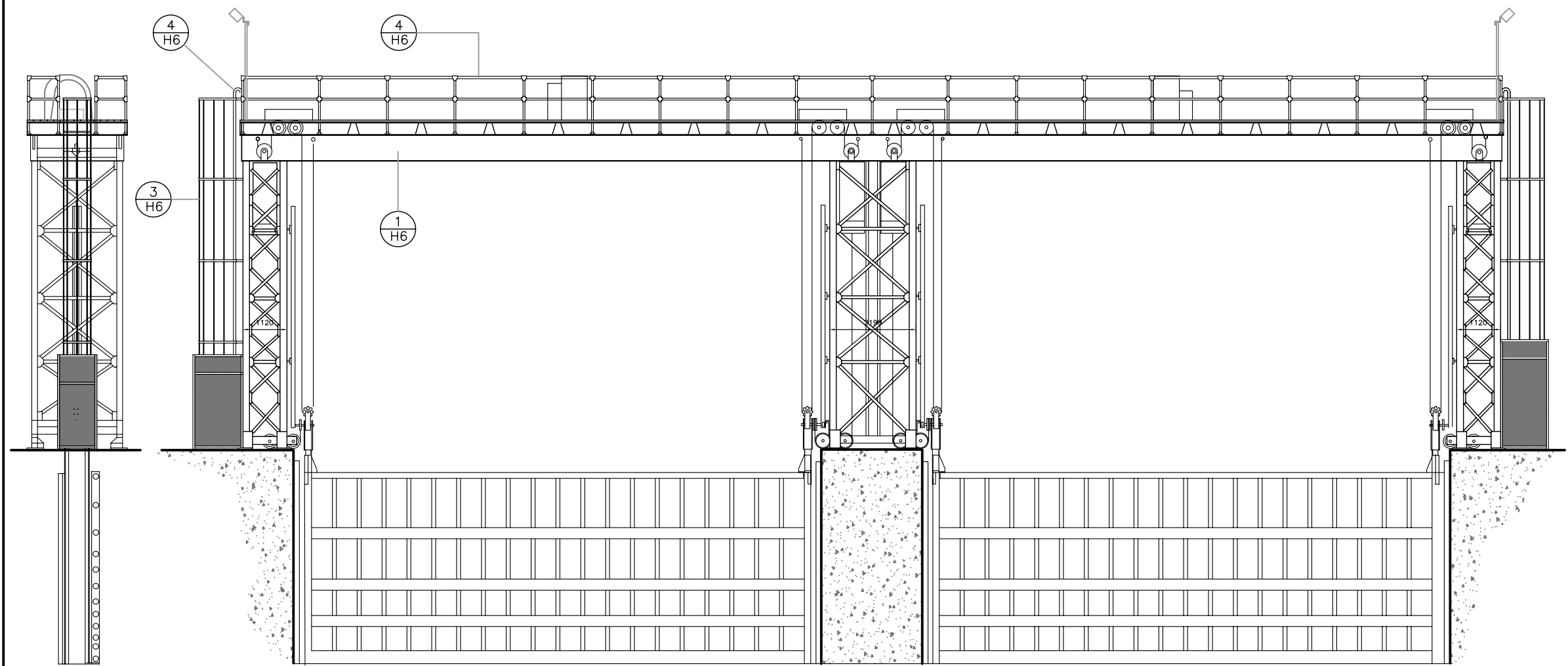


PLAN OF TOP OF TOWER  
SCALE : 1:50





NORTH ELEVATION  
SCALE : 1:50

WEST ELEVATION  
SCALE : 1:50

NOTE:  
SOME DIMENSIONS ON TOWER PLAN  
NEED TO BE VERIFIED ON SITE.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision		
	A Detail number No. du détail	
	B Location dwg. no. No. sur dessin	
	C Drawing sheet no. No. du dessin	

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_



Public Works and  
Government Services  
Canada



Travaux publics et  
Services gouvernementaux  
Canada

Ontario Region  
Région de l'Ontario



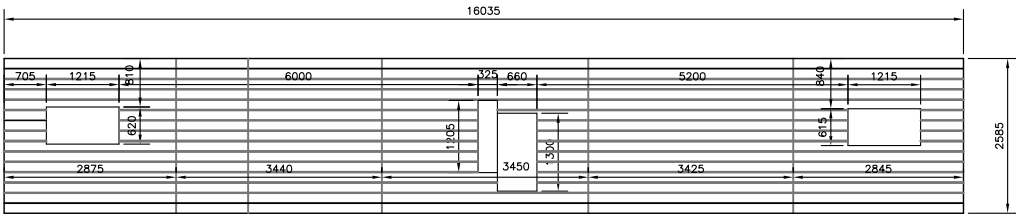
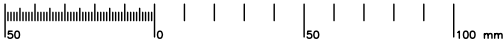
Project title / Titre du projet  
**HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER**

ONTARIO

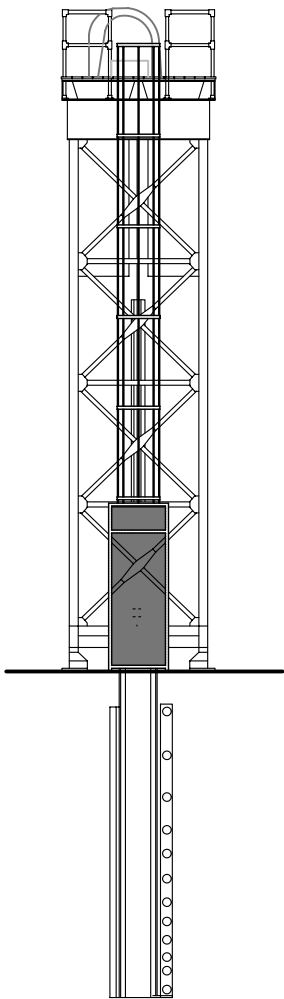
Drawing title / Titre du dessin  
**NORTH CHANNEL DAM  
ELEVATIONS AND PLAN AT  
TOP OF TOWER**

Scale / Echelle NOT TO SCALE	
Drawn by/ Dessiné par B. Prins	Date 2009.03.26
Designed by/ Conçu par	Date
Checked by/ Vérifié par C.A. Smith	Date 2009.03.26
Approved by / Approuvé par	Date

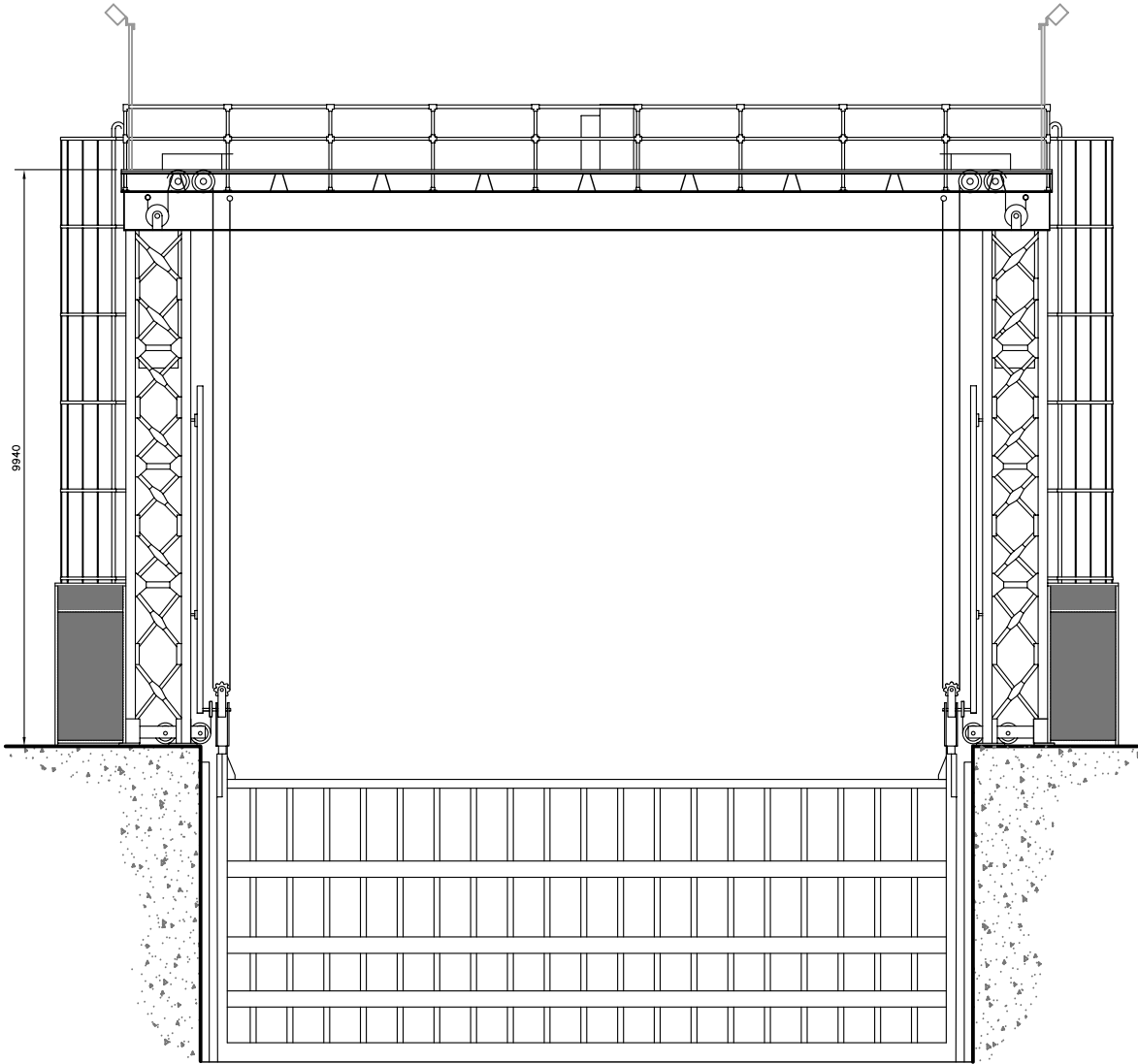
Project No./No. du projet R-12000.003	Client No./No du Client	Sheet No./ Feuille No. <b>H4</b>
Drawing Reference No./Numéro de Référence du Dessin OG 08/R4		



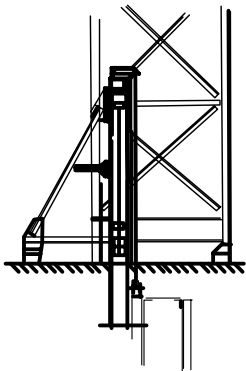
PLAN OF MACHINERY BRIDGE  
SCALE : 1:50



NORTH ELEVATION  
SCALE : 1:50



WEST ELEVATION  
SCALE : 1:50



SUPPORT BASE DETAIL  
SCALE : 1:50

NOTE:

SOME DIMENSIONS ON  
TOWER PLAN NEED TO  
BE VERIFIED ON SITE.

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

Revision / Révision				
A C	A Detail number No. du détail			
	B Location dwg. no. No. sur dessin			
	C Drawing sheet no. No. du dessin			

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_



Public Works and  
Government Services  
Canada



Travaux publics et  
Services gouvernementaux  
Canada

Ontario Region  
Région de l'Ontario



Project title / Titre du projet

HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin

SOUTH CHANNEL DAM  
ELEVATIONS AND PLAN AT  
TOP OF TOWER

Scale / Echelle  
NOT TO SCALE

Drawn by/ Dessiné par J. N. McKay, B. Prins Date 2009.03.26

Designed by/ Conçu par Date

Checked by/ Vérifié par C. A. Smith Date 2009.03.26

Approved by / Approuvé par Date

Project No./No. du projet R-12000.003 Client No./No du Client Sheet No./ Feuille No.

Drawing Reference No./Numéro de Référence du Dessin OG 08/R4 H5

TIME PLOTTED

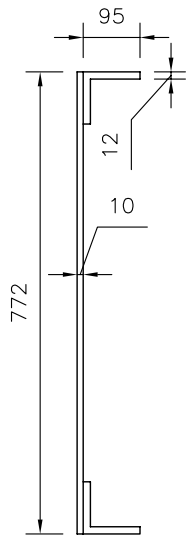
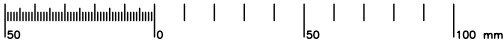
DATE PLOTTED 2008.02.01

PERSON PLOTTING J. McKay

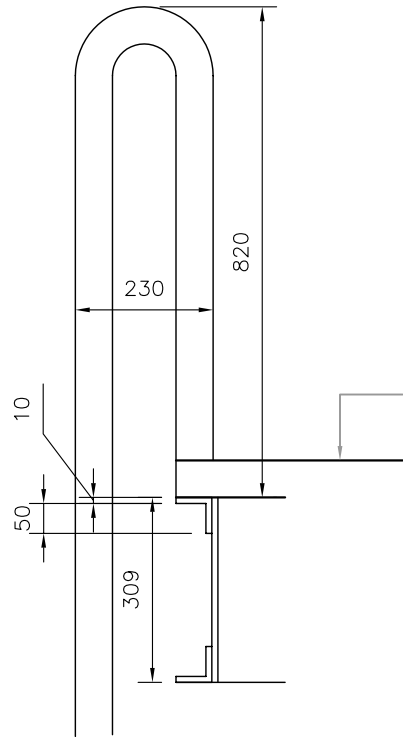
SCALE OF PLOT N.T.S.

VIEW PLOTTED Elevation

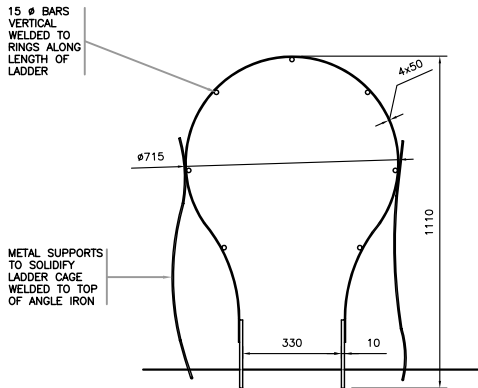
DRAWING NAME



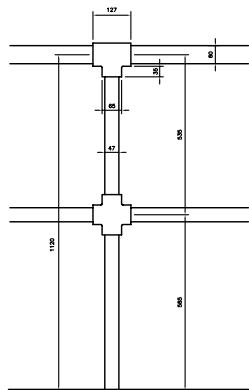
1 STORAGE SHED  
H4 SCALE : 1:5



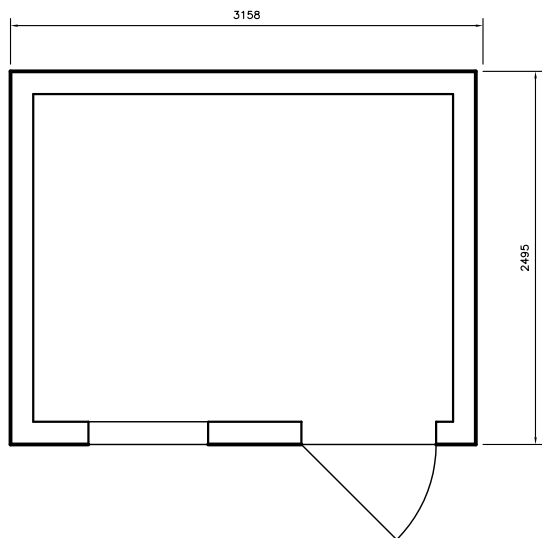
2 TOP OF LADDER  
H4 SCALE : 1:5



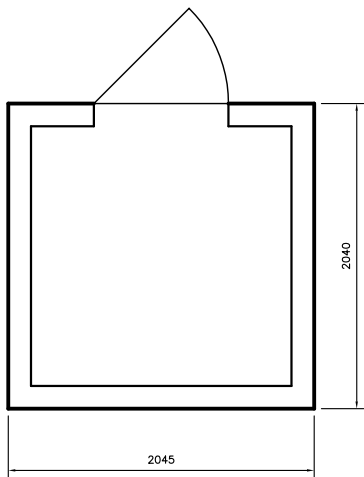
3 DECK LADDER CAGE DETAIL  
H4 SCALE : 1:5



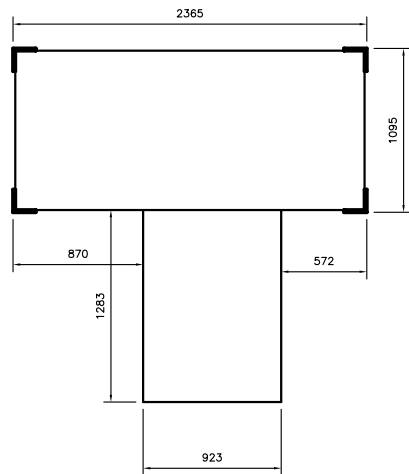
4 TYPICAL TOWER DECK RAIL DETAIL  
H4 SCALE : 1:5



5 STORAGE SHED  
H3 SCALE : 1:5



6 DAM CONTROL SHED  
H3 SCALE : 1 : 20



7 TOWER END FRAME DETAIL  
H3 SCALE : 1:5

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision				
A		A Detail number No. du détail		A
B		B Location dwg. no. No. sur dessin		B
C		C Drawing sheet no. No. du dessin		C

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_



Project title / Titre du projet  
**HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER**

ONTARIO

Drawing title / Titre du dessin

**MISCELLANEOUS DETAILS**

Scale / Echelle

AS SHOWN

Drawn by/ Dessiné par \_\_\_\_\_ Date \_\_\_\_\_

B. PRINS 2008.02.01

Designed by/ Conçu par \_\_\_\_\_ Date \_\_\_\_\_

Checked by/ Vérifié par \_\_\_\_\_ Date \_\_\_\_\_

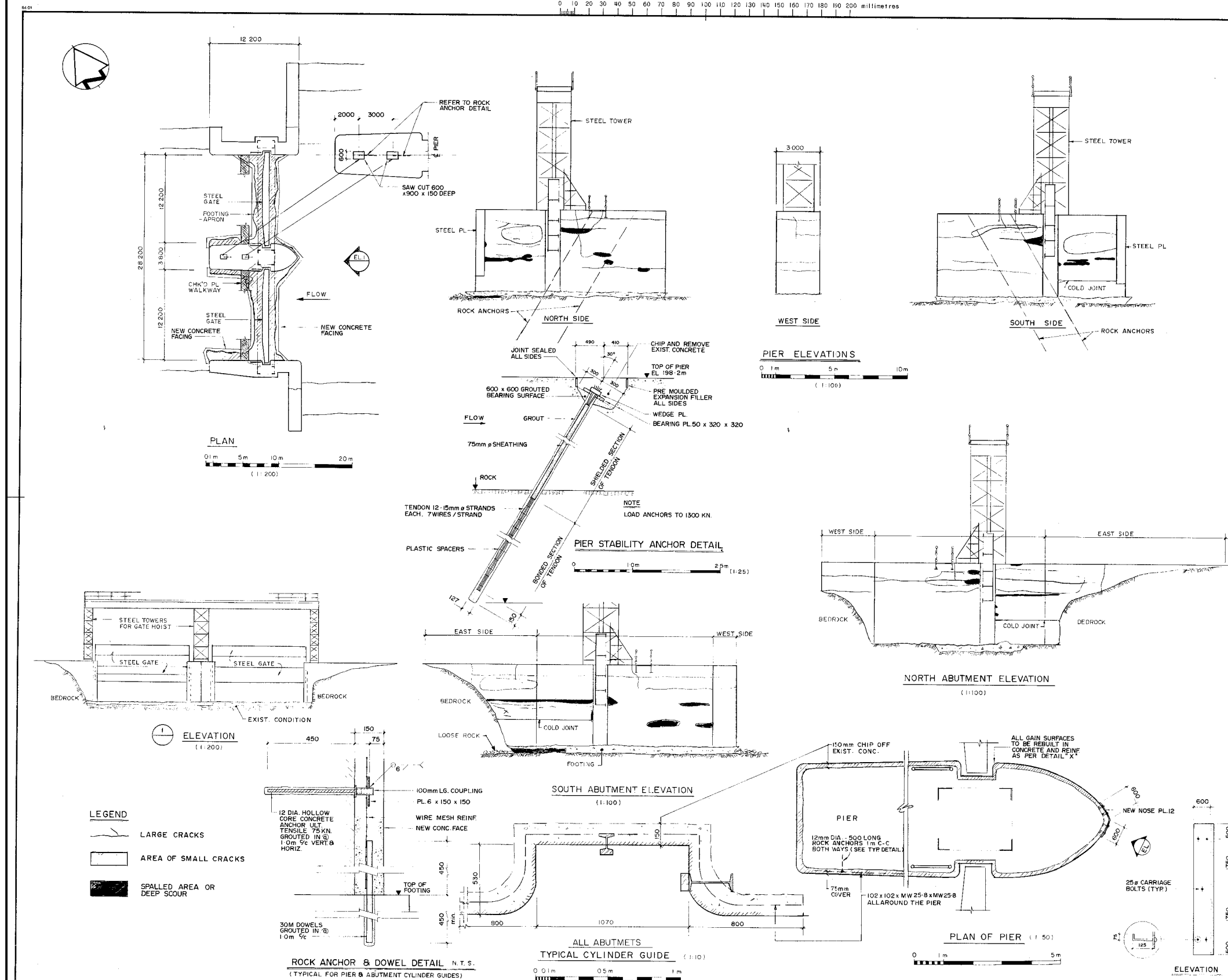
C. A. SMITH 2009.03.26

Approved by / Approuvé par \_\_\_\_\_ Date \_\_\_\_\_

Project No./No. du projet \_\_\_\_\_ Client No./No du Client \_\_\_\_\_ Sheet No./  
R.12000.003 Feuille No. \_\_\_\_\_

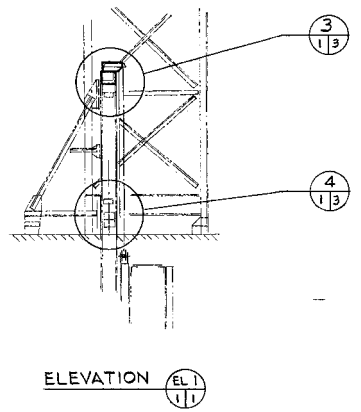
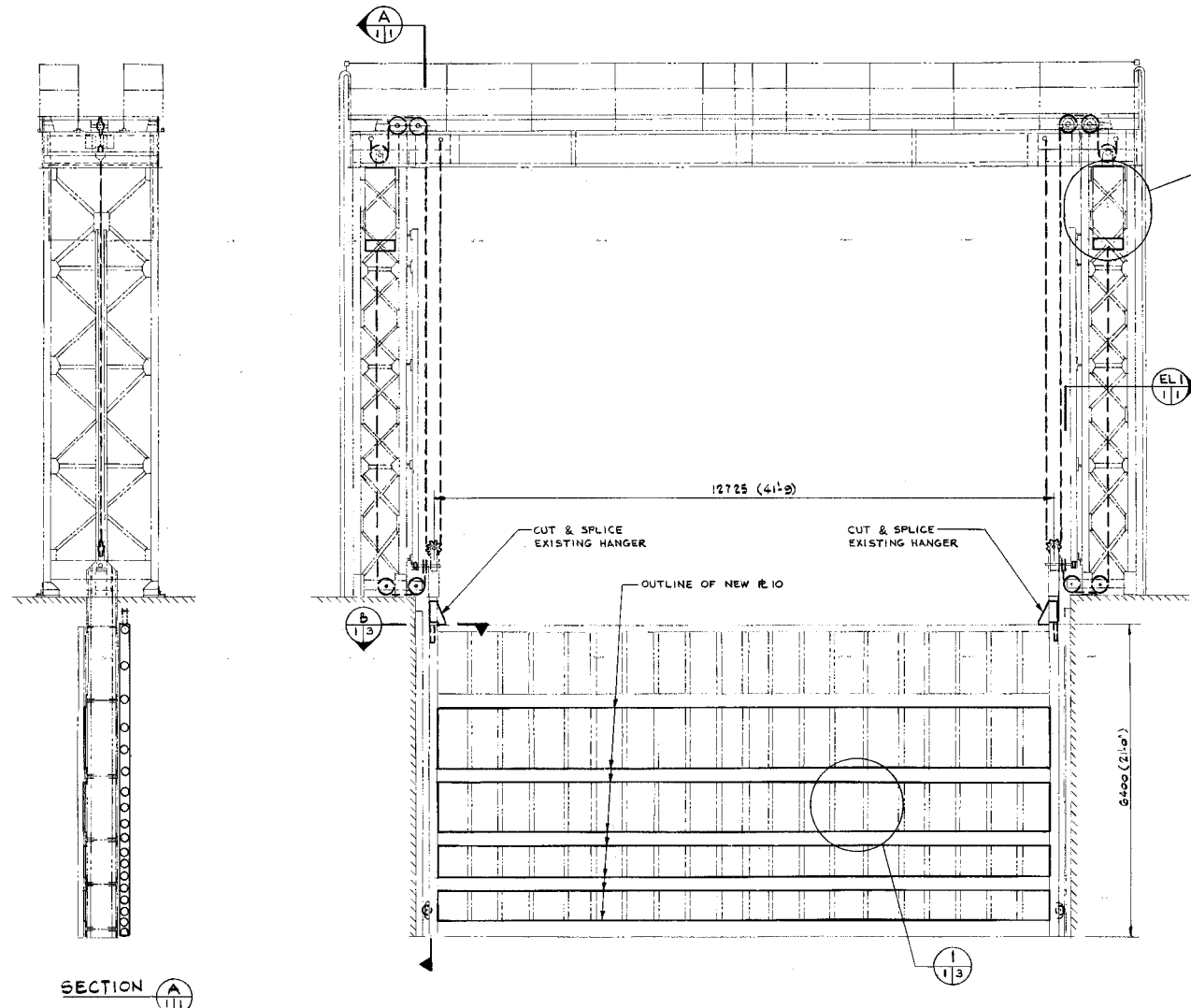
Drawing Reference No./Numéro de Référence du Dessin  
OG 08/R4

**H6**



50 0 50 100 mm

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres



ELEVATION 1-1

NOTES:  
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DOMINION BRIDGE DWG. NOS.: 5858 E1 & E2, 5858 A & 5858 I TO I7.  
2. EXISTING GATE STRUCTURE SHOWN THUS  
MODIFICATIONS SHOWN THUS

ELEVATION  
LOOKING DOWN STREAM  
0 1 m 5 m

SECTION A-A

Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario



AP.D. & ASSOCIATES  
CONSULTING ENGINEERS  
Member of the Stewar Worcester Group

revisions date

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision			
A	C	A Detail number No. du détail	A
B	C	B Location dwg. no. No. sur dessin	B C
C	C	C Drawing sheet no. No. du dessin	

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario



"AS BUILT DRAWING"  
87-03-05

A	B	C
detail no. no. de détail	drawing no. - where detail required dessin no. - où détail requis	drawing no. - where detailed dessin no. - où détaillé

Project title  
Titre du projet  
FRENCH RIVER ONT.

REPAIRS TO BIG CHAUDIERE DAMS

drawing title  
titre du dessin  
SOUTH CHANNEL GATE  
GENERAL ARRANGEMENT

designed by  
conçu par A. KING / M. WEISS

drawn by  
dessiné par F.W.

checked by  
vérifié par [Signature]

approved by  
approuvé par

project date  
date du projet 1986-02-13

project no.  
no. du projet 620337

drawing no.  
dessin no. M - I

Project title / Titre du projet

HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin

SOUTH CHANNEL GATE  
DIGITAL dwg. OF 1986 PWGSC  
dwg. by APD ASS. CONS. ENG.

Scale / Echelle  
NOT TO SCALE

Drawn by/ Dessiné par B. PRINS Date 2008.01.31

Designed by/ Conçu par Date

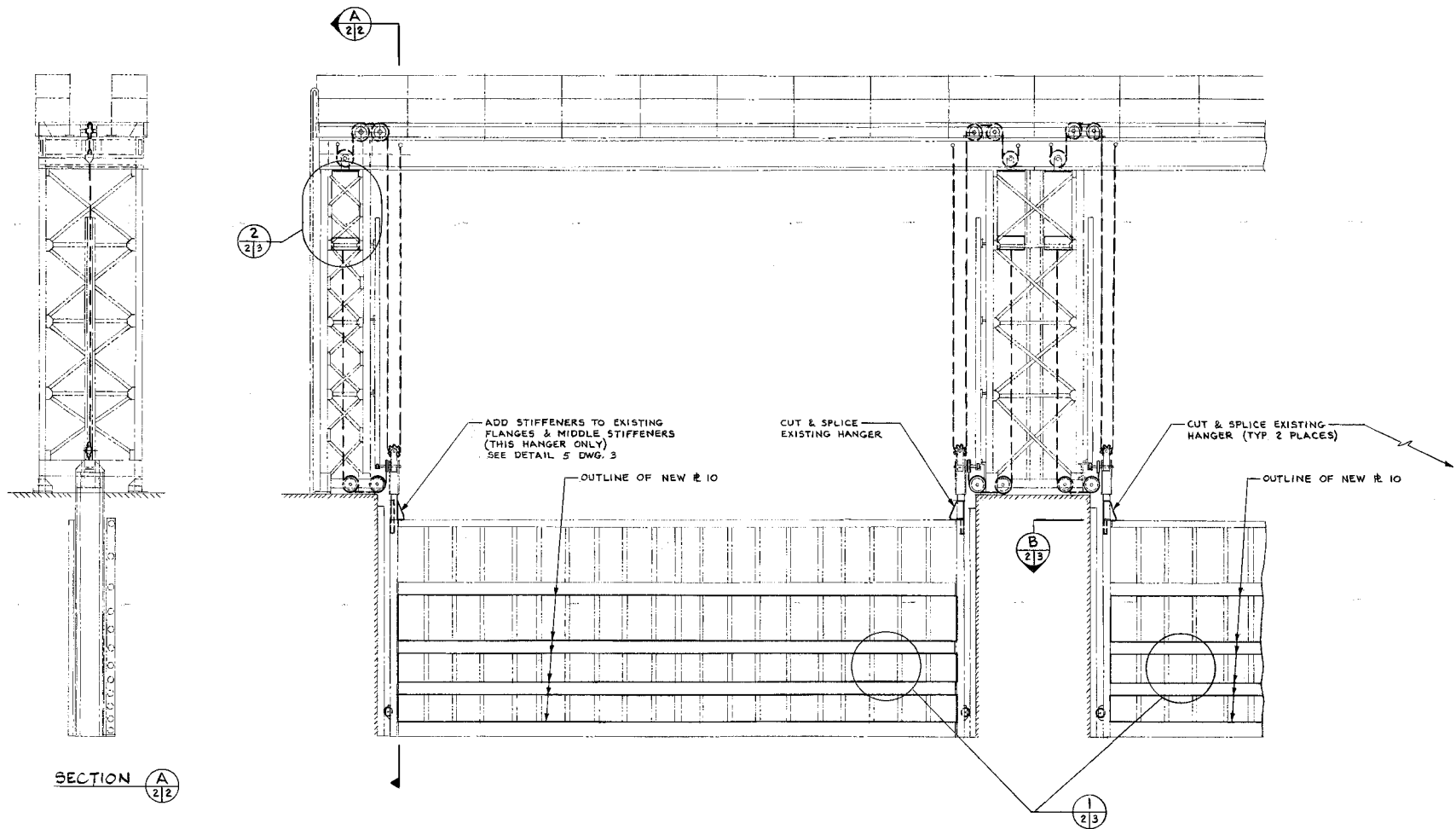
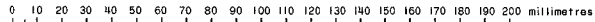
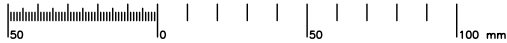
Checked by/ Vérifié par C.A. SMITH Date 2009.03.26

Approved by / Approuvé par Date

Project No./No. du projet R-12000.003 Client No./No du Client Sheet No./ Feuille No.

Drawing Reference No./Numéro de Référence du Dessin OG 08/R4 H8

TIME PLOTTED  
DATE PLOTTED  
PERSON PLOTTING  
SCALE OF PLOT  
VIEW PLOTTED  
DRAWING NAME



ELEVATION  
LOOKING DOWN STREAM



NOTES:  
1. FOR GENERAL NOTES SEE DWG. M-1

Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario



APD & ASSOCIATES  
CONSULTING ENGINEERS  
Member of the Swan Wooster Group

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé

Revision / Révision

A  
C

A Detail number  
No. du détail  
B Location dwg. no.  
No. sur dessin  
C Drawing sheet no.  
No. du dessin

A  
B C

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

Canada

"AS BUILT DRAWING"  
87-03-05

A detail no.  
No. du détail  
B drawing no. - where detail required  
No. du dessin - où détail requis  
C drawing no. - where detail not required  
No. du dessin - où détail non requis

Project title  
Titre du projet  
FRENCH RIVER ONT.

REPAIRS TO BIG CHAUDIERE DAMS

North Channel Gates  
GENERAL ARRANGEMENT

Designed by  
Conçu par  
A. KING / M. WEISS

Checked by  
Vérifié par  
F. W.

Reviewed by  
Examiné par  
[Signature]

Approved by  
Approuvé par

Project date  
Date du projet  
1986-02-13

Project no.  
No. du projet  
620337

Drawing no.  
Dessin no.  
M - 2

Project title / Titre du projet  
HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin  
NORTH CHANNEL GATES  
DIGITAL dwg. OF 1986 PWGSC  
dwg. by APD ASS. CONS. ENG.

Scale / Echelle  
NOT TO SCALE

Drawn by/ Dessiné par  
B. PRINS

Designed by/ Conçu par  
Date

Checked by/ Vérifié par  
C. A. SMITH

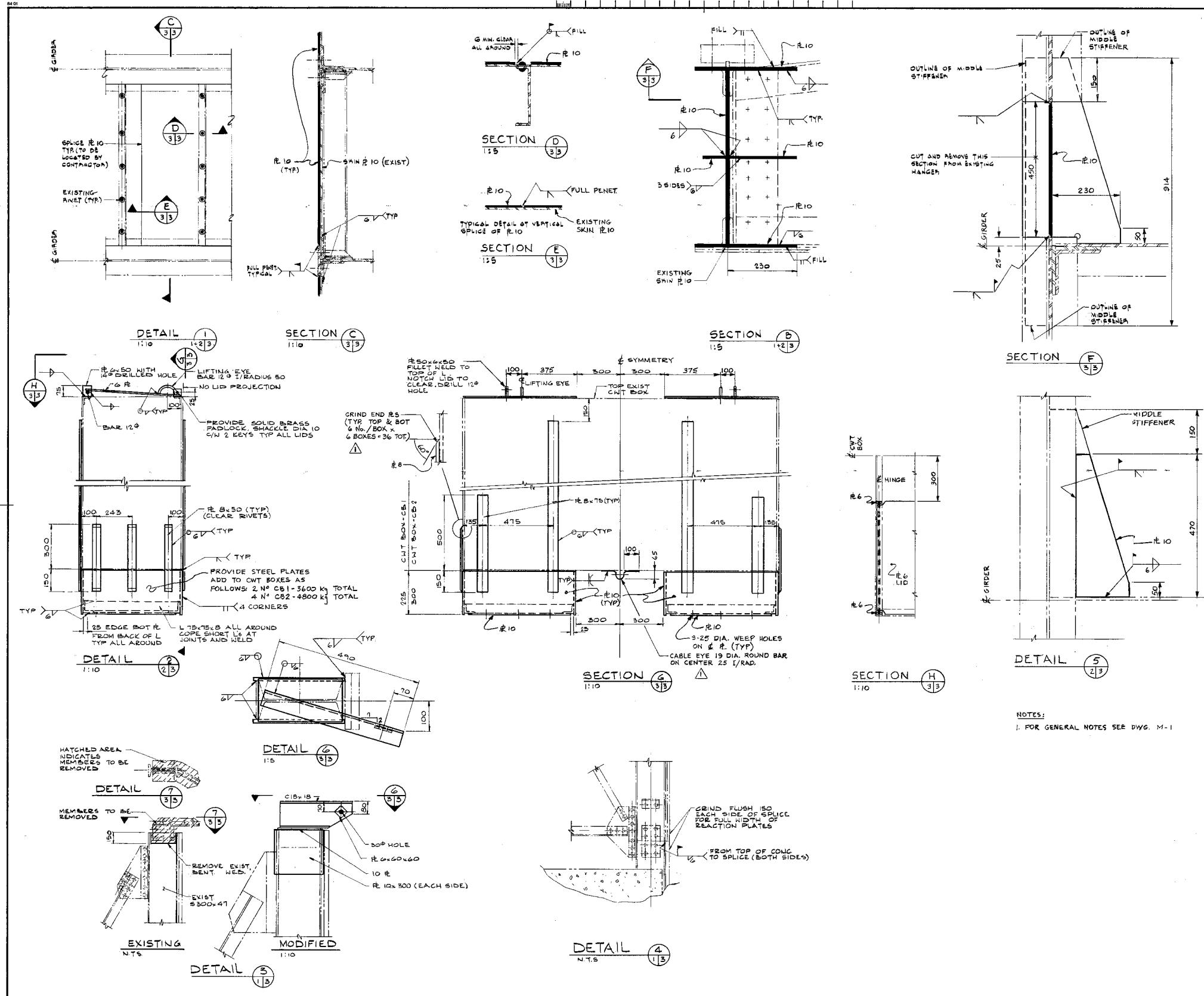
Approved by / Approuvé par  
Date

Project No./No. du projet  
R-12000.003  
Client No./No du Client  
OG 08/R4  
Sheet No./  
Feuille No.  
H9



50 100 150 200 millimetres

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres



Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario



APD & ASSOCIATES  
CONSULTING ENGINEERS  
Member of the Swan Wooster Group

COUNTERWEIGHT BOX  
FITTINGS ADDED  
FUS 1987 02 06

"AS BUILT DRAWING"  
87-03-05

A detail no.  
B drawing no. - where detail required  
C drawing no. - where detail added

DESIGNED BY: A. KING  
DRAWN BY: F.W.  
CHECKED BY: S. Smith  
APPROVED BY: [Signature]  
PROJECT DATE: 1986-02-13  
PROJECT NO.: 620337  
DRAWING NO.: M-3

FRENCH RIVER ONT.  
REPAIRS TO BIG CHAUDIERE DAMS  
GATES  
STRUCTURAL STEEL  
DETAILS

No.	Date	Description	Drawn by	Approved

Revision / Révision	
A	A Detail number
B	B Location dwg. no.
C	C Drawing sheet no.

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

Canada

Project title / Titre du projet  
HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

Drawing title / Titre du dessin  
GATES, STRUCT STEEL DETAILS  
DIGITAL dwg. of 1986 PWGSC  
dwg. by APD ASS. CONS. ENG.

Scale / Echelle  
N.T.S.  
Drawn by/ Dessiné par B. PRINS Date 2008.01.31  
Designed by/ Conçu par Date  
Checked by/ Vérifié par C.A. SMITH Date 2009.03.26  
Approved by/ Approuvé par Date

Project No./No. du projet R.12000.003 Client No./No du Client Sheet No./ Feuille No.  
Drawing Reference No./Numéro de Référence du Dessin OG 08/R4 H10

50 100 150 200 millimetres

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

# OPERATING MACHINERY MODIFICATION LIST

ITEM	DESCRIPTION	QTY.
①	ROLLER CHAIN ASSEMBLY ANSI #240 SINGLE STRAND, 3" PITCH, RIVETED CONSTRUCTION, 125,000 MINIMUM TENSILE STRENGTH, C/W END ATTACHMENTS, UNIT LENGTH 65'-6" C/DG TO SUIT ON SITE. FULTON CHAIN CO. DWG. NO. A124001-Z	2
②	ROLLER CHAIN SPROCKET ANSI #240 SINGLE TYPE C, 3" PITCH 13.482 P.D. 2 1/16 BORE DIA. W/ 7/16" X 3/4" KEYWAY, AS PER PATT # 1905 A ALT - DWG. # 15/M-1041 SPROCKET TO SUIT CHAIN ABOVE	4
③	ROLLER CHAIN SPROCKET ANSI #240 SINGLE TYPE C, 3" PITCH 13.482 P.D. 2 1/16 BORE DIA. AS PER PATT # 1905 H, W BRONZE BUSHING AS PER PATT # 1906 A - DWG. 15/M-1041 SPROCKET TO SUIT CHAIN ABOVE	4
④	SIDE ROLLERS (TOP OF GATE) AS PER DWG. 11/M-1038 - 4" Ø D (ITEM #3) C/W BRONZE BUSHING PATT # 1903 - 2 3/16" SHAFT (ITEM #3) C/W BRASS WISHERS	2
⑤	SIDE ROLLERS (BOTTOM OF GATE) AS PER DWG. 10/M-1038 - 7 1/8" DIA. ROLLER (ITEM #18) C/W BRONZE BUSHING PATT # 1902 - 1 1/16" DIA. PIN (ITEM #1) C/W WASHERS, NUTS, BOLTS # 11 - ROLLER BRACKET (ITEM #11)	2
⑥	1/2" Ø GALVANIZED WIRE ROPE FOR MAIN GUIDES 70'-0" LENGTH TO SUIT ON SITE (DWG. 15/M-1048) C/W SUPPORTING BOLTS (ITEM #1) - DWG. 11/M-1038 (REPLACE IS REQUIRED ONLY WITH SAME TYPE OR SIMILAR)	2
⑦	BEVEL PINION AS PER DWG. 14/M-1042 5 1/2" P.D. 14 TEETH, 2 1/16" BORE DIA. W KEYWAY AS PER PATT # 1911 A	2
⑧	1/2" Ø GALVANIZED WIRE ROPE FOR AULIS GUIDES 25'-0" LENGTH TO SUIT ON SITE (DWG. 15/M-1048) C/W - 2 WIRE ROPE THIMBLES (FOR 1/2" WIRE ROPE) - 3 CABLE CLIPS AT EACH END (FOR 1/2" CABLE)	2
⑨	GALVANIZED BOLT TYPE ANCHOR BUSHING - 30mm BOLT, 5-5TON SAFE WORKING LOAD	1
⑩	ROLLER GUIDE ASSEMBLY AS PER DWG. 10/M-1038 C/W - ROLLER GUIDE (ITEM #11) - ROLLERS (ITEM #11) 5 1/8" DIA C/W BRONZE BOLTS D.D	2
⑪	SHEAVE ASSEMBLY AS PER DWG. 11/M-1038 C/W - BEAT SHEAVE PLATE (ITEM #11) C/W BOLTS - 6" Ø SHEAVE (PATT # 1951 A) C/W BRONZE BUSHING (PATT # 1954) - 1 1/16" PIN (ITEM #4) C/W BRASS WASHERS	2
⑫	SHEAVE ASSEMBLY AS PER DWG. 11/M-1038 C/W - 12" Ø DIA. SHEAVE, W/ 1 1/16" BORE, PATT # 1950 A - BRONZE BUSHING, PATT # 1953 - 1 1/16" DIA. PIN (ITEM #5) - 4 BRASS WASHERS	2
⑬	SHEAVE ASSEMBLY AS PER DWG. 11/M-1038 C/W - 12" Ø DIA. SHEAVE, W/ 2 3/16" BORE, PATT # 1950 A - BRONZE BUSHING, PATT # 1953	2

NOTES:  
1. FOR GENERAL NOTES SEE DWG. M-

Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario



APD & ASSOCIATES  
CONSULTING ENGINEERS  
Member of the Swan Wooster Group

MOD. LIST REVISED  
PJS 1987 02 06

No.	Date	Description	Drawn by	Approved

Revision / Révision	
A Detail number No. du détail	A
B Location dwg. no. No. sur dessin	B
C Drawing sheet no. No. du dessin	C

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

Canada

"AS BUILT DRAWING"  
87-03-05

A Detail no. No. du détail	A
B Drawing no. - where detail required Dessin no. - où détail exigé	B
C Drawing no. - where detail detailed Dessin no. - où détail détaillé	C

Project title  
Titre du projet  
FRENCH RIVER ONT.

REPAIRS TO BIG CHAUDIERE DAMS

OPERATING MACHINERY MODIFICATIONS  
SOUTH CHANNEL

designed by conçu par	M. WEISS
drawn by dessiné par	C.R.
checked by vérifié par	R. Smith
approved by approuvé par	
project date date du projet	1986-02-13
project no. no. du projet	620337
drawing no. dessin no.	M - 4

Project title / Titre du projet  
**HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER**

ONTARIO

Drawing title / Titre du dessin  
**OP. MACH. MOD. SOUTH CHAN.  
DIGITAL dwg. of 1986 PWGSC  
dwg. by APD ASS. CONS. ENG.**

Scale / Echelle  
NOT TO SCALE  
Drawn by/ Dessiné par  
B. FRIS  
Designed by/ Conçu par  
Date

Checked by/ Vérifié par  
C. A. SMITH  
Approved by/ Approuvé par  
Date

Project No./No. du projet  
R.12000.003  
Drawing Reference No./Numéro de Référence du Dessin  
OG 08/R4  
Client No./No du Client  
Sheet No./Feuille No.  
H11

TIME PLOTTED

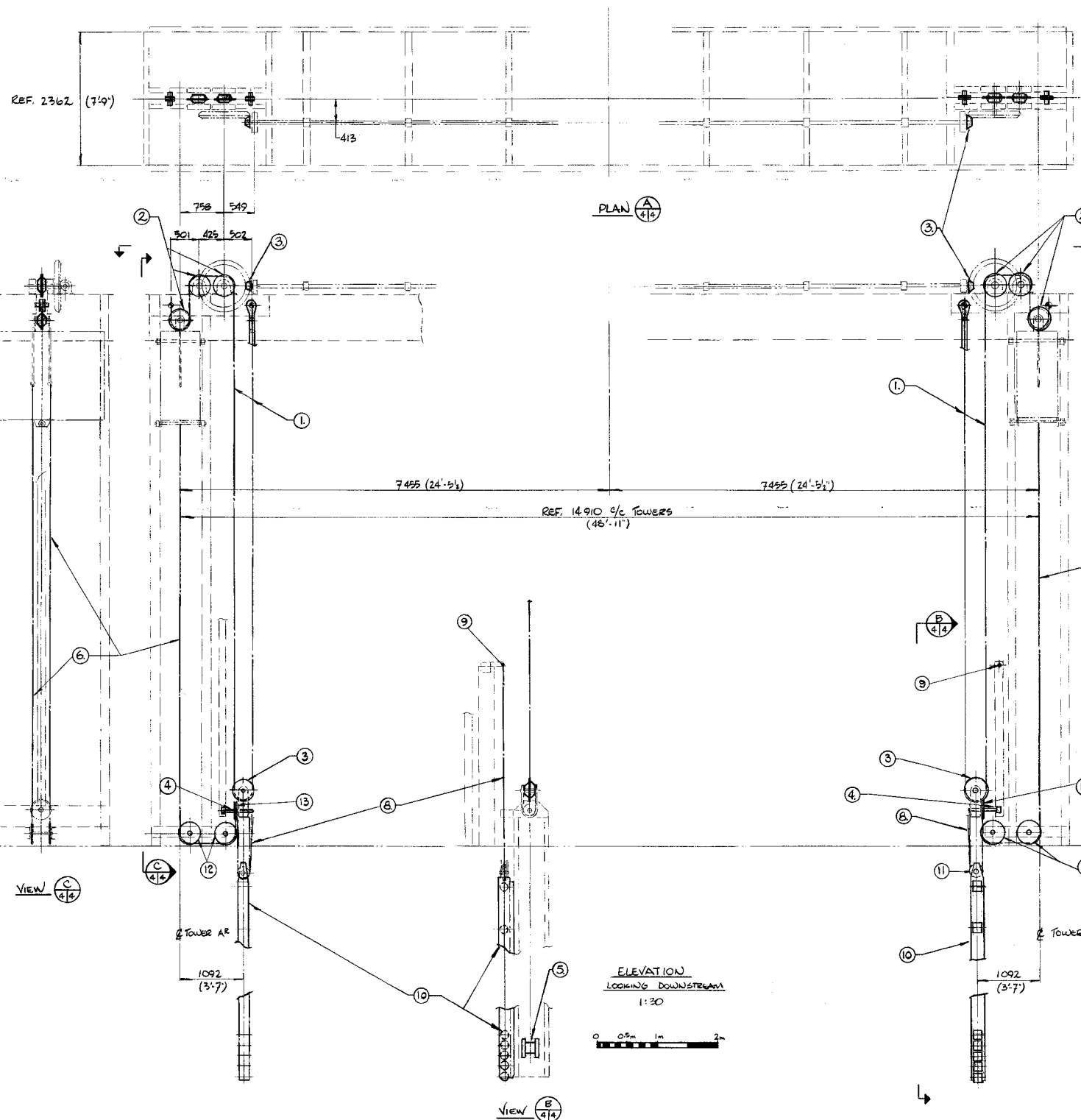
DATE PLOTTED

PERSON PLOTTING

SCALE OF PLOT

VIEW PLOTTED

DRAWING NAME



ELEVATION  
LOOKING DOWNSTREAM  
1:30  
0 0.5m 1m 2m

PWC B1



0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

# OPERATING MACHINERY MODIFICATION LIST

ITEM	DESCRIPTION	QTY.
1	ROLLER CHAIN ASSEMBLY ANSI #140, SINGLE STRAND, 3' PITCH, ANVISED CONSTRUCTION. 130,000 LB. AVERAGE TENSILE STRENGTH, C/W END ATTACHMENTS. UNIT LENGTH 55' 1/2" C TO C. TO SUIT ON SITE. PULTON CHAIN CO. DWG. NO. A124001-Z	4
2	ROLLER CHAIN SPACER ANSI #140 SINGLE TYPE C, 3' PITCH, 13.482" P.D., 2 1/2" BORE DIA. W/ 1/2" X 3/4" KEYWAY, AS PER PATT. # 1065 H - DWG. # 15/M-1041 SPROCKET TO SUIT CHAIN ABOVE	8
3	ROLLER CHAIN SPACER ANSI #140 SINGLE TYPE C, 3' PITCH, 13.482" P.D., 2 1/2" BORE DIA. AS PER PATT. # 1065 H - DWG. # 15/M-1041 SPROCKET TO SUIT CHAIN ABOVE	8
4	SIDE ROLLERS (TOP OF GATE) DWG. 11/M-1038 - 2 1/2" DIA. (ITEM A3) C/W BRONZE BUSHING PATT. # 1063 - 2 3/4" SHAFT (ITEM F8) C/W BRASS WASHERS	4
5	SIDE ROLLERS (BOTTOM OF GATE) DWG. 10/M-1038 - 2 1/2" DIA. ROLLER (ITEM A3) C/W BRONZE BUSHING PATT. # 1062 - 1 1/2" DIA. PIN (ITEM F1) C/W WASHERS, NUTS, BOLTS B 11 - ROLLER BRACKET (ITEM B4)	4
6	5/8" GALVANIZED WIRE ROPE FOR MAIN GUIDES 50'-0" LENGTH TO SUIT ON SITE (DWG. 13/M-1048) C/W SUPPORTING BOLTS (ITEM 11) DWG. 11/M-1038 (REPLACE IF REQUIRED ONLY WITH SAME TYPE OR SIMILAR)	4
7	BEVEL PINION DWG. 10/M-1048 3 1/2" P.D., 14 TEETH, 2 1/2" BORE DIA. W KEYWAY AS PER PATT. # 1071 H	4
8	1/2" GALVANIZED WIRE ROPE FOR ROLLER GUIDES 25'-0" LENGTH, TO SUIT ON SITE (DWG. 13/M-1048) C/W - 2 WIRE ROPE THIMBLES (FOR 1/2" WIRE ROPE) - 3 CAD. S CLIPS AT EACH END (FOR 1/2" CAD. S)	4
9	SHEAVE ASSEMBLY AS PER DWG. 11/M-1038 C/W - 12 1/8" DIA. SHEAVE W 1 1/2" BORE PATT. # 1050 H - BRONZE BUSHING PATT. # 1050 H - 1 1/2" DIA. PIN (ITEM F8) - 4 BRASS WASHERS	16
10	SHEAVE ASSEMBLY AS PER DWG. 11/M-1038 C/W - 12 1/8" DIA. SHEAVE W 2 1/2" BORE PATT. # 1049 H - BRONZE BUSHING PATT. # 1050	4

## NOTES:

1. FOR GENERAL NOTES SEE DWG. M-1

Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario



A.P.D. & ASSOCIATES  
CONSULTING ENGINEERS  
Member of the Swan Wooster Group  
MOD. LIST REVISED  
PJS 1987 02 06

No.	Date	Description	Drawn by (Dessiné par)	Approved (Approuvé)

Revision / Révision	
A	Detail number No. du détail
B	Location dwg. no. No. sur dessin
C	Drawing sheet no. No. du dessin

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

Canada

"AS BUILT DRAWING"  
87-03-05

A detail no.  
A no. du détail  
B drawing no. - where detail required  
B dessin no. - où détail exigé  
C drawing no. - where detailed  
C dessin no. - où détaillé

Project title  
Titre du projet  
FRENCH RIVER ONT.

REPAIRS TO BIG CHAUDIERE DAMS

OPERATING MACHINERY MODIFICATIONS  
NORTH CHANNEL

Designed by  
Conçu par  
M. WEISS

Drawn by  
Dessiné par  
C. R.

Reviewed by  
Examiné par

Approved by  
Approuvé par

Project date  
Date du projet  
1986-02-13

Project no.  
No. du projet  
620337

Drawing no.  
Dessin no.  
M - 5

Project title / Titre du projet

HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin

OP. MACH. MOD. NORTH CHAN.  
DIGITAL dwg. of 1986 PWGSC  
dwg. by APD ASS. CONS. ENG.

Scale / Echelle  
NOT TO SCALE

Drawn by/ Dessiné par  
B. PRINS  
2008.01.31

Designed by/ Conçu par  
Date

Checked by/ Vérifié par  
C.A. SMITH  
2009.03.26

Approved by/ Approuvé par  
Date

Project No./No. du projet  
R.12000.003  
Client No./No du Client  
Sheet No./  
Feuille No.

Drawing Reference No./Numéro de Référence du Dessin  
OG 08/R4  
H12

TIME PLOTTED

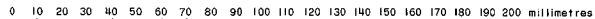
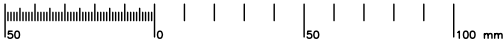
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PERSON PLOTTING

SCALE OF PLOT

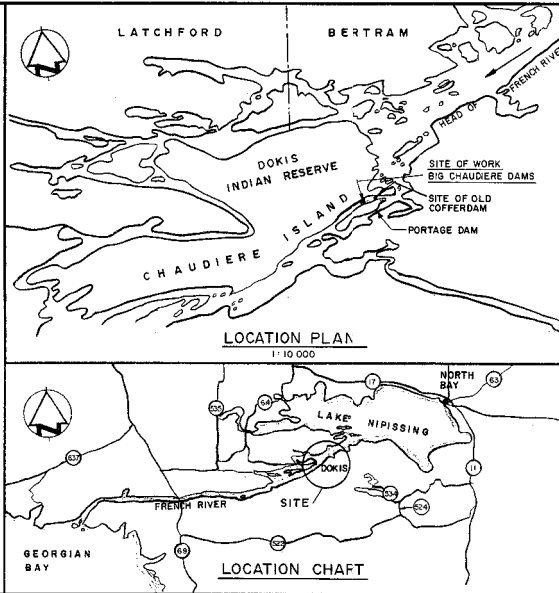
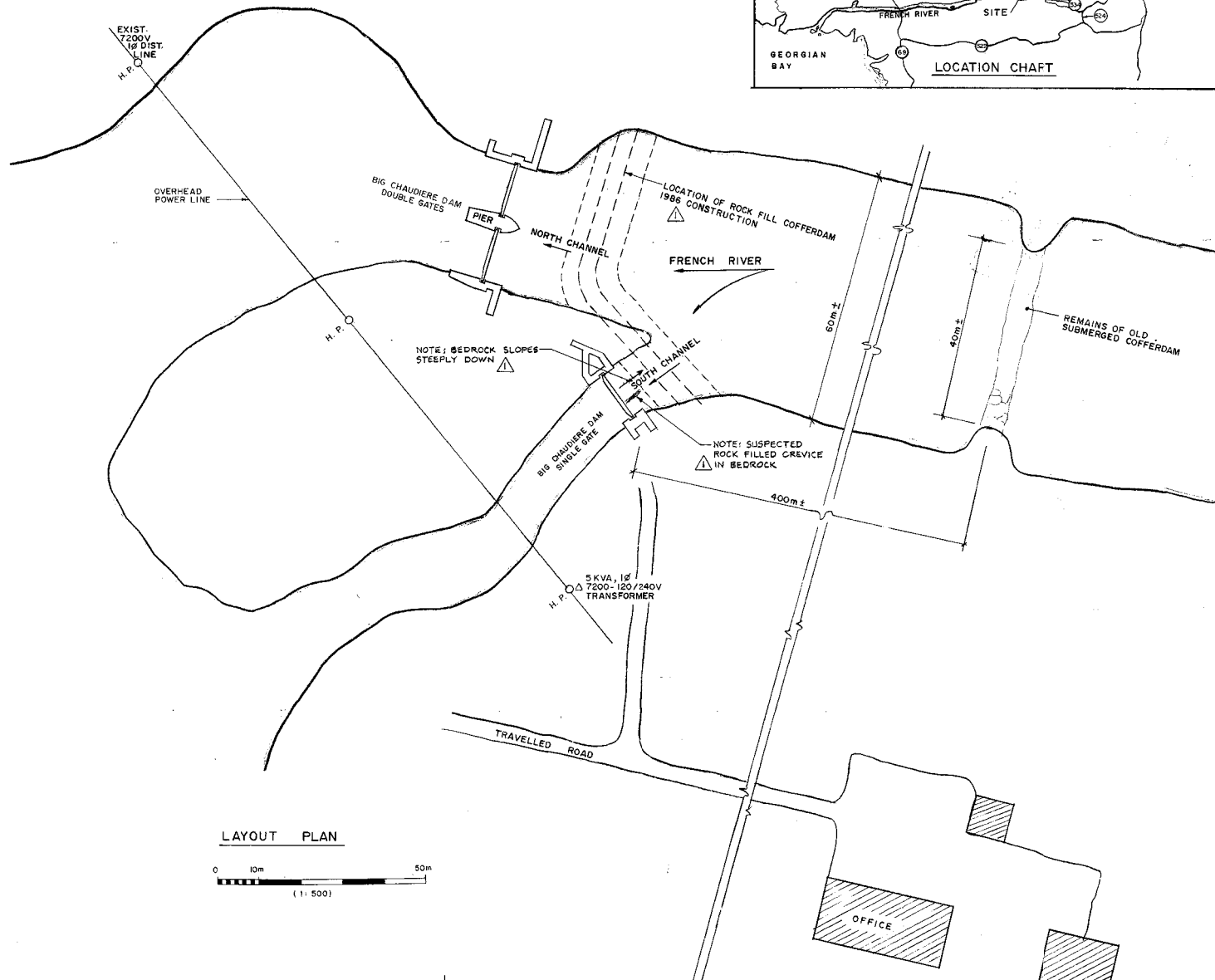
VIEW PLOTTED

DRAWING NAME



# DRAWING INDEX

DRAWING No.	DRAWING TITLE
MC-1	LOCATION CHART, LOCATION PLAN, LAYOUT PLAN
MC-2	PLAN, ELEVATION, DETAILS
MC-3	PLAN, ELEVATIONS, DETAILS
M-1	SOUTH CHANNEL GATE GENERAL ARRANGEMENT
M-2	NORTH CHANNEL GATE GENERAL ARRANGEMENT
M-3	GATES STRUCTURAL STEEL DETAILS
M-4	OPERATING MACHINERY MODIFICATIONS SOUTH CHANNEL
M-5	OPERATING MACHINERY MODIFICATIONS NORTH CHANNEL
1509	LAKE NIPISSING WATER LEVEL CONTROL (Attached to specifications)



Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario

PROJ. NO.  
PUBLIC WORKS CANADA  
LIBRARY  
1986 05 05  
3495  
ONTARIO REGION  
TORONTO

COFFERDAM LOCATION  
SHOWN  
PJS 1987 02 05

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision	
A	A Detail number No. du détail
B	B Location dwg. no. No. sur dessin
C	C Drawing sheet no. No. du dessin

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

Canada

"AS BUILT DRAWING"  
87-03-05

A	A detail no. No. du détail
B	B drawing no. - where detail required Dessin no. - où détail requis
C	C drawing no. - where detailed Dessin no. - où détaillé

project title  
titre du projet  
FRENCH RIVER ONT.

REPAIRS TO BIG CHAUDIERE DAMS

drawing title  
titre du dessin  
LOCATION CHART  
LOCATION PLAN  
LAYOUT PLAN

designed by  
conçu par  
P. SHIMAN

drawn by  
dessiné par  
V. M. M.

reviewed by  
révisé par  
[Signature]

approved by  
approuvé par  
[Signature]

project date  
date du projet  
1986-02-13

project no.  
no. du projet  
620337

drawing no.  
dessin no.  
MC-1

Project title / Titre du projet

HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin

LOC. CHART, LOC. PLAN,  
LAYOUT PLAN, DIGITAL dwg. of  
1986 PWGSC dwg.

Scale / Echelle

NOT TO SCALE

Drawn by/ Dessiné par  
B. PRINS  
2008.01.31

Designed by/ Conçu par  
Date

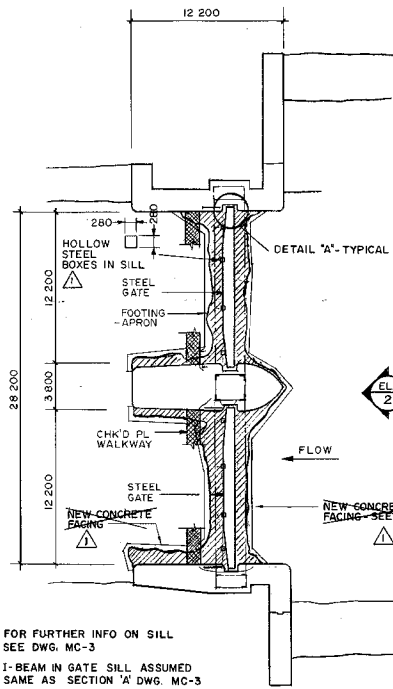
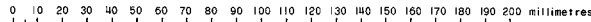
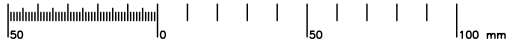
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C. A. SMITH  
2009.03.26

Approved by/ Approuvé par  
Date

Project No./No. du projet  
R.12000.003

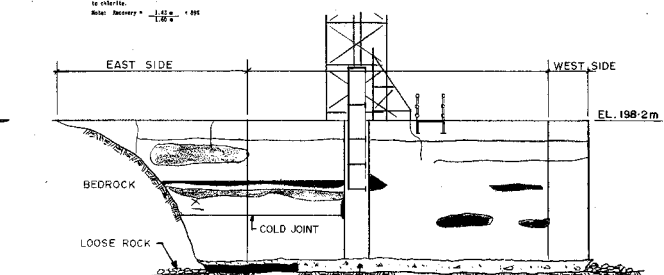
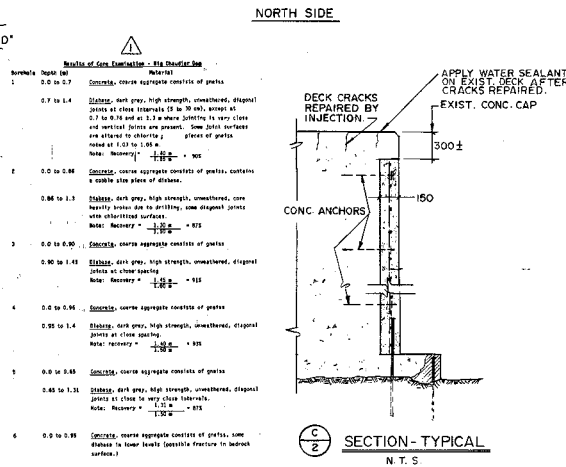
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OG 08/04

Sheet No./  
Feuille No.  
H13

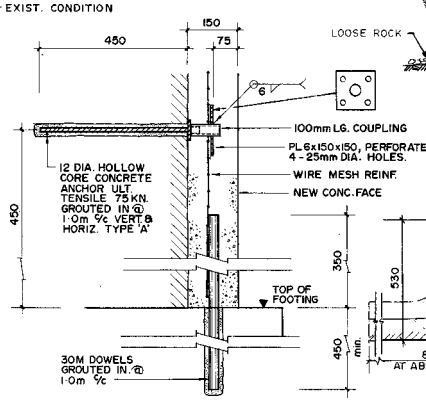


NOTE: FOR FURTHER INFO ON SILL  
SEE DWG. MC-3  
I-BEAM IN GATE SILL ASSUMED  
SAME AS SECTION 'A' DWG. MC-3

PLAN - DOUBLE GATES (EXIST.)  
0 1m 5m 10m 20m  
(1:200)

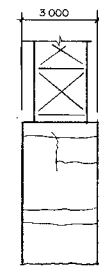


EXISTING CONDITIONS  
SOUTH ABUTMENT ELEVATION  
(1:100)

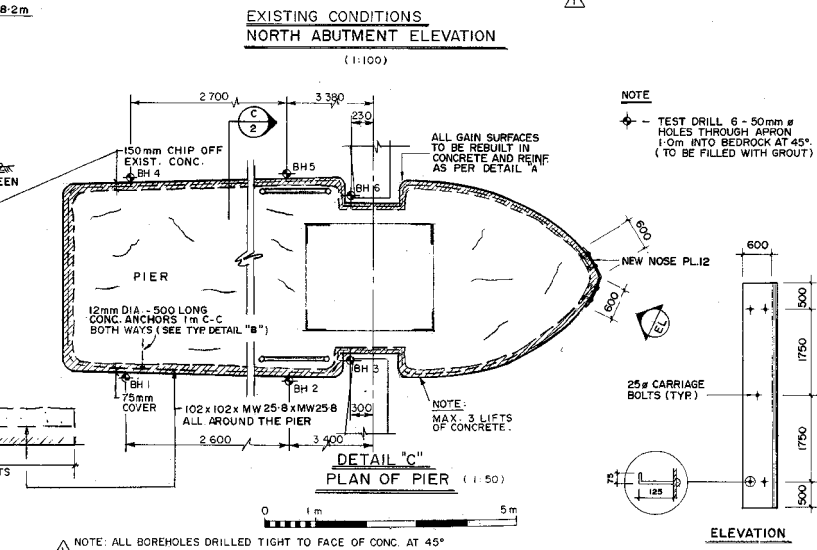
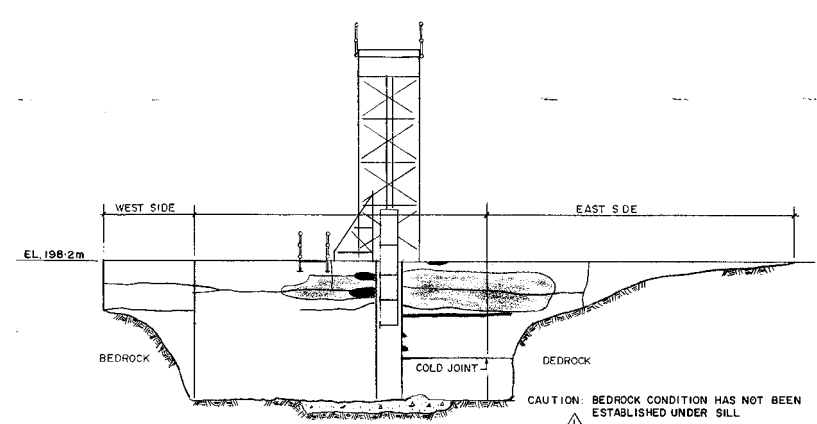
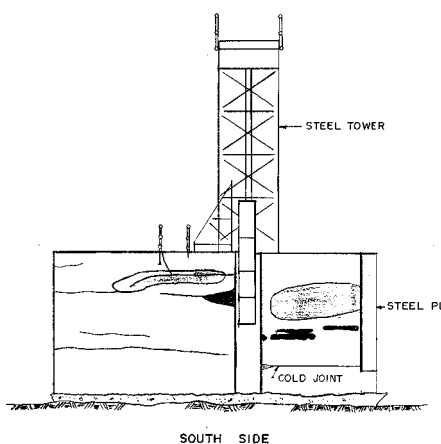


CONC. ANCHOR & DOWEL DETAIL "B" N.T.S.  
(TYPICAL FOR PIER & ABUTMENT CYLINDER GUIDES)

TYPICAL CYLINDER GUIDE REPAIR DETAIL "A"  
0 0.1m 0.5m 1m (1:10)



EXISTING CONDITIONS  
PIER ELEVATIONS  
0 1m 5m 10m  
(1:100)



NOTE:  
TEST DRILL 6 - 50mm #  
HOLES THROUGH APRON  
1.0m INTO BEDROCK AT 45°  
(TO BE FILLED WITH GROUT)

ALL GAIN SURFACES  
TO BE REBUILT IN  
CONCRETE AND REINF  
AS PER DETAIL 'A'

ELEVATION  
0 1m 5m  
(1:100)

Public Works Canada  
Travaux publics  
Ontario Region Région de l'Ontario

NOTES & BOREHOLES ADDED  
PJS 1987 02 06

REPAIRS TO BIG CHAUDIERE DAMS  
FRENCH RIVER ONT.

PLAN  
ELEVATIONS  
DETAILS

designed by P. SHIMAN  
checked by V. M. M.  
approved by [Signature]  
project no. 1986-02-13  
drawing no. 630337  
drawing no. MC-2

No.	Date	Description	Drawn by	Approved

Revision / Révision	
A	Detail number
B	Location dwg. no.
C	No. sur dessin
	C Drawing sheet no.
	No. du dessin

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

Canada

Project title / Titre du projet  
HERITAGE RECORDING  
BIG CHAUDIERE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin  
PLAN, ELEVATION, DETAILS  
DIGITAL dwg. of 1986 PWGSC  
dwg.

Scale / Echelle  
NOT TO SCALE

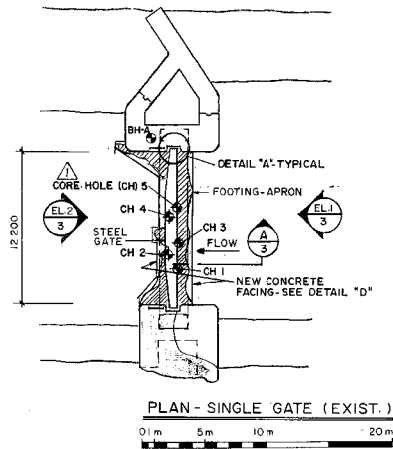
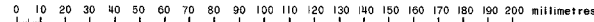
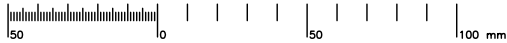
Drawn by/ Dessiné par B. PRINS Date 2008.01.31

Designed by/ Conçu par Date

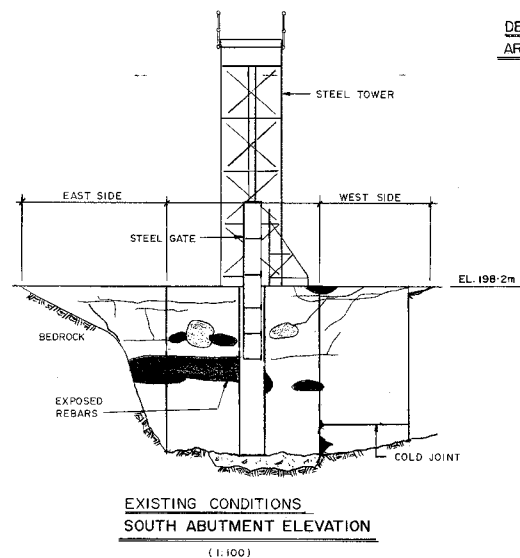
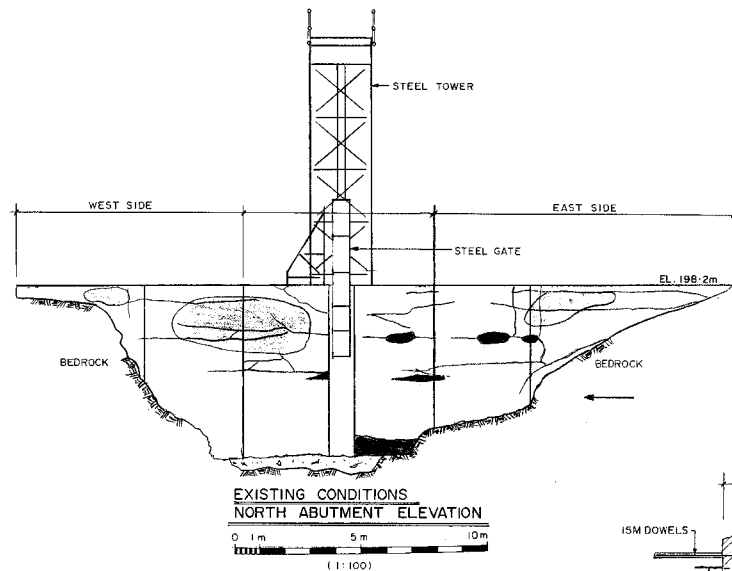
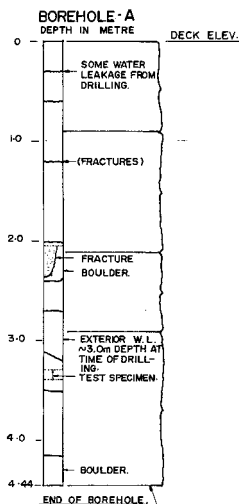
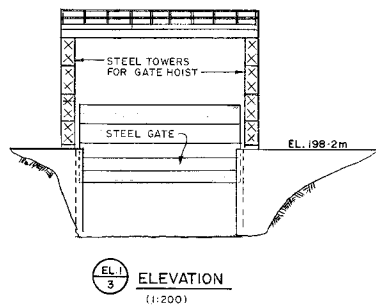
Checked by/ Vérifié par C.A. SMITH Date 2009.03.26

Approved by/ Approuvé par Date

Project No./No. du projet R.12000.003 Client No./No du Client Sheet No./Feuille No. OG 08/R4 H14



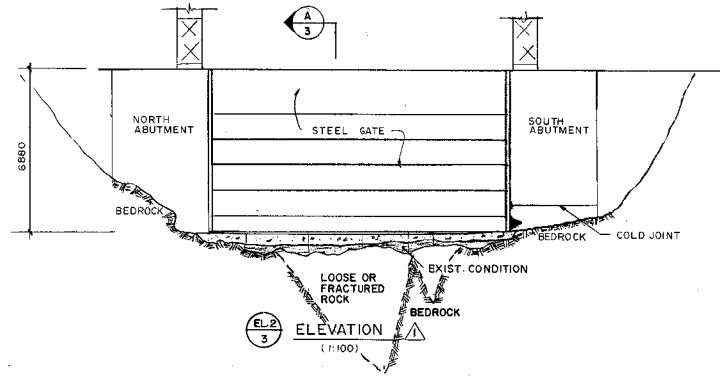
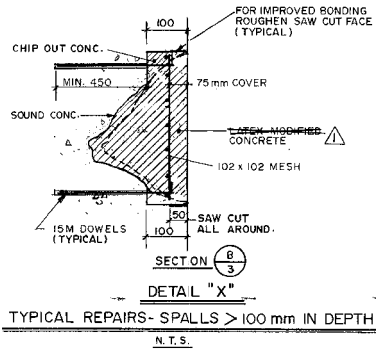
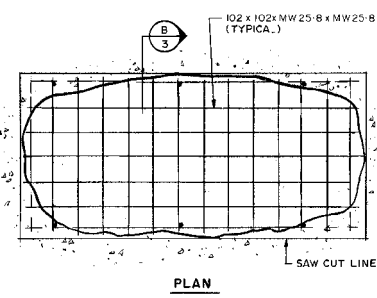
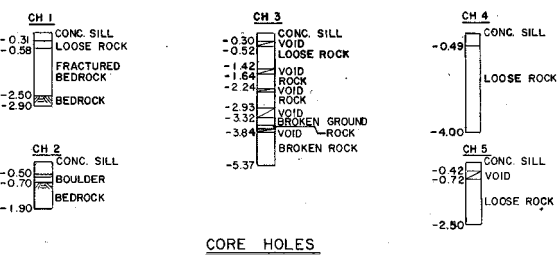
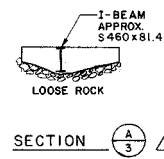
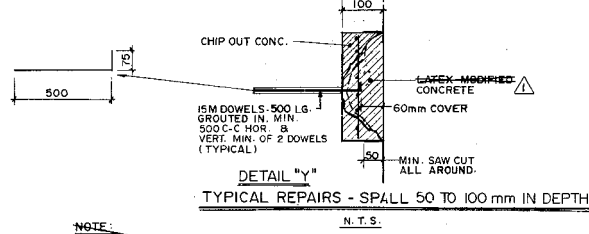
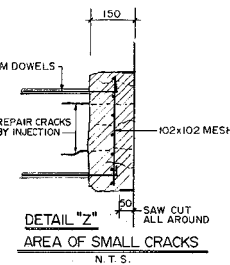
**NOTE-BOREHOLE-A**  
1 THESE DETAILS INDICATE VARIABLE COARSE AGGREGATES RANGING FROM GRAVEL SIZES UP TO A 450mm BOULDER.  
2 A SAMPLE OF CONCRETE WAS SELECTED AT A DEPTH OF 3.3m AND TESTED FOR RELATIVE COMPRESSIVE STRENGTH AND DENSITY.  
RELATIVE COMPRESSIVE STRENGTH 36.9 MPa  
RELATIVE DENSITY 2365 Kg/m<sup>3</sup>



**EXTENT OF REPAIRS (ABUTMENTS)**

AREA TO BE REPAIRED	METHOD OF REPAIR
LARGE CRACKS	REFER TO NOTE ①
AREA OF SMALL CRACKS	REFER TO DETAIL "Z"
SPALLED AREA OR DEEP SCOUR	REFER TO DETAILS "X" & "Y"

**NOTE ①** CRACK REPAIRS AT ABUTMENTS AND TOP OF PIER  
- ALL CRACKS TO 7mm IN WIDTH SEALED WITH EPOXY INJECTION.  
- ALL CRACKS GREATER THAN 7 mm SEALED WITH LATEX-MODIFIED GROUT INJECTION.  
CONC. FACES TO BE CHIPPED OUT FIELD DETERMINED BY THE ENGINEER.



Public Works Canada  
Travaux publics Canada  
Ontario Region Région de l'Ontario

1 CORE HOLES ADDED  
SECTION A ADDED  
EL. 2 REVISED  
PJS 1987 02 06

No.	Date	Description	Drawn by (Dessiné par)	Approved (Approuvé)
-----	------	-------------	---------------------------	------------------------

Revision / Révision	
A	Detail number No. du détail
B	Location dwg. no. No. sur dessin
C	Drawing sheet no. No. du dessin

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
Ontario Region Région de l'Ontario

**Canada**

"AS BUILT DRAWING"  
87-03-05

A detail no.  
no. du détail  
B drawing no. - where detail required  
dessin no. - où détail requis  
C drawing no. - where detailed  
dessin no. - où détaillé

project title  
titre du projet  
FRENCH RIVER ONT.

REPAIRS TO BIG CHAUDIERE DAMS

PLAN ELEVATIONS, DETAILS

designed by  
conçu par  
P. SHIMAN

drawn by  
dessiné par  
V. M. M.

checked by  
vérifié par  
[Signature]

approved by  
approuvé par  
[Signature]

project date  
date du projet  
1986-02-13

project no.  
no. du projet  
620337

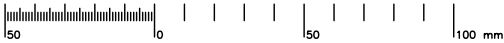
drawing no.  
dessin no.  
MC-3

Checked by/ Vérifié par  
C. A. SMITH  
Date  
2009.03.26

Approved by / Approuvé par  
Date

Project No./No. du projet  
R-12000.003  
Client No./No du Client  
Sheet No./  
Feuille No.  
Drawing Reference No./Numéro de Référence du Dessin  
OG 08/R4  
H15





TIME PLOTTED .pm

DATE PLOTTED 2008.02.01

PERSON PLOTTING J. McKAY

SCALE OF PLOT 1 : 1

VIEW PLOTTED Plot

DRAWING NAME Big C Photo Key Plan

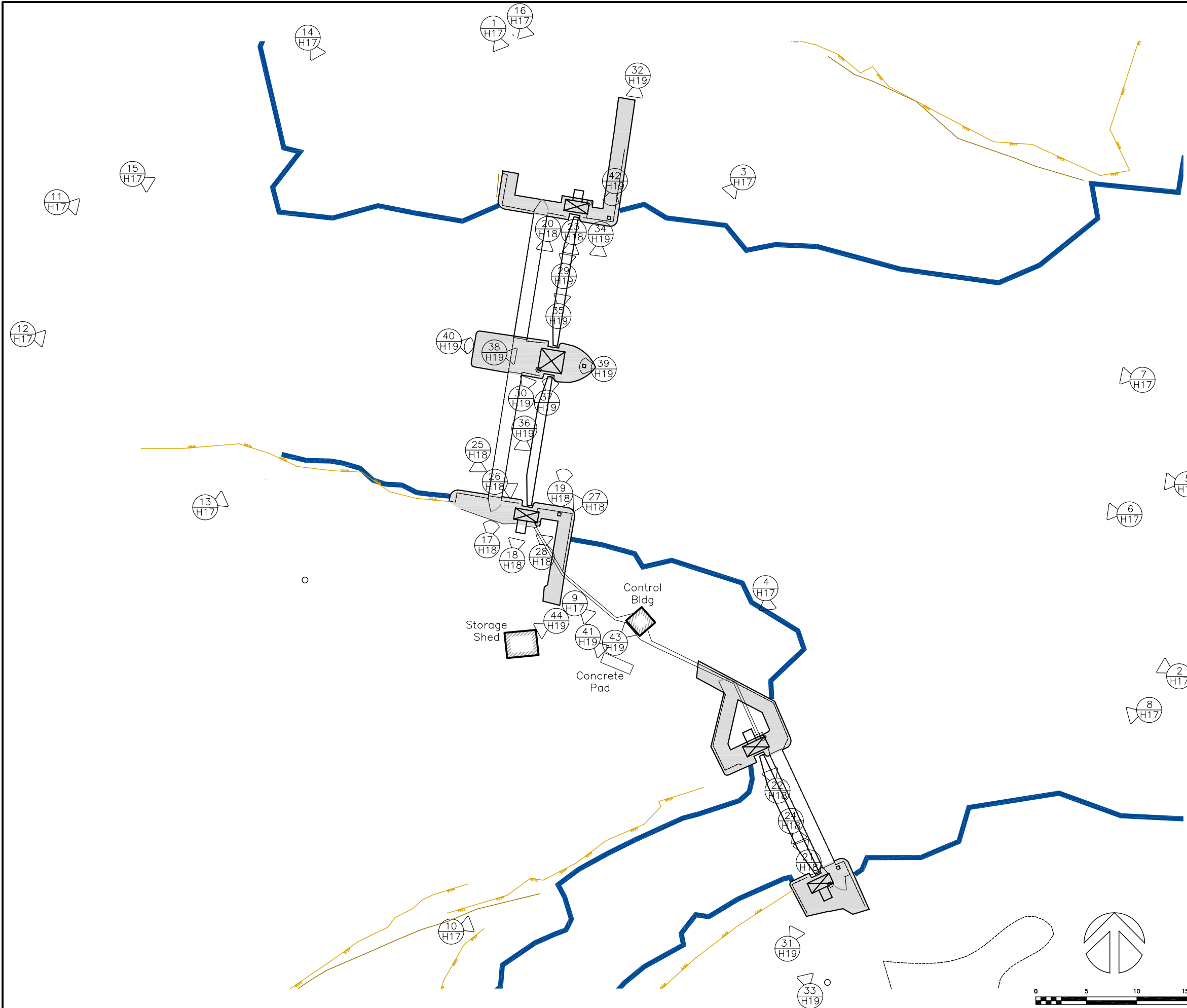


PHOTO SYMBOL INDEX

- CAMERA HORIZONTAL
- CAMERA LOOKING UP
- CAMERA LOOKING DOWN
- PHOTO NUMBER  
PAGE NUMBER IN PHOTO REPORT

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision			
A	C	A	B C
A Detail number No. du détail B Location dwg. no. No. sur dessin C Drawing sheet no. No. du dessin			

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

Public Works and  
Government Services  
Canada  
Travaux publics et  
Services gouvernementaux  
Canada  
Ontario Region  
Région de l'Ontario

Canada

Project title / Titre du projet

HERITAGE RECORDING  
BIG CHAUDIÈRE DAM  
FRENCH RIVER

ONTARIO

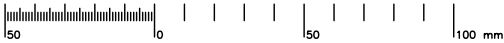
Drawing title / Titre du dessin

PHOTO KEY PLAN

Scale / Echelle 1 : 150	
Drawn by/ Dessiné par J.N. McKAY	Date 2008.01.31
Designed by/ Conçu par	Date
Checked by/ Vérifié par C.A. Smith	Date 2009.03.26
Approved by / Approuvé par	Date

Project No./No. du projet R.12000.003	Client No./No du Client	Sheet No./ Feuille No. H16
Drawing Reference No./Numéro de Référence du Dessin OG 08/R5		





1  
H16 MACHINERY BRIDGE DECK AND ACCESS WALKWAY



2  
H16 NORTH DAM UPSTREAM FACE



3  
H16 NORTH DAM UPSTREAM FACE



4  
H16 SOUTH DAM UPSTREAM FACE



5  
H16 NORTH DAM UPSTREAM FACE



6  
H16 NORTH DAM UPSTREAM FACE - SOUTH SLUICE



7  
H16 NORTH DAM UPSTREAM FACE - SOUTH SLUICE



8  
H16 SOUTH DAM UPSTREAM FACE



9  
H16 SOUTH DAM LOOKING SOUTH



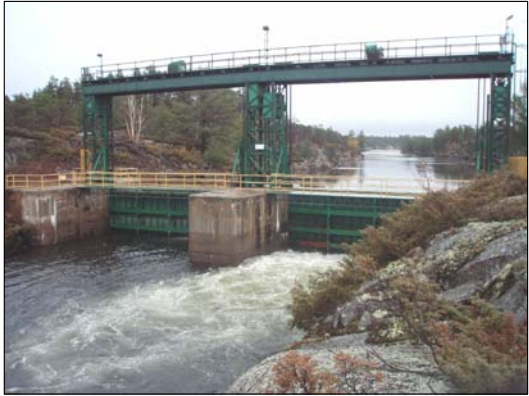
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H16 SOUTH DAM DOWNSTREAM FACE



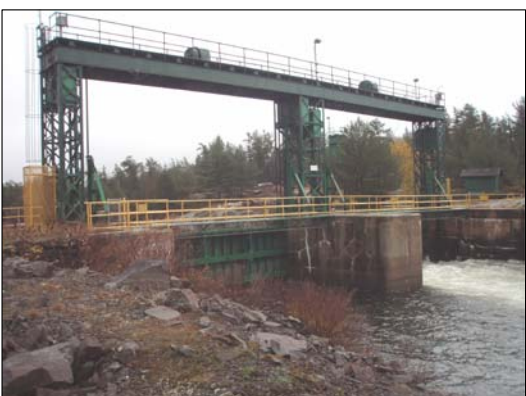
11  
H16 NORTH DAM DOWNSTREAM FACE - NORTH SLUICE



12  
H16 NORTH DAM DOWNSTREAM FACE - SOUTH SLUICE



13  
H16 NORTH DAM DOWNSTREAM FACE



14  
H16 NORTH DAM DOWNSTREAM FACE



15  
H16 NORTH DAM DOWNSTREAM FACE




16  
H16 NORTH DAM DOWNSTREAM FACE - LOOKING SOUTH

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision				
A	A Detail number No. du détail			
	B Location dwg. no. No. sur dessin			
	C Drawing sheet no. No. du dessin			

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

 Public Works and  
Government Services  
Canada  
Travaux publics et  
Services gouvernementaux  
Canada  
Ontario Region  
Région de l'Ontario

**Canada**

Project title / Titre du projet  
**HERITAGE RECORDING  
BIG CHAUDIÈRE DAM  
FRENCH RIVER**

**ONTARIO**

Drawing title / Titre du dessin  
**PHOTOS 1-16**

Scale / Echelle NOT TO SCALE	
Drawn by/ Dessiné par J.N. McKAY	Date 2008.01.31
Designed by/ Conçu par	Date
Checked by/ Vérifié par C. A. Smith	Date 2009.03.26
Approved by / Approuvé par	Date

Project No./No. du projet R-12000.003	Client No./No du Client	Sheet No./ Feuille No.
Drawing Reference No./Numéro de Référence du Dessin OG 08/R4		<b>H17</b>

TIME PLOTTED

DATE PLOTTED 2008.02.01

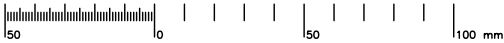
PERSON PLOTTING J. McKAY

SCALE OF PLOT N.T.S.

VIEW PLOTTED Photos

DRAWING NAME





TIME PLOTTED

DATE PLOTTED 2008.02.01

PERSON PLOTTING J. McKAY

SCALE OF PLOT N.T.S.

VIEW PLOTTED Photos

DRAWING NAME



17 NORTH DAM - ACCESS WALKWAY  
H16



18 NORTH DAM - MACHINERY BRIDGE  
H16



19 NORTH DAM - MACHINERY BRIDGE GUARDRAIL  
H16



20 NORTH DAM - CENTRE PIER & ACCESS WALKWAY  
H16



21 FLOOD LIGHT & SOUTH DAM MACHINERY BRIDGE  
H16



22 FLOOD LIGHT & NORTH DAM MACHINERY BRIDGE  
H16



23 NORTH DAM - MACHINERY BRIDGE AND MOTOR DRIVES  
H16



24 FLOOD LIGHT & SOUTH DAM MACHINERY BRIDGE  
H16



25 TOWER LATERAL SUPPORT AND FOOTING  
H16



26 CHAIN SPROCKET AND GATE GUIDE ASSEMBLY  
H16



27 GATE HANGER AND CHAIN SPROCKET  
H16



28 TOWER FOOTING AND GATE LIFTING CHAIN  
H16

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

A Detail number  
No. du détail  
B Location dwg. no.  
No. sur dessin  
C Drawing sheet no.  
No. du dessin

A  
B C

Client Acceptance / Acceptation du client

Signature \_\_\_\_\_ Date \_\_\_\_\_

File No./No. de dossier \_\_\_\_\_



Public Works and  
Government Services  
Canada

Travaux publics et  
Services gouvernementaux  
Canada

Ontario Region

Région de l'Ontario

Canada

Project title / Titre du projet

HERITAGE RECORDING  
BIG CHAUDIÈRE DAM  
FRENCH RIVER

ONTARIO

Drawing title / Titre du dessin

PHOTOS

Scale / Echelle

NOT TO SCALE

Drawn by/ Dessiné par

J. N. McKAY

Date

2008.01.31

Designed by/ Conçu par

Date

Checked by/ Vérifié par

C. A. Smith

Date

2009.03.26

Approved by / Approuvé par

Date

Project No./No. du projet

R-12000.003

Client No./No du Client

Sheet No./

Feuille No.

Drawing Reference No./Numéro de Référence du Dessin

OG 08/R4

H18





29  
H16 TOWER FOOTING



30  
H16 TOWER LATERAL SUPPORT – NORTH DAM  
NORTH ABUTMENT TOWER WITH ELECTRICAL CONTROL



31  
H16 PANEL IN YELLOW CAGE ENCLOSURE



32  
H16 ELECTRICAL CONTROL PANEL WITH CAGE ENCLOSURE



33  
H16 SOUTH DAM: ROLLER GATE, DOWNSTREAM VIEW



34  
H16 NORTH DAM: CENTRE PIER, UPSTREAM VIEW



35  
H16 NORTH DAM NORTH ABUTMENT  
SHOWING GATE HANGER AND TOWER



36  
H16 NORTH DAM – SOUTH ABUTMENT  
SHOWING GATE HANGER AND TOWER



37  
H16 COUNTERWEIGHT GUIDE CABLE AND SHEAVES



38  
H16 CENTRE TOWER CROSS-BRACE WITH GATE GUIDE  
ASSEMBLY (TOP) AND COUNTERWEIGHT SHEAVES



39  
H16 PULLEYS AND CABLES (GATE LIFTING MACHINERY)



40  
H16 COUNTERWEIGHTS AND CENTRE TOWER



41  
H16 CONCRETE FOUNDATION NORTH OF SOUTH DAM



42  
H16 BOLLARD (MOORING POST)



43  
H16 ELECTRICAL POWER CONTROL BUILDING




44  
H16 MAINTENANCE EQUIPMENT STORAGE SHED

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
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Revision / Révision				
A		A Detail number No. du détail	A	
B		B Location dwg. no. No. sur dessin	B	
C		C Drawing sheet no. No. du dessin	C	

Client Acceptance / Acceptation du client  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
File No./No. de dossier \_\_\_\_\_

 Public Works and  
Government Services  
Canada  
Travaux publics et  
Services gouvernementaux  
Canada  
Ontario Region  
Région de l'Ontario

**Canada**

Project title / Titre du projet  
**HERITAGE RECORDING  
BIG CHAUDIÈRE DAM  
FRENCH RIVER**

ONTARIO

Drawing title / Titre du dessin

**PHOTOS**

Scale / Echelle	
NOT TO SCALE	
Drawn by/ Dessiné par	Date
J.N. McKAY	2008.01.31
Designed by/ Conçu par	Date
Checked by/ Vérifié par	Date
C.A. Smith	2009.03.26
Approved by / Approuvé par	Date

Project No./No. du projet	Client No./No du Client	Sheet No./ Feuille No.
R.12000.003		
Drawing Reference No./Numéro de Référence du Dessin		<b>H19</b>
OG 08/R4		

TIME PLOTTED

DATE PLOTTED 2008.02.01

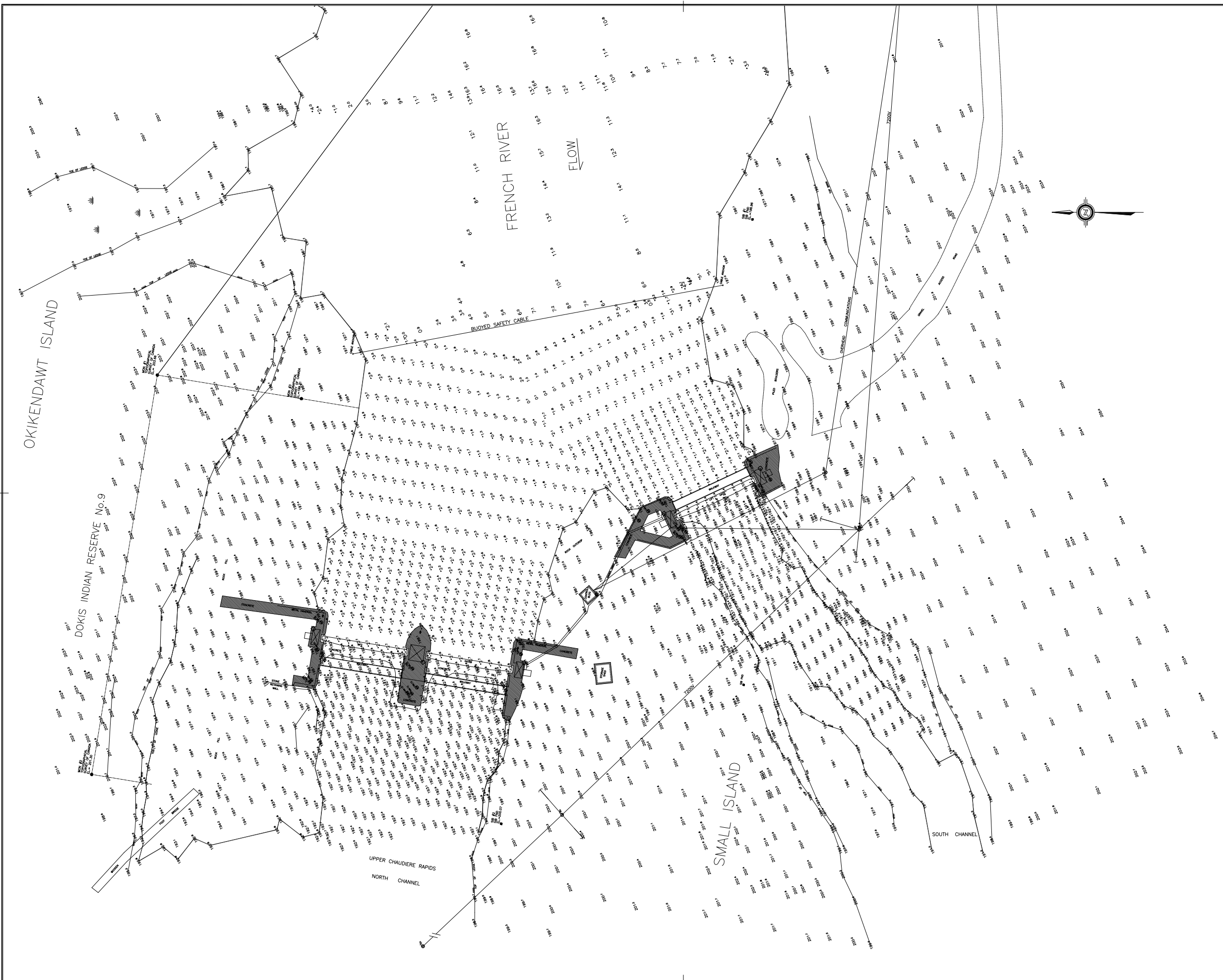
PERSON PLOTTING J. MCKAY

SCALE OF PLOT N.T.S.

VIEW PLOTTED Photos

DRAWING NAME





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

revisions

revisions	date
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legend

	INTERNATIONAL BOUNDARY
	CHANNEL LIMIT
	CHANNEL CENTERLINE
	SURVEY BASELINE
	SUBMERGED DEPTH CONTOUR
	PROPERTY BOUNDARY
	SHORELINE
	SOUNDING DEPTH BELOW CHART DATUM
	DRY SOUNDING
	HORIZONTAL CONTROL POINT
	HORIZONTAL CONTROL POINT PWC
	DREDGE LIMIT CONTROL POINT
	BUOY
	NAVIGATION LIGHT
	BOREHOLE

scale

1:200

THIS DRAWING IS IN METRIC UNITS

map info

GEOIDETIC DATUM : NAD83  
MAP PROJECTION : UTM  
ZONE : 17

REFERENCE STATIONS:

PT. NAME	EASTING	NORTHING	CD ELEV	DESCR.
MON #1	575762.28	5108528.08	203.66	T.S.C.
MON #2	575702.21	5108537.95	201.30	T.S.C.
MON #3	575758.70	5108506.40	199.31	T.S.C.
SIB #1	575785.68	5108438.52	196.96	T.S.C.

VERTICAL DATUM: WATER SURVEY OF CANADA  
REFERENCE BENCHMARKS:

BM NAME	ELEVATION	DESCRIPTION
B.M. #1	196.83 m	W.S.C.

GAUGE AT TIME(S) OF SURVEY: VARIED BETWEEN +5.5m & +5.7m

ALL SOUNDINGS ARE IN METRES AND REFERENCED TO GAUGE DATUM FOR: FRENCH RIVER AT LAKE NIPISSING OUTLET 190.0m

notes

SURVEY PARTY CHIEF: J.C. HALLIDAY  
SURVEY VESSEL : 14' WARRIORCRAFT  
SURVEY DATE(S): 98.05.11 TO 98.05.28, 98.06.16, 17, 18

SOUNDER TYPE: RAYTHEON 7198/DOOM DIGITRACE, LEADLINE  
SOUNDER SETTING: N/A VEL. OF SOUND: 1419 M/S  
DEPTH GATE USED: N/A FREQ. OF TRANS: 210 KHZ

POSITIONING SYSTEM USED: HYDRO II  
LAND SURVEY POSITION BY: NIKON 57M730

OFFICE PROCESSOR: J.C. HALLIDAY  
DATE OF PROCESSING: 98.06.03 TO 98.06.19

MODE OF PLOTTING: N/A  
MATRIX CELL WIDTH X LENGTH: N/A

\* THE SOUNDING INFORMATION REPRESENTS RESULTS OF THE SURVEY MADE ON THE DATE(S) SPECIFIED AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME

	A	Detail No.
	B	No. du detail
	C	drawing no. - where detail required
		dessin no. - ou detail existe
		drawing no. - where detailed
		dessin no. - ou détaillé

Project title  
titre du projet

FRENCH RIVER ONTARIO

drawing title  
titre du dessin

TOPOGRAPHIC/SOUNDING  
SURVEY-BIG CHAUDIERE DAMS  
MAY 1998

designed by  
conç par

GEORGE P. McFARLANE O.L.S., C.L.S.

drawn by  
dessiné par

J.C. HALLIDAY

reviewed by  
examiné par

GEORGE P. McFARLANE O.L.S., C.L.S.

approved by  
approuvé par

ENN LEESTI

project date  
date du projet

JUNE 23, 1998

project no.  
no. du projet

100371

drawing no.  
dessiné no.

HS001