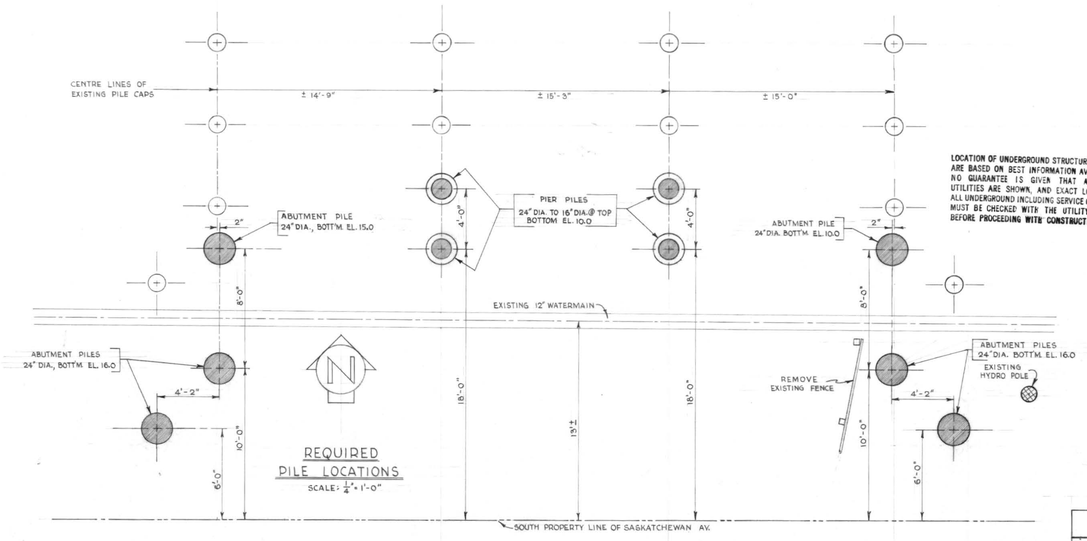
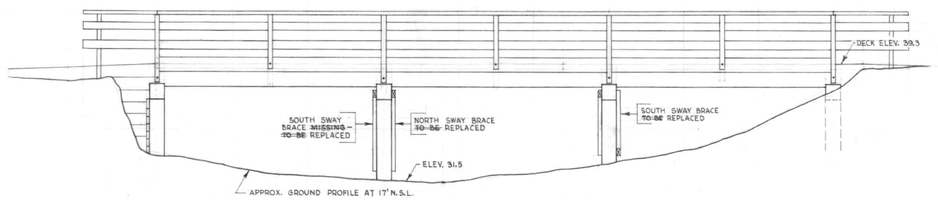


LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN, AND EXACT LOCATIONS OF ALL UNDERGROUND INCLUDING SERVICE CONNECTIONS MUST BE CHECKED WITH THE UTILITY CONCERNED BEFORE PROCEEDING WITH CONSTRUCTION.

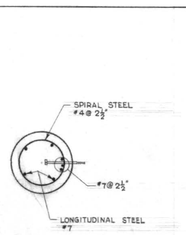
REQUIRED PILE LOCATIONS

SCALE: $\frac{1}{4}$" = 1'-0"



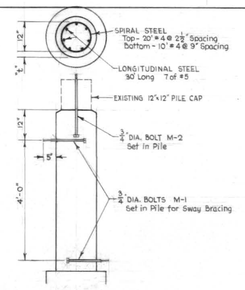
NORTH ELEVATION of EXISTING BRIDGE

SCALE: 1" = 4'-0"



ABUTMENT PILE DETAIL

PLAN VIEW SCALE: $\frac{1}{2}$" = 1'-0"



PIER PILE DETAIL

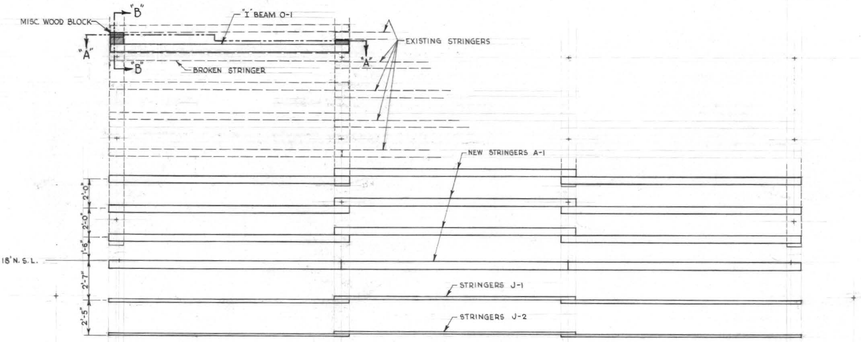
SCALE: $\frac{1}{2}$" = 1'-0"

PILE SPECIFICATIONS

1) Only Sulphate Resisting Cement to be Used.
2) "t" is to be 2' Above Ground For Pier Piles; 3' For Abutment Piles.
3) Below Ground "t" = 6' For Pier Piles; 3' for Abutment Piles.
~~4) Minimum Length 52' Measured From Underside of Pile Cap.~~
5) CONCRETE MIX

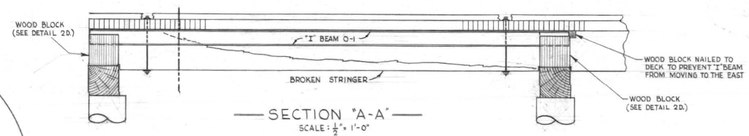
stone 1½" to #4	1850 lbs.
sand #4 down	1480 lbs.
cement	525 lbs.
total water	240 lbs.
pozzolith or porzite	21 oz.
maximum slump	4½ inches

~~6) Piles To Line Up With Centre of Existing Pile Caps.~~



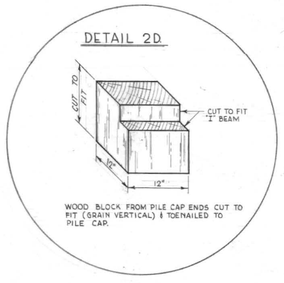
STRINGER LAYOUT

SCALE: $\frac{1}{4}$" = 1'-0"



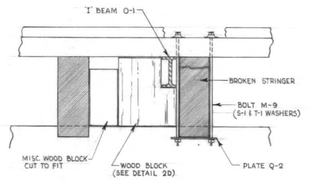
SECTION "A-A"

SCALE: $\frac{1}{2}$" = 1'-0"



WOOD BLOCK FROM PILE CAP ENDS CUT TO FIT (GRAIN VERTICAL) & TOENAILED TO PILE CAP.

DETAIL 2D



SECTION "B-B"

SCALE: 1" = 1'-0"

BILL of TIMBER

SPEC. CLASS	MARK	Nº REQ'D.	DESCRIPTION	SIZE	LENGTH	F. B. M.	REMARKS
1	A-1	12	STRINGERS	8"x 16"	16'-0"	1,536	
1	B-1	4	PILE CAPS	12"x 12"	11'-0"	528	
2	C-1	2	BATTENS	3"x 10"	6'-0"	40	
2	D-1	14	WING PLANKS	3"x12"	8'-0"	336	
2	E-1	2	END WEARING PLANKS	4"x8"	7'-8"	51	
2 2	F-1 F-2	4 3	SWAY BRACES " "	3"x 10" 3"x 10"	7'-0" 15'-0"	70 113	FOR REPLACING BROKEN SWAY BRACES
2 2	G-1 G-2	4 69	WING PLANK BACKING SIDEWALK PLANKS	2"x 8" 2"x 8"	7'-0" 5'-0"	37 460	
2	H-1	3	CURB BLOCK	6"x 6"	15'-4"	138	
2	I-1	16	BALLAST PLANKS	3"x12"	10'-0"	480	
1 1	J-1 J-2	3 3	SIDEWALK STRINGERS " "	3"x 12" 2"x 12"	16'-0" 16'-0"	144 96	
2	K-1	270	DECKING	2"x 4"	7'-8"	1380	
2	L-1	2	SPACER BLOCK	2"x 8"	10"	3	
			TOTAL			5,412	

LUMBER NOTES

1) All Lumber To Be Pacific Coast Douglas Fir.
2) All Lumber To Be Pressure Treated With Creosote Oil To A Net Retention Of 6 Pounds Per Cu. Ft. Of Wood.
3) Specification Class 1 - British Columbia Lumber Manuf. Assoc. "Construction" Grade With Not More Than 25% Of Individual Pieces As "Standard" Grade.
4) Specification Class 2 - B.C.L.M.A. "Standard" Grade.
5) All Lumber Rough Finish

FIELD ASSEMBLY INSTRUCTIONS

1) All Cuts & Field Drilled Holes Shall Be Treated With "OSMO CREO" Joint Preservative.
2) Field Drilled Holes To Be 1/16" Larger Than Bolt.
3) Iron ~~To Be~~ Painted With ~~Red Lead or Zinc Chromate Paint.~~ Rustoleum.

NAILING

1) Ballast Plank Backing To Ballast Planks - 6 of 6" Nails per Ballast Plank.
2) Wing Plank To Batten & Wing Plank Backing - 6 of 6" Nails per Wing Plank.
3) End Wearing Plank - 2 of 8" Nails per Stringer.
4) Decking - Each 2"x 4" toenailed to each Stringer & 4 Nails to Preceding 2"x 4"

BILL of BRIDGE IRON

MARK	Nº REQ'D.	DESCRIPTION	SIZE	LENGTH	LBS.	REMARKS
M-1	20	MACHINE BOLTS (3" THREAD)	¾" DIA.	16"	55	SWAY BRACES TO PILES; WING WALLS & BALLAST PLANKS TO PILES.
M-2	8	" " "	"	24"	34	PILE TO CAP
M-3	2	" " "	"	20"	5	SWAY BRACE TO PILE CAP
M-4	6	" " "	½" DIA.	14"	6	THROUGH LAPPING STRINGERS
M-5	4	" " "	½" DIA.	18"	10	ANGLES TO CAPS AT ABUTMENTS
M-6	14	" " "	½" DIA.	28"	24	STRINGER TO CAP AT CAP LAP, OUTSIDE STRINGERS TO ANGLE BRACKET
M-7	6	MACHINE BOLTS	¾" DIA.	14"	13	ANGLES TO CAPS AT PIERS
M-8	4	" "	½" DIA.	8"	2	BALLAST PLANK TO BATTEN
M-9	4	" "	"	22"	6	STRINGER REPAIRS
N-1	10	DRIFT BOLTS	½" DIA.	20"	6	STRINGERS TO PILE CAPS
O-1	1	"I" BEAM	6"x 12.5#	16'-0"	200	REPLACEMENT FOR STRINGER
P-1	6	ANGLES	4"x 4"x ¼"	3'-0"	119	PILE CAP CONNECTIONS
P-2	4	ANGLES	5"x 5"x ⅜"	6"	24	OUTSIDE STRINGER BRACKET
P-3	2	ANGLES	4"x 6"x ⅜"	25'-6"	490	CURB PROTECTOR
Q-1	4	PLATE	6"x 12"x ¼"		21	PILE CAP CONNECTIONS
Q-2	2	PLATE	9"x 3"x ¼"		4	BROKEN STRINGER REPAIRS
S-1		C.I.O.G. WASHERS	FOR ½" BOLTS		12	
S-2		" "	FOR ¾" BOLTS		37	
S-3		FLAT WASHERS	FOR ⅜" BOLTS		1	
T-1		LOCK WASHERS	FOR ½" BOLTS		½	
T-2		" "	FOR ¾" BOLTS		½	
U-1		LAG BOLTS	⅜" DIA.	4"	4	
V-1		COMMON WIRE NAILS		8"	5	END WEARING PLANK
V-2		" " "		6"	30	BALLAST & WING PLANKS
V-3		ARDOX NAILS		4"	125	DECKING
		TOTAL			1,234	

REVISED AS CONSTRUCTED
BY ____ DATE SEPT. 15/70
CHECKED BY ____ DATE 11/12/70

BENCH MARK: N.W. COR. STONE STEP AT ANTHES IMPERIAL 1350 SASKATCHEWAN AV. EL. 38.32

WHEN STARTING CONSTRUCTION NOTIFY
E. J. CONWAY
PROVINCIAL WATER CONTROL
phone 284-4470

CHARGES a) Repairs to existing bridge only — charge to 215-704-525
b) All work involved in widening — charge to 100-122-512

File A-100-D

NO.	DATE	TO
		G. DENSON
2	JAN 28/70	J. ALLAN
6	"	R. HOUGHTON
3	"	S. LIPKOVSKY
		J. McLEOD

DISTRIBUTION RECORD

PROVINCE OF MANITOBA — S. J. KUSTRA — REGISTERED ENGINEER

APPROVED BY:
J. G. Weber - 28 Aug 68 (see file A-100-D) sjk
for Water Control & Conservation Branch
• DEPARTMENT of HIGHWAYS •

BRIDGE WIDENING ON SASKATCHEWAN AV. OVER OMANDS CREEK
• PLAN & ELEVATION •

CITY OF WINNIPEG
ENGINEERING DEPARTMENT
W. D. HURST, CITY ENGINEER
J. B. STRICHOWSKI, DEPUTY CITY ENGINEER

DRAWN BY ____ DATE JULY 19/68
TRACED BY ____
CHECKED BY ____
APPROVED BY ____

SCALE AS NOTED
DRAWING No. BC-4522