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## COLORADO STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED S.N.FEDERAL AID PROJECT NO. 292-D(2) STATE HIGHWAY NO. 4 EAGLE COUNTY

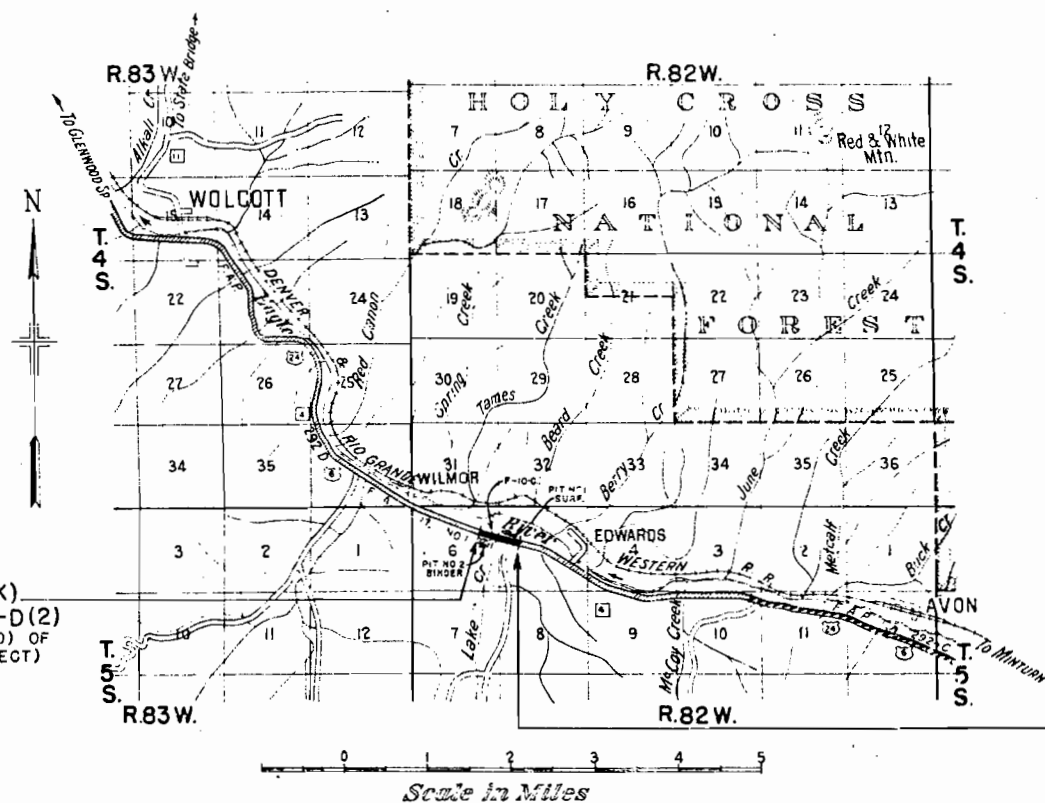
SCALES OF ORIGINAL TRACINGS  
ON PLAN, 1 IN. = 100 FT.  
ON PROFILE 1 IN. = 100 FT. HORIZONTAL  
1 IN. = 10 FT. VERTICAL  
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD  
GROSS LENGTH OF PROJECT } 2542.4 FEET = 0.481 MILES  
NET LENGTH OF PROJECT }

| FED. ROAD DIST. NO. | STATE | S.N. FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------------|-----------|--------------|
| 3                   | COLO. | 292-D(2)                | 1         |              |

REV INDEX ADDED SHEETS 6A & 6B 10-14-41 HL  
W. of Edwards

### CONVENTIONAL SIGNS

CENTER LINE OF SURVEY 100  
RIGHT OF WAY LINES  
SECTION LINES  
ONE QUARTER SECTION LINES  
TOWNSHIP LINES  
RAILROAD TRACKS  
BARBED WIRE FENCE  
POLE LINES



STA 612 + 92.4 (BACK)  
END OF SN F.A.P. 292-D(2)  
EQUALS STA. 614 + 00.8 (AHEAD) OF  
F.A.P. 292-D (ORIGINAL PROJECT)  
= Begin F 001-2(3)

STA 587 + 50  
BEGINNING OF SN F.A.P. 292-D(2)  
EQUALS SAME STATION OF  
F.A.P. 292-D (ORIGINAL PROJECT)

= End F 001-2(2)

NOTE:  
IT IS RECOMMENDED THAT BIDDERS ON THIS PROJECT  
GO OVER THE PLAN DETAILS WITH ONE OF THE FOLLOW-  
ING FIELD REPRESENTATIVES OF THIS DEPARTMENT.  
H. L. JENNESS, DIVISION ENGINEER, GLENWOOD SPRINGS  
A. K. LANGRIDGE, RESIDENT ENGINEER, MINTURN

RECOMMENDED FOR APPROVAL  
*[Signature]*  
ASSISTANT ENGINEER DATE 9/19/41

APPROVED  
*[Signature]*  
STATE HIGHWAY ENGINEER DATE

RECOMMENDED FOR APPROVAL  
DISTRICT ENGINEER  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY

RECOMMENDED FOR APPROVAL  
CHIEF WESTERN REGION  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY

APPROVED  
COMMISSIONER  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY

# TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

## CUT SLOPE TREATMENT IN EARTH CUTS

The intersection of cut slopes with the existing ground shall be rounded in earth cuts, beginning 5 feet outside the slope stake and extending 5 feet down the cut slope. Where the cut slope length is less than 5 feet, reduce each of the above lengths of slope treatment to the actual slope distance. Quantities involved in cut slope treatment shall be included in "Unclassified Excavation".

The depth and width of the side ditch shall be varied where necessary in order that sufficient depth may be acquired to provide entrance to cross drainage structures.

## GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department adopted June 1, 1947.

All quantities shown on preliminary plans are to be considered approximate only.

All roadway excavation required to construct the project is to be obtained as indicated on the plans. Quantities involved beyond the limits of ditch as shown on the Typical Section, either noted on the profile as "Borrow" or on the Tabulation of Structures as "Excavation" and "Embankment" are to be classified and paid for as "Unclassified Excavation".

These quantities are to be staked as part of the original excavation at locations indicated on the plans. Slope stakes beyond the limits of the Typical Section are subject to change by the Engineer, to fit embankment requirements actually encountered on construction.

If, after cut slopes are staked, it is found that the material will stand on a steeper slope, rights are reserved to change cut slopes after cuts have been opened up by the Contractor.

Except as noted on the plans, overhaul will be paid for as measured along center line of project.

All curves are to be superelevated and widened as provided by the standard superelevation sheet.

All side approach roads to the project shall be constructed in conformity with details shown on Standard M-2-B, and shall be gravel surfaced with a 4" thickness of "Gravel or Crushed Rock Surfacing" extending approximately 30 feet from edge of highway. Estimated tonnage of surfacing material required in this operation is shown in "Tabulation of Structures".

The alignment, grade lines and drainage structures shown on Plans are subject to adjustment by the Engineer in the field to meet construction requirements, after approval by the Denver Office of the Department.

The ends of all cuts shall be flared and backslopes flattened to discharge side ditch drainage away from the base of adjacent fill slopes. The transition of flattened backslope and ditch shall be done in such a manner that a uniform appearance of slope and ditch results, and so as to promote the growth of native groundcover.

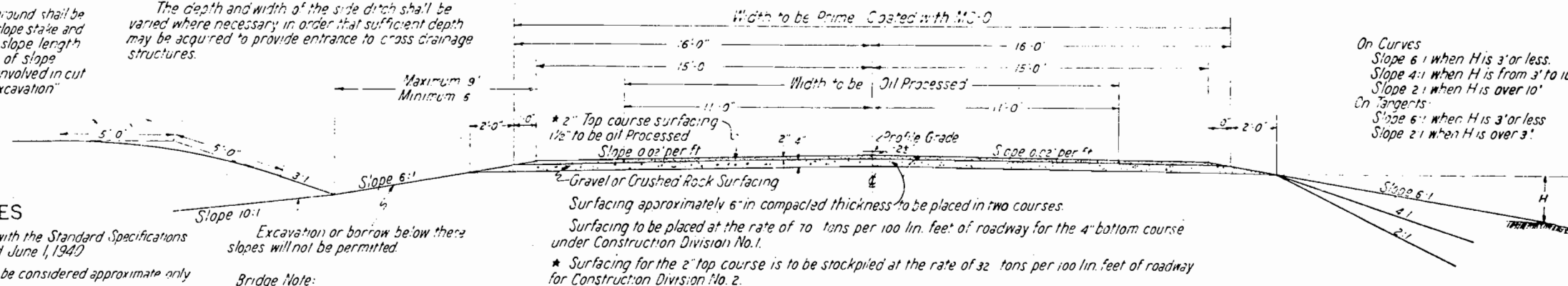
All wire fences including line posts, shall be placed approximately six (6) inches inside the boundary of the highway right of way.

The 64" C.M.P. Cross Culvert shall be provided with a standard concrete headwall at each end. No other C.M.P. Culverts shall be provided with headwalls. The ends of C.M.P. Culverts, which are not provided with headwalls, shall be covered with earth so that a minimum of metal will be exposed in the completed work. Fill slopes shall be warped adjacent to and over the pipes, and the covering over pipes shall be approximately six inches.

All poles encroaching on construction are to be moved by the owners.

The entire project shall be cleared in conformity with the requirements of the Standard Specifications except that such trees or shrubs, as the Engineer may designate, shall be left in place and protected from damage during construction operations.

## TYPICAL SECTION



## SURFACING PLAN

It is estimated that an ample quantity of material for Gravel Surfacing for the Project is available in the vicinity of the pits indicated in the following tabulation. Estimated quantities involved in this operation are shown below.

No alteration of the Surfacing Plan as here outlined will be allowed without written permission from the Department.

| PLACE REQUIRED          | QUANTITY REQUIRED | SOURCE OF MATERIAL                                |
|-------------------------|-------------------|---------------------------------------------------|
| STATION TO STATION      | TONS              |                                                   |
| 587 + 500 TO 602 + 150  | 469 1026          | 3 PIT NO. 1 - SURFACING ON R.O.W. STA. 597 TO 601 |
| 602 + 57.7 TO 612 + 924 | 332 725           | PIT NO. 2 - BINDER MATERIAL 100' LT. STA. 610 +   |
| APPROACHES              | 152 153           |                                                   |
| <b>TOTAL</b>            | <b>953 1904</b>   |                                                   |

2 MATERIAL AVAILABLE WITHOUT PURCHASE COST TO CONTRACTOR.

\* 2" top course surfacing material to be stockpiled for Construction Division No. 2, at locations indicated on the plans or designated by the Engineer with adequate provisions made for drainage.

## CONSTRUCTION DIVISION NO. 2

14" of the top course surfacing stockpiled under Construction Division No. 1, is to be hauled and Oil Processed under Construction Division No. 2. The remainder of stockpiled top surfacing is to be used on shoulders and for leveling present gravel surfacing before oil processed surfacing is placed.

All side approach roads to this project shall be oil processed a distance of approximately 20 feet from the edge of the roadway oil processed surfacing. Quantities involved in this operation are included in Summary of Quantities for Construction Division No. 2.

## SUMMARY OF APPROXIMATE QUANTITIES

| ITEM NO.                           | ITEM                                        | UNIT        | ROADWAY | BRIDGE STA. 602 + | PROJECT TOTALS |
|------------------------------------|---------------------------------------------|-------------|---------|-------------------|----------------|
| <b>CONSTRUCTION DIVISION NO. 1</b> |                                             |             |         |                   |                |
| 10a                                | Clearing and Grubbing Entire Project        | Lump Sum    | .       | .                 | .              |
| 11a                                | Removal of Disused Bridge Sta. 602 +        | Lump Sum    | .       | .                 | .              |
| 11b                                | Removal of 3 Structures                     | Lump Sum    | .       | .                 | .              |
| 11c                                | Remove and Reset Feed Yard, Sta. 602 +      | Lump Sum    | .       | .                 | .              |
| 12a                                | Removing and Rebuilding Fence               | Lin. Ft.    | 2200    |                   | 2200           |
| 12c                                | Untreated Wooden Line Posts                 | Each        | 30      |                   | 30             |
| 12d                                | Removing and Rebuilding Guard Fence         | Lin. Ft.    | 206     |                   | 206            |
| 13c                                | Unclassified Excavation                     | Cu. Yd.     | 16,000  |                   | 16,000         |
| 13d                                | Unclassified Ditch Excavation               | Cu. Yd.     | 400     |                   | 400            |
| 14a                                | Dry Rock Excavation (Str.)                  | Cu. Yd.     | 40      |                   | 50             |
| 14b                                | Dry Common Excavation (Str.)                | Cu. Yd.     | 320     | 150               | 470            |
| 14c                                | Wet Rock Excavation (Str.)                  | Cu. Yd.     | 10      | 10                | 20             |
| 14d                                | Wet Common Excavation (Str.)                | Cu. Yd.     | 40      | 650               | 690            |
| 14e                                | Mechanical Tamping                          | Hour        | 18      | 215               | 233            |
| 15a                                | Rolling Fills                               | Hour        | 100     |                   | 100            |
| 15b                                | Furnishing Roller                           | Roller-Unit | 2       |                   | 2              |
| 15c                                | Wetting Fills                               | M. Gal.     | 335     |                   | 335            |
| 16a                                | Station Yard Overhaul                       | Sta. Yd.    | 7000    |                   | 7000           |
| 16b                                | Yard Mile Overhaul                          | Yd. Mi.     | 100     |                   | 100            |
| 25a                                | Gravel or Crushed Rock Surfacing            | Ton         | 1910    |                   | 1910           |
| 26b                                | Stockpile Surfacing                         | Ton         | 960     |                   | 960            |
| 42a                                | Untreated Bridge Timber                     | M. ft. b.m. |         | 0.4               | 0.4            |
| 46a                                | Class A Concrete                            | Cu. Yd.     | 20      | 364               | 384            |
| 46b                                | Class A Concrete (Handrails)                | Cu. Yd.     |         | 5                 | 5              |
| 47                                 | Reinforcing Steel                           | Lb.         | 700     | 40,200            | 40,900         |
| 48                                 | Structural Steel                            | Lb.         |         | 25,600            | 25,600         |
| 51                                 | Relaying Pipe                               | Lin. Ft.    | 184     |                   | 184            |
| 53b                                | 18" Corrugated Metal Culvert Pipe           | Lin. Ft.    | 74      |                   | 74             |
| 53c                                | 24" Corrugated Metal Culvert Pipe           | Lin. Ft.    | 100     |                   | 100            |
| 53d                                | 36" Corrugated Metal Culvert Pipe           | Lin. Ft.    | 58      |                   | 58             |
| 61a                                | Project Markers                             | Each        | 2       |                   | 2              |
| 61b                                | Right of Way Markers                        | Each        | 7       |                   | 7              |
| 69a                                | Drain Pipe (Concrete Floor) 14" x 3'-3"     | Each        |         | 2                 | 2              |
| 102                                | Scarify and Windrow Oil Processed Surfacing | Sq. Yd.     | 4800    |                   | 4800           |
| <b>FORCE ACCOUNT</b>               |                                             |             |         |                   |                |
|                                    | obliterating Old Road                       | Lump Sum    | .       | .                 | .              |
| <b>CONSTRUCTION DIVISION NO. 2</b> |                                             |             |         |                   |                |
| 30e                                | Asphaltic Road Material RC-4                | Gal.        | 17.0    |                   | 17.0           |
| 30g                                | Asphaltic Road Material M.C-2               | Gal.        | 3130    |                   | 3130           |
| 30p                                | Asphaltic Road Material SC-3                | Gal.        | 8600    |                   | 8600           |
| 31c                                | Rolling Surfacing                           | Hour        | 25      |                   | 25             |
| 31d                                | Furnishing Rubber Tired Roller              | Lump Sum    | .       | .                 | .              |
| 31x                                | Road Mix Oil Processing                     | Sq. Yd.     | 7700    |                   | 7700           |
| 32b                                | Stone Screenings                            | Ton         | 100     |                   | 100            |
| 41b                                | Blading, Grading and Compacting Roadway     | Mile        | 0.5     |                   | 0.5            |

| FED. ROAD DIST. NO. | STATE | SN. FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|------------------------|-----------|--------------|
| 3                   | COLO. | 292-0(2)               | 3         |              |

# R.O.W. MARKERS

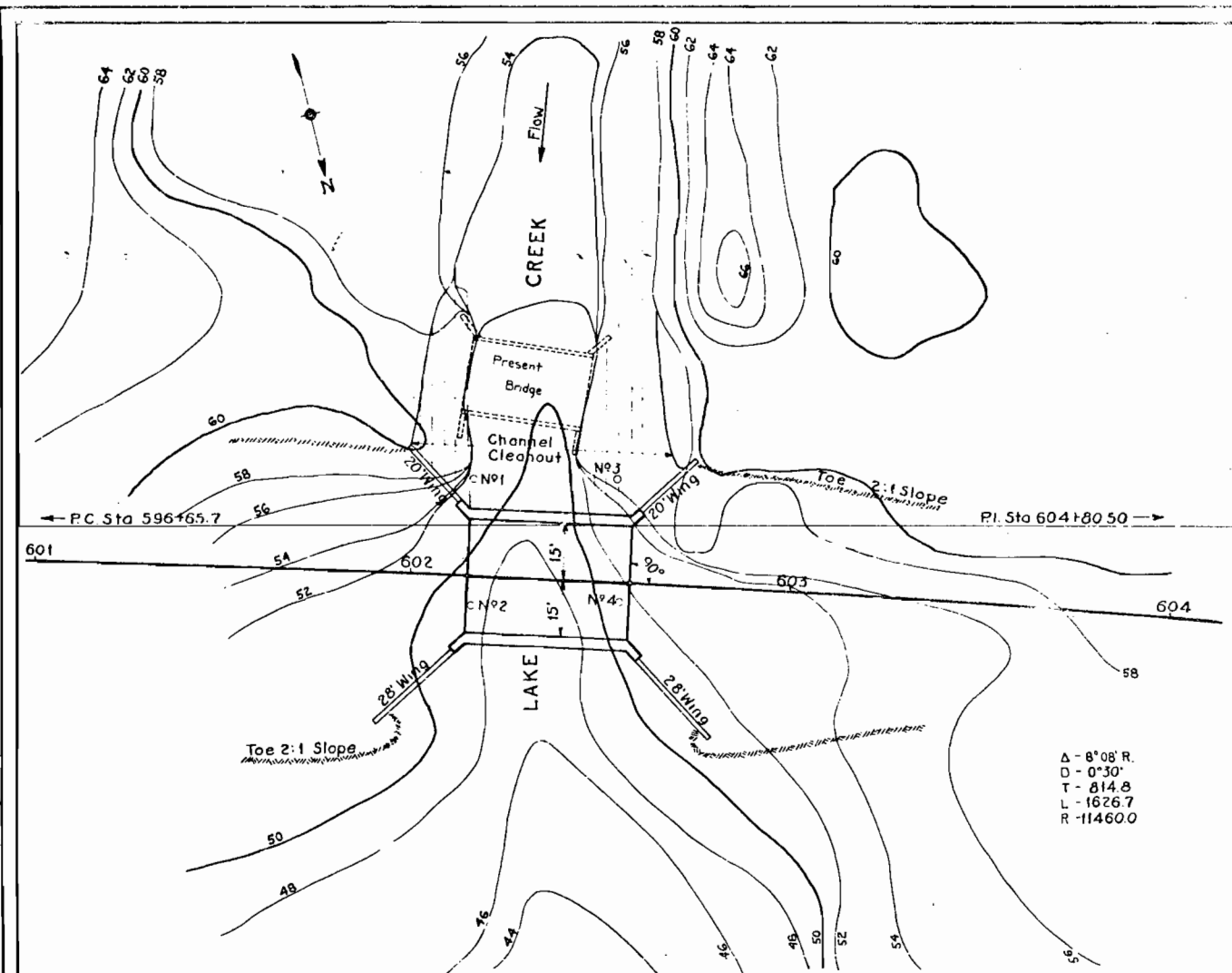
| STATION    | NO. SIDE |       |
|------------|----------|-------|
|            | LEFT     | RIGHT |
| 587 + 60   |          | 1     |
| 596 + 65.7 |          | 1     |
| 598 + 00   |          | 1     |
| 601 + 00   |          | 1     |
| 604 + 00   |          | 1     |
| 612 + 00   |          | 1     |
| 612 + 92.4 |          | 1     |
| TOTAL      |          | 7     |

# TABULATION OF STRUCTURES

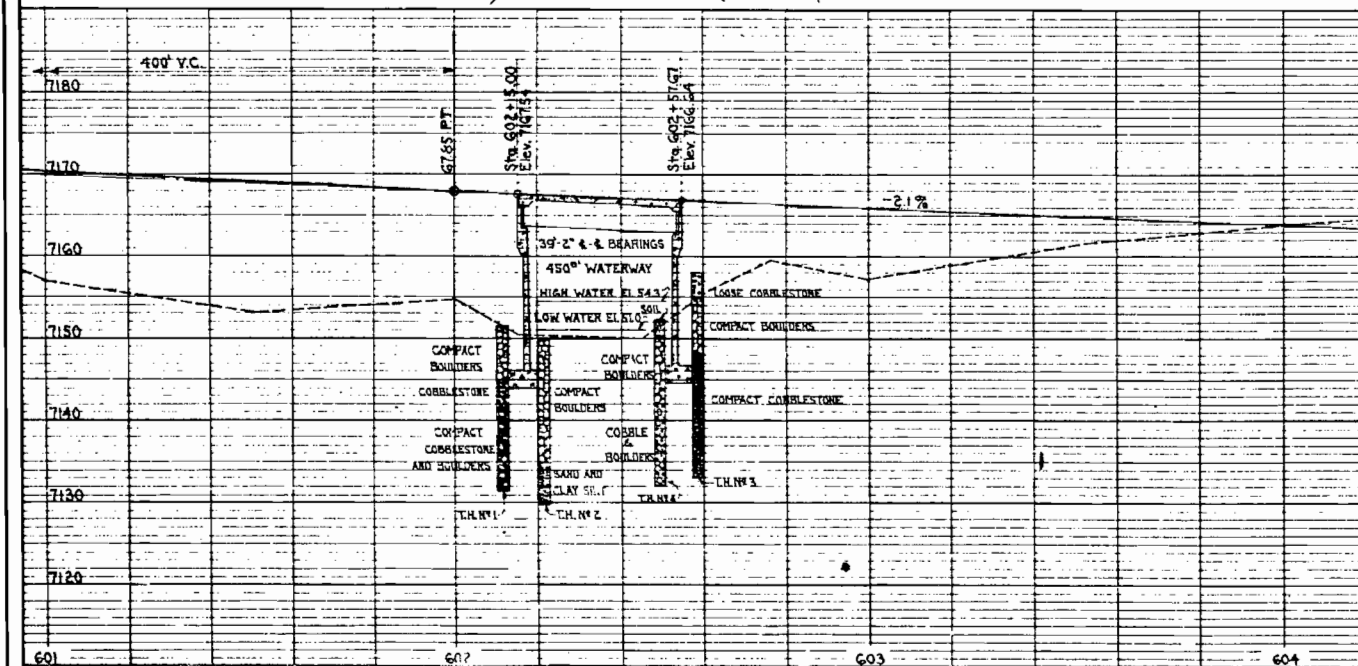
| STATION                    | DESCRIPTION                                                                                                                                                               | REMOVE  | UNCLASSIFIED |          | UNCLASSIFIED | STRUCTURAL-EXCAVATION   |  |  |        | MECH-ANICAL TAMP-ING | GRAVEL SURF. | CONCRETE |      | REINF. STEEL | CORRUGATED METAL CULVERT PIPE |     |     |          | RELAYING PIPE                                                             | MISCELLANEOUS |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|----------|--------------|-------------------------|--|--|--------|----------------------|--------------|----------|------|--------------|-------------------------------|-----|-----|----------|---------------------------------------------------------------------------|---------------|
|                            |                                                                                                                                                                           | STRUCT. | EXCAVATION   | DITCH    | EXCAVATION   |                         |  |  | CL' A' |                      |              | LBS      | PIPE |              |                               |     |     |          |                                                                           |               |
|                            |                                                                                                                                                                           | NO.     | CU. YDS.     | CU. YDS. | CU. YDS.     | ★                       |  |  |        |                      |              |          |      |              | 18"                           | 24" | 36" | LIN. FT. |                                                                           |               |
| 587 + 50                   | Project Marker                                                                                                                                                            |         |              |          |              |                         |  |  |        |                      |              |          |      |              |                               |     |     |          | Project Marker                                                            |               |
| 588 + 50                   | Remove 18"x48" C.M.P. Cross Culvert with headwall.                                                                                                                        | 1       |              |          |              |                         |  |  |        |                      |              |          |      |              |                               |     |     |          | Remove & Rebuild 2200 lin. Ft. fence, Rt. 30 Untreated Wooden Line Posts. |               |
| 590 + 50                   | C.M.P. Cross Culvert Inlet and Outlet                                                                                                                                     |         |              |          | 10           | 25                      |  |  |        | 2                    |              |          |      |              | 60                            |     |     |          |                                                                           |               |
| 591 + 00 to 612 + 92       | Remove and Rebuild Fence, Rt. & Lt.                                                                                                                                       |         |              |          |              |                         |  |  |        |                      |              |          |      |              |                               |     |     |          |                                                                           |               |
| 591 + 26                   | Remove 12"x6" C.M.P. Side Drain, Lt. Walk Approach, Lt.                                                                                                                   | 1       |              | 25       |              |                         |  |  |        |                      |              |          |      |              |                               |     |     |          | Remove and reset Feed Yard, Rt.                                           |               |
| 593 + 50                   | Road Approach, Lt. Relay 15" C.M.P. Side Drain, Lt.                                                                                                                       |         | 100          |          |              |                         |  |  |        | 30                   |              |          |      |              |                               |     | 56  |          |                                                                           |               |
| 595 + 30                   | C.M.P. Cross Culvert with Headwalls. Inlet and Outlet                                                                                                                     |         |              |          | 300          | 300                     |  |  |        | 10                   | 20           | 684      |      | 58           |                               |     |     |          |                                                                           |               |
| 595 + 85                   | Remove 5'x7'x30" Concrete Box Culvert. Lt. Road Approaches, Lt. and Rt.                                                                                                   | 1       |              | 500      |              |                         |  |  |        | 30                   |              |          |      |              |                               |     |     |          | Remove and rebuild 206 lin. ft. Wire Cable Guard Fence                    |               |
| 600 + 90                   | C.M.P. Side Drain, Lt.                                                                                                                                                    |         |              |          |              | 5                       |  |  |        |                      |              |          |      | 40           |                               |     |     |          |                                                                           |               |
| 602 + 15 to 602 + 57.7     | Concrete and I-Beam Bridge, 1 Span @ 39' 2" (Details on Sheets 4 to 6.)<br>Remove Disused Bridge, Lt.<br>Remove and Rebuild 206 ft. Wire Cable Guard Fence at bridge ends |         |              |          |              | (QUANTITIES IN SUMMARY) |  |  |        |                      |              |          |      |              |                               |     |     |          |                                                                           |               |
| 602 + 10 to 603 + 603 + 25 | Channel Improvement<br>Remove and Reset Feed Yard, Rt.<br>Road Approach, Lt.                                                                                              |         | 100          |          |              |                         |  |  |        |                      | 15           |          |      |              |                               |     |     |          |                                                                           |               |
| 608 + 50                   | Road Approach, Lt.                                                                                                                                                        |         | 25           |          |              |                         |  |  |        | 15                   |              |          |      |              |                               |     |     |          | Project Marker                                                            |               |
| 608 + 70                   | Relay 18" C.M.P. Side Drain, Lt.<br>Relay 18" C.M.P. Cross Culvert and Extend Inlet                                                                                       |         |              |          | 10           | 45                      |  |  |        | 4                    |              |          |      | 22           |                               |     | 46  |          |                                                                           |               |
| 611 + 70                   | Extend 18"x48" C.M.P. Cross Culvert 24' Lt. and 14' Rt. Inlet                                                                                                             |         |              |          | 10           | 10                      |  |  |        | 2                    |              |          |      | 10           |                               |     | 64  |          |                                                                           |               |
| 611 + 85                   | Relay 18" C.M.P. Side Drain, Rt. and Extend. Road Approach, Rt.                                                                                                           |         |              | 50       |              |                         |  |  |        |                      | 15           |          |      |              | 10                            |     | 18  |          | Project Marker                                                            |               |
| 612 + 92.4                 | Project Marker<br>Approach to Project                                                                                                                                     |         |              | 300      |              |                         |  |  |        |                      | 200          |          |      |              |                               |     |     |          |                                                                           |               |
| Totals                     |                                                                                                                                                                           | 3       | 225          | 1075     | 340          | 400                     |  |  |        | 18                   | 305          | 20       | 684  | 74           | 100                           | 58  | 184 |          |                                                                           |               |

\* Structural excavation is estimated to be 90 % common and 10 % rock, each of which is estimated to be 10 % wet and 90 % Dry  
 Ⓢ This length of pipe is not to be furnished as such, but is allowed to compensate for connecting bands.

Initial Date  
 Designed By HWP 8-41  
 Checked By HCC 8-41  
 Drawn By E.W.P. 5-16-41  
 Checked By HWP 8-41  
 Traced By HCC 9-5-41  
 Checked By J.W.T. 9-9-41



A - 8°08' R.  
 D - 0°30'  
 T - 814.8  
 L - 1626.7  
 R - 114600



# REVISIONS

Revised 10-14-41 - Lowered Abut No.1 Footing H.C.C.  
 Rev. as Constructed 11-20-42 H.W.V.

| FED. ROAD DIST. NO. | STATE | SN-F.A.P. | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-----------|--------------|
| 3                   | COLO. | 292 D(2)  | 4         |              |

## BAR LIST FOR ABUTMENT NO.1

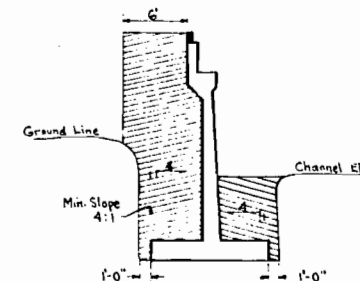
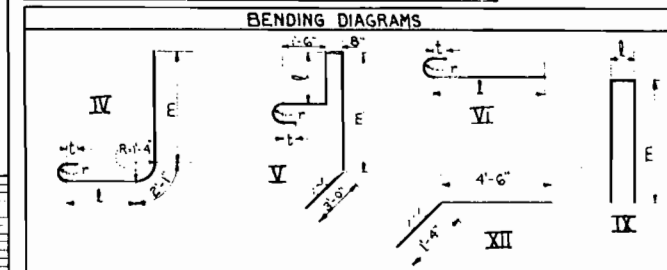
| MARK | SIZE   | Nº REQD | LENGTH  | TYPE | l            | m       | r      | t      | MARK | SIZE   | Nº REQD | LENGTH  | TYPE | l      | m       | r      | t      |
|------|--------|---------|---------|------|--------------|---------|--------|--------|------|--------|---------|---------|------|--------|---------|--------|--------|
| A1   | 1"     | 35      | 23'-11" | IV   | 2'-4"        | 18'-2"  | 4"     | 3 1/2" | B2   | 1"     | 1       | 6'-7"   | Str. |        |         |        |        |
| A2   | 1"     | 4       | 27'-10" | IV   | 2'-4"        | 22'-1"  | 4"     | 3 1/2" | B3   | 1"     | 2       | 27'-5"  | IV   | 2'-3"  | 21'-9"  | 4"     | 3 1/2" |
| A3   | 1 1/8" | 32      | 17'-8"  | IV   | 4'-9"        | 9'-4"   | 4 1/2" | 4"     | C1   | 1"     | 2       | 26'-6"  | IV   | 2'-1"  | 21'-0"  | 4"     | 3 1/2" |
| A4   | 1 1/8" | 12      | 17'-3"  | IV   | 4'-4"        | 9'-4"   | 4 1/2" | 4"     | C2   | 1"     | 2       | 25'-7"  | IV   | 1'-11" | 20'-3"  | 4"     | 3 1/2" |
| A5   | 1 1/8" | 42      | 22'-6"  | Str. | (Field Bend) |         |        |        | C3   | 1 1/8" | 6       | 17'-6"  | IV   | 4'-2"  | 9'-9"   | 4 1/2" | 4"     |
| A6   | 1 1/8" | 30      | 11'-3"  | V    | 2'-2"        | 3'-3"   | 2"     | 2"     | C4   | 1"     | 2       | 24'-9"  | IV   | 1'-10" | 19'-6"  | 4"     | 3 1/2" |
| A7   | 1 1/8" | 4       | 29'-6"  | Str. |              |         |        |        | C5   | 1"     | 2       | 23'-11" | IV   | 1'-9"  | 18'-9"  | 4"     | 3 1/2" |
| A8   | 1 1/8" | 10      | 5'-10"  | III  |              |         |        |        | C6   | 1"     | 2       | 23'-11" | IV   | 1'-7"  | 18'-0"  | 4"     | 3 1/2" |
| A9   | 1"     | 4       | 28'-5"  | IV   | 2'-4"        | 22'-8"  | 4"     | 3 1/2" | C7   | 1"     | 2       | 22'-1"  | IV   | 1'-7"  | 17'-3"  | 3 1/2" | 3"     |
| B1   | 1"     | 2       | 26'-11" | IV   | 2'-3"        | 21'-3"  | 4"     | 3 1/2" | C8   | 1"     | 2       | 21'-4"  | IV   | 1'-5"  | 16'-8"  | 3 1/2" | 3"     |
| B2   | 1"     | 2       | 26'-0"  | IV   | 2'-1"        | 20'-6"  | 4"     | 3 1/2" | C9   | 1"     | 2       | 20'-5"  | IV   | 1'-3"  | 15'-11" | 3 1/2" | 3"     |
| B3   | 1"     | 2       | 25'-1"  | IV   | 1'-11"       | 19'-9"  | 4"     | 3 1/2" | C10  | 1"     | 2       | 19'-7"  | IV   | 1'-2"  | 15'-2"  | 3 1/2" | 3"     |
| B4   | 1 1/8" | 6       | 17'-0"  | IV   | 4'-2"        | 9'-3"   | 4 1/2" | 4"     | C11  | 1"     | 2       | 18'-5"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B5   | 1"     | 2       | 24'-3"  | IV   | 1'-10"       | 19'-0"  | 4"     | 3 1/2" | C12  | 1"     | 2       | 18'-6"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B6   | 1"     | 2       | 23'-5"  | IV   | 1'-9"        | 18'-3"  | 4"     | 3 1/2" | C13  | 1"     | 2       | 17'-3"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B7   | 1"     | 2       | 22'-6"  | IV   | 1'-7"        | 17'-6"  | 4"     | 3 1/2" | C14  | 1"     | 2       | 16'-2"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B8   | 1"     | 2       | 21'-7"  | IV   | 1'-7"        | 16'-9"  | 3 1/2" | 3"     | C15  | 1"     | 2       | 15'-2"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B9   | 1"     | 2       | 20'-10" | IV   | 1'-5"        | 16'-2"  | 3 1/2" | 3"     | C16  | 1"     | 2       | 14'-5"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B10  | 1"     | 2       | 20'-10" | IV   | 1'-5"        | 16'-2"  | 3 1/2" | 3"     | C17  | 1"     | 2       | 13'-6"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B11  | 1"     | 2       | 19'-11" | IV   | 1'-3"        | 15'-5"  | 3 1/2" | 3"     | C18  | 1"     | 2       | 12'-6"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B12  | 1"     | 2       | 19'-11" | IV   | 1'-2"        | 14'-8"  | 3 1/2" | 3"     | C19  | 1"     | 2       | 11'-0"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B13  | 1"     | 2       | 18'-11" | IV   | 1'-2"        | 13'-11" | 3"     | 2 1/2" | C20  | 1"     | 2       | 10'-0"  | IV   | 1'-0"  | 14'-5"  | 4"     | 3 1/2" |
| B14  | 1"     | 2       | 18'-2"  | IV   | 1'-2"        | 13'-11" | 3"     | 2 1/2" |      |        |         |         |      |        |         |        |        |
| B15  | 1"     | 2       | 17'-6"  | IV   | 1'-2"        | 13'-3"  | 3"     | 2 1/2" |      |        |         |         |      |        |         |        |        |
| B16  | 1"     | 2       | 16'-9"  | IV   | 1'-2"        | 12'-6"  | 3"     | 2 1/2" |      |        |         |         |      |        |         |        |        |
| B17  | 1"     | 2       | 16'-0"  | IV   | 1'-2"        | 11'-9"  | 3"     | 2 1/2" |      |        |         |         |      |        |         |        |        |
| B18  | 1"     | 2       | 15'-8"  | IV   | 1'-2"        | 11'-9"  | 3"     | 2 1/2" |      |        |         |         |      |        |         |        |        |
| B19  | 1"     | 2       | 15'-8"  | Str. |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B20  | 1"     | 2       | 15'-3"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B21  | 1"     | 2       | 14'-7"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B22  | 1"     | 2       | 14'-7"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B23  | 1"     | 2       | 14'-7"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B24  | 1"     | 2       | 14'-7"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B25  | 1"     | 2       | 14'-7"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |
| B26  | 1"     | 2       | 14'-7"  |      |              |         |        |        |      |        |         |         |      |        |         |        |        |

## SUMMARY OF QUANTITIES

| ITEM NO. | DESCRIPTION                                   | UNIT      | SUPER-STRUCTURE | ABUT. NO.1 | ABUT. NO.2 | TOTAL  |
|----------|-----------------------------------------------|-----------|-----------------|------------|------------|--------|
| 11a      | Removal of Disused Bridge                     | L.S.      |                 |            |            |        |
| 14a      | Dry Rock Excavation (Str.)                    | Cu Yd.    |                 | 1.5        | 0          | 1.5    |
| 14b      | Dry Common Excavation (Str.)                  | "         |                 | 47.9       | 141.2      | 189.1  |
| 14c      | Wet Rock Excavation (Str.)                    | "         |                 | 10.5       |            | 10.5   |
| 14d      | Wet Common Excavation (Str.)                  | "         |                 | 249.1      | 223        | 472.1  |
| 14e      | Mechanical Tamping                            | Hour      |                 |            |            | 88.5   |
| 42a      | Untreated Bridge Timber                       | M ft. lb. |                 | 0.180      | 0.180      | 0.360  |
| 46a      | Class 'A' Concrete                            | Cu Yd.    | 39              | 172        | 153        | 364    |
| 46c      | Class 'A' Concrete (Handrails)                | "         | 3.5             | 0.6        | 0.6        | 4.7    |
| 47       | Reinforcing Steel (Incl. 1% overrun)          | Lb.       | 9,020           | 16,770     | 14,400     | 40,190 |
| 48       | Structural Steel (Incl. 1% overrun)           | Lb.       | 25,445          | 25         | 25         | 25,495 |
| 89a      | Drain Pipe (Concrete Floor 1/4" Dia. x 3'-3") | Each      | 2               |            |            | 2      |
|          | 12 Ga. Galv. Sheet Metal                      | Lb.       | 433             |            |            | 433    |
|          | 3/4" Expansion Joint Material                 | Sq. Ft.   | 35              |            |            | 35     |
|          | 1/2"                                          | "         | 2               |            |            | 2      |
|          | 1/4"                                          | "         |                 | 65         | 60         | 125    |

Wet Line was at Elev. 7150.10

\* To be included in Bid Price for Class 'A' Concrete.



## BAR SUMMARY FOR ABUT. NO.1

| 980 Lin Ft 1/8" Bars | 4 303 Lbs/Lin Ft | = | 4217 Lbs               |
|----------------------|------------------|---|------------------------|
| 1370                 | "                | " | 4658 "                 |
| 761                  | "                | " | 2032 "                 |
| 330                  | "                | " | 675 "                  |
| 1158                 | "                | " | 1740 "                 |
| 914                  | "                | " | 954 "                  |
| 416                  | "                | " | 354 "                  |
| 2959                 | "                | " | 1977 "                 |
|                      |                  |   | + 1% for overrun = 163 |
|                      |                  |   | Total = 16,770 Lbs.    |

## GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO STATE HIGHWAY DEPARTMENT ADOPTED JUNE 1, 1940.  
 ALL CONCRETE SHALL BE CLASS 'A'.  
 FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIP LAP OR TONGUE AND GROOVE LUMBER 2" UNLESS FACED WITH PANEL BOARDS.  
 CONCRETE, ROCKS, FLOOR SLABS AND CURBS SHALL BE POURED MONOLITHICALLY. FOOTINGS IN ROCK SHALL BE POURED OUT TO THE ROCK AND NOT FORMED.  
 ALL REINFORCING BARS SHALL BE DEFORMED AND TAGGED WITH THE STATION NUMBER AND LETTER DESIGNATION. MAIN BARS SHALL NOT BE SPICED.  
 SOUNDNESS AND DEPTH OF FOOTINGS SHALL BE ACCORDING TO THE BEST AVAILABLE DATA. IF ESSENTIALLY DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.  
 ALL RIVETS TO BE 1" DIA. ALL RIVETS TO BE POWER DRIVEN.  
 ALL STEEL BEAMS OR REINFORCING STEEL IN BRIDGE TO BE REMOVED SHALL BE SALVAGED AND BE PROTECTED BY CONTRACTOR FROM DAMAGE.

REFERENCE DRAWINGS  
 Sheet No. 5 - Superstructure Details.  
 Sheet No. 6 - Abutment No. 1.  
 Sheet No. 6a - Abutment No. 2.  
 Sheet No. 6b - Bar List for Abutment No. 2.

LOADING DATA  
 LIVE LOAD A.A.H.O. 1941 CLASS A (14-18)  
 DEAD LOAD ASSUMED 15 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 1/2" INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA  
 A.A.S.H.O. 1941  
 Fc = 833 #/sq.  
 fs = 18,000 #/sq.

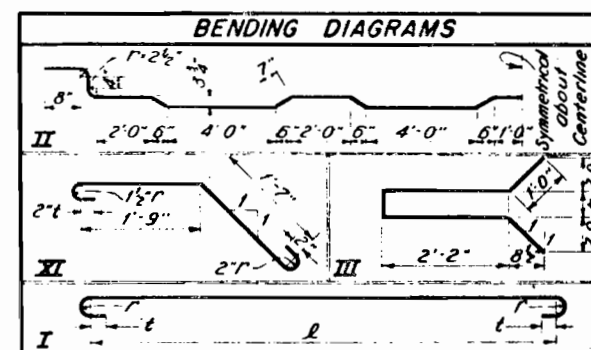
**COLORADO**  
**STATE HIGHWAY DEPARTMENT**  
 ONE 39'-2" CONC. & I-BEAM SPAN  
 General Layout - Summary of Quantities  
 Bar List for Abutment No. 1  
 Across Lake Creek  
 Sta. 602+15.00 to 602+37.67  
 Near WOLF CREEK Sec. 6 T. 55 S. R. 82 W.  
 Designed by HWP Approved by *Ed Bailey*  
 Made by H.C.C. Bridge Engineer  
 Checked by HWP Date: Sept. 12, 1941.

STRUCTURE NO. F-10-C

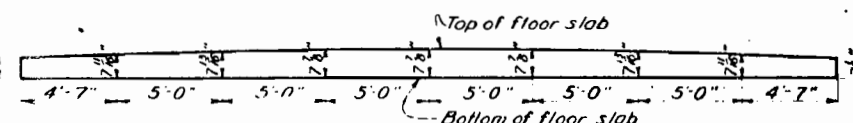
**SUPERSTRUCTURE BAR LIST**

| SUMMARY            |                                        | UNIT   |
|--------------------|----------------------------------------|--------|
| 7180               | lin ft $\frac{3}{8}$ " @ 1043 #/lin ft | 7490 # |
| 684                | " " $\frac{1}{2}$ " @ 668 #/ " "       | 457    |
| 1108               | " " $\frac{1}{2}$ " @ 830 #/ " "       | 942    |
| + 1% ± for Overrun |                                        | 131    |
| TOTAL              |                                        | 9020 # |

## BENDING DIAGRAMS



**CAMBER DIAGRAM**



### REFERENCE DRAWINGS

SHEET No. 6 DETAILS ABUT. NO. 1 & NO. 2  
SHEET No. 4 GENERAL LAYOUT &  
SUMMARY OF QUANTITIES

**LOADING DATA**  
LIVE LOAD A A 3 M O 1941 CLASS A M-15  
DEAD LOAD ASSUMES 15 LBS PER SQ FT ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 3 INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA.  
 $f_s = 18,000 \text{ #/in}^2$   
 $f_c = 833 \text{ #/in}^2$   
 $n = 12$

**COLORADO**  
**STATE HIGHWAY DEPARTMENT**  
***SUPERSTRUCTURE***  
***DETAILS***

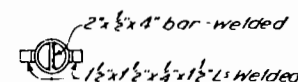
(ONE 39'-2" CONC. I BEAM SPAN)

LAKE CREEK

602+150 - 602+57.6  
WOLCOTT 6 1 55 4 82

HWP:3 Q. B. 1

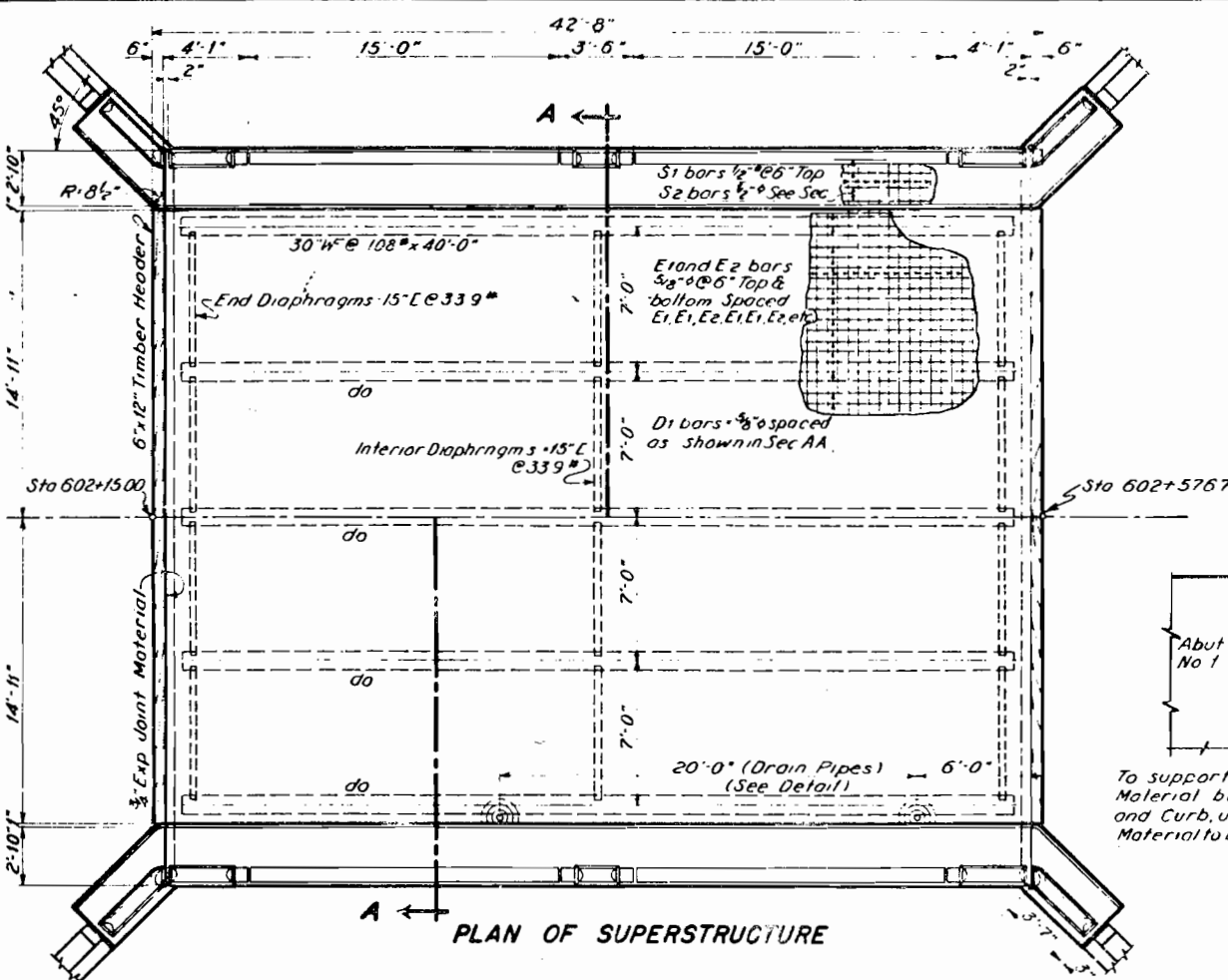
SWT. Sept. 129: 41  
HCC

[illegible]

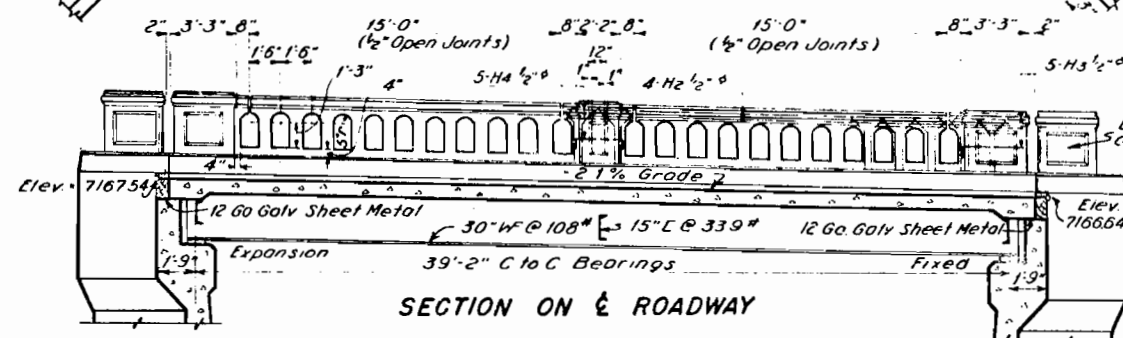
PLAN  
EXP'N. JOINT & POST DETAILS

To support Expansion Joint Material between Abutment No 1 and Curb, use 3/4" nails driven thru Material to be bonded in the Curb

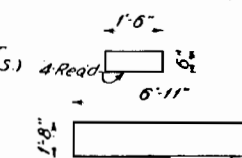
## PLAN OF SUPERSTRUCTURE



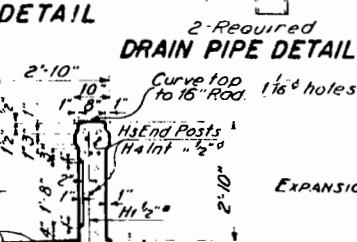
## SECTION ON E ROADWAY



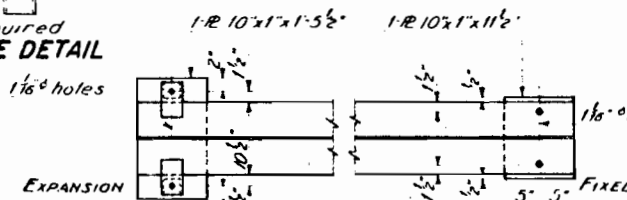
**SHEET METAL DETAIL**



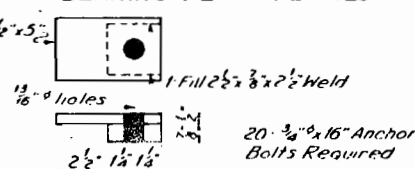
2-Required  
**DRAIN PIPE DETAIL**



### BEARING PLATE DETAILS

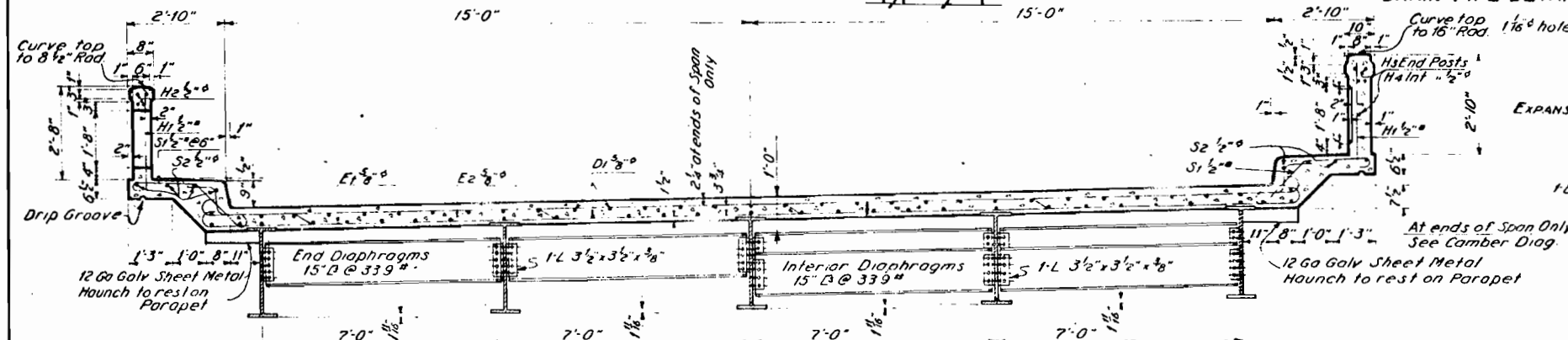


### CLIP DETAILS



STRUCTURE NO. *F-10-C*

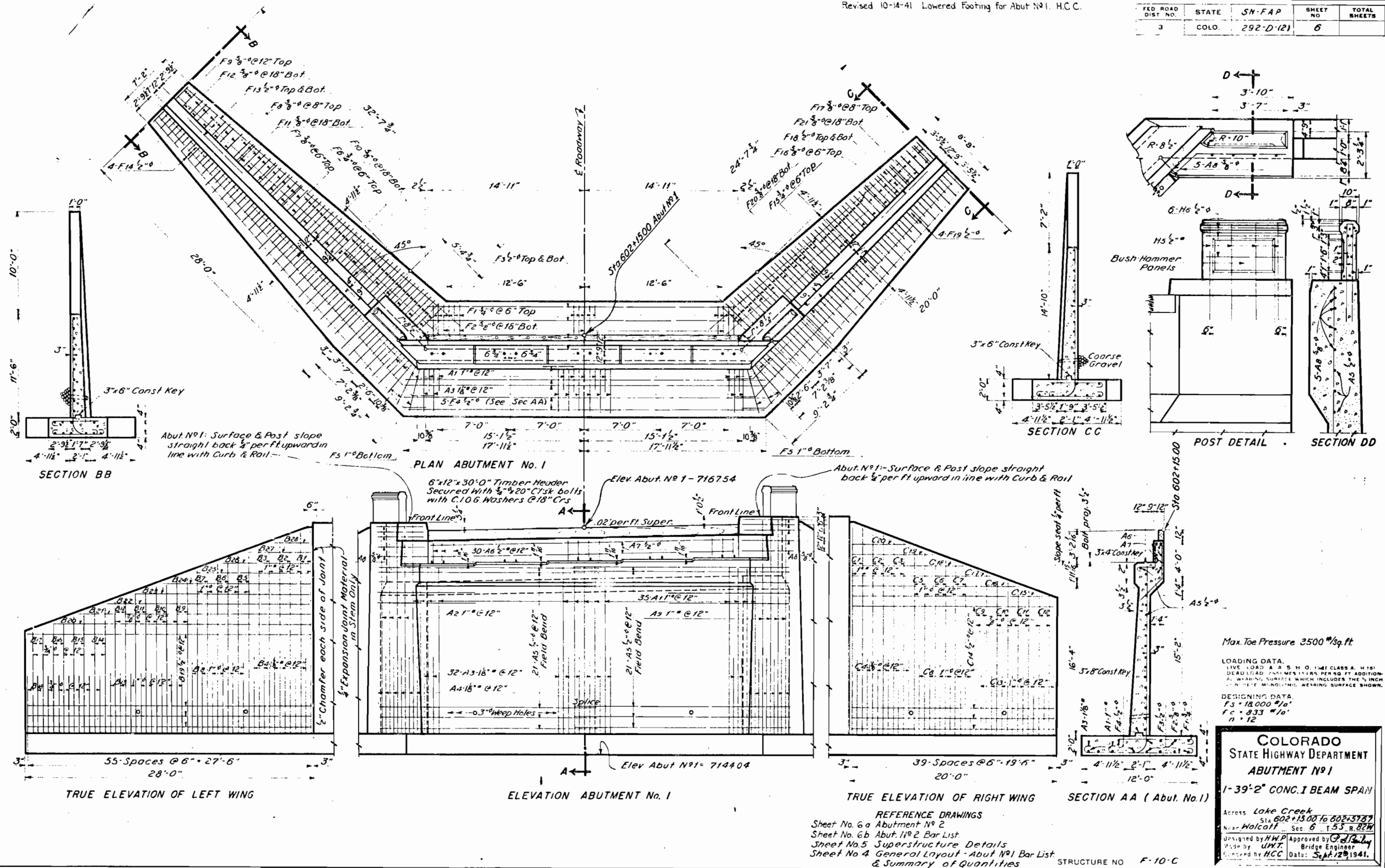
SECTION A A



REVISIONS

Revised 10-14-41 Lowered Footing for Abut. No. 1. H.C.C.

| FED. ROAD DIST. NO. | STATE | SN-FAP    | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-----------|--------------|
| 3                   | COLO. | 292-D-121 | 6         |              |

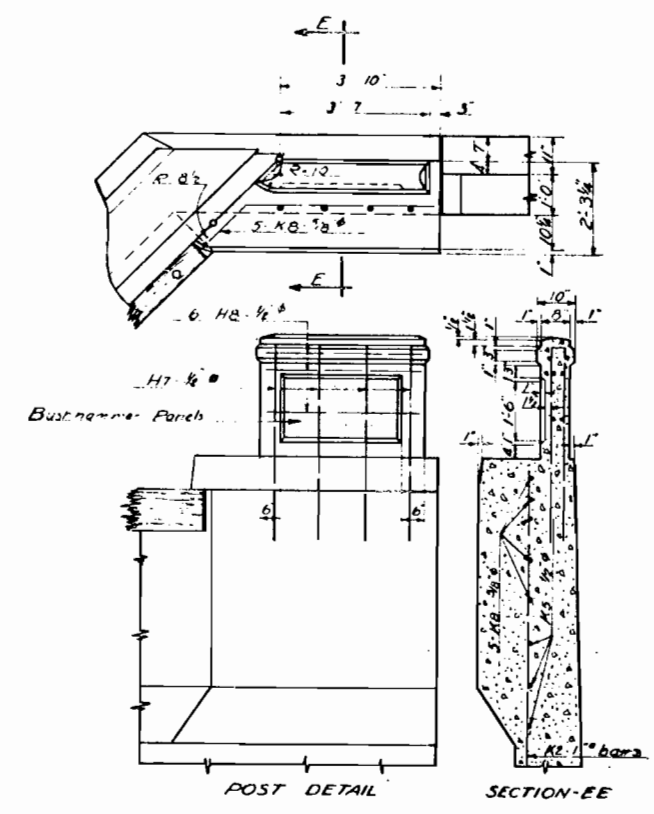
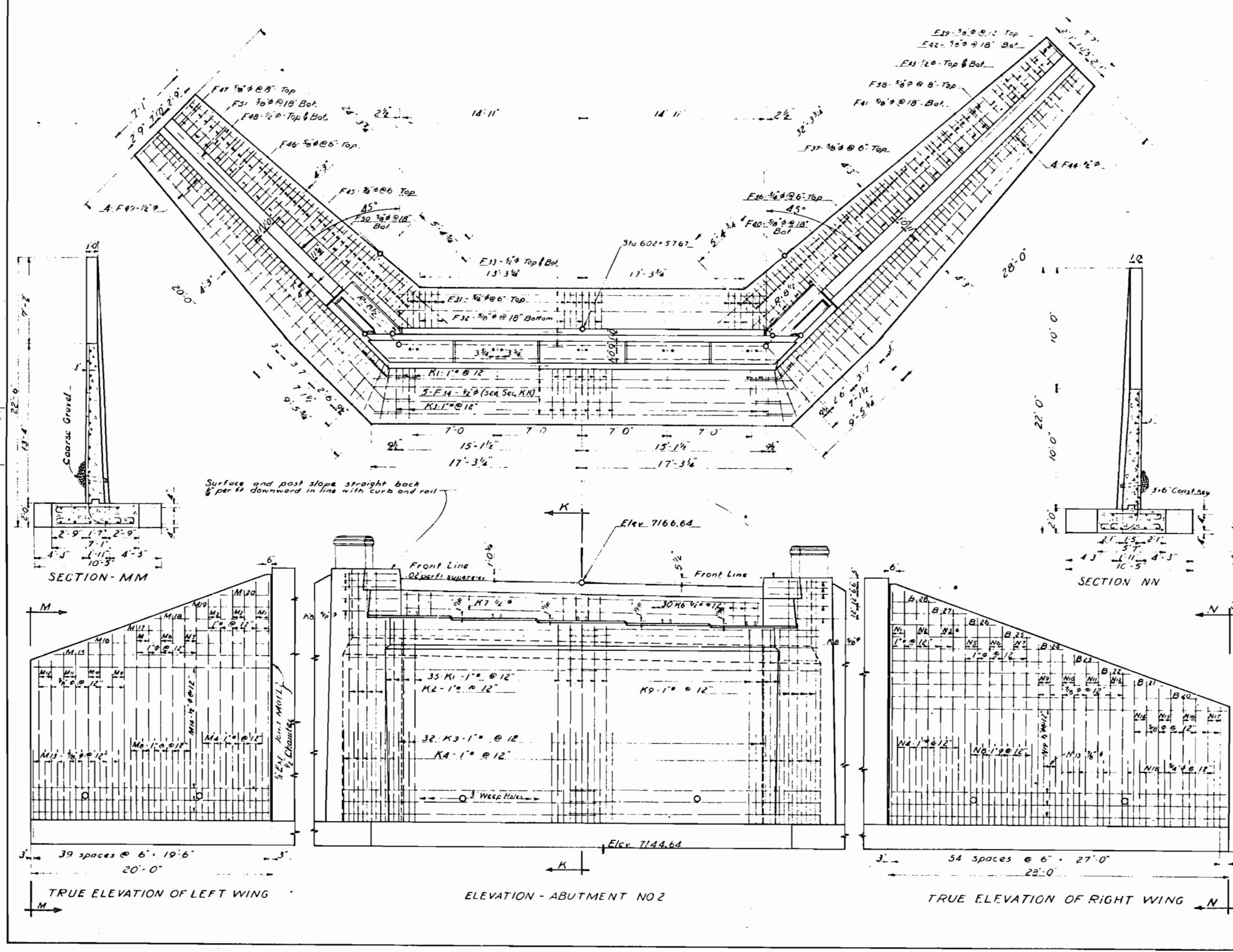


REVISIONS

Sheet 6A added 10-14-41  
No bars redistributed H.W.P. 12-24-41

| FED. ROAD DIST. NO. | STATE | SN-FAP   | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------|-----------|--------------|
| 3                   | COLO. | 292-D(2) | 6A        |              |

|             |     |
|-------------|-----|
| Designed By | HWP |
| Checked By  | NCC |
| Drawn By    | HWP |
| Checked By  | HCC |
| Traced By   | TTE |
| Checked By  | HWP |



REFERENCE DRAWINGS  
SHEET NO. 4 - GEN. LAYOUT, SUMMARY OF QUANTITIES, BAR LIST FOR ABUT. NO. 1  
SHEET NO. 5 - SUPERSTRUCTURE DETAILS  
SHEET NO. 6 - ABUTMENT NO. 1  
SHEET NO. 6B - BAR LIST FOR ABUT. NO. 2

LOADING DATA.  
LIVE LOAD A. A. B. M. O. 1931  
DEAD LOAD ASSUMES 15 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 1/4 INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA.  
A. A. B. M. O. 1941  
C. 10.11  
C. 10.11  
C. 10.11  
C. 10.11

**COLORADO STATE HIGHWAY DEPARTMENT**  
1-39'2" CONC. I-BEAM SPAN  
DETAILS.  
ABUTMENT NO. 2

Across Lake Creek  
Sta. 602+15.00 to 602+57.67  
Near Wadsworth Sec. 6 T. 53 S. R. 62 W.

Designed by HWP Approved by T. J. J. R. 62 W.  
Made by TTE Bridge Engineer  
Checked by Date: Oct. 15, 1941.

STRUCTURE NO. F-10-C

REVISIONS  
Sheet 6B added 10-14-41

| FED. ROAD DIST. NO. | STATE | SN-FAP   | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------|-----------|--------------|
| 3                   | COLO. | 292 D121 | 6-B       |              |

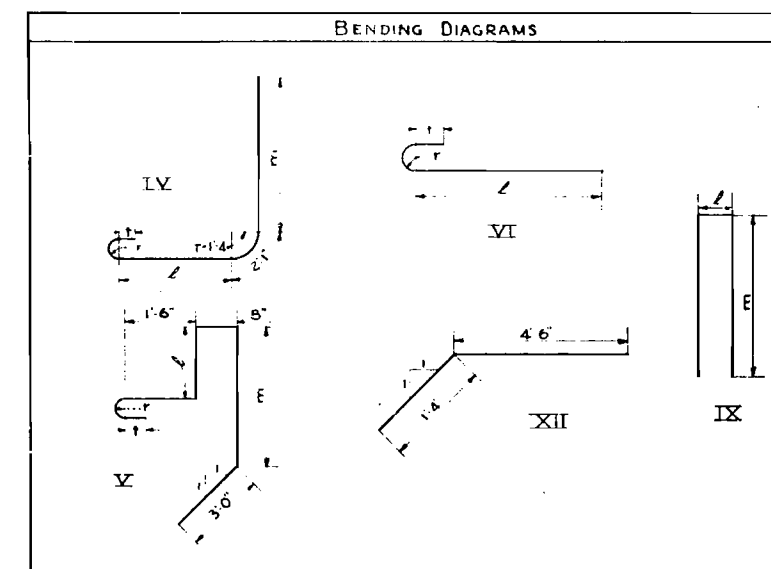
BAR LIST FOR ABUTMENT No 2

| BAR LIST FOR ABUTMENT NO. 2 |      |         |         |      |              |        |        |        |                 |      |         |         |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
|-----------------------------|------|---------|---------|------|--------------|--------|--------|--------|-----------------|------|---------|---------|------|--------|---------|--------|--------|-----------------|------|---------|--------|------|--------------|---|---|--------|--------|
| MARK                        | SIZE | NO REQD | LENGTH  | TYPE | ℓ            | m      | r      | t      | MARK            | SIZE | NO REQD | LENGTH  | TYPE | ℓ      | m       | r      | t      | MARK            | SIZE | NO REQD | LENGTH | TYPE | ℓ            | m | r | t      |        |
| K <sub>1</sub>              | 1"*  | 35      | 22' 3"  | IV   | 2' 2"        | 16' 8" | 4"     | 3 1/2" | N <sub>1</sub>  | 1"*  | 2       | 25' 3"  | IV   | 2' 1"  | 19' 9"  | 4"     | 3 1/2" | F <sub>31</sub> | 1/2" | 59      | 8' 4"  | V    | 7' 4"        |   |   | 3"     | 2 1/2" |
| K <sub>2</sub>              | 1"*  | 4       | 26' 2"  | IV   | 2' 2"        | 20' 7" | 4"     | 3 1/2" | N <sub>2</sub>  | 1"*  | 2       | 24' 4"  | IV   | 1' 11" | 19' 0"  | 4"     | 3 1/2" | F <sub>32</sub> | 1/2" | 19      | 7' 8"  | V    | 6' 10"       |   |   | 2 1/2" | 2"     |
| K <sub>3</sub>              | 1"*  | 32      | 15' 7"  | IV   | 4' 4"        | 7' 10" | 4"     | 3 1/2" | N <sub>3</sub>  | 1"*  | 2       | 23' 5"  | IV   | 1' 9"  | 18' 3"  | 4"     | 3 1/2" | F <sub>33</sub> | 1/2" | 6       | 30' 0" | Str. |              |   |   |        |        |
| K <sub>4</sub>              | 1"*  | 12      | 15' 2"  | IV   | 3' 11"       | 7' 10" | 4"     | 3 1/2" | N <sub>4</sub>  | 1"*  | 6       | 14' 6"  | IV   | 3' 4"  | 7' 9"   | 4"     | 3 1/2" | F <sub>34</sub> | 1/2" | 5       | 35' 0" | "    |              |   |   |        |        |
| K <sub>5</sub>              | 1/2" | 40      | 22' 6"  | Str. | (Field Bend) |        |        |        | N <sub>5</sub>  | 1/2" | 2       | 22' 7"  | IV   | 1' 8"  | 17' 6"  | 4"     | 3 1/2" | F <sub>35</sub> | 1/2" | 6       | 9' 6"  | V    | 8' 2"        |   |   | 4"     | 3 1/2" |
| K <sub>6</sub>              | 1/2" | 30      | 11' 3"  | V    | 2' 2"        | 3' 3"  | 2"     | 2"     | N <sub>6</sub>  | 1/2" | 2       | 21' 0"  | IV   | 1' 7"  | 16' 9"  | 4"     | 3 1/2" | F <sub>36</sub> | 1/2" | 22      | 8' 4"  | V    | 7' 4"        |   |   | 3"     | 2 1/2" |
| K <sub>7</sub>              | 1/2" | 4       | 29' 6"  | Str. |              |        |        |        | N <sub>7</sub>  | 1/2" | 2       | 20' 10" | IV   | 1' 5"  | 16' 0"  | 4"     | 3 1/2" | F <sub>37</sub> | 1/2" | 12      | 6' 11" | V    | 6' 1"        |   |   | 2 1/2" | 2"     |
| K <sub>8</sub>              | 1/2" | 10      | 5' 10"  | XII  |              |        |        |        | N <sub>8</sub>  | 1/2" | 6       | 13' 3"  | IV   | 2' 8"  | 7' 2"   | 4"     | 3 1/2" | F <sub>38</sub> | 1/2" | 12      | 6' 2"  | V    | 5' 4"        |   |   | 2 1/2" | 2"     |
| K <sub>9</sub>              | 1"*  | 4       | 26' 9"  | IV   | 2' 2"        | 21' 2" | 4"     | 3 1/2" | N <sub>9</sub>  | 1/2" | 2       | 19' 11" | IV   | 1' 5"  | 15' 3"  | 3 1/2" | 3"     | F <sub>39</sub> | 1/2" | 8       | 5' 6"  | V    | 4' 8"        |   |   | 2 1/2" | 2"     |
|                             |      |         |         |      |              |        |        |        | N <sub>10</sub> | 1/2" | 2       | 19' 2"  | IV   | 1' 3"  | 14' 8"  | 3 1/2" | 3"     | F <sub>40</sub> | 1/2" | 8       | 7' 7"  | V    | 6' 9"        |   |   | 2 1/2" | 2"     |
|                             |      |         |         |      |              |        |        |        | N <sub>11</sub> | 1/2" | 2       | 18' 3"  | IV   | 1' 1"  | 13' 11" | 3 1/2" | 3"     | F <sub>41</sub> | 1/2" | 9       | 6' 8"  | V    | 5' 10"       |   |   | 2 1/2" | 2"     |
| M <sub>1</sub>              | 1"*  | 2       | 25' 9"  | IV   | 2' 1"        | 20' 3" | 4"     | 3 1/2" | N <sub>12</sub> | 1/2" | 2       | 17' 5"  | IV   | 1' 0"  | 13' 2"  | 3 1/2" | 3"     | F <sub>42</sub> | 1/2" | 5       | 5' 7"  | V    | 4' 9"        |   |   | 2 1/2" | 2"     |
| M <sub>2</sub>              | 1"*  | 2       | 24' 10" | IV   | 1' 11"       | 19' 6" | 4"     | 3 1/2" | N <sub>13</sub> | 1/2" | 2       | 16' 5"  | IV   | 2' 0"  | 6' 2"   | 3 1/2" | 3"     | F <sub>43</sub> | 1/2" | 6       | 35' 6" | Str. |              |   |   |        |        |
| M <sub>3</sub>              | 1"*  | 2       | 23' 11" | IV   | 1' 9"        | 18' 9" | 4"     | 3 1/2" | N <sub>14</sub> | 1/2" | 2       | 16' 4"  | IV   | 1' 0"  | 12' 5"  | 2 1/2" | 2"     | F <sub>44</sub> | 1/2" | 4       | 39' 0" | "    | (Field Bend) |   |   |        |        |
| M <sub>4</sub>              | 1"*  | 6       | 15' 0"  | IV   | 3' 4"        | 8' 3"  | 4"     | 3 1/2" | N <sub>15</sub> | 1/2" | 2       | 15' 8"  | IV   | 1' 0"  | 11' 9"  | 2 1/2" | 2"     | F <sub>45</sub> | 1/2" | 22      | 8' 4"  | V    | 7' 4"        |   |   | 3"     | 2 1/2" |
| M <sub>5</sub>              | 1/2" | 2       | 23' 1"  | IV   | 1' 8"        | 18' 0" | 4"     | 3 1/2" | N <sub>16</sub> | 1/2" | 2       | 14' 11" | IV   | 1' 0"  | 11' 0"  | 2 1/2" | 2"     | F <sub>46</sub> | 1/2" | 12      | 6' 11" | V    | 6' 1"        |   |   | 2 1/2" | 2"     |
| M <sub>6</sub>              | 1/2" | 2       | 22' 3"  | IV   | 1' 7"        | 17' 3" | 4"     | 3 1/2" | N <sub>17</sub> | 1/2" | 2       | 14' 2"  | IV   | 1' 0"  | 10' 3"  | 2 1/2" | 2"     | F <sub>47</sub> | 1/2" | 12      | 6' 2"  | V    | 5' 4"        |   |   | 2 1/2" | 2"     |
| M <sub>7</sub>              | 1/2" | 2       | 21' 4"  | IV   | 1' 5"        | 16' 6" | 4"     | 3 1/2" | N <sub>18</sub> | 1/2" | 8       | 10' 4"  | IV   | 1' 4"  | 5' 11"  | 3"     | 2 1/2" | F <sub>48</sub> | 1/2" | 6       | 27' 0" | Str. |              |   |   |        |        |
| M <sub>8</sub>              | 1/2" | 6       | 13' 9"  | IV   | 2' 8"        | 7' 8"  | 4"     | 3 1/2" | N <sub>19</sub> | 1/2" | 10      | 27' 8"  | Str. |        |         |        |        | F <sub>49</sub> | 1/2" | 4       | 31' 0" | "    | (Field Bend) |   |   |        |        |
| M <sub>9</sub>              | 1/2" | 2       | 20' 5"  | IV   | 1' 5"        | 15' 9" | 3 1/2" | 3"     | N <sub>20</sub> | 1/2" | 1       | 25' 3"  |      |        |         |        |        | F <sub>50</sub> | 1/2" | 8       | 7' 7"  | V    | 6' 9"        |   |   | 2 1/2" | 2"     |
| M <sub>10</sub>             | 1/2" | 2       | 19' 8"  | IV   | 1' 3"        | 15' 2" | 3 1/2" | 3"     | N <sub>21</sub> | 1/2" | 1       | 22' 7"  |      |        |         |        |        | F <sub>51</sub> | 1/2" | 9       | 6' 8"  | V    | 5' 10"       |   |   | 2 1/2" | 2"     |
| M <sub>11</sub>             | 1/2" | 2       | 18' 9"  | IV   | 1' 1"        | 14' 5" | 3 1/2" | 3"     | N <sub>22</sub> | 1/2" | 1       | 19' 11" |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>12</sub>             | 1/2" | 2       | 17' 11" | IV   | 1' 0"        | 13' 8" | 3 1/2" | 3"     | N <sub>23</sub> | 1/2" | 1       | 17' 3"  |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>13</sub>             | 1/2" | 8       | 11' 11" | IV   | 2' 0"        | 6' 8"  | 3 1/2" | 3"     | N <sub>24</sub> | 1/2" | 1       | 14' 7"  |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>14</sub>             | 1/2" | 13      | 19' 8"  | Str. |              |        |        |        | N <sub>25</sub> | 1/2" | 1       | 11' 11" |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>15</sub>             | 1/2" | 1       | 18' 6"  | "    |              |        |        |        | N <sub>26</sub> | 1/2" | 1       | 9' 3"   |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>16</sub>             | 1/2" | 1       | 16' 2"  | "    |              |        |        |        | N <sub>27</sub> | 1/2" | 1       | 6' 7"   |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>17</sub>             | 1/2" | 1       | 13' 6"  | "    |              |        |        |        | N <sub>28</sub> | 1/2" | 1       | 3' 11"  |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>18</sub>             | 1/2" | 1       | 11' 0"  | "    |              |        |        |        |                 |      |         |         |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>19</sub>             | 1/2" | 1       | 7' 10"  | "    |              |        |        |        |                 |      |         |         |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |
| M <sub>20</sub>             | 1/2" | 1       | 5' 3"   | "    |              |        |        |        |                 |      |         |         |      |        |         |        |        |                 |      |         |        |      |              |   |   |        |        |

BAR SUMMARY FOR ABUT. 2

|                                              |
|----------------------------------------------|
| 2143 Lin Ft. 1" Bars @ 3400" Lin Ft. = 7286" |
| 483 - 1" - @ 2610" - = 1290                  |
| 490 - 1/2" - @ 2044" - = 1002                |
| 941 - 1/2" - @ 1502" - = 1413                |
| 953 - 1/2" - @ 1043" - = 994                 |
| 416 - 1/2" - @ 0850" - = 354                 |
| 2868 - 1/2" - @ 0668" - = 1916               |
| 11% for overrun = 145                        |
| Total = 14400"                               |

BENDING DIAGRAMS



REFERENCE DRAWINGS

SHEET No 4 GEN LAYOUT, SUMMARY OF QUANTITIES,  
BAR LIST FOR ABUT No 1  
SUPERSTRUCTURE DETAILS  
ABUT No 1  
ABUT No 2.

GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO STATE HIGHWAY DEPARTMENT, ADOPTED JUNE 1, 1941.  
ALL CONCRETE SHALL BE CLASS "A".  
FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SNIPLAP OR TONGUE AND GROOVE LUMBER S3S UNLESS FACED WITH PANEL BOARD.  
CONCRETE GIRDERS, FLOOR SLABS AND CURB SHALL BE POURED MONOLITHICALLY.  
FOOTINGS IN ROCK SHALL BE POURED OUT TO THE ROCK AND NOT FORMED.  
ALL REINFORCING BARS SHALL BE DEFORMED AND TAGGED WITH THE STATION NUMBER AND LETTER DESIGNATION. MAIN BARS SHALL NOT BE SPLICED.  
SOUNDINGS AND DEPTH OF FOOTINGS SHOWN ARE ACCORDING TO THE BEST AVAILABLE DATA. IF ESSENTIALLY DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.  
ALL RIVETS TO BE 1/2" DIA. ALL RIVETS TO BE POWER DRIVEN.

LOADING DATA.  
LIVE LOAD A. A. B. H. O. 1941, W-18  
DEAD LOAD ASSUMES 16 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 1/2 INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

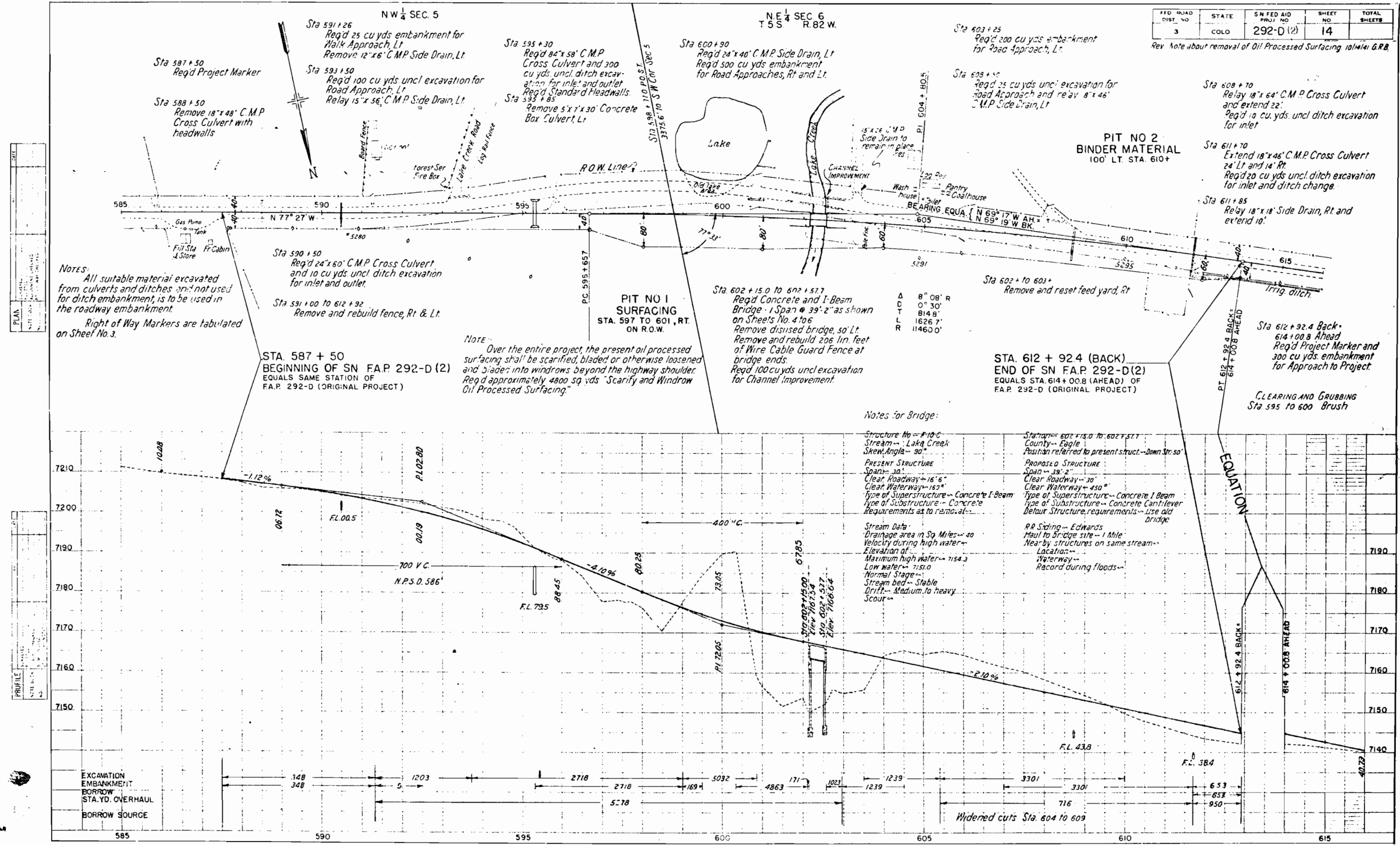
DESIGNING DATA.  
A. A. S. H. D. 1941  
6, 833' W.  
6, 18000' W.  
N-12

COLORADO  
STATE HIGHWAY DEPARTMENT  
ABUTMENT No 2  
BAR LIST, BENDING DIAGRAMS, & SUMMARY  
Across Lake Creek  
Sta. 602+15.0 to 602+17.67  
Near Wolcott Sec. 6, T. 33, R. 62W.  
Designed by HWP Approved by P. J. Bailey,  
Made by H.C.C. Bridge Engineer  
Checked by Date: Oct. 16, 1941.

STRUCTURE NO. F-10-C

| FED. ROAD DIST. NO. | STATE | SN F.A.P. PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|---------------------|-----------|--------------|
| 3                   | COLO. | 292-D (2)           | 14        |              |

Rev. Note about removal of Oil Processed Surfacing 10/14/41 G.R.B.



NW 1/4 SEC. 5  
T.53. R.62W.  
GOLDIE M. HYDE

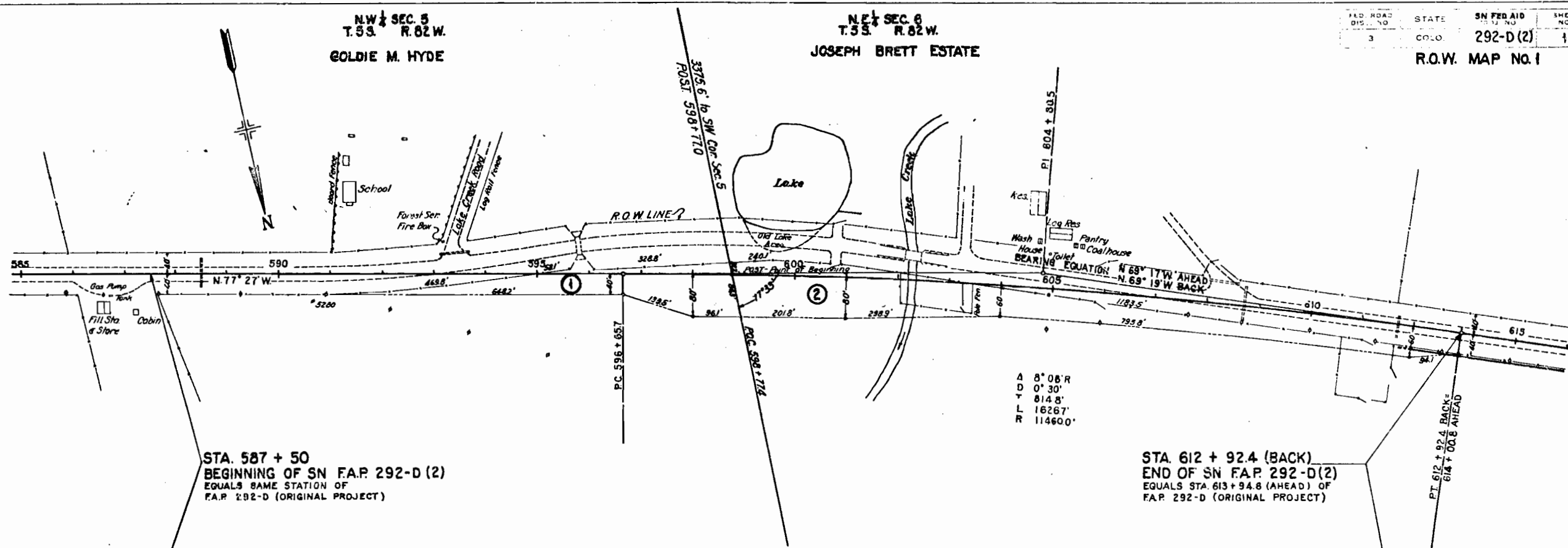
NE 1/4 SEC. 6  
T.53. R.62W.  
JOSEPH BRETT ESTATE

| FED. ROAD DIST. NO. | STATE  | SN. F.P. AID NO. | SHEET NO. | TOTAL SHEETS |
|---------------------|--------|------------------|-----------|--------------|
| 3                   | CO. O. | 292-D(2)         | 1         |              |

R.O.W. MAP NO. 1

JUL 1941  
ENG. DIV.  
S. H. 14

| PLAN                                     | DATE |
|------------------------------------------|------|
| NOTE: BENCH MARKS SHOWN AT 10' INTERVALS |      |



STA. 587 + 50  
BEGINNING OF SN F.A.P. 292-D(2)  
EQUALS SAME STATION OF  
F.A.P. 292-D (ORIGINAL PROJECT)

STA. 612 + 92.4 (BACK)  
END OF SN F.A.P. 292-D(2)  
EQUALS STA. 613 + 94.8 (AHEAD) OF  
F.A.P. 292-D (ORIGINAL PROJECT)

| PROFILE                                  | DATE |
|------------------------------------------|------|
| NOTE: BENCH MARKS SHOWN AT 10' INTERVALS |      |

