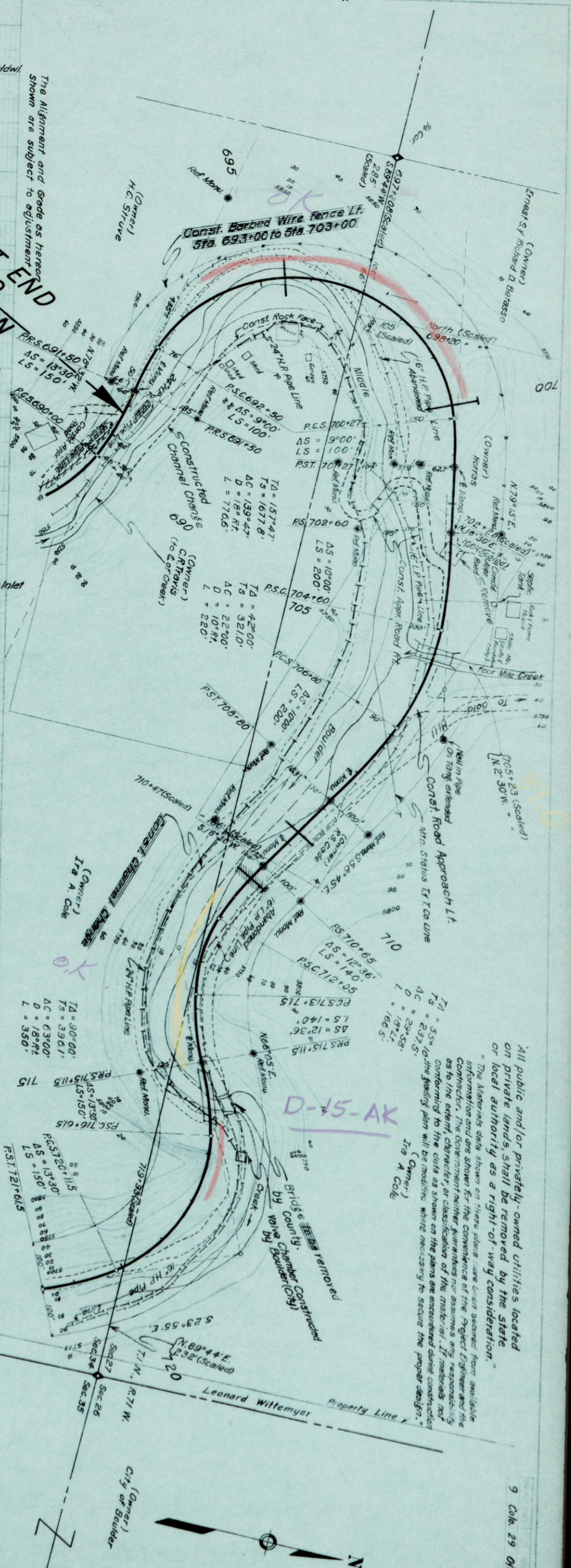








All public and/or privately-owned utilities located on private lands, shall be removed by the state or local authority as a right-of-way consideration.

10. The materials data shown on these plans have been prepared 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." (Q-5.)



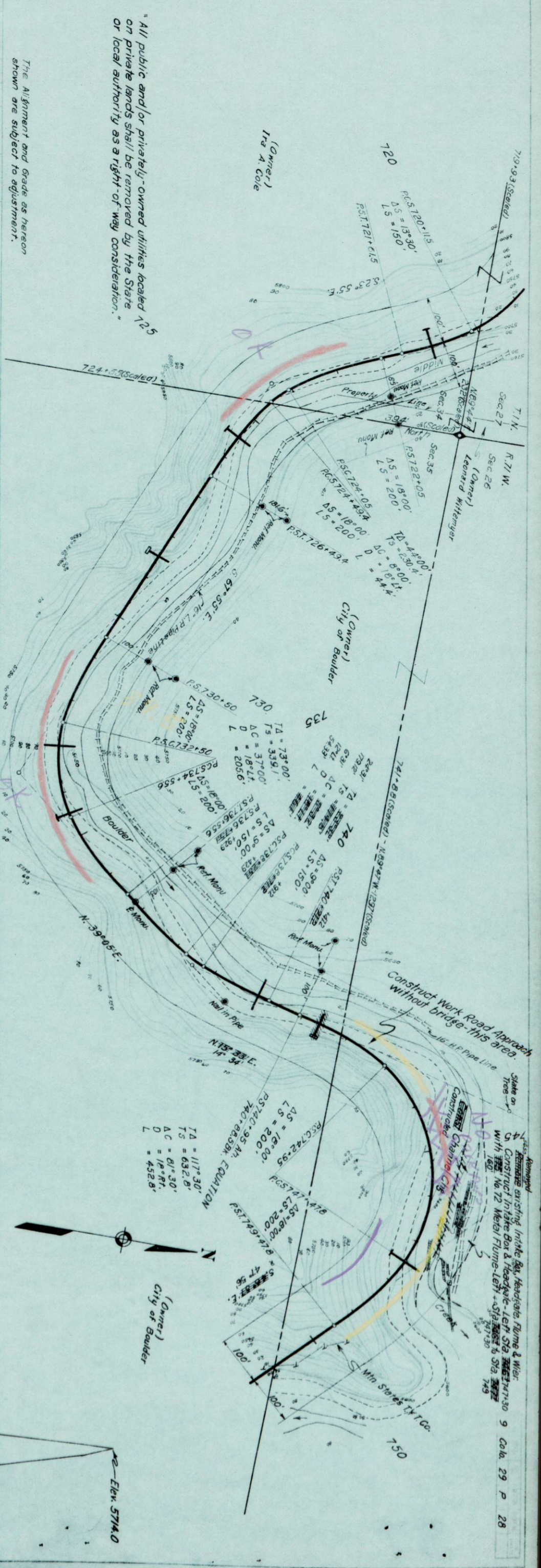
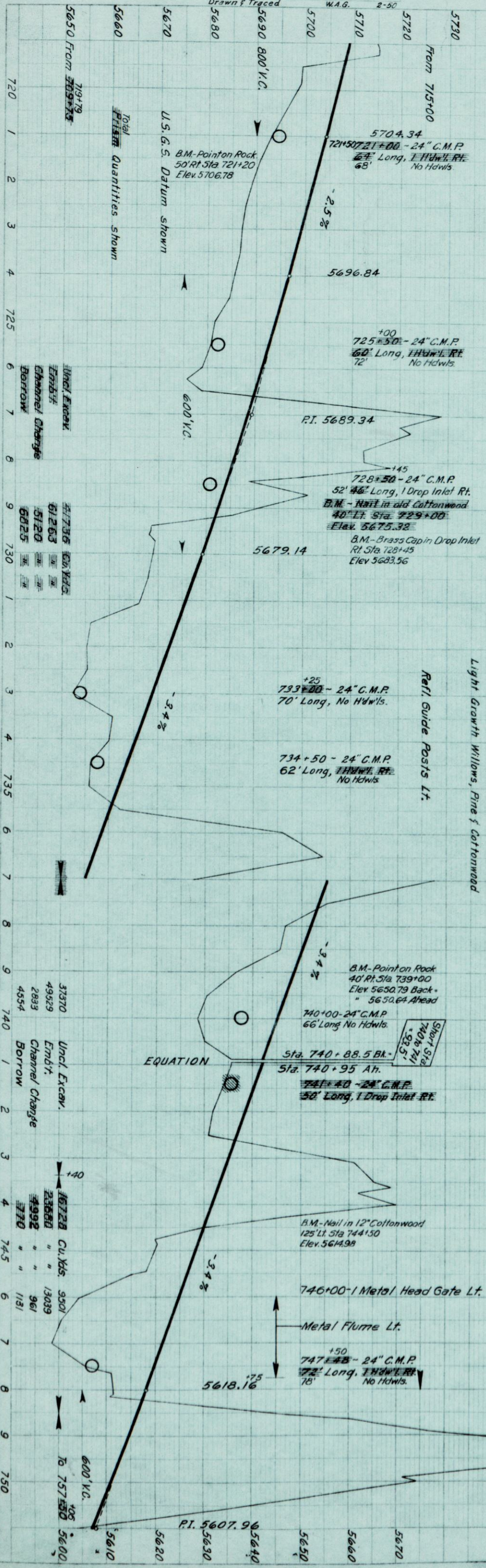
|           |                 |        |      |
|-----------|-----------------|--------|------|
| PROFILE   | SURVEYED        | M.J.E. | 1949 |
| NOTE BOOK | GRADES CHECKED  |        |      |
| NO.       | STRUCTURE NOTED |        |      |

Drawn & Traced W.A.G. 2-50

|           |                 |        |      |
|-----------|-----------------|--------|------|
| PLAN      | SURVEYED        | M.J.E. | 1949 |
| NOTE BOOK | GRADES CHECKED  |        |      |
| NO.       | STRUCTURE NOTED |        |      |

Drawn & Traced J.A.R. 2-50

Boulder-Idaho Springs-Colo. 29  
Sta. 720+00 to Sta. 750+00  
Sheet No. 28



"All public and/or privately-owned utilities located 125' on private lands shall be removed by the State or local authority as a right-of-way consideration."

The Alignment and Grade as hereon shown are subject to adjustment.

Light Growth Willows, Pine & Cottonwood

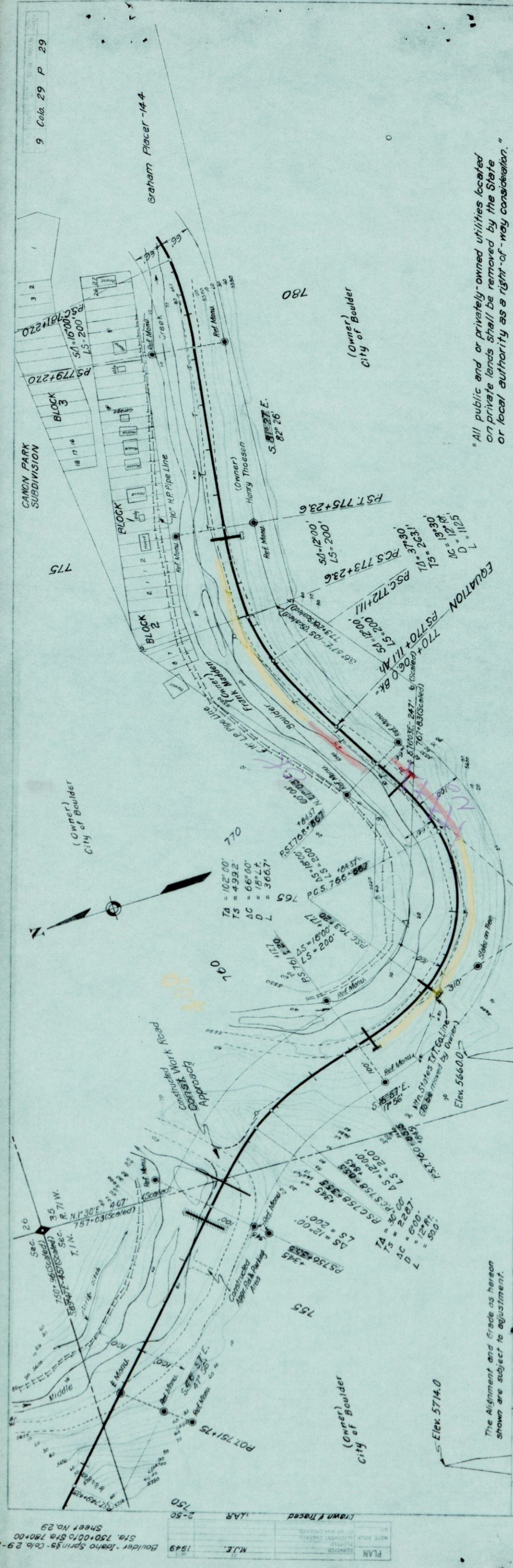
Ref. Guide Posts Lt.

EQUATION

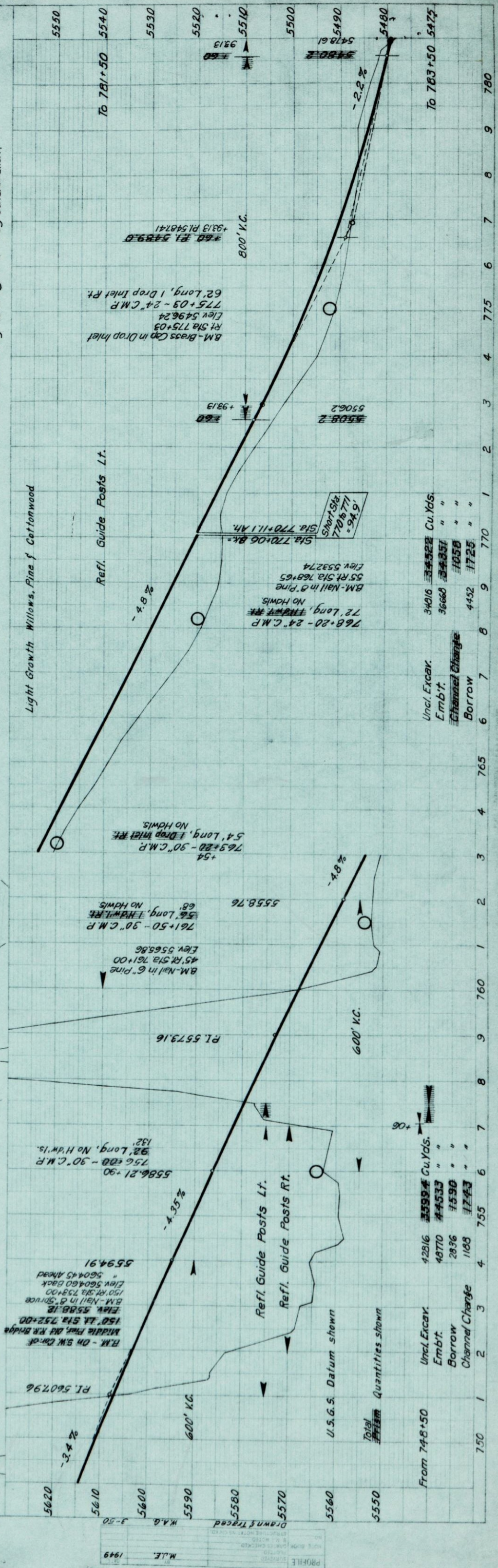
City of Boulder

Remove existing intake box, headgate, flume & weir. Construct intake box & headgate - left Sta. 746+30 to Sta. 749+00. Metal Flume - left Sta. 746+30 to Sta. 749+00. Construct Channel City.





"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."





Boulder - Idaho Springs, Colo. 29 - P  
Sta. 780+00 to Sta. 788+00  
Sheet No. 30

PLAN

|          |        |
|----------|--------|
| DATE     | 1949   |
| BY       | M.J.E. |
| REVISION |        |
| NO.      |        |

Drawn & Traced W.A.G. 1952

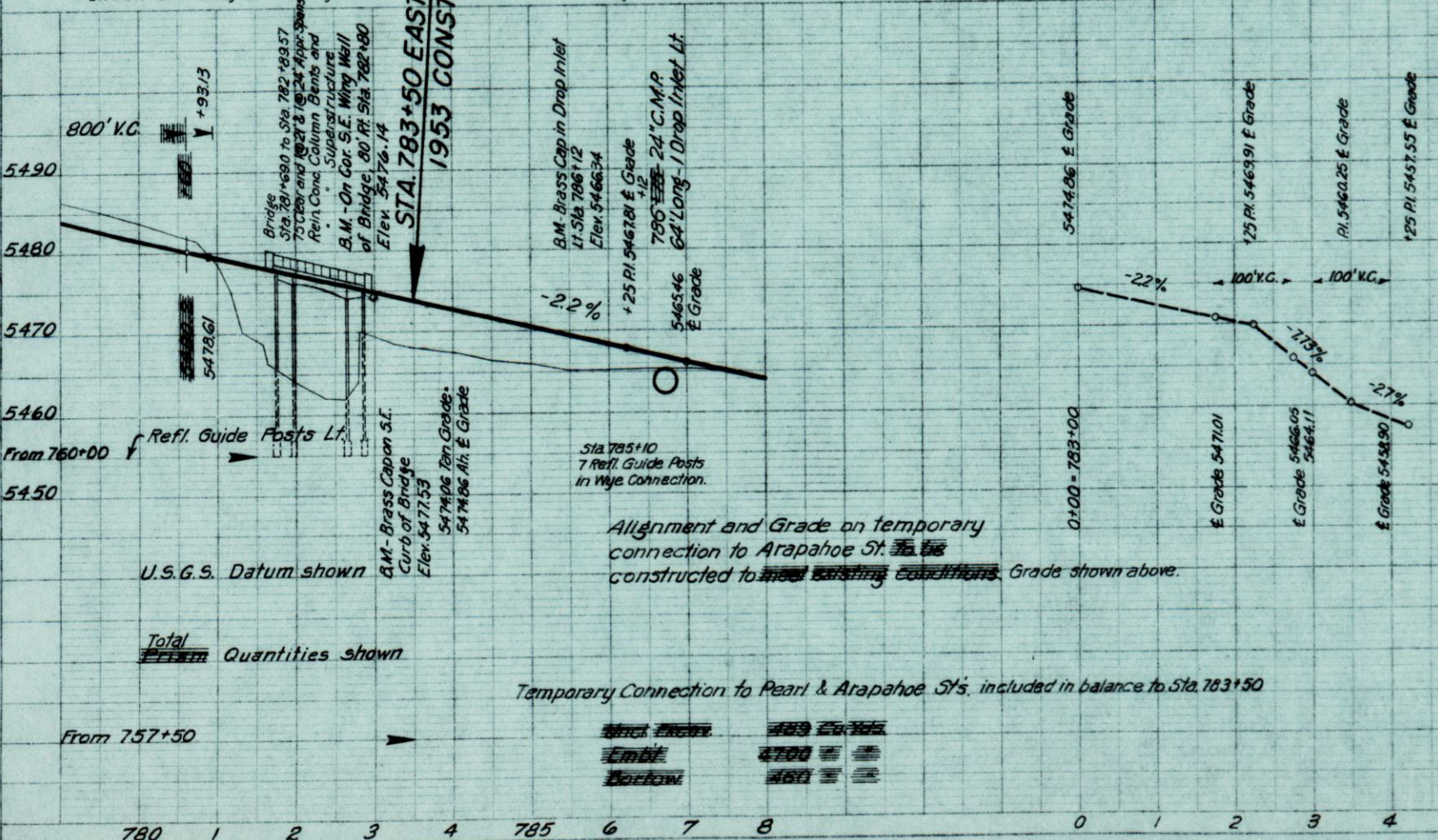
PROFILE

|          |        |
|----------|--------|
| DATE     | 1949   |
| BY       | M.J.E. |
| REVISION |        |
| NO.      |        |

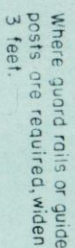
Drawn & Traced W.A.G. 1952



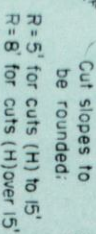
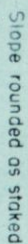
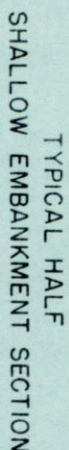
"All public and or privately-owned utilities located on private lands shall be removed by the State or local authority as a right-of-way consideration."







TYPICAL HALF  
CUT SECTION IN COMMON



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 subparallel cuts or flattening cut slopes where satisfactory material is available. The slopes of the ends of cut cuts shall be flattened and flared to improve appearance.

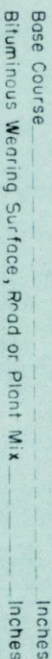
Furrows/ditches shall be constructed on approximate one percent grades following the ground contour and when possible shall be so constructed that the direction of flow will be away from the roadway.

Tasceli shall be conserved and either placed in stockpiles or spread over cut and embankment slopes as directed and in accordance with the specifications.

Roadway ditches at the ends of cuts shall be constructed so as to carry the flow away from the adjacent embankment slopes.

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.

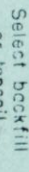
Subjects grade to be on the surface of stabilized graded road and located ten feet from center line on tangents and inside of curves. Bureau of Public Roads book of "Transition Curves for Highways," shall be used to determine superlevation and transition lengths (Table I), and widening of curves (Table IX).



TYPICAL SURFACING SECTION



TYPICAL SURFACING SECTION



NOT INCLUDED IN THIS CONTRACT

| STATION TO STATION             | DEPTH     |
|--------------------------------|-----------|
| 691+00                         | 9"        |
| 783+50<br>(Item 26<br>Item 47) | 5"<br>4") |

| HEIGHT     | EMBANKMENT SLOPE | EARTH CUT SLOPE | ROCK CUT SLOPE |
|------------|------------------|-----------------|----------------|
| 0' to 3'   | 6:1              | 3:1             |                |
| 3' to 6'   | 4:1              | 3:1             | 1/2:1          |
| 6' to 12'  | 2:1              | 2:1             | to 1:1         |
| 12' to 30' | 1 1/2:1          | 1 1/2:1         | 1:1            |
| 30' up     | 1 1/2:1          | 1:1             |                |

When field conditions indicate the need for slopes other than those indicated above they shall be constructed as stated by the Engineer. In cases where the height of cuts are in excess of 30 feet and in material which erodes readily, use slopes of  $1\frac{1}{2}$  to 1 or flatter if practical.

## NATIONAL FOREST &amp; PARK HIGHWAYS

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

DIVISION No. 9 STANDARD ROADBED:-BITUMINOUS WEARING SURFACE " " " "  
PROJECT *Cota 29-P, Boulder-Idaho Springs*  
NATIONAL Forest: Roosevelt  
COUNTY *Boulder*  
STATE *Colorado*

Design Engineer

DATE: Jan 3, 1952