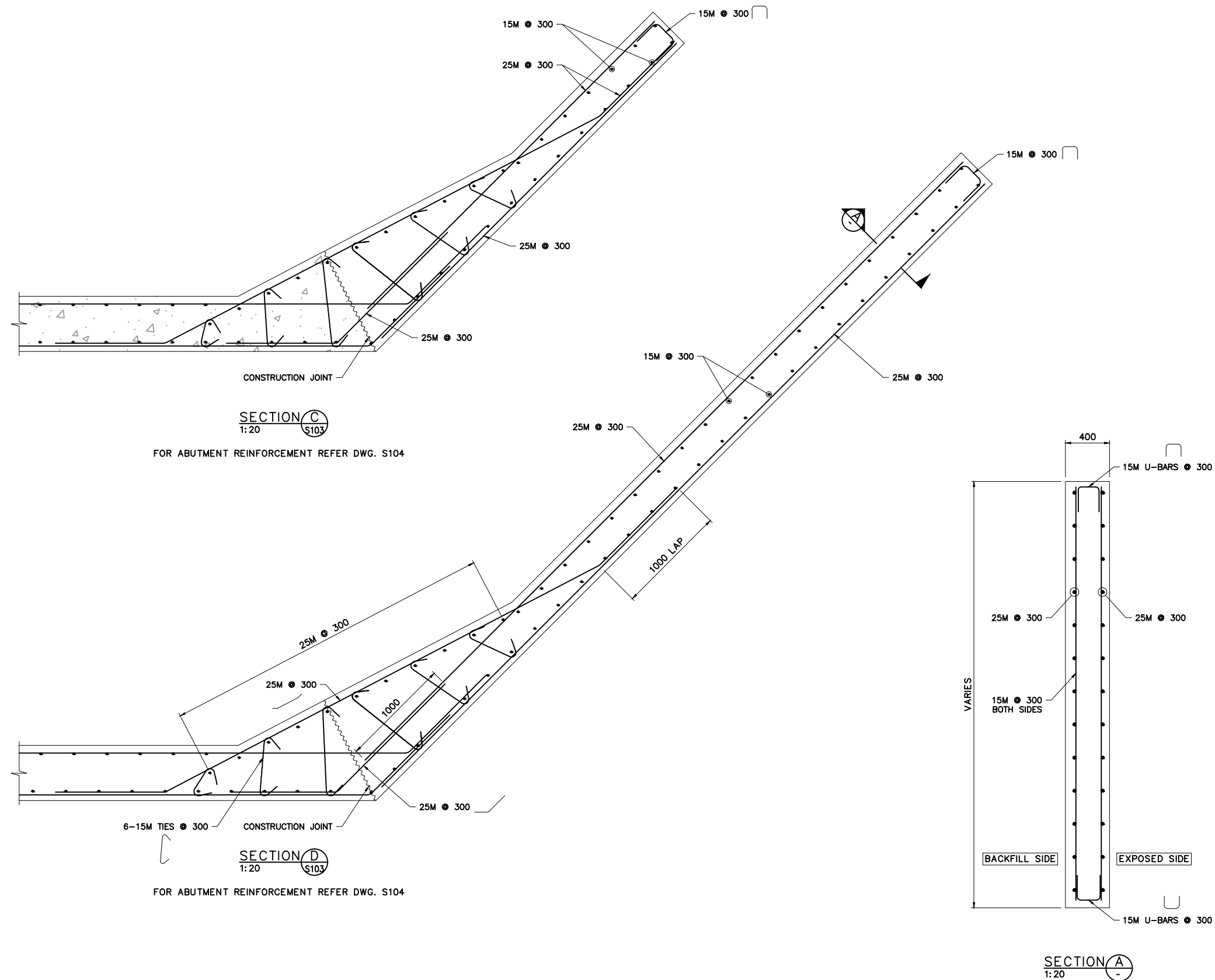
Parks Canada Project Manager/Administrateur de Projets Parcs Canada

Client Acceptance/Acceptation du client	Approved by/Approuvé par
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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
201612		S105
Drawing Reference No./No. de référence du dessin		
2511-00545-00		




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1	2016.06.07	ISSUED FOR TENDER	GS	JP
No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé

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

Consultant's Stamp Sceau de l'expert-conseil	Eng. Stamp Sceau de l'ingénieur
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Client/client	
 Parks Canada Agency Western and Northern Region	L'Agence Parcs Canada Ouest et Nord Région

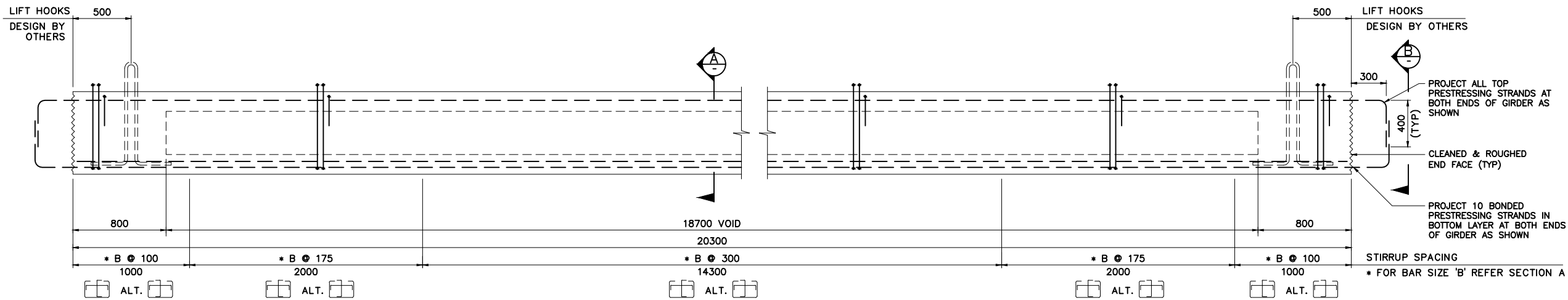
Consultant's Name Nom de l'expert-conseil
 McElhanney

Project title/Titre du projet
WILDLIFE UNDERPASS AT km 83.1 TCH TWINNING YOHO NATIONAL PARK

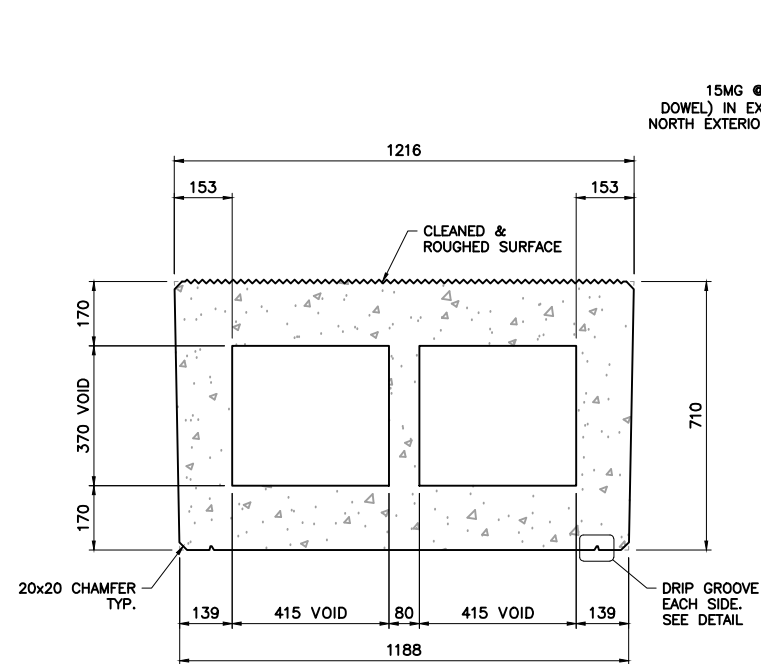
Drawing title/Titre du dessin
WING WALL DETAILS
NOT FOR CONSTRUCTION

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
-	SZ	2016.05.17
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
GS	JP	AS NOTED
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
201612		S106
Drawing Reference No./No. de référence du dessin		
2511-00545-00		

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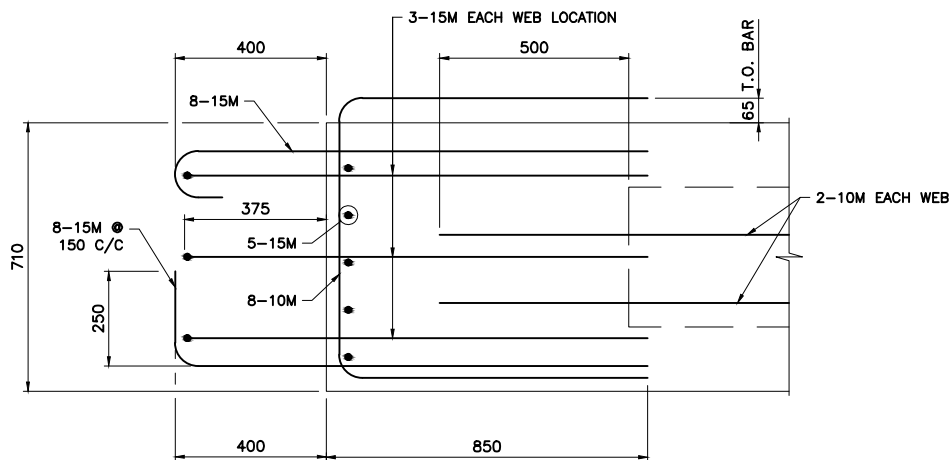


ELEVATION - BOX GIRDER
1:20



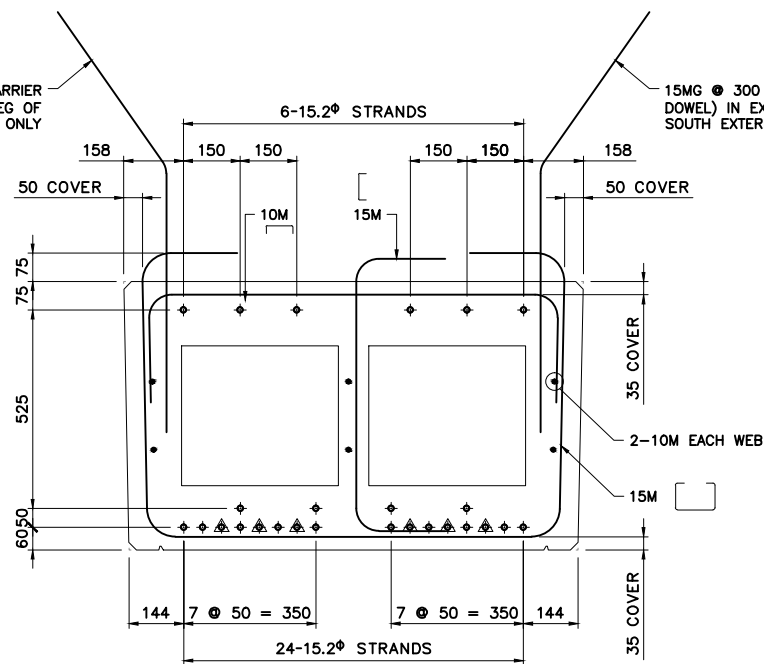
CONCRETE OUTLINE

SECTION A
1:10



SECTION C
1:10

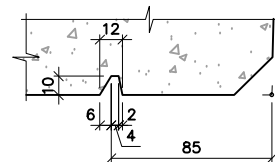
STIRRUPS NOT SHOWN FOR CLARITY



REINFORCEMENT & PRESTRESSING STEEL ARRANGEMENT

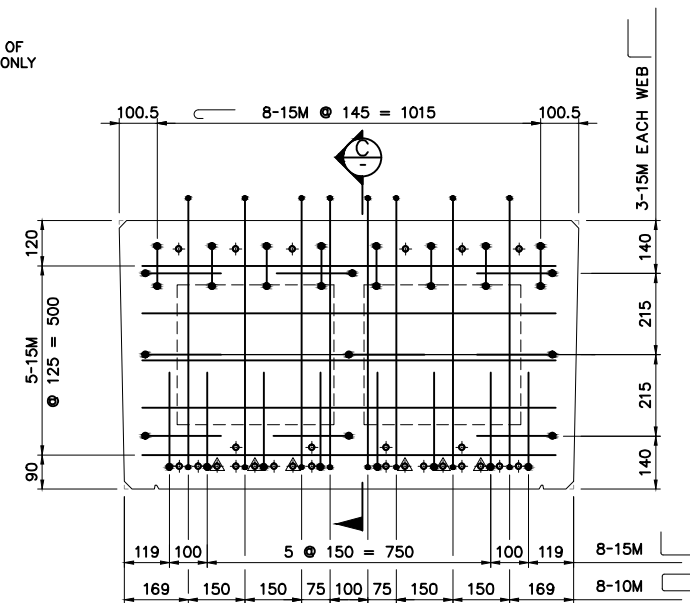
SECTION A
1:10

10 STRANDS DEBONDED FOR A DISTANCE OF 2.0M FROM BOTH ENDS



DRIP GROOVE DETAIL

1:2



TYPICAL END VIEW

SECTION B
1:10

STIRRUPS NOT SHOWN FOR CLARITY

NOTES:

1. DESIGN CODE CAN/CSA S6-14

- DEAD LOAD (GIRDER) 13.3KN/m PER GIRDER
- DEAD LOAD (SLAB) 4.5KN/m PER GIRDER
- DEAD LOAD (WEARING COURSE) 2.6KN/m PER GIRDER

- LIVE LOAD CL-800 + DYNAMIC LOAD ALLOWANCE
- LIVE LOAD DISTRIBUTION FACTOR 0.32
- FOR SHEAR 0.25
- FOR MOMENT

2. CONTRACTOR CAN PROPOSE ALTERNATIVE BOX GIRDER GEOMETRY IN ADDITION TO THIS DESIGN FOR CONSIDERATION. FOR ALTERNATIVE GIRDER GEOMETRY, IF PROPOSED AS SINGLE CELL BOX, A SHEAR KEY SHALL BE PROVIDED AT ALL INTERFACE BETWEEN GIRDERS.

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No.	Date/Date	Description/Description	Drawn by Dessine par	Approved Approuve
1	2016.06.07	ISSUED FOR TENDER	JANP	JP

Revision / Revision



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



Consultant's Stamp
Sceau de l'expert-conseil

Eng. Stamp
Sceau de l'ingenieur

Client/client

Parks Canada
Agency
Western and
Northern
Region

L'Agence Parcs
Canada
Ouest et Nord
Région

Consultant's Name
Nom de l'expert-conseil



Project title/Titre du projet

WILDLIFE UNDERPASS
AT km 83.1
TCH TWINNING

YOHO NATIONAL PARK

Drawing title/Titre du dessin

PRECAST GIRDER DETAILS

NOT FOR CONSTRUCTION

Surveyed by/Arpente par	Drawn by/Dessine par	Date/Date
	JANP	2016.05.17
Designed by/Concept par	Reviewed by/Revise par	Scale/Échelle
GS	JP	AS NOTED

Parks Canada Project Manager/Administrateur de Projets Parcs Canada

Client Acceptance/Acceptation du client

Approved by/Approuve 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

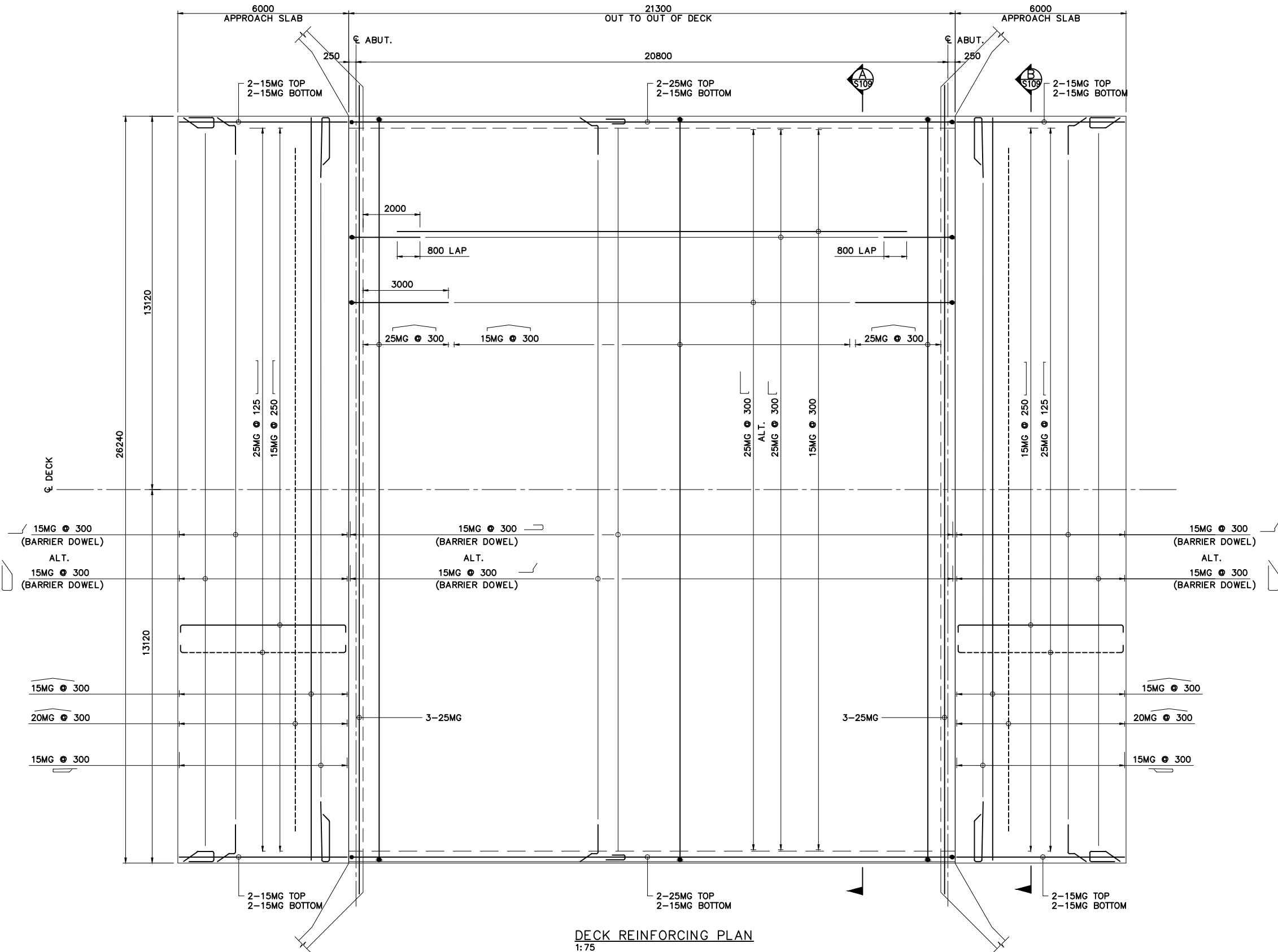
Sheet No./
No. de la feuille

Drawing Reference No./No. de reference du dessin

2511-00545-00

S107

Plotted: June 08, 2016, 12:11:25
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DECK REINFORCING PLAN
1:75

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1	2016.06.07	ISSUED FOR TENDER	JANP	JP
No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé

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

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

Client/client	
Parks Canada Agency Western and Northern Region	L'Agence Parcs Canada Ouest et Nord Région

Consultant's Name Nom de l'expert-conseil

Project title/Titre du projet
WILDLIFE UNDERPASS AT km 83.1 TCH TWINNING YOHO NATIONAL PARK

Drawing title/Titre du dessin
DECK SLAB DETAILS
SHEET 1
NOT FOR CONSTRUCTION

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
	JANP	2016.05.17
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
GS	JP	AS NOTED

Parks Canada Project Manager/Administrateur de Projets Parcs Canada

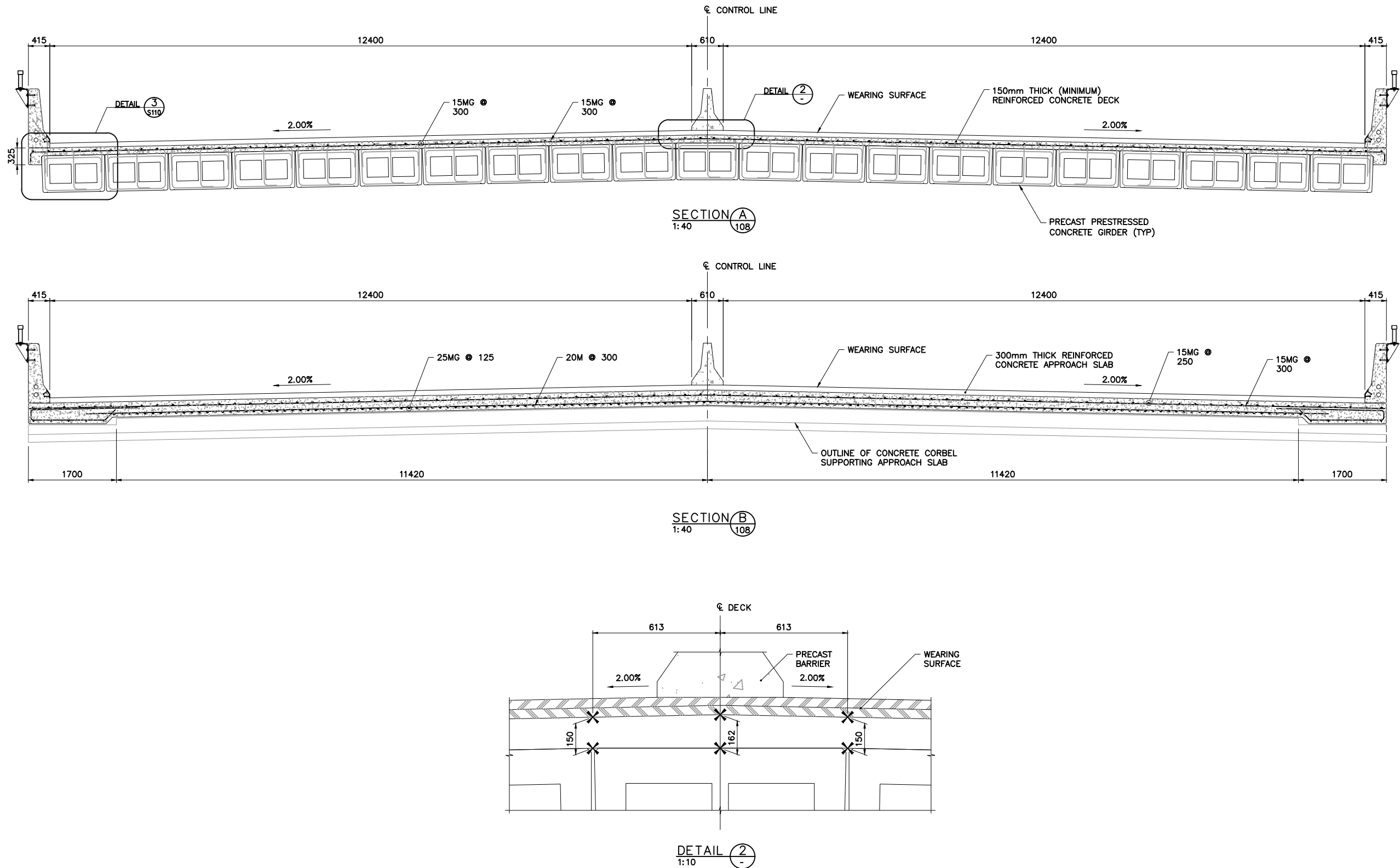
Client Acceptance/Acceptation du client	Approved by/Approuvé par
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Parks Canada Responsible Officer/Agent Responsable Parcs Canada

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
201612		S108

Drawing Reference No./No. de référence du dessin
2511-00545-00



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No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
1	2016.06.07	ISSUED FOR TENDER	JANP	JP

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

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

Client/client

Parks Canada Agence Western and Northern Region	L'Agence Parcs Canada Ouest et Nord Région

Consultant's Name
Nom de l'expert-conseil

McElhanney

Project title/Titre du projet

**WILDLIFE UNDERPASS
AT km 83.1
TCH TWINNING
YOHO NATIONAL PARK**

Drawing title/Titre du dessin

DECK SLAB DETAILS

SHEET 2

NOT FOR CONSTRUCTION

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
	JANP	2016.05.17

Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
GS	JP	AS NOTED

Parks Canada Project Manager/Administrateur de Projets Parcs Canada

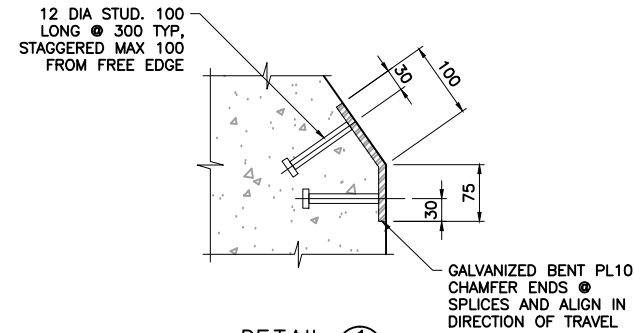
Client Acceptance/Acceptation du client	Approved by/Approuvé par



Project No./No. du projet	Asset No./No. du bien	Sheet No./ No. de la feuille
201612		S109

Drawing Reference No./No. de reference du dessin

2511-00545-00

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

Project title/Titre du projet

WILDLIFE UNDERPASS
AT km 83.1
TCH TWINNING

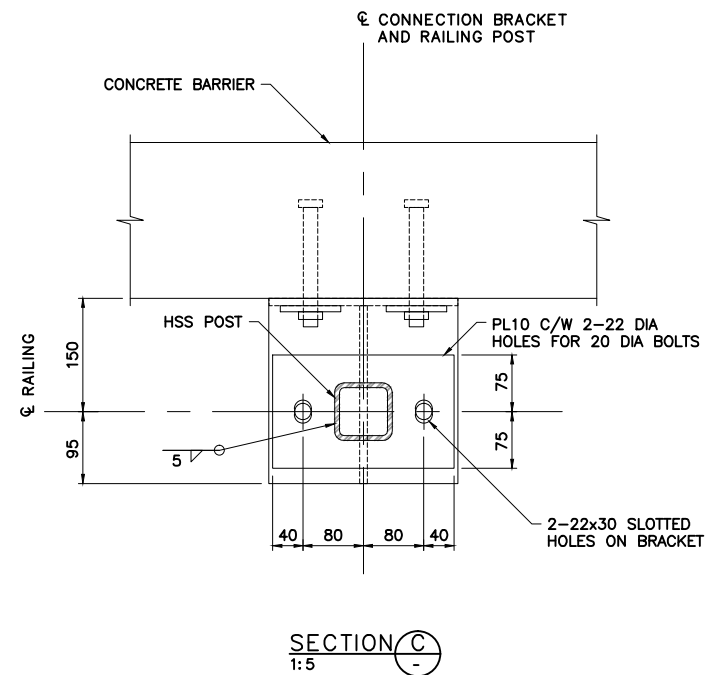
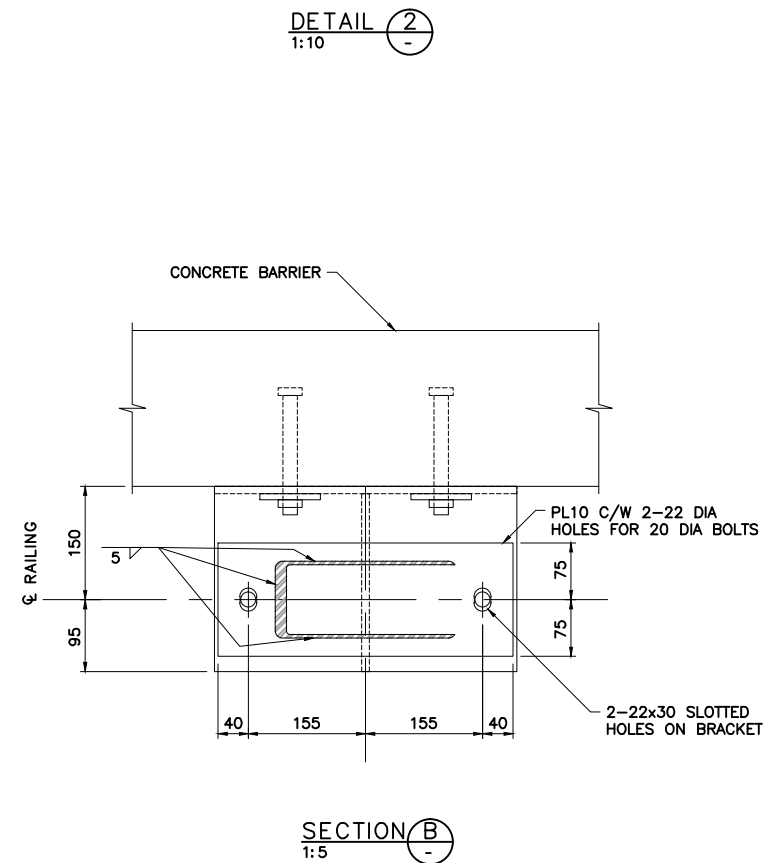
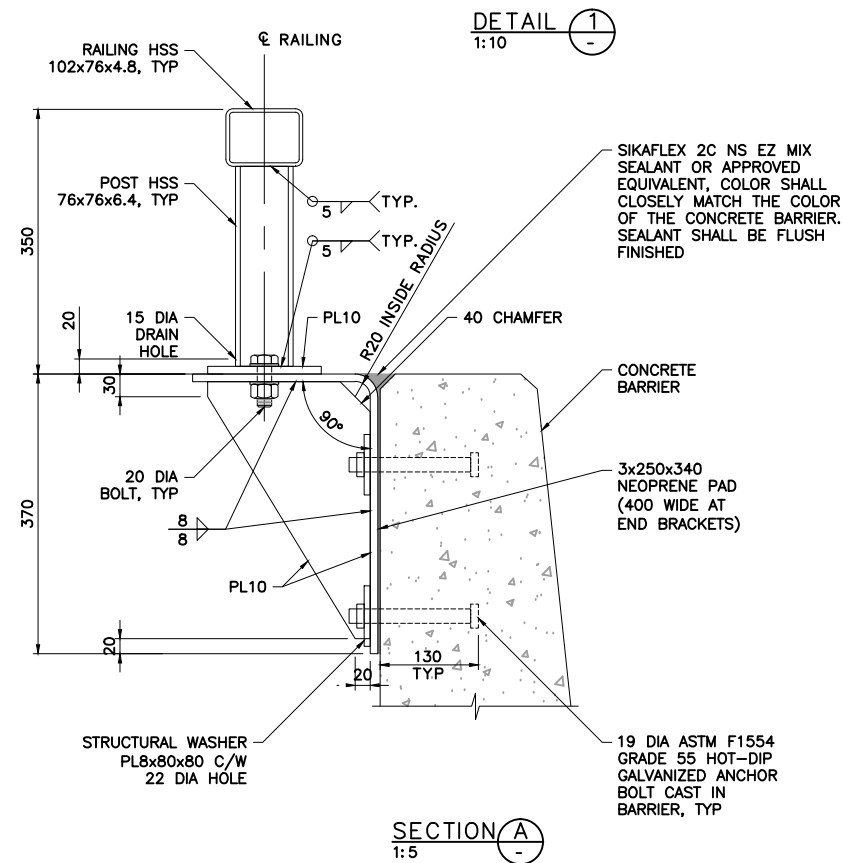
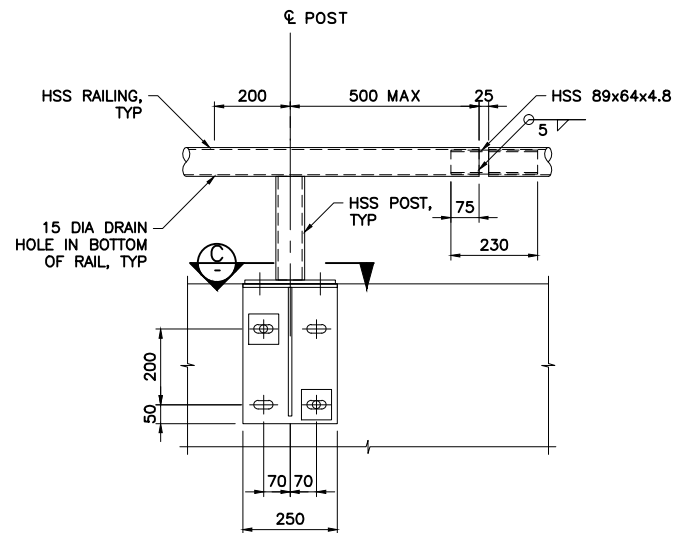
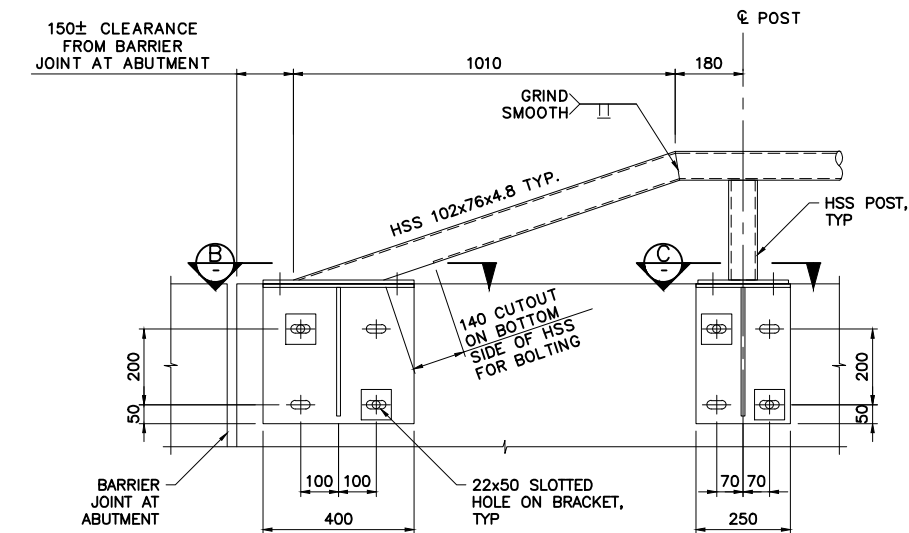
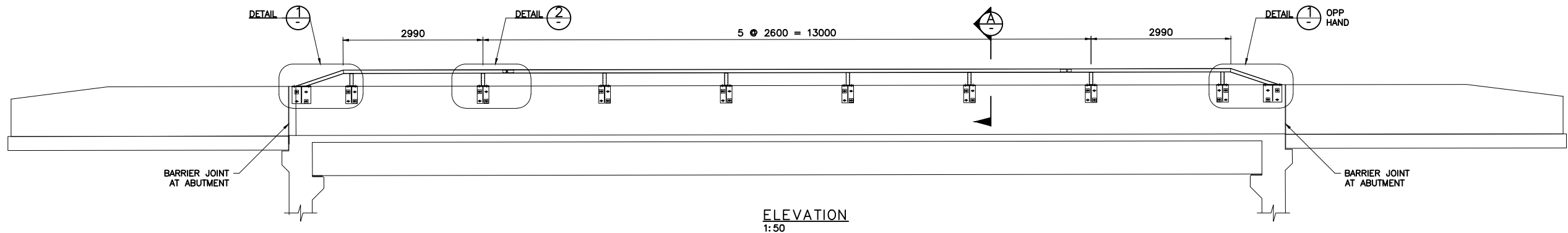
YOHO NATIONAL PARK

NOT FOR CONSTRUCTION

Parks Canada Project Manager/Administrateur de Projets Parcs Canada

Parks Canada Responsible Officer/Agent Responsable Parcs Canada	Parks Canada Project Manager/Administrateur de Projets Parcs Canada

Drawing Reference No./No. de reference du dessin	S110
2511-00545-00	



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1	2016.06.07	ISSUED FOR TENDER	JANP	JP
No.	Date/Date	Description/Description	Drawn by Dessine par	Approved Approuve

Revision / Revision	
A	detail number numero de detail
B	source drawing no. de dessin no.
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Consultant's Stamp Sceau de l'expert-conseil	Eng. Stamp Sceau de l'ingenieur
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Client/client	Parks Canada Agency Western and Northern Region	L'Agence Parcs Canada Ouest et Nord Région
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Consultant's Name Nom de l'expert-conseil	McElhanney
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Project title/Titre du projet	WILDLIFE UNDERPASS AT km 83.1 TCH TWINNING YOHO NATIONAL PARK
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Drawing title/Titre du dessin	BICYCLE RAILING DETAIL
NOT FOR CONSTRUCTION	

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
	JANP	2016.05.17
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
GS	JP	AS NOTED

Parks Canada Project Manager/Administrateur de Projets Parcs Canada

Client Acceptance/Acceptation du client	Approved by/Approuvé par
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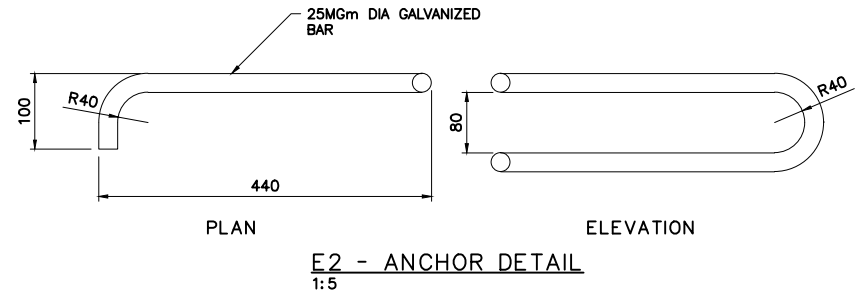
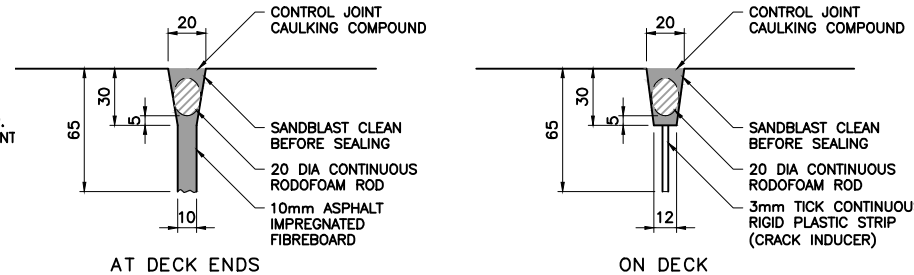
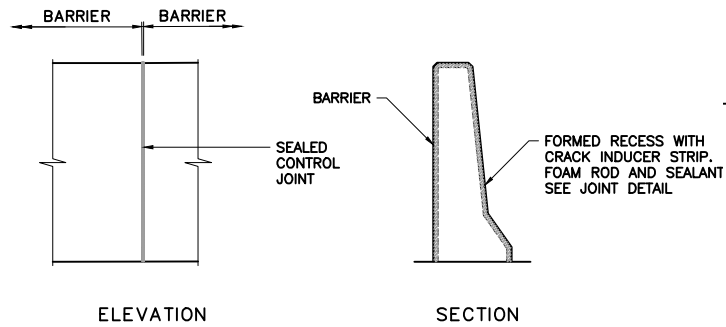
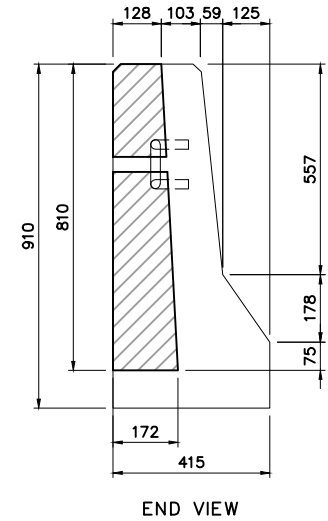
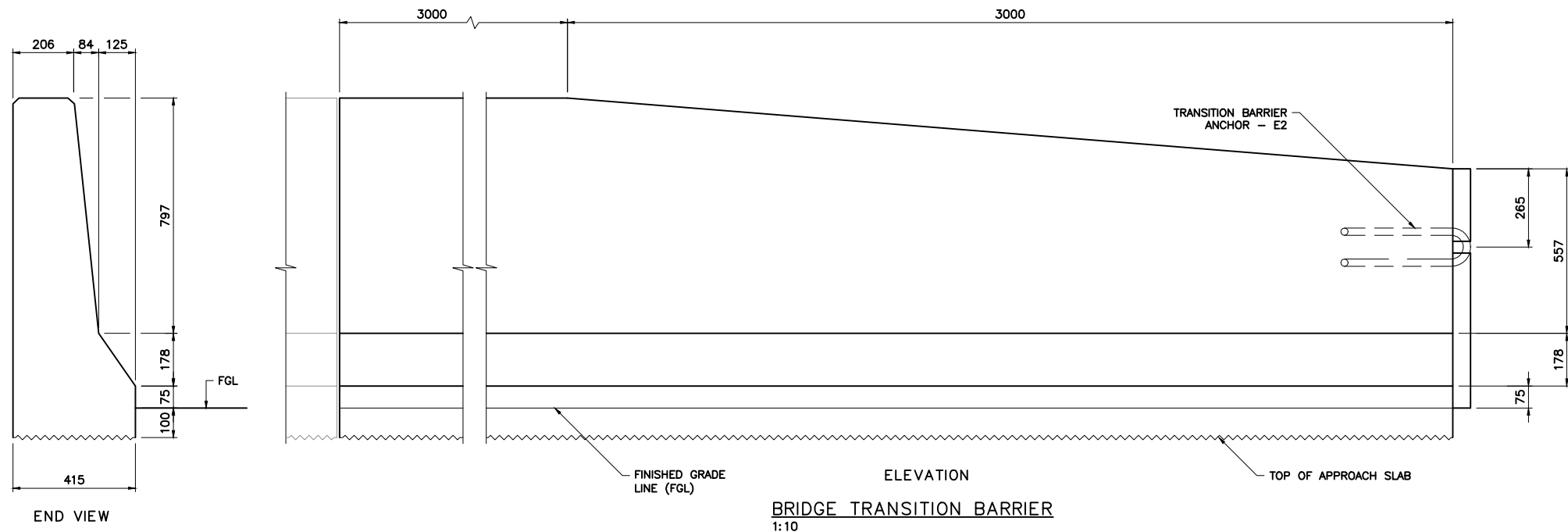
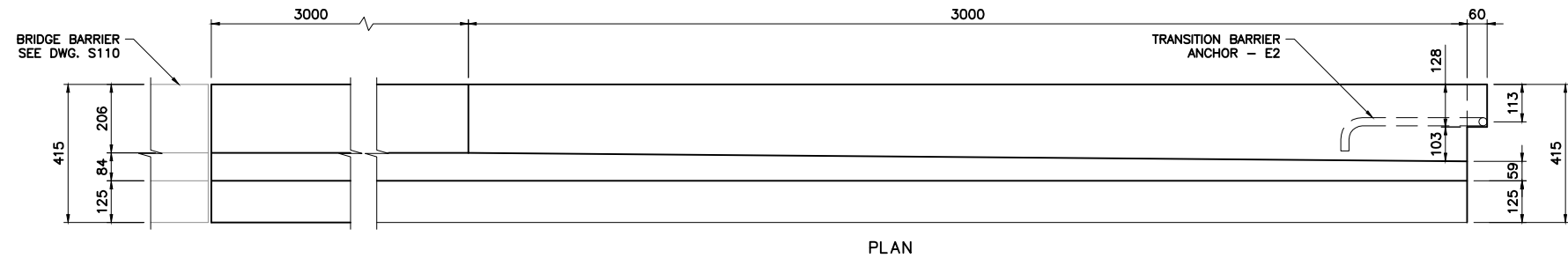
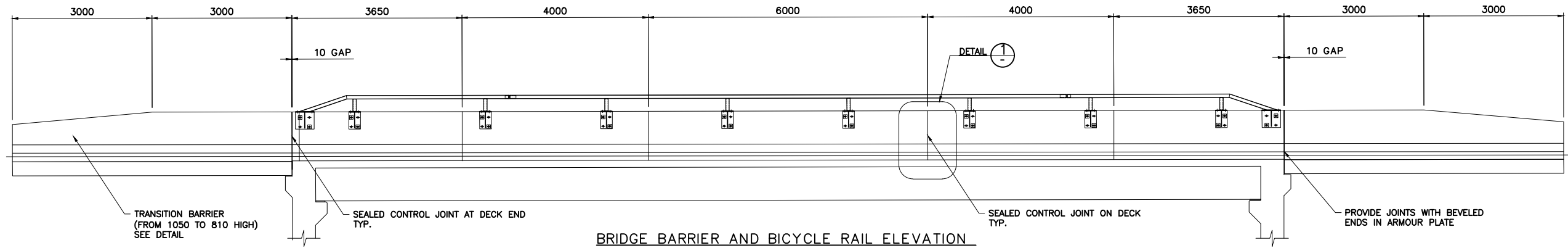
Parks Canada Responsible Officer/Agent Responsable Parcs Canada

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
201612		S111

Drawing Reference No./No. de référence du dessin	2511-00545-00
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Plotted:



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Revision / Revision

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

Client/client

Parks Canada
Agency
Western and
Northern
Region

L'Agence Parcs
Canada
Ouest et Nord
Région

Consultant's Name
Nom de l'expert-conseil

McElhanney

Project title/Titre du projet

WILDLIFE UNDERPASS
AT km 83.1
TCH TWINNING
YOHO NATIONAL PARK

Drawing title/Titre du dessin

BRIDGE BARRIER TRANSITION

NOT FOR CONSTRUCTION

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date/Date
	JANP	2016.05.17

Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
GS	JP	AS NOTED

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
201612		S112

Drawing Reference No./No. de référence du dessin

2511-00545-00