

Canada - British Columbia
Fraser River Flood Control 1968 Agreement
Project No. 3 The Township of Richmond

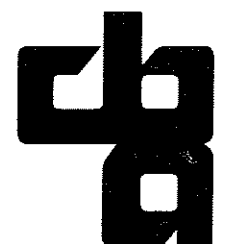
Contract No. 3

**Supply and Supervision of Installation
of Pumping Equipment**

DRAWING LIST

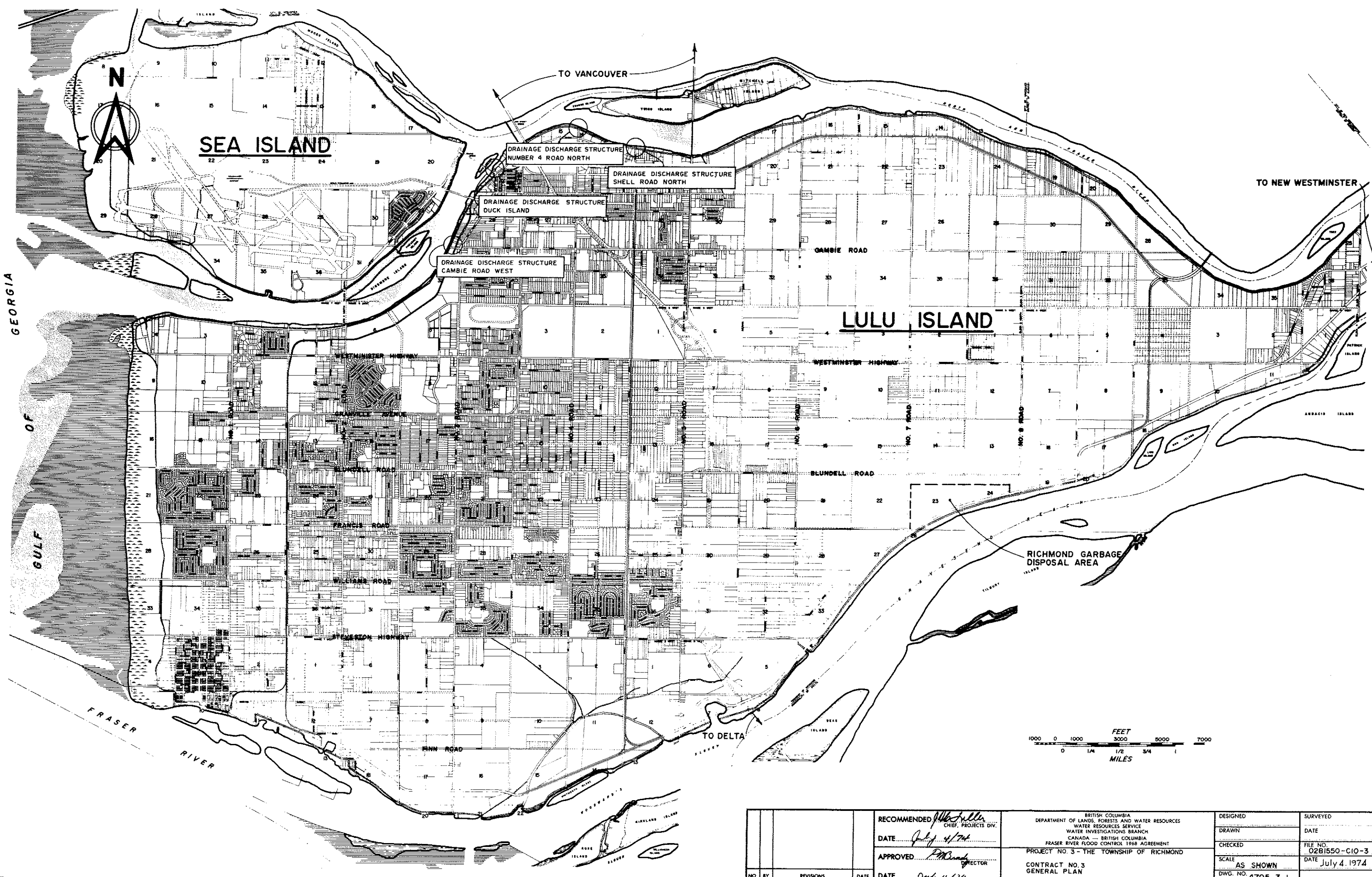
REFERENCE DRAWINGS

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4795-3-14	DRAINAGE DISCHARGE STRUCTURES MAINTENANCE FLOOR SUPPORT FRAMES AND GRATING
4795-3-15	DUCK ISLAND DRAINAGE DISCHARGE STRUCTURE ARRANGEMENT OF MECHANICAL AND ELECTRICAL EQUIPMENT



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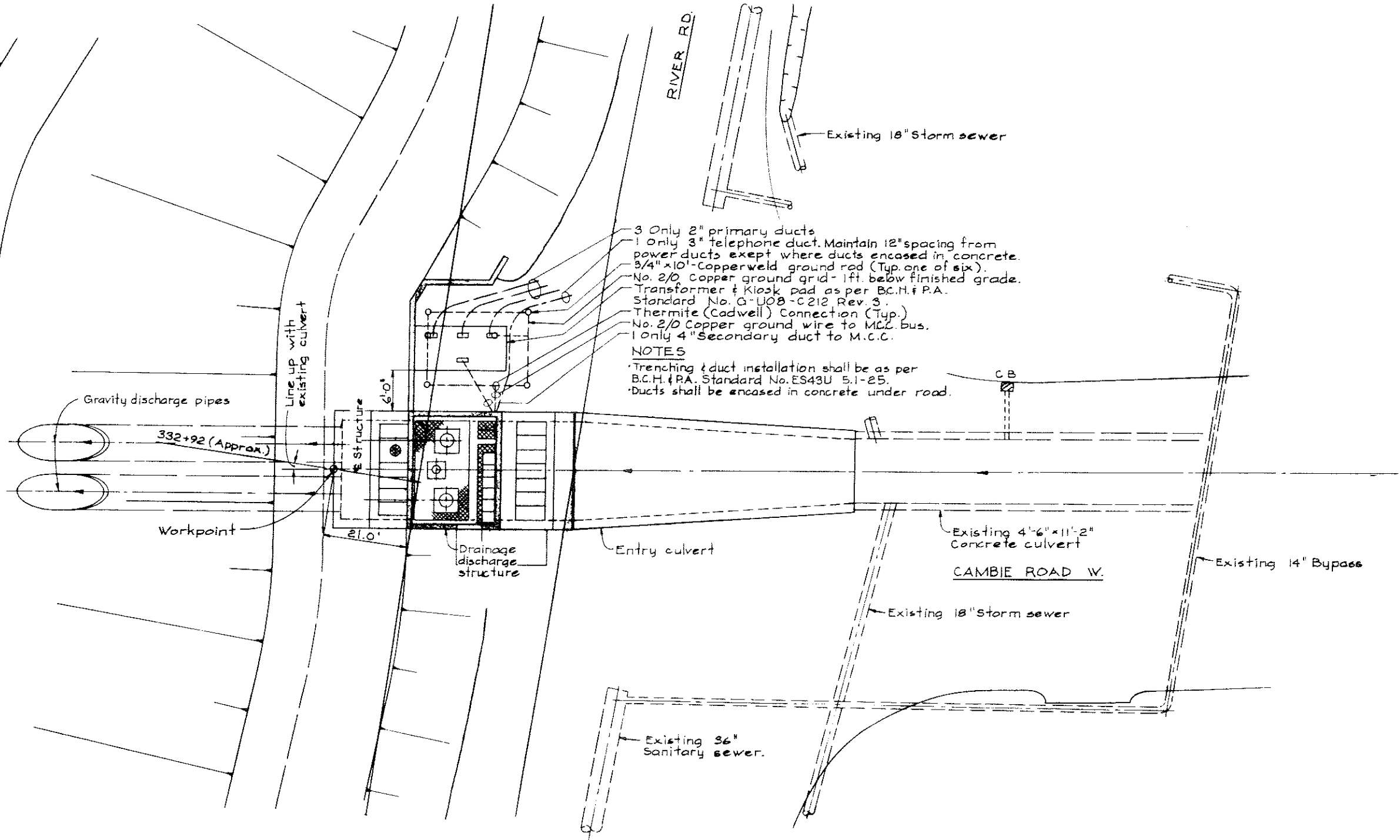
Consulting Engineers
Vancouver, Canada



NO.	BY	REVISIONS	DATE	RECOMMENDED <i>P. McSherry</i> CHIEF, PROJECTS DIV.	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA — BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 — THE TOWNSHIP OF RICHMOND CONTRACT NO. 3 GENERAL PLAN	DESIGNED	SURVEYED
				DATE <i>July 4/74</i>		DRAWN	DATE
				APPROVED <i>P. McSherry</i> DIRECTOR		CHECKED	FILE NO. 02B1550-C10-3
				DATE <i>July 4/74</i>		SCALE AS SHOWN	DATE July 4, 1974
						DWG. NO. 4795-3-1	SHEET OF SHEETS

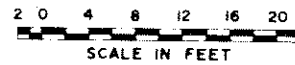


FRASER RIVER - MIDDLE ARM
 FLOW



- 3 Only 2" primary ducts
- 1 Only 3" telephone duct. Maintain 12" spacing from power ducts except where ducts encased in concrete.
- 3/4" x 10' - Copperweld ground rod (Typ. one of six).
- No. 2/0 Copper ground grid - 1ft. below finished grade.
- Transformer & Kiosk pad as per B.C.H. & P.A. Standard No. G-U08-C212 Rev. 3.
- Thermite (Cadwell) Connection (Typ.)
- No. 2/0 Copper ground wire to M.C.C. bus.
- 1 only 4" Secondary duct to M.C.C.

NOTES
 • Trenching & duct installation shall be as per B.C.H. & P.A. Standard No. ES43U 5.1-25.
 • Ducts shall be encased in concrete under road.



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 CONSULTING ENGINEERS - VANCOUVER - CANADA

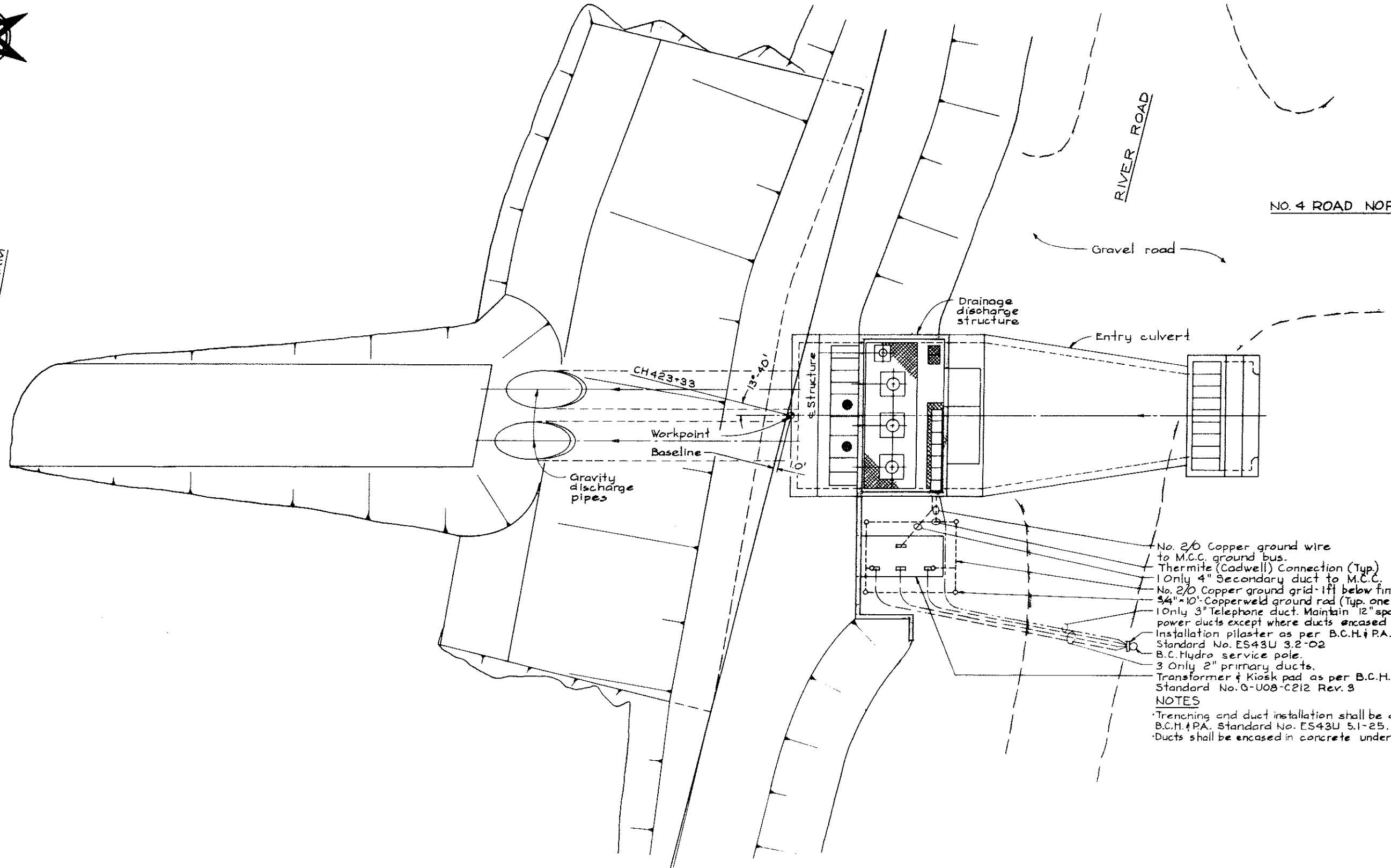
RECOMMENDED	<i>John Fuller</i> CHIEF, PROJECTS DIV.
DATE	<i>July 24/74</i>
APPROVED	<i>P.D. [Signature]</i> DIRECTOR
DATE	<i>July 24/74</i>

BRITISH COLUMBIA
 DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
 WATER RESOURCES SERVICE
 WATER INVESTIGATIONS BRANCH
 CANADA - BRITISH COLUMBIA
 FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
 PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
 CONTRACT NO. 3
 CAMBIE ROAD WEST DRAINAGE DISCHARGE STRUCTURE
 LAYOUT & POWER SUPPLY

DESIGNED	SURVEYED
DRAWN <i>H6</i>	DATE
CHECKED	FILE NO. 0281550-C10-3
SCALE <i>As shown</i>	DATE <i>July 2, 1974</i>
DWG NO. 4795-3-2	SHEET OF SHEETS



FRASER RIVER
NORTH ARM
FLOW



- No. 2/0 Copper ground wire to M.C.C. ground bus.
- Thermite (Cadwell) Connection (Typ.)
- 1 Only 4" Secondary duct to M.C.C.
- No. 2/0 Copper ground grid - 1ft below finished grade.
- 3/4" x 10" Copperweld ground rod (Typ. one of six).
- 1 Only 3" Telephone duct. Maintain 12" spacing from power ducts except where ducts encased in concrete.
- Installation pilaster as per B.C.H. & P.A. Standard No. ES43U 3.2-02
- B.C. Hydro service pole.
- 3 Only 2" primary ducts.
- Transformer & Kiosk pad as per B.C.H. & P.A. Standard No. O-U08-C212 Rev. 3

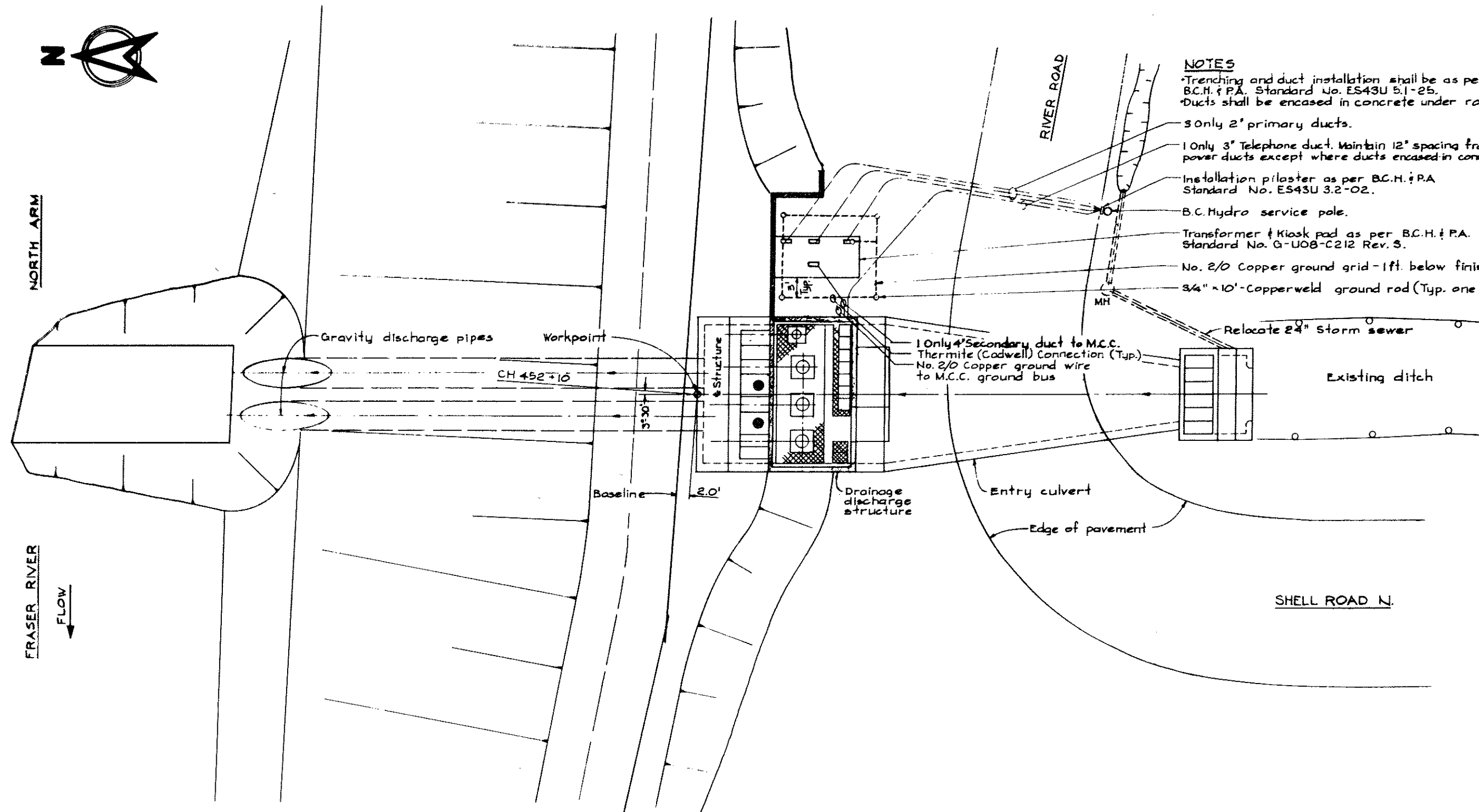
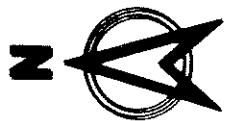
NOTES
 *Trenching and duct installation shall be as per B.C.H. & P.A. Standard No. ES43U 5.1-25.
 *Ducts shall be encased in concrete under road.

2 0 4 8 12 16 20
 SCALE IN FEET

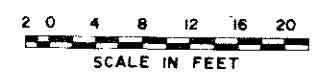



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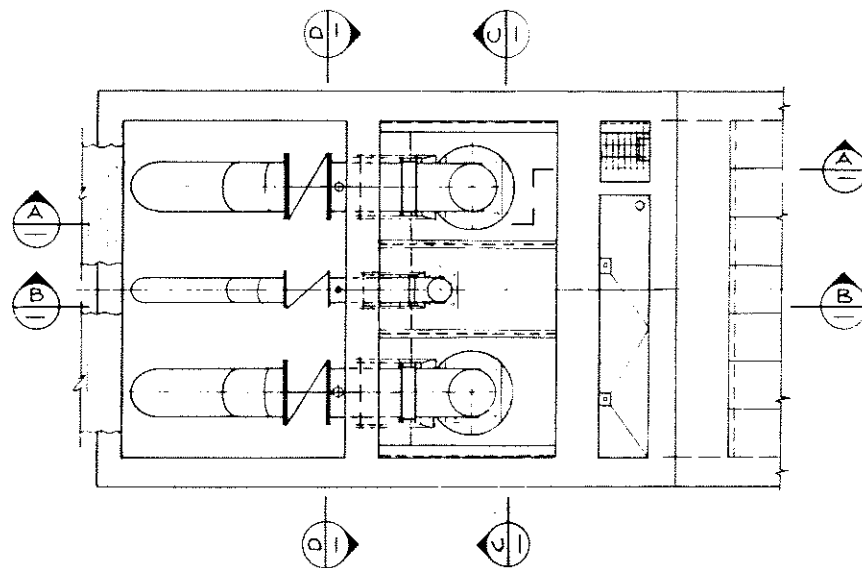
NO.	BY	REVISIONS	DATE	RECOMMENDED <i>J.M. Fuller</i> CHIEF, PROJECTS DIV.	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND	DESIGNED	SURVEYED
				DATE <i>July 24/74</i>		DRAWN	DATE
				APPROVED <i>P. Smith</i> DIRECTOR	CONTRACT NO. 3 NO. 4 ROAD NORTH DRAINAGE DISCHARGE STRUCTURE LAYOUT B POWER SUPPLY	CHECKED	FILE NO. 0281550-C10-3
				DATE <i>July 24/74</i>		SCALE <i>As shown</i>	DATE <i>July 2, 1974</i>
						DWG. NO. 4795-3-3	SHEET OF SHEETS



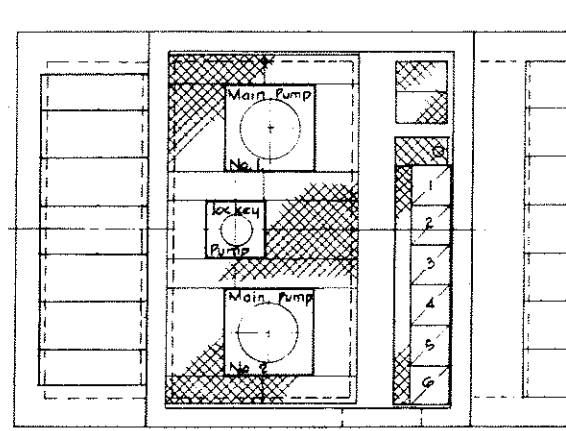
- NOTES**
- *Trenching and duct installation shall be as per B.C.H. & P.A. Standard No. ES43U 5.1-25.
 - *Ducts shall be encased in concrete under road.
 - 3 Only 2" primary ducts.
 - 1 Only 3" Telephone duct. Maintain 12" spacing from power ducts except where ducts encased in concrete.
 - Installation pilaster as per B.C.H. & P.A. Standard No. ES43U 3.2-02.
 - B.C. Hydro service pole.
 - Transformer & Kiosk pad as per B.C.H. & P.A. Standard No. G-U08-C212 Rev. 3.
 - No. 2/0 Copper ground grid - 1ft. below finished grade.
 - 3/4" x 10' - Copperweld ground rod (Typ. one of six).



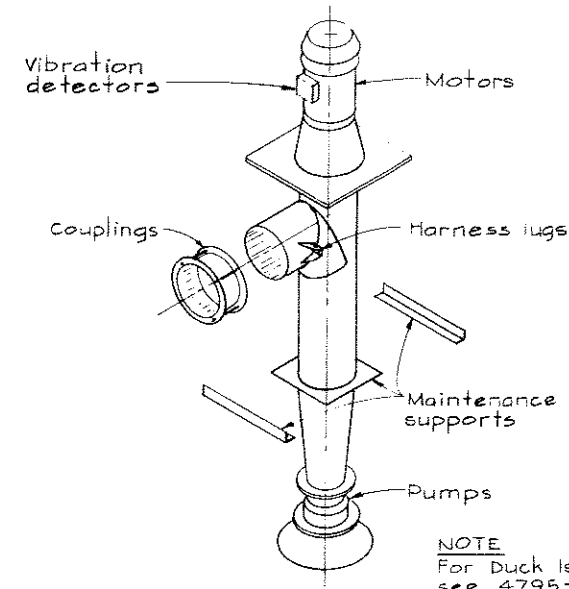
 CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	NO. BY REVISIONS DATE	RECOMMENDED <i>J.H. Fuller</i> CHIEF, PROJECTS DIV. DATE <i>July 4, 1974</i>	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 3 SHELL ROAD NORTH DRAINAGE DISCHARGE STRUCTURE LAYOUT & POWER SUPPLY	DESIGNED DRAWN <i>HS</i> CHECKED SCALE <i>As shown</i> DWG. NO. 4795-3-4	SURVEYED DATE FILE NO. 0201550-C10-3 DATE <i>July 4, 1974</i> SHEET OF SHEETS
		APPROVED <i>P.B. Sandhu</i> DIRECTOR DATE <i>July 4, 1974</i>		PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 3 SHELL ROAD NORTH DRAINAGE DISCHARGE STRUCTURE LAYOUT & POWER SUPPLY	DWG. NO. 4795-3-4



PLAN @ EL 7.0



PLAN @ EL 18.0

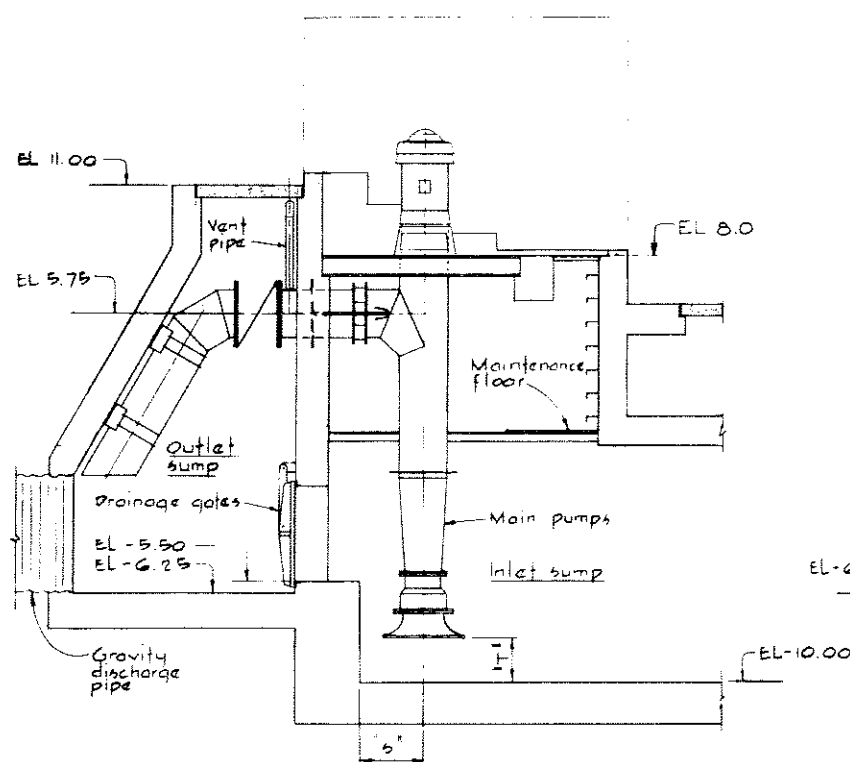


NOTE
For Duck Island
see 4795-3-15

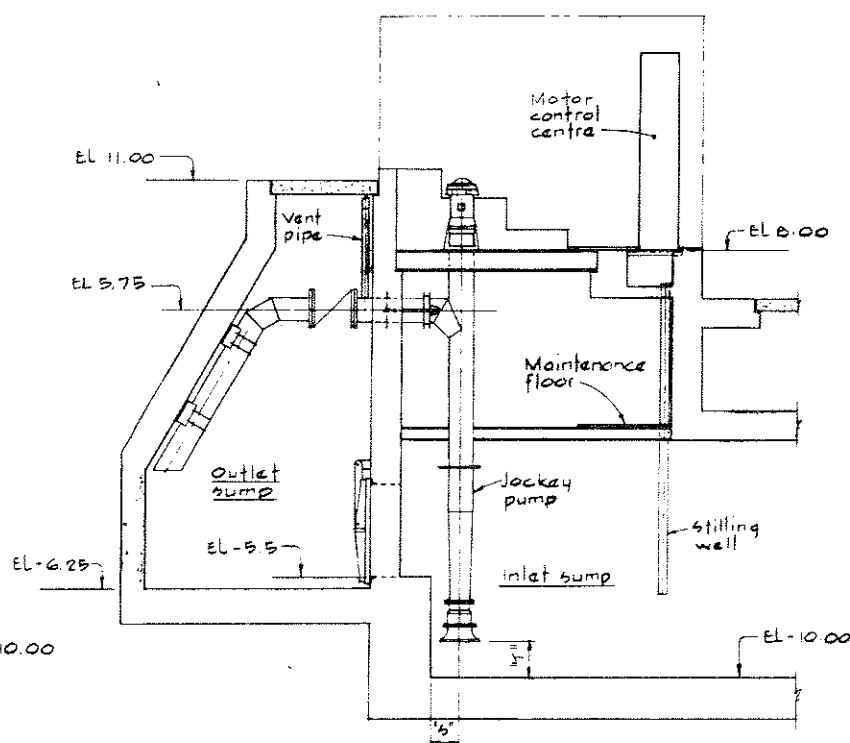
ITEMS INCLUDED IN CONTRACT NO. 3
(CAMBIE ROAD WEST, NO. 4 ROAD NORTH, SHELL ROAD NORTH)
NTS

GENERAL NOTES - MECHANICAL

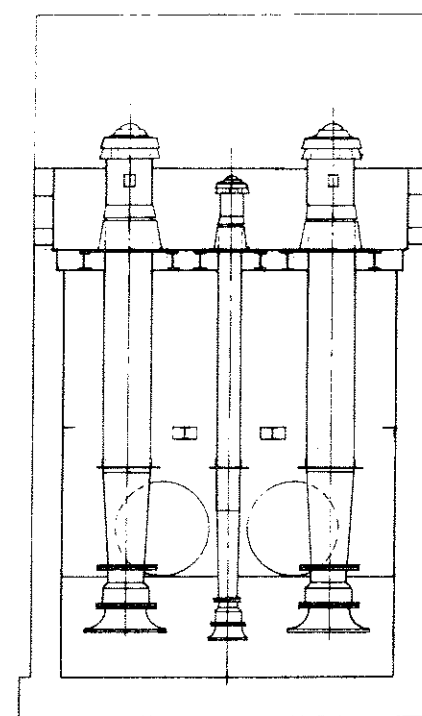
Roof hatches are designed to allow withdrawal of pump columns and elbows with approx. 1' minimum clearance all around.
Dimensions "6" & "1" shall be supplied by contractor for each particular pump.
"5" will determine location of each pump centreline.
"1" will determine required pump column lengths.



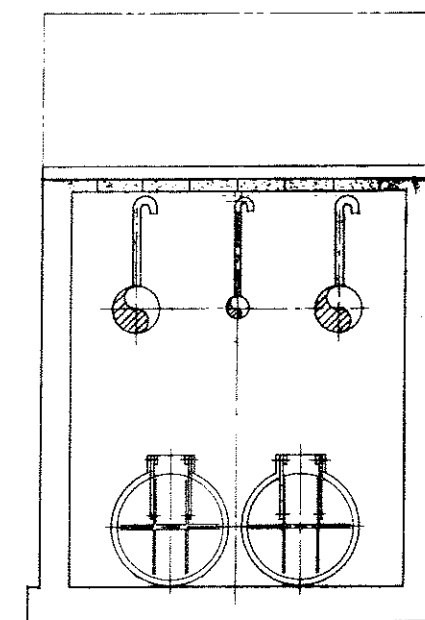
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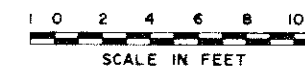
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SECTION C-C



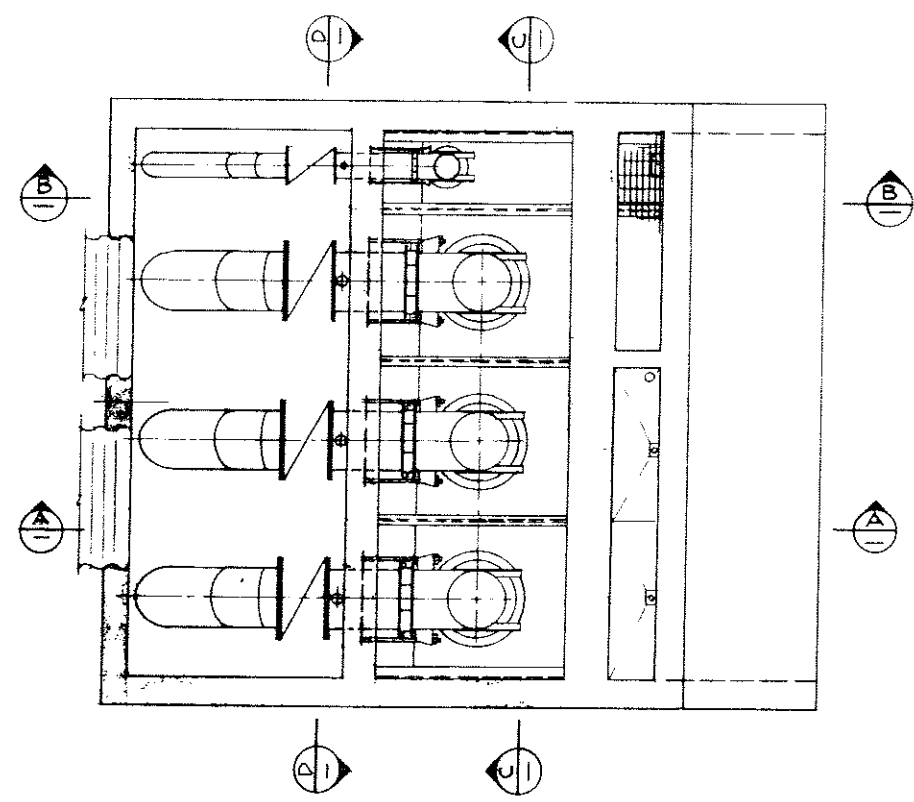
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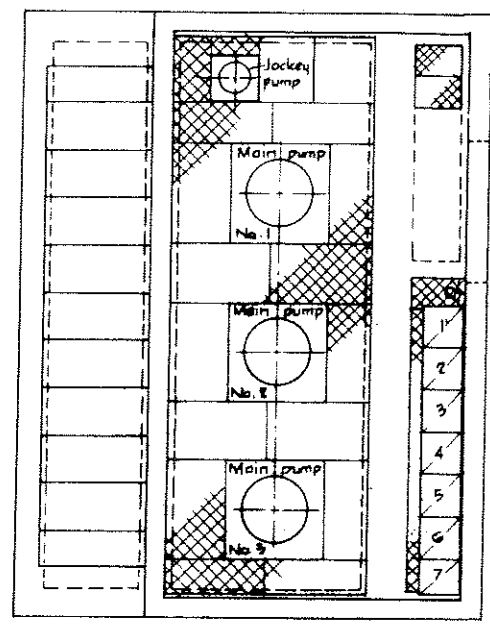
CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

NO.	BY	REVISIONS	DATE	RECOMMENDED <i>M. J. Little</i> CHIEF, PROJECTS DIV.	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND	DESIGNED	SURVEYED
				DATE <i>July 4/74</i>		DRAWN H.W.	DATE
				APPROVED <i>P. Minard</i> DIRECTOR	CONTRACT NO. 3 CAMBIE ROAD WEST DRAINAGE DISCHARGE STRUCTURE ARRANGEMENT OF MECHANICAL AND ELECTRICAL EQUIPMENT	CHECKED	FILE NO. 0281550-C10-3
			DATE <i>July 31/74</i>	DWG. NO. 4795-3-5		SCALE As shown	DATE July 2, 1974
						SHEET OF SHEETS	

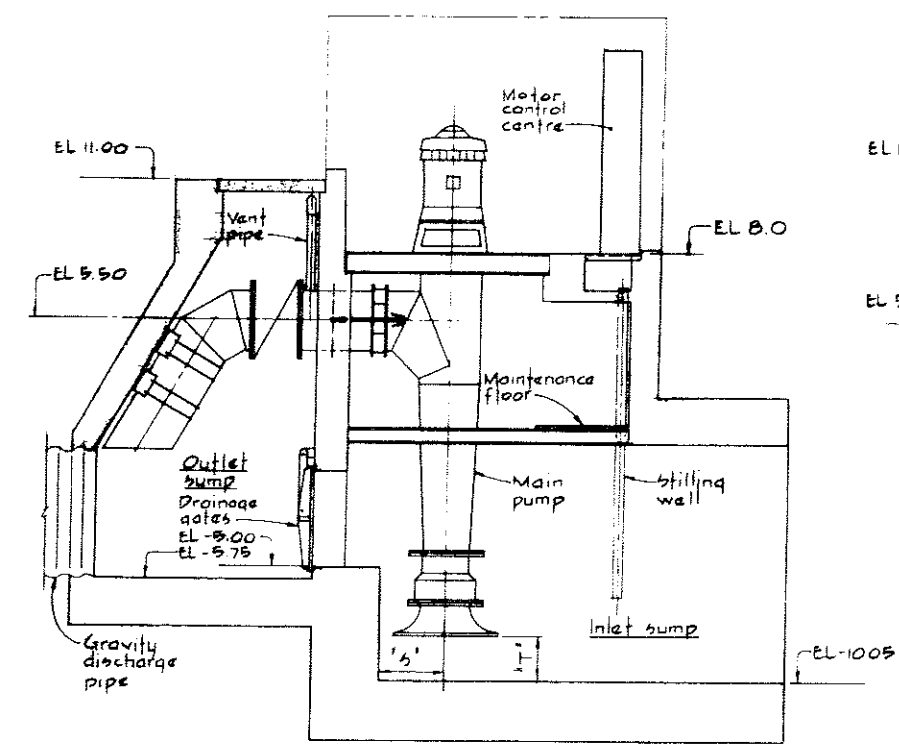
NOTES
For General Notes see 4795-3-5



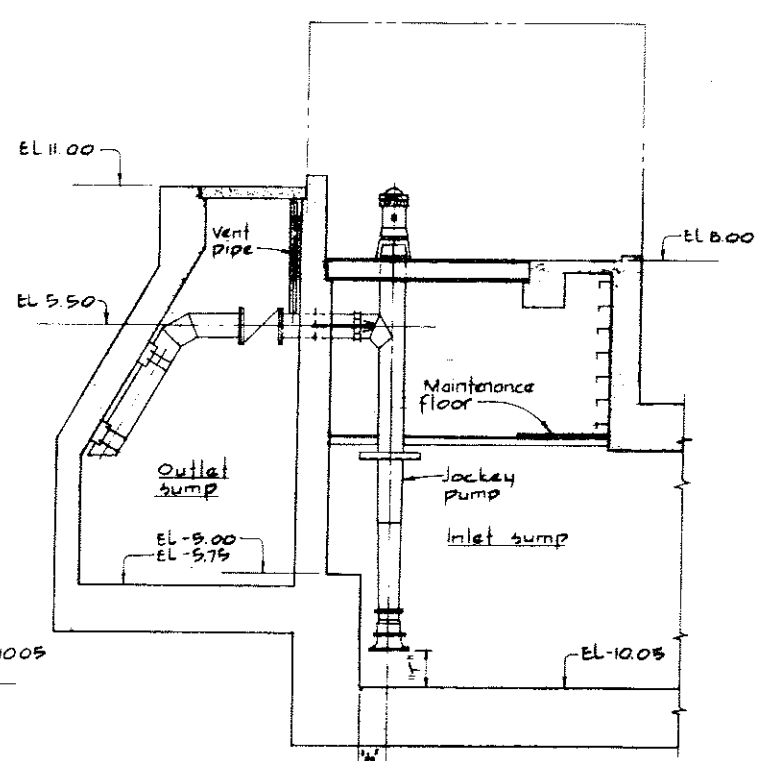
PLAN @ EL 7.0



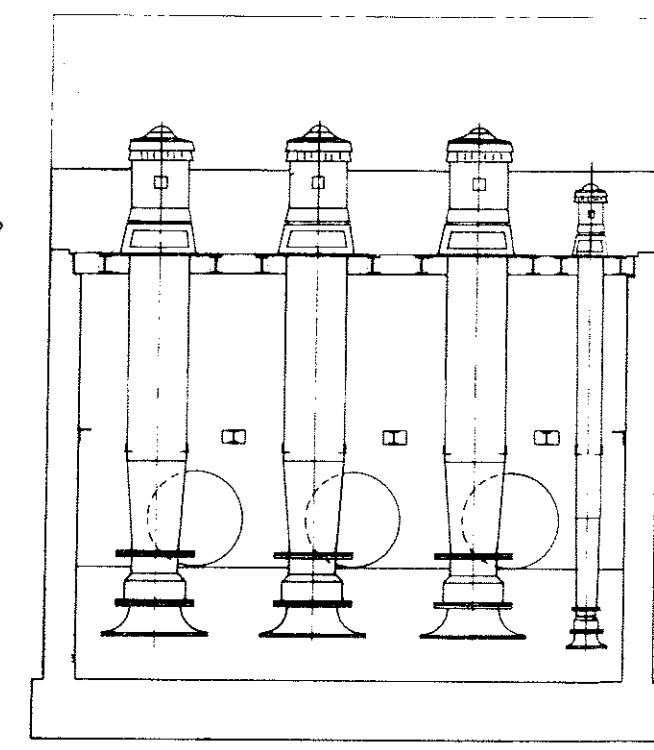
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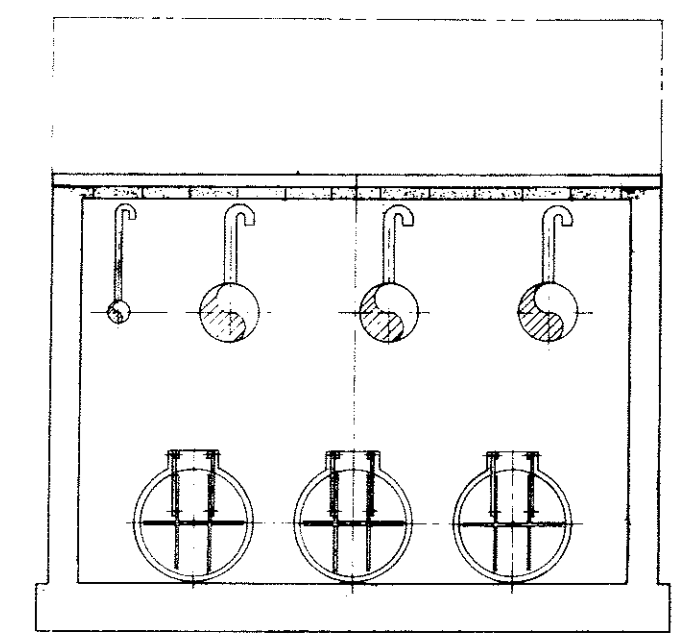
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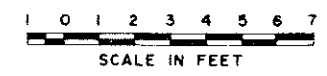
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SECTION C

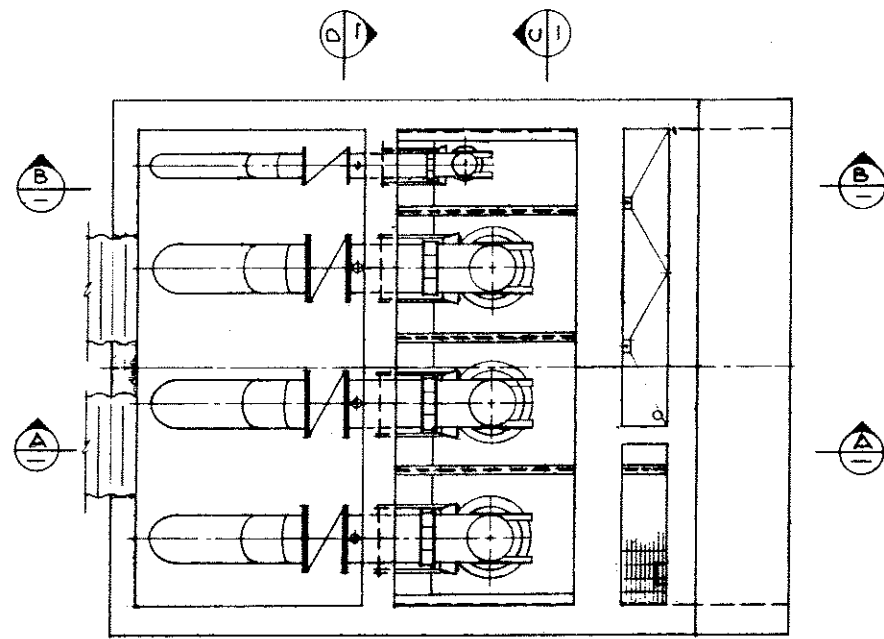


SECTION D

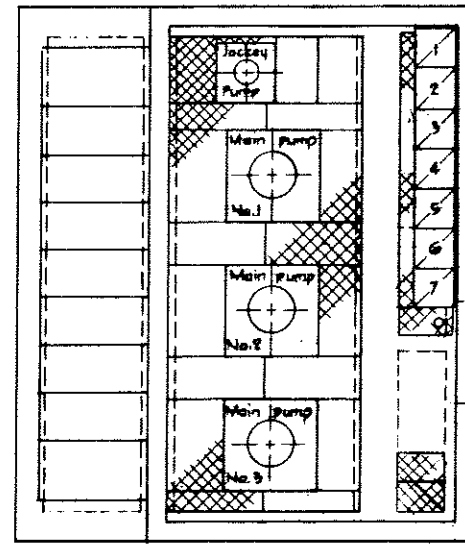


 CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	RECOMMENDED <i>M. Fuller</i> CHIEF, PROJECTS DIV.	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA — BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO 3 — THE TOWNSHIP OF RICHMOND CONTRACT NO. 3 NO 4 ROAD NORTH DRAINAGE DISCHARGE STRUCTURE ARRANGEMENT OF MECHANICAL AND ELECTRICAL EQUIPMENT	DESIGNED	SURVEYED
	DATE <i>July 24/74</i>		DRAWN <i>H.W.</i>	DATE
APPROVED <i>M. Fuller</i> DIRECTOR	CHECKED	FILE NO. 0281550-C10-3	DATE <i>July 4 1974</i>	
NO. BY REVISIONS DATE	SCALE <i>As shown</i>	DWG. NO. 4795-3-6	SHEET OF SHEETS	

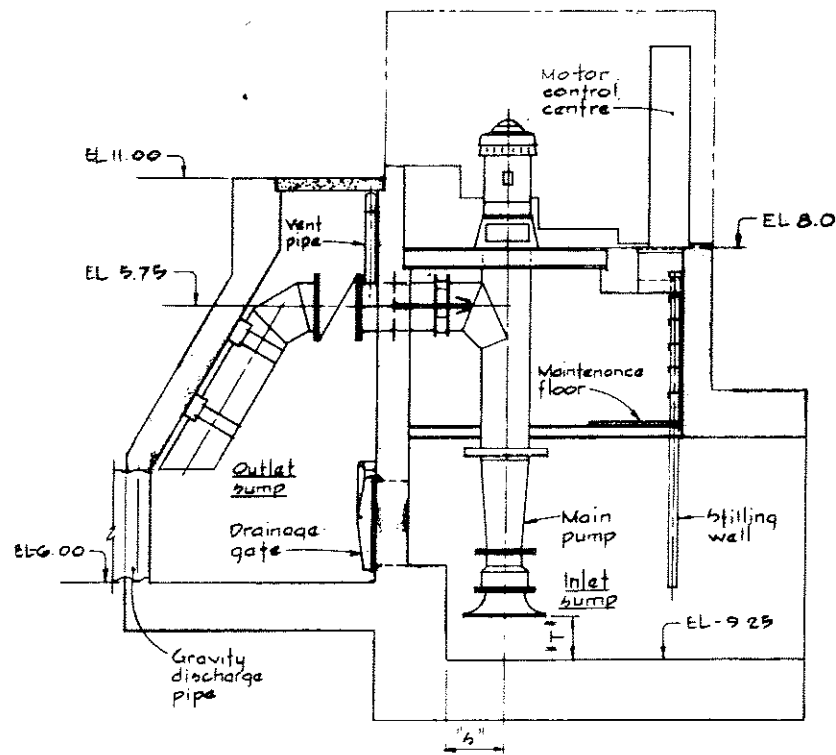
NOTES
For general notes see 4795-3-5



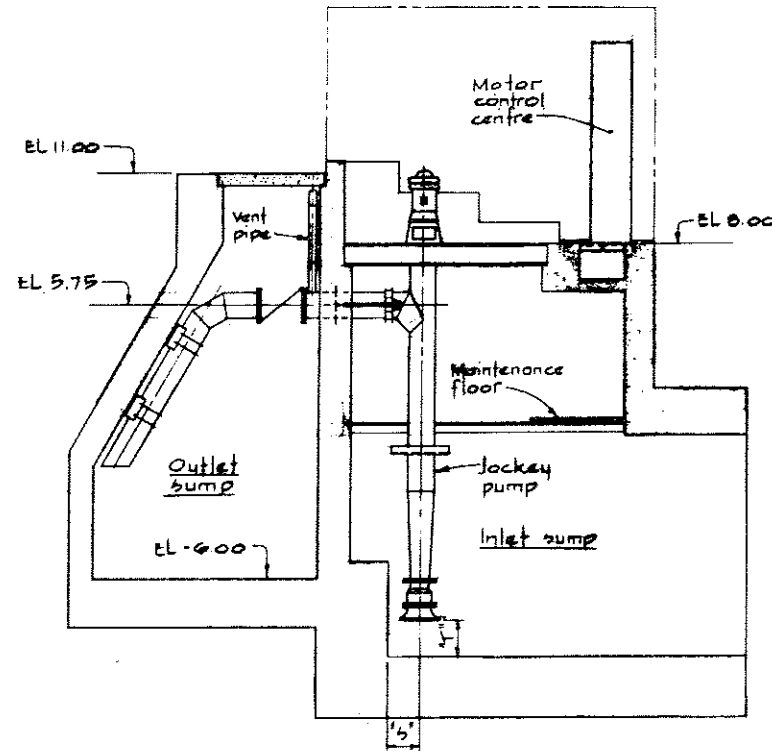
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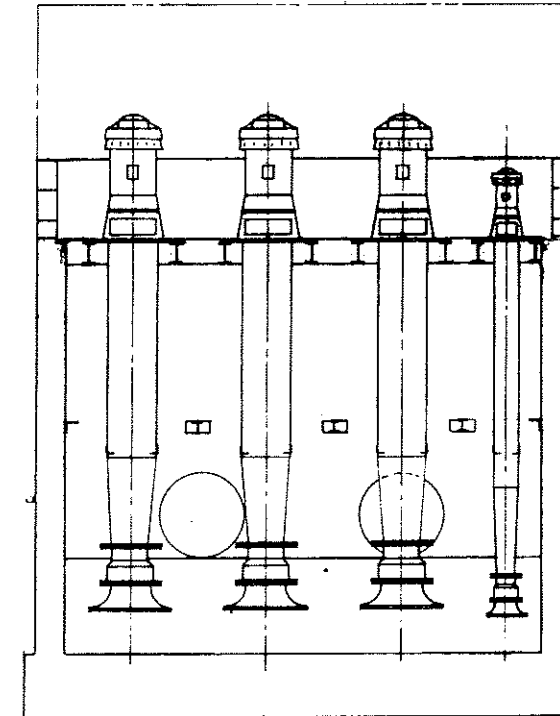
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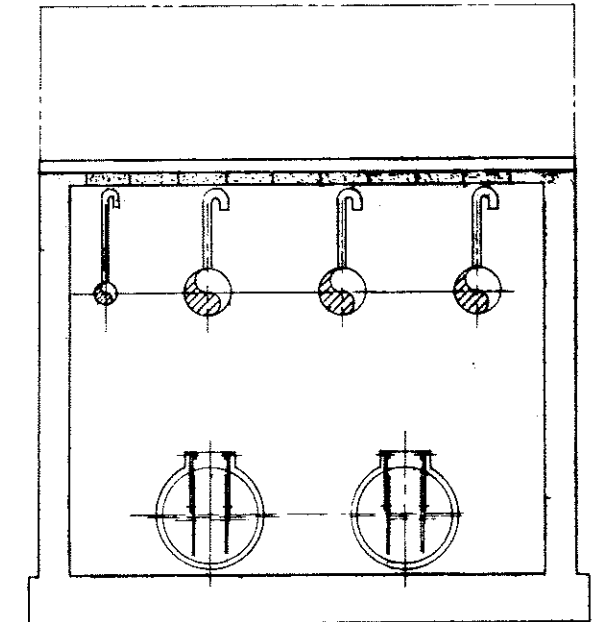
SECTION A-A



SECTION B-B




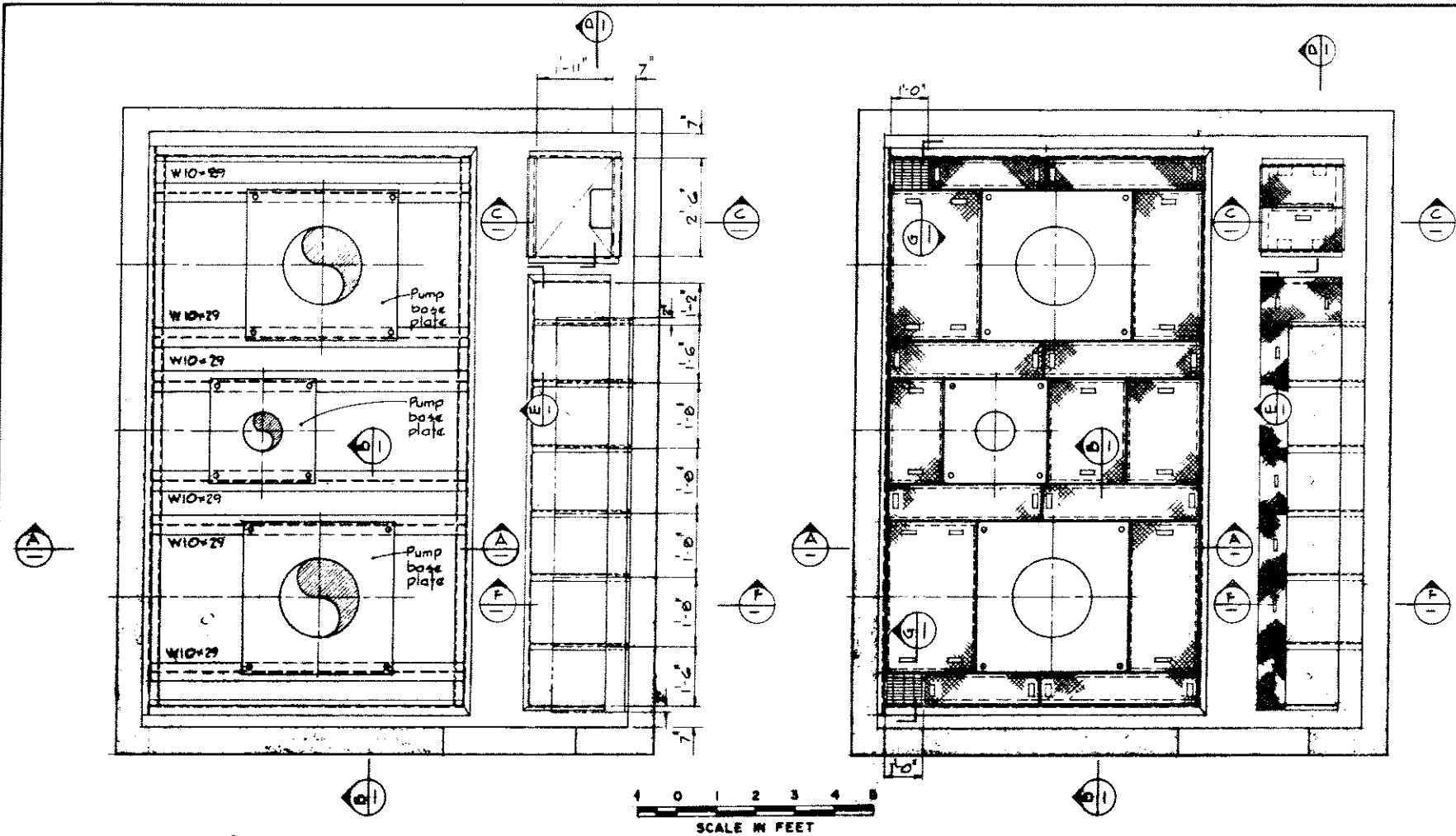
SECTION C-C



SECTION D-D

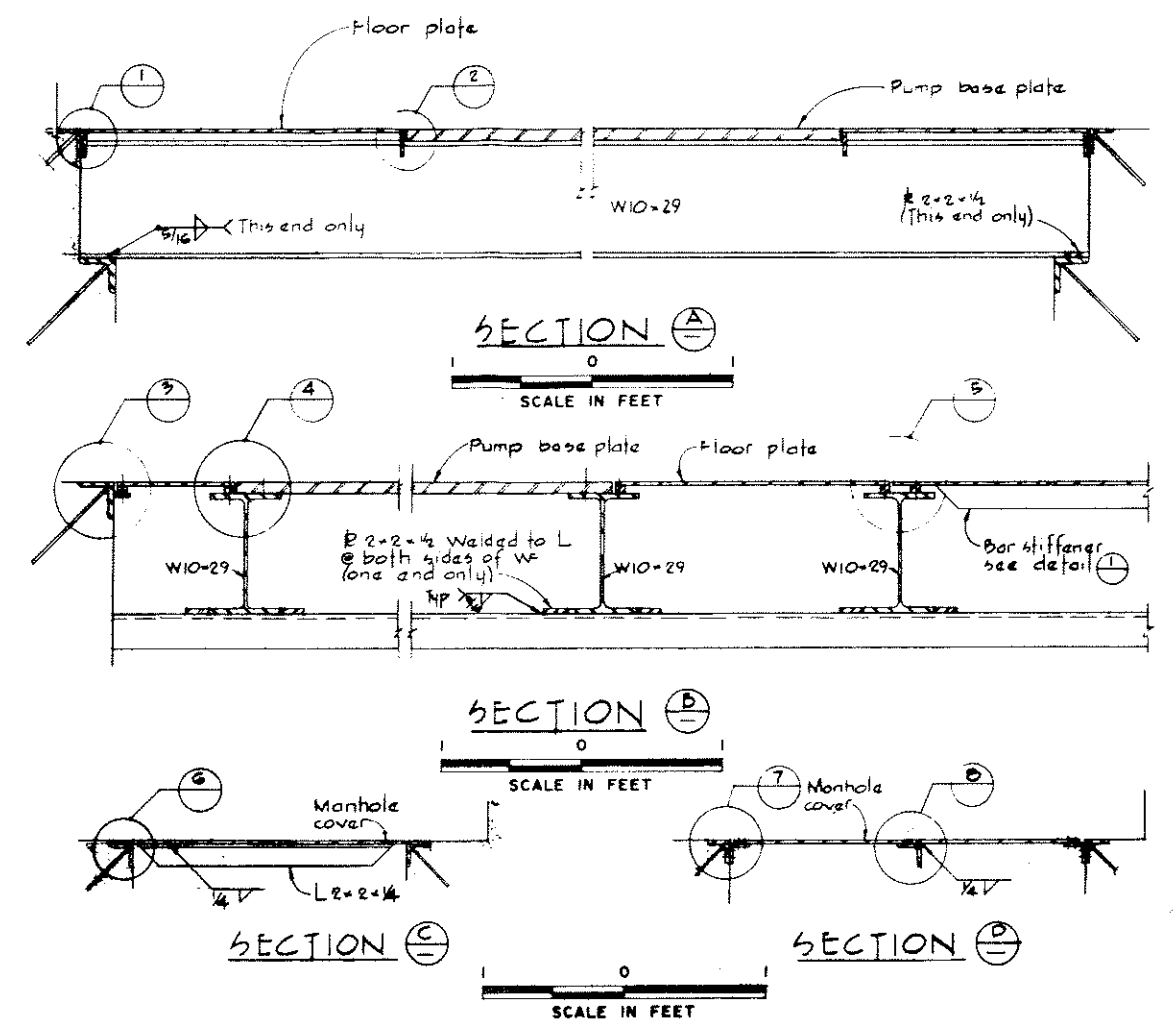


 CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA	NO.	BY	REVISIONS	DATE	RECOMMENDED <i>John Miller</i> CHIEF, PROJECTS DIV. DATE <i>July 11/74</i>	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 3 SHELL ROAD NORTH DRAINAGE DISCHARGE STRUCTURE ARRANGEMENT OF MECHANICAL & ELECTRICAL EQUIPMENT	DESIGNED	SURVEYED
							DRAWN <i>H.W.</i>	DATE
					APPROVED <i>P.M. Smith</i> DIRECTOR DATE <i>July 4/74</i>		CHECKED	FILE NO. <i>0281550-C10-3</i>
							SCALE <i>As shown</i>	DATE <i>July 4, 1974</i>
							DWG. NO. <i>4795-3-7</i>	SHEET OF SHEETS



PLAN PUMP SUPPORT STRUCTURE

PLAN FLOOR PLATES

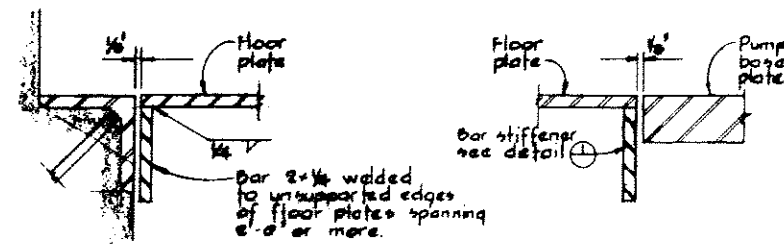


SECTION A

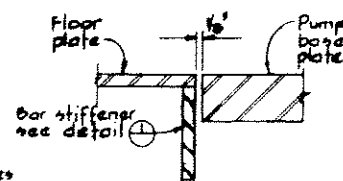
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SECTION C

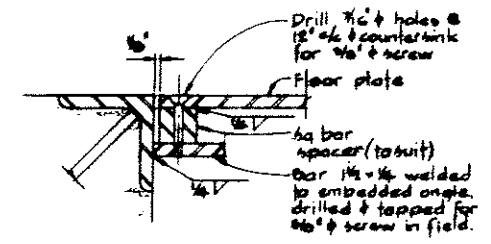
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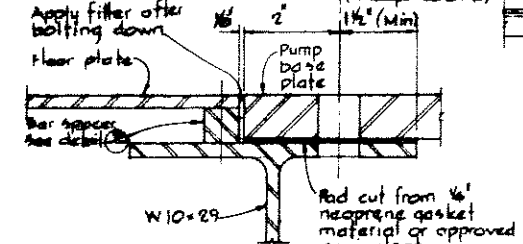
DETAIL 1



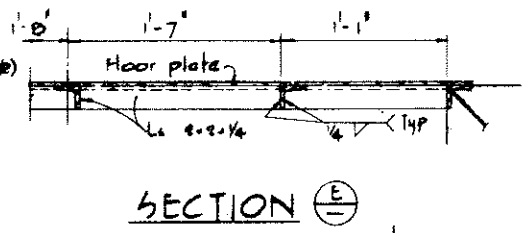
DETAIL 2



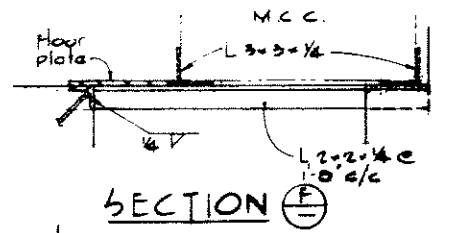
DETAIL 3 TYPICAL FLOOR PLATE FIXING



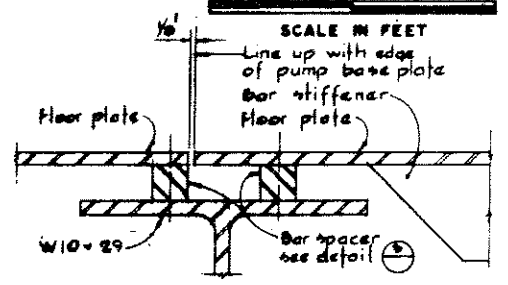
DETAIL 4



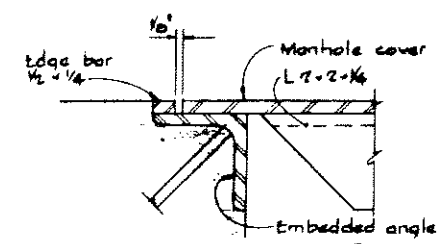
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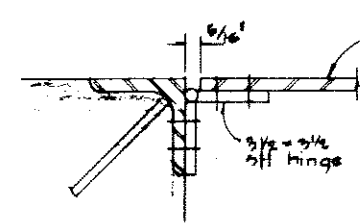
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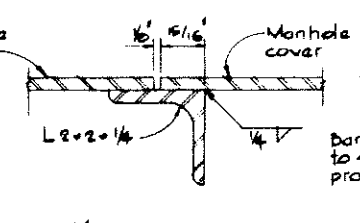
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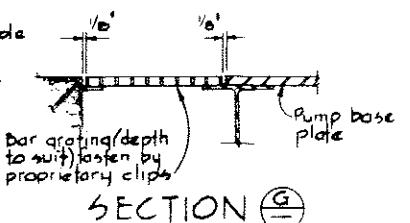
DETAIL 6



DETAIL 7



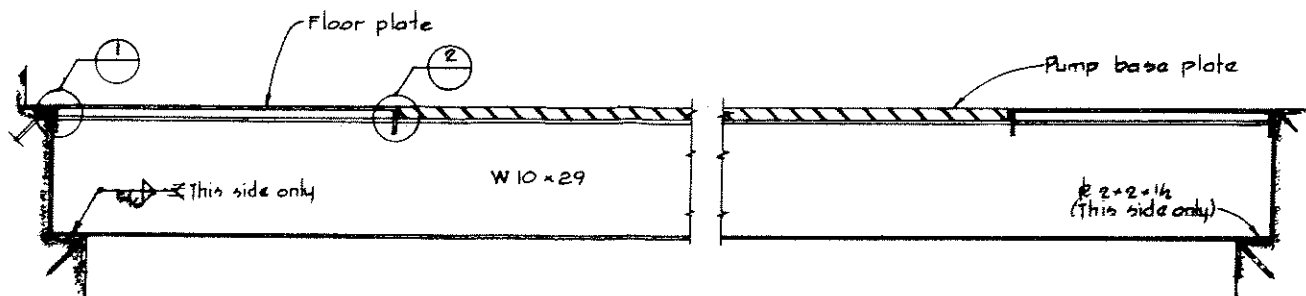
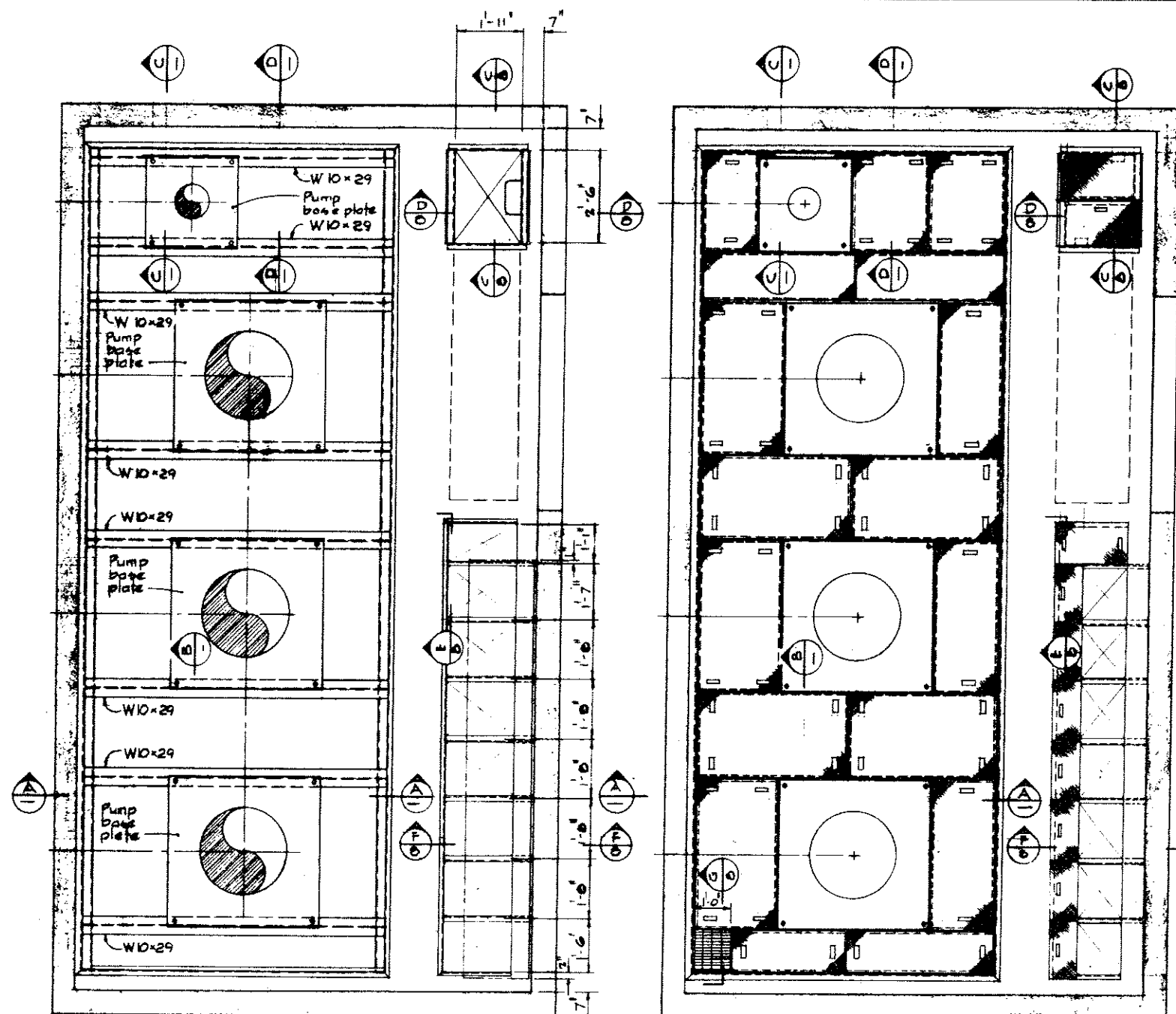
DETAIL 8



SECTION G

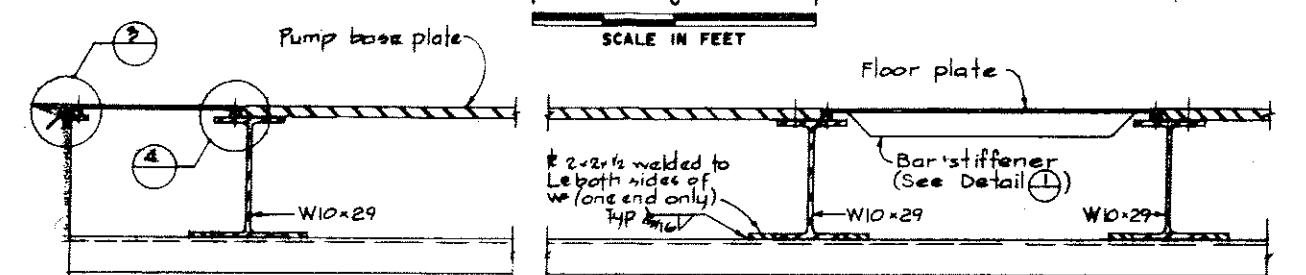
NOTES
For General Notes see 4795-3-5

<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	RECOMMENDED: <i>J. Fuller</i> CHIEF, PROJECTS DIV.	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO 3 CAMBIE ROAD WEST DRAINAGE DISCHARGE STRUCTURE PUMP SUPPORT FRAME AND FLOOR PLATING	DESIGNED: _____	SURVEYED: _____
	DATE: <i>July 4/74</i>		DRAWN: <i>H.W.</i>	DATE: _____
	APPROVED: <i>P. B...</i> DIRECTOR		CHECKED: _____	DATE: <i>July 4, 1974</i>
	DATE: <i>July 4/74</i>		SCALE: <i>A as shown</i>	DWG. NO: 4795-3-8
NO. BY: _____	REVISIONS: _____	DATE: _____		SHEET OF SHEETS



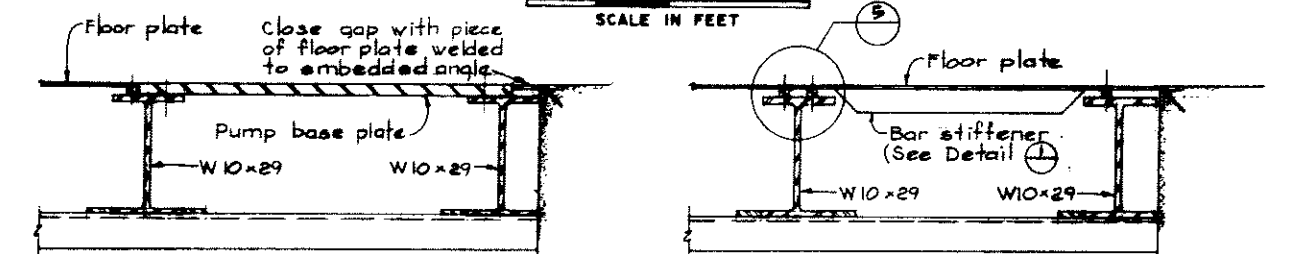
SECTION A

SCALE IN FEET



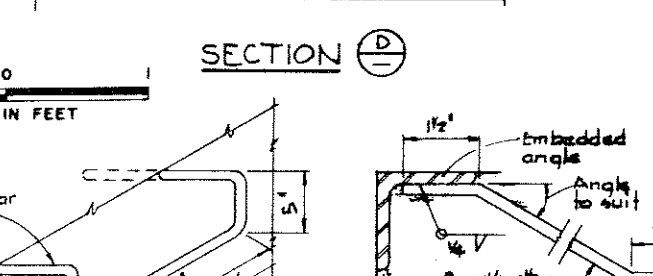
SECTION B

SCALE IN FEET



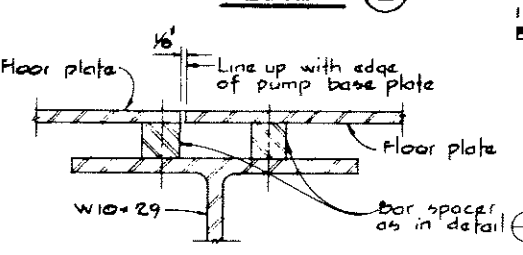
SECTION C

SCALE IN FEET



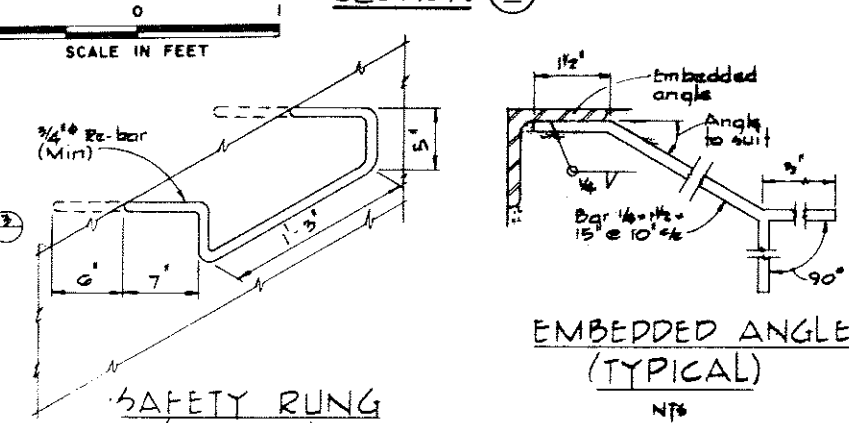
SECTION D

SCALE IN FEET



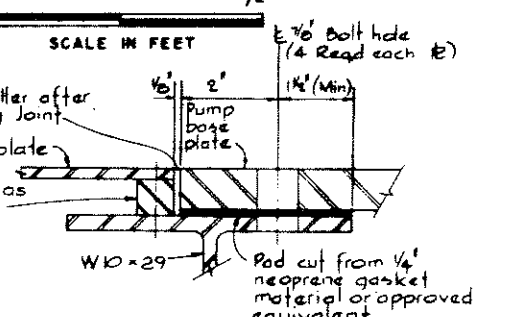
DETAIL 5

SCALE IN FEET



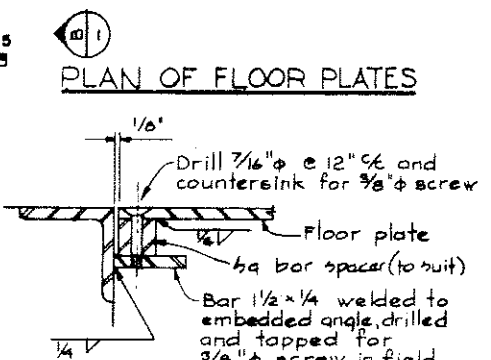
EMBEDDED ANGLE (TYPICAL)

NPS



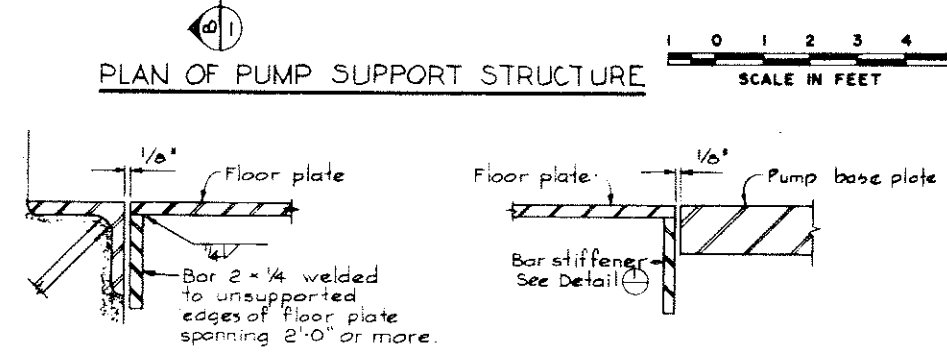
DETAIL 4

SCALE IN FEET



DETAIL 3

SCALE IN FEET



DETAIL 1

DETAIL 2

SCALE IN FEET

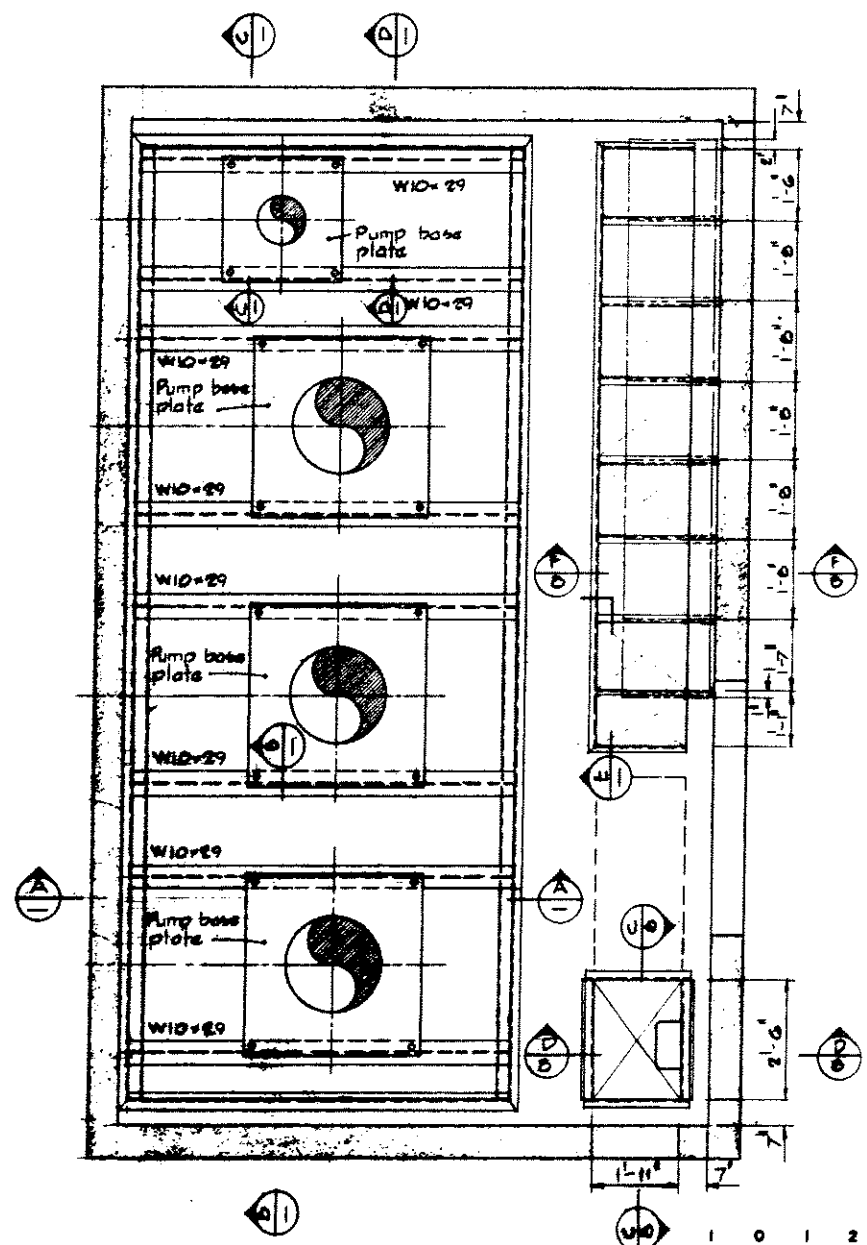
NOTES
For General Notes see 4795-3-5

CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

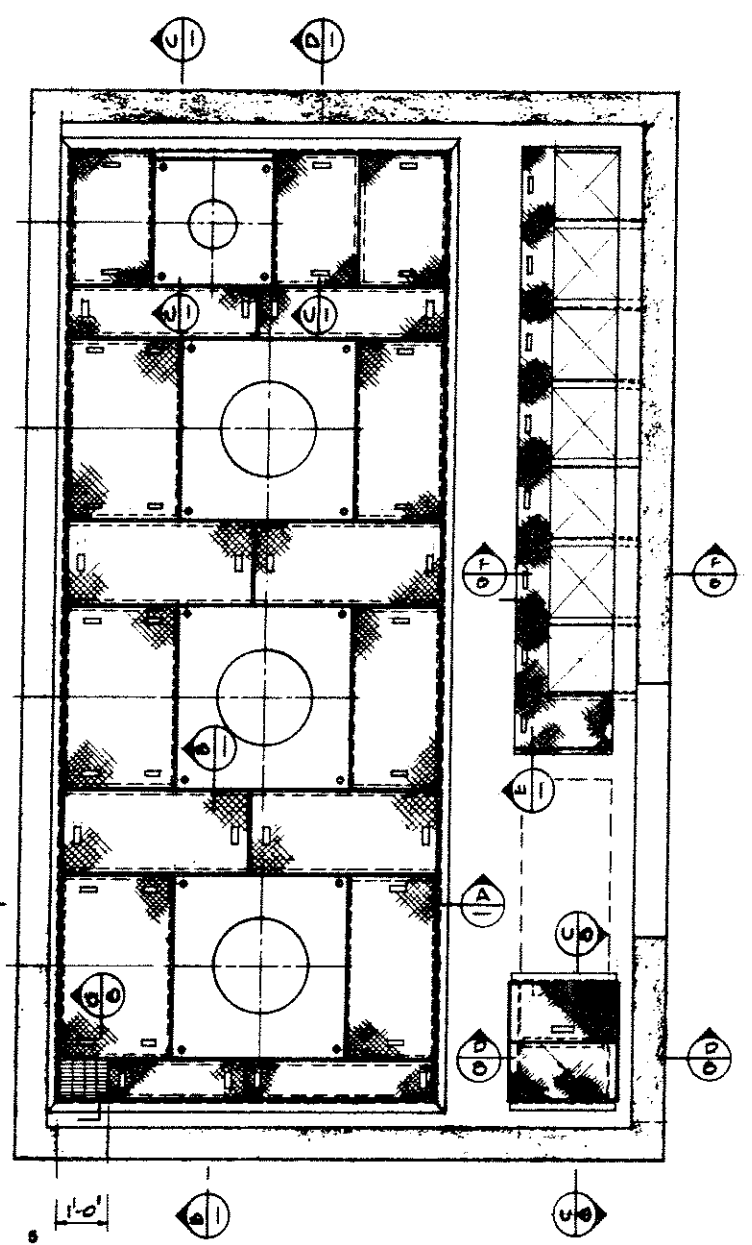
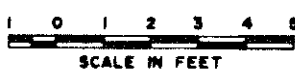
RECOMMENDED *John Miller*
CHIEF, PROJECTS DIV.
DATE *July 4/74*
APPROVED *John Miller*
DIRECTOR
DATE *July 4/74*

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO. 8
NO. 4 ROAD NORTH DRAINAGE DISCHARGE STRUCTURE
PUMP SUPPORT FRAME AND FLOOR PLATING

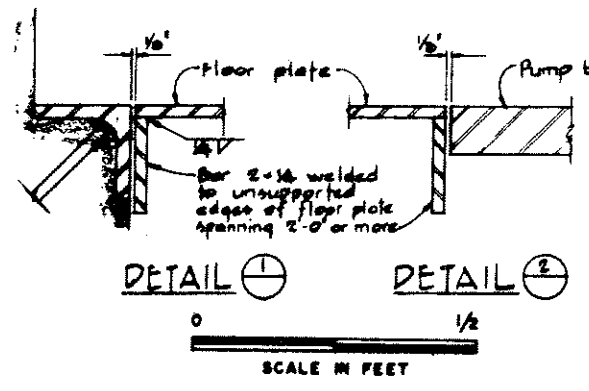
DESIGNED	SURVEYED
DRAWN H 5	DATE
CHECKED	FILE NO. 0281550-C10-3
SCALE A _s shown	DATE July 4, 1974
DWG. NO. 4795-3-9	SHEET ... OF ... SHEETS



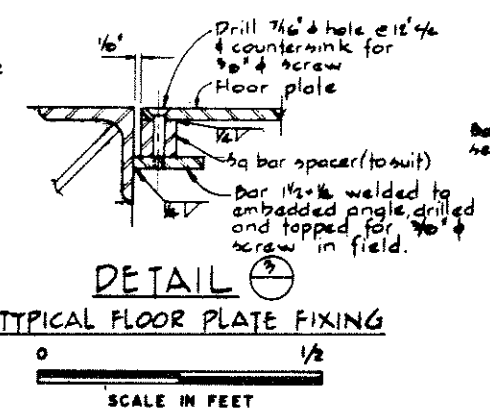
PLAN
PUMP SUPPORT STRUCTURE



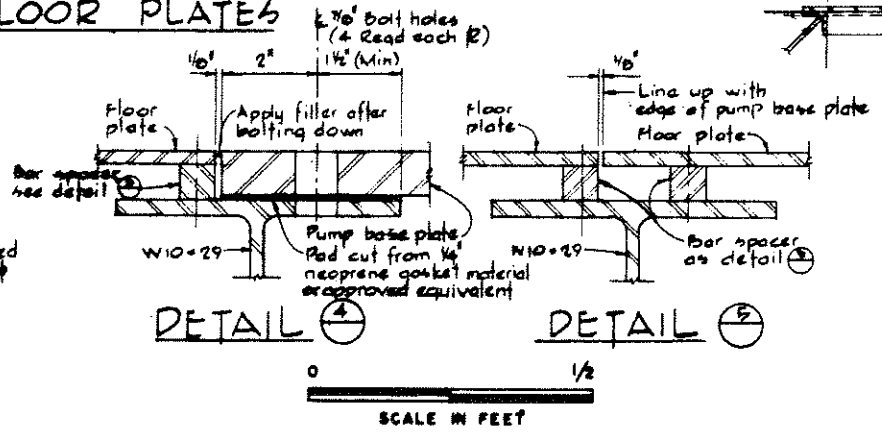
PLAN
FLOOR PLATES



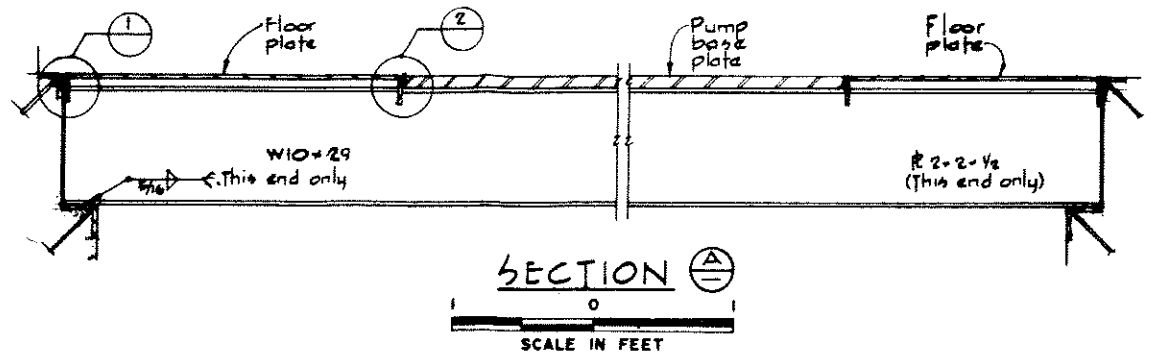
DETAIL 1
DETAIL 2
SCALE IN FEET



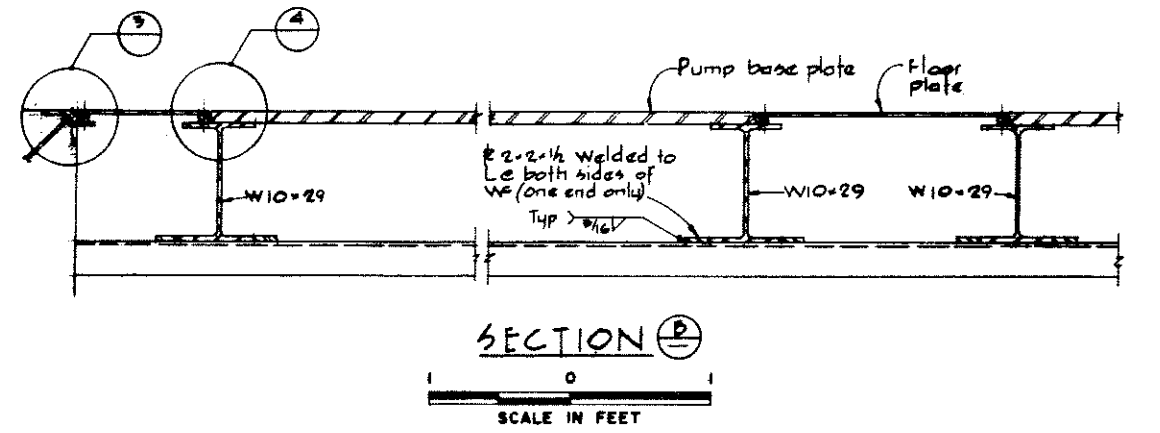
DETAIL 3
TYPICAL FLOOR PLATE FIXING
SCALE IN FEET



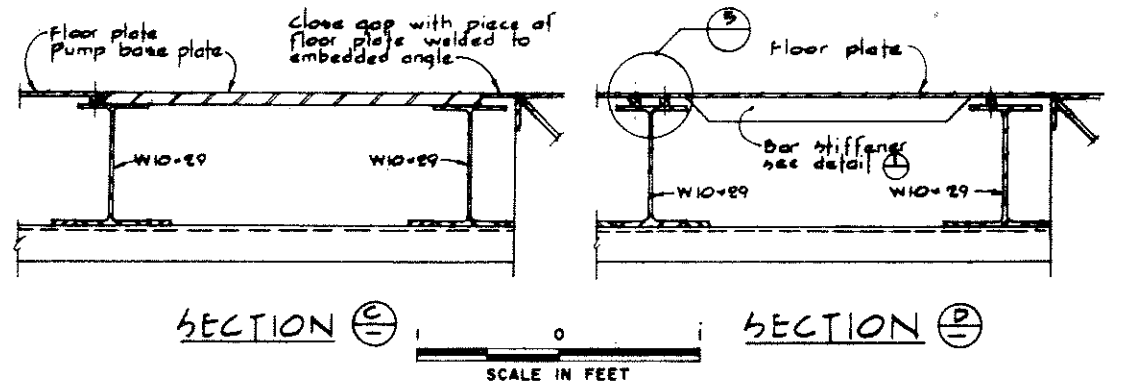
DETAIL 4
DETAIL 5
SCALE IN FEET



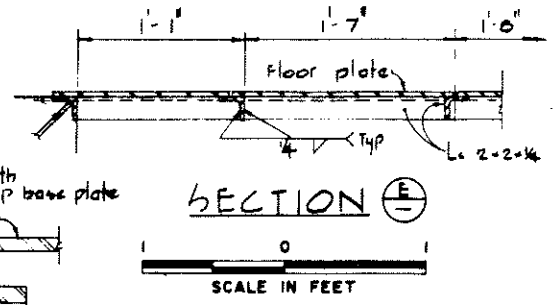
SECTION A-A
SCALE IN FEET



SECTION B-B
SCALE IN FEET



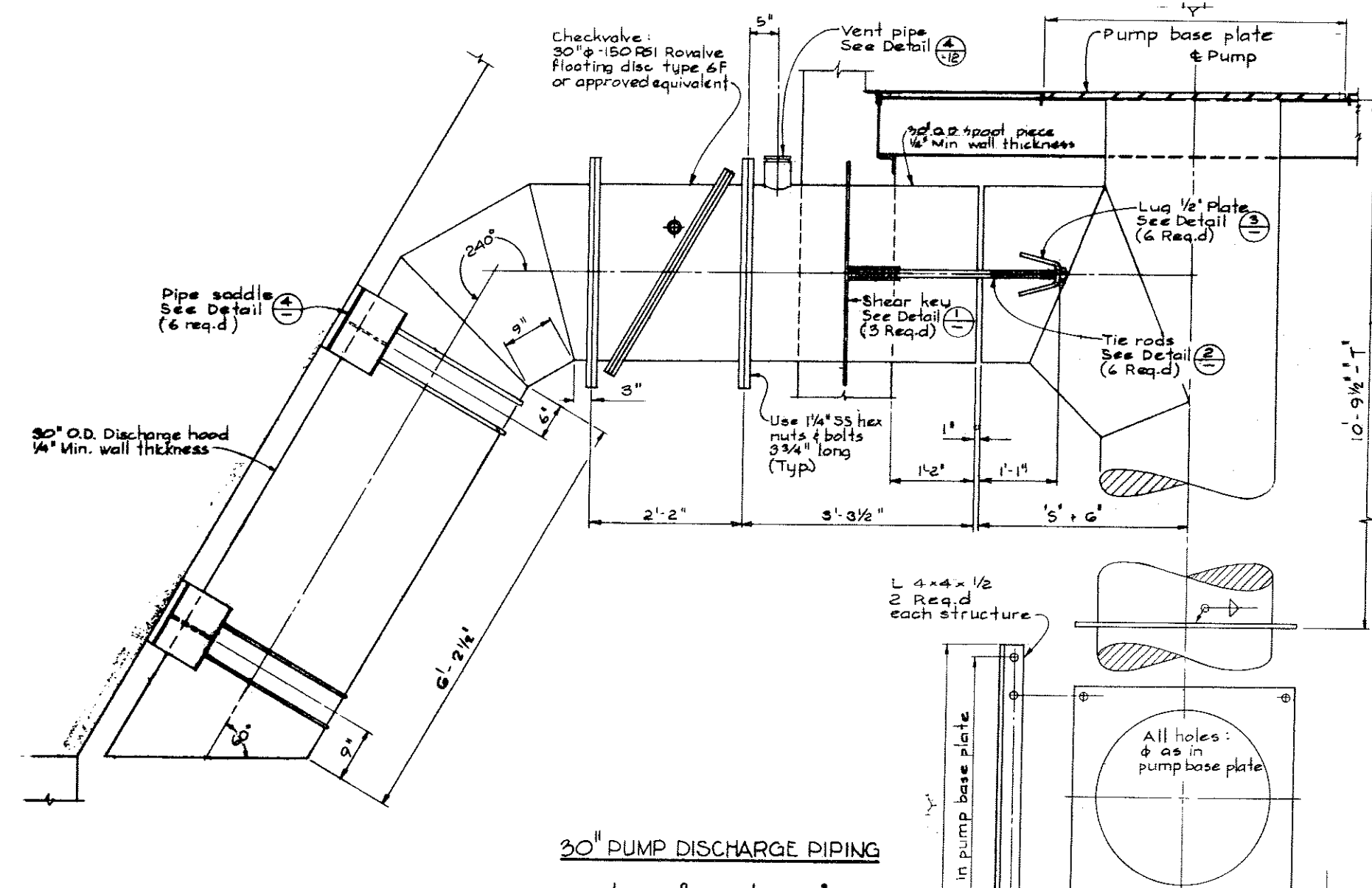
SECTION C-C
SECTION D-D
SCALE IN FEET



SECTION E-E
SCALE IN FEET

NOTES
For General Notes see 4795-3-5

<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	RECOMMENDED: <i>M. Fuller</i> CHIEF, PROJECTS DIV.	DESIGNED: _____	SURVEYED: _____
	DATE: <i>July 4/74</i>	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DATE: _____
APPROVED: <i>M. Fuller</i> DIRECTOR	PROJECT NO 3 - THE TOWNSHIP OF RICHMOND	CHECKED: <i>H.W.</i>	FILE NO: <i>0281550-C1Q-3</i>
DATE: <i>July 4/74</i>	CONTRACT NO 3 SHELL ROAD NORTH DRAINAGE DISCHARGE STRUCTURE PUMP SUPPORT FRAME AND FLOOR PLATING	SCALE: <i>A4 shown</i>	DATE: <i>July 4, 1974</i>
NO. BY _____	REVISIONS _____	DWG. NO: <i>4795-3-10</i>	SHEET _____ OF _____ SHEETS



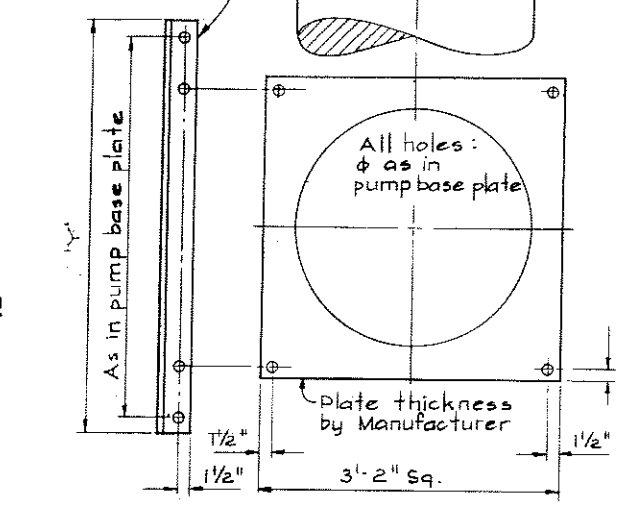
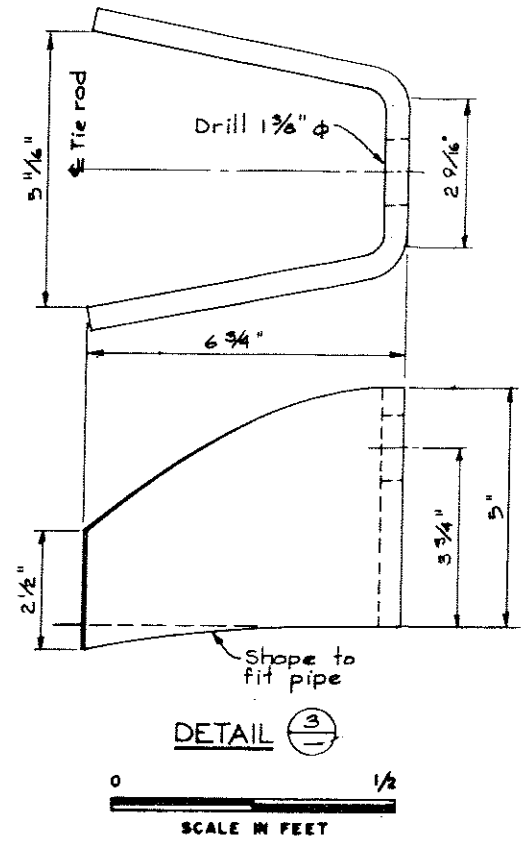
PIPE FLANGES (All 1/16" raised face)						
Nom. size	Flange O.D.	Bolt circle	Bolt No.	Holes Dia.	Thickness	Flange RF
30"	38 3/4"	36"	18	1 3/8"	1 1/4"*	53/4"
24"	32"	29 1/2"	14	1 3/8"	1 1/8"*	27 1/4"
12"	19"	17"	8	1"	1"*	15"

* Excludes raised face (RF)

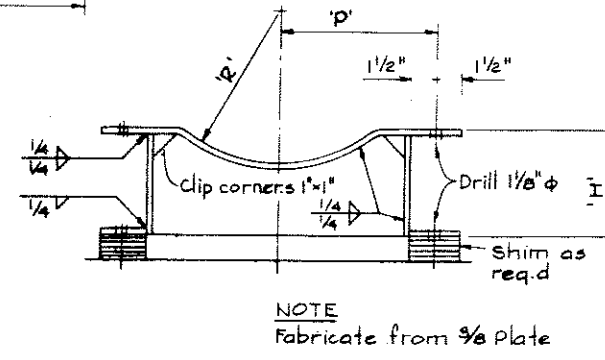
SHEAR KEY & TIE ROD DIMENSIONS							
Nom. size	Dwg. No.	'W'	'R'	'B'	'L'	'D ₁ '	'D ₂ '
30"	-11	2'-5"	1'-3"	1'-6 3/4"	2'-11 1/2"	1 1/4"	1 3/4"
24"	-12	2'-3"	1'-0"	1'-3 3/4"	2'-10 1/2"	1 1/4"	1 3/4"
12"	-13	1'-0 1/2"	6 3/8"			3/4"	1 1/4"

COUPLINGS			
Nom. size	Dwg. No.	No. Req.	
30"	-11	3	
24"	-12	5	
12"	-13	3	

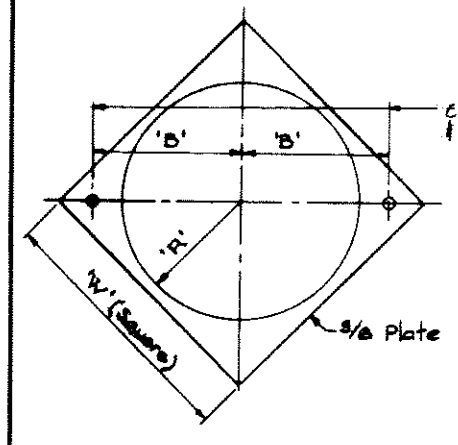
PIPE SADDLE DIMENSIONS				
Nom. size	Dwg. No.	'P'	'R'	'H'
30"	-11	2'-3 1/2"	1'-3"	9"
24"	-12	1'-0 1/2"	1'-0"	7"
12"				See 4795-3-13



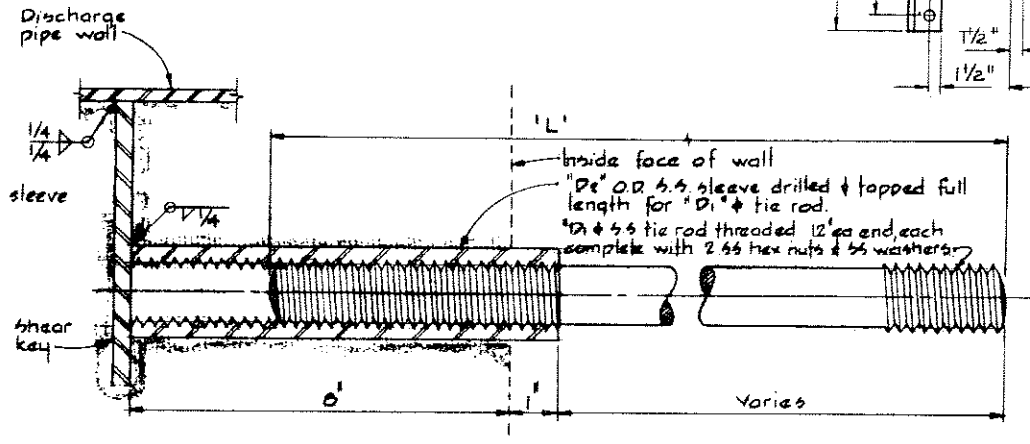
PLAN



DETAIL (4) NTS



DETAIL (1) NTS



DETAIL (2) NTS

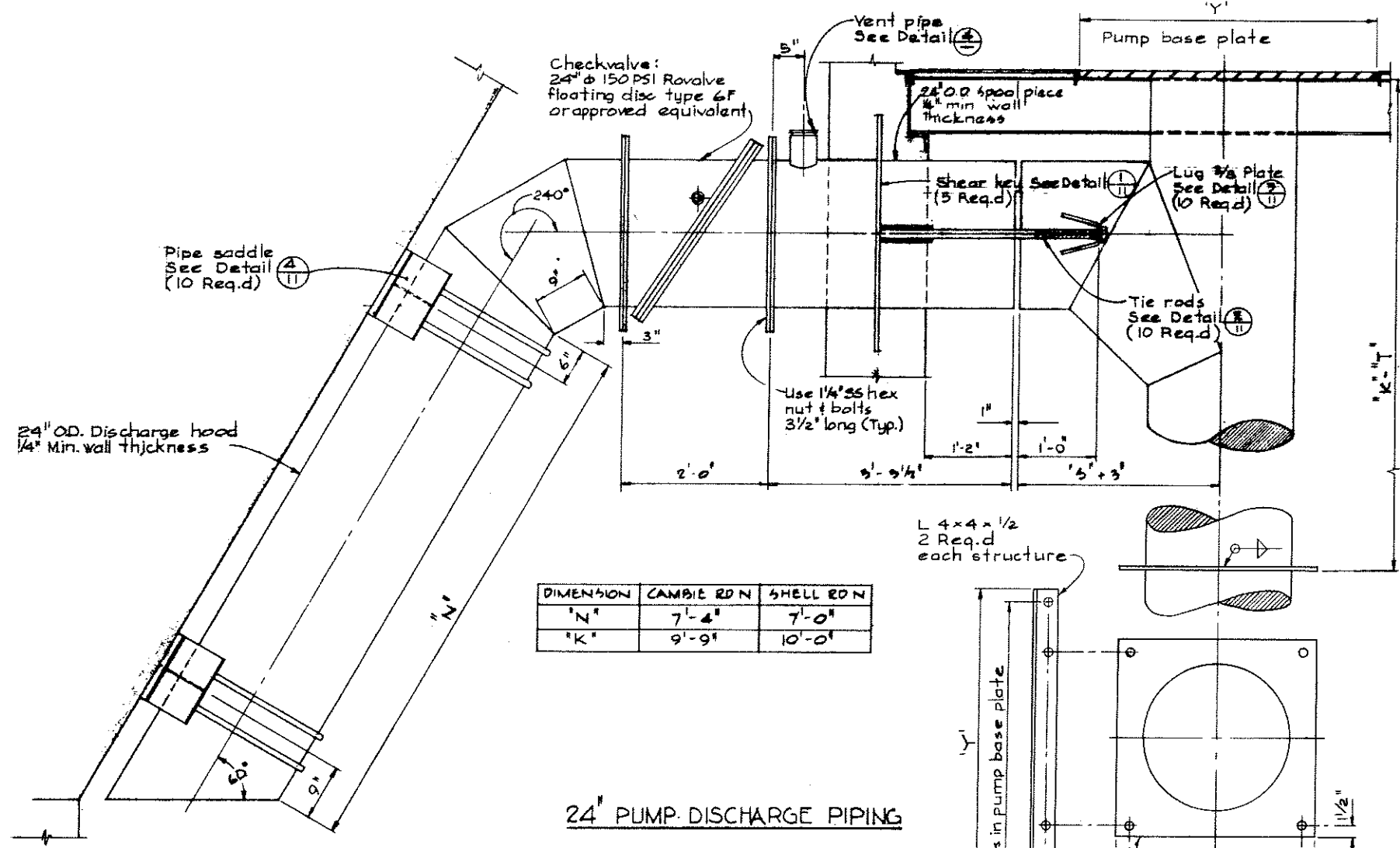


CBA ENGINEERING LTD.
CONSULTING ENGINEERS - VANCOUVER - CANADA

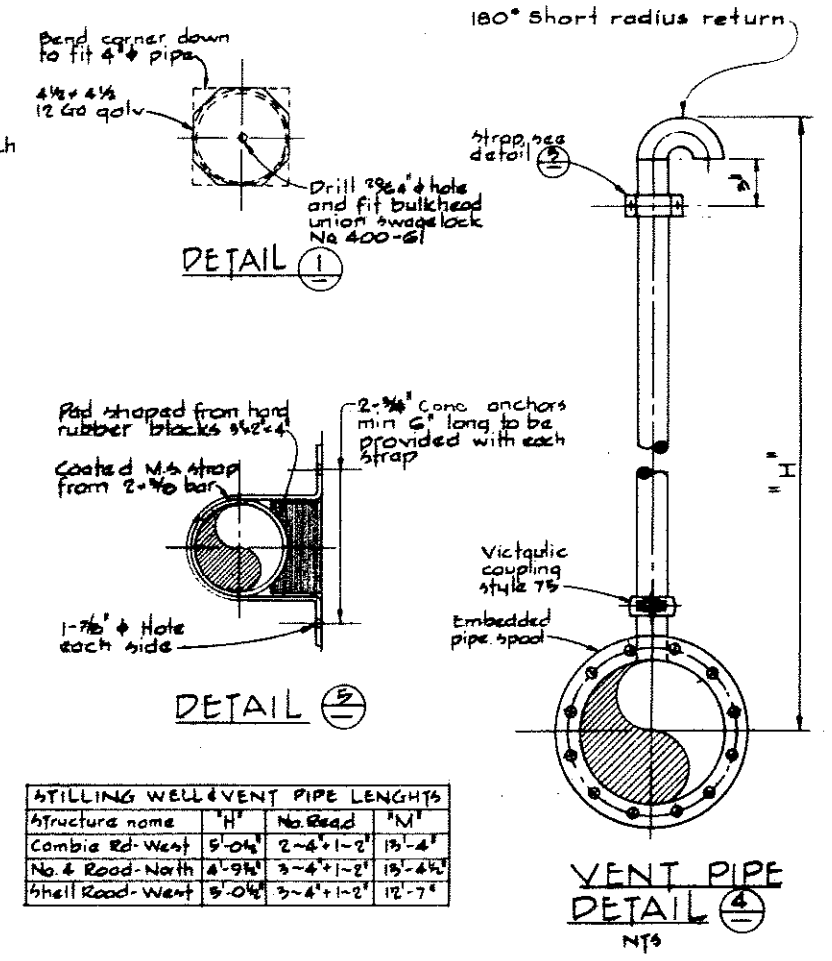
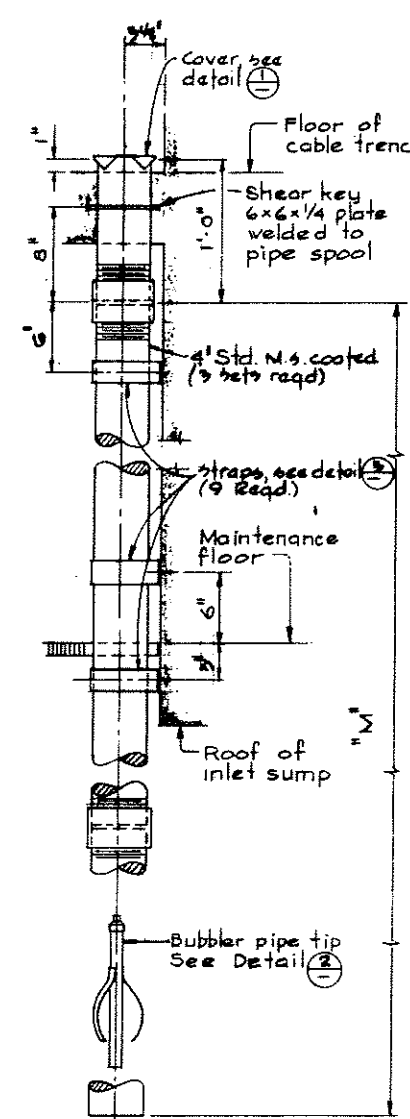
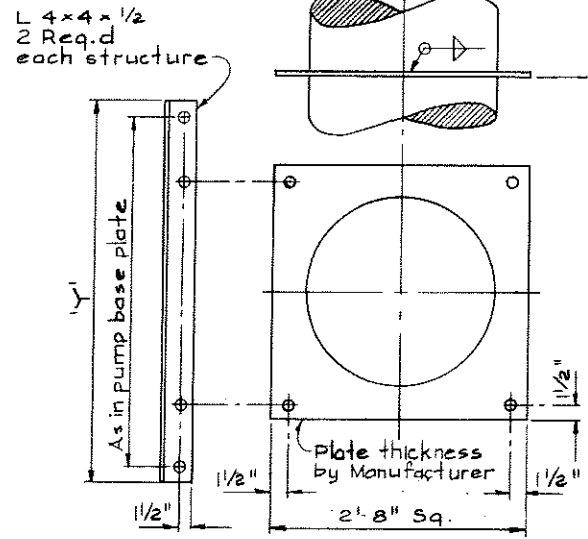
RECOMMENDED *M. J. Miller*
CHIEF, PROJECTS DIV.
DATE *July 4/74*
APPROVED *P. B. [Signature]*
DIRECTOR
DATE *July 4/74*

BRITISH COLUMBIA
DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER INVESTIGATIONS BRANCH
CANADA - BRITISH COLUMBIA
FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
CONTRACT NO. 3
NO. 4 ROAD NORTH DRAINAGE DISCHARGE STRUCTURE
DETAILS OF 30 INCH DIAMETER DISCHARGE PIPEWORK

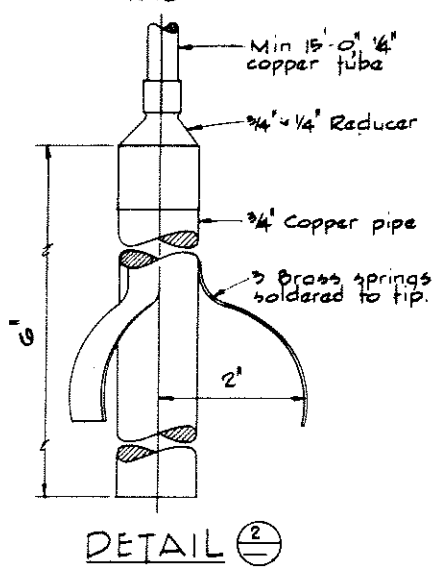
DESIGNED	SURVEYED
DRAWN <i>H.S.</i>	DATE
CHECKED	FILE NO. <i>02B1550-C10-3</i>
SCALE <i>As shown</i>	DATE <i>July 4, 1974</i>
DWG. NO. <i>4795-3-11</i>	SHEET <i>OF</i> SHEETS



DIMENSION	CAMBIE RD N	SHELL RD N
"N"	7'-4"	7'-0"
"K"	9'-9"	10'-0"

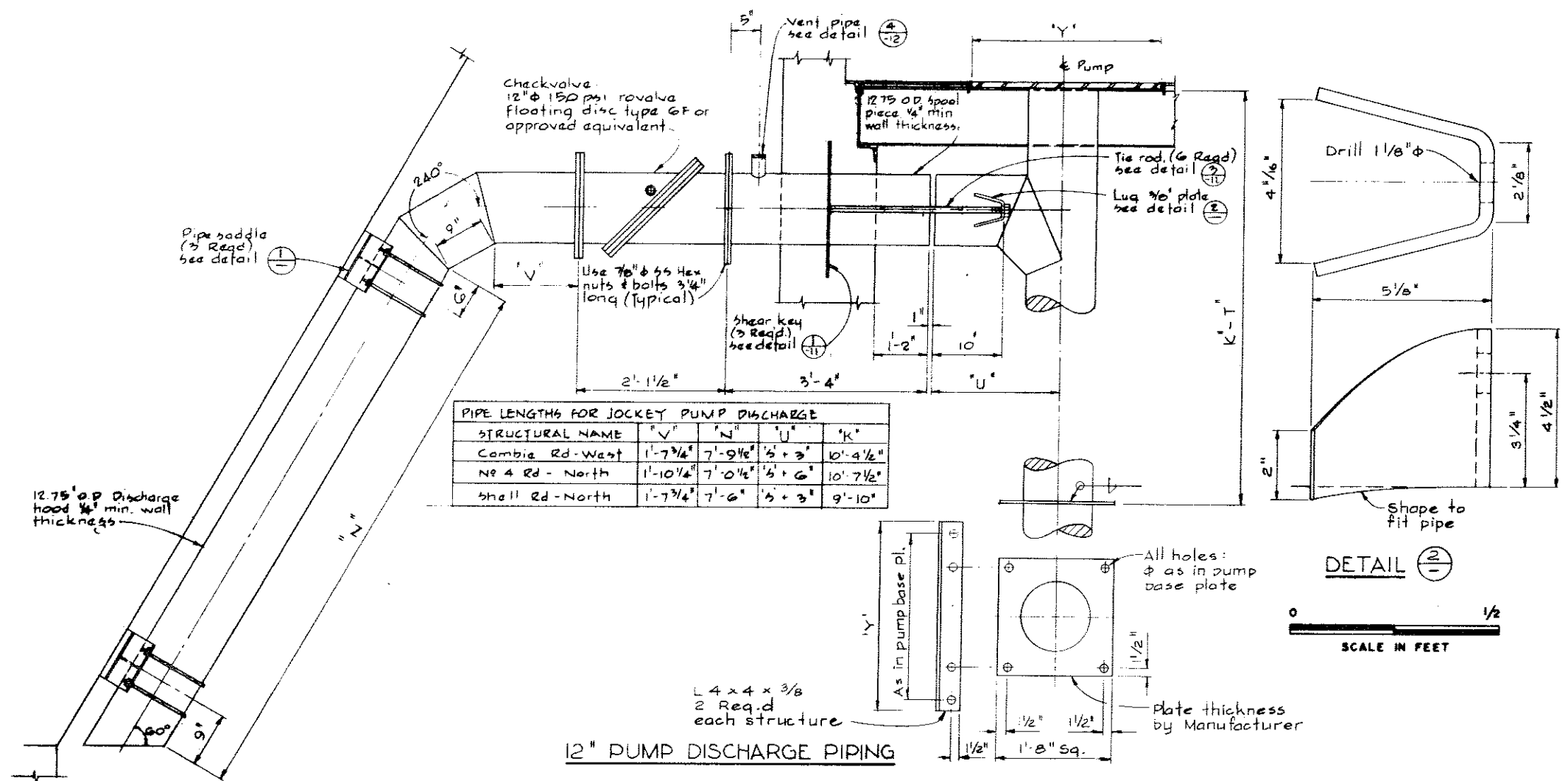


STILLING WELL & VENT PIPE LENGTHS			
Structure name	"H"	No. Req'd	"N"
Cambie Rd - West	5'-0"	2-4' x 1'-2"	13'-4"
No. 4 Road - North	8'-9"	3-4' x 1'-2"	13'-4"
Shell Road - West	5'-0"	3-4' x 1'-2"	12'-7"



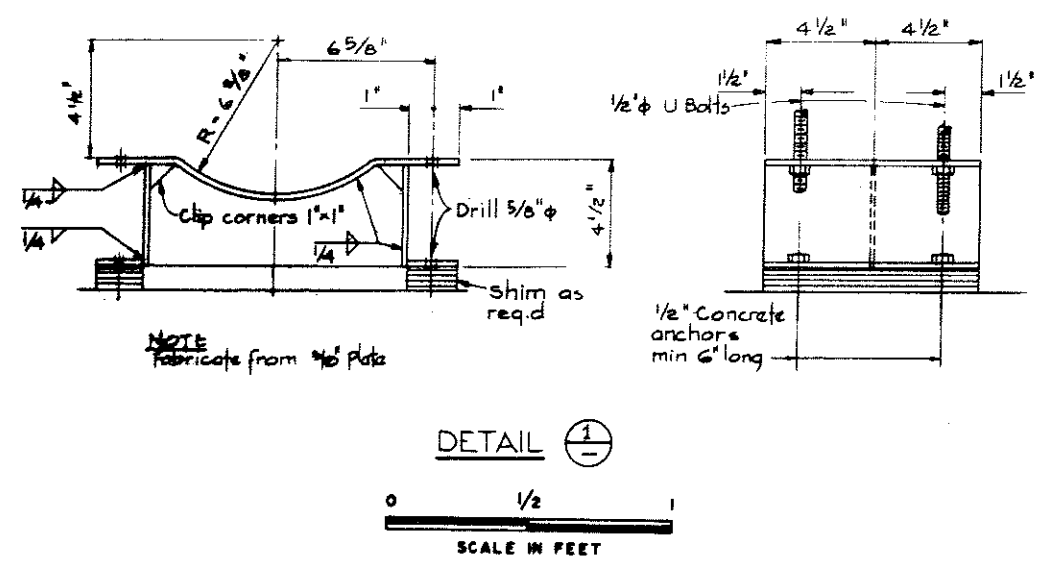
NOTES
 For General Notes see 4795-3-5
 For additional notes see 4795-3-13

<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	RECOMMENDED <i>W. J. Fuller</i> CHIEF, PROJECTS DIV.	BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT	DESIGNED DRAWN H.S. CHECKED SCALE As shown DWG. NO. 4795-3-12	SURVEYED DATE FILE NO. 0281550-C10-3 DATE July 4, 1974 SHEET OF SHEETS
	DATE July 4/74 APPROVED <i>W. J. Fuller</i> DIRECTOR DATE July 4/74	PROJECT NO 3 - THE TOWNSHIP OF RICHMOND CONTRACT NO. 3 CAMBIE ROAD WEST AND SHELL ROAD NORTH DETAILS OF 24 INCH DIAMETER DISCHARGE PIPEWORK	NO. BY REVISIONS DATE	SHEET OF SHEETS

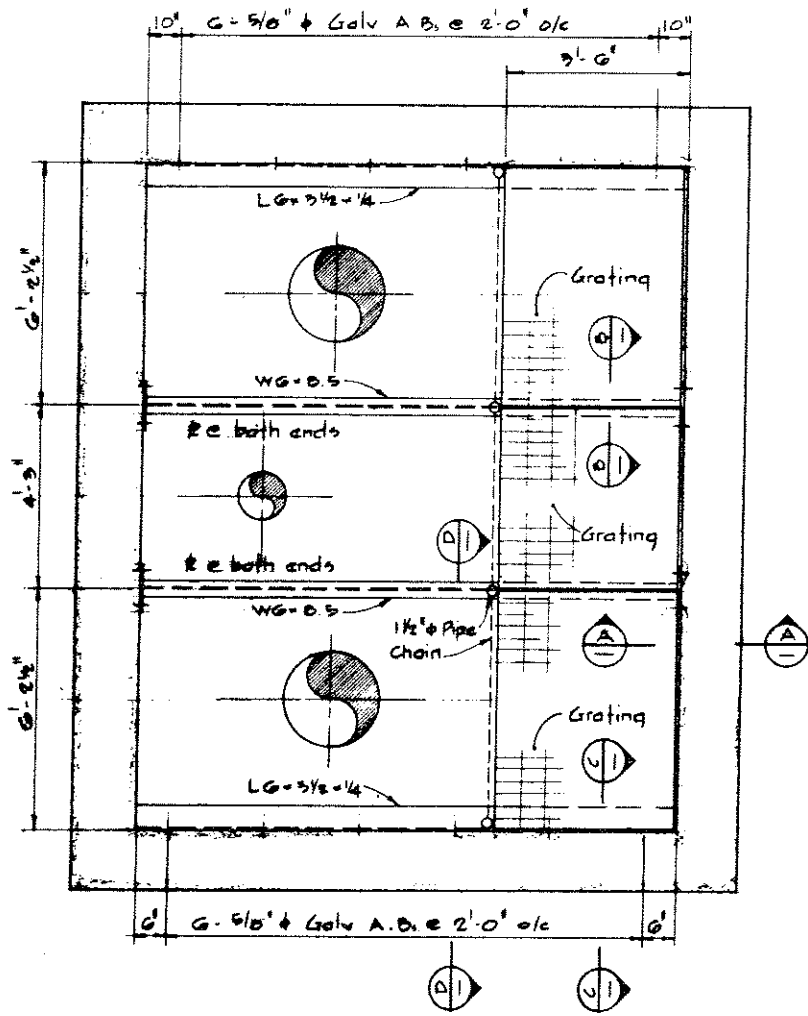


NOTES

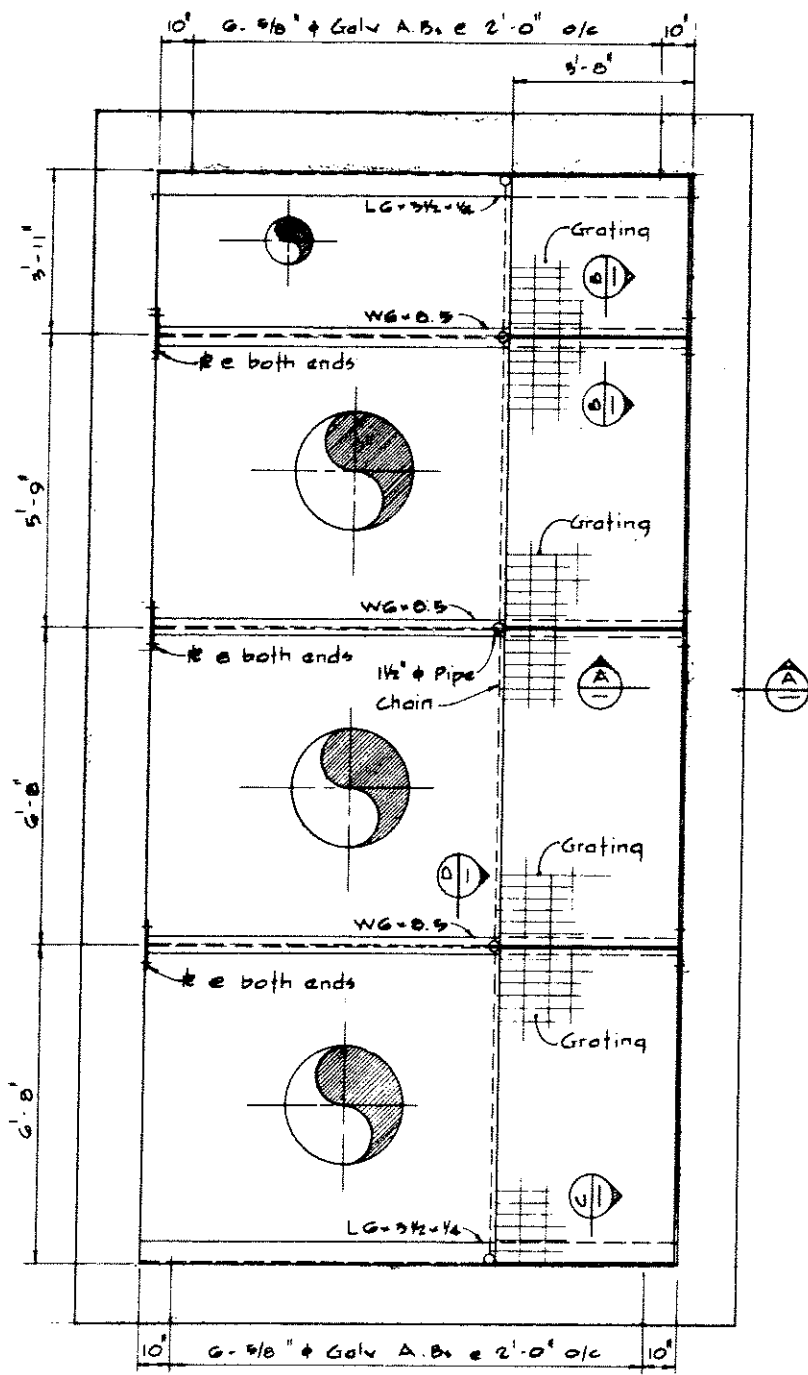
- For General Notes see 4795-3-5
- Arrange bolt holes in flanges so that bolts do not interfere with vent piping.
- Coupling between pump discharge elbow and embedded spool piece omitted for clarity.
- Couplings shall be Smith-Blair Type 411 or approved equivalent.
- For dimensions of couplings, pipe flanges and saddles, shear keys and tie rods see 4795-3-11
- See specifications wherever terms "coated" or "coating" appear for metal or other parts.
- Vent piping to be fabricated from 4" std M.S. coated pipe for connection to 24" and 30" pipe spools and from 2" std M.S. coated pipe for connection to 12" pipe spools.



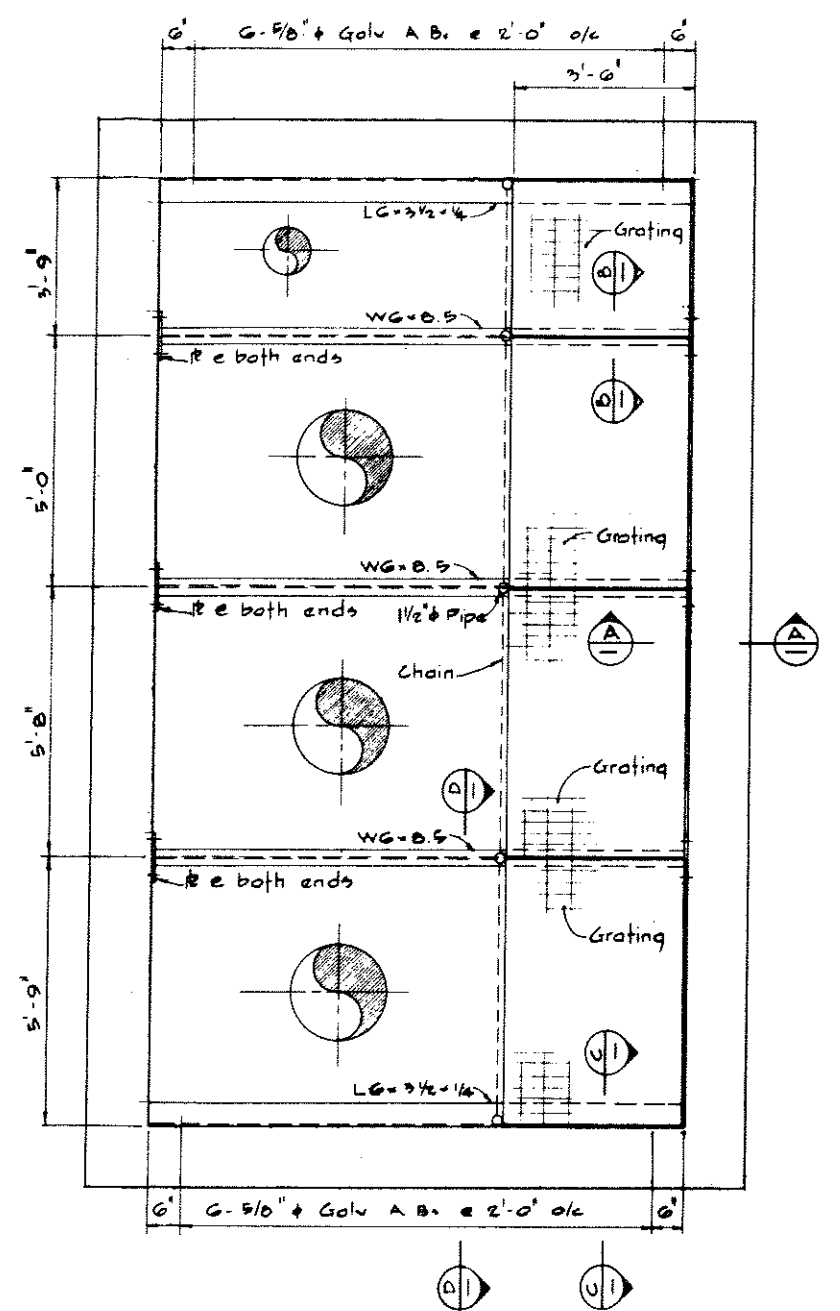
<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	RECOMMENDED: <i>John Fuller</i> CHIEF, PROJECTS DIV.	DESIGNED: _____	SURVEYED: _____
	DATE: <i>July 11/74</i>	DRAWN: <i>H.W.</i>	DATE: _____
	APPROVED: <i>John Fuller</i> DIRECTOR	CHECKED: _____	FILE NO.: 0281550-C10-3
	DATE: <i>July 11/74</i>	SCALE: <i>As shown</i>	DATE: <i>July 4, 1974</i>
NO. BY: _____	REVISIONS: _____	DATE: _____	DWG. NO.: 4795-3-13
<p>BRITISH COLUMBIA DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER RESOURCES SERVICE WATER INVESTIGATIONS BRANCH CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO 3 - THE TOWNSHIP OF RICHMOND</p>		<p>CONTRACT NO. 3 DRAINAGE DISCHARGE STRUCTURES DETAILS OF 12 INCH DIAMETER DISCHARGE PIPEWORK</p>	
		SHEET: _____	OF _____ SHEETS



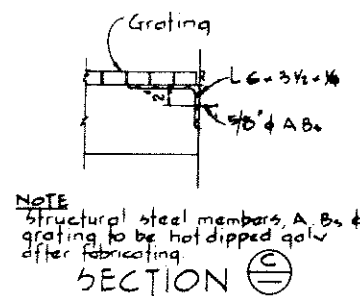
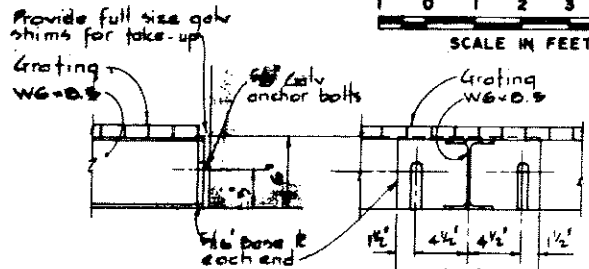
• PLAN
• MAINTENANCE FLOOR
• CAMBIE ROAD - WEST



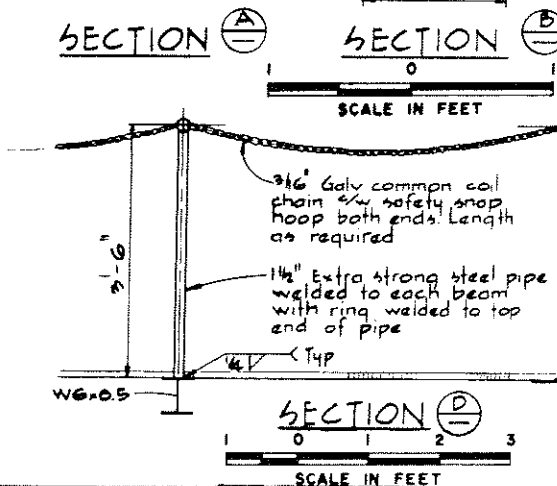
• PLAN
• MAINTENANCE FLOOR
• NO. 4 ROAD - NORTH



• PLAN
• MAINTENANCE FLOOR
• SHELL ROAD - NORTH

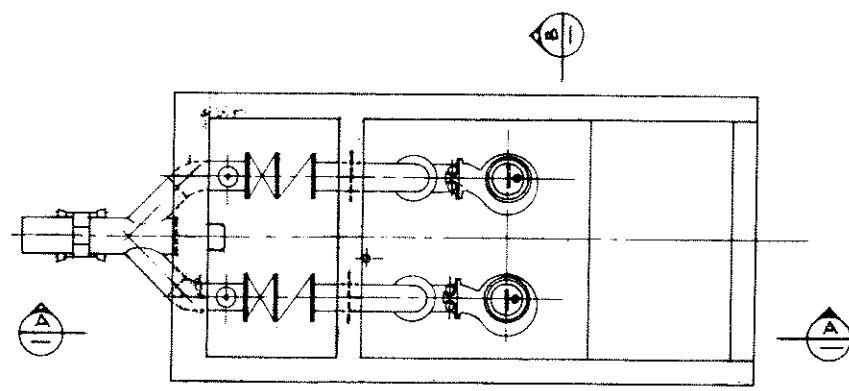


NOTE
Structural steel members, A.B.s & grating to be hot dipped galv after fabricating

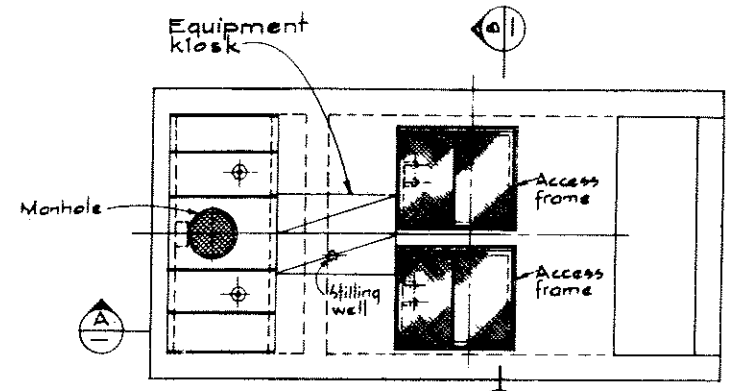


NOTES
• For General Notes see 4795-3-5
• For additional notes see 4795-3-13

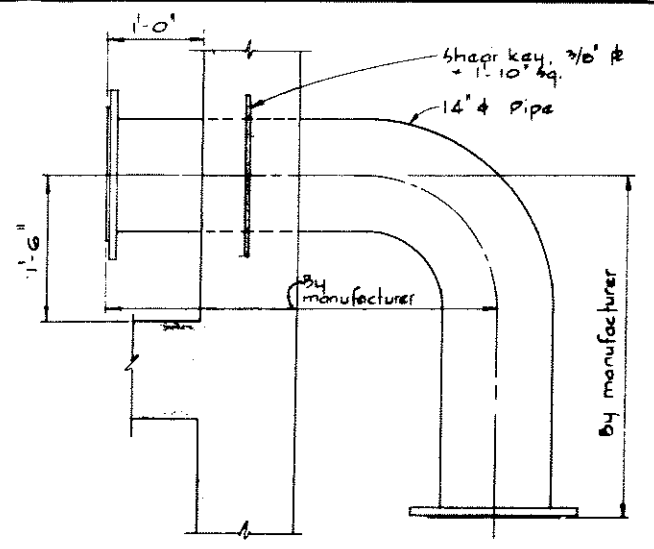
<p>CBA ENGINEERING LTD. CONSULTING ENGINEERS - VANCOUVER - CANADA</p>	RECOMMENDED: <i>John Fuller</i> CHIEF, PROJECTS DIV.	DESIGNED	SURVEYED
	DATE: <i>July 24/74</i>	DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES WATER INVESTIGATIONS SERVICE CANADA - BRITISH COLUMBIA FRASER RIVER FLOOD CONTROL 1968 AGREEMENT PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND	DATE
APPROVED: <i>PH</i> DIRECTOR	CONTRACT NO. 3 DRAINAGE DISCHARGE STRUCTURES MAINTENANCE FLOOR SUPPORT FRAMES AND GRATING	CHECKED	FILE NO. 0281550-C10-3
DATE: <i>July 24/74</i>		SCALE: A as shown	DATE: July 4, 1974
NO. BY	REVISIONS	DWG. NO. 4795-3-14	SHEET OF SHEETS



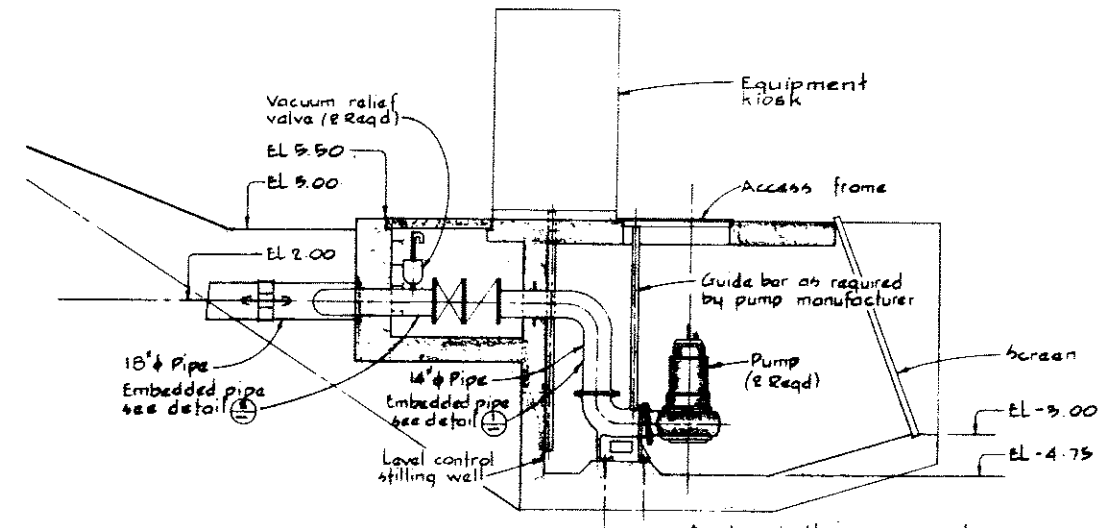
INLET & PUMP
PLAN @ EL 4.00



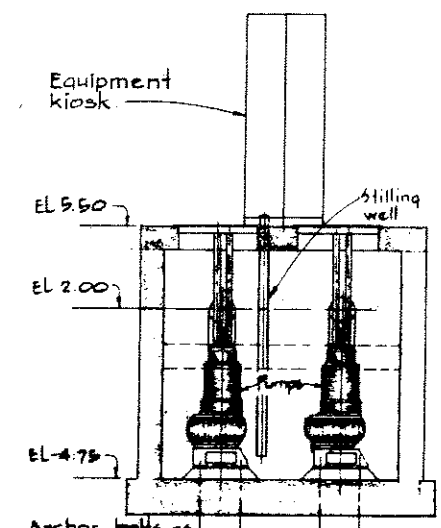
PLAN @ EL 5.50



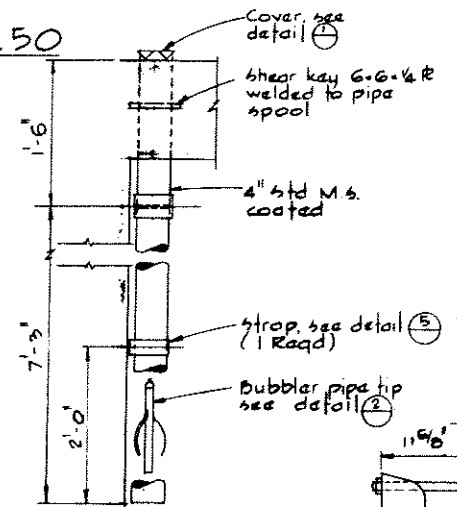
DETAIL 1



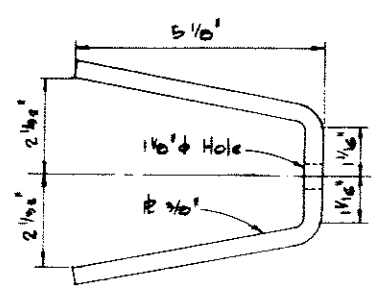
SECTION A



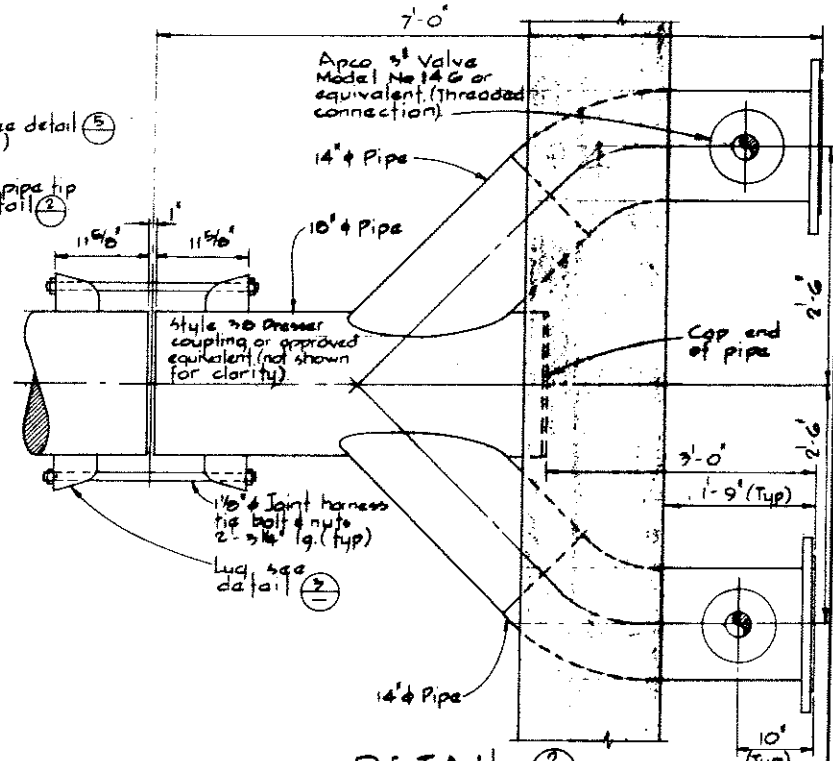
SECTION B



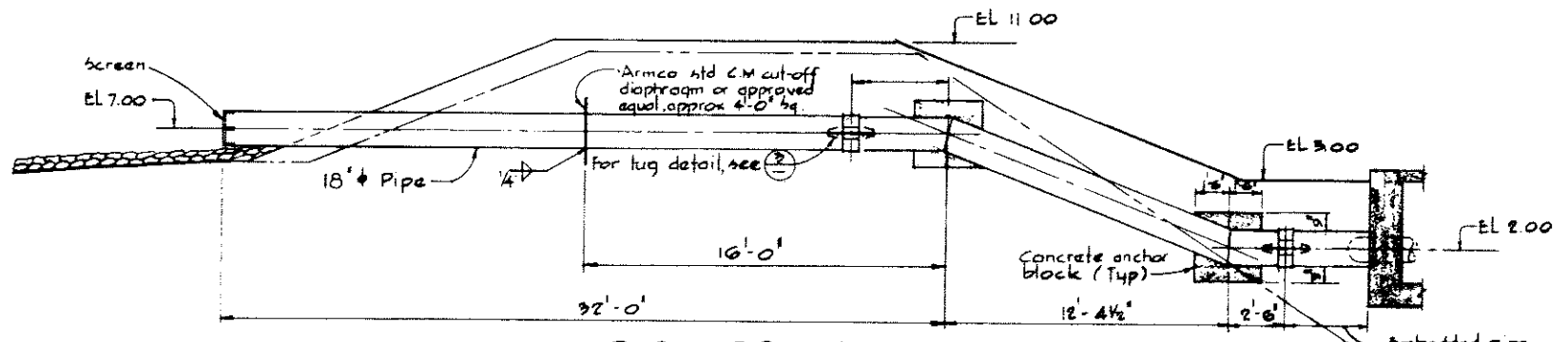
DETAIL 4
STILLING WELL
Not to scale



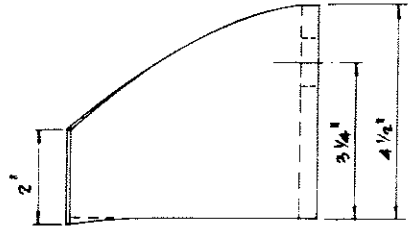
PLAN



DETAIL 2
Not to scale



PIPE PROFILE



ELEVATION
DETAIL 3
1/2

SCALE IN FEET

NOTES
 Contract No. 3 includes submersible pumps, pump bases, access frames and covers.
 For General Notes see 4795-3-5.



CBA ENGINEERING LTD.
 CONSULTING ENGINEERS - VANCOUVER - CANADA

NO. BY	REVISIONS	DATE

RECOMMENDED	<i>McFalls</i> CHIEF, PROJECTS DIV.
DATE	July 14/74
APPROVED	<i>Blair</i> DIRECTOR
DATE	July 11/74

BRITISH COLUMBIA
 DEPARTMENT OF LANDS, FORESTS AND WATER RESOURCES
 WATER RESOURCES SERVICE
 WATER INVESTIGATIONS BRANCH
 CANADA - BRITISH COLUMBIA
 FRASER RIVER FLOOD CONTROL 1968 AGREEMENT
 PROJECT NO. 3 - THE TOWNSHIP OF RICHMOND
 CONTRACT NO. 3
 DUCK ISLAND DRAINAGE DISCHARGE STRUCTURE
 ARRANGEMENT OF MECHANICAL & ELECTRICAL EQUIPMENT

DESIGNED	SURVEYED
DRAWN H.W.	DATE
CHECKED	FILE NO. 0281550-C10-3
SCALE As shown	DATE July 4, 1974
DWG. NO. 4795-3-15	SHEET OF SHEETS