

CANADA-BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

OPERATION AND MAINTENANCE
INSTRUCTION
FLOOD CONTROL WORKS

VOLUME 3

"AS-CONSTRUCTED" DRAWINGS

VILLAGE OF HARRISON HOT SPRINGS

CANADA - BRITISH COLUMBIA

FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

Water Management Division
Ministry of Environment
Victoria, British Columbia

Environment Canada
Water Planning and Management Branch
Inland Waters Directorate
Pacific Region
224 West Esplanade
North Vancouver, B.C.

VILLAGE OF HARRISON HOT SPRINGS

VOLUME 3

"AS-CONSTRUCTED" DRAWINGS

Operation and Maintenance Instructions
Flood Control Works

VILLAGE OF HARRISON HOT SPRINGS

**Operation and Maintenance Instructions
Flood Control Works**

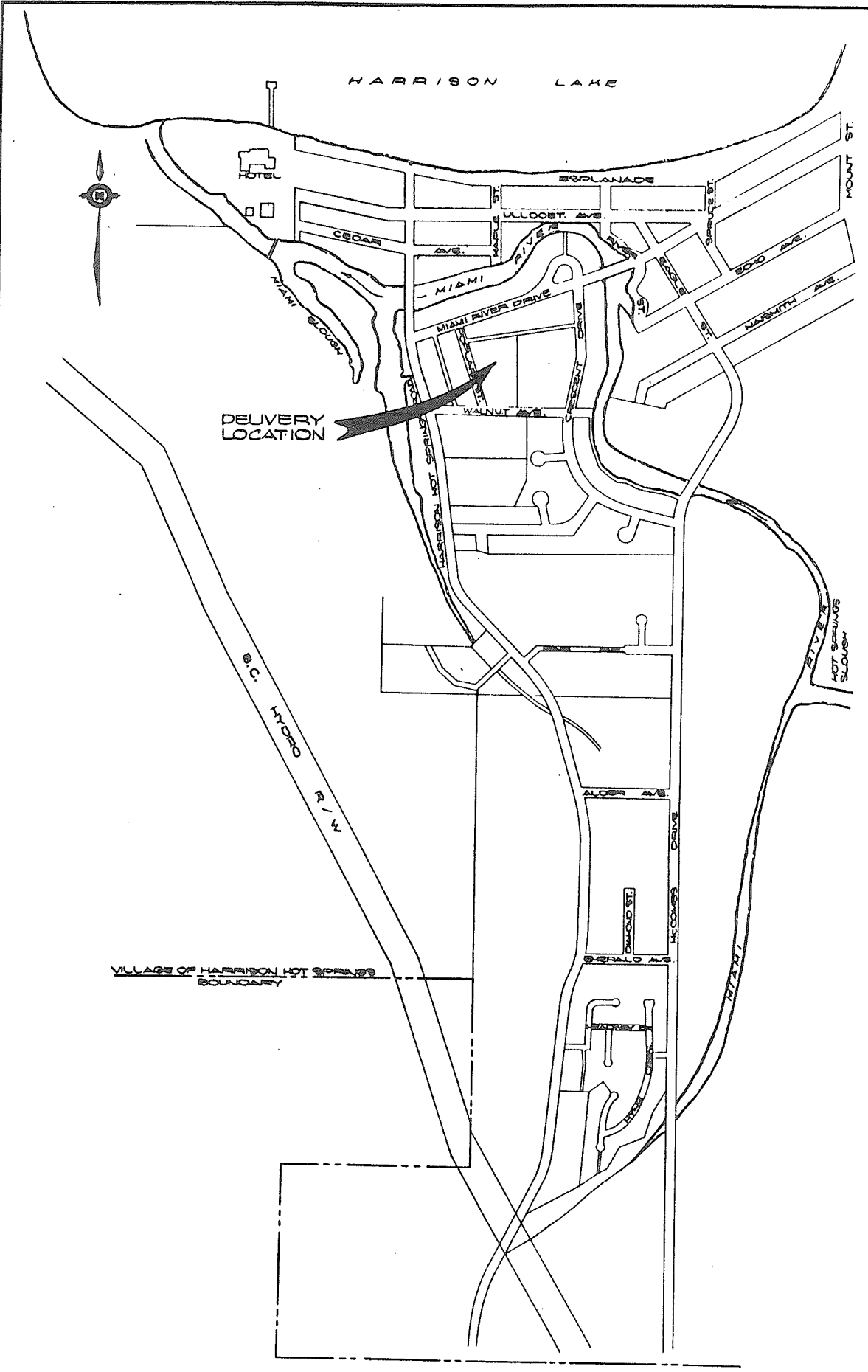
THE MANUAL

The operation and maintenance instructions for the flood control works for the Village of Harrison Hot Springs are provided in three Volumes:

Volume 1	General Instructions
Volume 2	Pump Station Instructions (by others)
Volume 3	"As-Constructed" Drawings

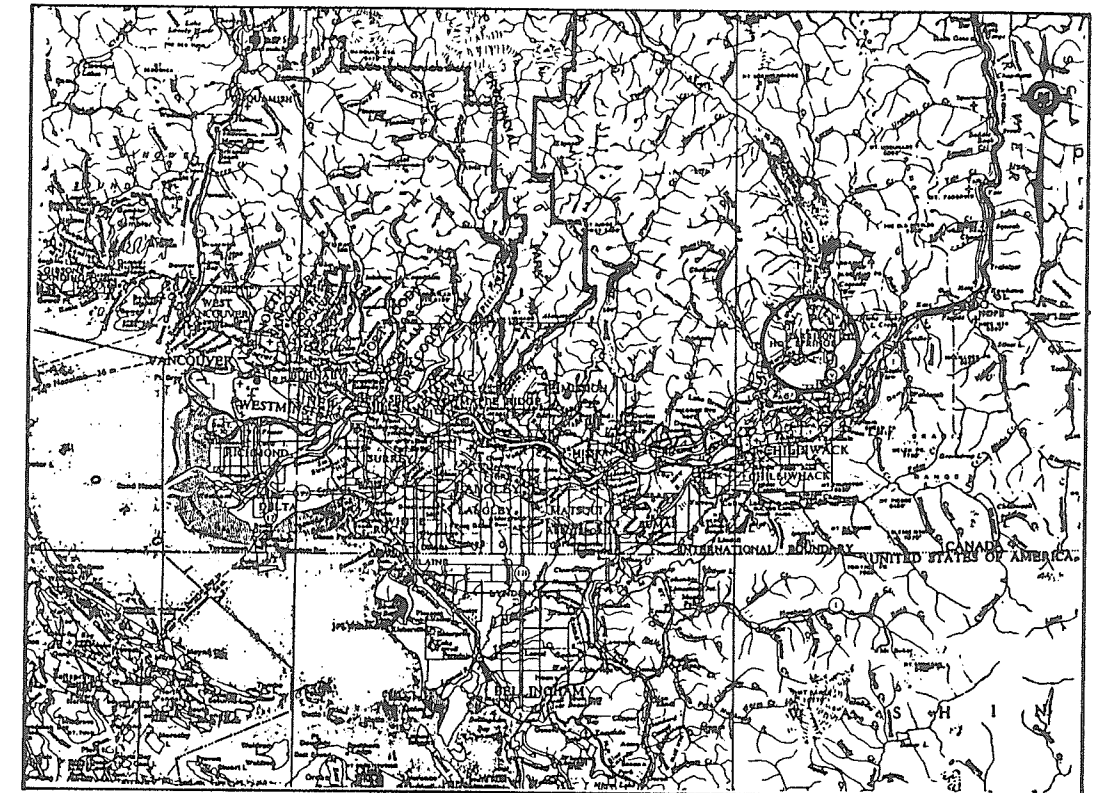
**THE VILLAGE OF HARRISON HOT SPRINGS FLOOD CONTROL PROJECT
"AS-CONSTRUCTED" DRAWING LIST**

Drawing Number	Drawing Title	Provincial 105 mm Negative Number
A. Project No. 9, Contract No. 1, Harrison Hot Springs: Supply of Floodboxes		
92-2-1	Legend - Index to Drawings	384 003
92-2-2	Floodboxes	384 004
B. Project No. 9, Contract No. 2, Harrison Hot Springs: Supply of Miscellaneous Metalwork		
92-2-3	Legend - Index to Drawings	384 005
92-2-4	Miscellaneous Metalwork	384 006
92-2-5	Miscellaneous Metalwork	384 007
C. Project No. 9, Contract No. 3, Harrison Hot Springs: Dyke Reconstruction		
95-3-1	Index to drawings - Legend (floodbox replacement and related works)	384 008
95-3-2	Previous Site Plans	384 009
95-3-3	Detailed site plan	384 010
95-3-4	Floodbox sections	384 011
95-3-5	Details at Miami Creek entrance to floodboxes	384 012
95-3-6	Details at Harrison Lake entrance to floodboxes	384 013
95-3-7	New drainage pumping station details.	384 014
95-3-8	Rip-rap and stairway details.	384 015
95-3-9	Typical sections.	384 016
95-3-10	Fish ladder details.	384 017



LOCATION PLAN
1:6000

THIS DRAWING REDUCED TO HALF SIZE



KEY PLAN
1:83360

NOTES :

1. ELEVATIONS ARE GEODETIC SURVEY OF CANADA DATUM IN METRES .
2. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN METRES/MILLIMETRES UNLESS STATED OTHERWISE .
3. CONTRACT 196.13.3 REFERS ONLY TO THE SUPPLY AND DELIVERY OF PRECAST FLOODBOX SECTIONS TO HARRISON HOT SPRINGS. (SEE LOCATION PLAN AND SPECIFICATIONS FOR DELIVERY LOCATION). ALL OTHER DETAILS ON SHEETS 1 & 2 REFER TO WORK BY OTHERS.

INDEX TO DRAWINGS	
<u>SHEET No.</u>	<u>DESCRIPTION</u>
1.	KEY PLAN - LOCATION PLAN - LEGEND - INDEX TO DRAWINGS
2.	FLOODBOX SECTIONS

John W. Knight
26/13/92

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
DWG No. 196-13-3

384 003

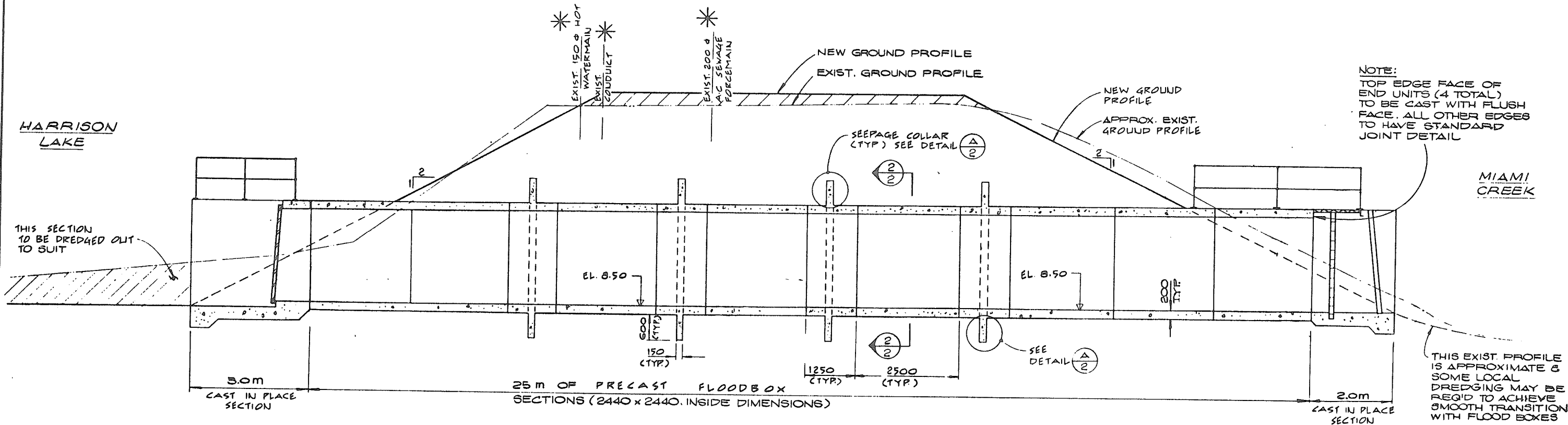
REVISIONS		
No	DESCRIPTION	DATE

RECOMMENDED <i>R. H. Cameron</i>
DATE <i>FEB. 17 / 92</i>
RECOMMENDED <i>John W. Knight</i>
DATE <i>FEB. 17 / 92</i>
APPROVED <i>John W. Knight</i>
DATE <i>FEB. 17 / 92</i>

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

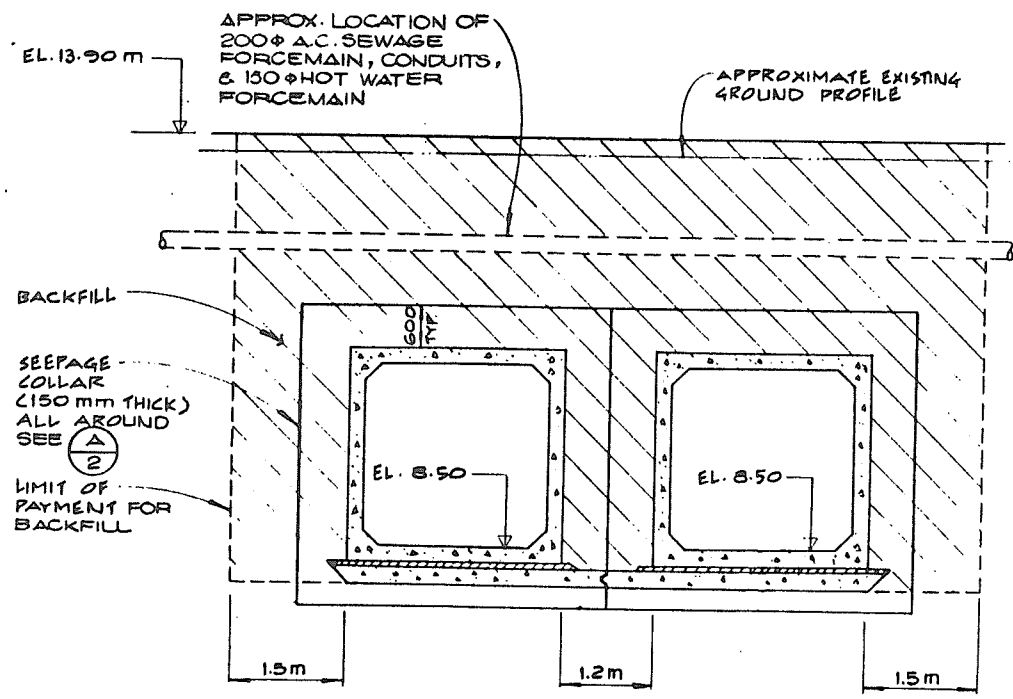
HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 1
SUPPLY OF FLOODBOXES
KEY PLAN - LOCATION PLAN
LEGEND - INDEX TO DRAWINGS

FILE No. <i>0281550 C28</i>	SURVEYED <i>J.T.</i>
DESIGNED <i>JWCB</i>	DATE <i>OCT. / 90</i>
DRAWN <i>M. IDK</i>	SCALE <i>AS SHOWN</i>
DATE <i>FEB 1992</i>	DRAWING No. <i>92-2-1</i>
CHECKED <i>JWCB</i>	SHEET <i>1</i> of <i>2</i>

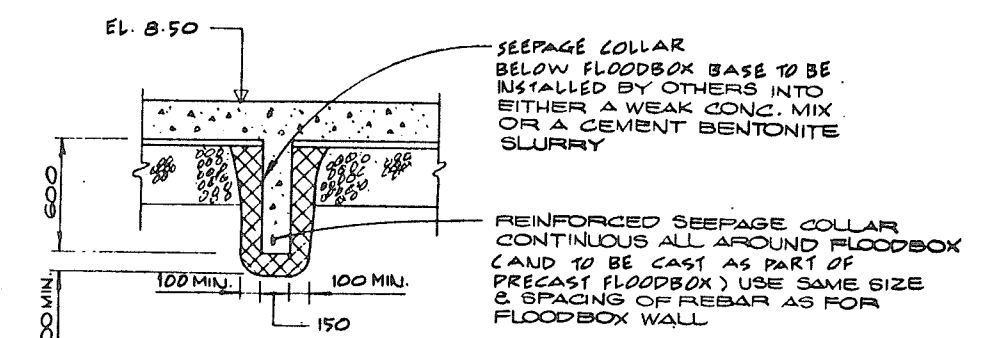


NOTE:
TOP EDGE FACE OF
END UNITS (4 TOTAL)
TO BE CAST WITH FLUSH
FACE. ALL OTHER EDGES
TO HAVE STANDARD
JOINT DETAIL

NOTE: **NEW FLOOD BOX**
(TYP. FOR 2)
SECTION 1
1 : 50 **2**



SECTION 2
1 : 50 **2**



SEEPAGE COLLAR
DETAIL A/2
1 : 20 **2**

NOTE:
CONTRACT 196-13-3 REFERS ONLY TO
SUPPLY & DELIVERY OF PRECAST
FLOODBOX SECTIONS, INSTALLATION
WILL BE BY OTHERS AS WILL
CONSTRUCTION OF CAST IN PLACE
SEGMENTS. SEE ALSO NOTE 3, SH. 1

THIS DRAWING REDUCED TO HALF SIZE

REVISIONS		
No	DESCRIPTION	DATE

RECOMMENDED *R.M. Lomon*
DATE *FEB. 17/92*

RECOMMENDED *John W. C. Bottle*
DATE *Feb. 17/92*

APPROVED *John W. C. Bottle*
DATE *Feb. 17/92*

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA-BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 1
SUPPLY OF FLOODBOXES

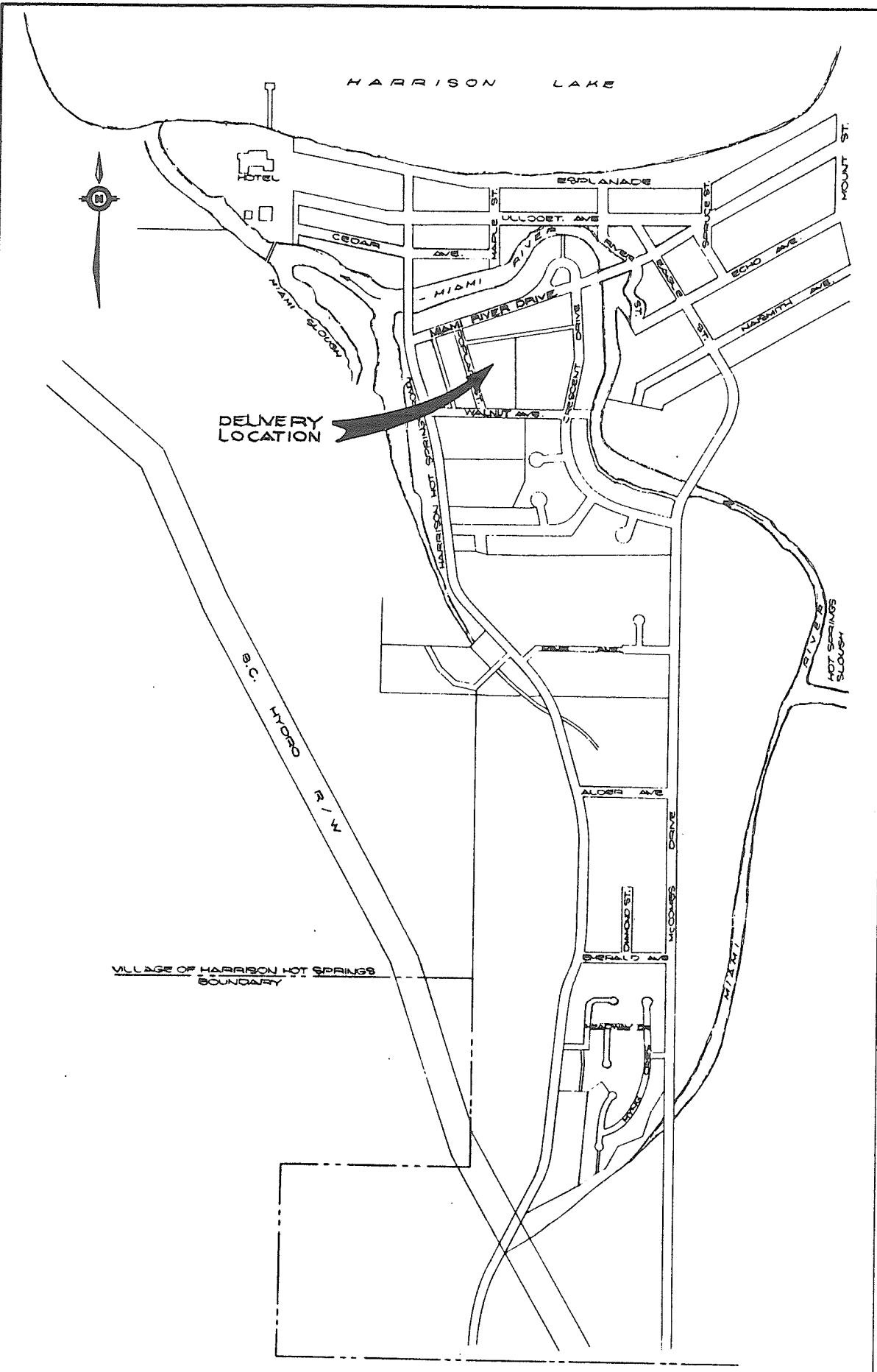
DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS

DWG. No. 196-13-3

FILE No. 0281550 C28
DESIGNED JWCB
DRAWN D.K./VB
DATE FEB '92
CHECKED *John W. C. Bottle*

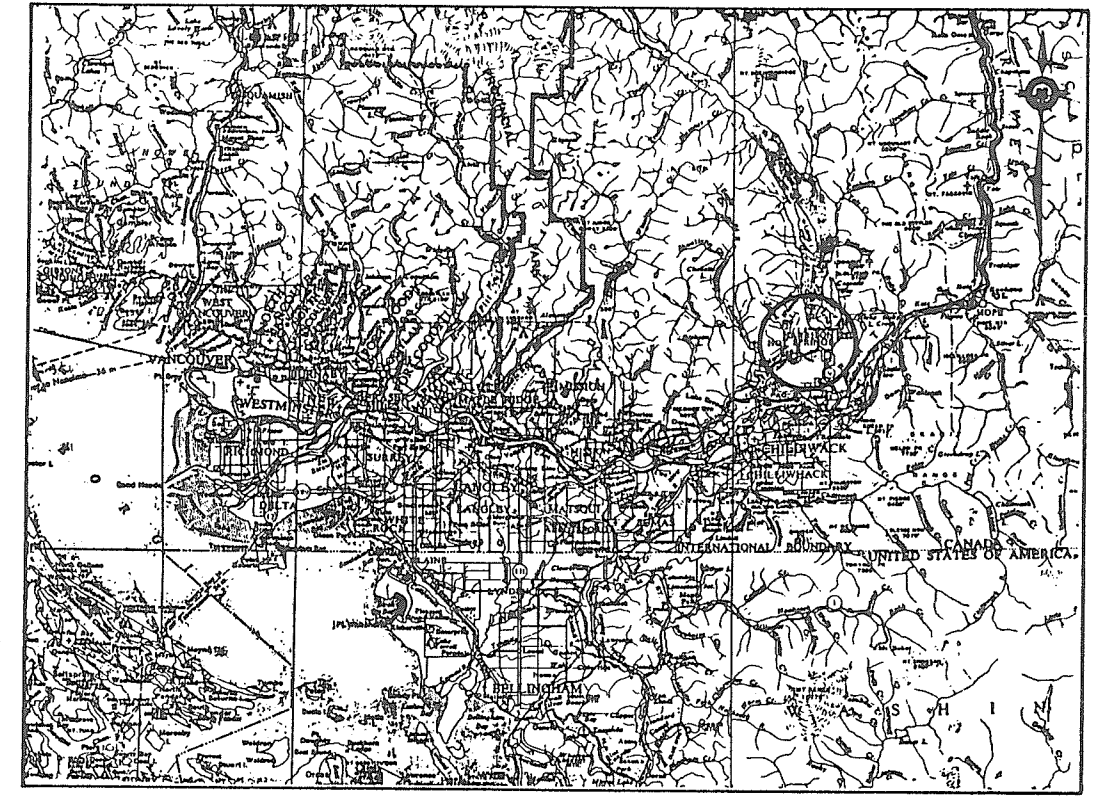
SURVEYED J.T.
DATE OCT. 190
SCALE AS SHOWN
DRAWING No. 92-2-2
SHEET 2 of 2

384 004



LOCATION PLAN
1:6000

THIS DRAWING REDUCED TO HALF SIZE



KEY PLAN
1:63360

- NOTES :**
1. ELEVATIONS ARE GEODETIC SURVEY OF CANADA DATUM IN METRES .
 2. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN METRES/MILLIMETRES UNLESS STATED OTHERWISE .
 3. CONTRACT 196.13.4 REFERS ONLY TO THE SUPPLY AND DELIVERY OF MISCELLANEOUS ITEMS AS FOLLOWS:
 - a) ALUMINUM HANDRAILING
 - b) ALUMINUM GRATING AND SUPPORTS
 - c) HOT DIP GALVANIZED TRASH RACKS
 - d) FLOODGATE ASSEMBLIES, INCLUDING THIMBLES
- SEE LOCATION PLAN AND SPECIFICATIONS FOR DELIVERY LOCATION. ALL OTHER DETAILS ON SHEET 1, 2 & 3 REFER TO WORK BY OTHERS.

INDEX TO DRAWINGS	
<u>SHEET No.</u>	<u>DESCRIPTION</u>
1.	KEY PLAN - LOCATION PLAN - LEGEND - INDEX TO DRAWINGS
2.	DETAILS AT MIAMI CREEK ENTRANCE TO FLOODBOXES
3.	DETAILS AT HARRISON LAKE ENTRANCE TO FLOODBOXES

John W. Boyle
Feb 13/1992

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS

DWG. No. 196-13-4

384 005

FILE No. 9201550-028	SURVEYED J.T.
DESIGNED JWCB	DATE OCT. /90
DRAWN IDK	SCALE AS SHOWN
DATE FEB '92	DRAWING No. 92-2-5
CHECKED JWCB	SHEET 1 of 3

REVISIONS		
No.	DESCRIPTION	DATE

RECOMMENDED *A.P. Camm*
DATE Feb. 17/92

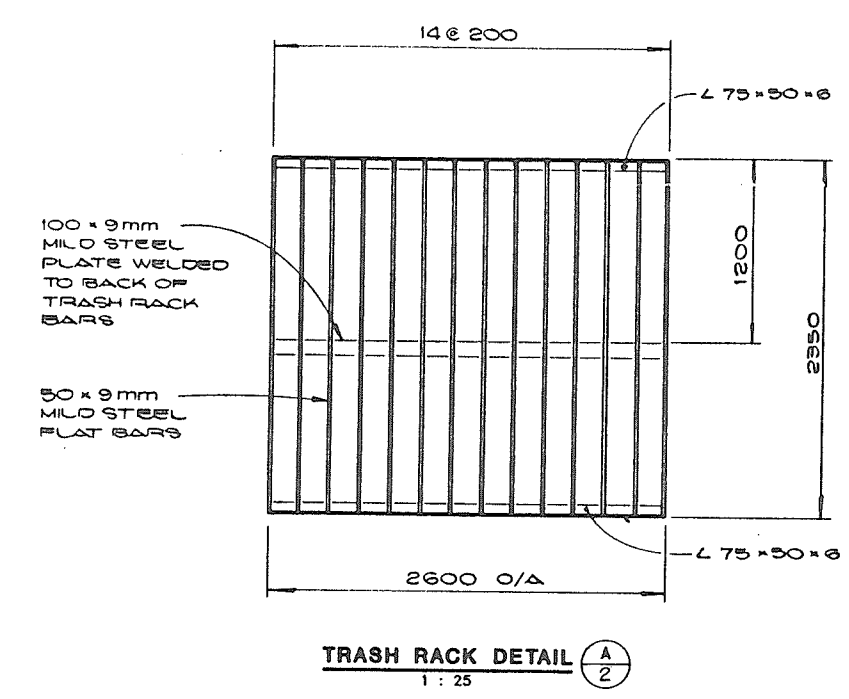
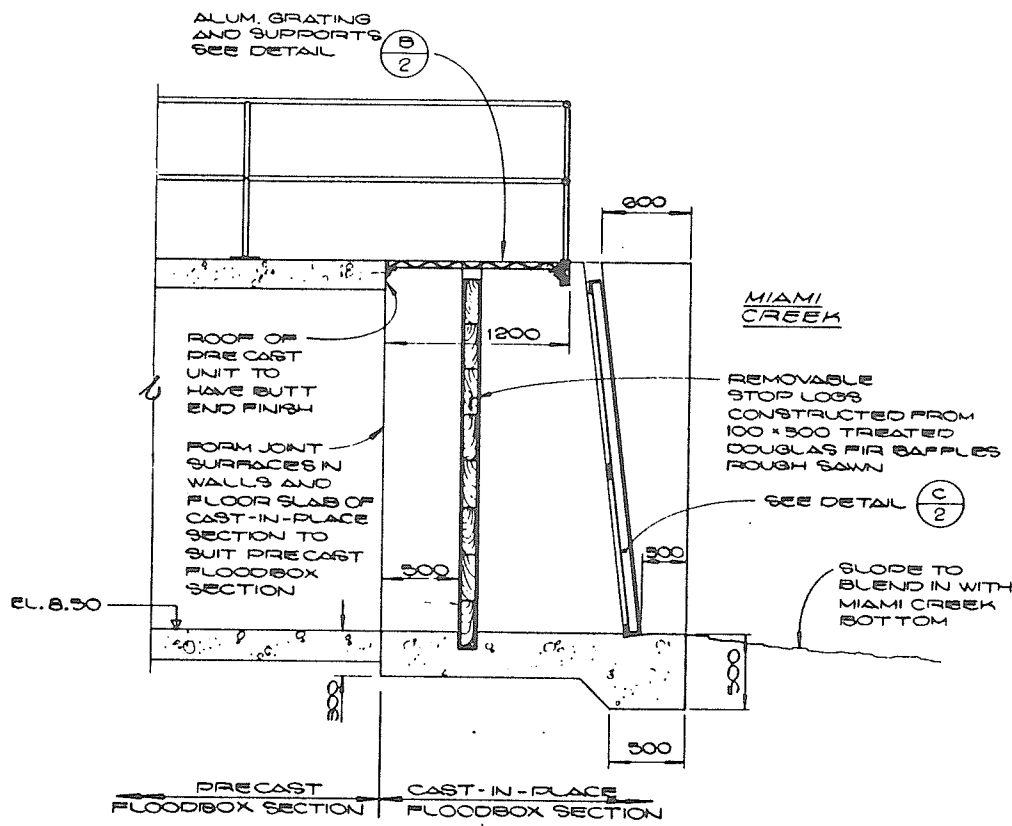
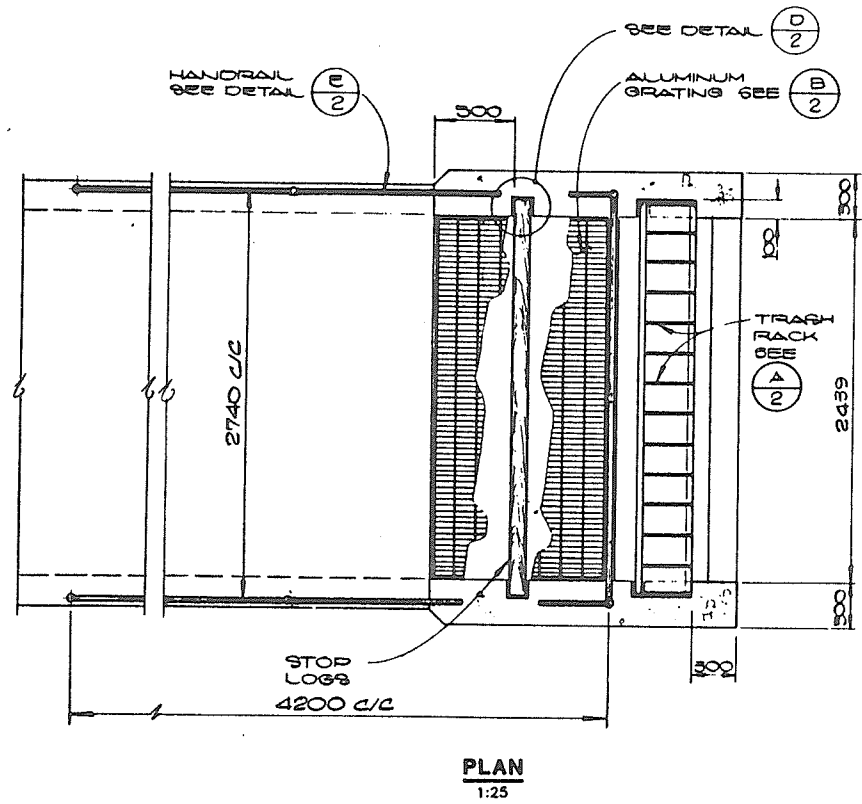
RECOMMENDED *Ann*
DATE Feb. 17/92

APPROVED *Bob*
DATE Feb. 17/92

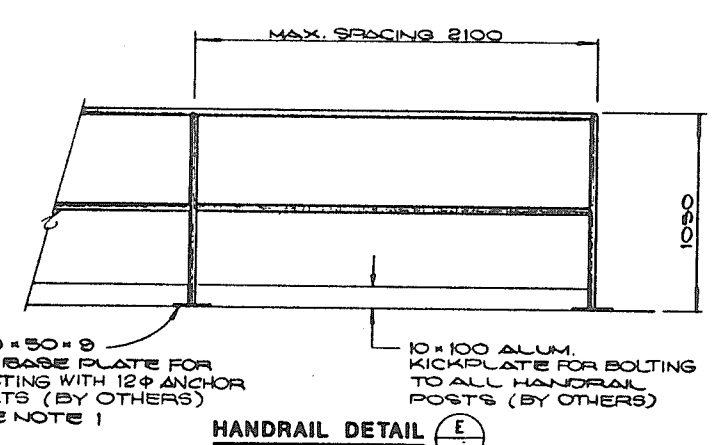
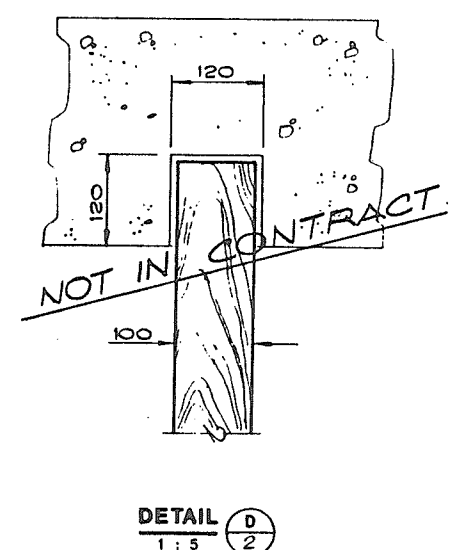
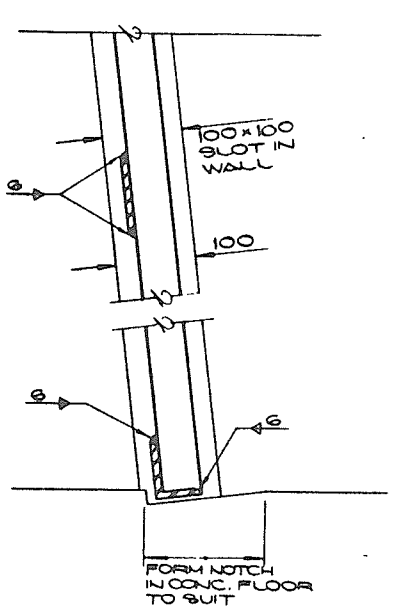
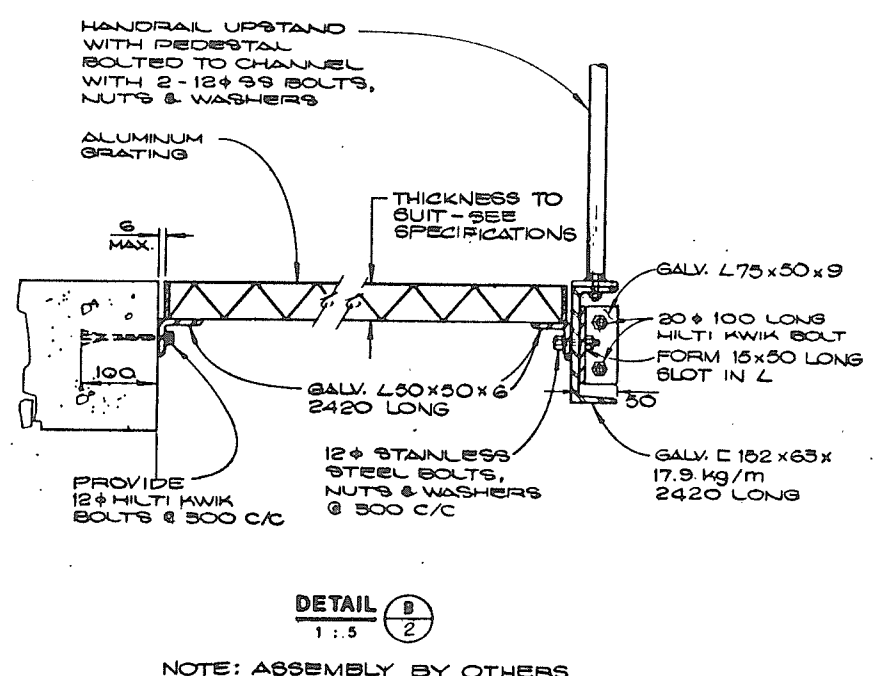


Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 2
SUPPLY OF MISCELLANEOUS METALWORK
KEY PLAN - LOCATION PLAN
LEGEND - INDEX TO DRAWINGS



NOTE:
TRASH RACK TO BE HOT DIP GALVANIZED AFTER FABRICATION



- NOTES:**
- WHERE BASE PLATE IS TO BE LOCATED ONTO CONC., PROVIDE 12 x HILTI KWIK BOLTS 100 LONG. WHERE PLATE IS LOCATED OVER STEEL SUPPORTS, PROVIDE 12 x 55 BOLTS, NUTS & WASHERS
 - HANDRAIL ASSEMBLY TO BE ALUMINUM
 - SEE NOTE 5 SHEET 1 REGARDING CONTRACT 196-13-4 WORK

John W. Knight
Feb 13/1992
DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS

384 006

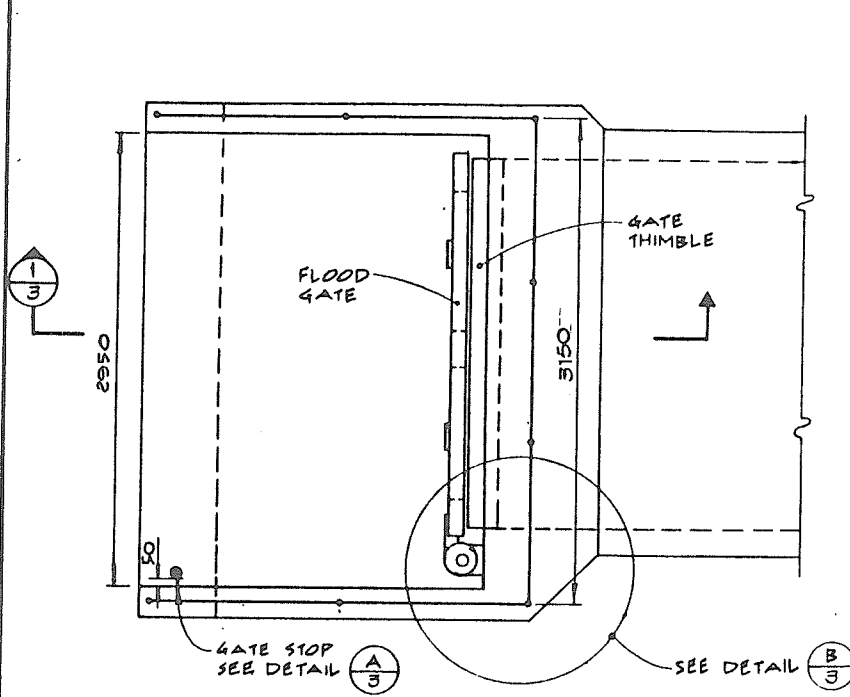
FILE No. 2251550 C28	SURVEYED J.T.
DESIGNED J.W.C.B.	DATE OCT/90
DRAWN /VB	SCALE AS SHOWN
DATE FEB. '92	DRAWING No. 92-2-4
CHECKED MPB/B	SHEET 2 of 3

REVISIONS		
No.	DESCRIPTION	DATE

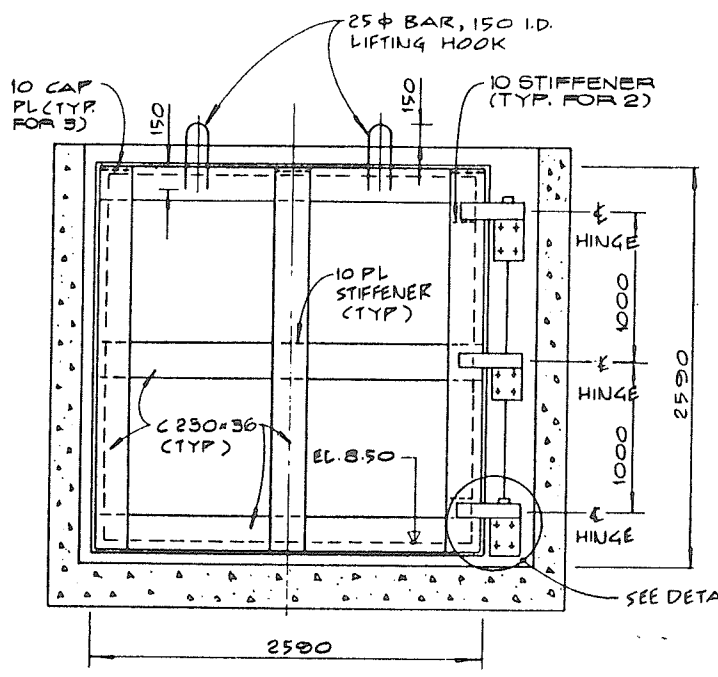
RECOMMENDED <i>A. M. Cameron</i>	DATE FEB. 17/92
RECOMMENDED <i>Mr.</i>	DATE Feb. 17/92
APPROVED <i>John W. Knight</i>	DATE Feb. 17/92

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA-BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

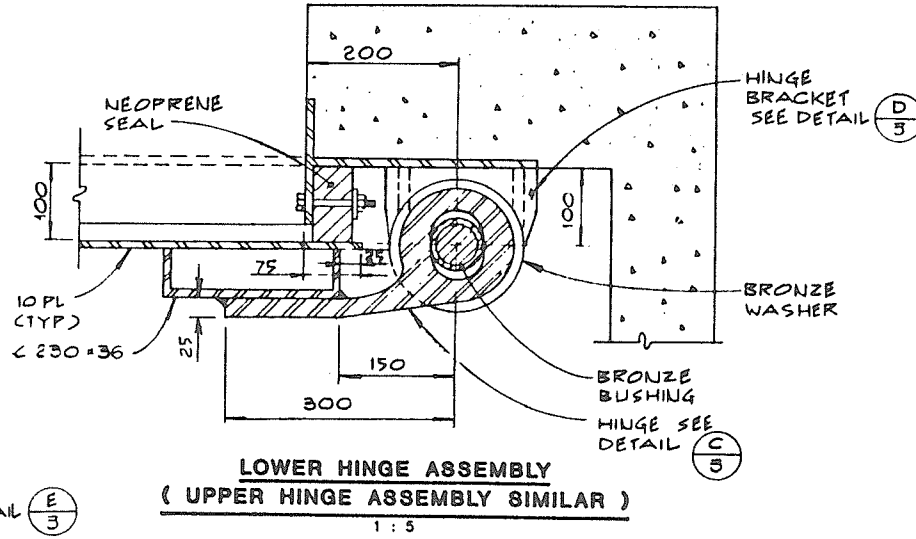
HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 2
SUPPLY OF MISCELLANEOUS METALWORK



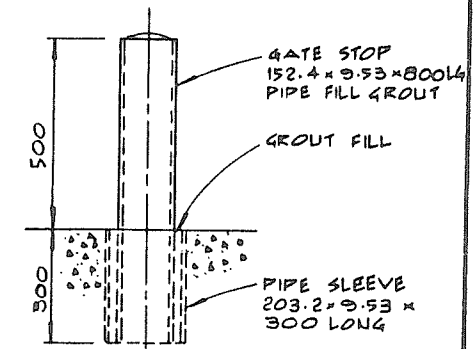
PLAN ON FLOODBOX ENTRANCE AT HARRISON LAKE
1:25



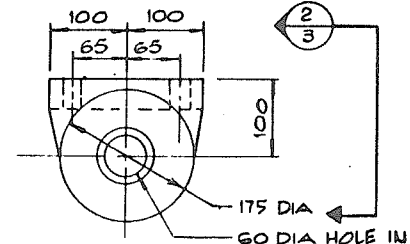
ELEVATION ON FLOOD GATE
1:25



LOWER HINGE ASSEMBLY (UPPER HINGE ASSEMBLY SIMILAR)
1:5



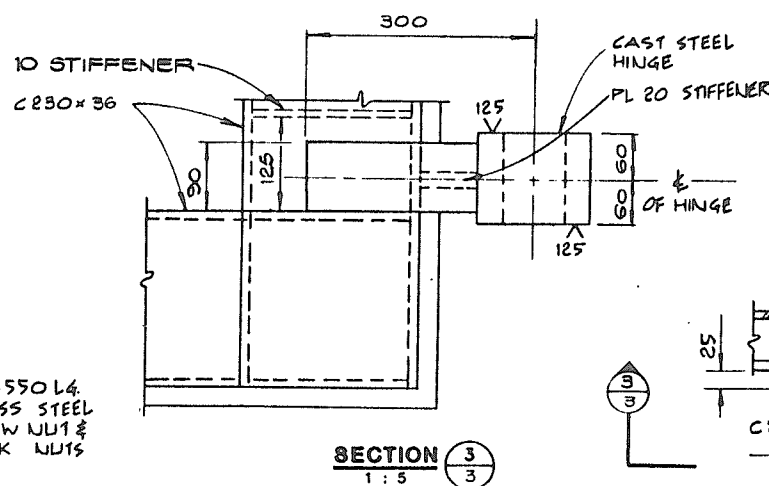
DETAIL A/3
1:5



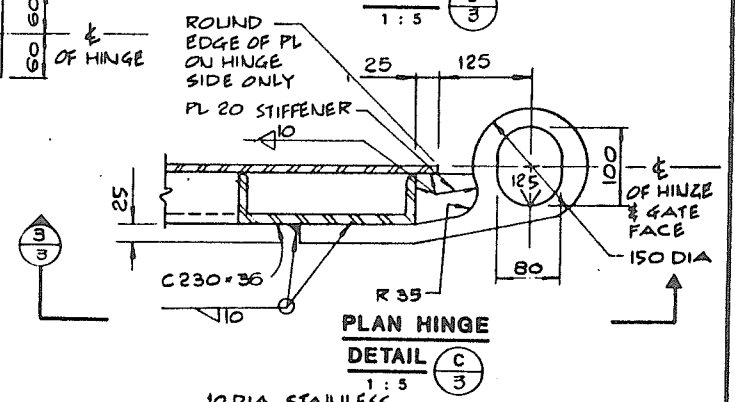
PLAN - CAST STEEL HINGE BRACKET
1:5

NOTES:
1. UNLESS NOTED OTHERWISE ALL METALWORK FOR THE FLOODGATES & ASSOCIATED FRAMEWORK SHALL BE FABRICATED FROM MILD STEEL & SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. DETAILS ON THIS SHEET REFER TO THE WEST FLOODBOX. DETAILS FOR THE EAST FLOODBOX ARE IDENTICAL EXCEPT THE FLOODGATE SHALL BE HINGED OPPOSITE HAND TO THE WEST FLOODGATE.

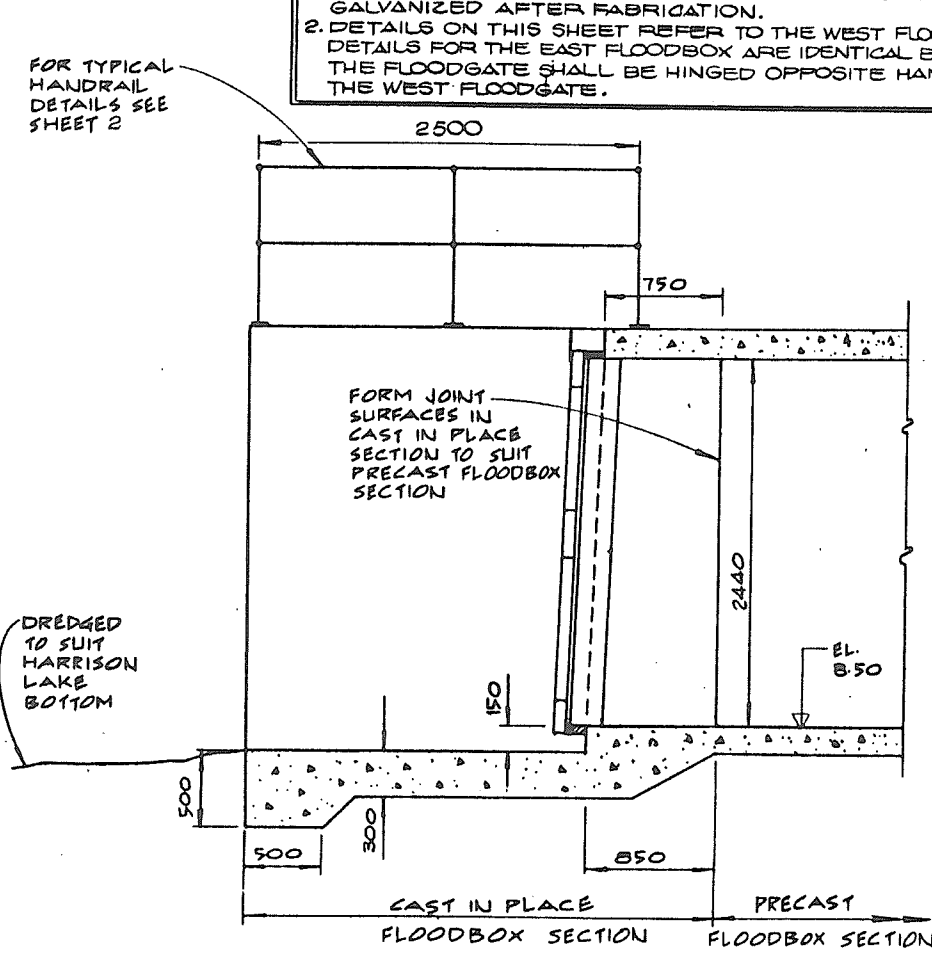
FOR TYPICAL HANDRAIL DETAILS SEE SHEET 2



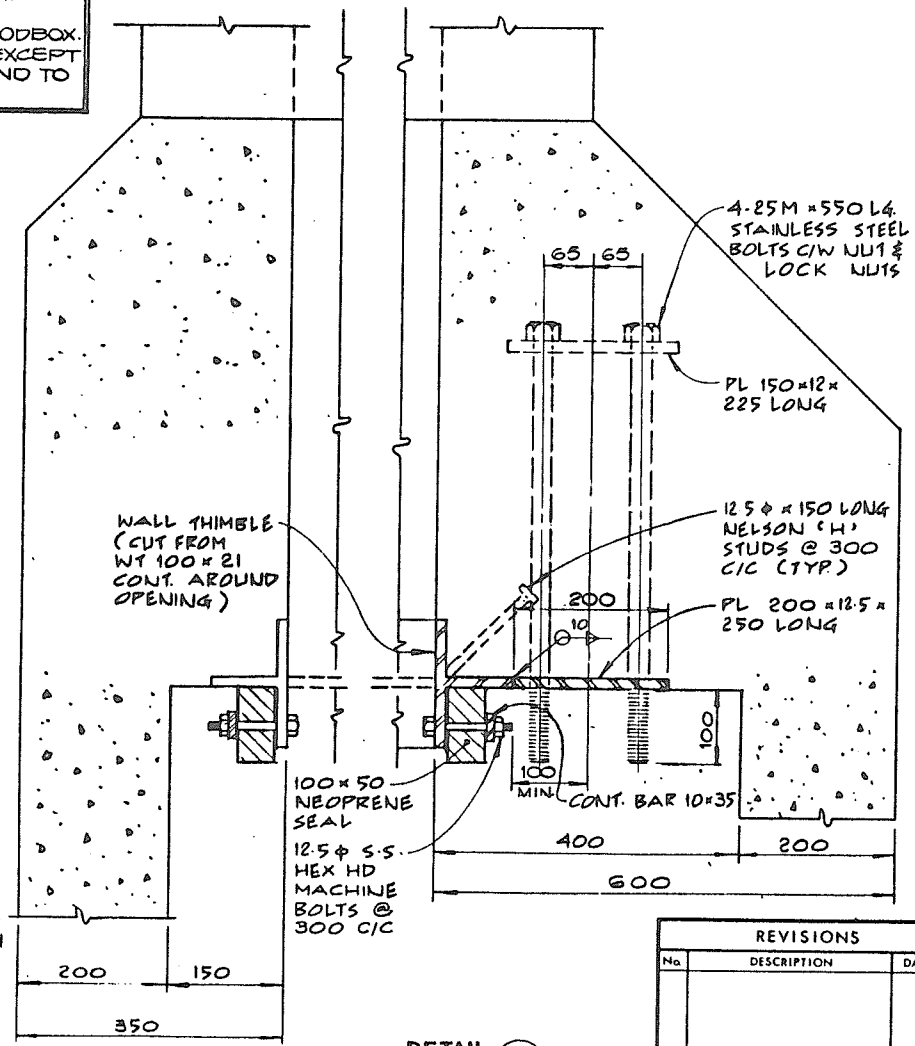
SECTION 3/3
1:5



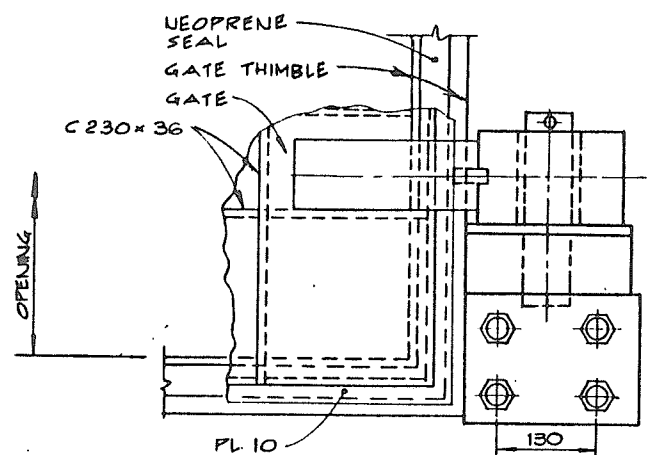
DETAIL C/3
1:5



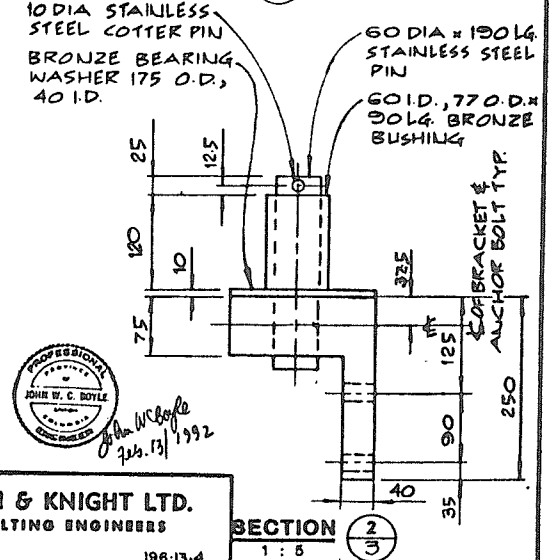
SECTION 1/3
1:25



DETAIL B/3
1:5



DETAIL E/3
1:5



SECTION 2/3
1:5

NOTE: SEE NOTE 3, SH. 1, REGARDING CONTRACT 196-13-4 WORK

384 007

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS

PROFESSIONAL
JOHN W. C. BOYLE
REGISTERED
24.13.1992

REVISIONS		RECOMMENDED
No.	DESCRIPTION	DATE
		RECOMMENDED <i>R.A. Conner</i> DATE <i>FEB. 17/92</i>
		RECOMMENDED <i>John</i> DATE <i>FEB. 17/92</i>
		APPROVED <i>John</i> DATE <i>FEB. 17/92</i>

Province of British Columbia Ministry of Environment WATER MANAGEMENT BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	FILE No. 0251550 C28 DESIGNED JWCB DRAWN DK/VB DATE FEB 1992 CHECKED JMB/PW	SURVEYED J.T. DATE OCT. 1990 SCALE AS SHOWN DRAWING No. 92-2-3 SHEET 3 of 3
--	---	---

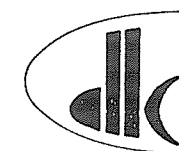
CANADA BRITISH COLUMBIA

FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

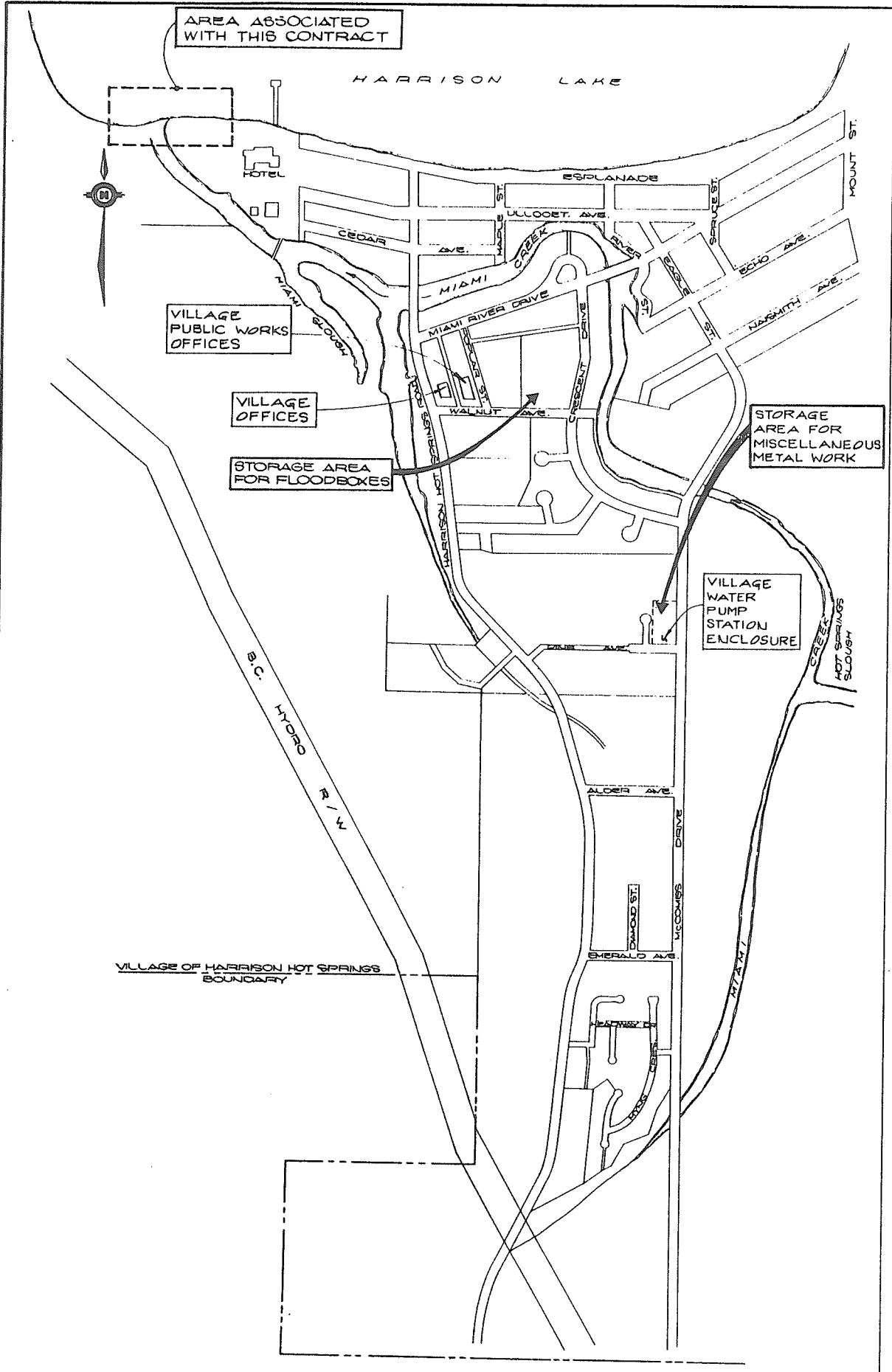
PROJECT No. 9 HARRISON HOT SPRINGS

CONTRACT No. 3

DYKE RECONSTRUCTION



DAYTON & KNIGHT LTD.
Consulting Engineers



AREA ASSOCIATED WITH THIS CONTRACT

LOCATION PLAN
1:6000

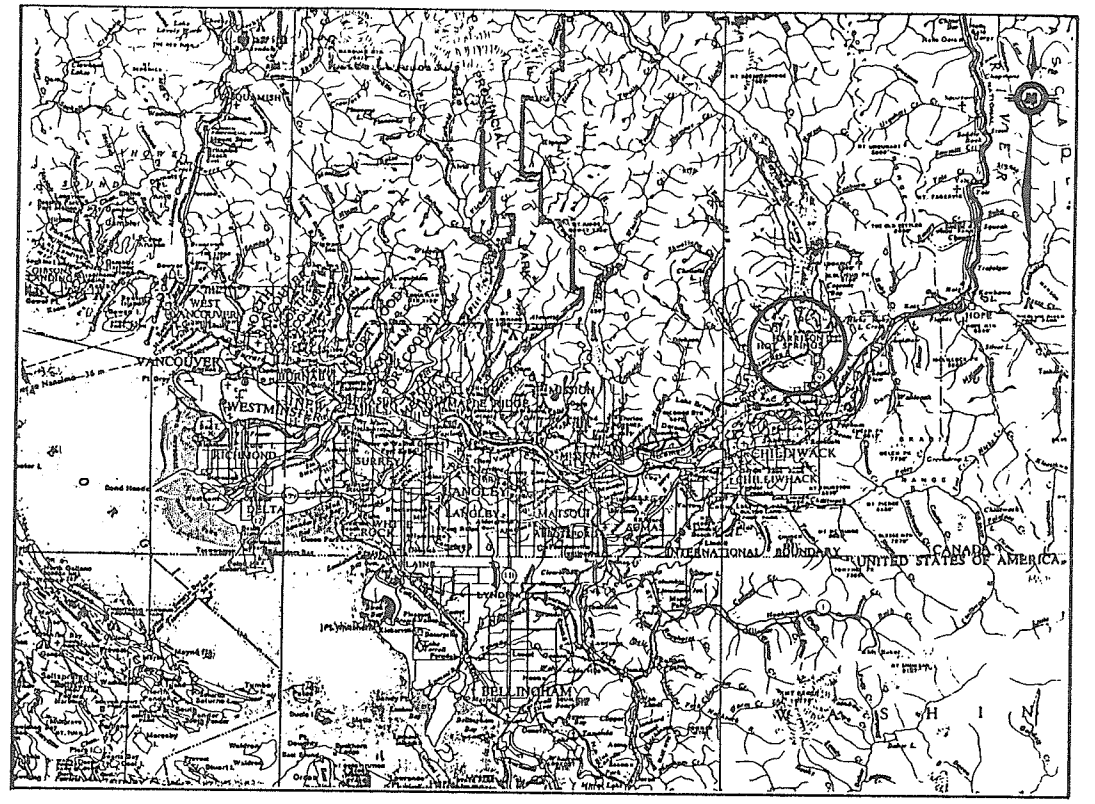
THIS DRAWING REDUCED TO HALF SIZE

LEGEND

- EXISTING
- NEW
- RIGHT OF WAY
- ☞ EQUIPMENT SUPPLIED BY OTHERS AND TO BE INSTALLED THIS CONTRACT

DESCRIPTION OF FILL MATERIALS		LOCATION OF FILL MATERIALS
TYPE I	GENERAL FILL (SELECT EXCAVATED)	GENERAL FILL UNDER ROADS
TYPE II	20mm MINUS CRUSHED GRAVEL	ROADWAY & PEDESTRIAN ACCESS & FLOODBOX AND PIPE BEDDING
TYPE III	75mm MINUS PIT RUN	PEDESTRIAN ACCESS
TYPE IV	150mm MINUS PIT RUN	ROADWAY GENERAL FILL AND DYKE FILL
TYPE V	150mm MINUS FILTER	RIP-RAP FILTER
TYPE VI	600mm MINUS ROCK RIP-RAP	RIP-RAP
TYPE VII	20mm MINUS DRAIN ROCK	UNDER PUMPING STATION SLAB
TYPE VIII	IMPERVIOUS FILL	CORE OF DYKE

- NOTES :**
- ELEVATIONS ARE GEODETIC SURVEY OF CANADA DATUM IN METRES .
 - ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN METRES/MILLIMETRES UNLESS STATED OTHERWISE .
 - THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES TREES AND BUSH WHERE SHOWN ARE APPROXIMATE ONLY AND MAY NOT ALL BE SHOWN. THE CONTRACTOR SHALL NOTE IN PARTICULAR THAT HOT WATER PIPE LINE, A SEWAGE FORCEMAIN AND UNDERGROUND CONDUITS EXIST WITHIN THE DYKE IN THE VICINITY OF THE WORK . (SEE FOLLOWING DRAWINGS AND SPECIFICATIONS FOR FURTHER DETAILS). LOCATIONS OF SERVICES MARKED * TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION .
 - SEE SPECIFICATIONS FOR GEOTECHNICAL DATA ON BOREHOLES .
 - SEE SHEET 3 FOR BENCH MARK DATA .
 - THE PRECAST FLOODBOXES HAVE BEEN SUPPLIED AND DELIVERED BY OTHERS UNDER CONTRACT No. 1 AND ARE PRESENTLY STORED AT THE SITE INDICATED ON THE LOCATION PLAN. SIMILARLY, MOST OF THE MISCELLANEOUS METALWORK REQUIRED FOR THE WORK HAS BEEN SUPPLIED AND DELIVERED BY OTHERS UNDER CONTRACT No. 2 AND IS ALSO PRESENTLY STORED AT THE SITE INDICATED ON THE LOCATION PLAN. DOCUMENTS FOR CONTRACT No.'S 1 & 2 ARE AVAILABLE FOR REVIEW AT DAYTON & KNIGHT LTD.'S OFFICES.



KEY PLAN
1:63360

INDEX TO DRAWINGS

SHEET No.	DESCRIPTION
1.	KEY PLAN - LOCATION PLAN - LEGEND - INDEX TO DRAWINGS
2.	EXISTING FLOODBOXES AND PUMPING STATION SITE PLAN
3.	NEW FLOODBOXES , PUMPING STATION SUBSTRUCTURE AND DISCHARGE PIPE
4.	FLOODBOX SECTIONS
5.	DETAILS AT MIAMI CREEK ENTRANCE TO FLOODBOXES
6.	DETAILS AT HARRISON LAKE ENTRANCE TO FLOODBOXES
7.	NEW DRAINAGE PUMPING STATION DETAILS
8.	RIP-RAP AND STAIRWAY DETAILS
9.	TYPICAL SECTIONS
10.	FISH LADDER DETAILS

APPROVED
June 28 1992

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
DWG. No. 196-13-2

384 008

REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	DEC/92

RECOMMENDED: *R. Lamm*
DATE: July 16, 1992

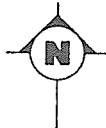
RECOMMENDED: *W. H. H. H.*
DATE: 1992-07-16

APPROVED: *W. H. H. H.*
DATE: July 16, 1992

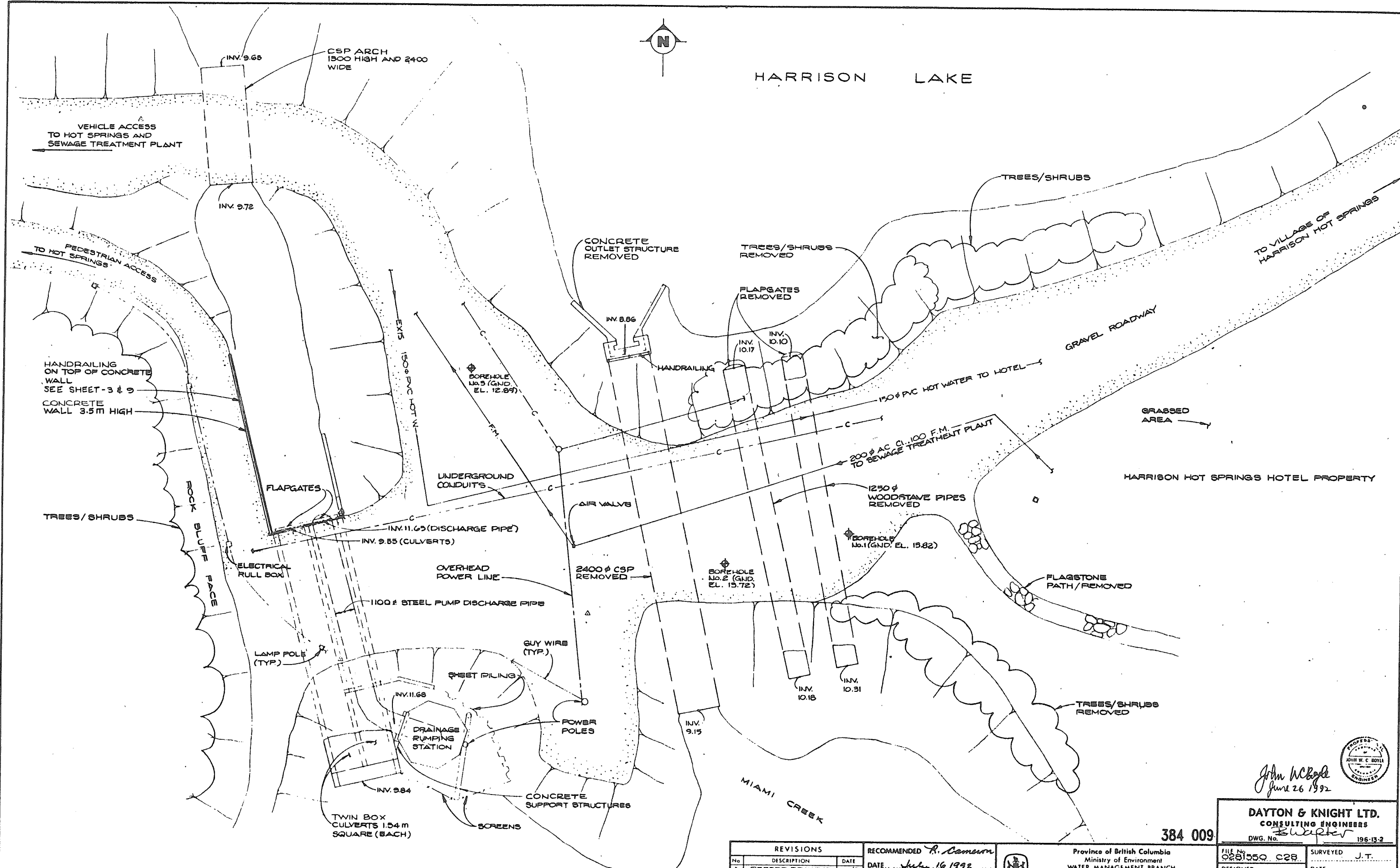
Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 5
DYKE RECONSTRUCTION
KEY PLAN - LOCATION PLAN
LEGEND - INDEX TO DRAWINGS

FILE No. 0261550-C29	SURVEYED J.T.
DESIGNED JWCB	DATE OCT. '90
DRAWN M. J. D.K.	SCALE AS SHOWN
DATE FEB. '92	DRAWING No. 95-3-1
CHECKED J.M.S.	SHEET 1 of 10



HARRISON LAKE



SITE PLAN

John W. Boyle
June 26 1992



DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
DWG. No. 384 009 196-13-2

REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	DEC. '90

RECOMMENDED <i>R. Cameron</i>	DATE July 16 1992
RECOMMENDED <i>W. H. ...</i>	DATE 1992-07-16
APPROVED <i>...</i>	DATE July 16 1992

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 5
DYKE RECONSTRUCTION
EXISTING FLOODBOXES AND
PUMPING STATION SITE PLAN

FILE No. 0251550 C28	SURVEYED J.T.
DESIGNED JWCB	DATE OCT. '90
DRAWN LW/RH	SCALE 1:100
DATE FEB '92	DRAWING No. 95-3-2
CHECKED JWP	SHEET 2 of 10

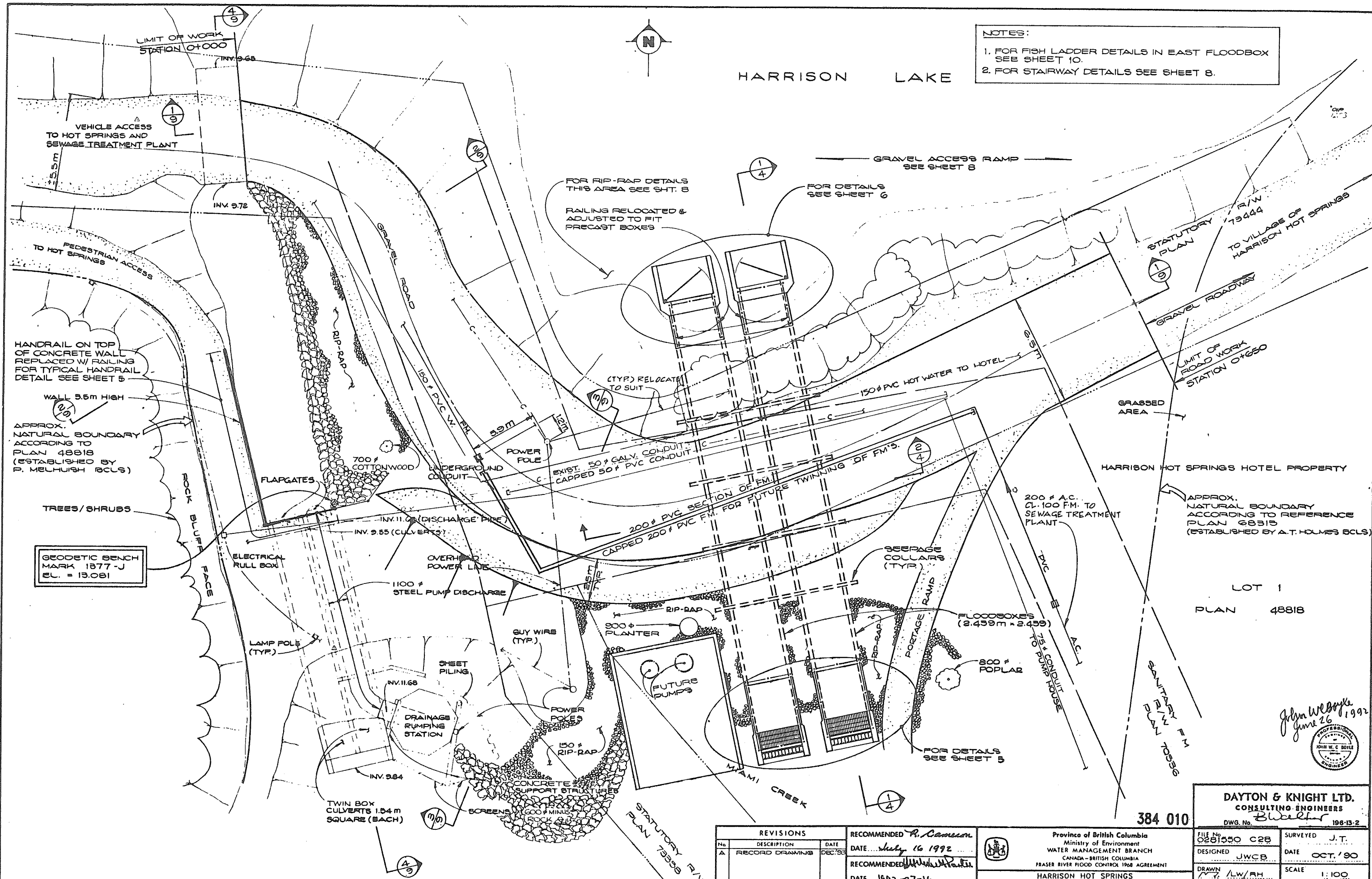
THIS DRAWING REDUCED TO HALF SIZE



HARRISON LAKE

NOTES:

1. FOR FISH LADDER DETAILS IN EAST FLOODBOX SEE SHEET 10.
2. FOR STAIRWAY DETAILS SEE SHEET 8.



GEODETIC BENCH MARK 1577-J
EL. = 13.091

APPROX. NATURAL BOUNDARY ACCORDING TO REFERENCE PLAN 68318 (ESTABLISHED BY A.T. HOLMES BCL)

LOT 1
PLAN 48818

John W. Boyle
June 26, 1992
PROFESSIONAL ENGINEER
JOHN W. C. BOYLE
1988-1992

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
Blueler
DWG. No. 198-13-2

384 010

REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	DEC '92

RECOMMENDED *R. Cameron*
DATE *July 16 1992*

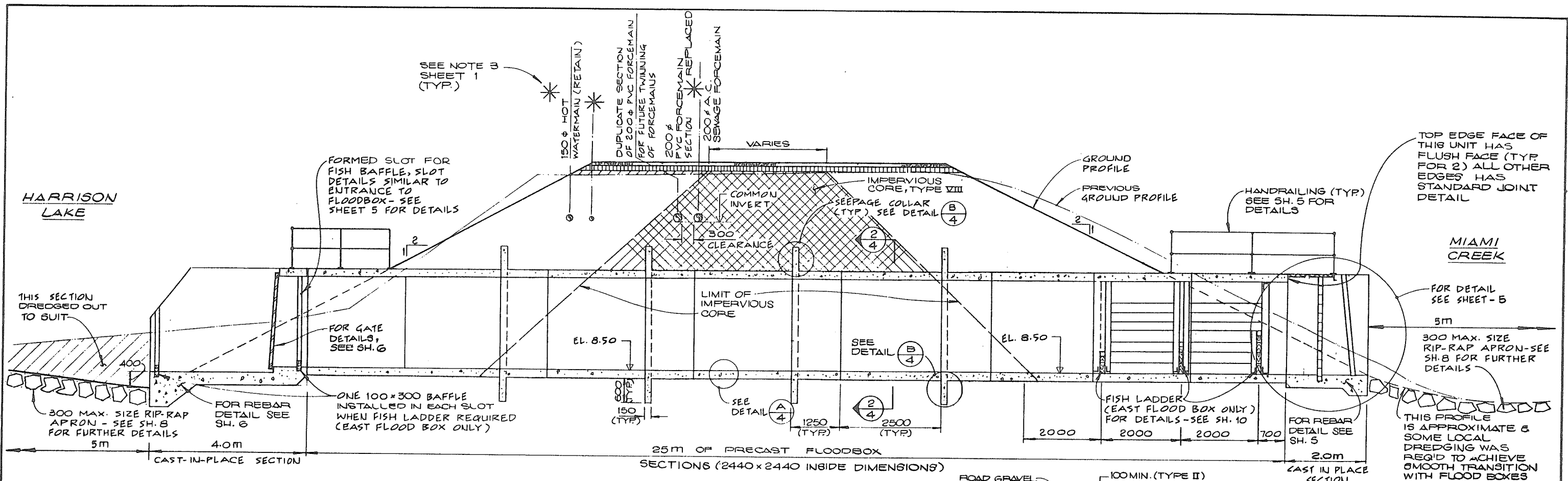
RECOMMENDED *John W. Boyle*
DATE *July 16 1992*

APPROVED *John W. Boyle*
DATE *July 16 1992*

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1998 AGREEMENT

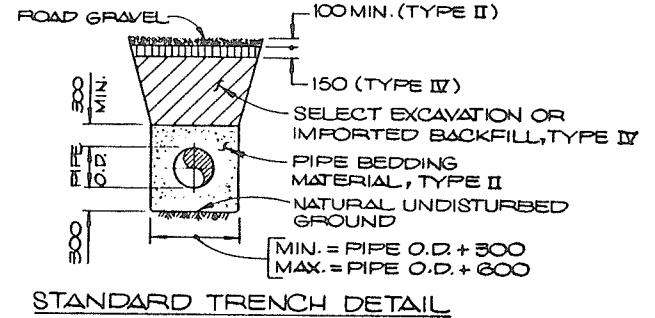
HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 3
DYKE RECONSTRUCTION
NEW FLOODBOXES, PUMPING STATION
SUBSTRUCTURE AND DISCHARGE PIPE

FILE No. 0281550 C28	SURVEYED J.T.
DESIGNED JWCB	DATE OCT. '90
DRAWN L.W./R.H.	SCALE 1:100
DATE FEB. '92	DRAWING No. 95-3-3
CHECKED JWB	SHEET 5 of 10

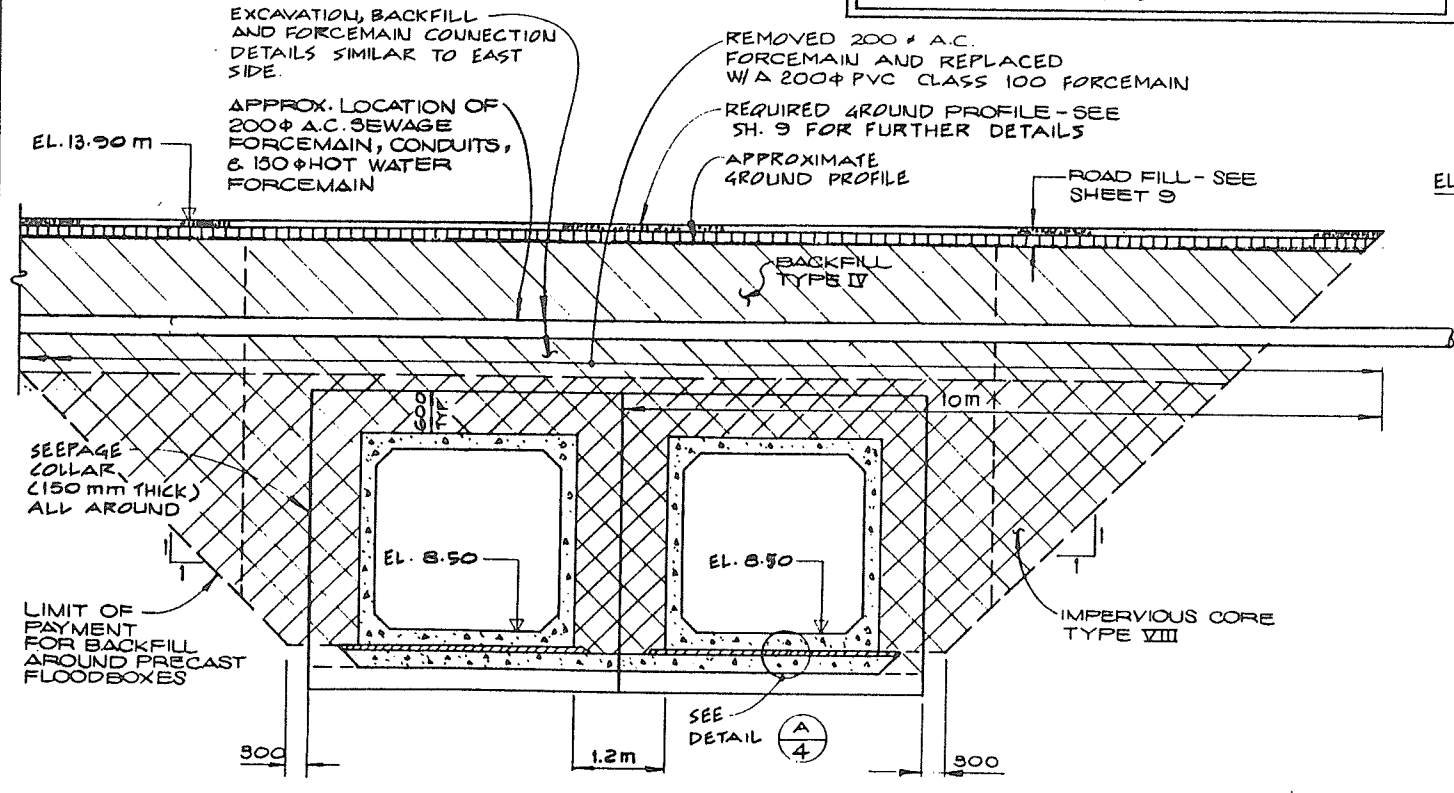


NOTE:
FISH LADDER/FISH BAFFLE AND SLOT
DETAILS ONLY APPLY TO
EAST FLOOD BOX.

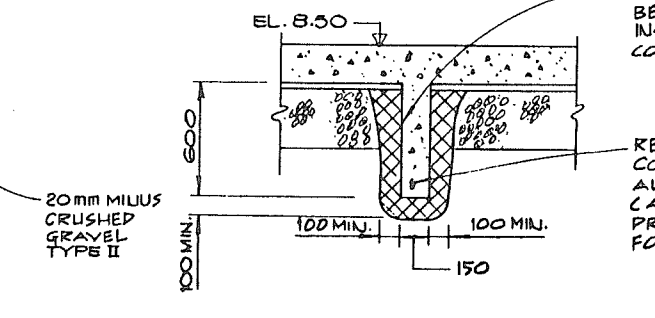
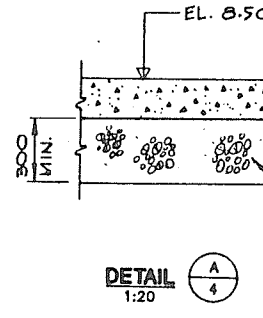
**NEW FLOOD BOX
(TYP. FOR 2)**
SECTION 1
1:50



NOTE:
PRECAST FLOODBOX SECTIONS,
HANDRAILING THIS SHEET, GRATING,
TRASH RACKS & FLOODGATES
SUPPLIED BY OTHERS



ELEV. (m)
14
13
12
11
10
9
8
7



SEEPAGE COLLAR
BELOW FLOODBOX BASE
INSTALLED INTO A WEAK
CONCRETE MIX

REINFORCED SEEPAGE
COLLAR CONTINUOUS
ALL AROUND FLOODBOX
(AND FORMED AS PART OF
PRECAST FLOODBOX) SEE SECTION 2/3
FOR HORIZONTAL LOCATION.

SECTION 2
1:50

THIS DRAWING REDUCED TO HALF SIZE

REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	DEC '92

RECOMMENDED: *R. Cameron*
DATE: *July 16, 1992*

RECOMMENDED: *W. P. P. P.*
DATE: *1992-07-16*

APPROVED: *E. P. P.*
DATE: *July 16, 1992*

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
384 011
DWG. No. 196-13-2

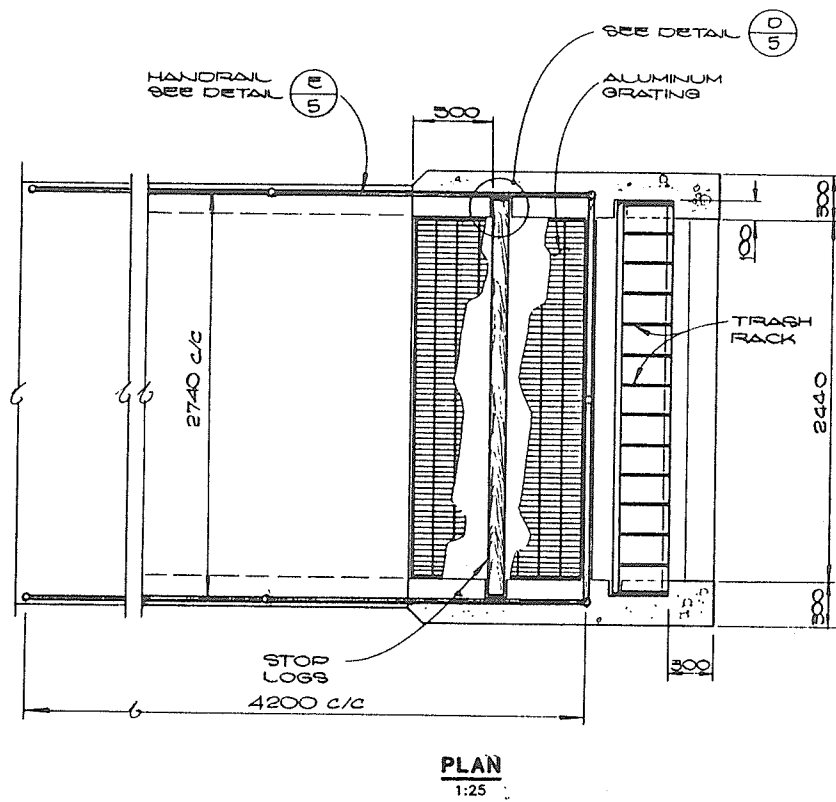
Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 3
DYKE CONSTRUCTION
FLOODBOX SECTIONS

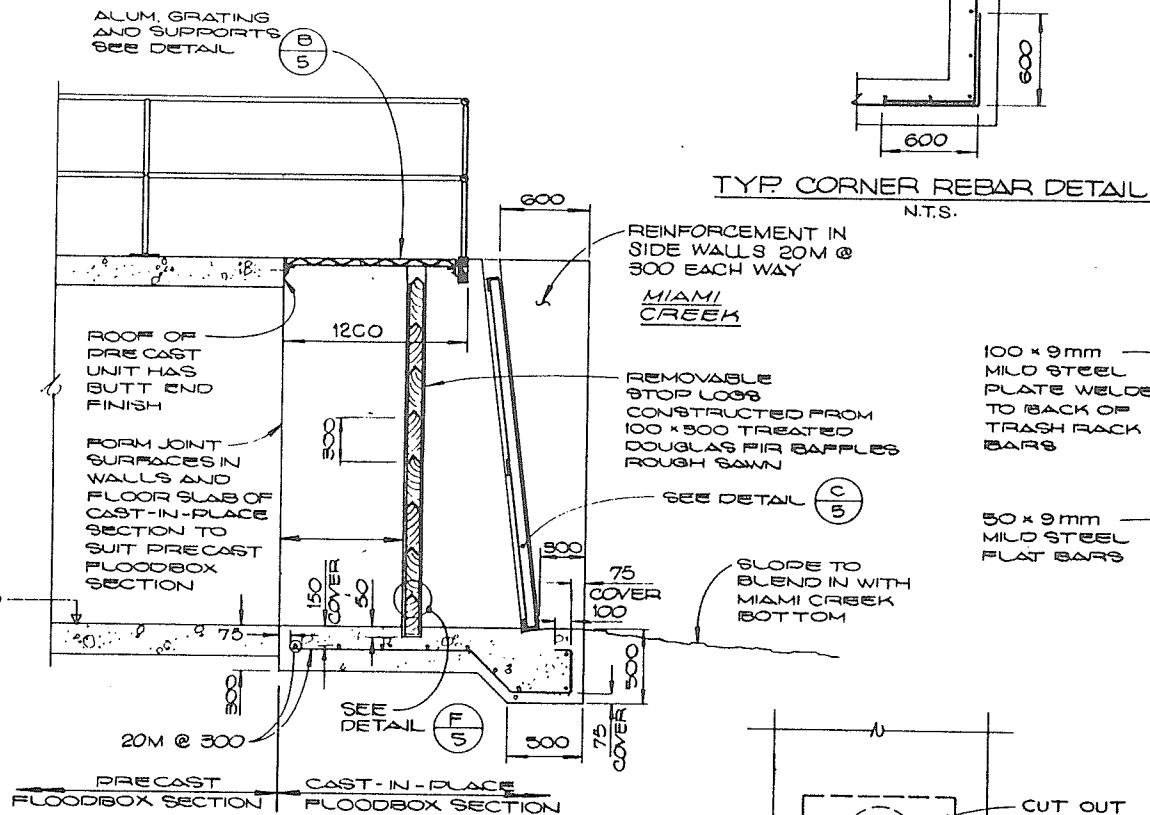
FILE No. *0201550 C 28*
DESIGNED *JWCB*
DRAWN *D.K.*
DATE *FEB '92*
CHECKED *JLW*

SURVEYED *J.T.*
DATE *OCT '90*
SCALE *AS SHOWN*
DRAWING No. *95-3-4*
SHEET *4* of *10*

John W. Knight
June 26 1992

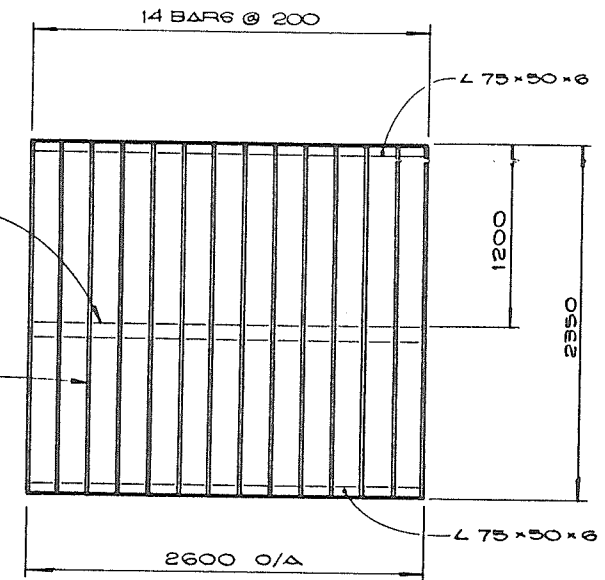
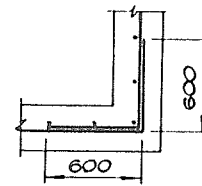


PLAN
1:25



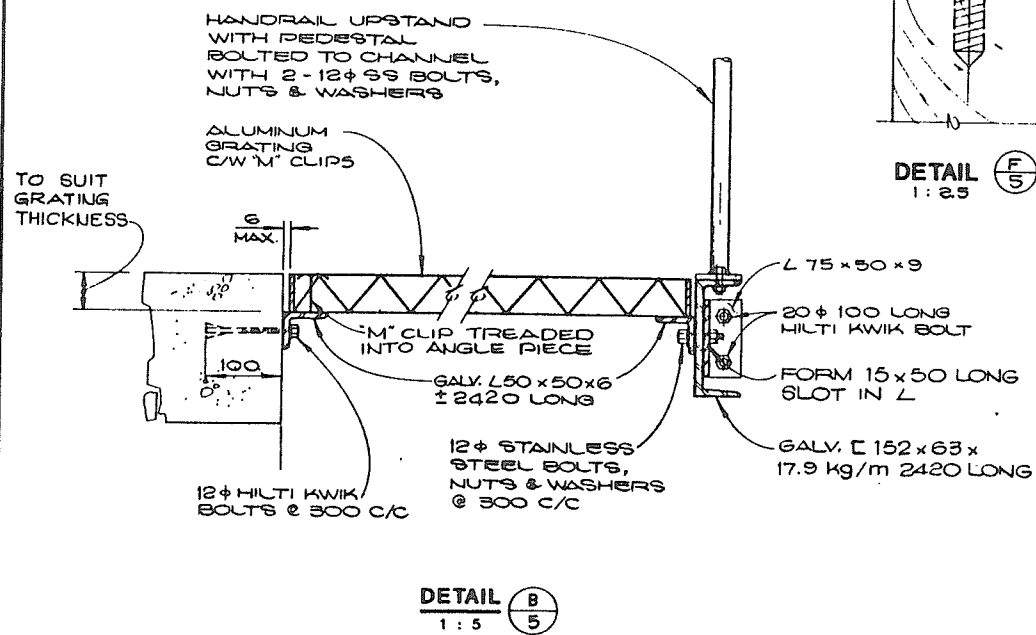
DETAILS AT MIAMI CREEK ENTRANCE TO FLOODBOXES (TYPICAL FOR 2)
1:25

TYP. CORNER REBAR DETAIL
N.T.S.

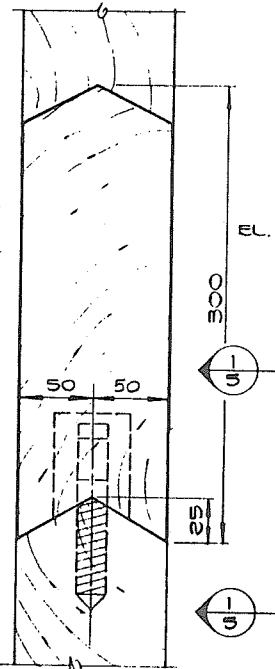


TRASH RACK DETAIL
1:25

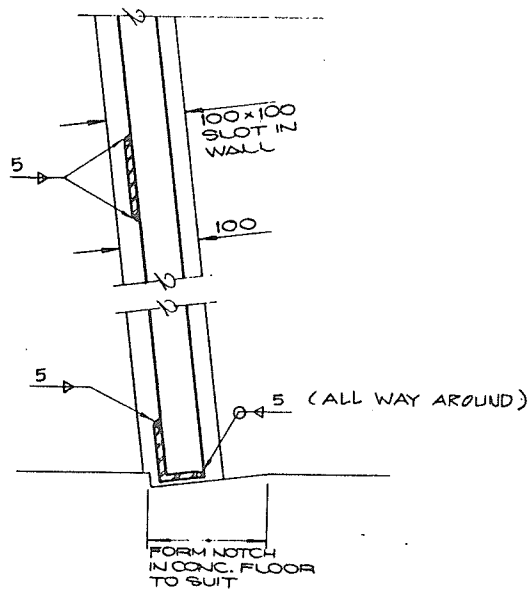
NOTE:
TRASH RACK HOT-DIP GALVANIZED AFTER FABRICATION



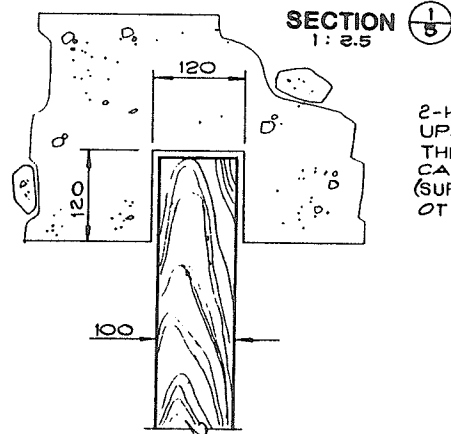
DETAIL B
1:5



DETAIL F
1:25



DETAIL D
1:5



SECTION B
1:2.5

2-HOLES FOR UPSTAND DRILLED THROUGH C/W 6# CARRIAGE BOLTS (SUPPLIED BY OTHERS)

200 x 50 x 9 ALUMINUM BASE PLATE TO BE BOLTED WITH 12# ANCHOR BOLTS SEE NOTE 1

10 x 100 ALUM. KICKPLATE BOLTED TO ALL HANDBRAIL POSTS

NOTES:
1. WHERE BASE PLATE IS LOCATED ONTO CONC. USE 12# HILTI KWIK BOLTS 100 LONG AND LOCATE BASE PLATE ON TOP OF A 10mm LAYER OF NON SHRINK GROUT. WHERE PLATE IS LOCATED OVER STEEL SUPPORTS USE 12# SS BOLTS, NUTS & WASHERS
2. HANDBRAIL ASSEMBLY ALUMINUM

HANDBRAIL DETAIL
1:20

TRASH RACKS, GRATING (INCLUDING SUPPORTS & HANDBRAILING AT EITHER END OF FLOODBOXES)

John C. Boyle
June 26, 1992



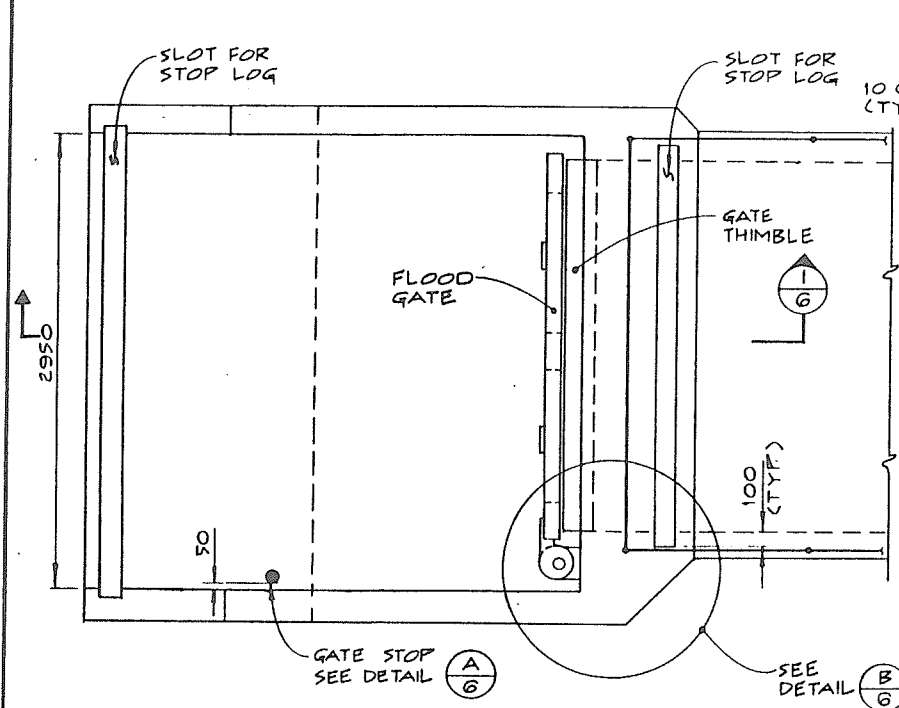
384 012

DAYTON & KNIGHT LTD. CONSULTING ENGINEERS <i>Buxton</i>		DWG. No.	196-13-2
FILE No.	0281550 C28	SURVEYED	J.T.
DESIGNED	J.W.C.B.	DATE	OCT. '90
DRAWN	M7	SCALE	AS SHOWN
DATE	FEB. '92	DRAWING No.	95-3-5
CHECKED	JWB	SHEET	5 of 10

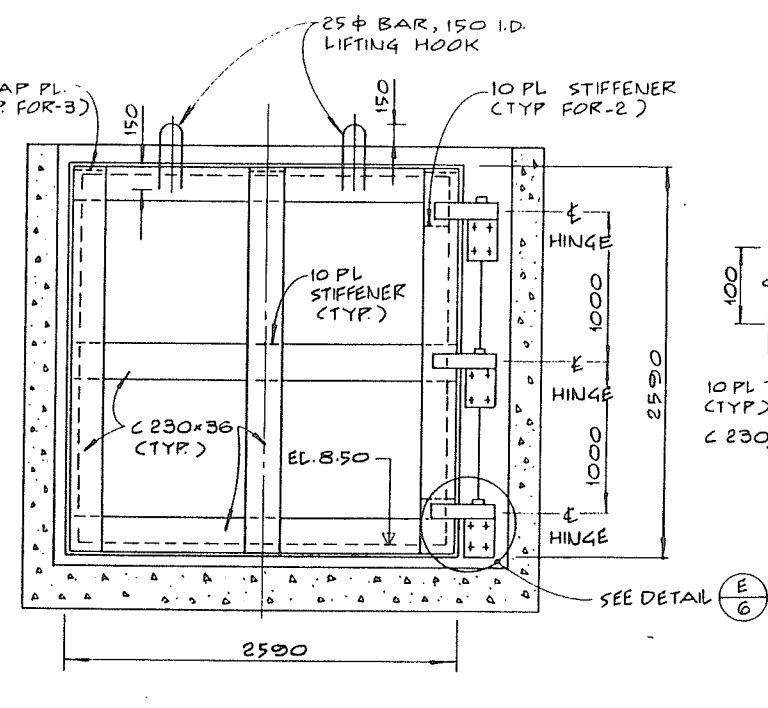
REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	DEC. '92
RECOMMENDED <i>R. Cameron</i>		
DATE	<i>July 16, 1992</i>	
RECOMMENDED <i>John C. Boyle</i>		
DATE	<i>1992-07-16</i>	
APPROVED <i>John C. Boyle</i>		
DATE	<i>July 16, 1992</i>	

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA-BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1988 AGREEMENT

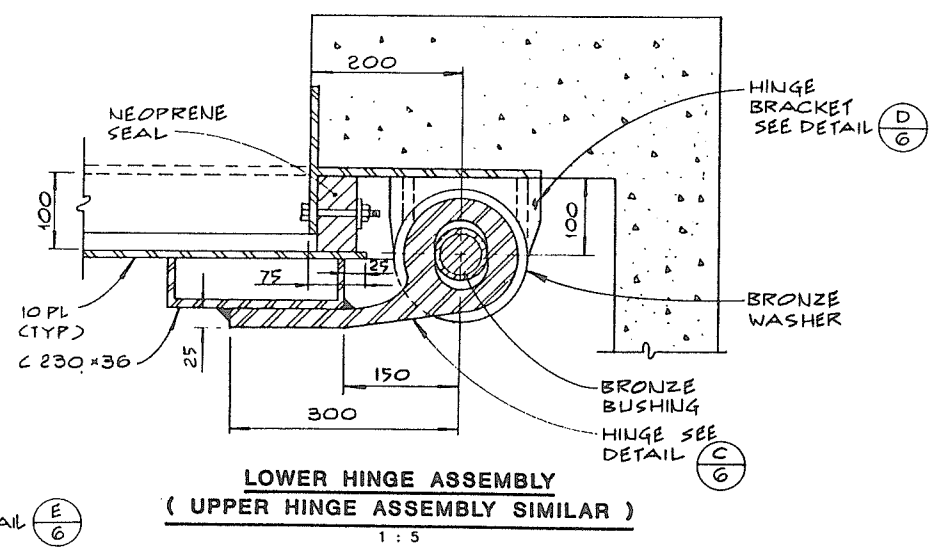
HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 3
DYKE RECONSTRUCTION
DETAILS AT MIAMI CREEK ENTRANCE TO FLOODBOXES



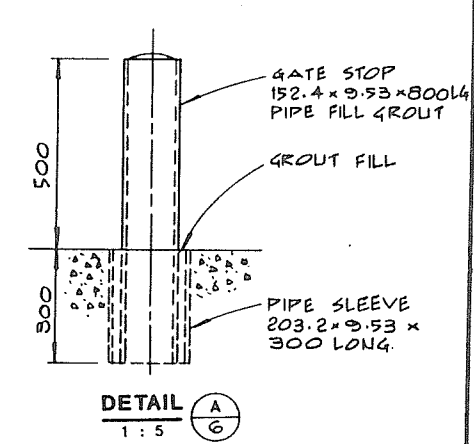
PLAN ON FLOODBOX ENTRANCE AT HARRISON LAKE
1: 25



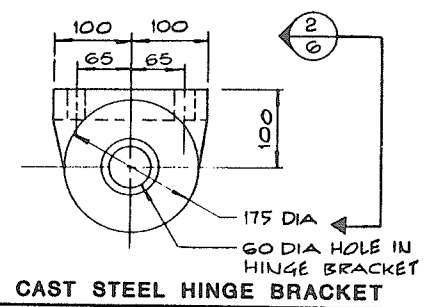
ELEVATION ON FLOOD GATE
1: 25



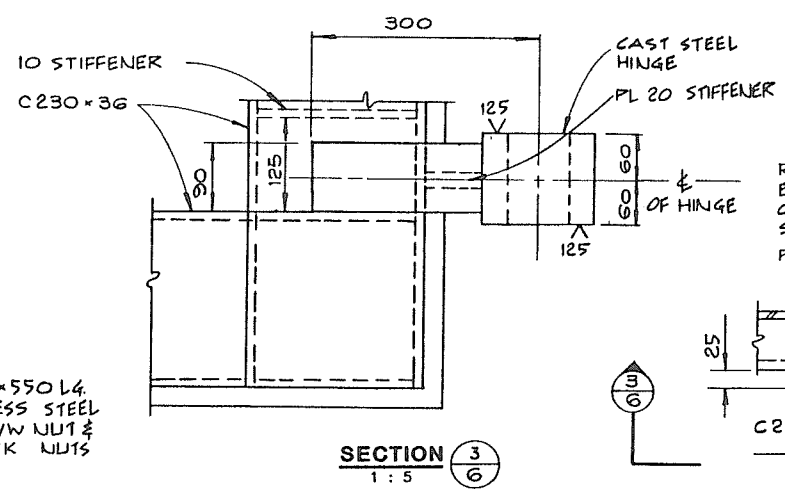
LOWER HINGE ASSEMBLY (UPPER HINGE ASSEMBLY SIMILAR)
1: 5



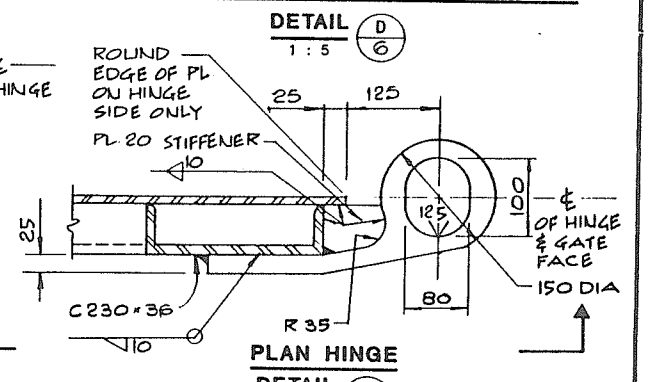
DETAIL A
1: 5



PLAN - CAST STEEL HINGE BRACKET
1: 5



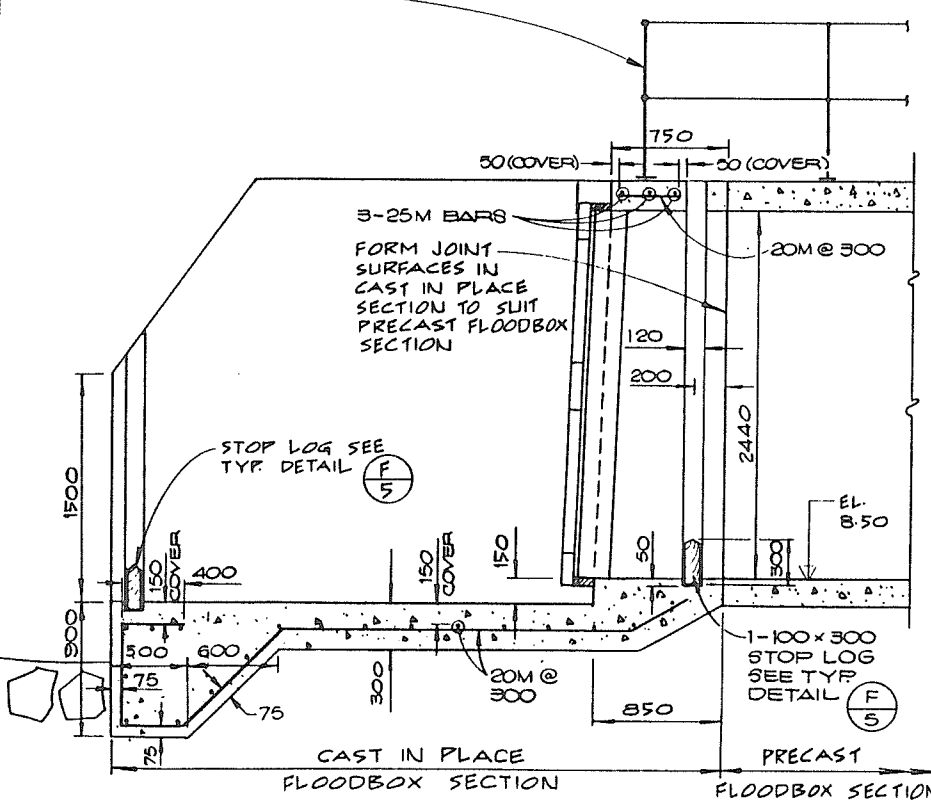
SECTION 3
1: 5



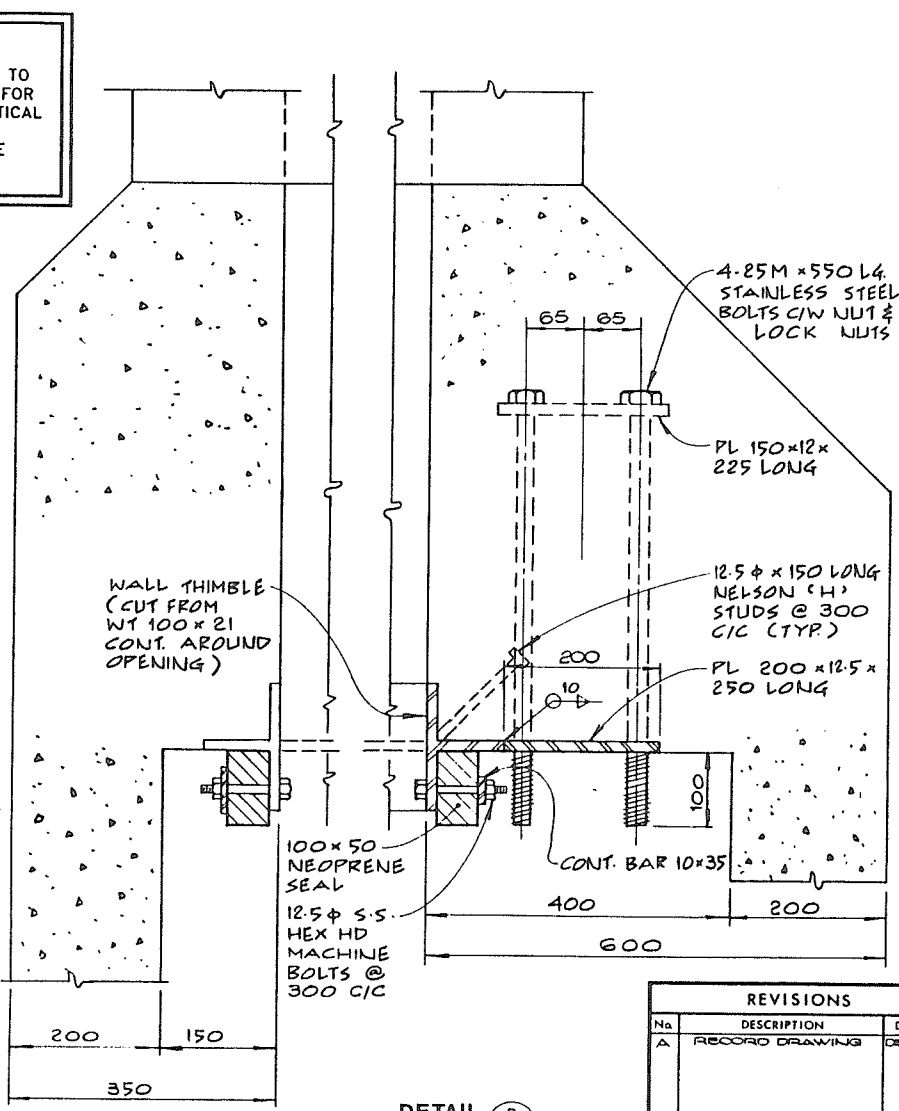
PLAN HINGE DETAIL C
1: 5

NOTE: DETAILS ON THIS SHEET REFER TO THE WEST FLOODBOX. DETAILS FOR THE EAST FLOODBOX ARE IDENTICAL EXCEPT THE FLOODGATE HINGED OPPOSITE HAND TO THE WEST FLOODGATE.

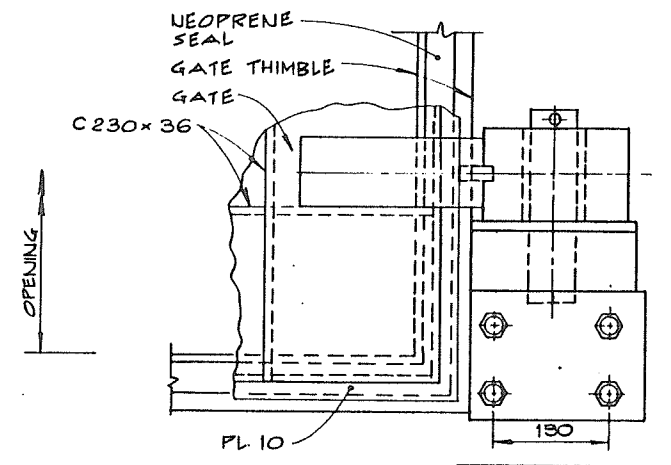
FOR TYPICAL HANDRAIL DETAILS SEE SHEET 5



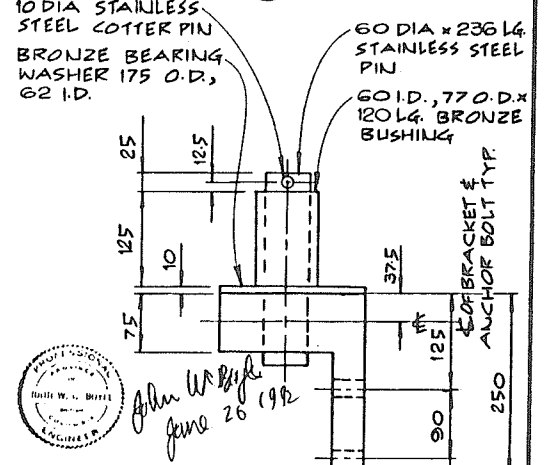
SECTION 1
1: 25



DETAIL B
1: 5



DETAIL E
1: 5



DETAIL D
1: 5

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
384 013
DWG. No. 196-13-R

REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	08/16/92

RECOMMENDED BY: *P. Cameron*
DATE: July 16, 1992

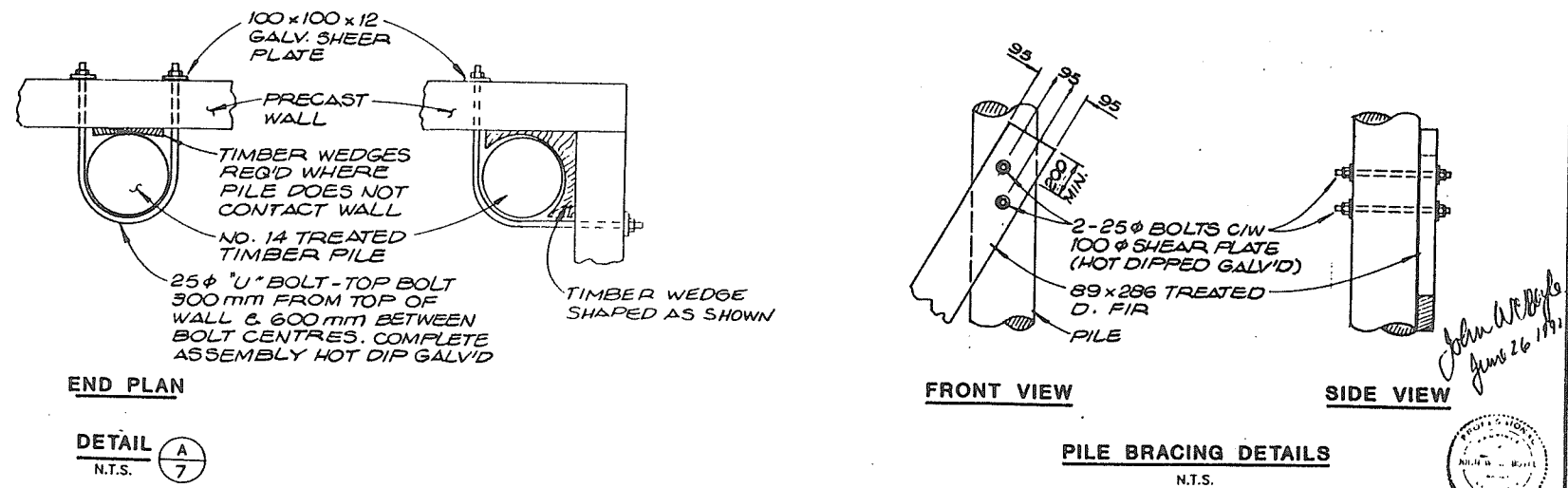
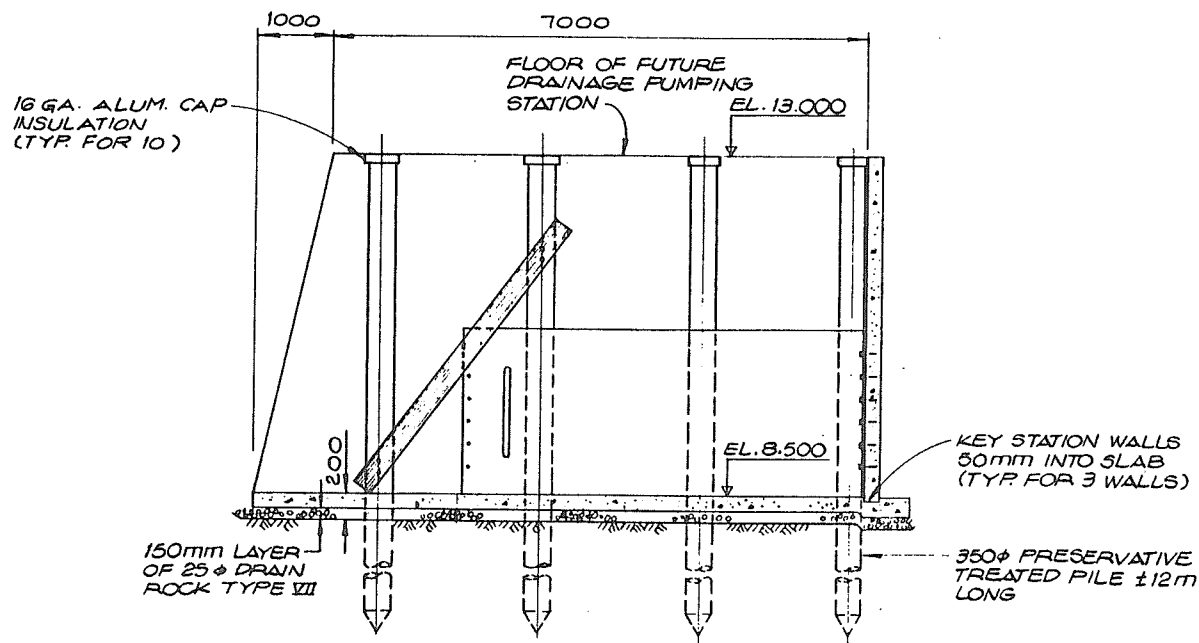
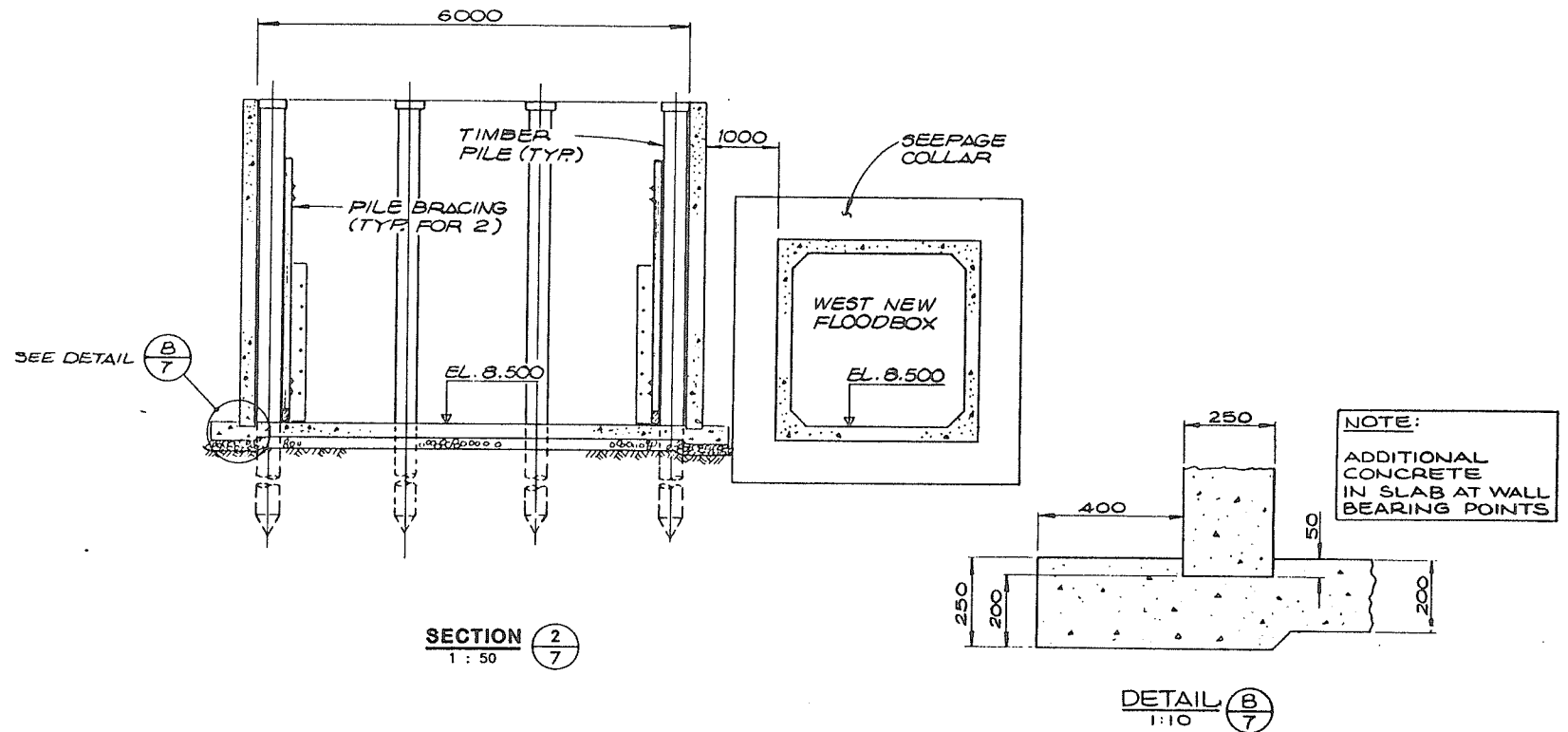
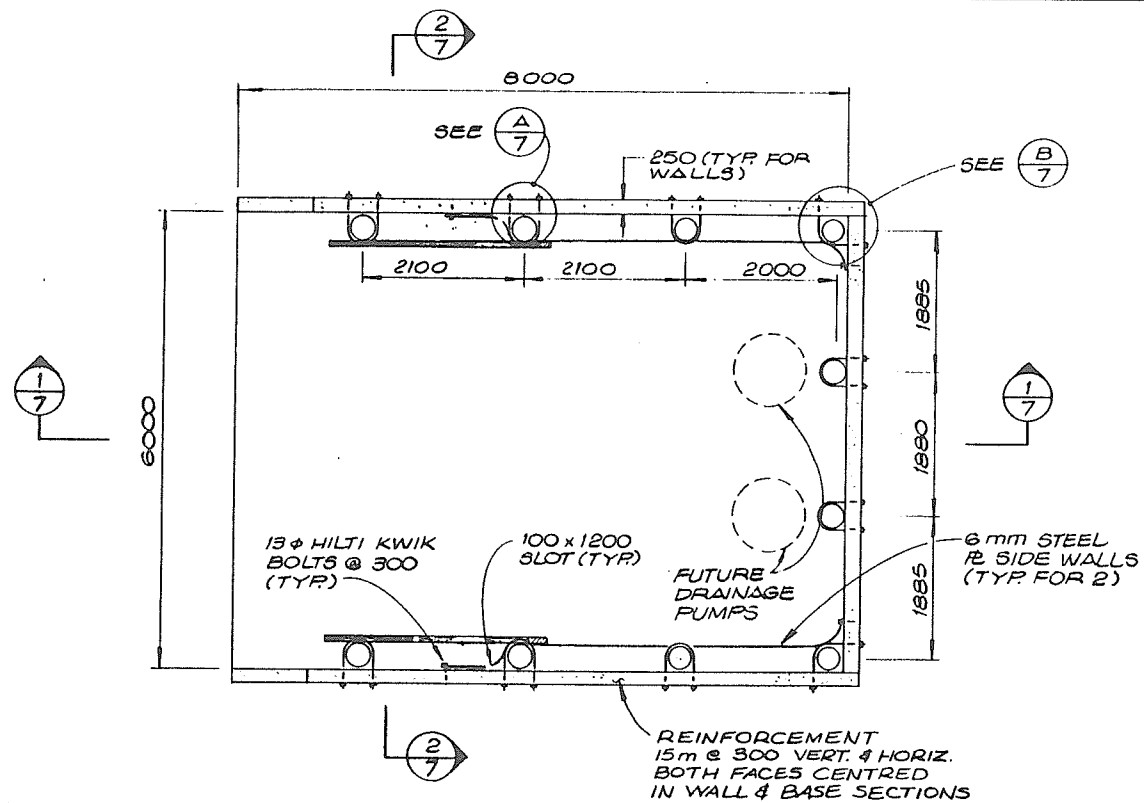
RECOMMENDED BY: *W. H. P. Porter*
DATE: 1992-07-16

APPROVED BY: *[Signature]*
DATE: July 16, 1992

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA-BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 5
DYKE RECONSTRUCTION
DETAILS AT HARRISON LAKE ENTRANCE
TO FLOODBOXES

FILE No. 0281550 C28	SURVEYED J.T.
DESIGNED JWCB	DATE Oct. 1990
DRAWN D.K.	SCALE AS SHOWN
DATE FEB. '92	DRAWING No. 95-3-6
CHECKED JWP	SHEET 6 of 10



THIS DRAWING REDUCED TO HALF SIZE

TYP. WALL TO PILE CONNECTIONS

REVISIONS		
No	DESCRIPTION	DATE
A	RECORD DRAWING	DEC. '92

RECOMMENDED <i>A. Cameron</i>	DATE <i>July 16, 1992</i>
RECOMMENDED <i>W. H. P. P.</i>	DATE <i>1992-07-16</i>
APPROVED <i>John W. P.</i>	DATE <i>July 16, 1992</i>

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA-BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 3
DYKE CONSTRUCTION
NEW DRAINAGE PUMPING STATION DETAILS

DAYTON & KNIGHT LTD. CONSULTING ENGINEERS <i>Shulter</i>		DWG. No. 196-13-2
FILE No. 028150-C28	DESIGNED J.W.C.B.	SURVEYED J.T.
DRAWN V.B.	DATE FEB. '92	DATE OCT. '90
CHECKED J.W.B.	SCALE AS SHOWN	DRAWING No. 95-3-7
		SHEET 7 of 10

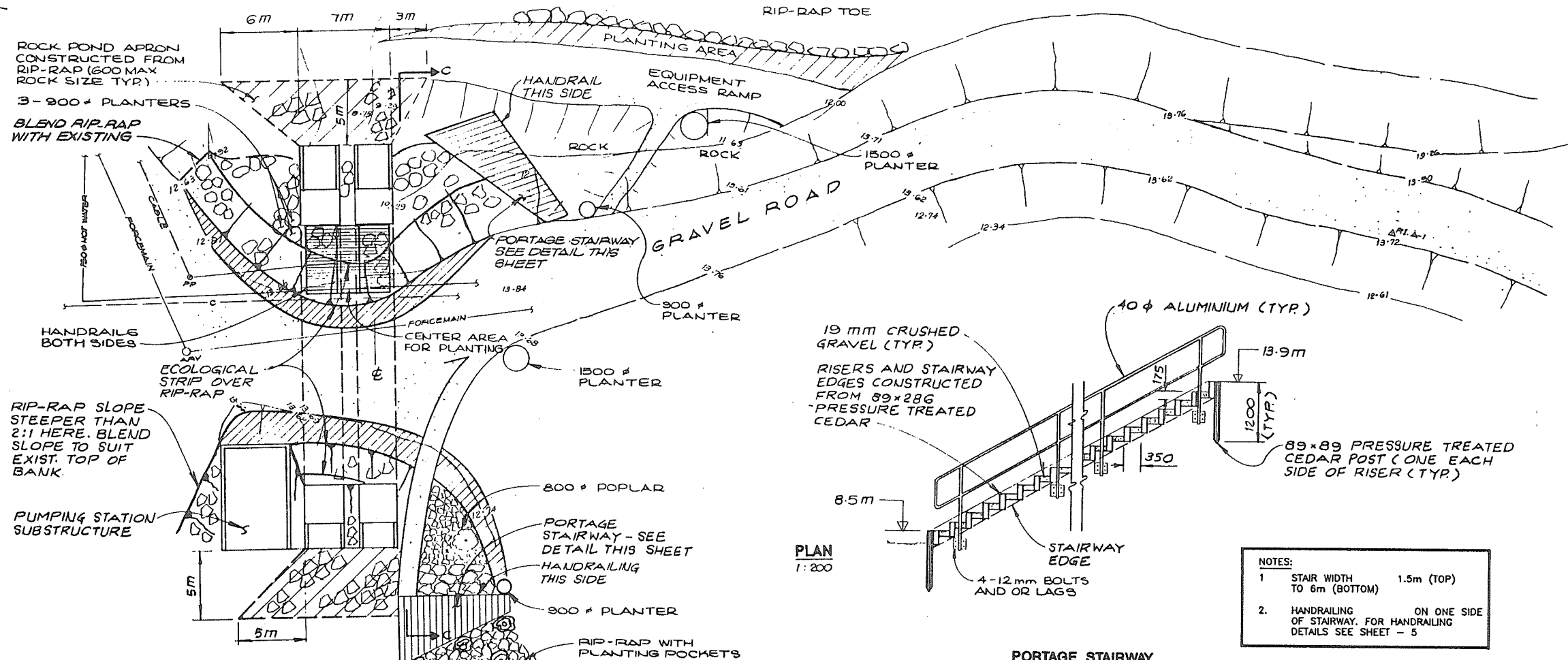
384 014

John W. P.
June 26, 1992

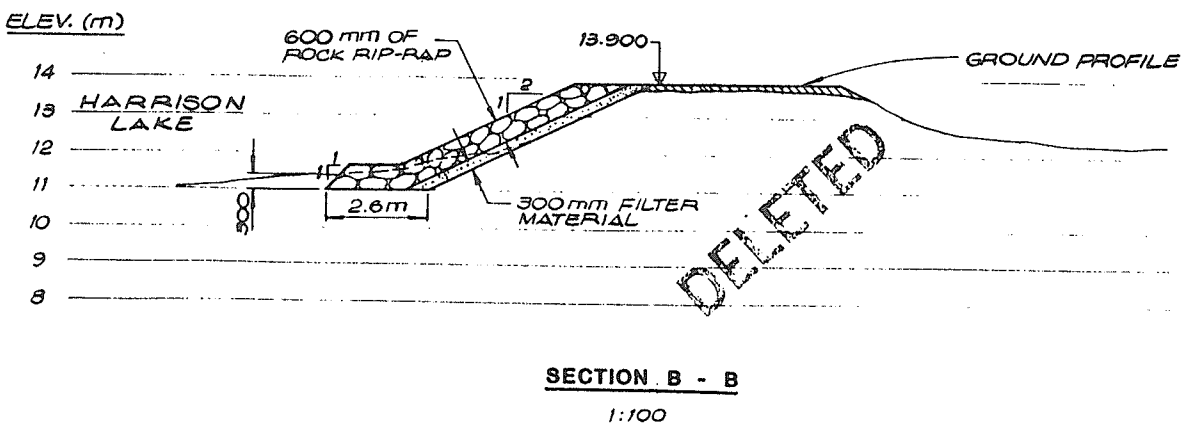
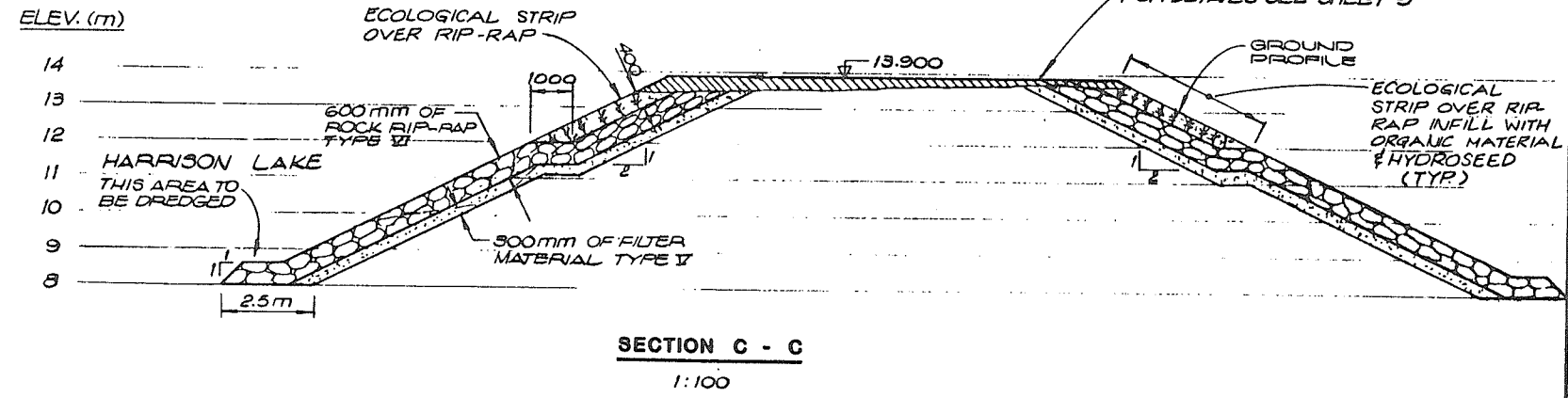
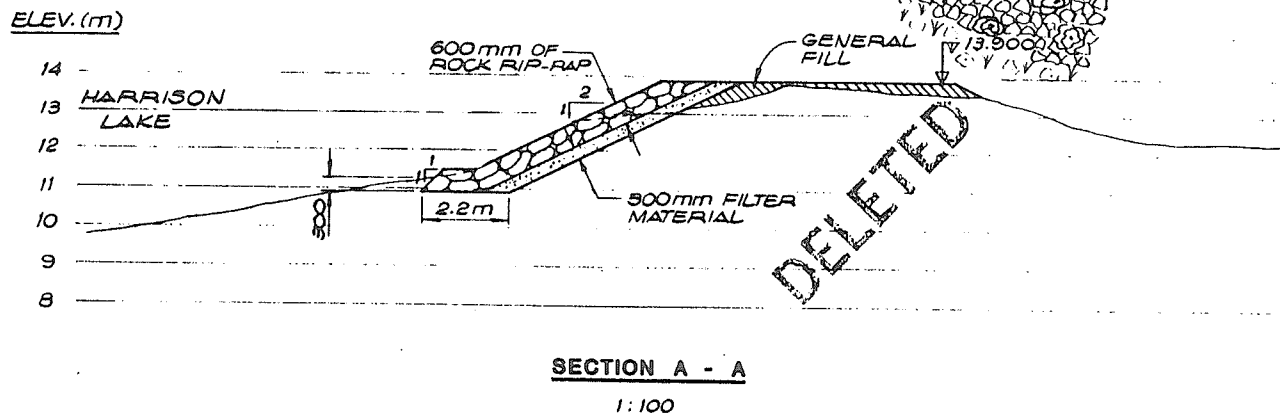




HARRISON LAKE



- NOTES:
1. STAIR WIDTH 1.5m (TOP) TO 6m (BOTTOM)
 2. HANDRAILING ON ONE SIDE OF STAIRWAY. FOR HANDRAILING DETAILS SEE SHEET - 5



REVISIONS		
No	DESCRIPTION	DATE
A	RECORD DRAWING	DEC '93

RECOMMENDED <i>P. Cameron</i>	DATE <i>July 16, 1992</i>
RECOMMENDED <i>John White</i>	DATE <i>1992-07-16</i>
APPROVED <i>John White</i>	DATE <i>July 16, 1992</i>

Province of British Columbia
 Ministry of Environment
 WATER MANAGEMENT BRANCH
 CANADA - BRITISH COLUMBIA
 FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
 PROJECT No. 9, CONTRACT No. 9
 DYKE CONSTRUCTION
 RIP-RAP AND STAIRWAY DETAILS

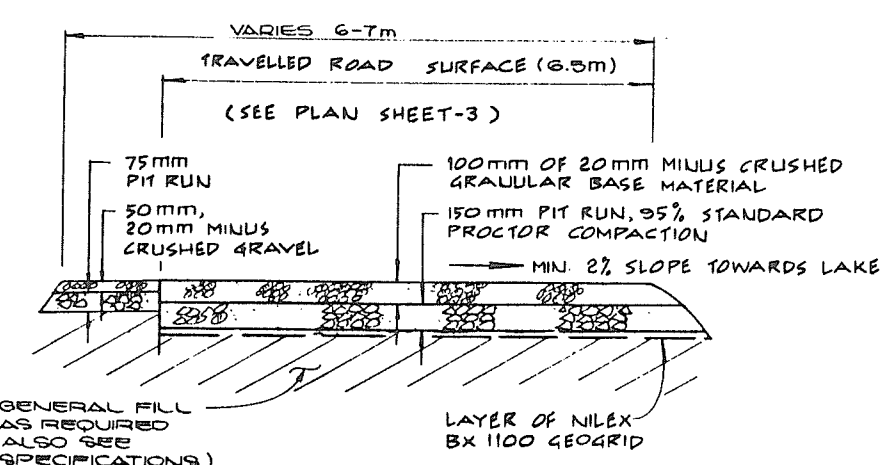
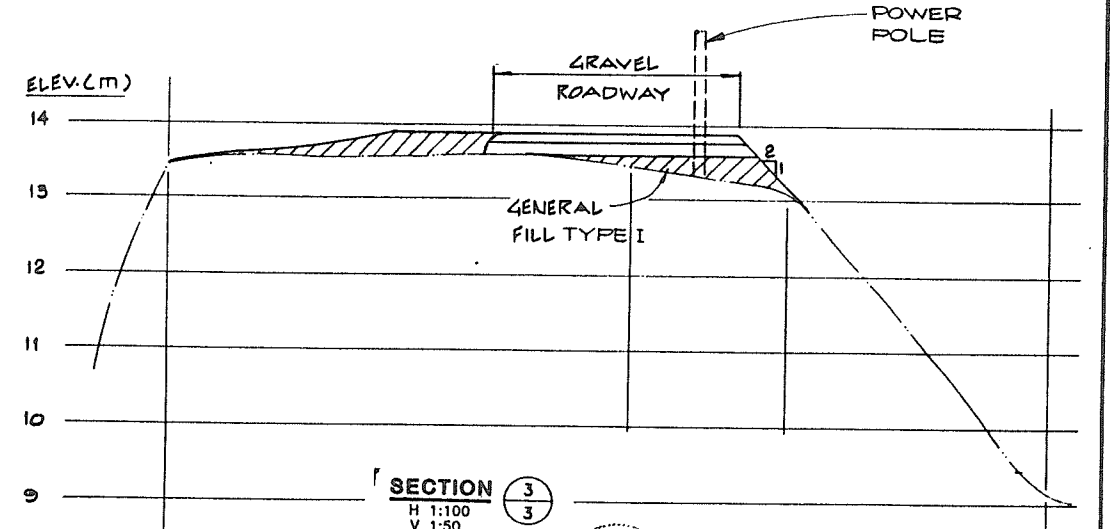
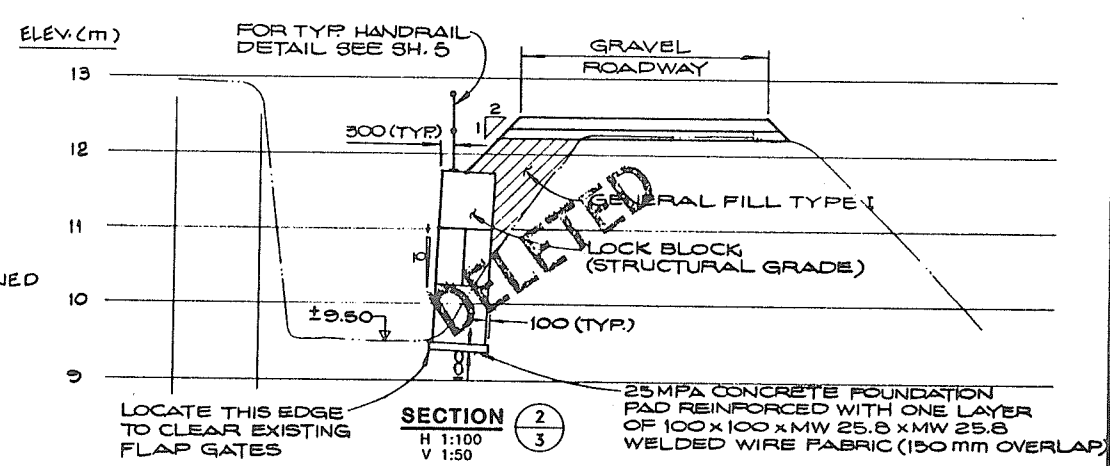
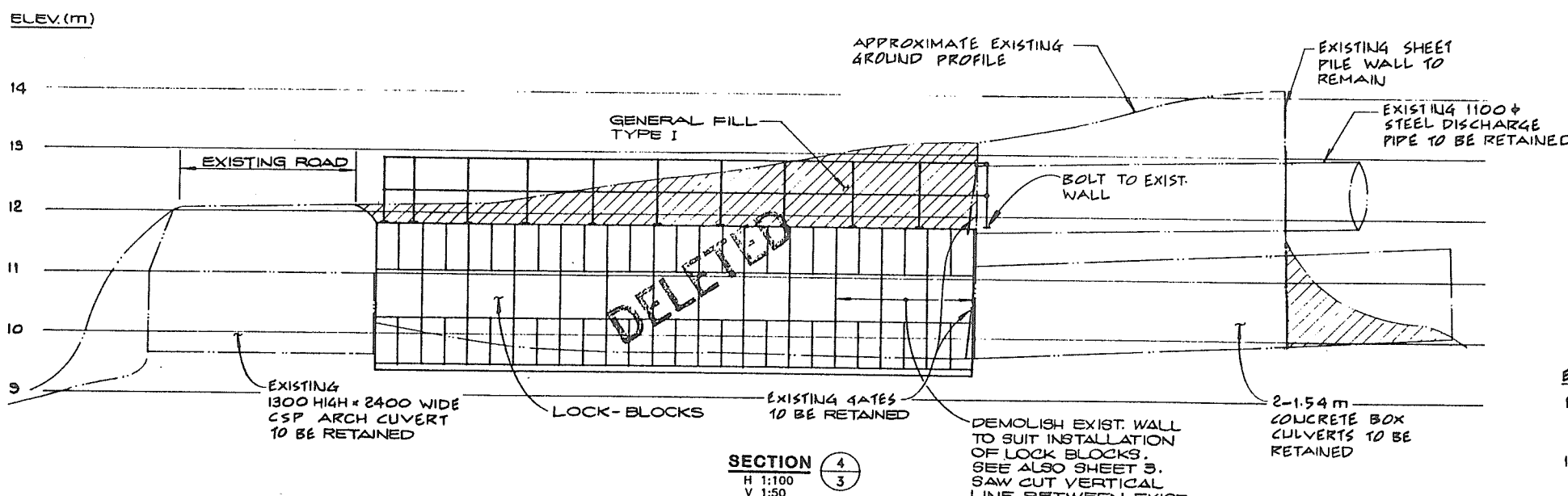
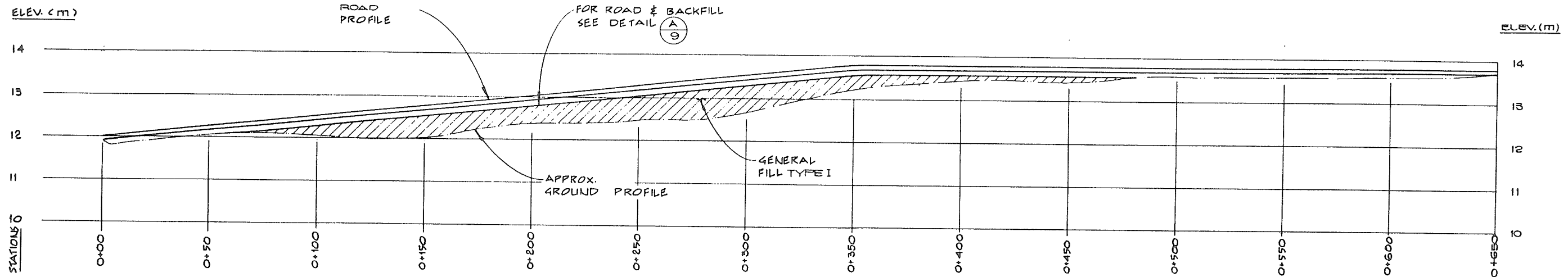
DAYTON & KNIGHT LTD.
 CONSULTING ENGINEERS
Shulman

384 015

DWG. No. 196-13-2

FILE No. <i>0291550-C28</i>	SURVEYED <i>J.T.</i>
DESIGNED <i>L.C.</i>	DATE <i>OCT. '90</i>
DRAWN <i>VB/D.K.</i>	SCALE <i>AS SHOWN</i>
DATE <i>FEB. '92</i>	DRAWING No. <i>95-3-8</i>
CHECKED <i>JWF</i>	SHEET <i>8</i> of <i>10</i>

John White
 June 26 1992



REVISIONS		
No.	DESCRIPTION	DATE
A	RECORD DRAWING	OCT. '92

RECOMMENDED *R. Cameron*
DATE *July 16, 1992*

RECOMMENDED *[Signature]*
DATE *1992-07-16*

APPROVED *[Signature]*
DATE *July 16, 1992*

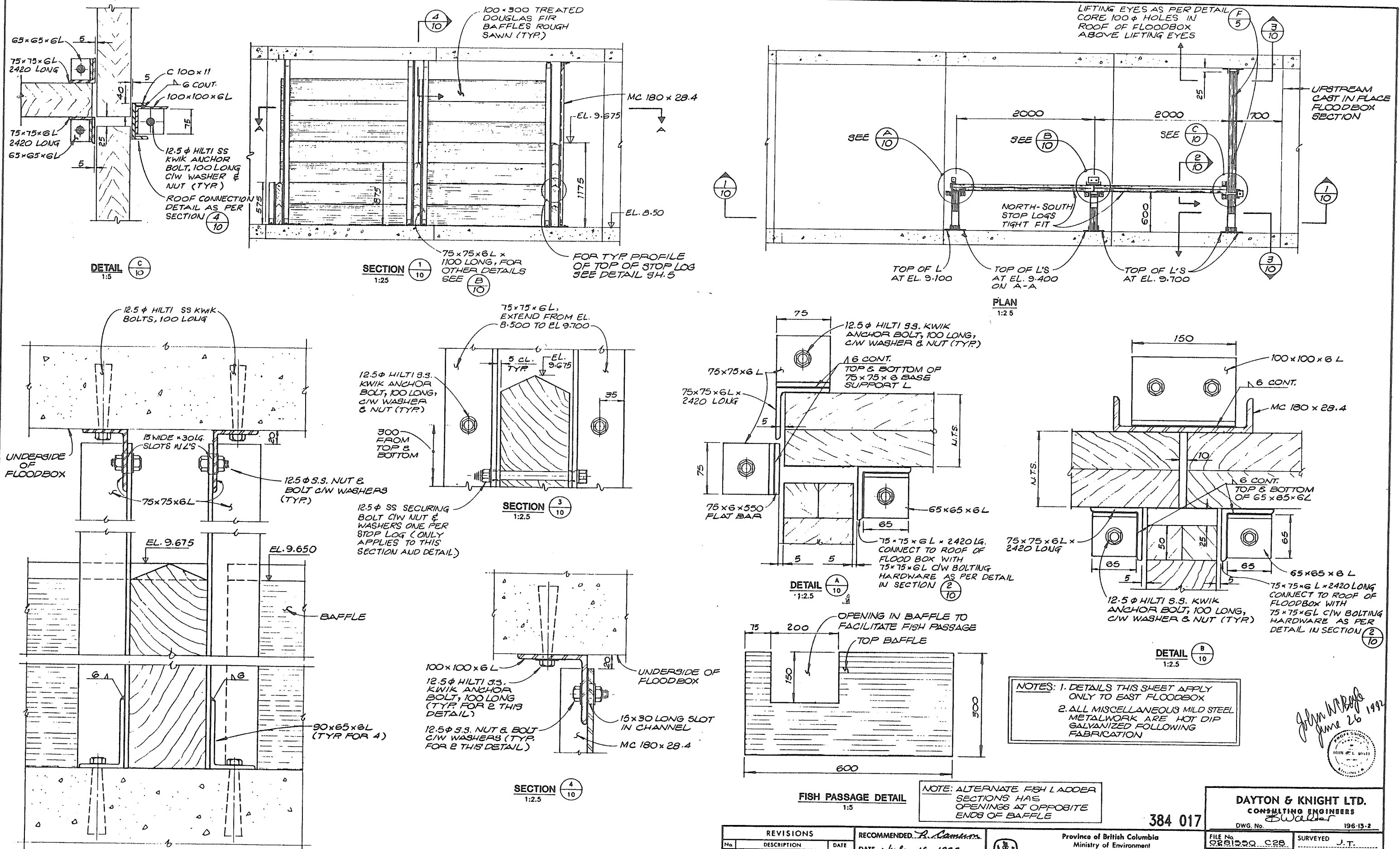
Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 3
DYKE CONSTRUCTION
TYPICAL SECTIONS

FILE No. 0291550 C28
DESIGNED J.W.C.B.
DRAWN D.K.
DATE FEB '92
CHECKED *[Signature]*

SURVEYED J.T.
DATE OCT. '90
SCALE AS SHOWN
DRAWING No. 95-3-9
SHEET 9 of 10

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
DWG. No. 196-13-2



THIS DRAWING REDUCED TO HALF SIZE

John W. R. [Signature]
June 26, 1992

REVISIONS		
No.	DESCRIPTION	DATE
1	RECORD DRAWING	OCT. '93

RECOMMENDED: *R. [Signature]*
DATE: July 16, 1992

RECOMMENDED: *[Signature]*
DATE: 1992-07-16

APPROVED: *[Signature]*
DATE: July 16, 1992

Province of British Columbia
Ministry of Environment
WATER MANAGEMENT BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT

HARRISON HOT SPRINGS
PROJECT No. 9, CONTRACT No. 8
DYKE CONSTRUCTION
FISH LADDER DETAILS

DAYTON & KNIGHT LTD.
CONSULTING ENGINEERS
DWG. No. 384 017
196-13-2

FILE No. 0201500-028
DESIGNED: JWCB
DRAWN: VB
DATE: FEB '92
CHECKED: JWB

SURVEYED: J.T.
DATE: OCT. '90
SCALE: AS SHOWN
DRAWING No. 95-3-10
SHEET 10 of 10