PLANS

OF PROPOSED

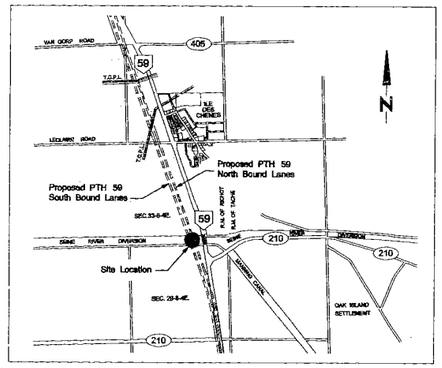
R.C. BRIDGE OVER SEINE RIVER DIVERSION

ON P.T.H. No. 59 SOUTH BOUND LANES

LENGTH	69 714 IN TO IN OF ABUTMENT BACKWALLS
SUPERSTRUCTURE	THREE SPAN CONTINUOUS PRECAST PRESTRESSED CONCRETE I- GIRDERS WITH CAST IN PLACE DECK AND ASPHALT OVERLAY ON 18.5° SKEW
SUBSTRUCTURE	TWO REINFORCED CONCRETE ABUTMENTS AND TWO REINFORCED CONCRETE PIERS ON STEEL H-PILES
ROADWAY WIDTH	10 900 CLEAR ROADWAY WIDTH
LOCATION	IN SEC.28-8-4E R.M. OF RITCHOT

SHEET LEGEND

1. COVER SHEET
2. GENERAL ELEVATION
3. SITE AND EROSION CONTROL DETAILS
4. SITE AND EROSION CONTROL DETAILS
5. SITE AND EROSION CONTROL DETAILS
6. BORING LOGS
7. PILE & FOOTING LAYOUT
8. ABUTMENT CONCRETE DETAILS SU.1
9. ABUTMENT CONCRETE DETAILS SU.1
10. ABUTMENT CONCRETE DETAILS SU.4
11. ABUTMENT CONCRETE DETAILS SU.4
12. ABUTMENT REINFORCING DETAILS FOR SU.1
13. ABUTMENT REINFORCING DETAILS FOR SU.1
14. ABUTMENT REINFORCING DETAILS FOR SU.4
15. ABUTMENT REINFORCING DETAILS FOR SU.
16. ABUTMENT REINFORCING DETAILS FOR SU.1 & SU.4
17. ABUTMENT REINFORCING DETAILS
18. ABUTMENT REINFORCING DETAILS
19. PIER SU.2 CONCRETE DETAILS
20. PIER SU.3 CONCRETE DETAILS
21. PIER REINFORCING DETAILS
22. PIER REINFORCING DETAILS
23. PIER REINFORCING DETAILS
24. PIER REINFORCING DETAILS
25. GIRDER CONCRETE DETAILS
26. GIRDER CONCRETE DETAILS
27. GIRDER CONCRETE DETAILS
28. GIRDER REINFORCING DETAILS
29. GIRDER REINFORCING DETAILS
30. BEARING DETAILS
31. BEARING DETAILS
32. BEARING DETAILS
33. DECK SLAB CONCRETE DETAILS
34. DECK SLAB REINFORCING DETAILS
35. DECK SLAB REINFORCING DETAILS
36. CURB DETAILS
37. DECK SLAB REINFORCING DETAILS
38. DIAPHRAGM CONCRETE DETAILS
39. DIAPHRAGM REINFORCING DETAILS
40. DIAPHRAGM REINFORCING DETAILS
41. DECK DRAIN DETAILS
42. EXPANSION JOINT DETAILS
43. EXPANSION JOINT DETAILS
44. EXPANSION JOINT DETAILS
45. EXPANSION JOINT DETAILS
46. EXPANSION JOINT DETAILS
47. EXPANSION JOINT DETAILS
48. EXPANSION JOINT DETAILS
49. EXPANSION JOINT DETAILS
50. RAILING DETAILS
51. RAILPOST DETAILS
52. RAILING ASSEMBLY DETAILS
53. APPROACH SLAB DETAILS



LOCATION PLAN
Not to Scale

DESIGN DATA

SPECIFICATONS

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECOND EDITION 1998 PLUS INTERIM REVISIONS THRU 2003
ANSI AASHTO AWS BRIDGE WELDING CODE D.1.5M/D1.5-2002 EDITION

VEHICULAR LIVE LOADING

1. MODIFIED AASHTO HSS 25 TRUCK LOADING (GOVERNS)
2. AASHTO LRFD HL-93 LOADING

STRUCTURAL CONCRETE

1. APPROACH SLABS, DECK SLAB, CURBS ON DECK SLAB, CURBS ON ABUTMENT WINGWALLS, AND ABUTMENT END BLOCKS - f'c=45 MPa @ 28 DAYS
2. PRECAST PRESTRESSED CONCRETE I-GIRDERS - f'c=40 MPa, fci=30 MPa
3. ALL OTHER STRUCTURAL CONCRETE - f'c=30 MPa @ 28 DAYS

CEMENT

1. CEMENT FOR THE APPROACH SLABS, DECK SLAB, CURBS ON DECK SLAB, CURBS ON ABUTMENT WINGWALLS, AND ABUTMENT END BLOCKS SHALL BE TYPE 10E-SF PORTLAND SILICA FUME CEMENT CONFORMING TO CSA A362 - 03
2. CEMENT FOR PIER FOOTINGS AND ABUTMENT FOOTINGS SHALL BE TYPE 50 SULPHATE - RESISTANT PORTLAND CEMENT CONFORMING TO CAN/CSA A5 - 03
3. CEMENT FOR ALL OTHER STRUCTURAL CONCRETE SHALL BE TYPE 10 NORMAL PORTLAND CEMENT CONFORMING TO CAN/CSA-A5 - 03

REINFORCING STEEL

CSA G30.18 GRADE 400W ----------ALL LOCATIONS EXCEPT WHERE NOTED BELOW
MMFX-2 (ONLY AVAILABLE FROM MMFX STEEL CORP. OF AMERICA) ___DECK SLAB AND DECK CURBS

STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40.21 GRADE 300W UNLESS NOTED OTHERWISE.
HSS TUBING FOR BRIDGE RAIL SHALL CONFORM TO CAN/CSA - G40.21-04 GRADE 350W.

PRESTRESSING STRAND

ASTM A416M 13 mm ø SEVEN WIRE LOW RELAXATION STRAND, fpu= 1 860 MPa

PILE LOADING

	ABUTMENTS	PIERS
MAXIMUM FACTORED LOAD	775 kN	720 kN
FACTORED BEARING RESISTANCE	800 kN	830 kN

HYDRAULIC DESIGN DATA

DESIGN DISCHARGE

Q_{100} = 212 m³/sec
V = 1.3 m/s

MANITOBA TRANSPORTATION AND GOVERNMENT SERVICES

BRIDGES & STRUCTURES BRANCH

PROVINCE OF MANITOBA

ENVIRONMENTAL APPROVALS

- [ ] MANITOBA ENVIRONMENT LICENCE RECEIVED
  LICENCE No. _____
- [X] FISHERIES AND OCEANS CANADA - LETTER OF ADVICE/ AUTHORIZATION TO HARMFULLY ALTER, DISRUPT OR DESTROY HABITAT SUBJECT TO CONDITIONS
  IN LETTER DATED NOVEMBER 9, 2005
  D.F.O. FILE No. WI-04-2450
- [ ] TRANSPORT CANADA - LETTER OF APPROVAL SUBJECT TO CONDITIONS IN LETTER DATED _____
  NWPP. FILE No. 8200-04-6561
- [ ] NO ENVIRONMENTAL CLEARANCE REQUIRED

COMPLETED BY : _____ DATE : _____

RELEASED FOR CONSTRUCTION BY:

DIRECTOR OF BRIDGES & STRUCTURES

DATE: Nov.17/05

ALL DIMENSIONS ARE IN MILLIMETRES (mm) AND ALL ELEVATIONS AND STATIONS ARE IN METRES (m) UNLESS SHOWN OTHERWISE.

OCT 31 / 07
AS BUILTS

DRAWN BY:	M.S.	DATE:	JULY 2005	SHEET No. 1
CHECKED BY:	A.H.P. & S.L.D.	DATE:	JULY 2005	SITE No. 693-02

..\bs_sites\069302\069302cs.dgn 10/17/05 11:17:03 AM