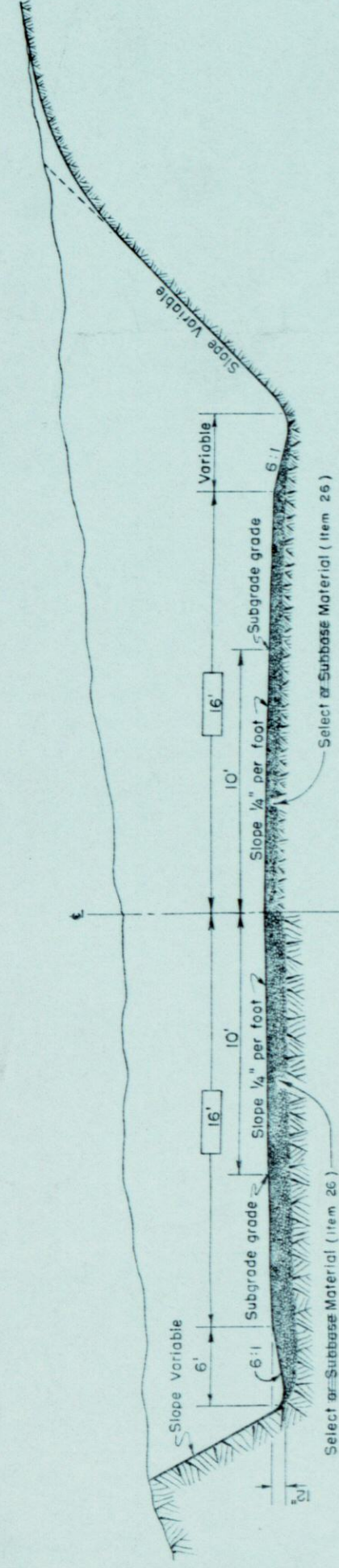
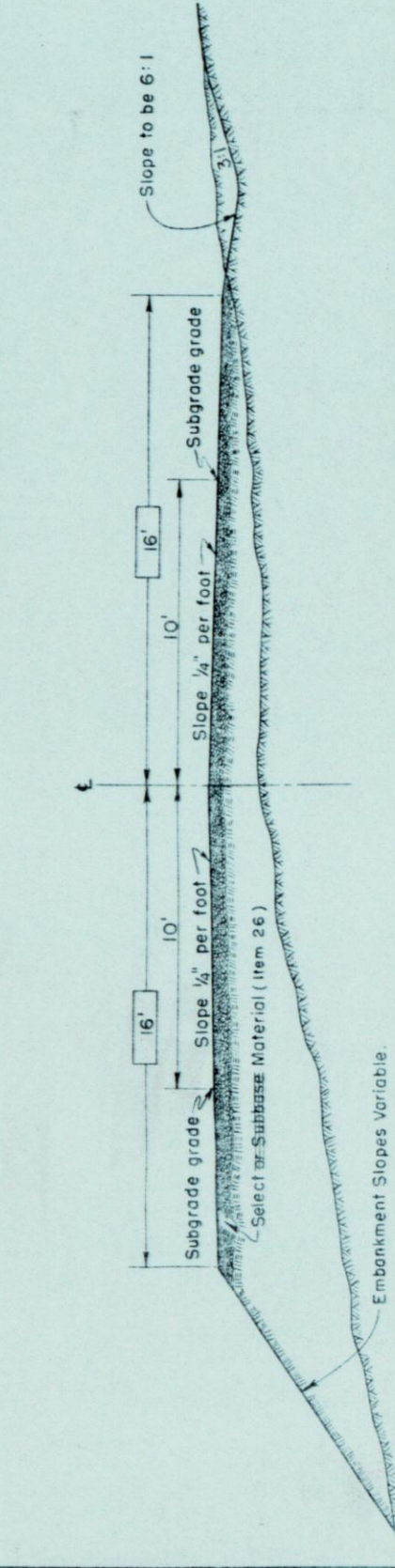
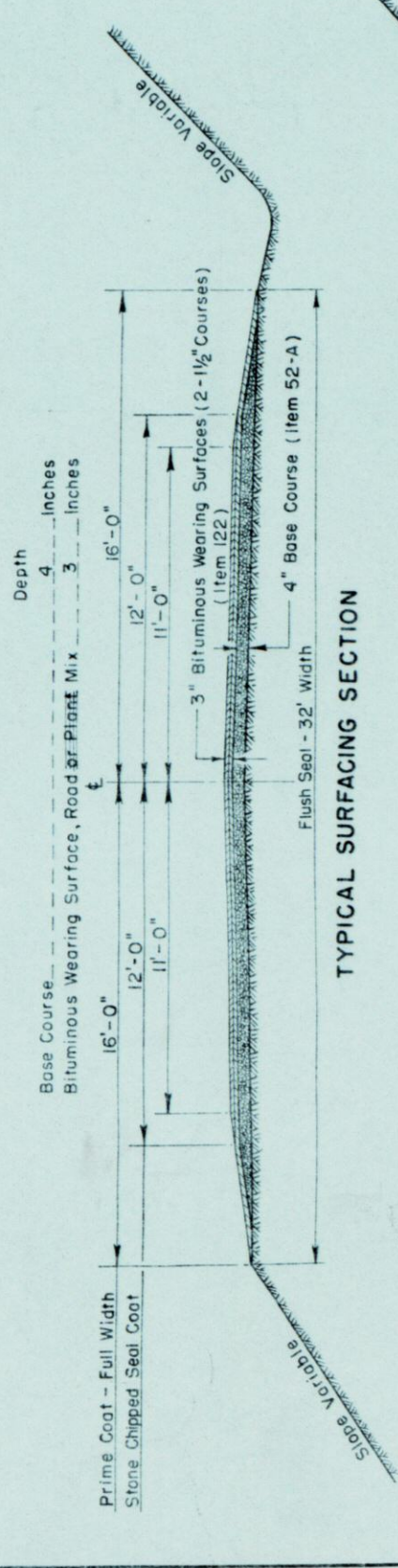
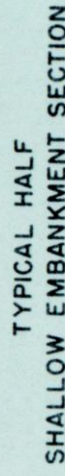




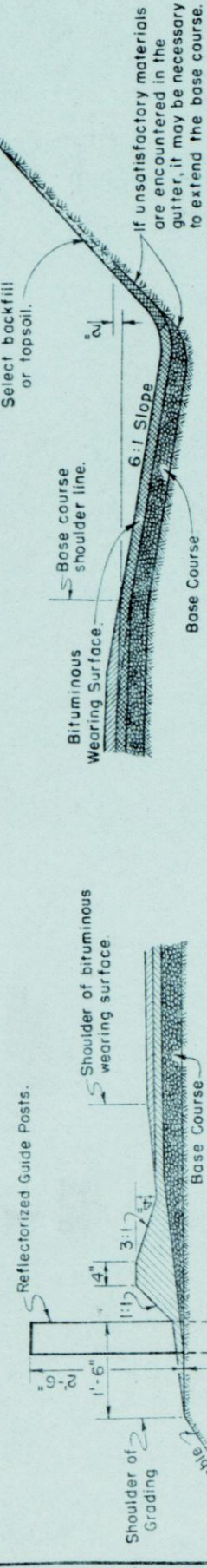
TYPICAL HALF
CUT SECTION IN ROCK



TYPICAL HALF
EMBANKMENT SECTION



TYPICAL SURFACING SECTION



DETAIL OF
RAISED BITUMINOUS SHOULDER

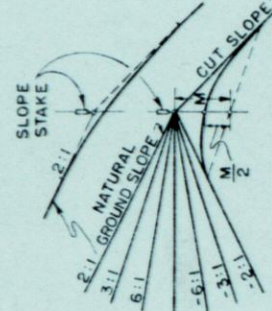
— DETAIL OF BITUMINOUS GUTTER

SLOPE ROUNDING FACTORS		ALTERNATE ROUNDING DIMENSIONS	
NATURAL GROUND SLOPE	CUT SLOPE HEIGHT RATIO	SEMI-TANGENTS †	
		Back of Slope Stake "B"	Front of Slope Stake "F"
VARIABLE	0' - 5' 3:1	5'	5'
VARIABLE	5' - 10' 2:1		
RELATIVELY FLAT (6:1 AND FLATTER)	10' - 15' 1½:1 15' - 30' 1½:1 OVER 30' 1:1		
MODERATELY STEEP	10' - 15' 1½:1 15' - 30' 1½:1 OVER 30' 1:1	5'	8' **
STEEP (STEEPER THAN 3:1)	10' - 15' 1½:1 15' - 30' 1½:1 OVER 20' 1:1	3'	5' *

† Measured on slope surface.
 ** Desirable
 * Minimum (Wooded)
 ▷ These ratios are desirable in steep terrain.

[NOTE:- in areas where existing conditions permit, use more liberal rounding with unequal semi-tangents. (Approximating a parabolic curve.)

ROUNDING, WARPING, AND FINISHING SLOPES, AS PROVIDED IN ITEM 24 - 3.9. FP - 41 SPECIFICATIONS.



CUT SLOPE ROUNDING

GENERAL NOTES

Where Borrow is specified in the contract and satisfactory material is found in the roadway excavation, the right is reserved to increase the amount of Unclassified Excavation and reduce the Unclassified Excavation for Borrow. When additional material is needed for completing embankments, stabilizing the subgrade or for selected cushion or topping, it may be secured by uniformly widening thru or sidehill cuts or flattening cut slopes where satisfactory material is available. The slopes at the ends of all cuts shall be flattened and flared to improve appearance.

Class 2, Grading D-1, 4" compacted depth, 24' width.

Class 2, grading 0-1, 4 compacted again, 24 in.

Item 122, Aggregate and Bituminous Material Wearing Course, Class C-1, Grading C, 3" compacted depth, 20' width. Two course construction.

Embankment slopes shall be uniformly warped between one rate of slope and another. The transition shall cover a distance of not less than fifty feet.

Subgrade grade to be on the surface of stabilized graded road and located ten feet from center line on tangents and insides of curves.

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DIVISION NO.9 DENVER, COLO.

TYPICAL CROSS SECTIONS
NATIONAL FOREST & PARK HIGHWAYS

DIVISION No. 9 STANDARD ROADBED - BITUMINOUS WEARING SURFACE 22' " " "
 PROJECT Colo. 22-2 Boulder-Jalisco Springs
 NATIONAL Forest : Roosevelt
 COUNTY Boulder
 STATE Colorado

APPROVED: Clyde E. Tarnad Date: June 21, 1954
Design Engineer

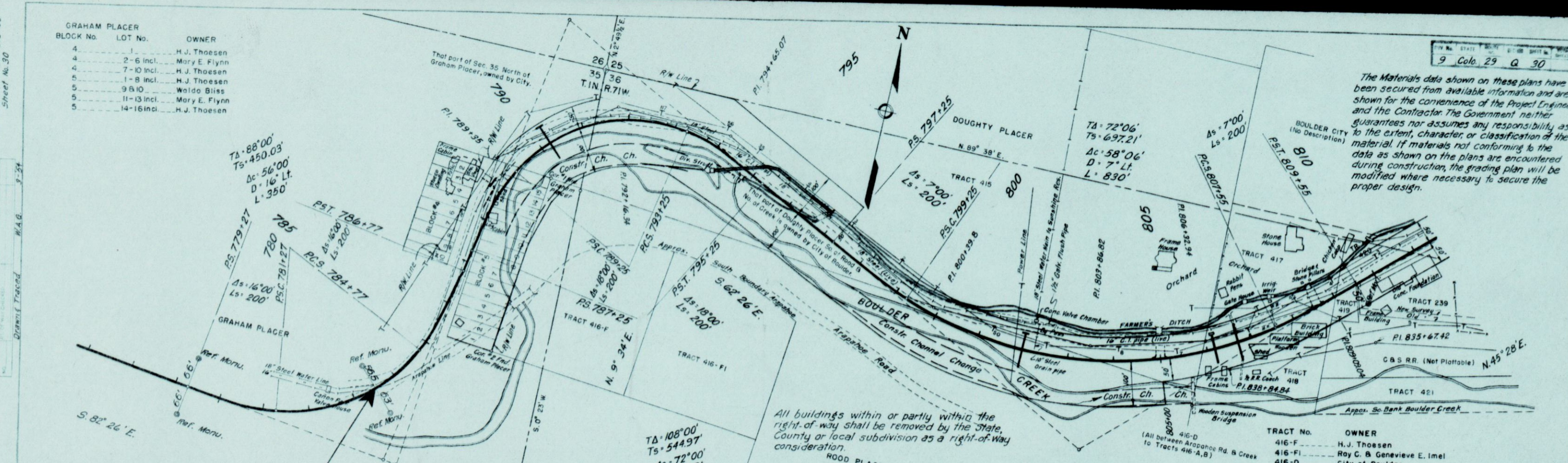
Boulder - Idaho Springs, Colo. 29-Q
Sta 780+00 to Sta 810+00
Sheet No. 30

PLAN
J.S.L.
1954
NOTE: SEE
REVISIONS
FOR ALL CHANGES
DRAWN BY
W.A.G.
9-24

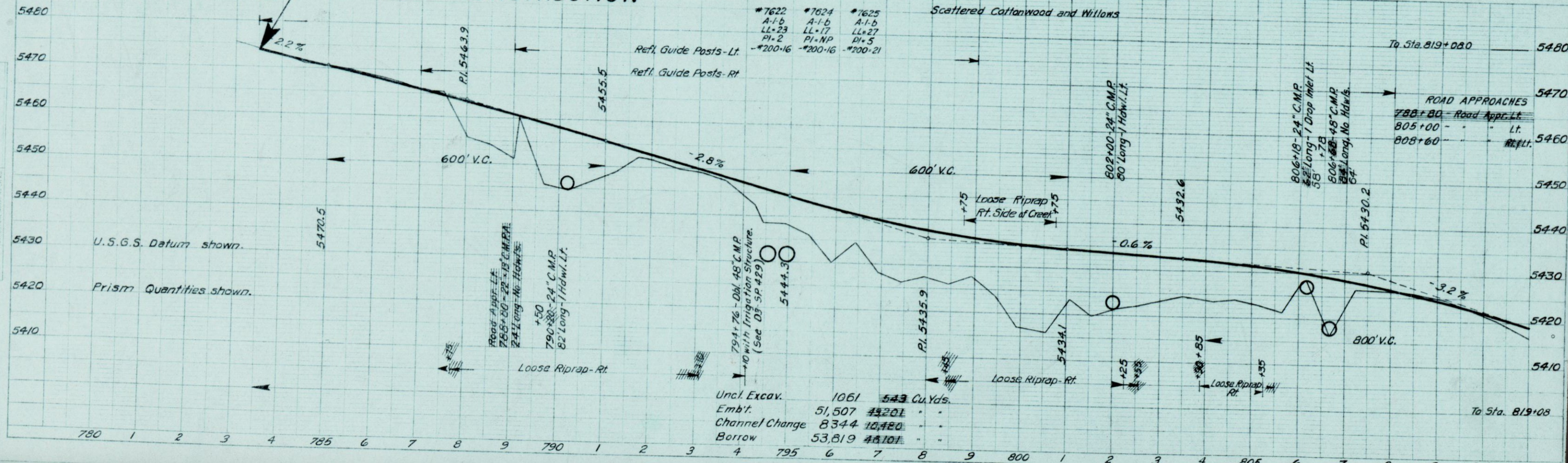
GRAHAM PLACER		
BLOCK No.	LOT No.	OWNER
4	1	H. J. Thoesen
4	2-6 incl.	Mary E. Flynn
4	7-10 incl.	H. J. Thoesen
5	1-8 incl.	H. J. Thoesen
5	9-10	Waldo Bliss
5	11-13 incl.	Mary E. Flynn
5	14-16 incl.	H. J. Thoesen

9 Colo. 29 Q 30

The Materials data shown on these plans have been secured from available information and are shown for the convenience of the Project Engineer and the Contractor. The Government neither guarantees nor assumes any responsibility as to the extent, character, or classification of the material. If materials not conforming to the data as shown on the plans are encountered during construction, the grading plan will be modified where necessary to secure the proper design.



The Alignment and Grade as hereon shown are subject to adjustments.
**STA. 783+50 WEST END PROJ. 29-Q
1955 CONSTRUCTION**



Uncl. Excav.	1061	543 Cu. Yds.
Emb't.	51,507	44201
Channel Change	8344	10,480
Borrow	53,819	44101

PLAN	SUBJECT	DATE
NOTE BOOK	P. 5775 ALIGNMENT CHECKING RT. OF VAN DYKE RD.	1954
NO.	U.S.L.	1954
Drawn & Traced W.A.G.		

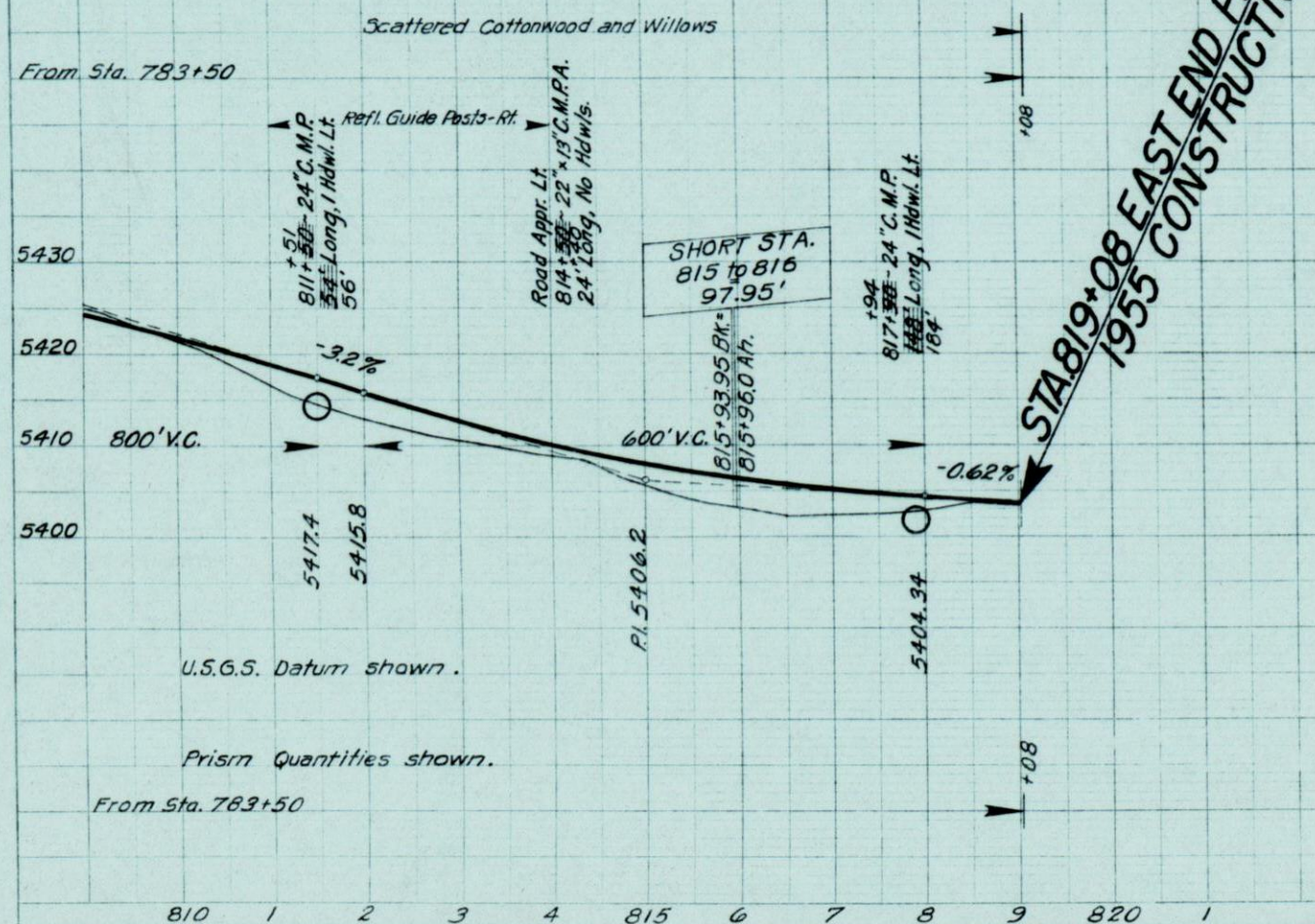
DATE	
PROFILE	
NOTE: 8-24-68	
STRUCTURE N-741 NE CH-40	



All buildings within or partly within the right-of-way shall be removed by the State, County or local subdivision as a right-of-way consideration.

TRACT No.	OWNER
417 B 420	Shirley E.G. Tanger
418 B 419	Steve Pospohala
419	Improvements, Sinclair Refining Co.
421	County
422-A	Helen N. Elliott & John P. Nate
423	C. & S. Railroad
423-A & 237-A	Continental Oil Co.
237	Industrial Engineering & Supply Co.
238 & 239-C	Charles W.V. Feigel
238 A & B	Marks & Beulah Kern
238 D	Boulder County
239	Steve Pospohala
999 & 1000	Elmo M. Francis & Gough C. Reinhardt (On Halves)

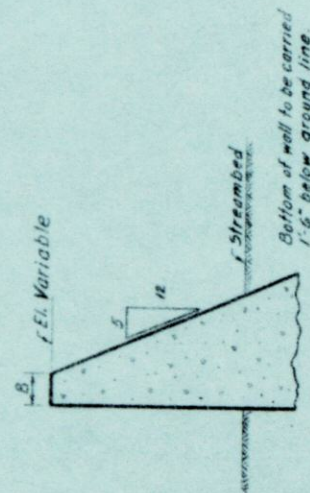
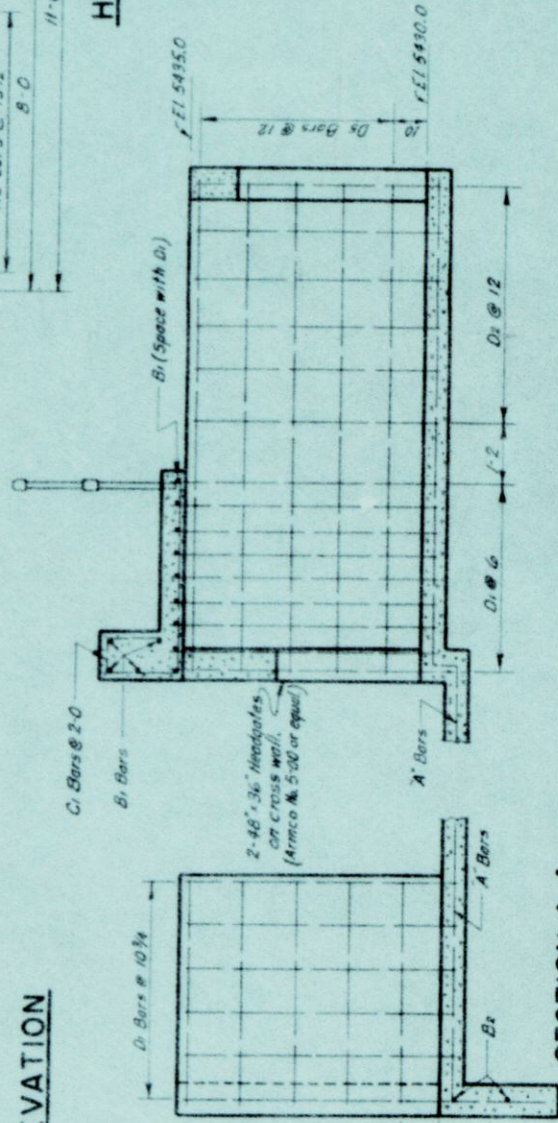
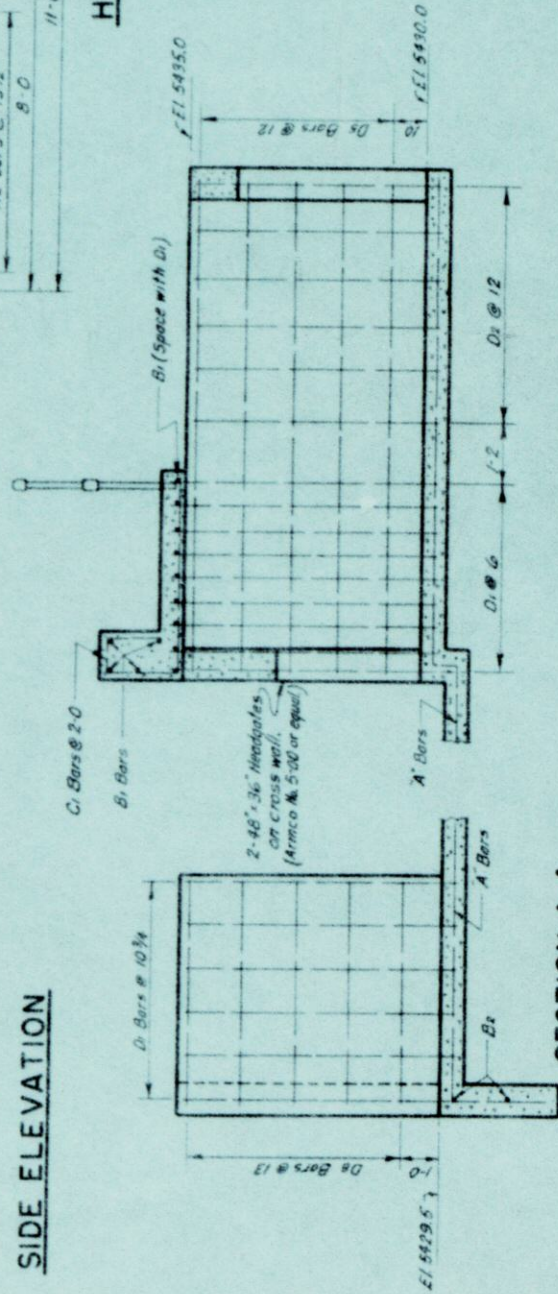
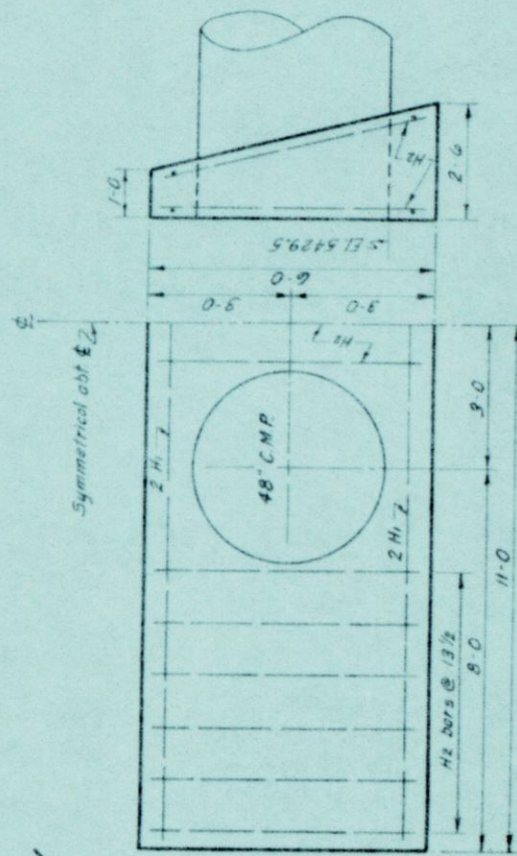
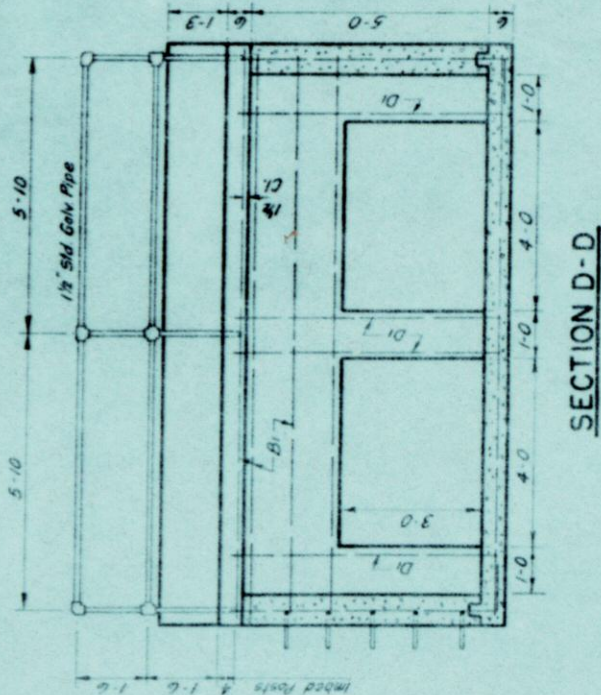
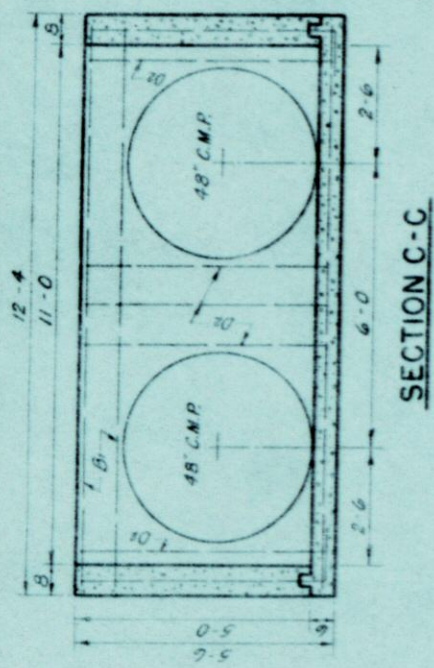
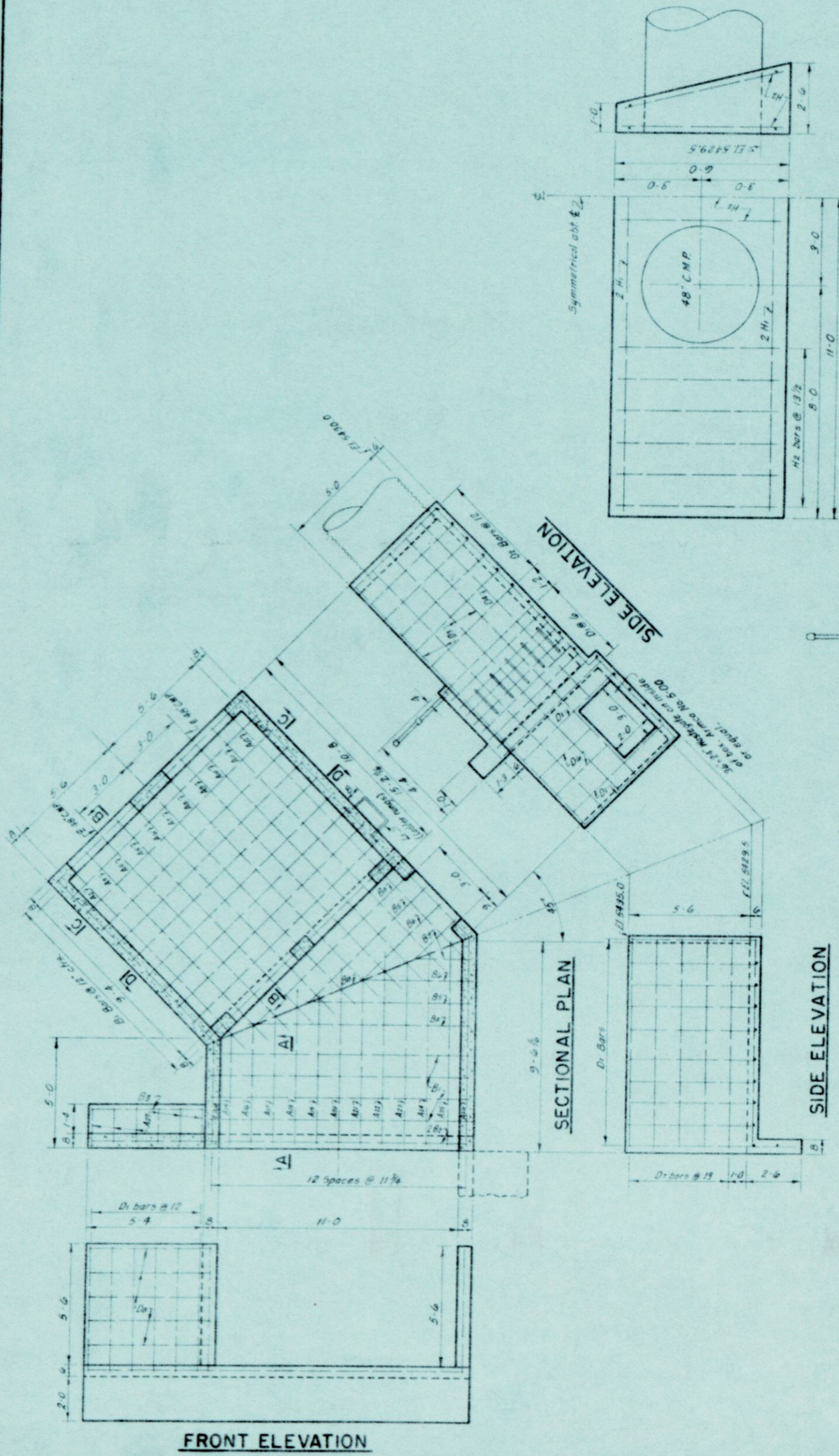
All public and/or privately-owned utilities located on private lands shall be removed by the State or local authority as a right-of-way consideration.



ROAD APPROACHES

811+75 - Road Appr. Rt.	
813+60 - " " "	
814+30 - " " "	
814+50 - " " Lt.	
815+60 - " " Rt.	
817+10 - " " "	
817+50 - " " "	
817+90 to 818+40 - " "	

As Constructed - BOULDER - IDAHO SPRINGS 3

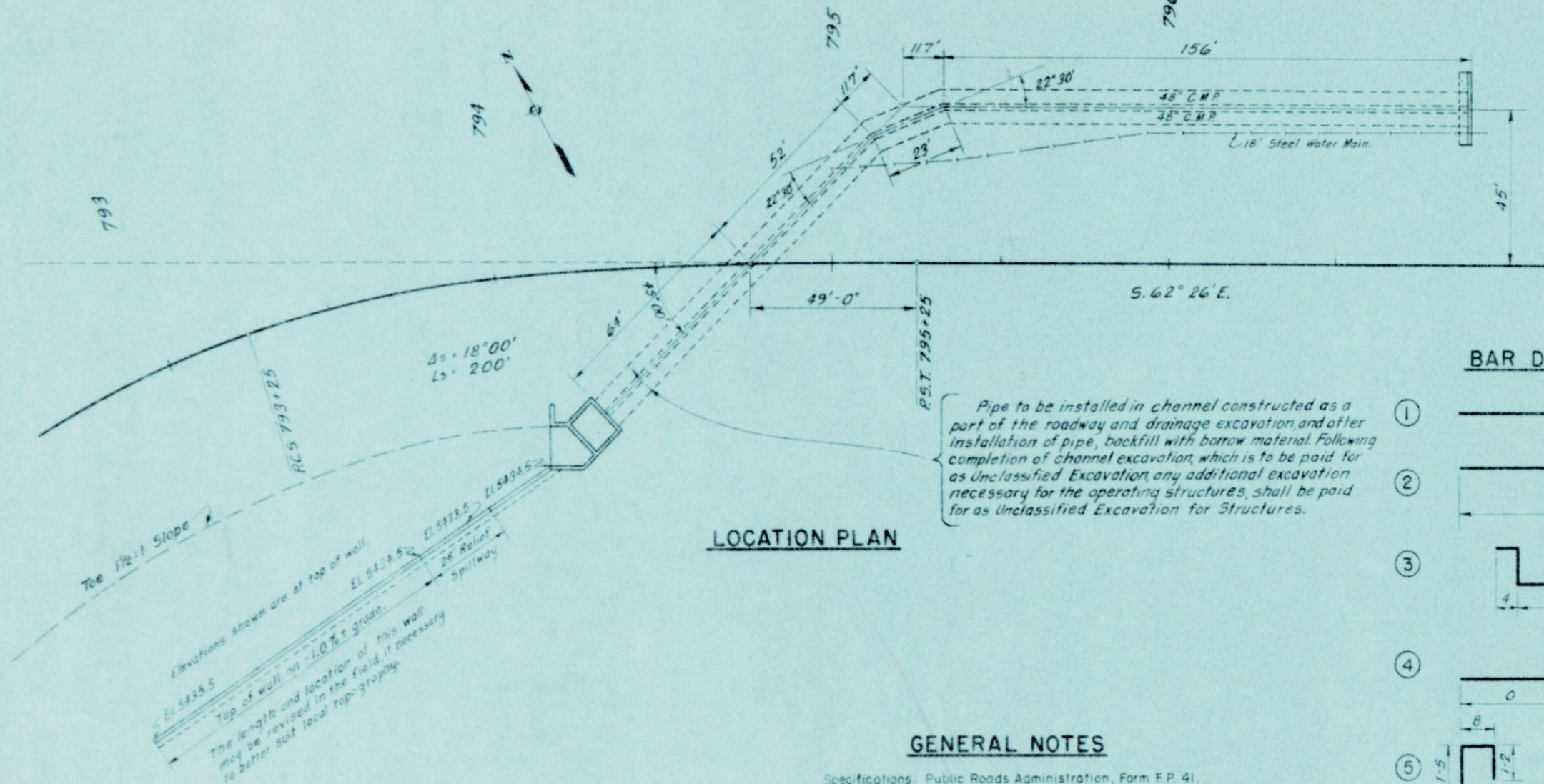


IRRIGATION STRUCTURE

STATION 795 ±

COLO. 29-Q, BOULDER - IDAHO SPRINGS

U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DIVISION NO. 9 DENVER, COLO.



LOCATION PLAN

Pipe to be installed in channel constructed as a part of the roadway and drainage excavation, and after installation of pipe, backfill with borrow material. Following completion of channel excavation, which is to be paid for as Unclassified Excavation, any additional excavation necessary for the operating structures, shall be paid for as Unclassified Excavation for Structures.

GENERAL NOTES

Specifications: Public Roads Administration, Form F.P. 41.

Design Stresses: $f_c = 1200 \text{ psi}$, $f_s = 20,000 \text{ psi}$, $n = 10$.

Concrete: All concrete to be Class "A", made with Type II (Low Alkali) Portland Cement, with an air-entraining admixture.

Curb to be poured monolithically with sidewalk. Keyways to be in center of walls unless otherwise noted. All exposed edges to be chamfered $\frac{3}{4}$ ". All exposed surfaces to be given a "Rubbed Finish".

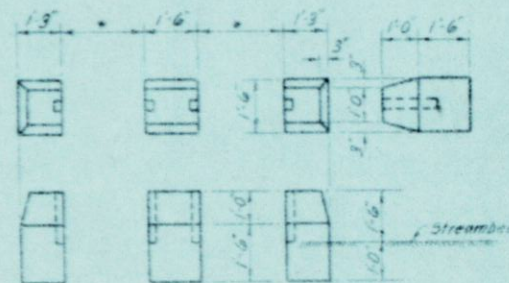
Reinforcing Steel: All bars shall be intermediate grade steel, and shall conform to A.S.T.M. Specification A 15-39 and A 305-49. Shop details shall be submitted and approved before fabrication. All bars to be placed in centers of walls and slabs unless otherwise noted.

Headgates: One new 36" x 24" wastegate, and two new 48" x 36" Headgates to be installed. Gates to be similar or equal to Armco No. 5-00. Installation shall be in accordance with manufactures recommendations.

Quantities: The quantities shown here are approximate only, and must be verified in the field.

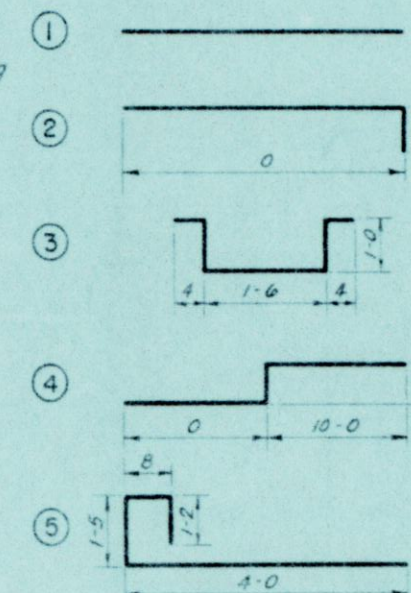
Revisions: Any revisions found necessary in the field must be approved by the Bridge Engineer.

* NOTE: Location and spacing of concrete flashboard stops, to be determined by the engineer in the field.



CONCRETE FLASHBOARD STOPS*

BAR DIAGRAMS



NOTE: All dimensions are "Out to Out."

BAR LIST

Bar	Type	Location	No.	Size	Length	O	a
A1					11-6 to 16-1		
thru	4				by 5	1-0 to 5-7	
A12					15-4	4-10	
A13					6-6	4-7	
A14					6-11 to 11-1	5-0 to 9-2	
A15					by 5	by 5	
thru	2						2-0
A25		Floor			11-2	9-3	
A26					2-6	1-7	
A27					33	12-0	
B1					2	17-3	
B2					2	6-0	
B3							
B4							
thru	1				10-4 to 12-7	by 2-7	
B7							
B8					1	12-10	
C1	5	Curb	7	#4	6-3		
D1					46	6-6	5-7
D2	2				17	6-0	5-1
D3					4	15-0	
D4					1	11-0	
D5					5	10-6	
D6					2	3-3	
D7					5	9-3	
D8	2				5	10-0	5-6
H1					4	21-6	
H2	1	Headwall	30	#4	5-6		
L1	3	Ladder	5	#6	4-2		

ESTIMATED QUANTITIES

Class A Concrete	* 56 Cu. Yd.
Reinforcing Steel	1190 Lbs.
Galv. Pipe Handrail	12 Lin. Ft.
Wastegate 36" x 24"	1 Each
Headgate 48" x 36"	2 Each
Excavation for Structures	100 Cu. Yds.
48" Corrugated Metal Pipe	590 Lin. Ft.

* Concrete quantities to be checked in field.

APPROVED:

The Farmers Ditch Company

President _____ Date _____

Secretary _____ Date _____

Treasurer _____ Date _____

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DIVISION NO. 9 DENVER, COLO.

IRRIGATION STRUCTURE

STATION 795 ±

COLO. 29-Q, BOULDER - IDAHO SPRINGS

APPROVED: *Philip A. Upp* Date: Dec. 10, 1954
Bridge Engineer

Sheet No. 1 of 2

D3 - SP 429