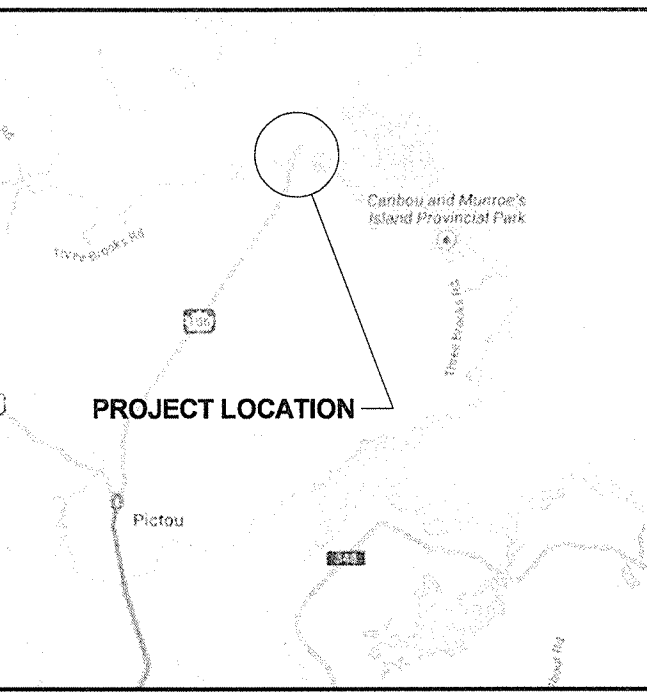


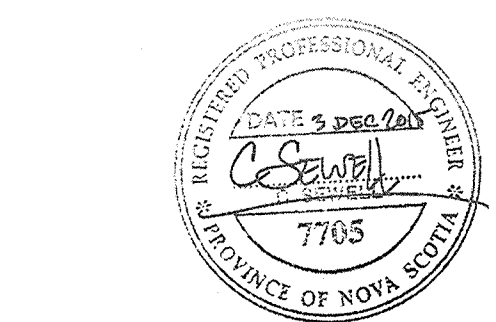
ABBREVIATIONS

APPROX.	APPROXIMATELY
BOT.	BOTTOM
CL	CENTRE LINE
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
Ø	COMPLETE WITH
DIA.	DIAMETER
DWG.	DRAWING
EA.	EACH
E.E.	EACH END
E.L./ELEV.	ELEVATION
E.S.	EACH SIDE
EX/EXIST.	EXISTING
GALV.	GALVANIZED
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
N.C.	NATIONAL COURSE
O.C.	ON CENTRES
PL	PLATE
RAD.	RADIUS
REINF.	REINFORCED
SIM.	SIMILAR
S.S.	STAINLESS STEEL
T.O.	TOP OF
TYP.	TYPICAL
U/S	UNDER SIDE
W/	WITH



NOTES:

1. EXISTING STRUCTURE BASE ON AS-BUILT DRAWINGS SHT. 1 TO SHT. 14 DATED JAN. 1993 AND FIELD REVIEW.

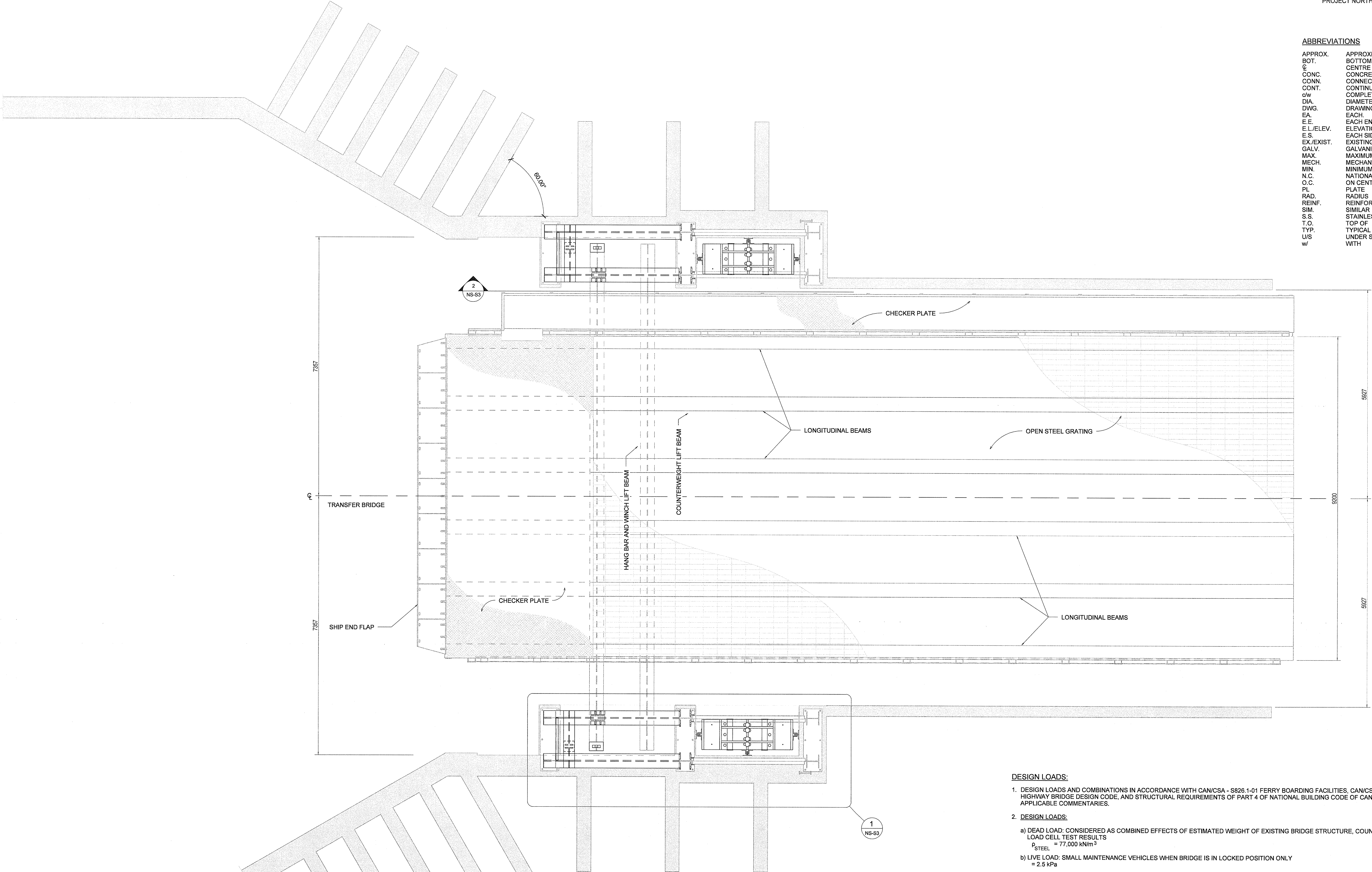


C02	ISSUED FOR TENDER	DEC 01 2015
revisions		date

CARIBOU/WOOD ISLANDS RAMP LIFTING MECHANISM UPGRADE

SITE PLAN  
CARIBOU

designed	C.S./M.A.P.	conçu
date	OCT. 24, 2014	
drawn	T.B./J.O.	dessiné
date	OCT. 24, 2014	
approved	N.L.	approuvé
date	OCT. 24, 2014	
project number	R.064789.001	
drawing no.	NS-S1	



SITE PLAN - CARIBOU  
SCALE: 1:50

DESIGN LOADS:

- DESIGN LOADS AND COMBINATIONS IN ACCORDANCE WITH CAN/CSA - S826-1-01 FERRY BOARDING FACILITIES, CAN/CSA - S6-1-08 CANADIAN HIGHWAY BRIDGE DESIGN CODE, AND STRUCTURAL REQUIREMENTS OF PART 4 OF NATIONAL BUILDING CODE OF CANADA 2010 (NBC) AND APPLICABLE COMMENTARIES.
- DESIGN LOADS:
  - DEAD LOAD: CONSIDERED AS COMBINED EFFECTS OF ESTIMATED WEIGHT OF EXISTING BRIDGE STRUCTURE, COUNTERWEIGHTS, AND LOAD CELL TEST RESULTS  
 $P_{STEEL} = 77,000 \text{ kNm}^3$
  - LIVE LOAD: SMALL MAINTENANCE VEHICLES WHEN BRIDGE IS IN LOCKED POSITION ONLY  
 $= 2.5 \text{ kPa}$
  - GROUND SNOW LOAD  
Is: ULS = 1.0 SLS = 0.9 Ss = 2.7 Sr = 0.6
  - ICE ACCUMULATION: EXTREME ZONE  
 $V_{ICE} = 9.8 \text{ kNm}^3$
  - WIND: (HOURLY WIND PRESSURE)  
 $q_{1/50} = 0.59 \text{ kPa}$
- UNFACTORED POINT LOAD (kN) AT THE HANG BAR AND WINCH LIFT BEAM DEVELOPED FROM LOAD CELL TEST RESULTS AND AS-BUILT DRAWINGS INCLUDING EFFECTS OF TIDAL ACTION ARE AS FOLLOWS:

POINT LOAD	EAST (kN)	WEST (kN)
TOTAL DEAD	433	416
UNBALANCED DEAD	53	64
FRICTION ALLOWANCE	13	17
LIVE (LOCKED POSITION)	211	177
SNOW	215	178
ICE	87	79
WIND	92	77

MOVING RANGE OF BRIDGE DURING TIDAL ACTION FROM AS-BUILT DRAWINGS

- LEVEL BRIDGE
- CL OF WINCH BEAM WHEN HIGH TIDE AND LIGHT SHIP
- CL OF WINCH BEAM WHEN LOW TIDE AND LOADED SHIP

ELEVATIONS (T.O. DECK)

- + 5.4 m
- + 7.54 m
- + 3.75 m

- EFFECTIVE SURFACE AREA FOR GRATING CONSIDERED AS 85% OF TOTAL SURFACE AREA FOR EFFECTS OF WIND, SNOW AND ICE.
- CONSTRUCTION LOADS SHALL NOT EXCEED SPECIFIED DESIGN LOADS.

