

**GENERAL**

- ALL DIMENSIONS IN MILLIMETERS AND ELEVATIONS IN METERS UNLESS NOTED OTHERWISE.
- ELEVATIONS SHOWN ON THESE DRAWINGS ARE RELATIVE ONLY AND HAVE NOT BEEN TIED TO A GEODETIC GRID.
- BENCH MARK # 1
  - ELEVATION: 1237.626
  - NAD 83 3TM 114 - NORTHING: -17 727.789 EASTING: 5 587 003.266
  - DESCRIPTION: NORTH-EAST CORNER OF ELECTRICAL BOX CONCRETE BASE. BENCHMARK HAS BEEN PAINTED WITH REFLECTIVE ORANGE PAINT AND AN ARROW HAS BEEN PLACED ON IT.
- \* DENOTES DIMENSIONS OF THE NEW BRIDGE THAT MUST BE CONFIRMED IN THE FIELD BEFORE USE. CONFIRM ALL EXISTING DIMENSIONS BEFORE START OF FABRICATION.
- ALL MATERIALS USED IN THE WORK SHALL BE NEW.
- TAKE PRECAUTIONS TO ENSURE THAT NO MATERIAL FALLS INTO THE WATER AT ANY TIME.
- PROTECT THE EXISTING CONCRETE SUBSTRUCTURE FROM DAMAGE.

**DESIGN NOTES**

- CAN/CSA-S6-06
- LIVE LOAD: CL625 + DYNAMIC LOAD ALLOWANCE
- DEAD LOAD: 130 kN/SPAN
- WIND LOAD: Q50: 0.65 kPa

**TIMBER**

- EXCEPT WHERE SPECIFICALLY NOTED, FOLLOW THE REQUIREMENTS OF THE PARKS CANADA AGENCY "GUIDE FOR THE USE, HANDLING AND DISPOSAL OF PRESSURE TREATED WOOD", DATED JANUARY 2009.
- ALL TIMBER DIMENSIONS SHOWN ARE ACTUAL DIMENSIONS.
- DECK PLANKS SHALL BE ROUGH SAWN STRUCTURAL GRADE PRESSURE TREATED SPRUCE OR DOUGLAS FIR. WIDTH SHALL NOT EXCEED 250 mm.
- OTHER TIMBER ELEMENTS SHALL BE NO. 1 OR NO. 2 GRADE PRESSURE TREATED S-P-F.
- DECK PLANKS MAY BE FULL WIDTH OR MAY BE SUPPLIED IN A MAXIMUM OF 2 PIECES. DISCONTINUOUS PLANKS SHALL BE SPLICED DIRECTLY OVER ONE OF THE 3 CENTRAL STRINGER LINES. NAILERS SHALL BE PROVIDED ON BOTH SIDE OF ANY STRINGER WHERE PLANKS ARE SPLICED. STAGGER SPLICE LOCATIONS BETWEEN ADJACENT PLANKS.
- CONNECTIONS FOR HORIZONTAL RAILING TO BE BUTTED FLUSH TOGETHER AT CENTERLINE OF POST WITH EACH SIDE OF THE CONNECTION TO INCLUDE 2 - #10 x 150 SCREWS.
- ALL TIMBER SHALL CONFORM TO CSA STANDARD O141.
- TIMBER TREATMENT SHALL BE TYPE CCA IN CONFORMANCE WITH THE APPLICABLE STANDARD IN THE CSA O80 RANGE.
- TIMBER HAND RAIL TREATMENT SHALL BE ECO WOOD TREATMENT OR APPROVED EQUAL.
- TREAT ALL CUT TIMBER SURFACES AND PREDRILLED HOLES WITH TWO APPLICATIONS OF AN APPROVED LIQUID WOOD PRESERVATIVE IN CONFORMANCE WITH CSA STANDARD O80.3 AND SUITABLE FOR USE WITH CCA TREATMENT.
- SCREWS FOR CONNECTING TIMBER ELEMENTS SHALL BE RSS "RUGGED STRUCTURAL SCREWS" AS MANUFACTURED BY GRK FASTENERS, OR APPROVED EQUIVALENT ONLY.
- BOLTS CONNECTING TIMBER ELEMENTS SHALL BE IN ACCORDANCE WITH ASTM STANDARD A307, HOT-DIP GALVANIZED. PROVIDE 2 FLAT WASHERS FOR EACH BOLT. PROVIDE ROUND HEADS AT EXPOSED LOCATIONS OR COUNTERSINK BELOW THE SURFACE OF THE SURROUNDING WOOD.

**STEEL**

- MAIN STRINGERS SHALL BE ATMOSPHERIC CORROSION RESISTANT (WEATHERING STEEL) IN CONFORMANCE WITH CSA G40.21, GRADE 350AT.
- ALL OTHER STEEL SHALL BE IN CONFORMANCE WITH CSA G40.21, GRADE 300A.
- BOLTS CONNECTING STEEL ELEMENTS SHALL BE IN ACCORDANCE WITH ASTM A325, TYPE 3 (WEATHERING).
- USE WELD MATERIAL THAT MATCHES THE WEATHERING PROPERTIES OF THE CONNECTED ELEMENTS.
- FIELD WELDS WILL NOT BE PERMITTED.
- PROVIDE SHOP DRAWINGS OF ALL STEEL ELEMENTS FOR REVIEW.
- PERFORM WELDING IN ACCORDANCE WITH CSA STANDARD W59.
- FABRICATION SHALL BE PERFORMED BY A FIRM CERTIFIED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA W47.1, DIVISION 1 OR DIVISION 2.1.
- STEEL SHIMS CAN BE USED TO INCREASE DESIRED BRIDGE ELEVATIONS AT BEARING LOCATIONS.

**RIP RAP**

- RIP RAP SHOULD NOT BE KEYED IN ANY DEEPER THAN THE TOP OF FOOTING. EXCAVATION SHOULD START NEXT TO PIER IN ORDER TO CONFIRM DEPTH OF PIER PRIOR TO PLACING RIP RAP.
- CLASS 1 RIP RAP TO BE PLACED IN THE EXTENTS AS SHOWN. AT ABUTMENT RIP RAP EXTEND TO ELEVATION 1236.00.

NOT FOR CONSTRUCTION

PERMIT TO PRACTICE  
DILLON CONSULTING LIMITED  
Date JULY 15, 2013  
PERMIT NUMBER: P2528  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

0	13/07/15	ISSUED FOR TENDER	RCB	HAT
No.	Date	Description	Drawn by Dessine par	Approved Approuve
Revision / Revision				

<b>A</b>	Detail number	A Numero de detail
<b>B</b>	Sheet number	B Numero de la feuille
Linear dimensions in millimetres		Dimensions lineaires en millimetres
Consultant's Name Nom de l'expert-conseil	Eng. Stamp Sceau de l'ingenieur	
<b>DILLON CONSULTING</b>		2013-07-15

	Parks Canada Asset Management Western and Northern Region	Parcs Canada Gestion des biens Région de l'Ouest et du Nord
--	---	---

**Canada**

**PARKS CANADA**

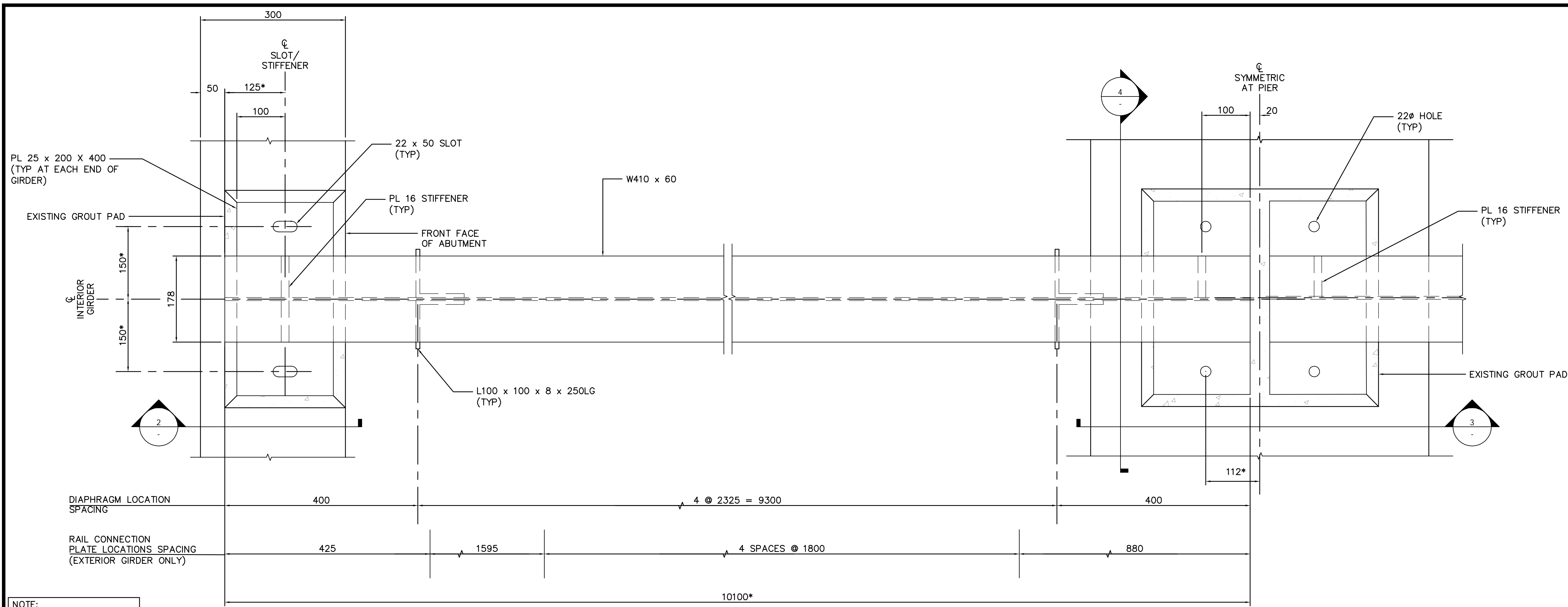
Project Title/Titre du projet  
**BAR U RANCH, ALBERTA**

**SERVICE BRIDGE  
BAR U RANCH  
NATIONAL HISTORIC SITE**

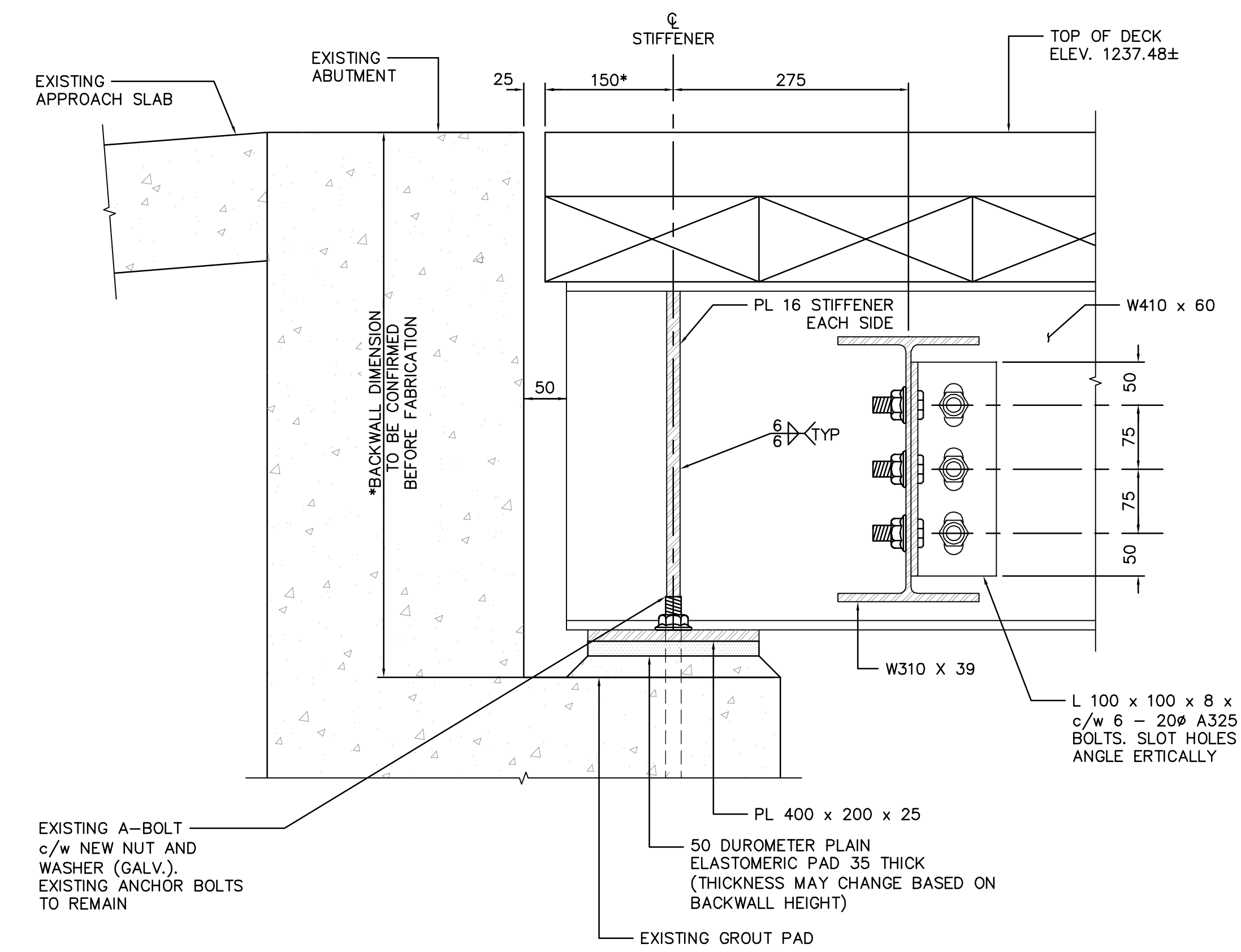
Drawing Title/Titre du dessin  
**SITE PLAN  
AND PROFILE**

Surveyed by/Arpente par GG	Drawn by/Dessine par RCB	Date JUNE 7, 2013
Designed by/Concept par KGW	Reviewed by/Revisé par CH	Scale/Echelle AS SHOWN
Client Acceptance/Acceptation du client KAREN ESARTE		Approved by/Approuve par
Project No./No du projet <b>137706</b>	Asset No./No du bien	Sheet No./ N°de la feuille <b>1</b>
Drawing Set No./No de serie du dessin		3

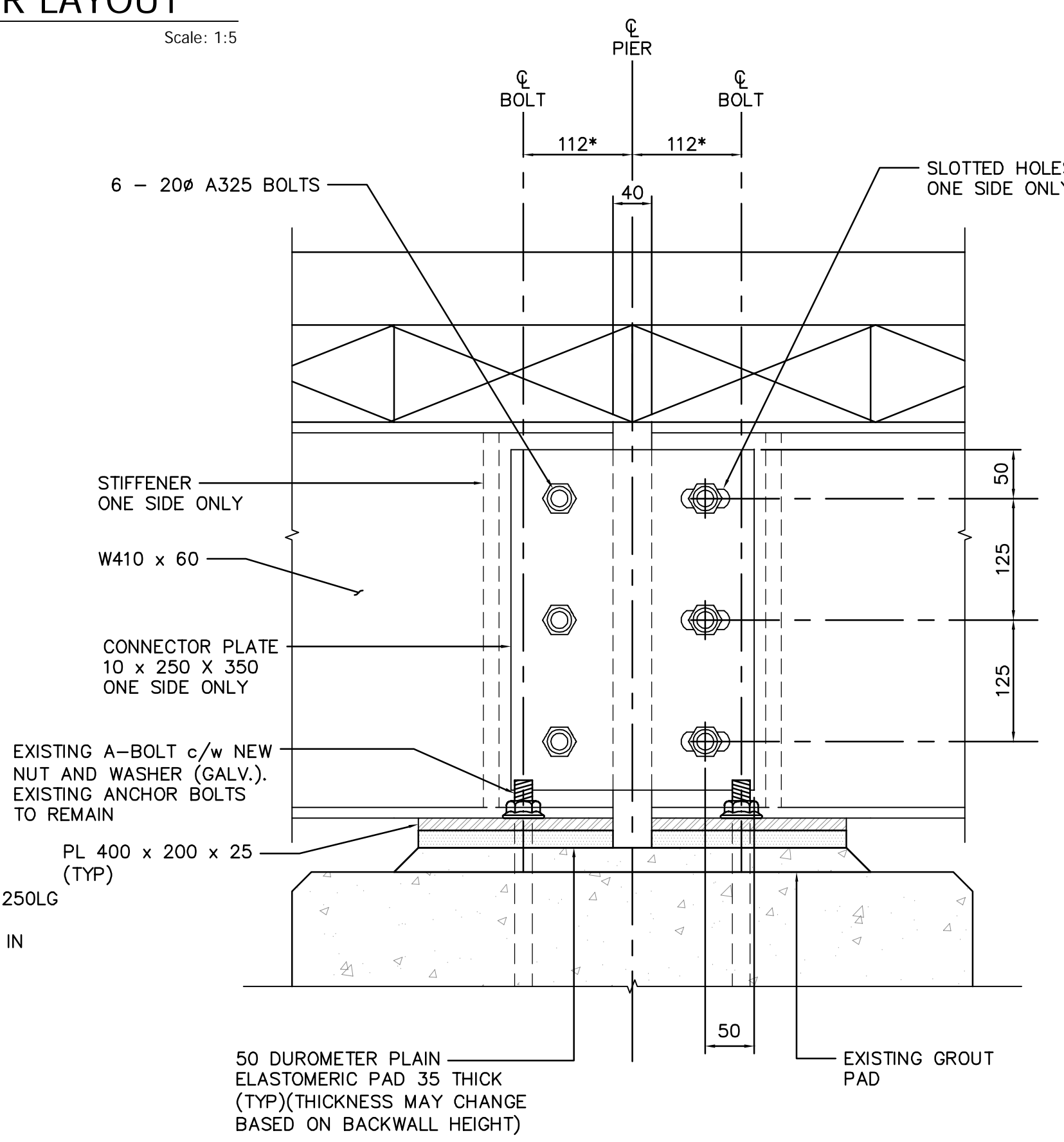




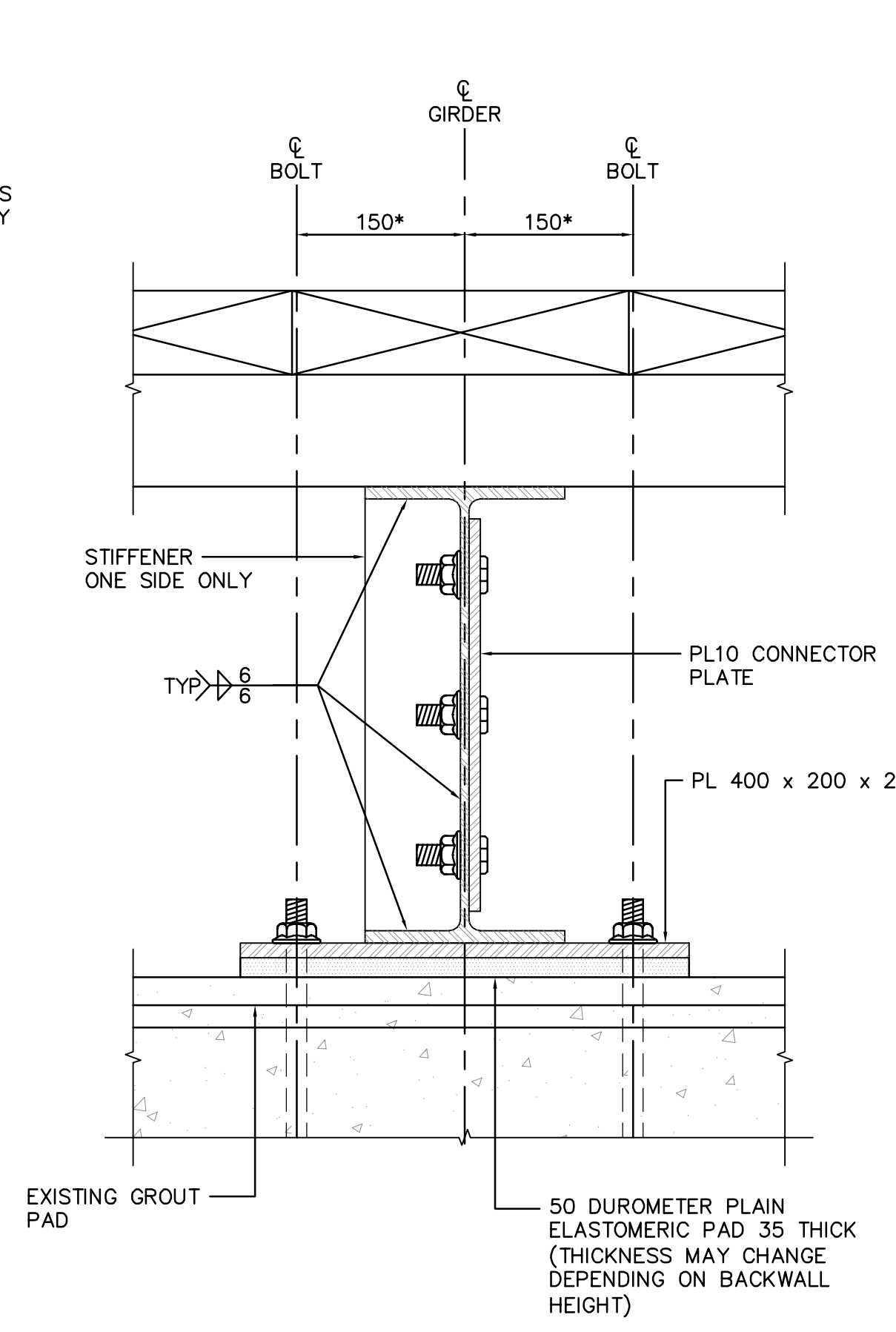
1 GIRDER LAYOUT  
Scale: 1:5



2 SECTION AT ABUTMENT  
Scale: 1:5



3 SECTION AT PIER  
Scale: 1:5



4 SECTION THROUGH PIER  
Scale: 1:5

NOT FOR CONSTRUCTION

PERMIT TO PRACTICE  
DILLON CONSULTING LIMITED  
Date JULY 15, 2013  
PERMIT NUMBER: P2528  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

0	13/07/15	ISSUED FOR TENDER	RCB	HAT
No.	Date	Description	Drawn by Dessine par	Approved Approuve
Revision / Revision				

(A)	Detail number	A Numero de detail
(B)	Sheet number	B Numero de la feuille
Linear dimensions in millimetres		Dimensions lineaires en millimetres

Consultant's Name  
Nom de l'expert-conseil

Eng. Stamp  
Sceau de l'ingenieur

**DILLON CONSULTING**

2013-07-15

Parks Canada / Parcs Canada

Asset Management / Gestion des biens  
Western and Northern Region / Région de l'Ouest et du Nord

**Canada**

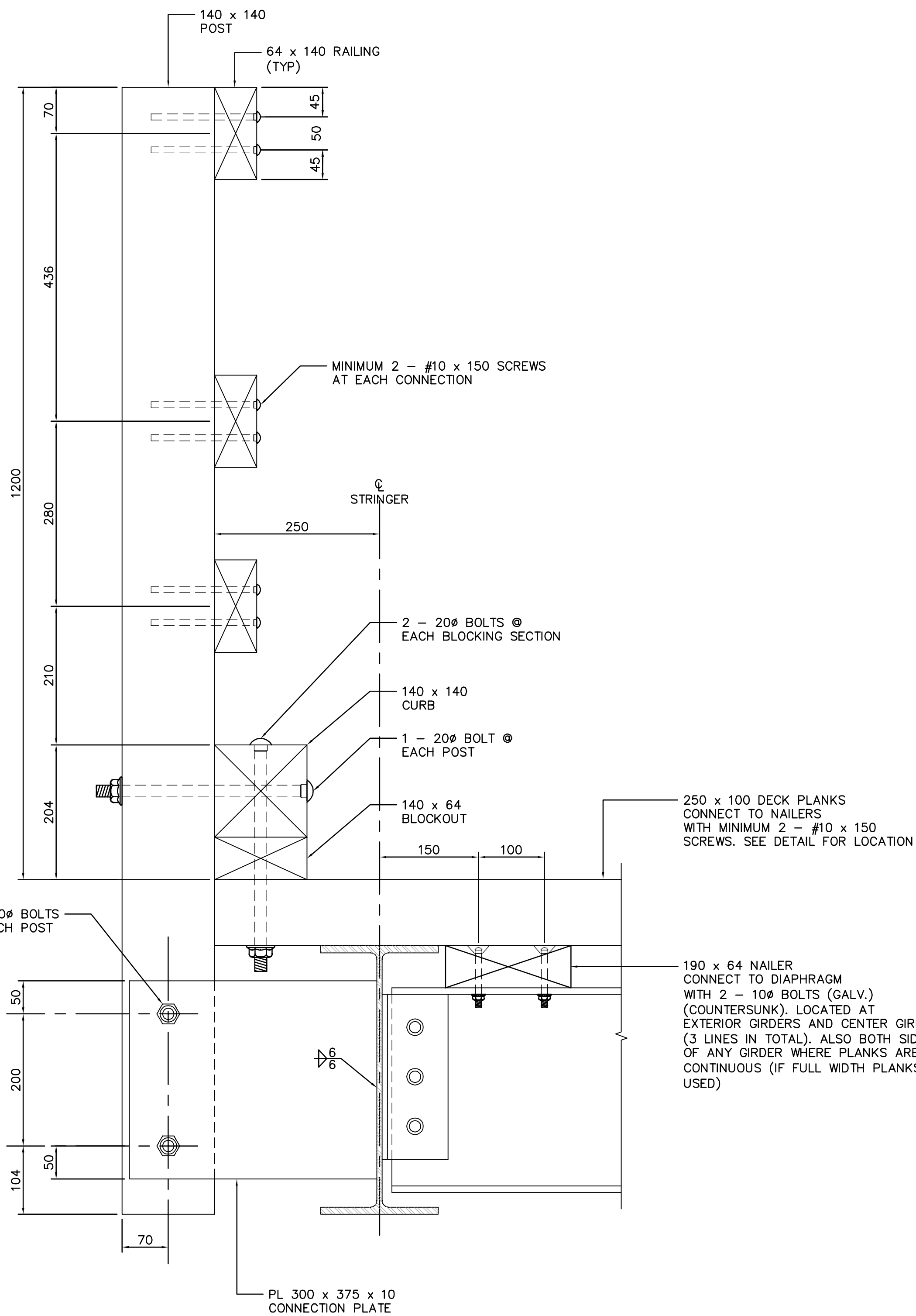
**PARKS CANADA**

Project Title/Titre du projet  
**BAR U RANCH, ALBERTA**

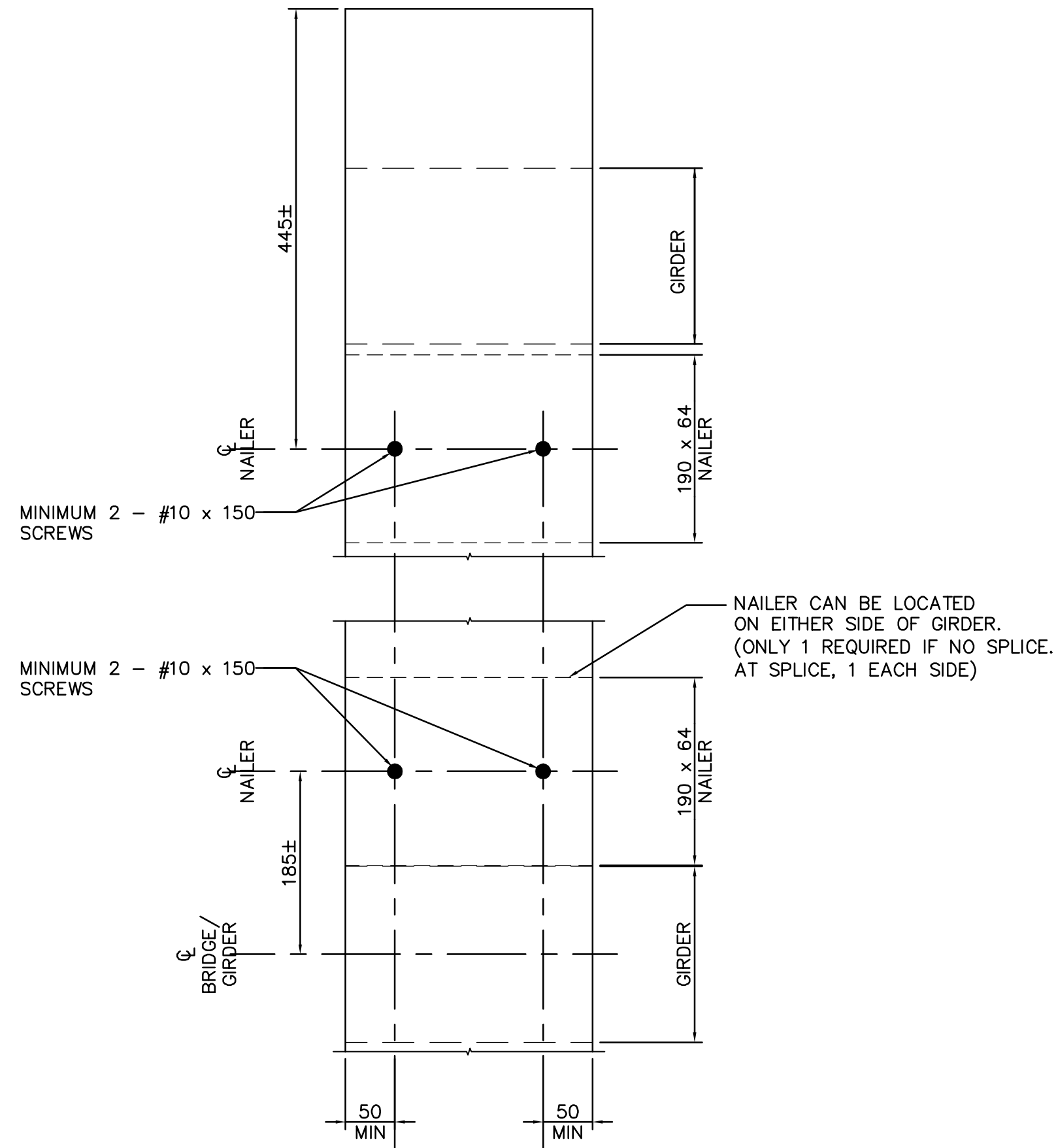
**SERVICE BRIDGE  
BAR U RANCH  
NATIONAL HISTORIC SITE**

Drawing Title/Titre du dessin  
**GIRDER DETAILS  
AND SECTIONS**

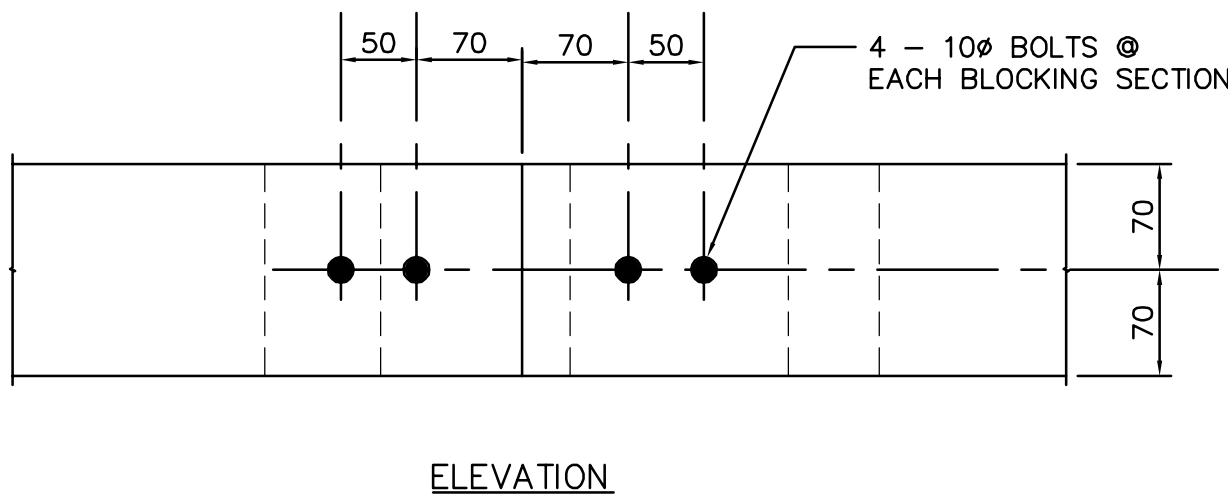
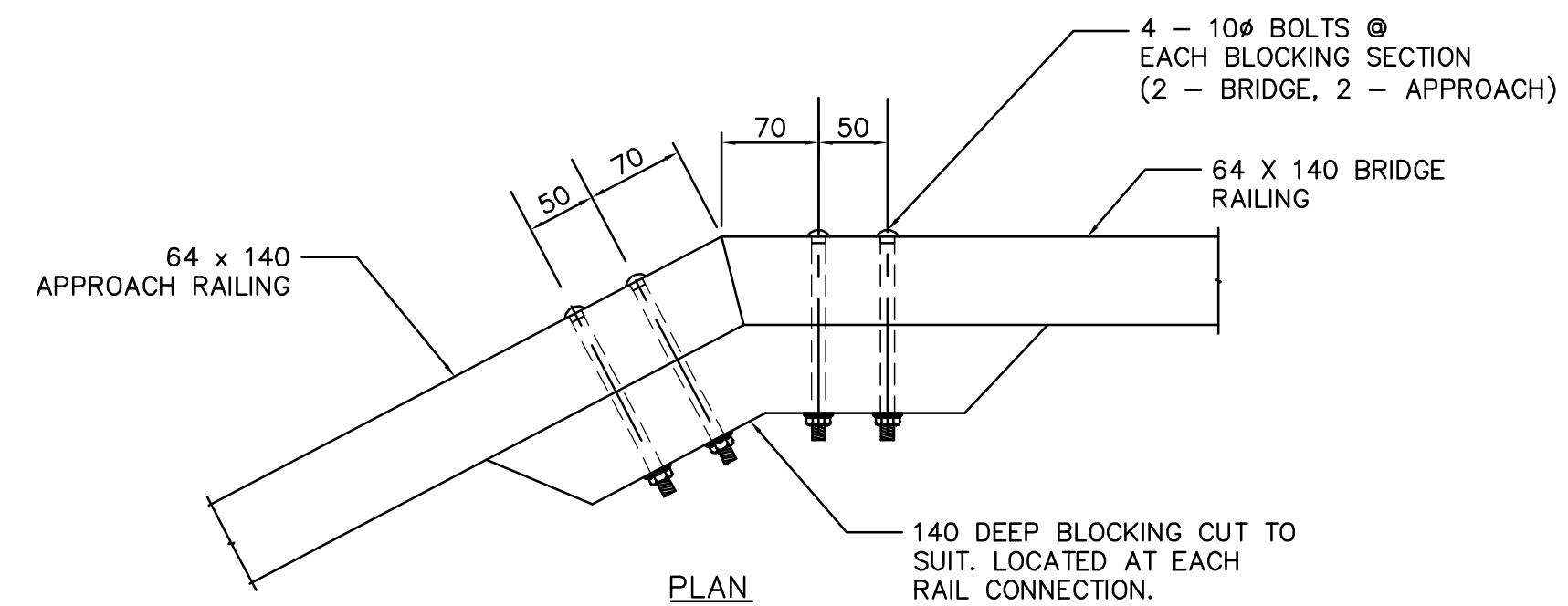
Surveyed by/Arpenté par GG	Drawn by/Dessiné par RCB	Date JUNE 7, 2013
Designed by/Concept par KGW	Reviewed by/Revisé par CH	Scale/Echelle AS SHOWN
Client Acceptance/Acceptation du client KAREN ESARTE		Approved by/Approuvé par
Date		Date
Project No./N° du projet 137706	Asset No./N° du bien	Sheet No./N° de la feuille 2
Drawing Set No./N° de série du dessin		3



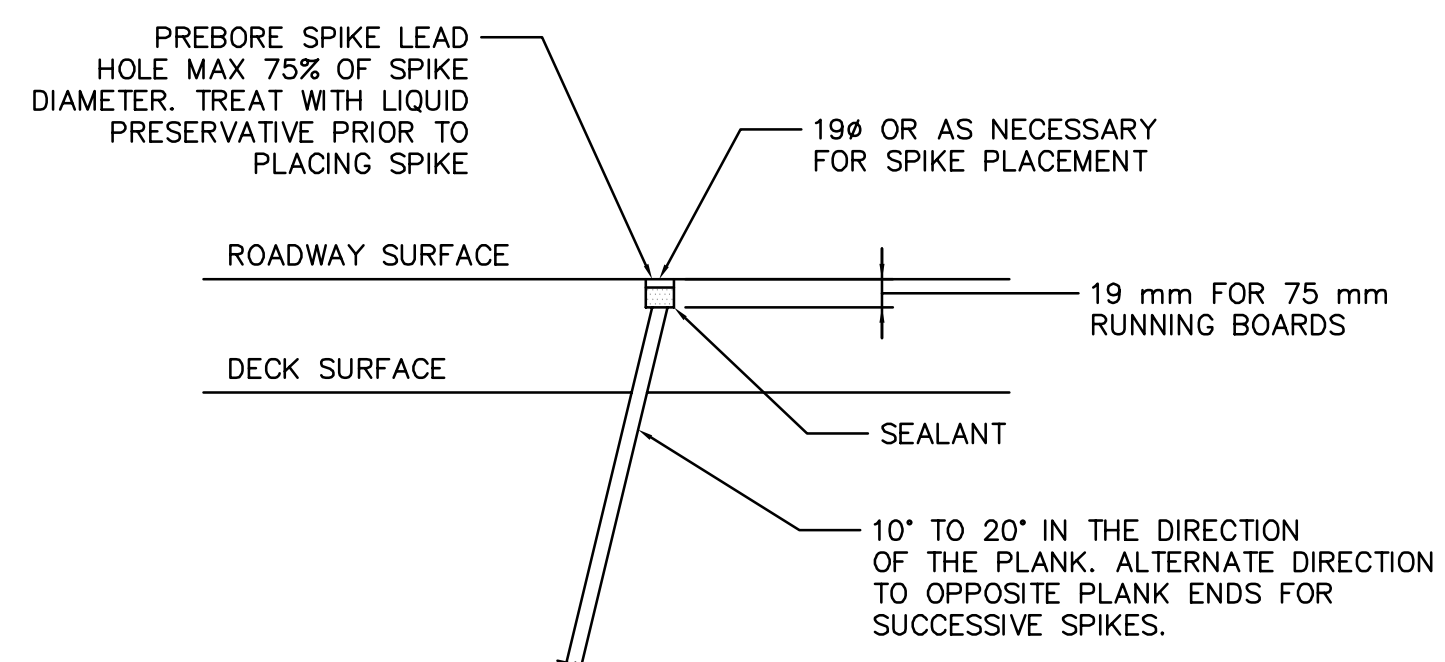
1 POST CONNECTION DETAIL  
Scale: 1:5



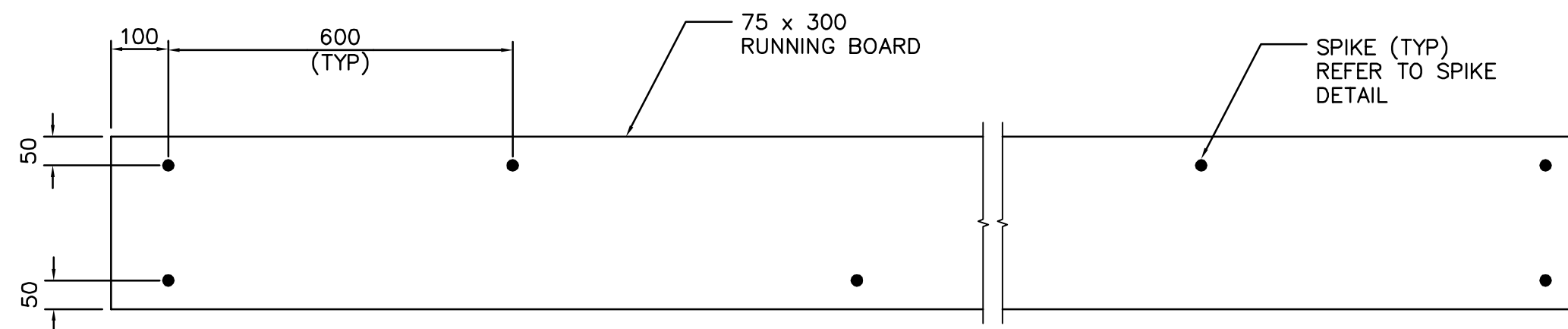
2 TYPICAL DECK PLANK CONNECTION DETAIL  
Scale: 1:5



3 APPROACH RAIL CONNECTION  
Scale: 1:5



4 SPIKE DETAIL  
Scale: 1:5



5 RUNNING BOARD ATTACHMENT PATTERN FOR SPIKES  
Scale: 1:10

NOT FOR CONSTRUCTION

PERMIT TO PRACTICE  
DILLON CONSULTING LIMITED  
Date JULY 15, 2013  
PERMIT NUMBER: P2528  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

0	13/07/15	ISSUED FOR TENDER	RCB	HAT
No.	Date	Description	Drawn by Dessine par	Approved Approuve
Revision / Revision				

(A)	Detail number	A Numero de detail
(B)	Sheet number	B Numero de la feuille
Linear dimensions in millimetres		Dimensions lineaires en millimetres

Consultant's Name  
Nom de l'expert-conseil

Eng. Stamp  
Sceau de l'ingenieur

**DILLON CONSULTING**

2013-07-15

**Canada**

Parks Canada / Parcs Canada

Asset Management / Gestion des biens  
Western and Northern Region / Région de l'Ouest et du Nord

**PARKS CANADA**

Project title/Titre du projet  
**BAR U RANCH, ALBERTA**

**SERVICE BRIDGE  
BAR U RANCH  
NATIONAL HISTORIC SITE**

Drawing title/Titre du dessin  
**SUPERSTRUCTURE DETAILS  
AND SECTIONS**

Surveyed by/Arpenté par GG	Drawn by/Dessiné par RCB	Date JUNE 7, 2013
Designed by/Concept par KGW	Reviewed by/Revisé par CH	Scale/Echelle AS SHOWN
Client Acceptance/Acceptation du client KAREN ESARTE		Approved by/Approuvé par
Project No./N° du projet 137706		Sheet No./N° de la feuille 3
Drawing Set No./N° de série du dessin		3