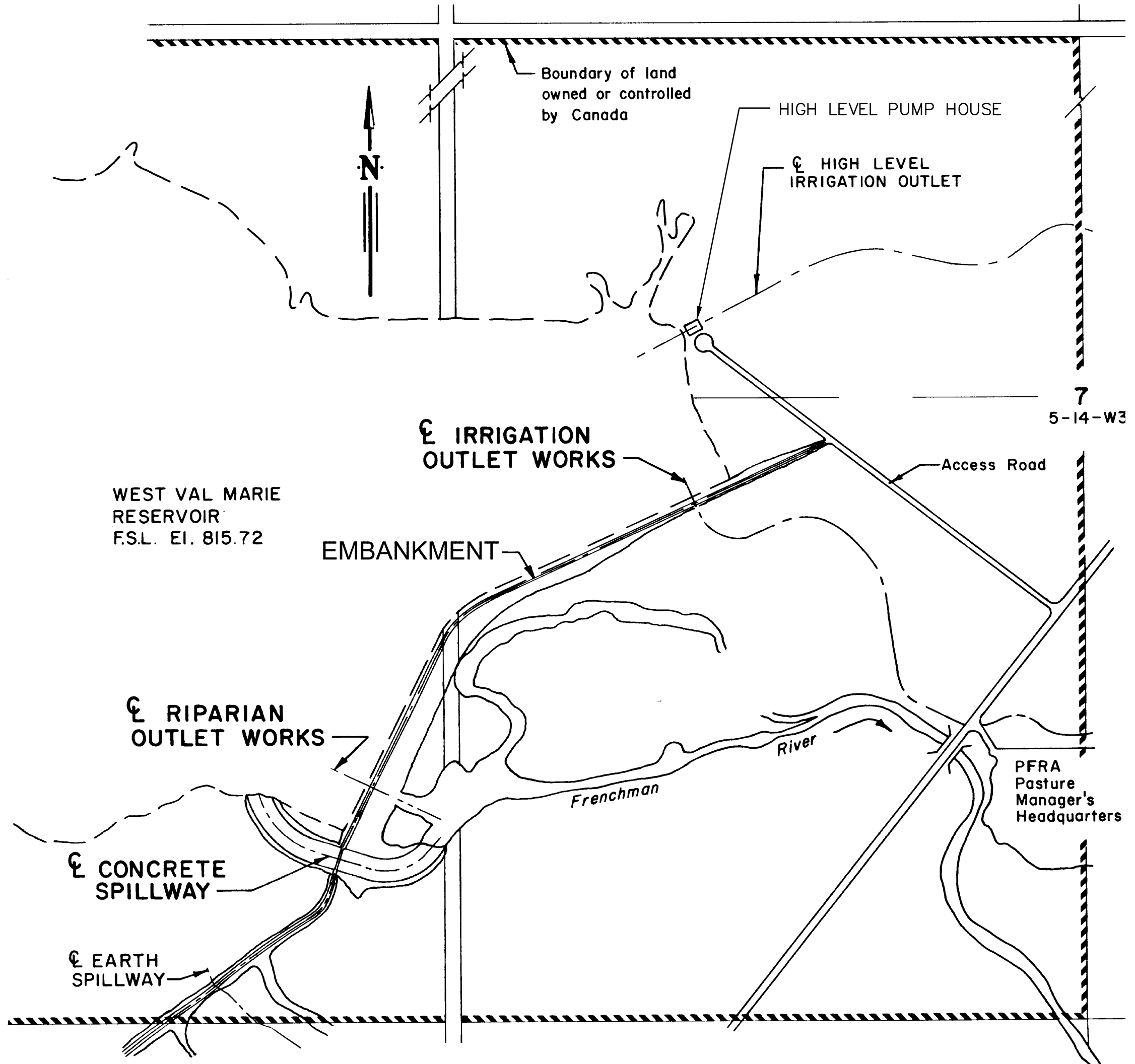
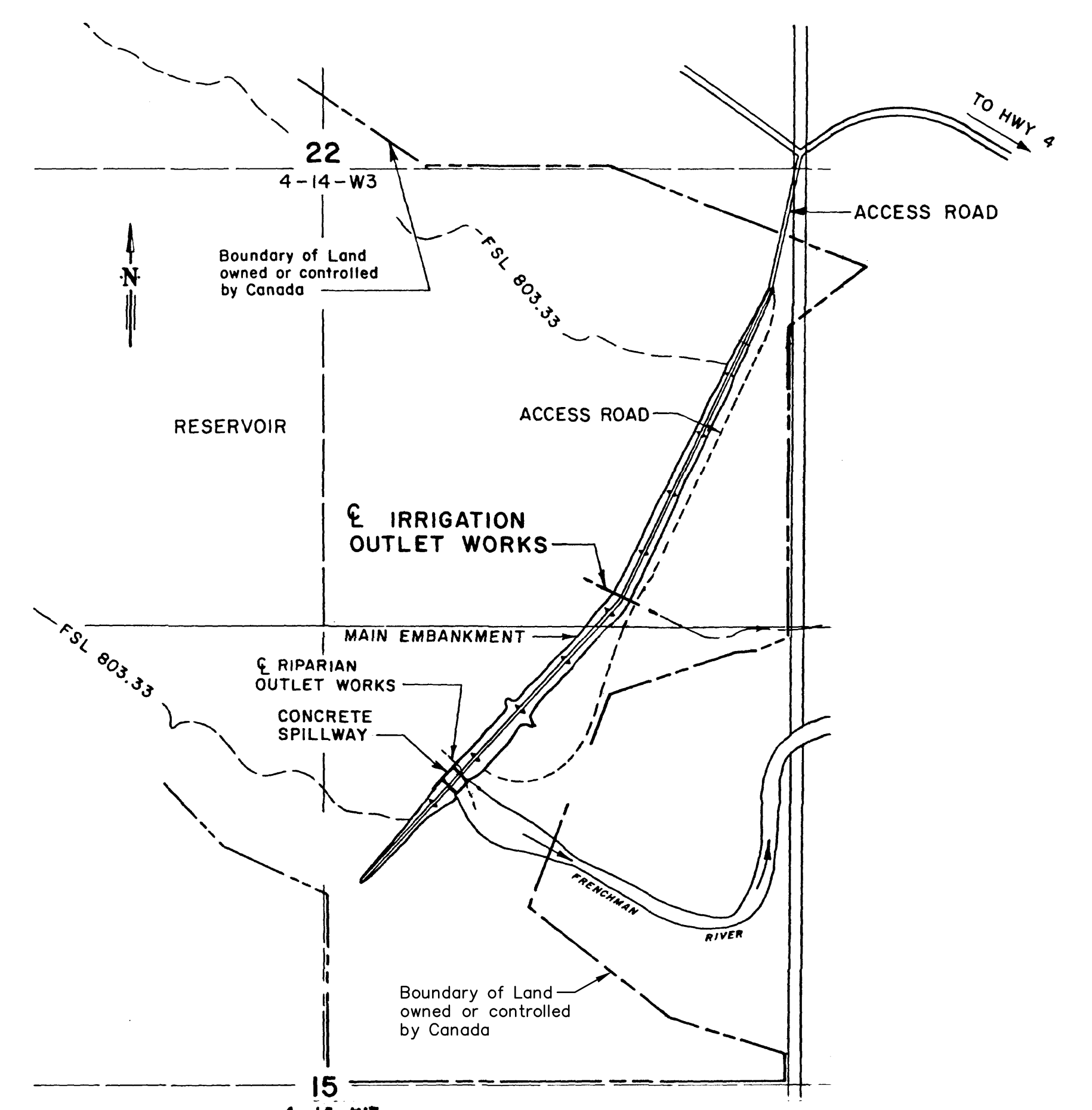
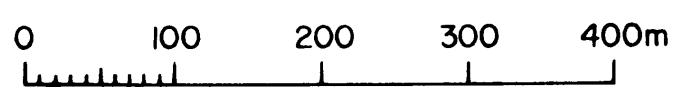


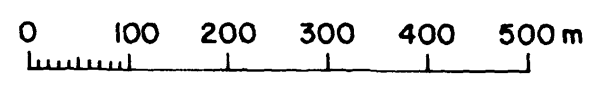
VICINITY MAP
SCALE 0 5 10 km



WEST VAL MARIE DAM
SITE PLAN



VAL MARIE DAM
SITE PLAN



ALL DIMENSION, STATIONING AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

Mark	Grid Ref.	Nature of Revision	Date	Eng.	Draft.

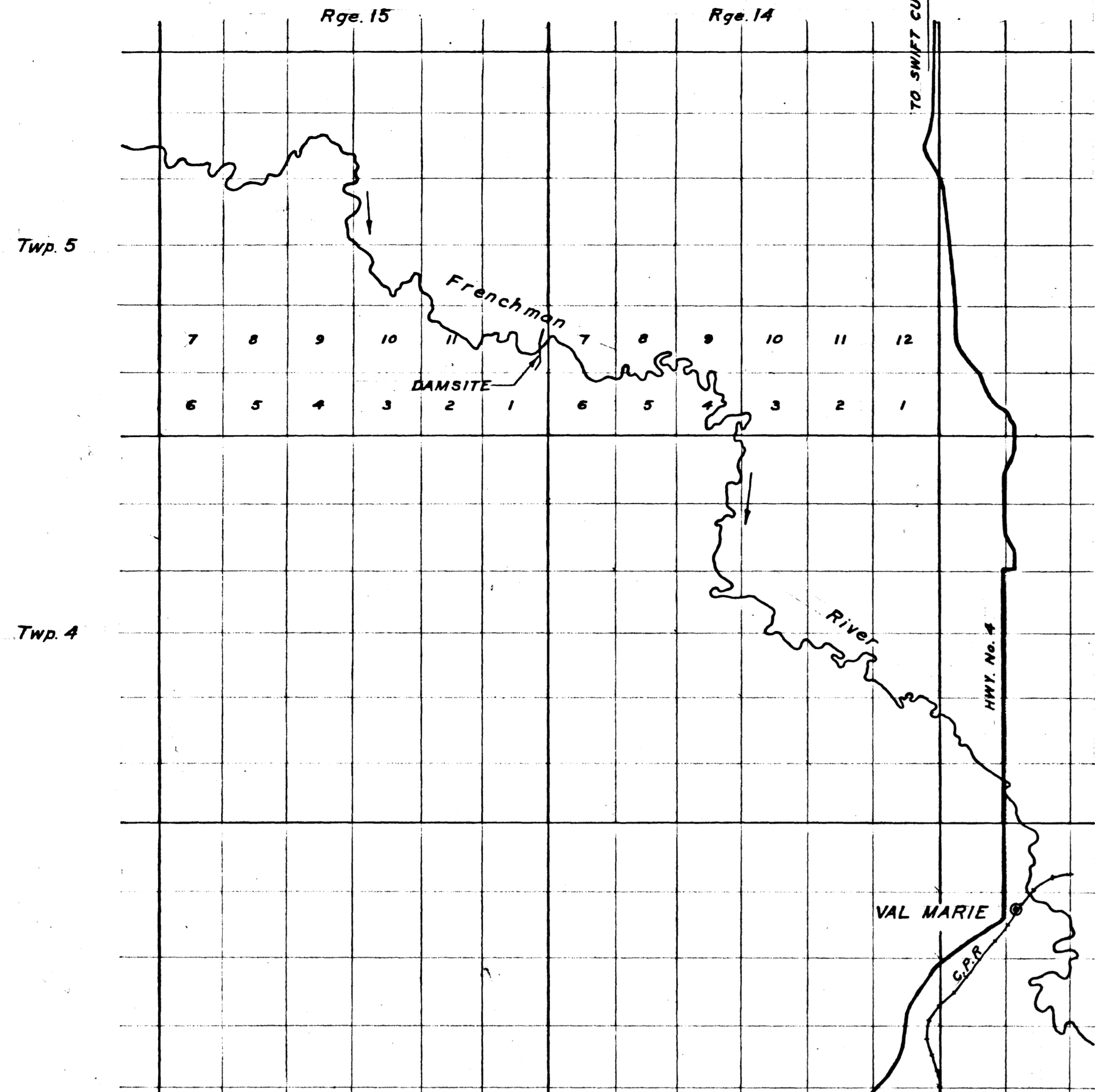
Designed	WC	Approved	<i>Wayne Carbon</i>
Drawn	RM	Position Title	Manager Dam Safety Unit
Checked	WC	Date	May 26, 2010

AESB - DGSA
 Agri-Environment Services Branch
 Direction générale des services agroenvironnementaux

Canada

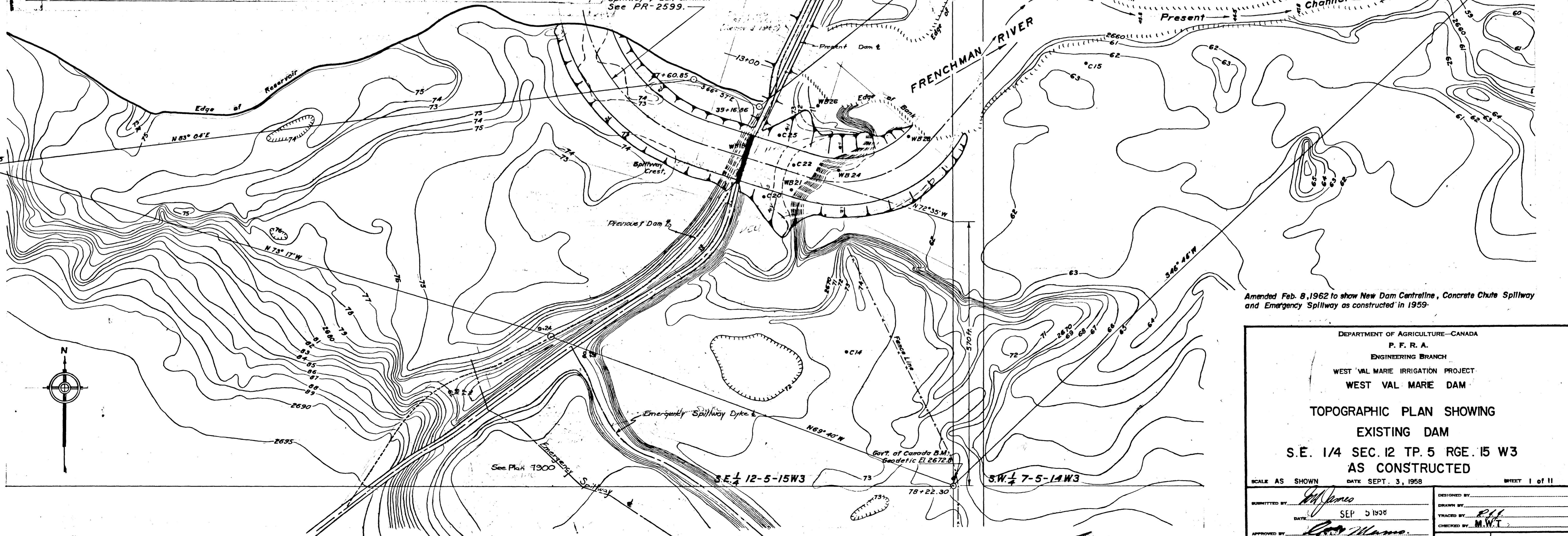
SAFETY HANDRAIL PROJECT
 CONTRACT 3 - HANDRAIL INSTALLATION
**VICINITY MAP AND SITE PLANS
 FOR VAL MARIE AND WEST VAL MARIE DAMS**

Scale As Shown Date May 2010 Sheet 3 of 9 208363



LOCATION MAP
Scale: 1" = 1 1/2 Miles

Approach Channel,
Spillway & Exit Channel.
See PR-2599.



Amended Feb. 8, 1962 to show New Dam Centreline, Concrete Chute Spillway and Emergency Spillway as constructed in 1959.

DEPARTMENT OF AGRICULTURE—CANADA
P. F. R. A.
ENGINEERING BRANCH
WEST VAL MARIE IRRIGATION PROJECT
WEST VAL MARIE DAM

TOPOGRAPHIC PLAN SHOWING
EXISTING DAM
S.E. 1/4 SEC. 12 TP. 5 RGE. 15 W3
AS CONSTRUCTED

SCALE AS SHOWN DATE SEPT. 3, 1958 SHEET 1 of 11

SUBMITTED BY: <i>M. J. Manso</i>	DESIGNED BY:
DATE: SEP 5 1958	DRAWN BY:
APPROVED BY: <i>M. J. Manso</i>	CHECKED BY: <i>M. W. T.</i>
DATE: SEP 5 1958	W. VAL PRC-2598

Scale: 1" = 100' - 0"

Canada

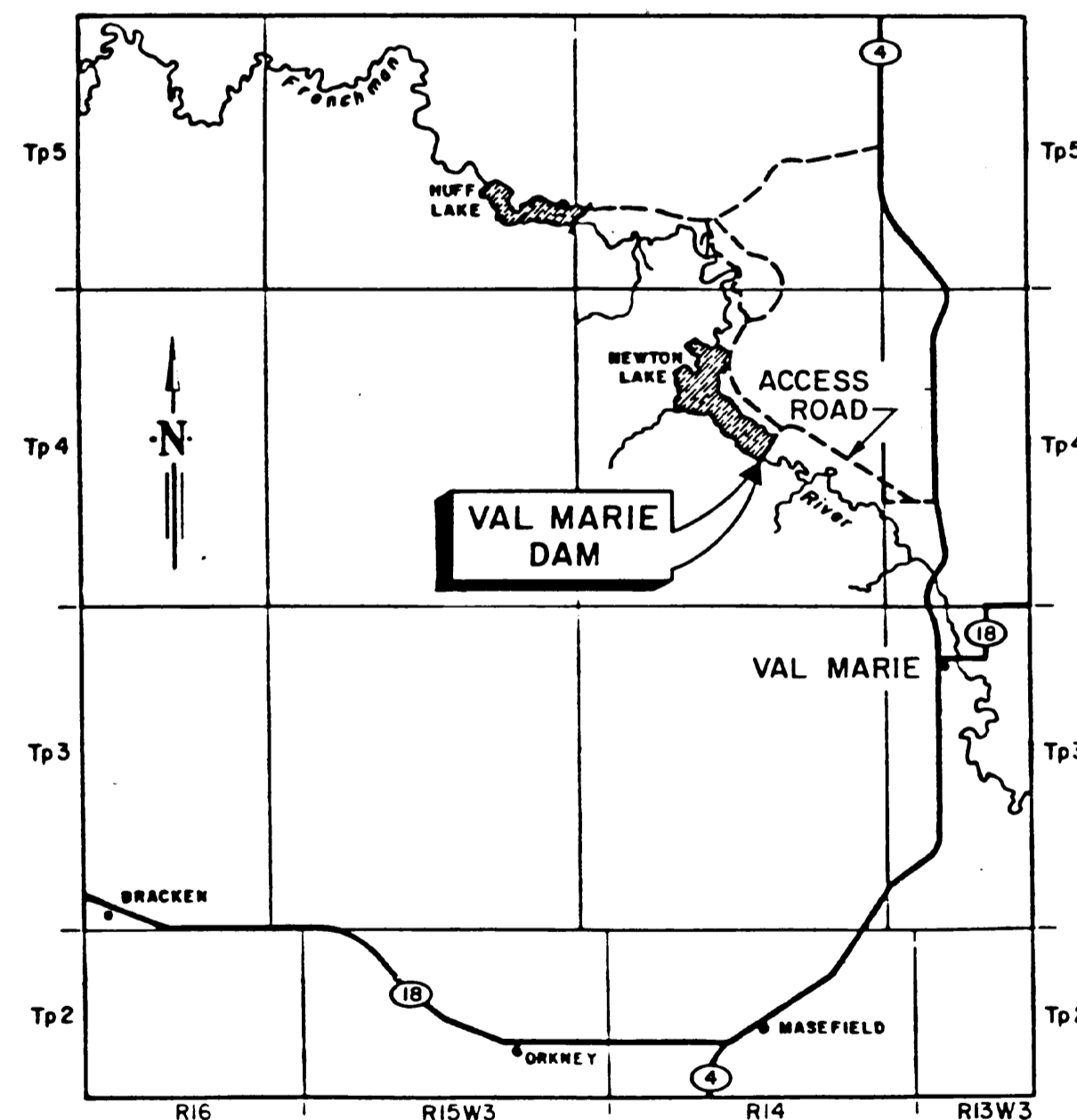
Saskatchewan

VAL MARIE DAM PROJECT

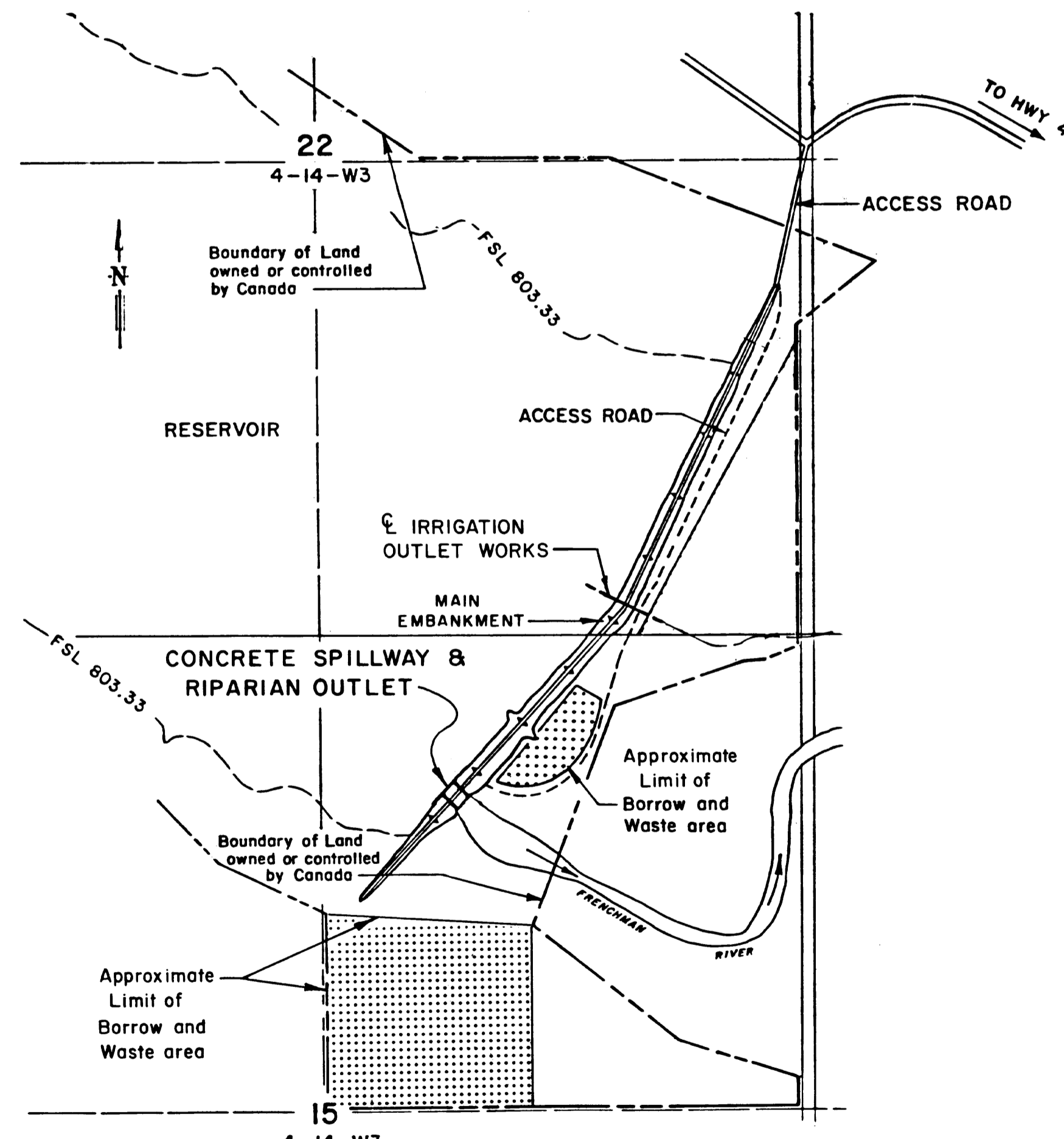
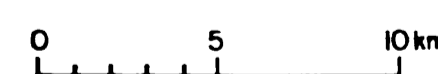
CONTRACT 2A - SPILLWAY REHABILITATION



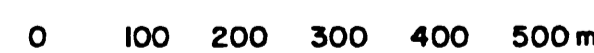
Agreement On Irrigation Based Economic Development
Entente sur le développement économique lié à l'irrigation



VICINITY MAP



SITE PLAN



DRAWING INDEX

SHEET NO.	TITLE
1.	VICINITY MAP, SITE PLAN AND DRAWING INDEX
2.	EMBANKMENT AND COFFERDAM DETAILS
3.	ABUTMENT AND BREASTWALL - CONCRETE SURFACE AND CRACK REPAIRS
4.	PIER - CONCRETE SURFACE REPAIRS
5.	WINGWALL - STRUCTURAL AND REINFORCEMENT DETAILS
6.	SPILLWAY EXTENSION - EXISTING DETAILS AND DOWEL EMBEDMENT PLAN
7.	SPILLWAY EXTENSION - STRUCTURAL DETAILS - SHEET 1 OF 2
8.	SPILLWAY EXTENSION - STRUCTURAL DETAILS - SHEET 2 OF 2
9.	SPILLWAY EXTENSION - REINFORCEMENT DETAILS - SHEET 1 OF 2
10.	SPILLWAY EXTENSION - REINFORCEMENT DETAILS - SHEET 2 OF 2
11.	SPLITTER WALL - STRUCTURAL AND REINFORCEMENT DETAILS
12.	WEIR - STRUCTURAL AND REINFORCEMENT DETAILS
13.	BREASTWALL GATES - METALWORK DETAILS - SHEET 1 OF 2
14.	BREASTWALL GATES - METALWORK DETAILS - SHEET 2 OF 2
15.	RIPARIAN STEM ALTERATION DETAILS
16.	METALWORK DETAILS

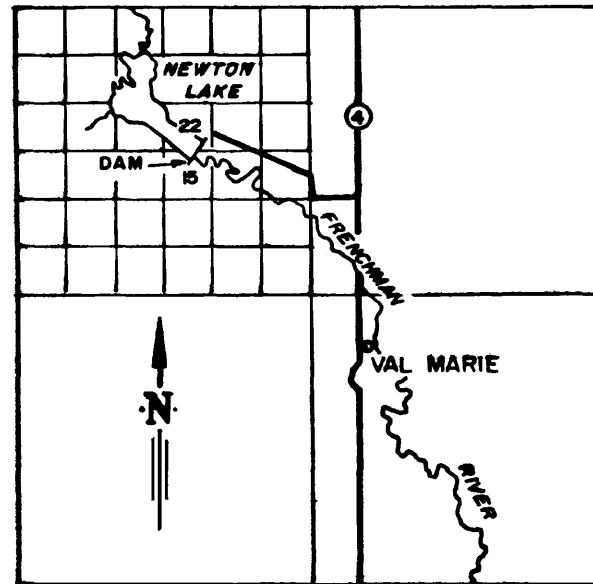
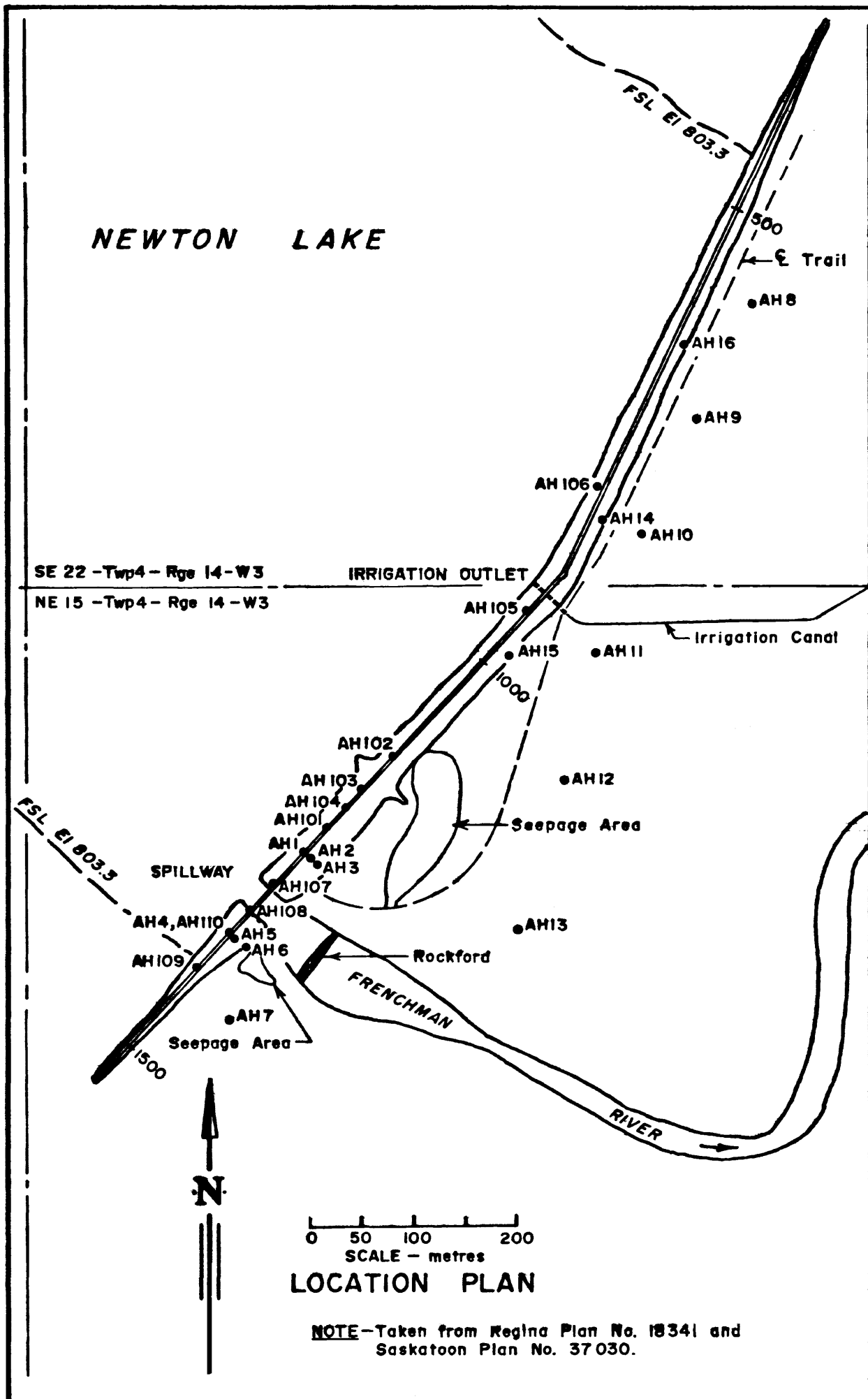
ALL DIMENSIONS, STATIONING AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE SHOWN

Mark	Grid Ref.	Nature of Revision	Date	Eng. By Whom

Designed <i>David Probst</i>	Submitted <i>Ed Jankovic</i>
Drawn <i>John Knapton</i>	Date 90-08-03
Checked <i>[Signature]</i>	Approved <i>[Signature]</i>
	Date 3/28/90

Agriculture Canada
Prairie Farm Rehabilitation Administration / Administration des Prairies
Engineering Service

AS CONSTRUCTED	Submitted By _____	Date _____
VAL MARIE DAM PROJECT		
CONTRACT 2A - SPILLWAY REHABILITATION		
VICINITY MAP, SITE PLAN AND DRAWING INDEX		
Scale AS SHOWN	Date AUG/90	Sheet 1 of 16 C116110



NOTE - All plans of the Val Marie Irrigation Project Works are on the datum of Topographic Survey B.M. No. 28 (89.6 metres West of NE32-2-13-W3, El 847.48), which is the same as the datum of Reclamation Service B.M. 1315, used in the original construction of the Val Marie Project.

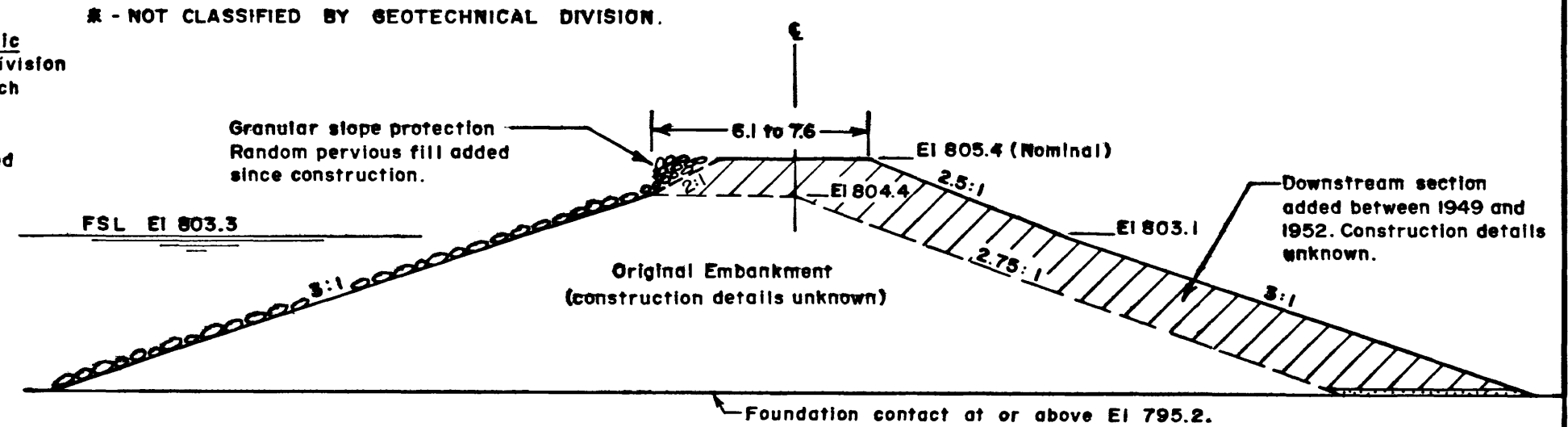
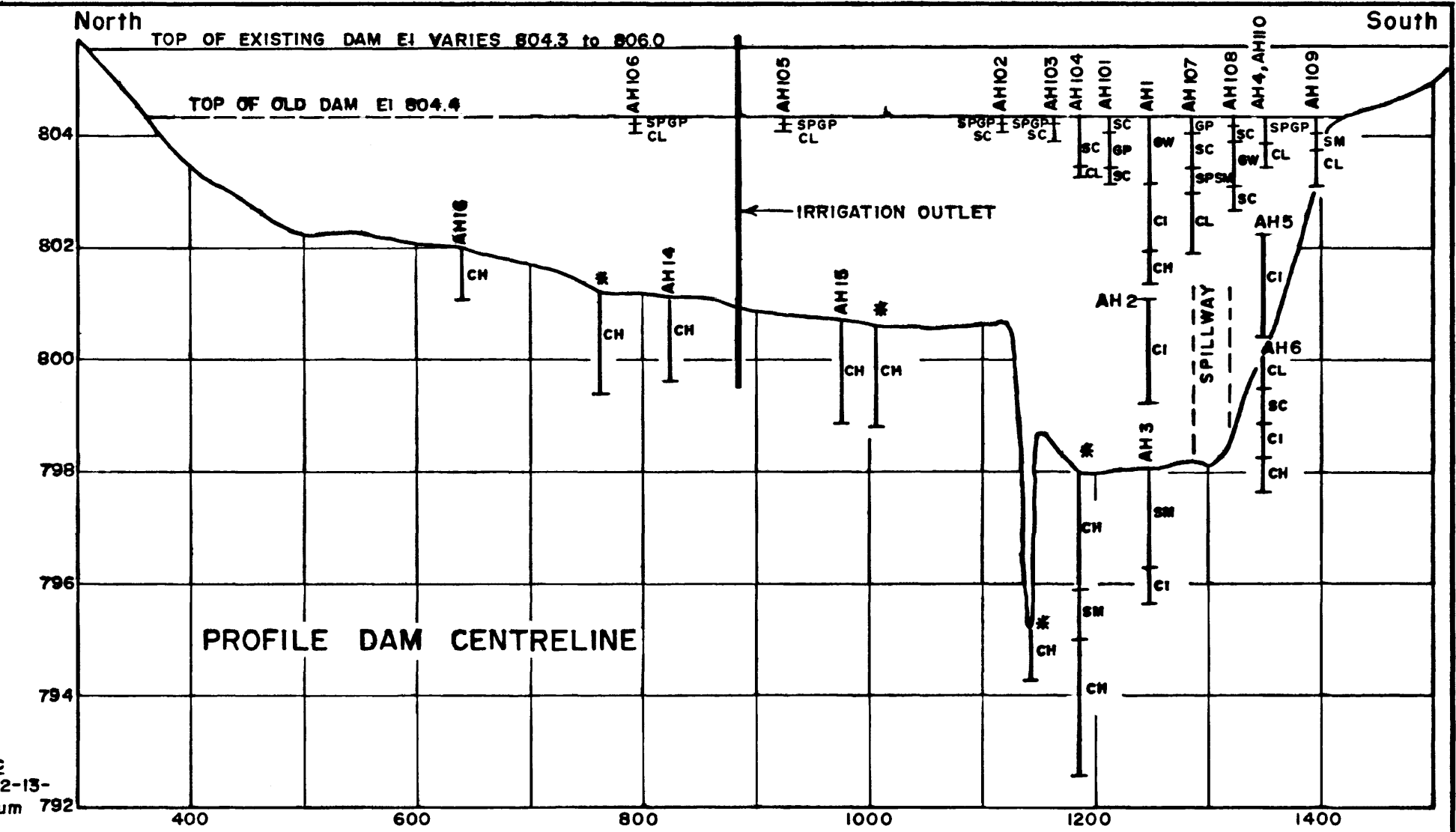
- This plan uses the datum of Topographic Survey B.M. No. 28, previous plans from this division have used Topographic Survey B.M. No. 78, which gives Topographic Elevation 0.15 metres lower.

- Stationing taken from Saskatoon Plan No. 37030. Does not agree with stationing used on Swift Current Office Plans.

LEGEND

Note - All symbols shown may not appear on plan

Topsoil or no sample	ML Inorganic silts
Pt Peat, muskeg	CL Inorganic clays, low plasticity
GW Well-graded gravels	OL Organic silts, low plasticity
GP Poorly graded gravels	CI Inorganic clays, medium plasticity
GM Silty gravels	MH Inorganic silts
GC Clayey gravels	CH Inorganic clays, high plasticity
SW Well-graded sands	OH Organic clays, high plasticity
SP Poorly-graded sands	Shale
SM Silty sands	Sandstone
SC Clayey sands	Siltstone



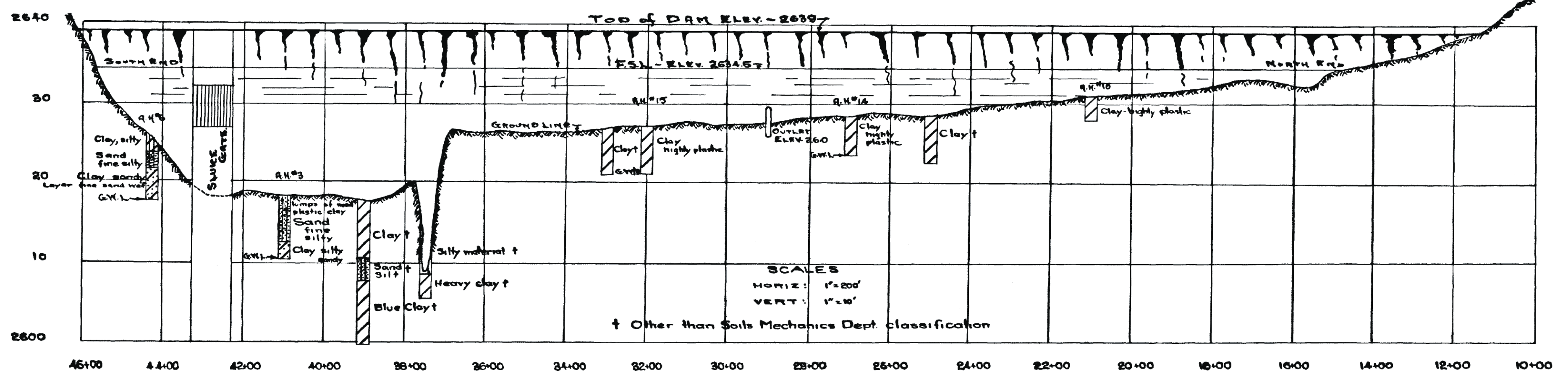
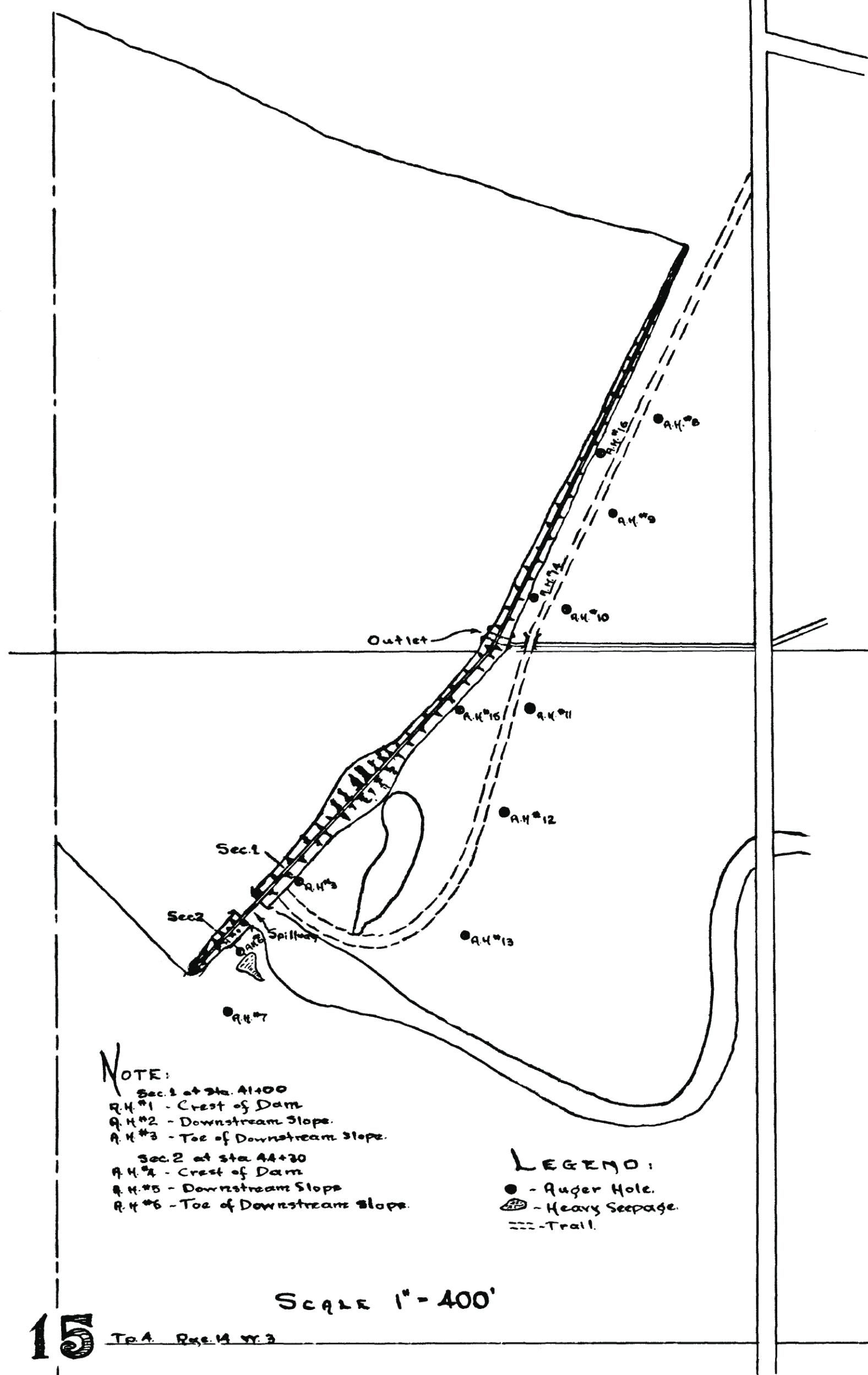
VAL MARIE

LOCATION PLAN, PROFILE AND TYPICAL CROSS-SECTION

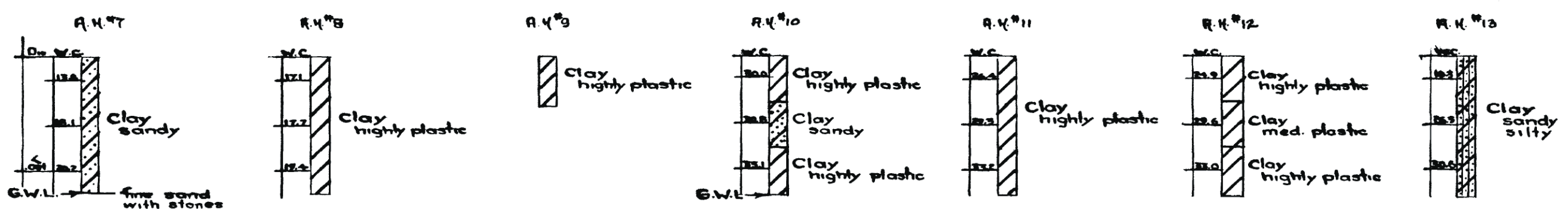
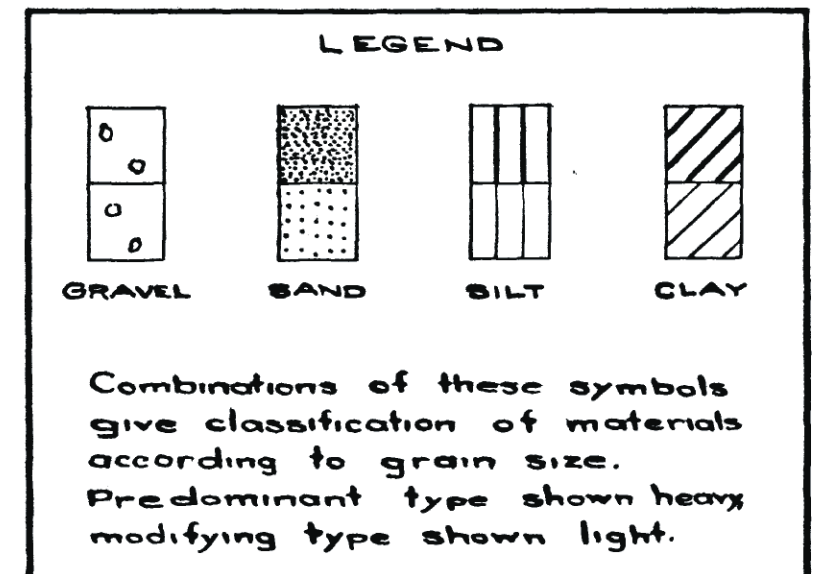
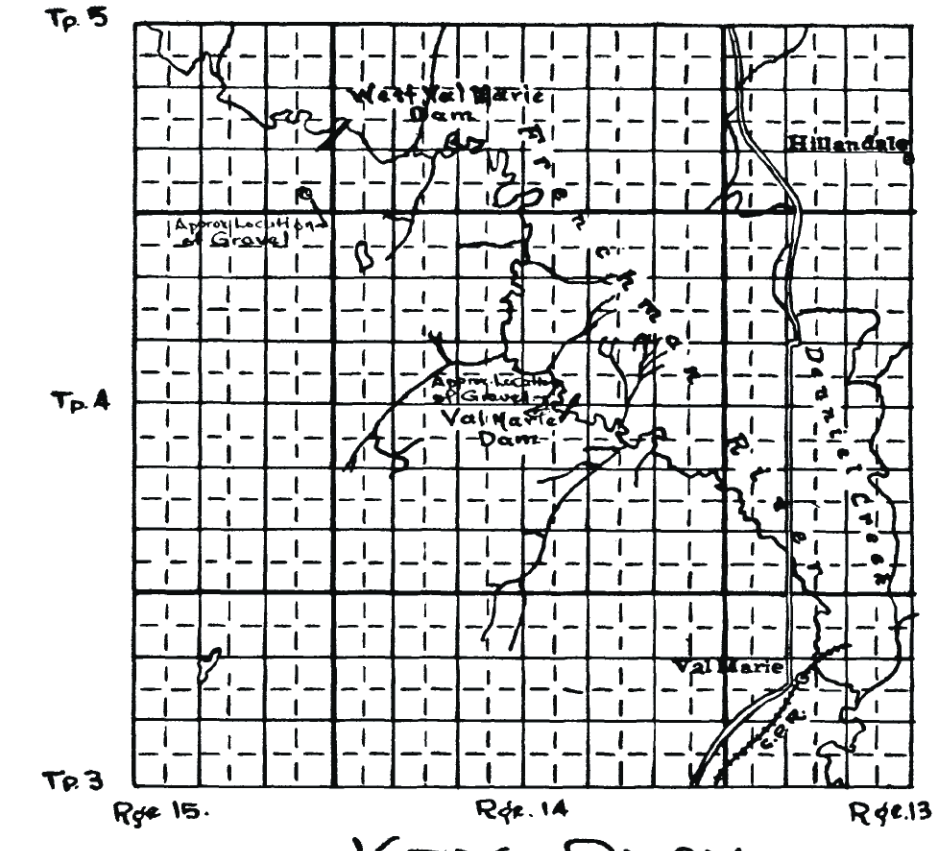
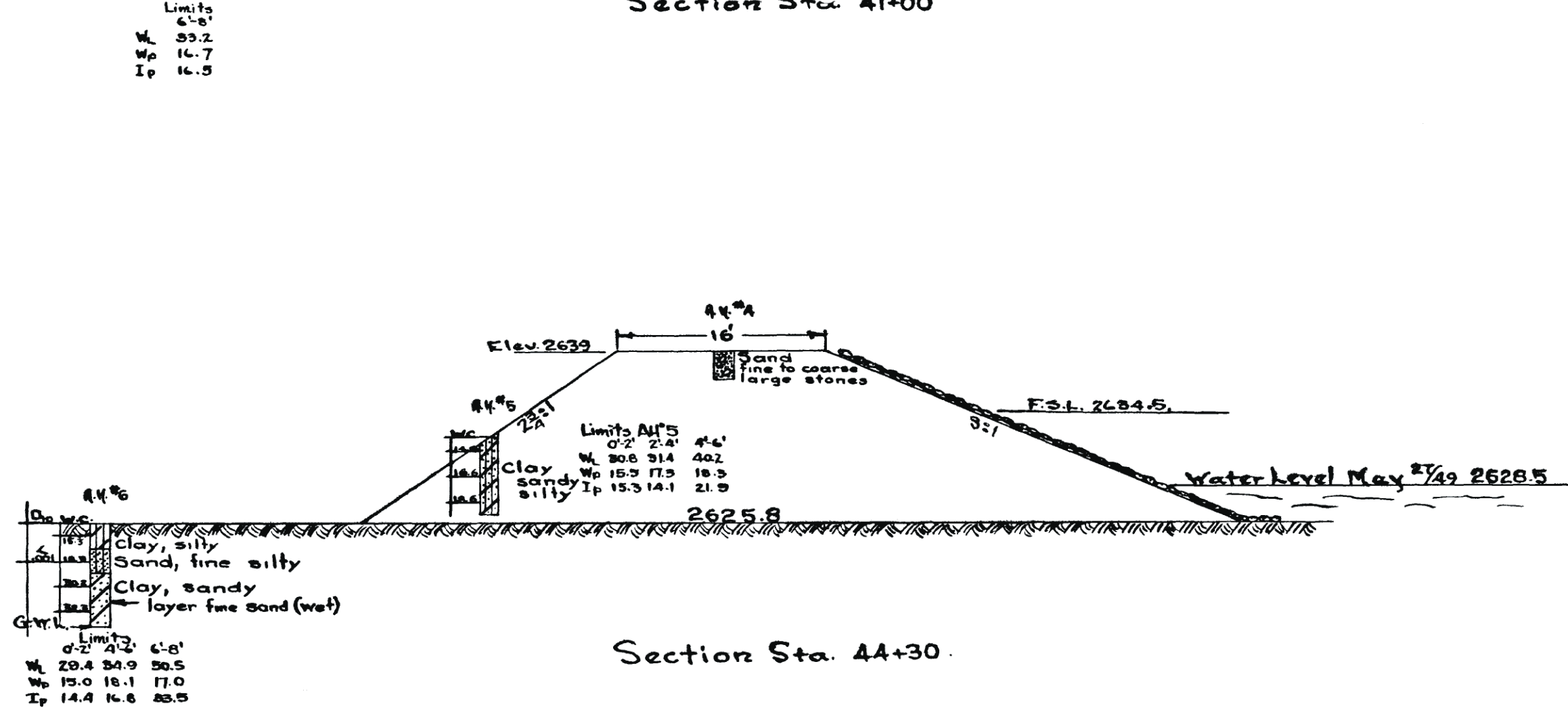
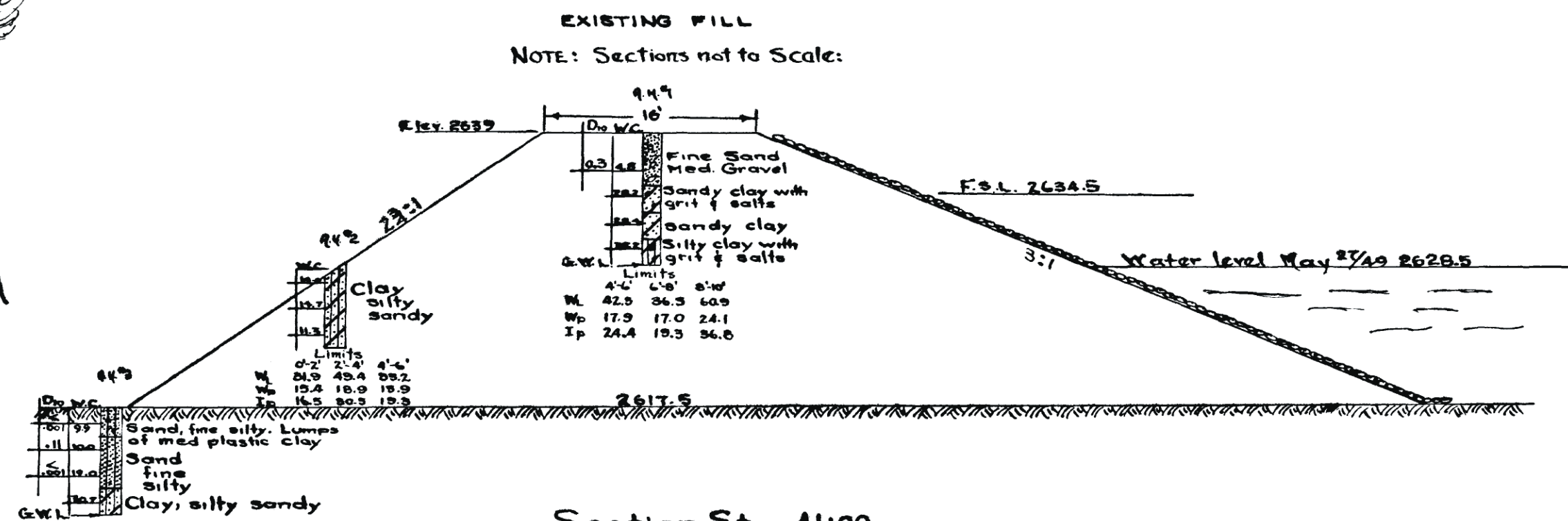
SCALE AS SHOWN DATE APRIL 1986 SHEET OF 102726 C

DESIGNED WS DRAWN CHECKED	SUBMITTED DATE 86-04	Agriculture Canada Prairie Farm Rehabilitation Administration Administration de Rétablissement agricole des Prairies
APPROVED DATE	DIRECTOR, ENG. SERVICE	ENGINEERING SERVICE

Rev. C - May 1988
Rev. B - Jan. 1988
Rev. A - Jan. 1987



CROSS SECTIONS



DEPARTMENT OF AGRICULTURE - CANADA
 P. F. R. A.
 WATER DEVELOPMENT BRANCH
 VAL MARIE
 SE 1/4 - Sec 22 - Tp. 4 - R. 14 - W. 3rd

TOPOGRAPHY-CROSS SECTIONS & PROFILE
 SHOWING
LOCATION & LOGS OF TEST HOLES

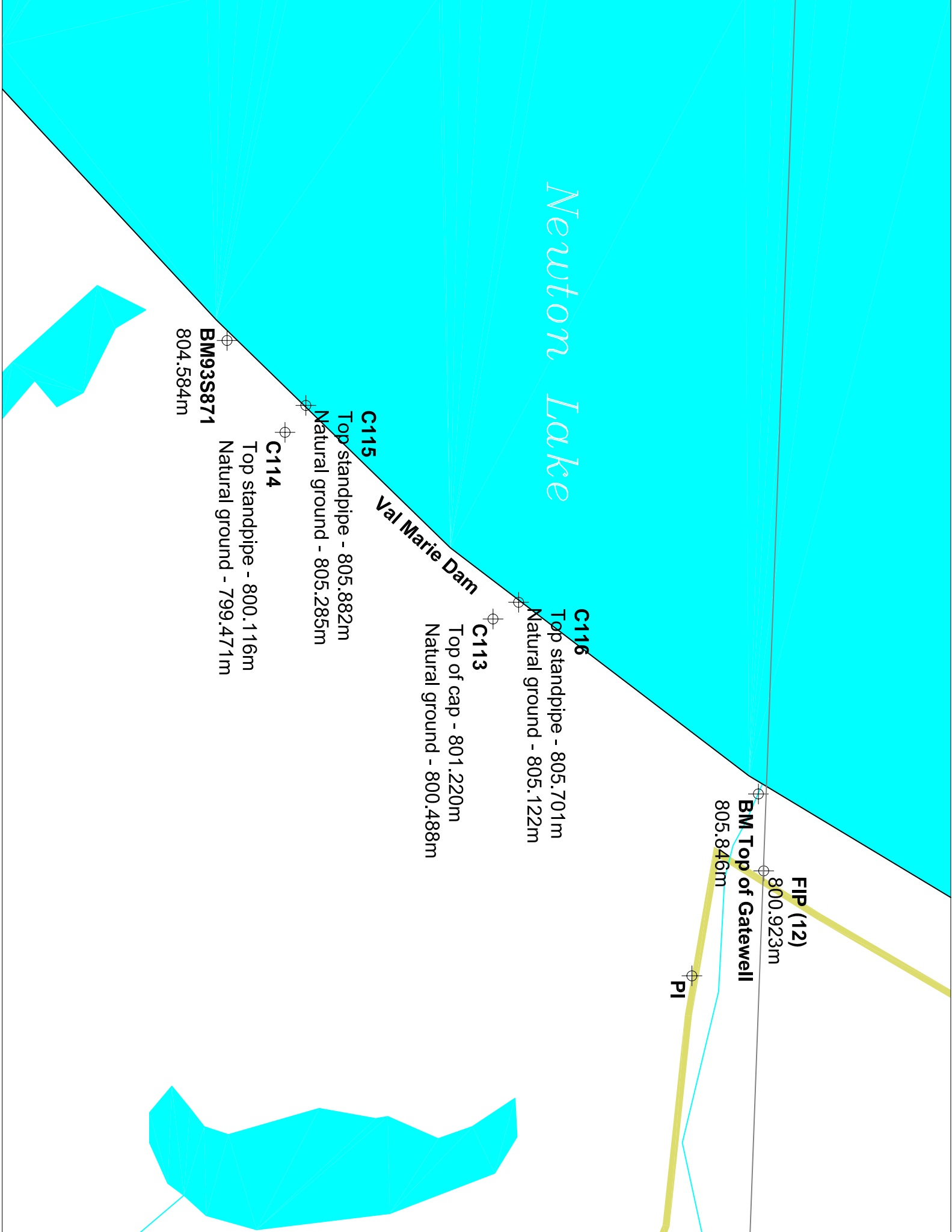
SCALE AS SHOWN DATE JUNE - 1949 SHEET

SUBMITTED BY: *R. P. ...* DESIGNED BY: *...*
 DRAWN BY: *...*
 DATE: *June 14/49* TRACED BY: *...*
 APPROVED BY: *...* CHECKED BY: *...*
 DATE: _____ CHIEF ENGINEER

PLANO: 37030

Newton Lake

Val Marie Dam



C116

Top standpipe - 805.701m
Natural ground - 805.122m

C113

Top of cap - 801.220m
Natural ground - 800.488m

C115

Top standpipe - 805.882m
Natural ground - 805.285m

C114

Top standpipe - 800.116m
Natural ground - 799.471m

BM933S871

804.584m

FIP (12)

800.923m

BM Top of Gatewell

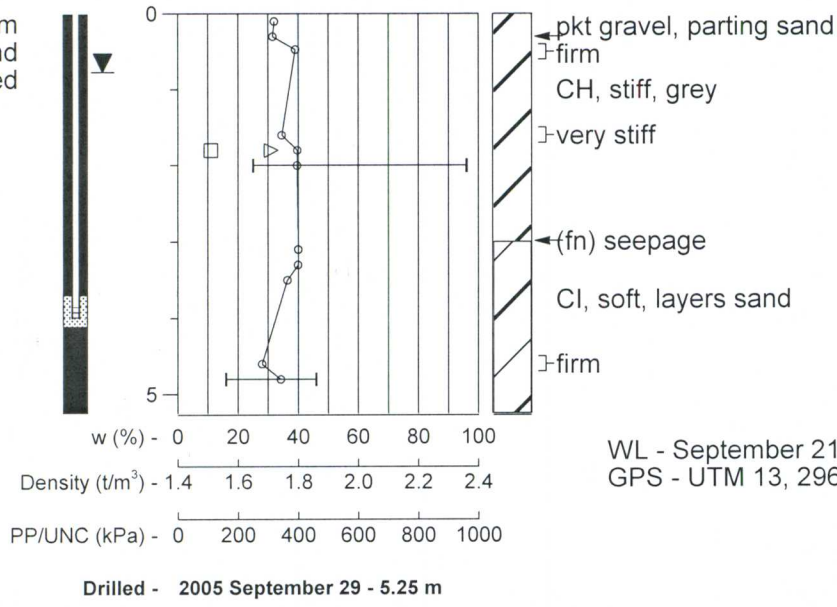
805.846m

PI

C117

EL. m

Note: 0.60 m above ground steel cased



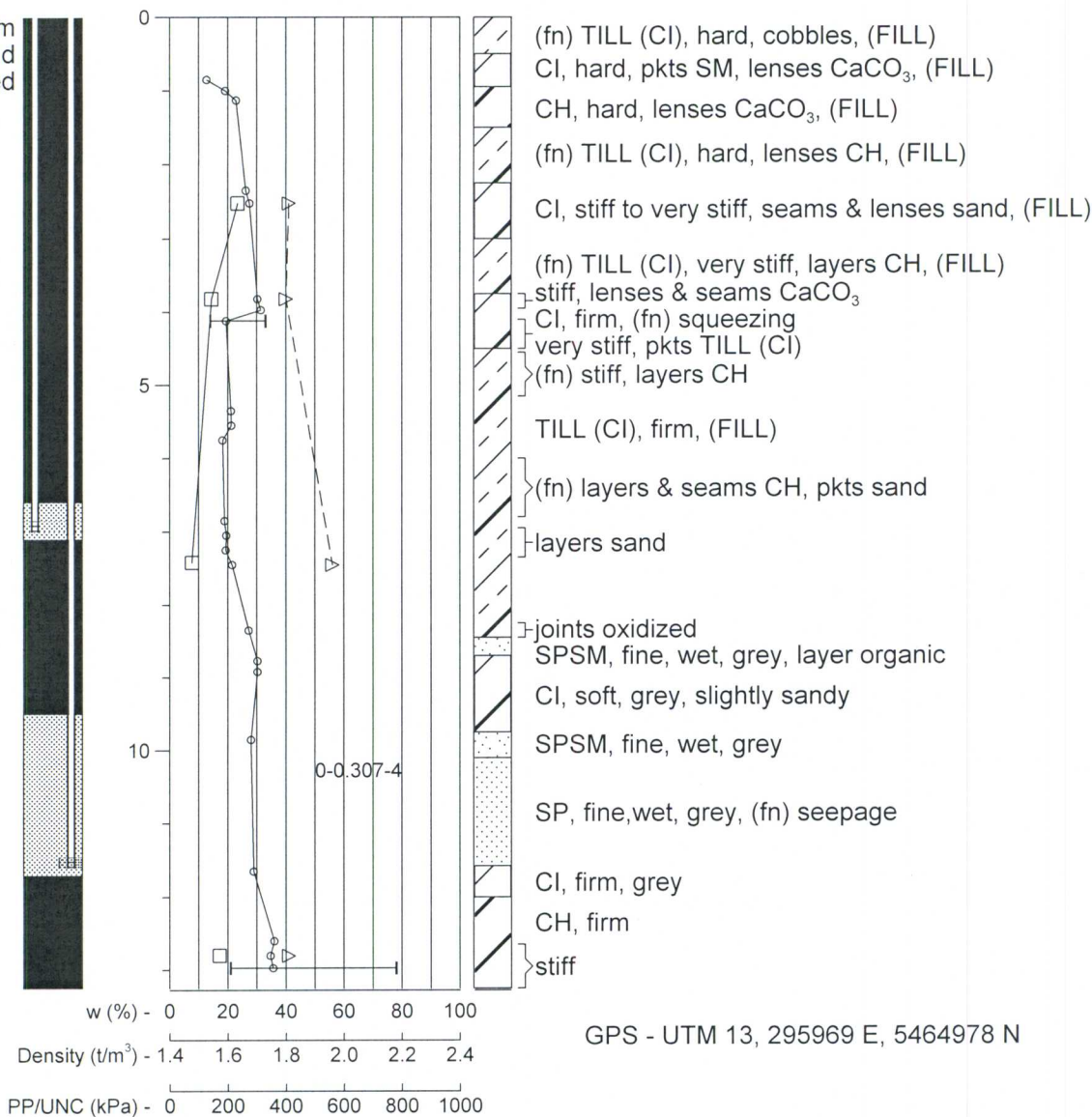
WL - September 21, 2005 - 0.77 m
 GPS - UTM 13, 296076 E, 5465072 N

Drilled - 2005 September 29 - 5.25 m

C119

EL. m

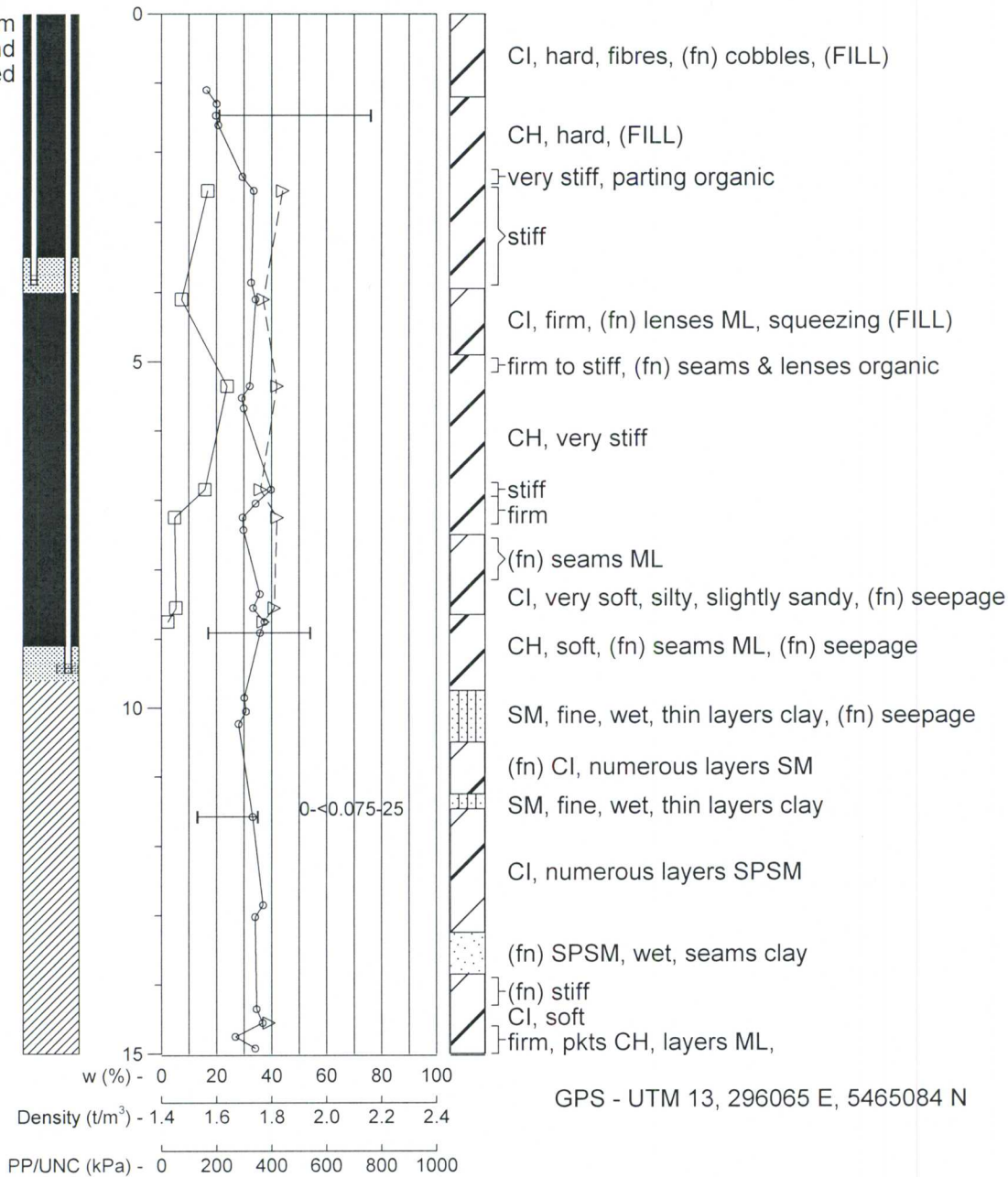
Note: 0.75 m above ground steel cased



C120

EL. m

Note: 0.50 m above ground steel cased

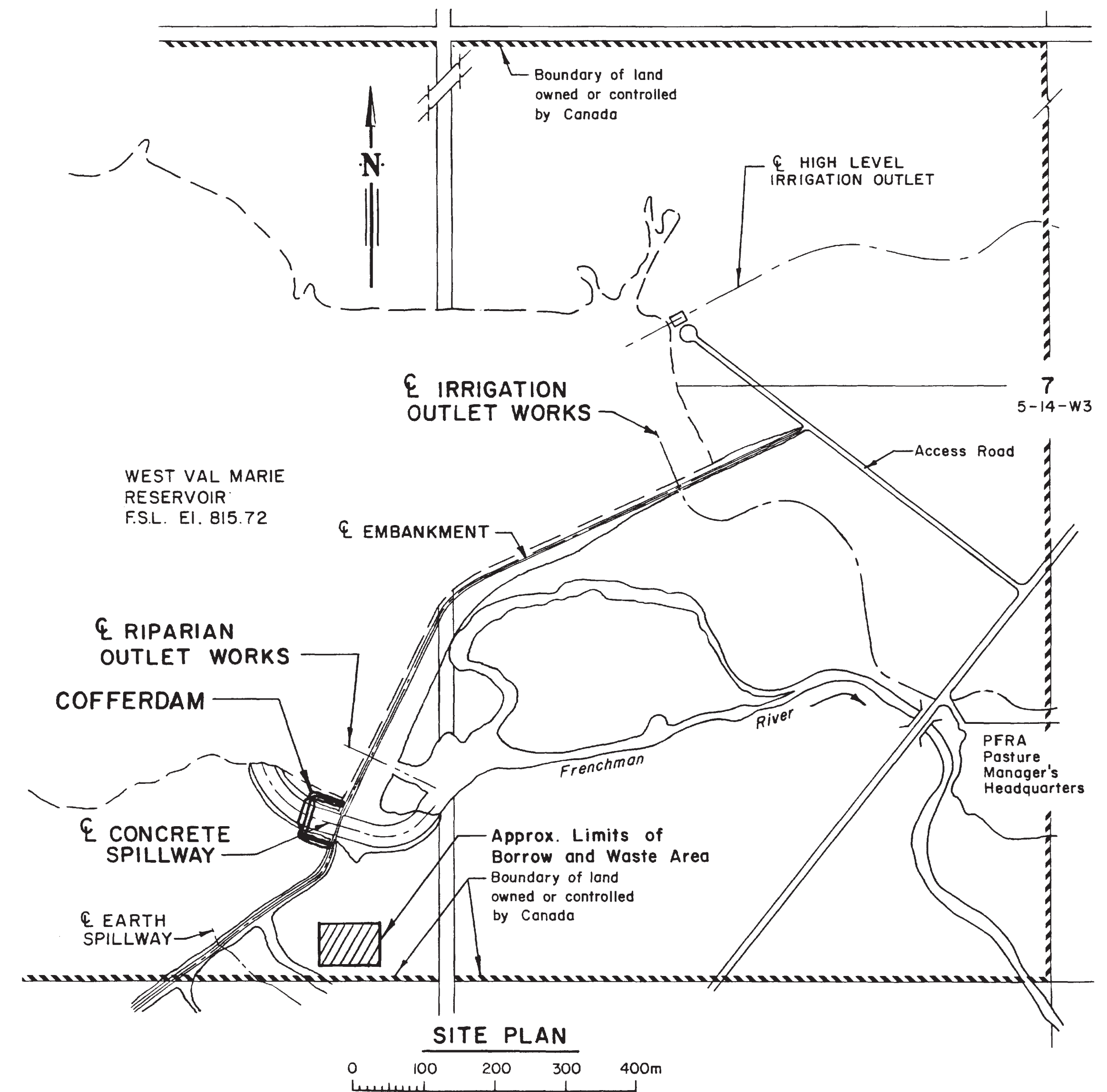
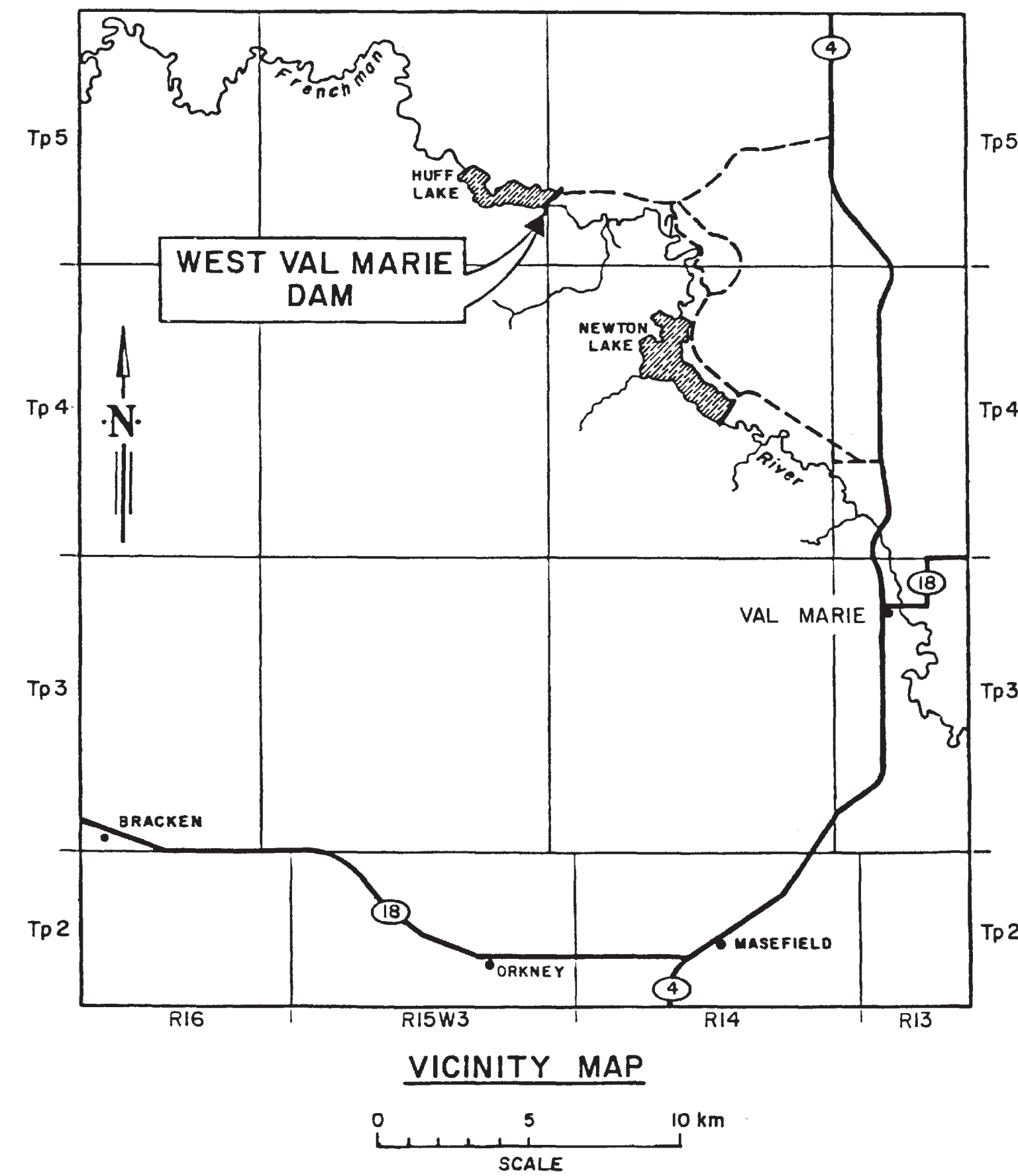


GPS - UTM 13, 296065 E, 5465084 N

Drilled - 2005 September 29 - 15 m

WEST VAL MARIE IRRIGATION PROJECT

CONTRACT 3 - COFFERDAM



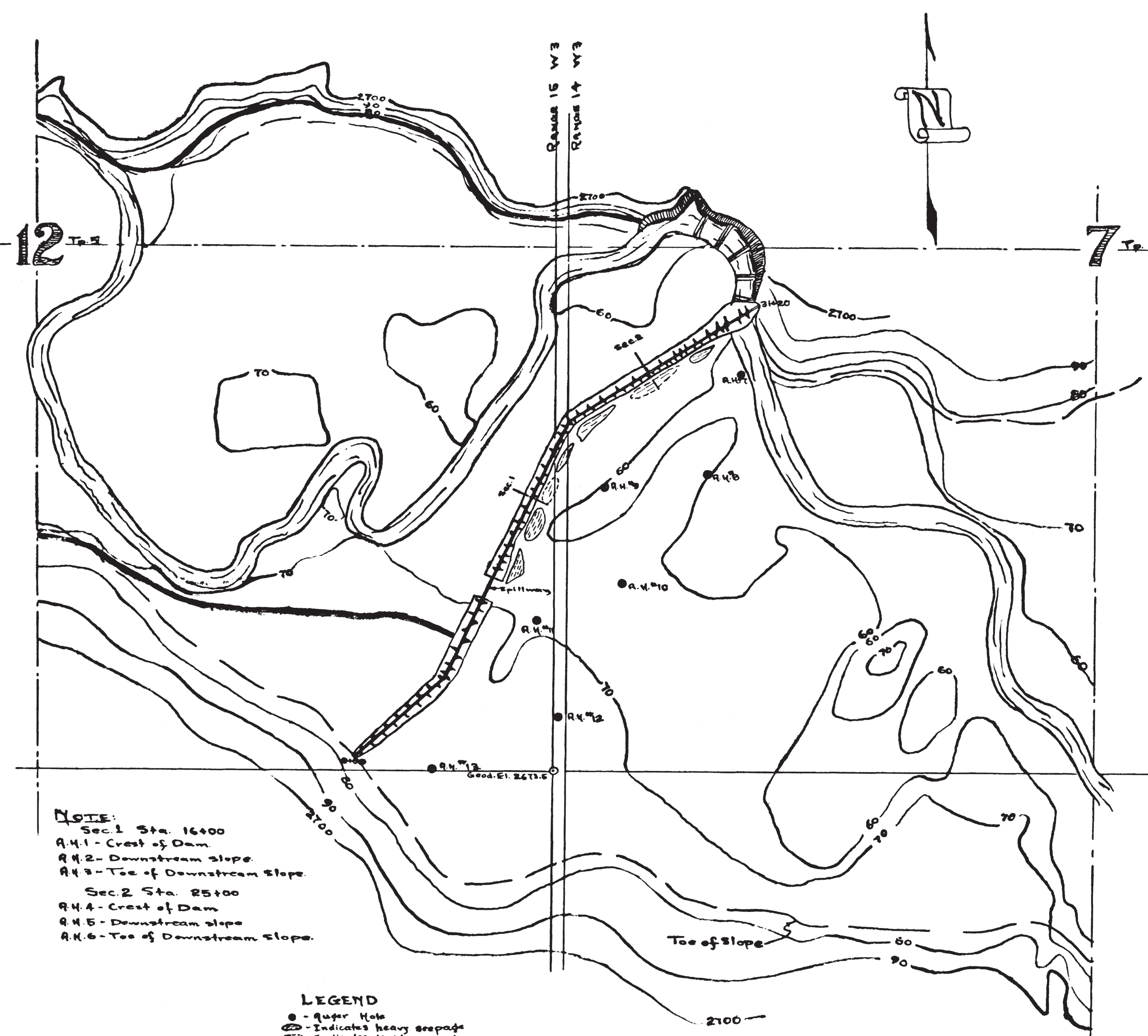
ALL DIMENSIONS, STATIONING AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE SHOWN

Mark	Grid Ref.	Nature of Revision	Date	Eng.	Draft

Designed <i>[Signature]</i>	Approved <i>[Signature]</i>
Drawn <i>[Signature]</i>	Position Title Senior Design Engineer
Checked <i>[Signature]</i>	Date 23 July 1997

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada
PFRA ARAP
Prairie Farm Rehabilitation Administration / Administration du rétablissement agricole des Prairies

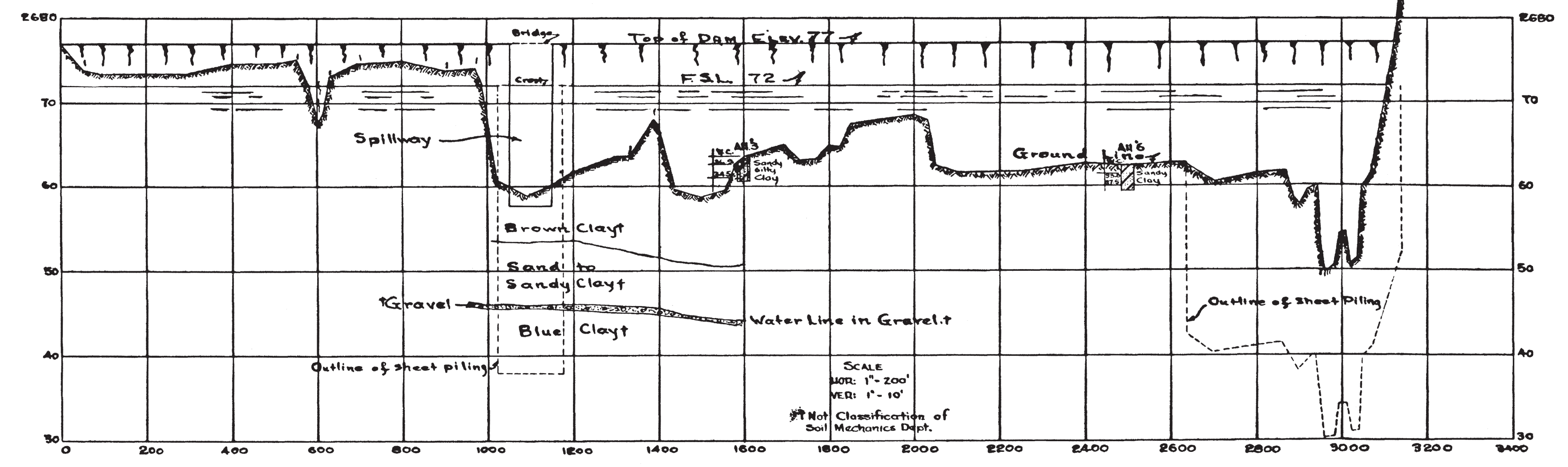
WEST VAL MARIE IRRIGATION PROJECT			
CONTRACT 3 - COFFERDAM			
VICINITY MAP AND SITE PLAN			
Scale As Shown	Date July/97	Sheet 1 of 2	206861



NOTE:
 Sec. 1 Sta. 16+00
 A4.1 - Crest of Dam
 A4.2 - Downstream slope
 A4.3 - Toe of Downstream Slope
 Sec. 2 Sta. 25+00
 A4.4 - Crest of Dam
 A4.5 - Downstream slope
 A4.6 - Toe of Downstream Slope

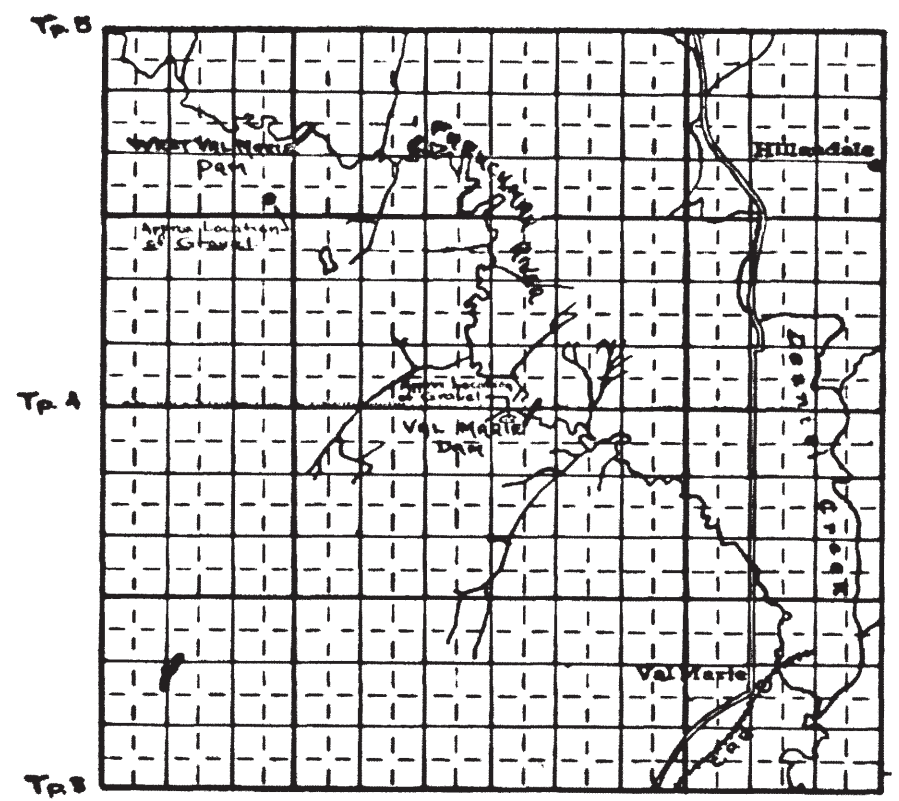
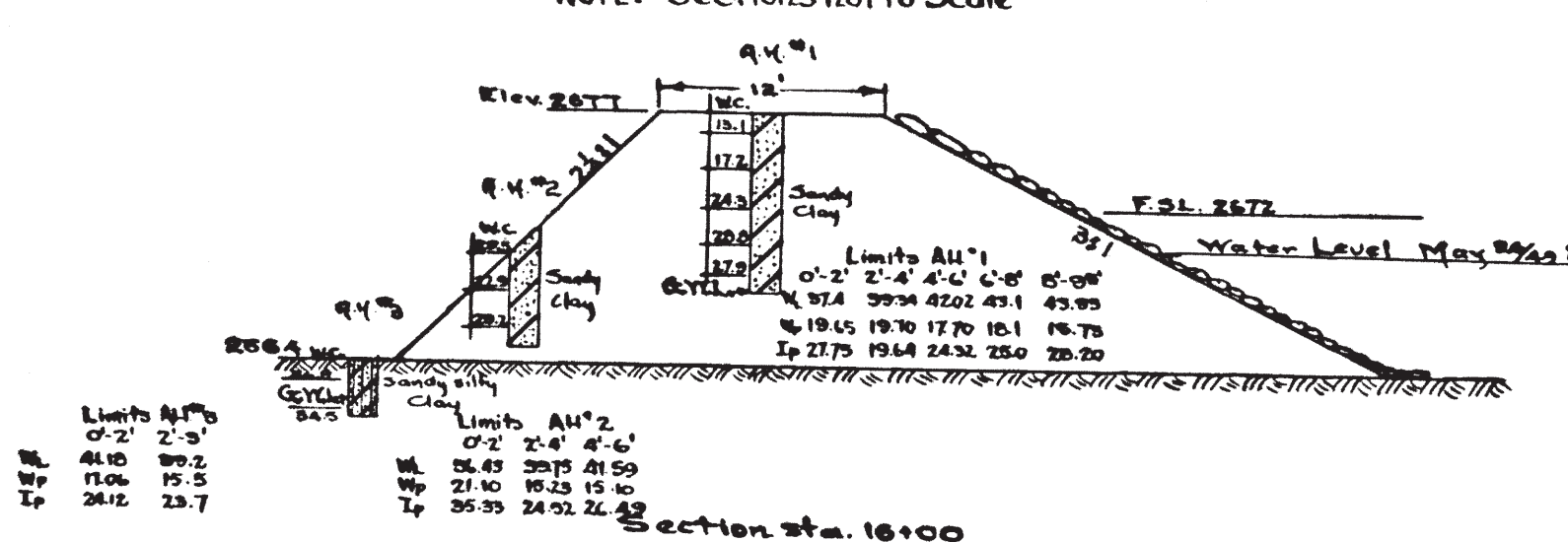
LEGEND
 ● - Super Hole
 ⊕ - Indicates heavy seepage
 ⊙ - Indicates light seepage

SCALE - 1" = 400'

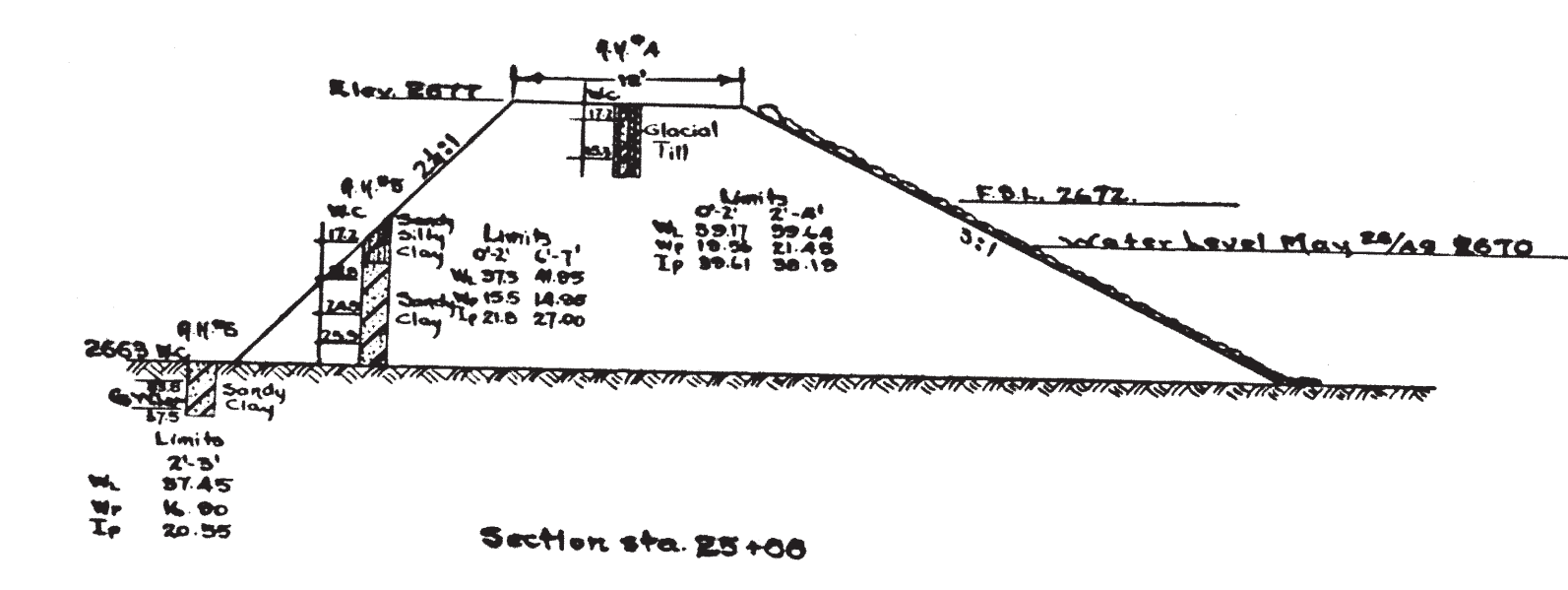
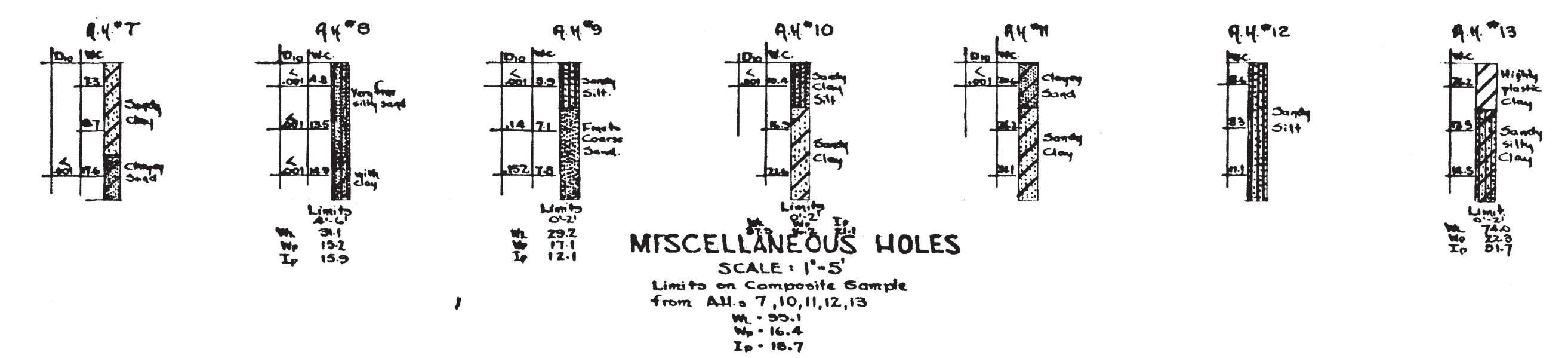


SCALE
 HOR: 1" = 200'
 VER: 1" = 10'
 Not Classification of
 Soil Mechanics Dept.

CROSS SECTIONS
 Existing Fill
 NOTE: Sections not to Scale



KEY PLAN
 Scale 1" = 3 mi.



LEGEND

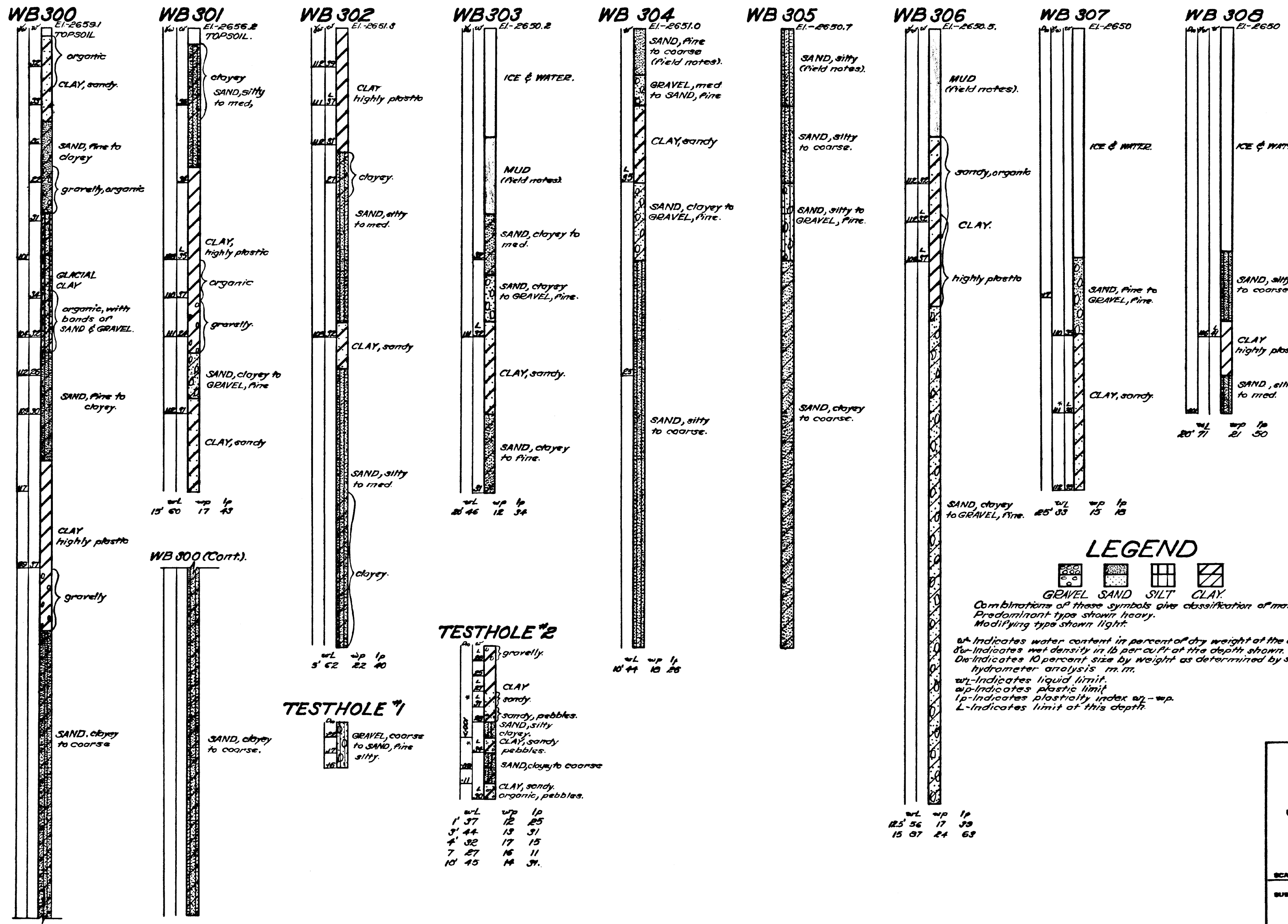
GRAVEL	SAND	SILT	CLAY
--------	------	------	------

Combinations of these symbols give classification of materials according to grain size. Predominant type shown heavy. Modifying type shown light.

DEPARTMENT OF AGRICULTURE - CANADA
 P. F. R. A.
 WATER DEVELOPMENT BRANCH
 WEST VAL MARIE
 W_{1/2} - Sec. 7 - Tp. 5 - R. 14 - W. 3rd.
**TOPOGRAPHY-CROSS SECTIONS
 & PROFILE**
 SHOWING
LOCATIONS & LOGS OF TEST HOLES

SCALE AS SHOWN DATE JUNE - 1949 SHEET

SUBMITTED BY: <i>R. L. H.</i>	DESIGNED BY: <i>D.K.</i>
DATE: <i>Jan 14/49</i>	DRAWN BY: <i>D.K.</i>
APPROVED BY: <i>R. S. D.</i>	CHECKED BY: <i>R. S. D.</i>
DATE: _____	PLAN NO: 1457T-3-1



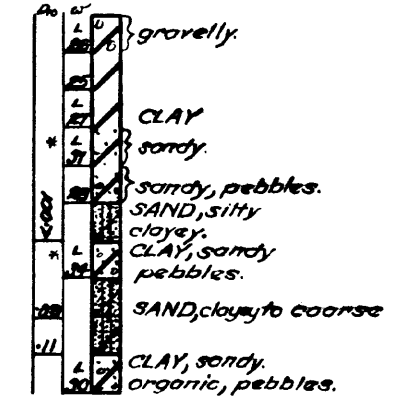
LEGEND



Combinations of these symbols give classification of material. Predominant type shown heavy. Modifying type shown light.

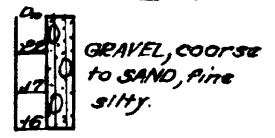
w_L - Indicates water content in percent of dry weight at the depth shown.
 d_w - Indicates wet density in lb per cu ft at the depth shown.
 D₁₀ - Indicates 10 percent size by weight as determined by sieve or hydrometer analysis. m.m.
 w_L - Indicates liquid limit.
 w_p - Indicates plastic limit.
 I_p - Indicates plasticity index w_L - w_p.
 L - Indicates limit at this depth.

TESTHOLE #2



Depth	w _L	w _p	I _p
1' 37"	12	25	
3' 44"	13	31	
4' 32"	17	15	
7' 27"	16	11	
10' 45"	14	31	

TESTHOLE #1



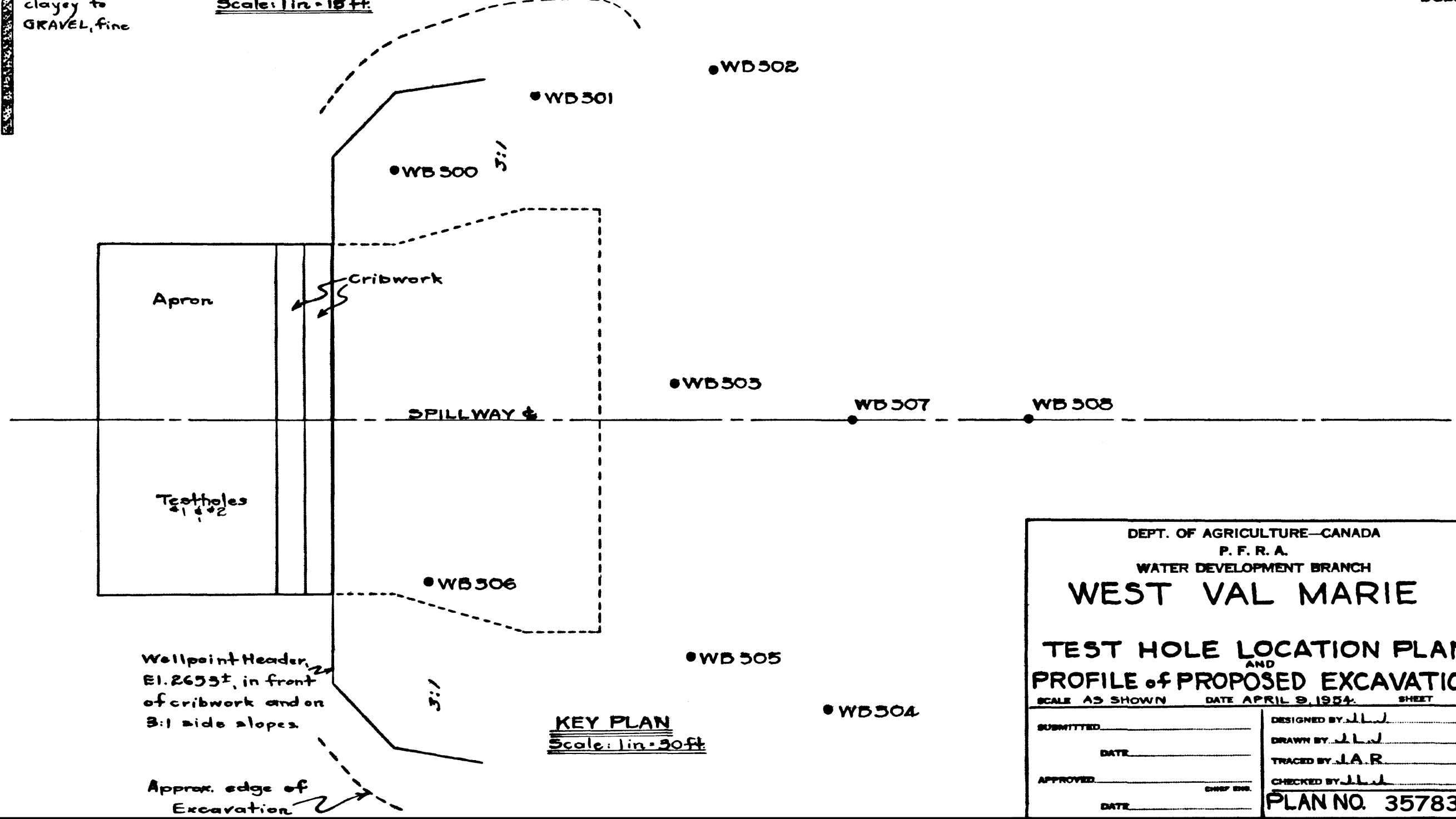
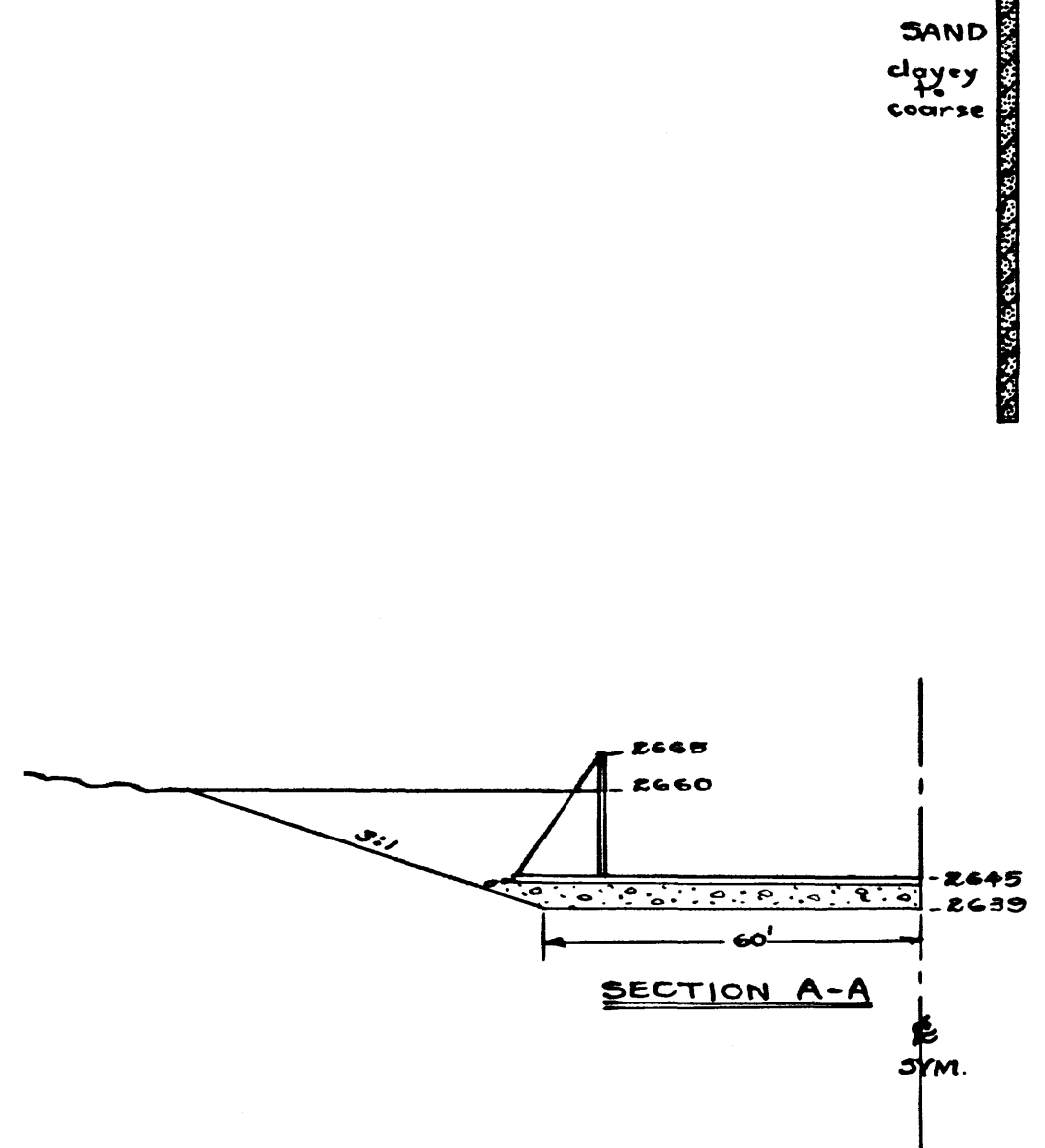
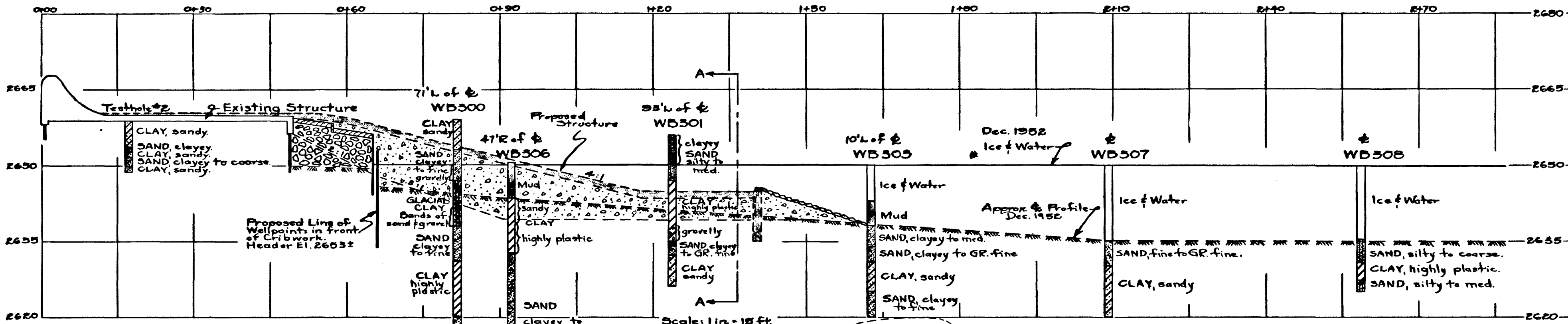
Depth	w _L	w _p	I _p
1' 50"	17	43	
5' 52"	22	40	

DEPT. OF AGRICULTURE-CANADA
 P. F. R. A.
 WATER DEVELOPMENT BRANCH
 WEST VAL MARIE
**SUMMARY OF DRILL LOGS
 & SOIL TEST RESULTS
 SPILLWAY AREA**

SCALE: 1" = 5' DATE: MARCH 25, 1959 SHEET

SUBMITTED	DESIGNED BY J. L. J.
DATE	DRAWN BY R.H.
APPROVED	TRACED BY R.H.
DATE	CHECKED BY J. L. J.

PLAN No. 35782



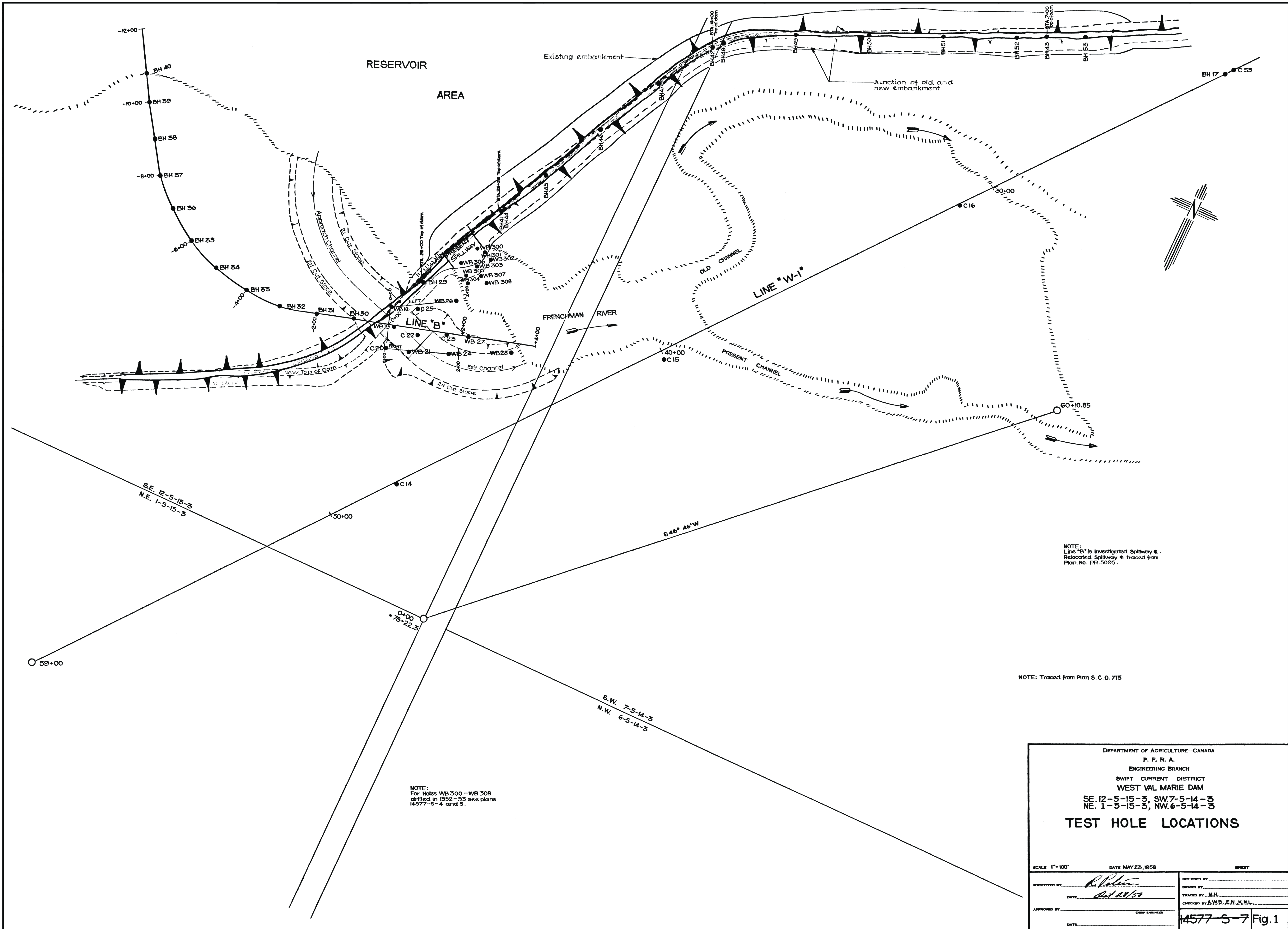
DEPT. OF AGRICULTURE-CANADA
P. F. R. A.
WATER DEVELOPMENT BRANCH
WEST VAL MARIE

TEST HOLE LOCATION PLAN AND PROFILE of PROPOSED EXCAVATION

SCALE AS SHOWN DATE APRIL 9, 1954. SHEET

SUBMITTED _____	DESIGNED BY J.L.J.
DATE _____	DRAWN BY J.L.J.
APPROVED _____	TRACED BY J.A.R.
DATE _____	CHECKED BY J.L.J.

PLAN NO. 35783



NOTE:
Line "B" is Investigated Spillway &. Relocated Spillway &. traced from Plan No. RR-5095.

NOTE: Traced from Plan S. C. O. 715

NOTE:
For Holes WB 300 - WB 308 drilled in 1952-53 see plans 14577-5-4 and 5.

DEPARTMENT OF AGRICULTURE-CANADA
P. F. R. A.
ENGINEERING BRANCH
SWIFT CURRENT DISTRICT
WEST VAL MARIE DAM
SE. 12-5-15-3, SW. 7-5-14-3
NE. 1-5-15-3, NW. 6-5-14-3

TEST HOLE LOCATIONS

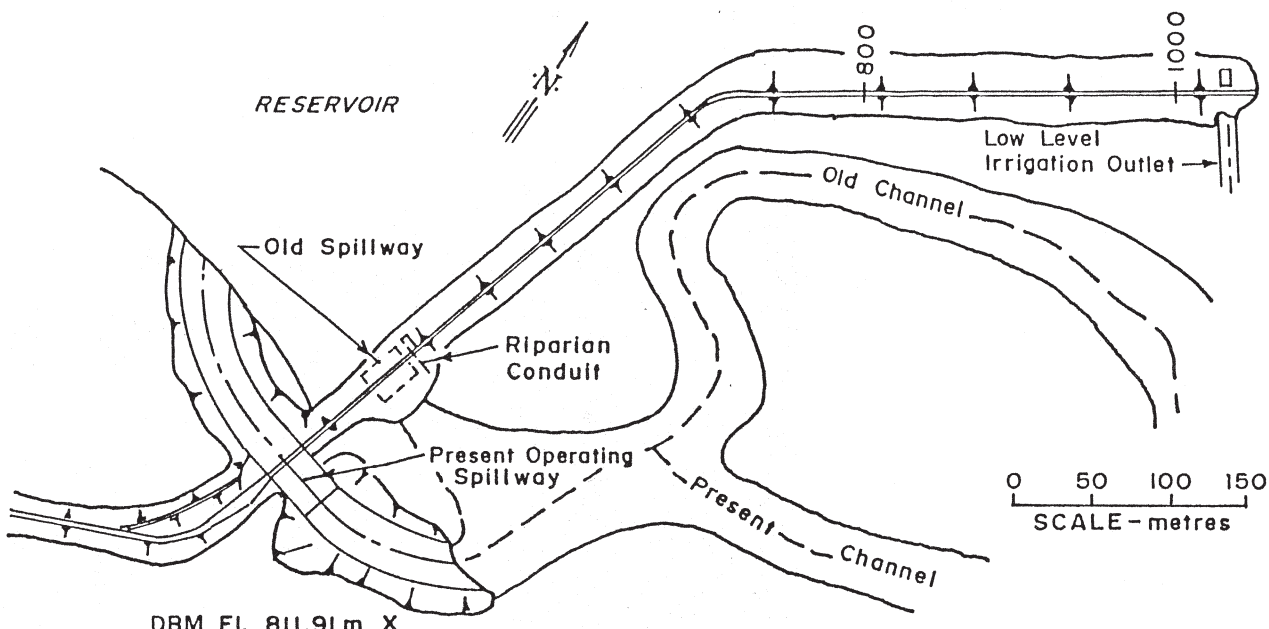
SCALE 1"=100' DATE MAY 25, 1956 SHEET

SUBMITTED BY: <i>R. Pollock</i> DATE: <i>Oct 29/53</i> APPROVED BY: _____ DATE: _____	DESIGNED BY: _____ DRAWN BY: _____ TRACED BY: M.H. CHECKED BY: A.W.B., E.N., K.M.L. CHIEF ENGINEER: _____
--	---

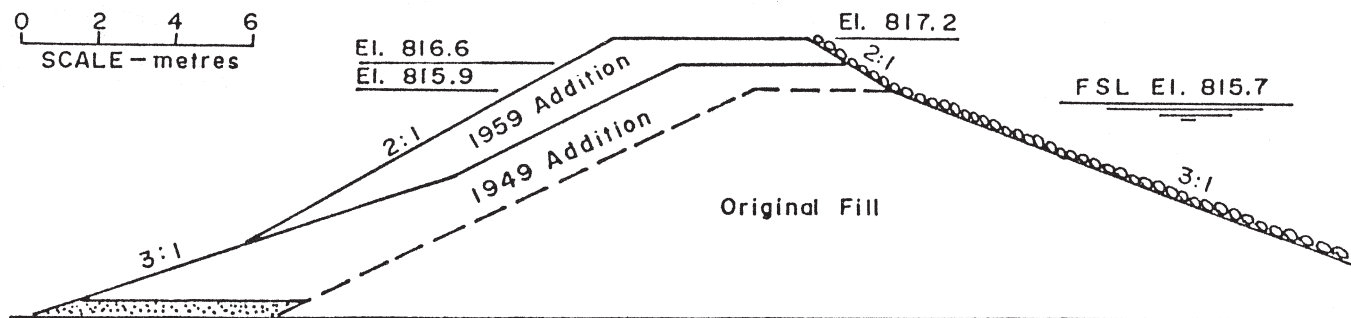
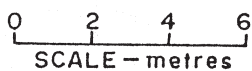
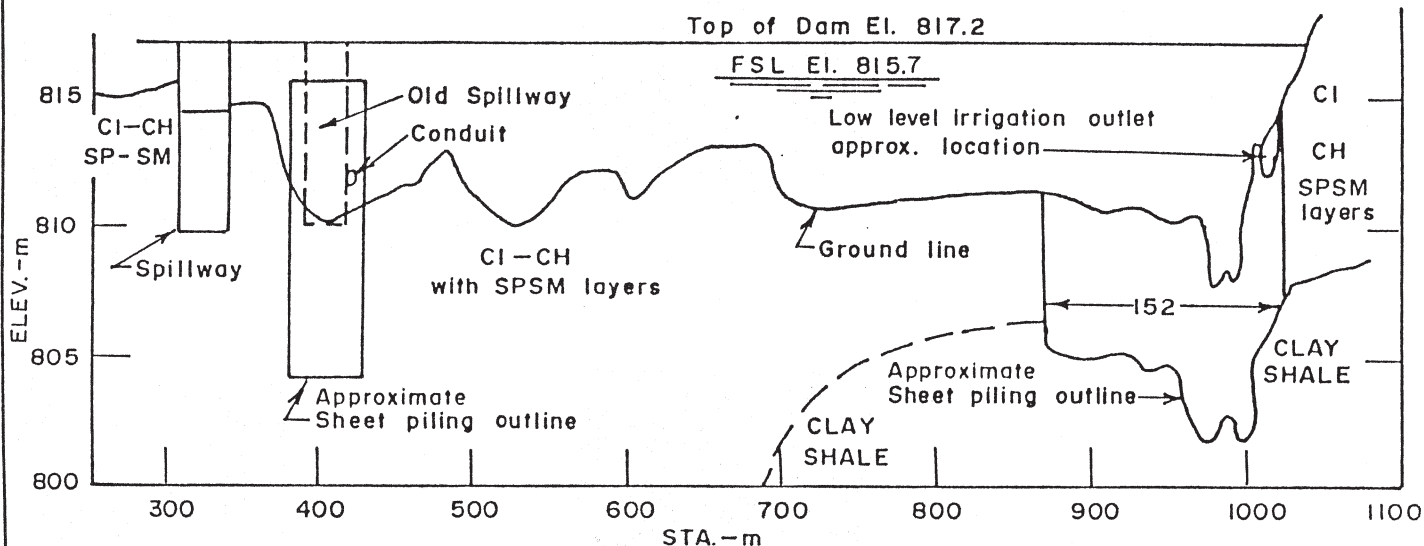
14577-5-7 Fig. 1

NOTE: Pumphouse for high level irrigation outlet located approximately 165m NW of low level outlet gatewell.

- D35 -

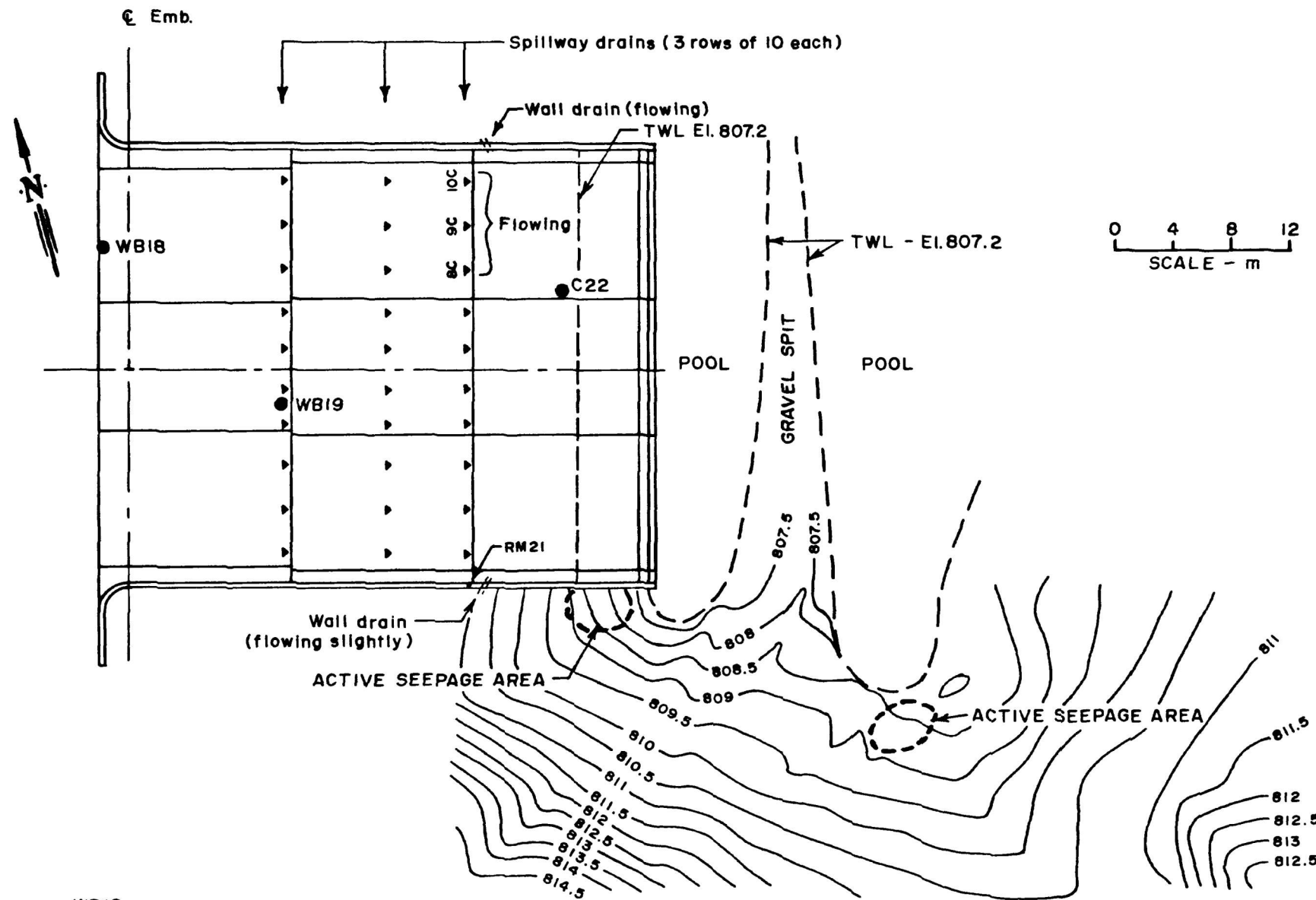


DBM El. 811.91m X



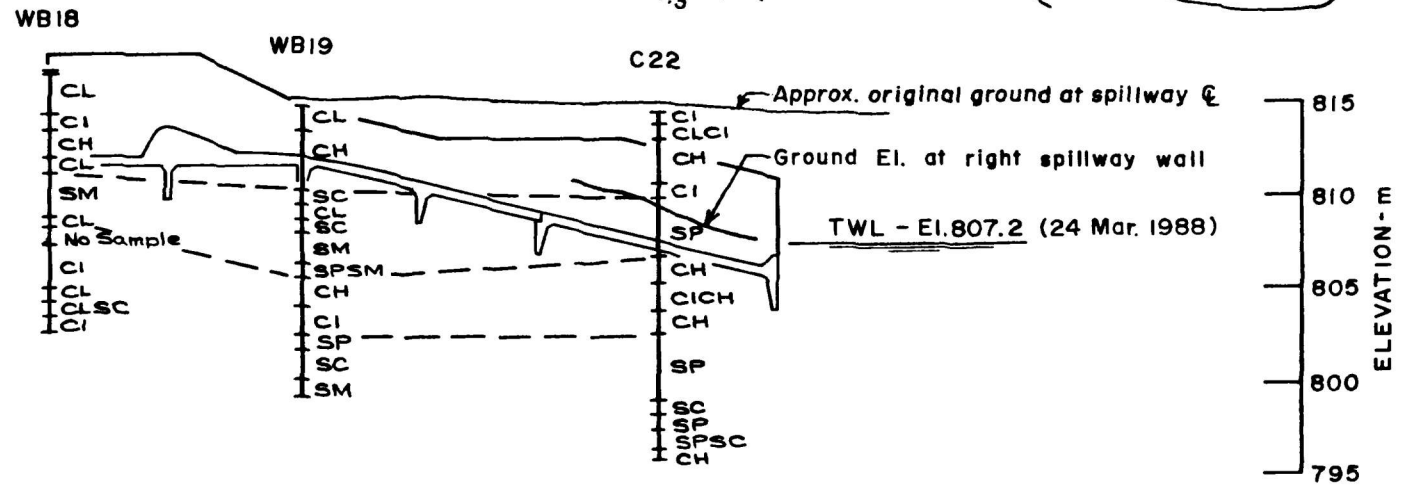
"A" Revision - Plan view label - Dec. 1987.

DESIGNED <i>[Signature]</i>	SUBMITTED <i>[Signature]</i>	Agriculture Canada Prairie Farm Rehabilitation Administration Administration du Rétablissement agricole des Prairies	WEST VAL MARIE	
DRAWN <i>[Signature]</i>	DATE <i>30 Oct 87</i>		SITE PLAN, FOUNDATION PROFILE AND EMBANKMENT CROSS-SECTION	
CHECKED <i>[Signature]</i>	APPROVED CHIEF ENGINEER PFRA	ENGINEERING SERVICE	SCALE AS SHOWN	DATE OCT. 1987
			SHEET	OF 103 138A D1



NOTE - No flow from seepage area on north side of spillway. Some dampness at approx. El. 809.0.

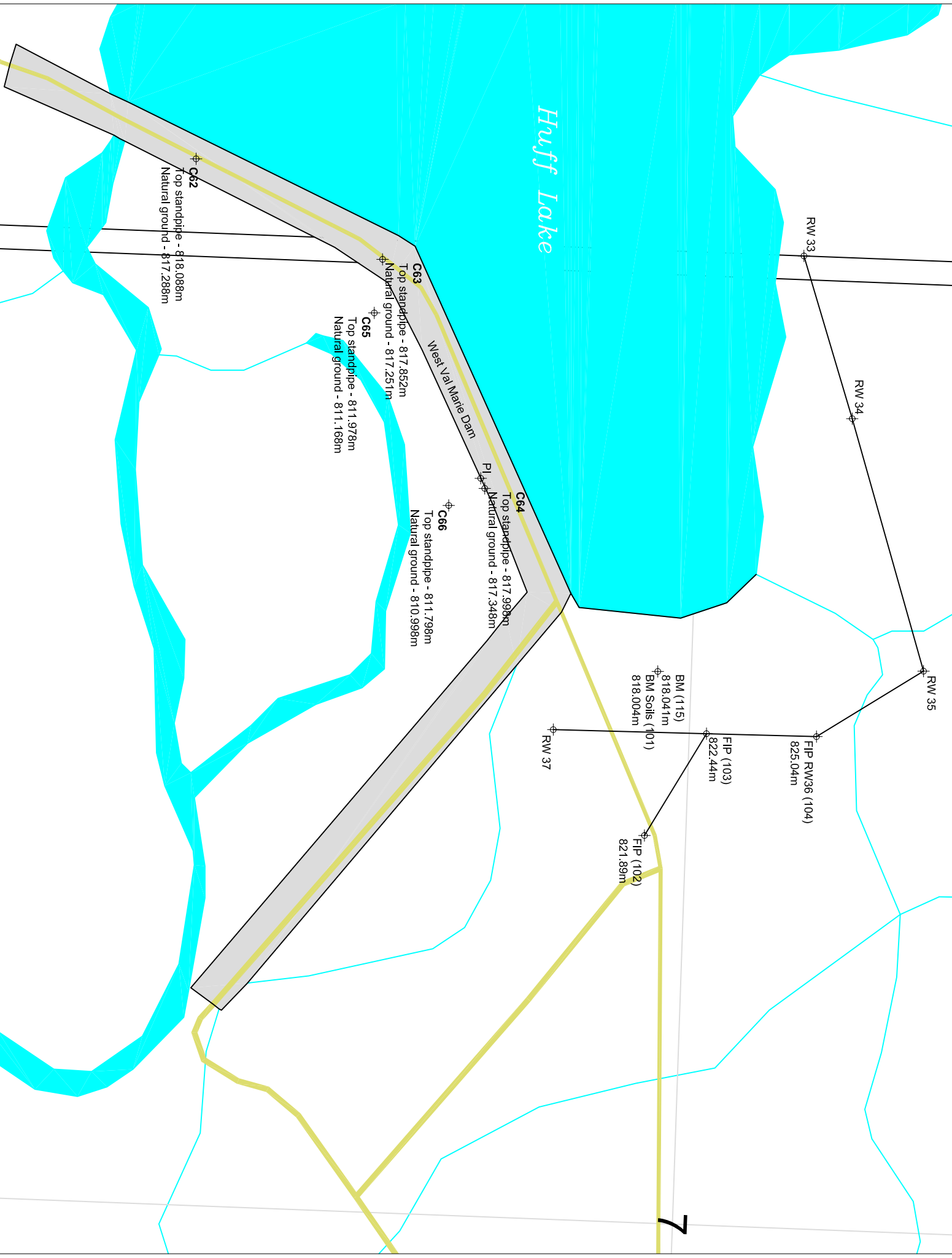
820
 (24 Mar. 1988)
 RWL - El. 815.0 FSL - El. 815.6
 795



M ALL DIMENSIONS, STAKING AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE SHOWN

DESIGNED VK	SUBMITTED <i>[Signature]</i>	Agriculture Canada Prairie Farm Rehabilitation Administration Administration du Rétablissement agricole des Prairies	WEST VAL MARIE DAM	
DRAWN RMA	DATE 13 May 88		SEEPAGE AREA SOUTH OF SPILLWAY MARCH 1988	
CHECKED FYL VK	APPROVED DIRECTOR, ENG. SERVICE	ENGINEERING SERVICE	SCALE AS SHOWN	DATE MAY 1988
	DATE		SHEET OF	103 210

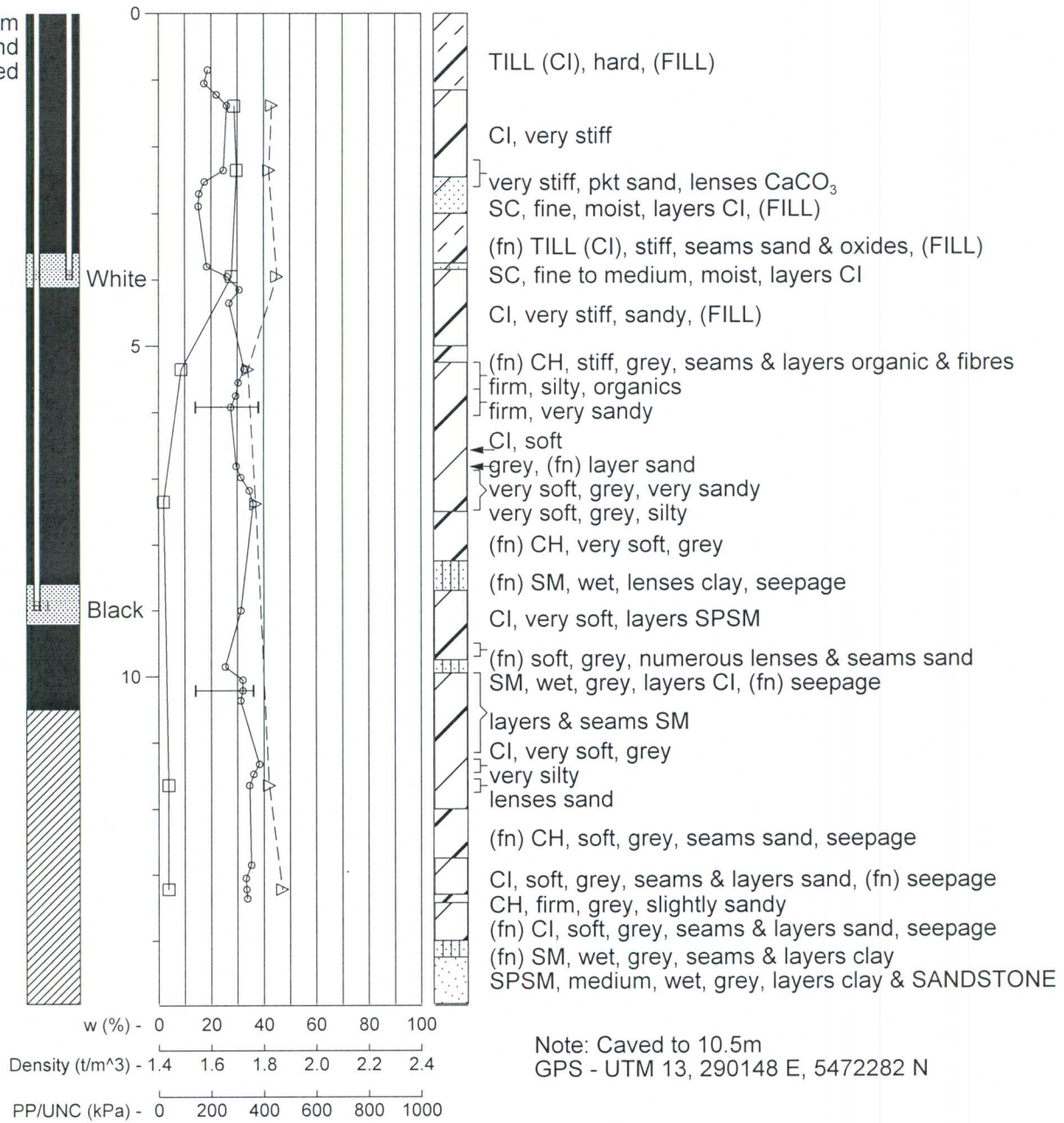
Huff Lake



C62

EL. m

Note: 0.60m above ground steel cased

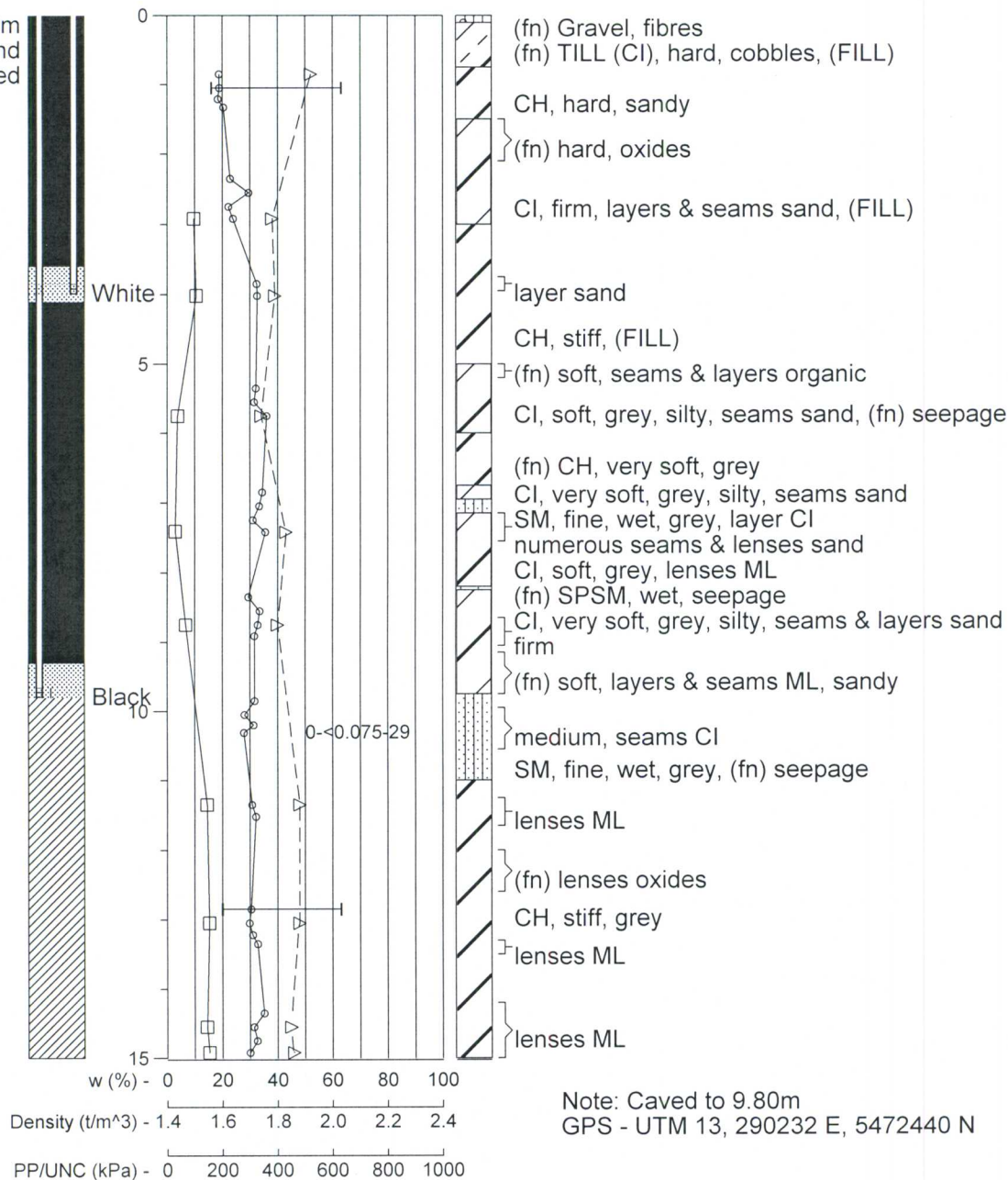


Drilled - 2005 October 4 - 14.95 m

C63

EL. m

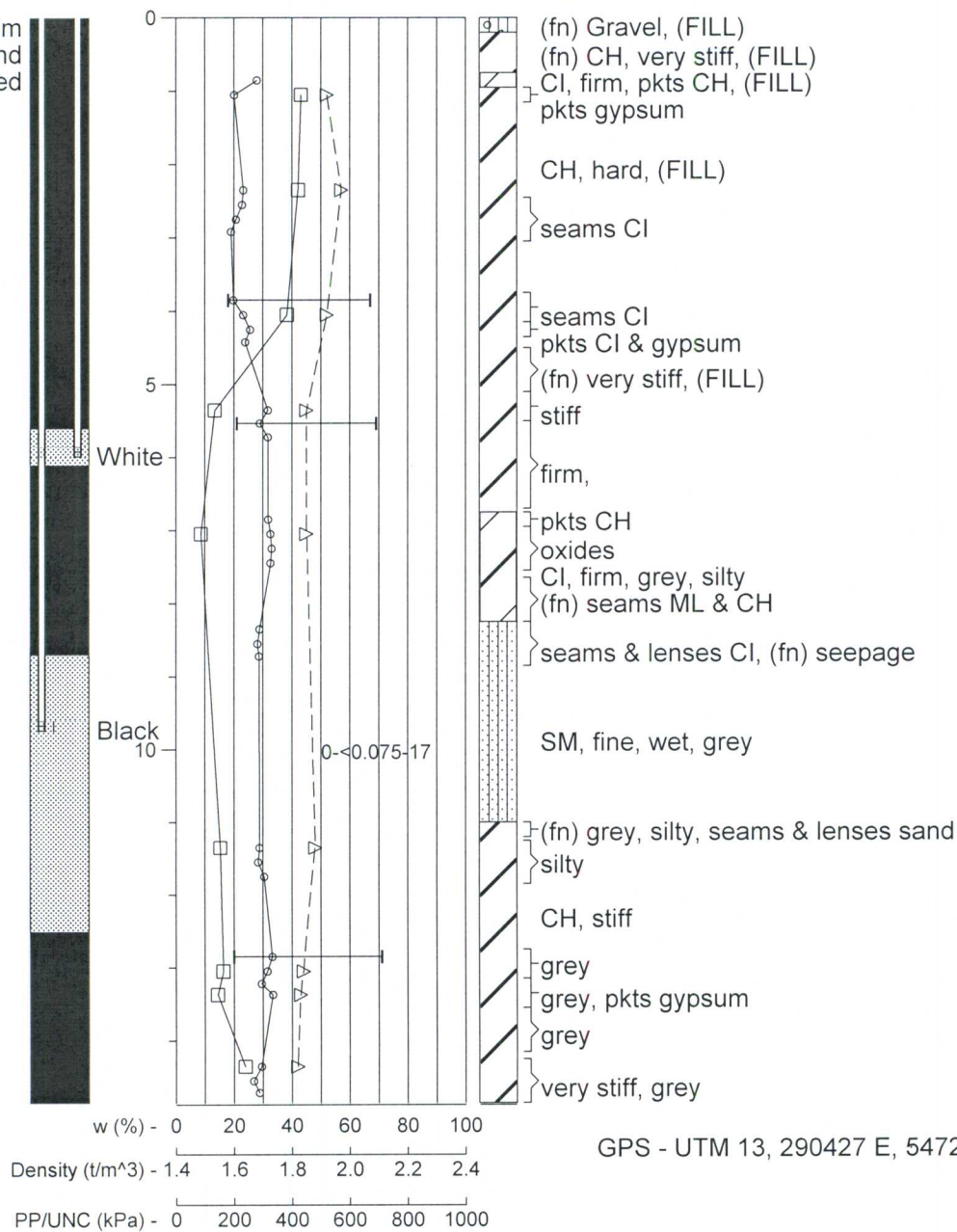
Note: 0.60m above ground steel cased



C64

EL. m

Note: 0.60m above ground steel cased



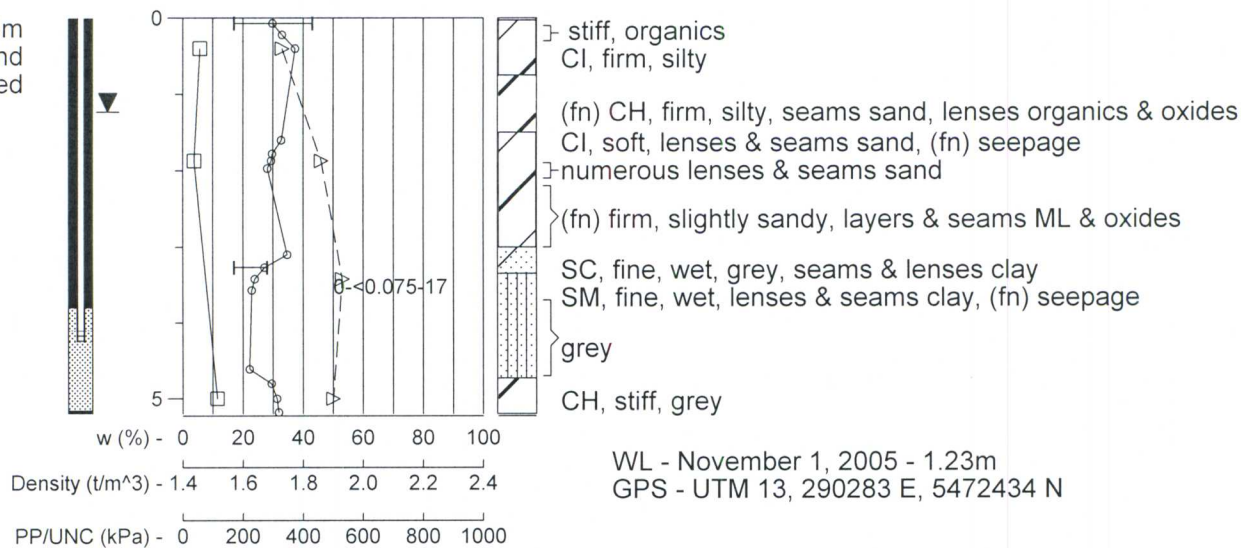
GPS - UTM 13, 290427 E, 5472418 N

Drilled - 2005 October 13 - 14.85 m

C65

EL. m

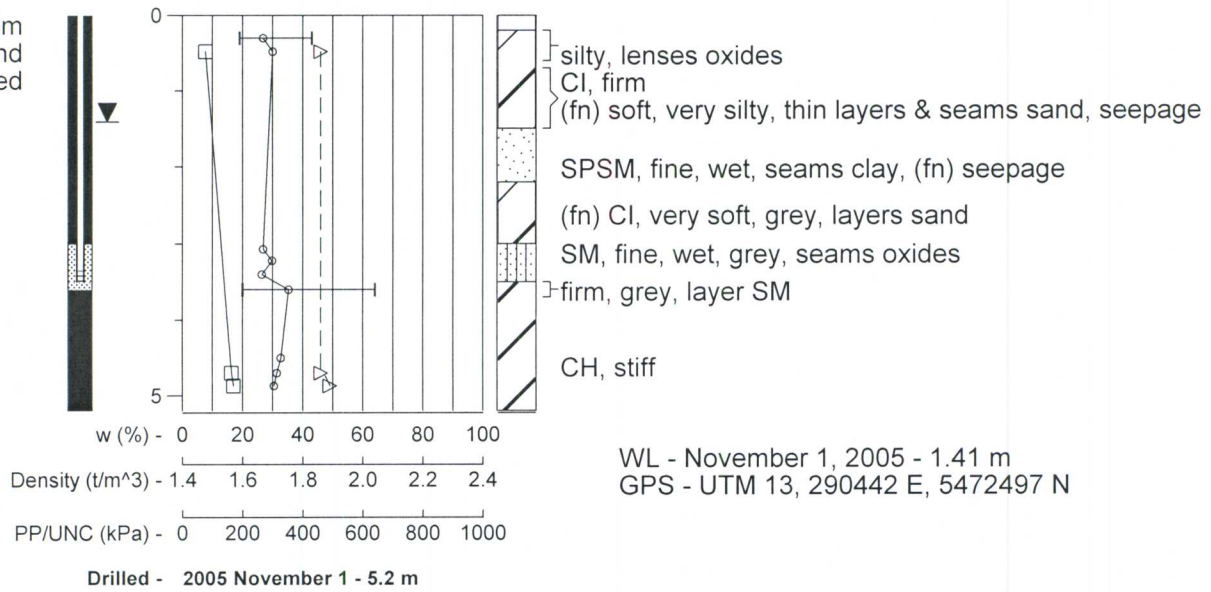
Note: 0.75m above ground steel cased



C66

EL. m

Note: 0.75m
above ground
steel cased



WL - November 1, 2005 - 1.41 m
GPS - UTM 13, 290442 E, 5472497 N