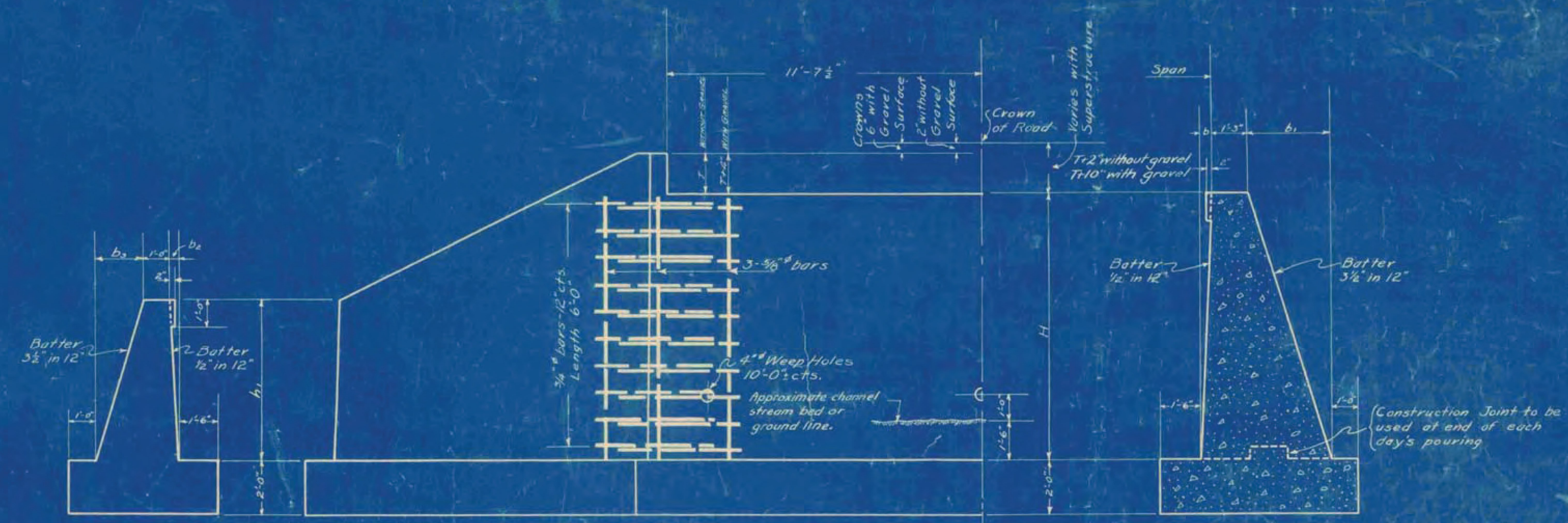


Dimensions and Quantities

Angle of Wings	With Gravel Surface						Without Gravel Surface								
	H	b	b ₁	h ₁	b ₂	L	Concrete Cu Yds.	Steel Lbs.	h ₁	b ₂	b ₃	L	Concrete Cu Yds.	Steel Lbs.	
30°	4'-0"	2'	1'-2"	3'-0"	1 1/2"	0'-10 1/2"	5.6	21.0	166	2'-9"	1 1/2"	0'-9 1/2"	5'-0"	20.4	166
	6'-0"	3'	1'-9"	3'-0"	1 1/2"	0'-10 1/2"	8'-0"	33.1	251	2'-0"	1 1/2"	0'-8 1/2"	7'-0"	32.0	251
	8'-0"	4'	2'-4"	3'-3"	1 3/4"	0'-11 1/2"	11'-0"	49.0	335	3'-0"	1 1/2"	0'-10 1/2"	10'-0"	47.5	335
	10'-0"	5'	2'-11"	3'-9"	2"	1'-1"	13'-6"	68.8	420	3'-6"	1 1/2"	1'-0"	12'-6"	65.7	420
	12'-0"	6'	3'-6"	4'-3"	2 1/2"	1'-3"	15'-6"	92.0	505	4'-0"	2"	1'-2"	14'-6"	90.0	505
	14'-0"	7'	4'-1"	4'-9"	2 1/2"	1'-5 1/2"	18'-0"	117.4	590	4'-6"	2 1/2"	1'-4"	17'-0"	116.5	590
45°	4'-0"	2'	1'-2 1/2"	3'-3"	1 1/2"	0'-11 1/2"	6'-8"	22.4	166	3'-0"	1 1/2"	0'-10 1/2"	6'-0"	21.2	166
	6'-0"	3'	1'-9"	3'-9"	2"	1'-1"	9'-0"	35.3	251	3'-6"	1 1/2"	1'-0"	8'-6"	33.0	251
	8'-0"	4'	2'-4"	4'-6"	2 1/2"	1'-4"	12'-6"	51.0	335	4'-3"	2 1/2"	1'-3"	11'-6"	44.2	335
	10'-0"	5'	2'-11"	5'-3"	2 3/4"	1'-6 1/2"	15'-6"	72.0	420	5'-0"	2 1/2"	1'-5 1/2"	14'-6"	70.0	420
	12'-0"	6'	3'-6"	5'-9"	3"	1'-8"	18'-0"	97.5	505	5'-6"	2 1/2"	1'-7"	17'-0"	93.3	505
	14'-0"	7'	4'-1"	6'-6"	3 1/2"	1'-11"	21'-0"	126.3	590	6'-3"	3 1/2"	1'-10"	20'-0"	123.8	590
60°	4'-0"	2'	1'-2 1/2"	3'-9"	2"	1'-1"	7'-0"	25.9	166	3'-6"	1 1/2"	1'-0"	6'-6"	22.8	166
	6'-0"	3'	1'-9"	4'-6"	2 1/4"	1'-4"	10'-6"	38.8	251	4'-3"	2 1/4"	1'-3"	10'-0"	36.4	251
	8'-0"	4'	2'-4"	5'-5"	2 3/4"	1'-6 1/2"	14'-0"	51.0	335	5'-0"	2 3/4"	1'-5 1/2"	13'-0"	54.1	335
	10'-0"	5'	2'-11"	6'-6"	3 1/4"	1'-11"	17'-0"	80.0	420	6'-3"	3 1/4"	1'-10"	16'-0"	78.0	420
	12'-0"	6'	3'-6"	7'-6"	3 3/4"	2'-2"	20'-6"	109.5	505	7'-3"	3 3/4"	2'-1"	19'-6"	105.7	505
	14'-0"	7'	4'-1"	8'-3"	4 1/4"	2'-5"	24'-0"	143.3	590	8'-0"	4"	2'-4"	23'-0"	141.3	590



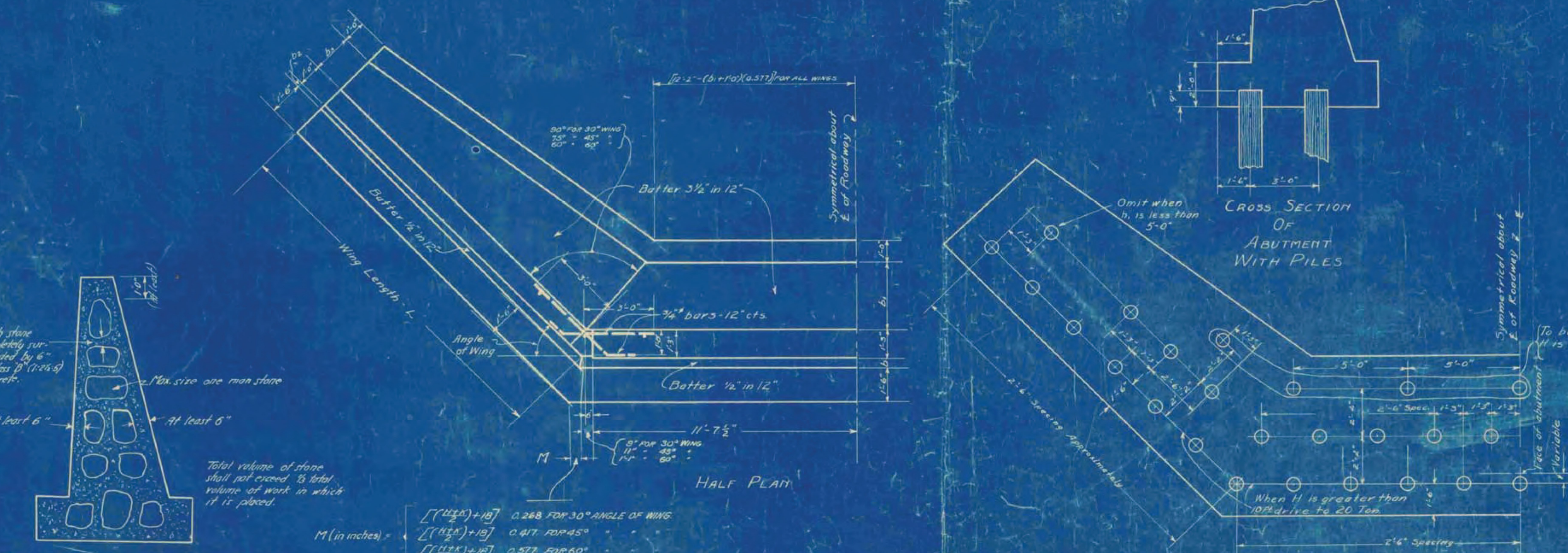
END VIEW WING

HALF ELEVATION

CROSS SECTION OF ABUTMENT

General Notes

Class "B" (1:2 1/2:5) Concrete shall be used throughout in abutment, unless otherwise specified. All exposed edges shall be chamfered, face dimension of chamfer shall be 1". Expansion materials are shown on superstructure sheet. All work and materials shall conform to the Standard Road and Bridge Specifications of the Vermont Highway Dept. (1926). Exact length, angle and height of wings to be determined by the Engineer. Footings may be stepped when necessary with the approval of the Engineer. The lengths, heights, and batters of wings, and quantities are given for 30, 45, and 60 degree wings retaining a fill standing on 1/4 slope. All reinforcing steel shall be deformed bars of structural or intermediate grade, and shall conform to the Standard Specifications for Billet-Steel Concrete Reinforcement Bars of the American Society For Testing Materials, Serial Designation, A-15-14. Reference: Standard Gravity Abutment, Sheet 75.



HALF PLAN

CROSS SECTION OF ABUTMENT WITH PILES

**St. Johnsbury
BRO-1447(30)
Sheet 76 of 76
For Reference only**

STANDARD GRAVITY
ABUTMENTS
FOR
SLAB BRIDGES

Correct: *A. D. Bishop*
Bridge Engineer

S.L.A.G. - Square

CROSS SECTION OF ABUTMENT SHOWING TYPICAL CYCLOPEAN CONSTRUCTION (To be used only when called for by contract and plans.)

$$M \text{ (in inches)} = \begin{cases} [(1.25H) + 10] & 0.268 \text{ FOR } 30^\circ \text{ ANGLE OF WINGS} \\ [(1.125H) + 10] & 0.417 \text{ FOR } 45^\circ \\ [(1.0625H) + 10] & 0.571 \text{ FOR } 60^\circ \end{cases}$$

(H AND K IN FEET) WITH GRAVEL K = T + 0.33
WITHOUT GRAVEL K = T
Where T is expressed in feet.

Pile-spacing when piles are required Engineer to specify when necessary.

Surveyed by
Designed by
Drawn by
Traced by E. Guy Norton 4-23-28
Checked by M. A. Woodruff 5/7/28
Gen'l S.L.A.G. No. Square Filed
Sheet of Sheets