

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	1	

8-10-38 H.D.M. - Revised Under 31 Sheets.
REV. AS CONST. - W.H. - 8-27-38.

COLORADO STATE HIGHWAY DEPARTMENT

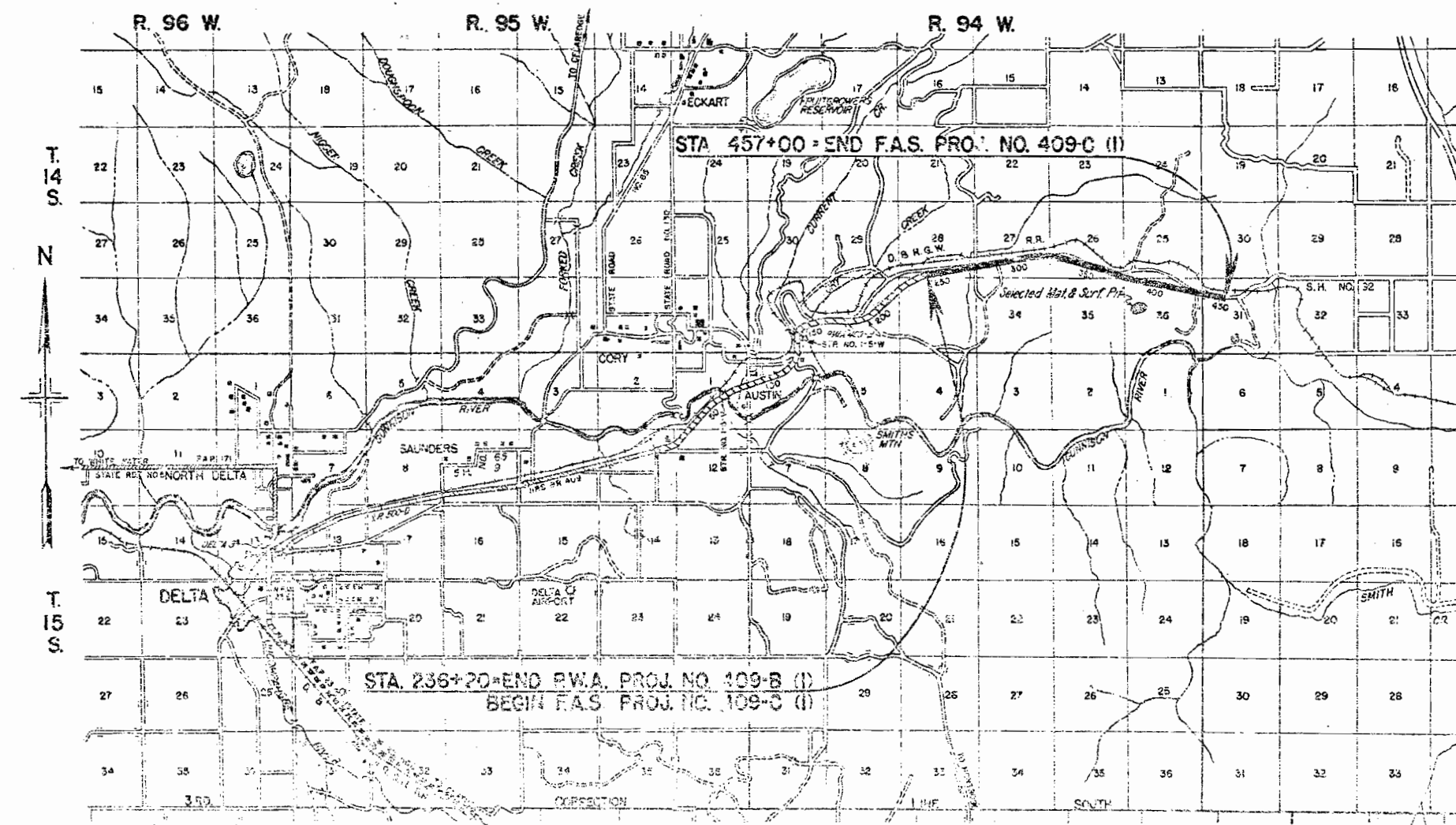
PLAN AND PROFILE OF CONSTRUCTED FEDERAL AID SECONDARY PROJECT NO. F.A.S. 409-C(1) STATE HIGHWAY NO. 92 DELTA COUNTY

CONVENTIONAL SIGNS

- CENTER LINE OF SURVEY ————— 60
- RIGHT OF WAY LINES —————
- TOWNSHIP OR RANGE LINES —————
- SECTION LINES —————
- ONE-QUARTER SECTION LINES —————
- BARBED WIRE FENCE —————
- POLE LINES —————
- RAILROAD —————
- PRESENT ROAD —————

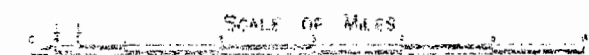
- INDEX OF SHEETS
- SHEET NO. 1 SKETCH MAP & TITLE
 - 2 TYPICAL SECTION & SUMMARY OF APPROXIMATE QUANTITIES
 - 3 LIST OF STRUCTURES, R.O.W. MARKERS & FENCING REQ.
 - 4 STANDARD HEADWALLS FOR C.M.P. CULVERTS M102E
 - 5 CONCRETE BOX CULVERTS (M104D)
 - 6 STANDARD SIPHON CORRUGATED GALVANIZED IRON PIPE M123A
 - 7 STANDARD TIMBER GUARD POSTS M19A
 - 8 STANDARD WIRE FENCES WITH TREATED WOOD POSTS & MARKER POSTS M24F
 - 9 STANDARD METHODS FOR SUPERELEVATION & WIDENING OF CURVES M1B
 - 10 TYPICAL SIDE APPROACH ROADS—ROADWAY CONSTRUCTION TRAFFIC SIGNS M2B
 - 11 TO 18 PLAN & PROFILE
 - 19 TO 20 CROSS SECTIONS *See final Const. X sect.*

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 22,080 FT. = 4.181 MI.
NET LENGTH OF PROJECT



NOTE
It is recommended that bidders on this project go over the plan details with one of the following field representatives of this department.
J.J. Vandemuer, Div. Eng. Grand Junction.
E.B. Faber, Res. Eng. Hotchkiss.

RECOMMENDED FOR APPROVAL
[Signature]
ASSISTANT ENGINEER
APPROVED
[Signature]
STATE HIGHWAY ENGINEER
RECOMMENDED FOR APPROVAL
DIST. ENG. BUREAU PUBLIC ROADS
RECOMMENDED FOR APPROVAL
CHIEF ENG. BUREAU PUBLIC ROADS
APPROVED
DIRECTOR BUREAU PUBLIC ROADS



LIST OF STRUCTURES

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409 C(1)	3	

8-10-38 Revised List of Structures, Fencing & R.O.W. Markers - R.B.M.

ION	DESCRIPTION	REMOVE STRUCT.	EXCAVATION CU. YD.	STRUCTURAL CU. YD.	EXCAV. ★	CONCRETE CU. YD.	REINF. STEEL	CORRUGATED METAL CULVERT PIPE						GR. OR CR. RK. SURF.	MISCELLANEOUS
		NO.	UNCL.	EMB.		CL "A"	CL "B"	LB.	18"	24"	30"	36"	48"	60"	
1-260+00	Intercepting ditch Rt.		500												
2	Cross culvert & ditches		20		10	1.10		64							
2	Cross culvert & ditches		10		5	1.65		60						15	
2	Road approach & side drain Lt.		40					28							
2	Cross culvert & ditches		10		20	1.10		58						30	
2	Road approaches Lt. & Rt. & Side drain Lt.		100					32							
1-275+50	Ditch change Rt.		50												
2	Cross culvert & ditches & remove structure	1	10		20	1.65		48						15	
2	Road approach Rt.		100												
1-290+40	Channel change Rt.		20												
1	Siphon pipe for flume Rt. & remove structure	1			10									18" x 36" C.M. siphon pipe for flume	
2	Cross culvert (Sk. 75°) & ditches & rem. structure	1	10		20	2.25		52						30	
2	Road approaches Rt. & Lt.		100												
2	Cross culvert & ditches		50		20	1.10		72							
2	Cross culvert & ditches		50		10	1.10		72							
2	Cross culvert & ditches		50		10	1.10		72							
2	Road approach Rt.		50											15	
2	Cross culvert (Sk. 60°) & ditches & rem. str.	1	10		30	1.65		70							
2-329+00	Intercepting ditch Rt.		80												
34-329+00	Intercepting ditch Lt.		60												
2-360+00	Intercepting ditch Rt.		620												
0-355+00	Intercepting ditch Lt.		520												
0	Cross culvert				20	1.10		50							
0	Remove structure	1													
2	Cross culvert and ditches and remove structure	1	5		20	1.10		56							
0	Cross culvert and ditches and remove structure	1	20		140	6.75	241					64			
10	Cross culvert and ditches and remove structure	1	5		30	3.00					70			15	
10	Road approach and side drain Lt.		20					22							
15-360+70	Channel change Rt. & Lt.		500												
10	Cross culvert (45° Sk. Rt.) and ditches		10		80	3.00					112				
10-391+00	Intercepting ditch Rt.		620												
10	Cross culvert and ditches and remove structure	1	5		40	2.25					76				
10-376+00	Intercepting ditch Lt.		120												
10	Cross culvert and inlet		5		5	1.65		64							
15	Cross culvert and ditches		5		5	2.25		64							
20	Cross culvert and inlet		5			1.65		60							
10-391+00	Intercepting ditch Lt.		60												
50	Cross culvert (45° Sk. Rt.) and ditches		10		30	1.65		82							
20-422+00	Intercepting ditch Rt.		620												
20-422+00	Intercepting ditch Lt.		620												
20	Cross culvert and ditches		5		5	1.65		66							
70	Cross culvert (40° Sk. Lt.) and ditches		80		100	5.00					114				
90	Cross culvert (75° Sk. Lt.)				5	3.00					72				
90	Cross culvert (45° Sk. Lt.) and ditches		10		20	3.00					116				
57	Cross culvert and ditches		5		20	1.65		54							
20-453+00	Intercepting ditch Rt.		620												
00-453+00	Intercepting ditch Lt.		620												
50-437+00	Channel change Lt.		370												
20	Road approach Rt.		120											15	
29	8' x 8' x 52' C. B. C. (TYPE 81) and ditches		170		260/13.60	10.167									
00	Cross culvert					1.10		60							
50	Cross culvert and ditches		5		15	1.10		60							
00-457+00	Intercepting ditch Rt.		80												
50	Cross culvert and inlet		5		5	1.10		58							
00	Project Marker													1 Project Marker	
TOTALS		9	6,650	530		955/20.35	47.95	10,408	704	504	192	370	114	64	135

Structural excavation is estimated to be 10% Rock and 90% Common, each of which is estimated to be 60% Dry and 40% Wet.

FENCING REQUIREMENTS

STA.	TO STA.	SIDE	REMOVE FENCE LIN. FT.	BUILD FENCE LIN. FT.	FENCE COMB.	GATES NO.
				B. WIRE	COMB.	B. WIRE OR WAY
245+00	R&L 2					
246+30	R 1					
246+45	L 1					
259+80	L 1					
261+00	L 1					
273+05	R 1					
273+13	L 1					
285+50	L 1					
286+50	L 1					
299+90	R 1					
300+00	L 1					
313+00	L 1					
314+00	L 1					
326+25	L 1					
326+32	R 1					
353+42	L 1					
353+62	R 1					
369+00	R 1					
370+00	R 1					
381+00	R 1					
382+10	L 1					
382+43	R 1					
413+82	L 1					
413+96	R 1					
445+18	L 1					
445+30	R 1					
344+00	L 1					
345+00	L 1					
352+00	L 1					
TOTALS			5830	43500	730	7 4

R.O.W. MARKERS

STATION	SIDE	NO.
245+00	R&L	2
246+30	R	1
246+45	L	1
259+80	L	1
261+00	L	1
273+05	R	1
273+13	L	1
285+50	L	1
286+50	L	1
299+90	R	1
300+00	L	1
313+00	L	1
314+00	L	1
326+25	L	1
326+32	R	1
353+42	L	1
353+62	R	1
369+00	R	1
370+00	R	1
381+00	R	1
382+10	L	1
382+43	R	1
413+82	L	1
413+96	R	1
445+18	L	1
445+30	R	1
344+00	L	1
345+00	L	1
352+00	L	1
TOTALS		30

18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"
9	12	12	12	12	12	12	12	12	12	12	12
4	6	9	12	17	21	27	33	39	46	54	62
4	7	10	13	18	22	28	34	41	49	57	66
4	7	11	15	20	25	31	38	45	54	63	72
5	8	12	16	22	28	34	42	50	59	69	79

ALL STRUCTURES

the standard specifications of the adopted June 1937.

types A&B, which shall be class "B".

bed free of form marks.

ed to a 2" face.

oroughly cleaned before fresh concrete

sides.

"med.

with the station number & letter designation.

'begin a lap of 50 diameters.

shall be 1'-0"

is shall be placed parallel to & of roadway

%

ee sheet No. 2

* to the rock and not formed.

COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD HEADWALLS
INTERCEPTING HEADWALLS
INCASED METAL PIPE CULVERT
WITH HEADWALLS
FOR CORRUGATED
METAL PIPE CULVERTS

Designed R.S.A.-G.H.D. Approved by C.D. Bailey
Made by L.S.-A.V.R. Bridge Engineer
Checked G.H.D.-W.M.M. Date: April 27, 1937.

S.W. 1/4 SEC. 28
T. 14 S. R. 94 W.

NOTE: All pole lines encroaching on construction
were moved by owners.
Right of way markers, fencing requirements
and gates are tabulated on Sheet No. 3.

S.E. 1/4 SEC. 28
T. 14 S. R. 94 W.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	11	

Rev. as Const. June 1939 J.F.P.

Sta. 238+87 ~ Req'd. 18"x64' C.M.P.
cross culvert and 16 cu. yds.
uncl. excav. for ditch.

Sta. 241+00 ~ Req'd. 24"x60' C.M.P.
cross culvert and 15 cu. yds.
uncl. excav. for ditch.

Sta. 259+40 ~ Req'd. 64 cu. yds. embankment
for road approach Lt. & 18"x28'
C.M.P. side drain Lt.

PLAN	DATE	BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK			
REVISIONS			

$\Delta 37^{\circ}10'R$
D 2'
T 963.2'
L 1858.3'
R 2865.0'

P.T. 242+28.9

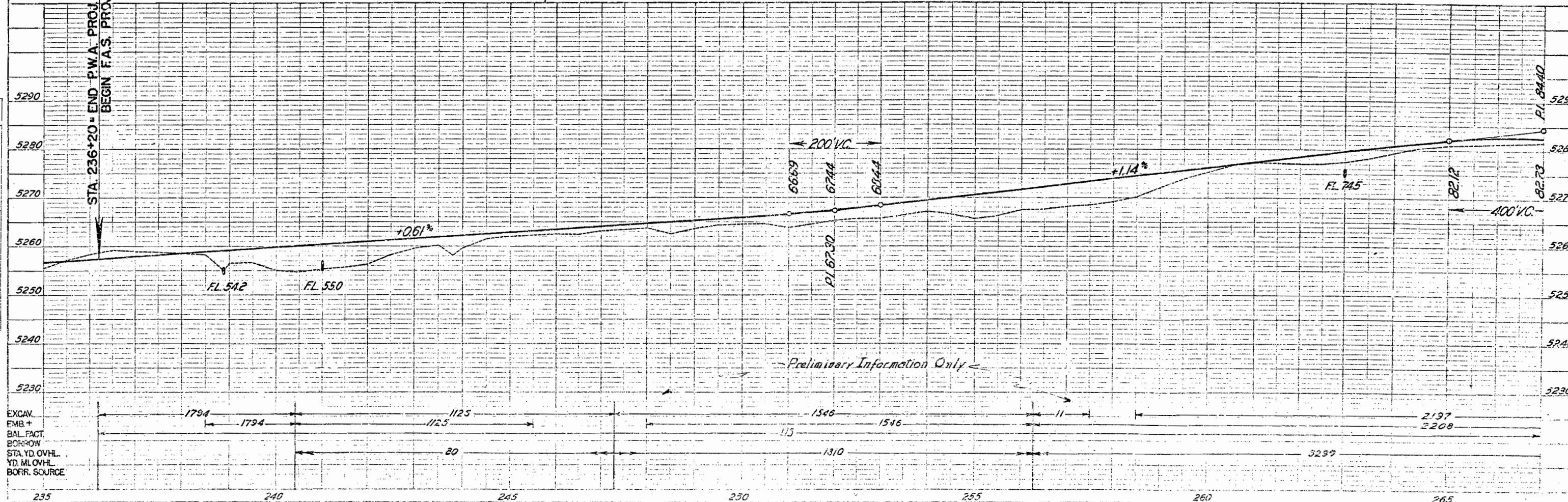
Sta. 241+20-242+85 ~ Req'd.
27 cu. yds. Uncl. Excav. for
Intercepting ditch Rt.

Sta. 236+20-240+85 ~ Req'd. 75 cu. yds. of uncl. excav.
for intercepting ditch Rt.

Sta. 244+10-267+60 ~ Req'd. 219 cu. yds.
Uncl. Excav. for Intercepting ditch Rt.

Sta. 250+ to 261+, 268+, 368+ to 369+ ~
Req'd. Move Pole Line
off R.O.W. (Work to be done by Telephone
Co. Forces) Not a part of this contract.

Sta. 263+00 ~ Req'd. 18"x58' C.M.P.
cross culvert.



PROFILE	DATE	BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK			
REVISIONS			

EXCAV.
FMB +
BAL. FACT.
BORROW
STA. YD. OVHL.
YD. MLOVHL.
BORR. SOURCE

S.E. 1/4 SEC. 28
T.14 S R. 94 W.

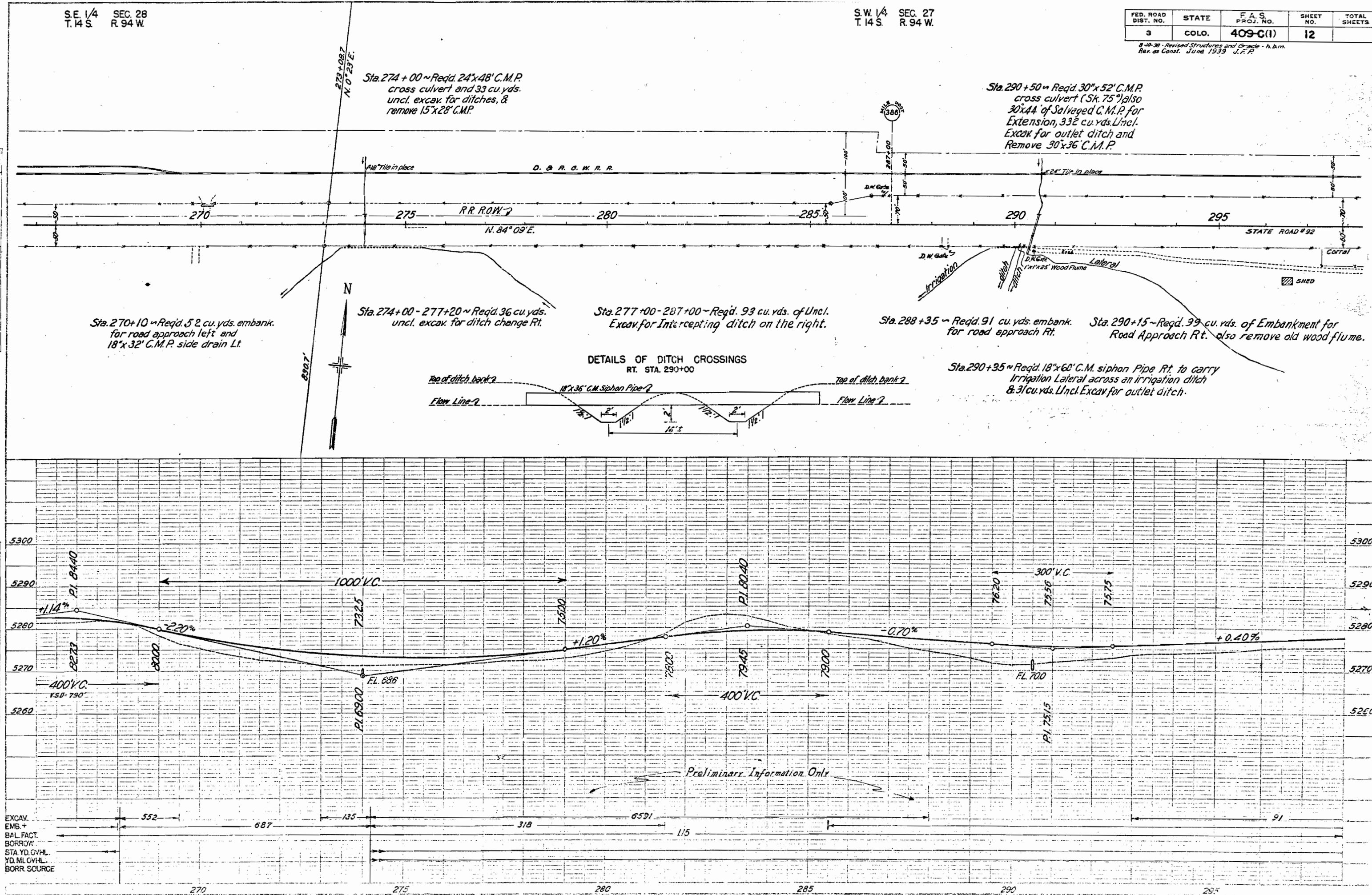
S.W. 1/4 SEC. 27
T.14 S R. 94 W.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	12	

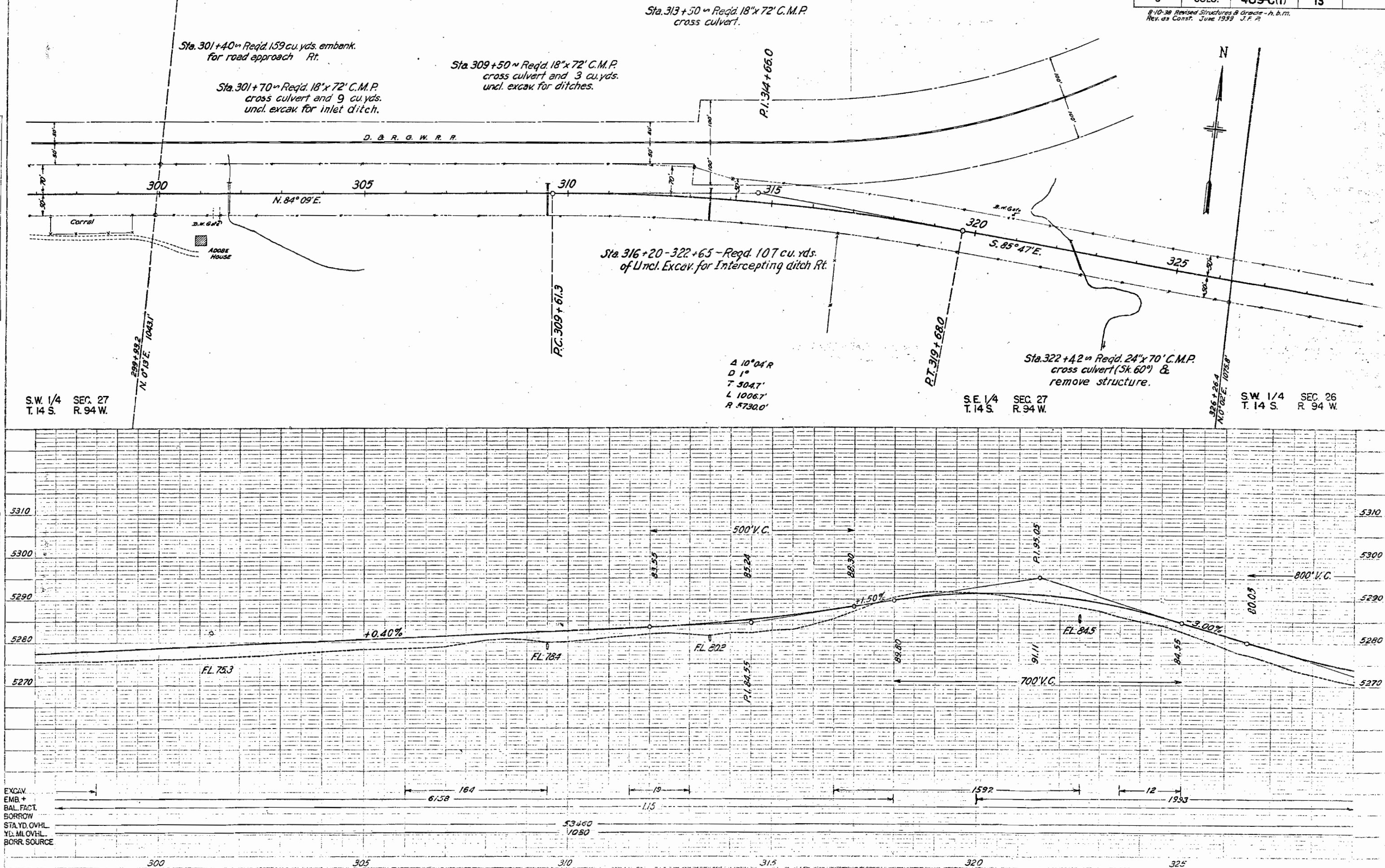
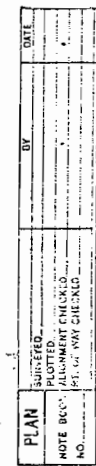
8-10-39 - Revised Structures and Grade - h.b.m.
Rev. as Const. June 1939 J.F.P.

PLAN	DATE	BY
PLAN		
NOTE BOOK		
NO.		

PROFITE	DATE	BY
PROFITE		
NOTE BOOK		
NO.		



FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	13	



SW 1/4 SEC. 26
T. 14 S. R. 94 W.

N

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	14	

8-10-38 - Revised structures & Grade - h.b.m. & ROW
Rev. as Const. June 1939 J.E.R.

Sta. 332+00⁰⁰ Reqd. 18"x50' C.M.P. cross culvert

Sta. 333+40⁰⁰ Remove 18"x36' C.M.P.

Sta. 336+32⁰⁰ Reqd. 18"x56' C.M.P. cross culv.
& remove 15"x44' C.M.P.

Sta. 351+00⁰⁰ Reqd. 36"x70' C.M.P. cross culv. &
46 cu. yds. of uncl. excav. for ditches
& remove 24"x44' C.M.P.

Sta. 349+62⁰⁰ Reqd. 204 cu. yds. of embank.
for road approach Lt.

Sta. 341+07⁰⁰ Reqd. 60"x64' C.M.P. cross culvert &
cu. yds. of uncl. excav. for inlet
& remove 6'x4'x32' W.B.C.

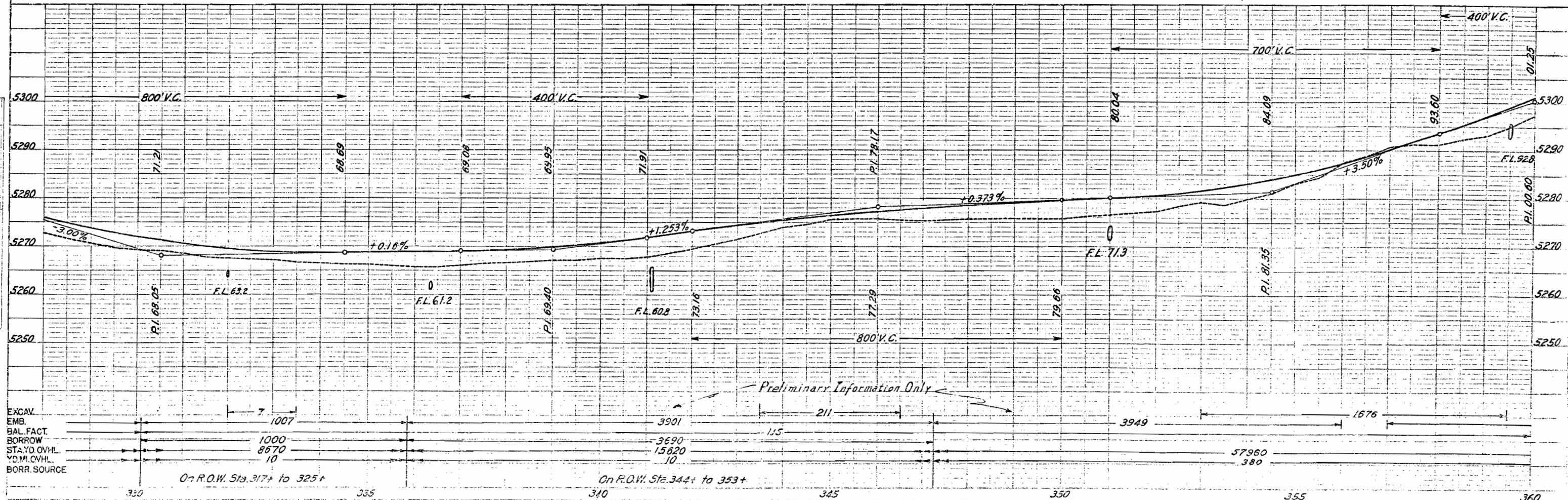
A 14°50'R
D 1'
T 745.9
L 1483.3
R 5730.0

Sta. 359+50⁰⁰ Reqd. 36"x112' C.M.P. cross
culv. (Sk. 45°R) & 890 cu. yds. of
uncl. excav. for Channel change
Rt & Lt. on 502 cu. yds. of Embank.
for Road Approach on right.

SE 1/4 SEC. 26
T. 14 S. R. 94 W.

PLAN	DATE
BY	
DATE	
NO.	

PROFILES	DATE
BY	
DATE	
NO.	



S.E. 1/4 SEC. 26
T.14 S. R.94 W.

S.W. 1/4 SEC. 25
T.14 S. R.94 W.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	15	

Rev. as Const. June 1939 J.F.P.

Sta. 364+00 - Req'd. 30"x76" C.M.P. cross culv. & 10 cu. yds. of uncl. excav. for outlet & remove 30"x40" C.M.P.

Sta. 363+50 - 369+00 - Req'd. 12 guard posts Lt.

Sta. 360+20 to 364+50 - Req'd. 132 cu. yds. of Uncl. Excav. for Intercepting ditch left.

Sta. 380+00 to 384+00 - Req'd. 79 cu. yds. of uncl. excav. for intercepting ditch Lt.

Sta. 375+50 - Req'd. 24"x64" C.M.P. cross culv. & 29 cu. yds. of uncl. excav. for outlet.

Sta. 382+60 to 390+90 - Req'd. 144 cu. yds. of Uncl. Excavation for Intercepting ditch Rt.

Sta. 386+00 - Req'd. 24"x60" C.M.P. cross culv. & 43 cu. yds. of uncl. excav. for inlet & outlet.

Sta. 369+90 to 375+50 - Req'd. 153 cu. yds. of uncl. excav. for intercepting ditch Rt.

Sta. 362+50 - 368+50 - Req'd. 13 guard posts Rt.

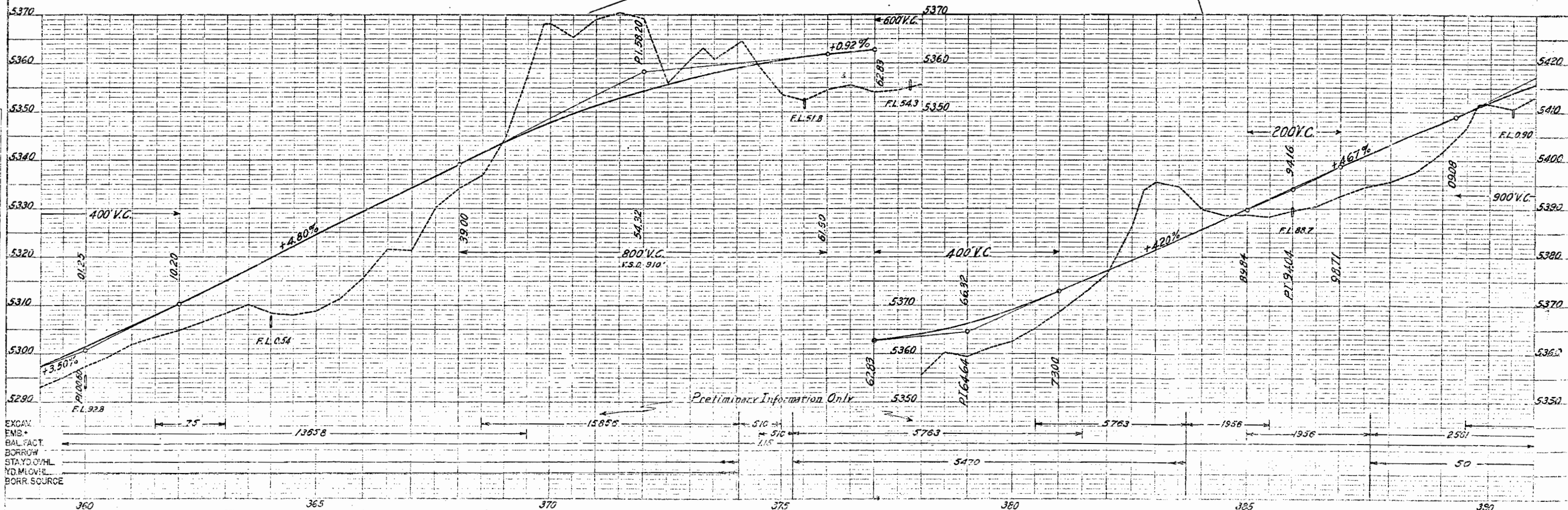
Sta. 373+67 - Req'd. 70 cu. yds. of Embank for Road Approach Lt. & 78 cu. yds. of Uncl. Excavation.

Sta. 377+75 - Req'd. 30"x64" C.M.P. cross culvert & 26 cu. yds. of uncl. excav. for outlet.

A 14° 50' R
D 1"
T 745.9
L 1483.3
R 5730.0

A 11° 52' L
D 2"
T 297.8
L 533.3
R 2865.0

N.W. 1/4 SEC. 36
T.14 S. R.94 W.



S.W. 1/4 SEC. 25
T. 14 S. R. 94 W.

Sta. 389+90 to 396+70 Req'd. 113 cu. yds. of
Uncl. Excav. for Intercepting ditch left.

Sta. 390+50 Req'd. 24"x82" C.M.P. cross culvert (Sk. 45° R.)
& 79 cu. yds. of uncl. excav. for ditches.

Sta. 400+50 to 405+00 Req'd. 83 cu. yds. of uncl. excav.
for intercepting ditch Lt.

Sta. 398+00 Req'd. 24"x66" C.M.P. cross culv.

Sta. 397+50 to 399+00 Req'd. 4 guard posts left.

Sta. 407+00-409+50 Req'd. 6 guard posts Lt.

Sta. 406+95 Req'd. 48"x114" C.M.P. cross culvert (Sk. 40° L.)
& 15 cu. yds. of uncl. excav. for inlet
& channel change left.

Sta. 408+80 Req'd. 36"x72" C.M.P. cross culvert (Sk. 75° L.)
and 17 cu. yds. Uncl. Excavation for outlet.

Sta. 407+25 to 408+50 Req'd. 305 cu. yds. of Uncl.
Excavation for channel change on the left.

Sta. 417+00 Req'd. 36"x116" C.M.P. cross culv. (Sk. 45° L.)
& 9 cu. yds. of uncl. excav. for inlet.

Sta. 420+67 Req'd. 24"x66" C.M.P. cross culv.
& 11 cu. yds. of uncl. excav. for inlet.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	16	

Rev. as Const. June 1939, J.F.P.

Sta. 391+30 to 395+50 Req'd. 71 cu. yds. of uncl. excav.
for intercepting ditch Rt.

Sta. 396+50-398+00 Req'd. 4 guard posts Rt.

Sta. 395+90 to 405+40 Req'd. 159 cu. yds. of
Uncl. Excavation for Intercepting ditch Rt.

Sta. 405+50-409+00 Req'd. 8 guard posts Rt.

Sta. 406+00 to 408+50 Req'd. 65 cu. yds. of
Uncl. Excavation for Intercepting ditch Rt.

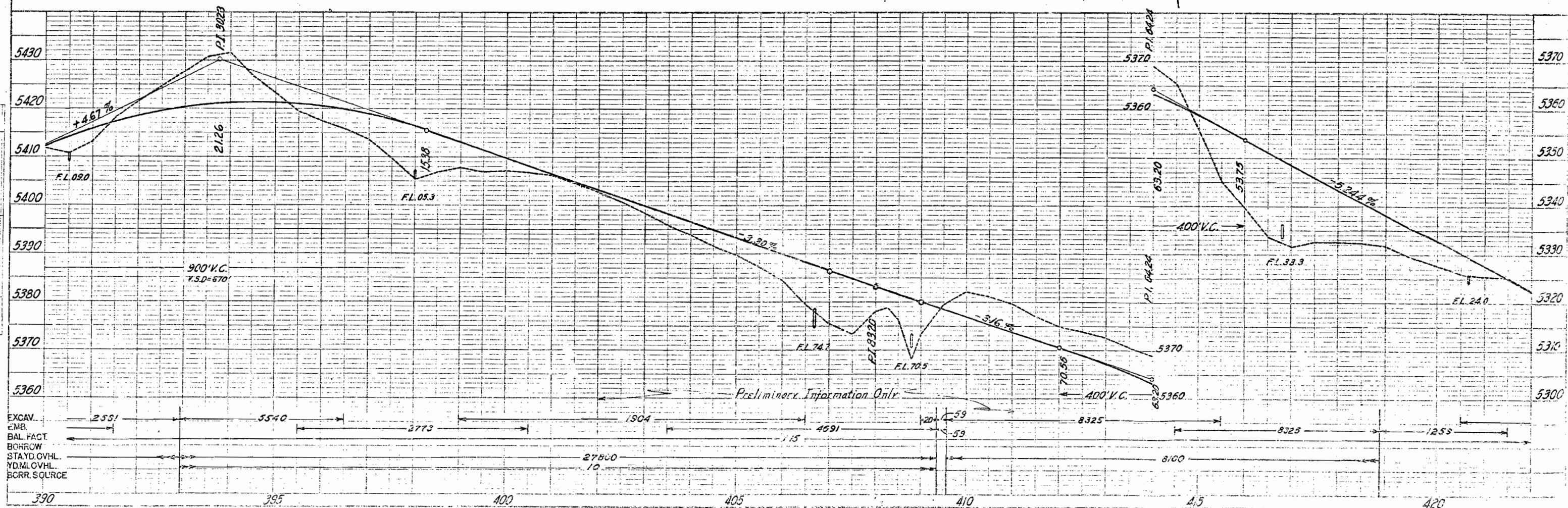
Sta. 408+80 to 415+40 Req'd. 174 cu. yds. of
Uncl. Excavation for Intercepting ditch on Rt.

Sta. 415+00-419+50 Req'd. 20 guard posts Lt. & Rt.

Sta. 416+75 to 429+50 Req'd. 216 cu. yds. of Uncl.
Excavation for Intercepting ditch on Rt.

N.W. 1/4 SEC. 36
T. 14 S. R. 94 W.

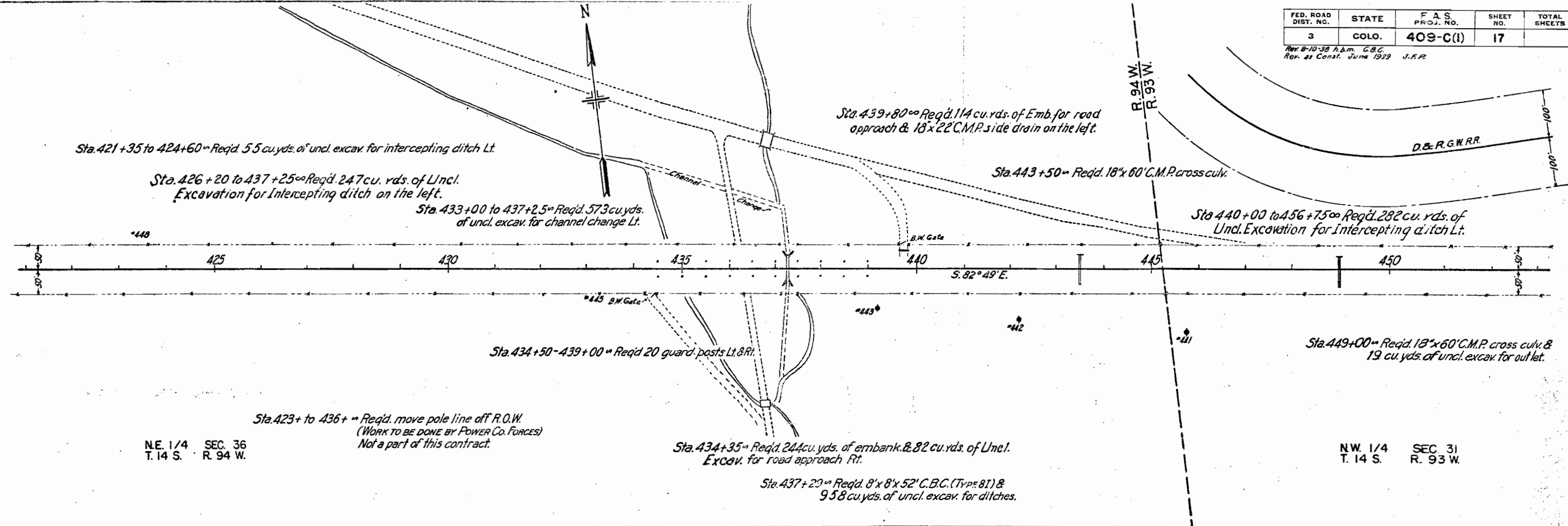
NE. 1/4 SEC. 36
T. 14 S. R. 94 W.



FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	409-C(1)	17	

Rev. 8-10-38 h.k.m. C.B.C.
Rev. 23 Const. June 1939 J.F.R.

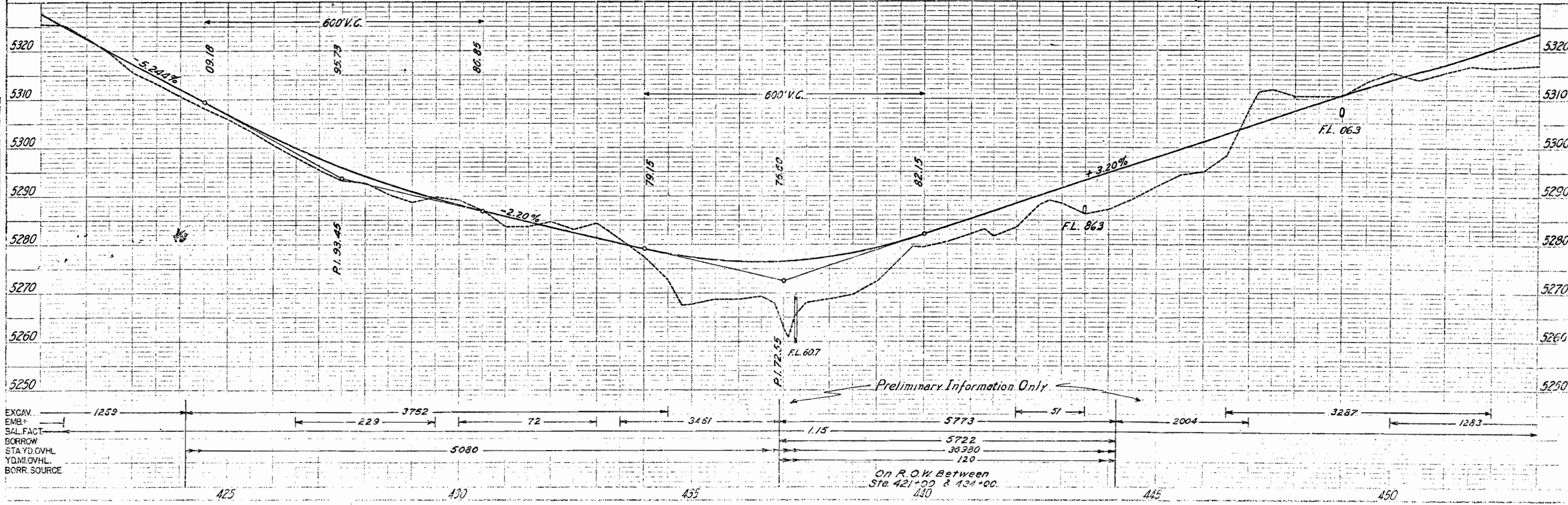
PLAN
BY
DATE
NOTE: BY THE ALIGNMENT CHIEF AND THE CHIEF OF WAY CHIEF.
NO.



NE 1/4 SEC. 36
T. 14 S. R. 94 W.

NW 1/4 SEC. 31
T. 14 S. R. 93 W.

PLAN
BY
DATE
NOTE: BY THE ALIGNMENT CHIEF AND THE CHIEF OF WAY CHIEF.
NO.

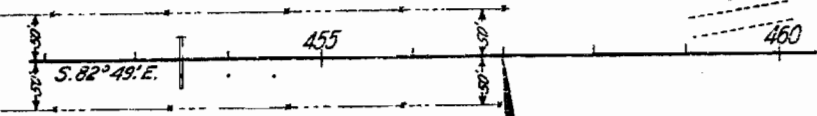
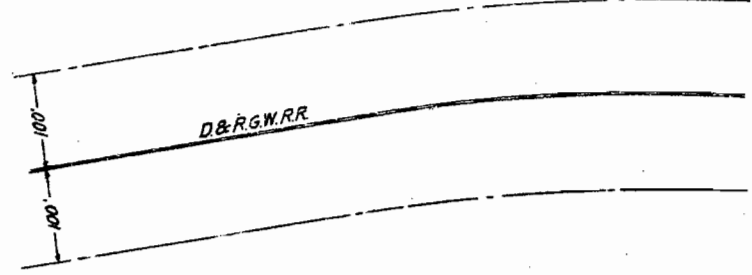


Preliminary Information Only

On R.O.W. Between
Sta. 421+00 & 434+00.

PLAN
 DATE
 BY
 CHECKED
 NO.
 NOTE BOOK
 NO. 1
 NO. 2
 NO. 3
 NO. 4
 NO. 5
 NO. 6
 NO. 7
 NO. 8
 NO. 9
 NO. 10
 NO. 11
 NO. 12
 NO. 13
 NO. 14
 NO. 15
 NO. 16
 NO. 17
 NO. 18
 NO. 19
 NO. 20
 NO. 21
 NO. 22
 NO. 23
 NO. 24
 NO. 25
 NO. 26
 NO. 27
 NO. 28
 NO. 29
 NO. 30
 NO. 31
 NO. 32
 NO. 33
 NO. 34
 NO. 35
 NO. 36
 NO. 37
 NO. 38
 NO. 39
 NO. 40
 NO. 41
 NO. 42
 NO. 43
 NO. 44
 NO. 45
 NO. 46
 NO. 47
 NO. 48
 NO. 49
 NO. 50
 NO. 51
 NO. 52
 NO. 53
 NO. 54
 NO. 55
 NO. 56
 NO. 57
 NO. 58
 NO. 59
 NO. 60
 NO. 61
 NO. 62
 NO. 63
 NO. 64
 NO. 65
 NO. 66
 NO. 67
 NO. 68
 NO. 69
 NO. 70
 NO. 71
 NO. 72
 NO. 73
 NO. 74
 NO. 75
 NO. 76
 NO. 77
 NO. 78
 NO. 79
 NO. 80
 NO. 81
 NO. 82
 NO. 83
 NO. 84
 NO. 85
 NO. 86
 NO. 87
 NO. 88
 NO. 89
 NO. 90
 NO. 91
 NO. 92
 NO. 93
 NO. 94
 NO. 95
 NO. 96
 NO. 97
 NO. 98
 NO. 99
 NO. 100

Sta. 453+50⁰⁰ Req'd. 18"x58' C.M.P. cross culvert
 & 4 cu. yds. of uncl. excav. for inlet.

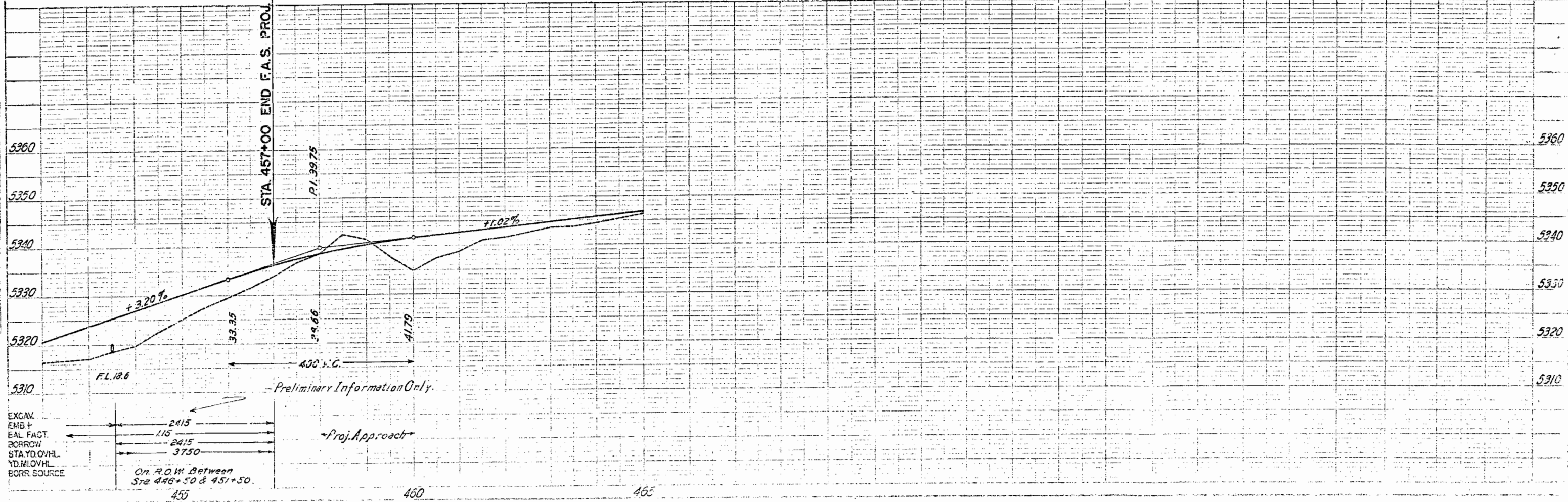


Sta. 457+00⁰⁰ Req'd. 1 Project Marker

Sta. 452+50-454+50⁰⁰ Req'd. 5 guard posts Rt.

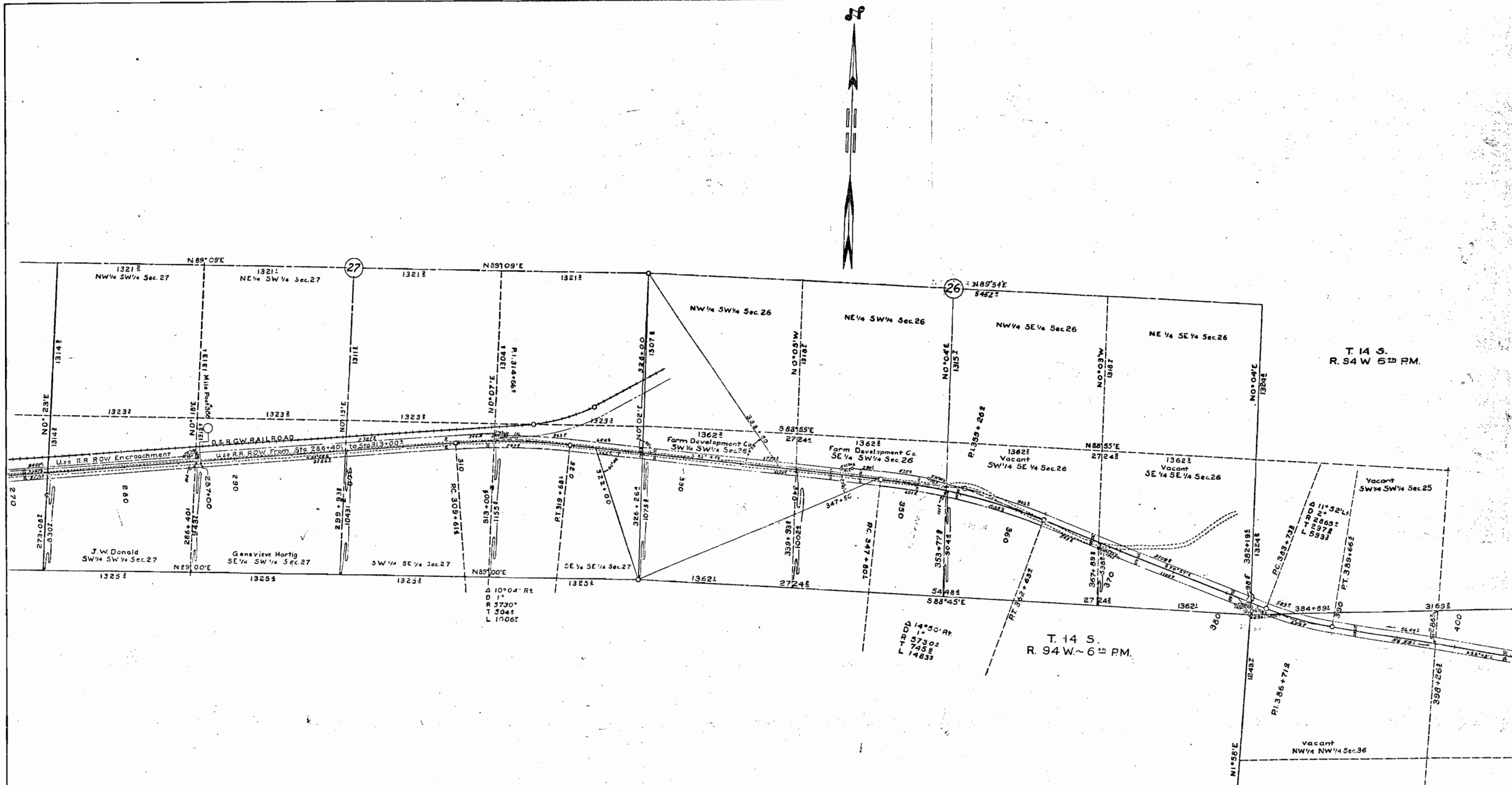
NW 1/4 SEC. 31
 T. 14 S. R. 93 W.

STA. 457+00 END F.A.S. PROJ. NO. 409-C(1)



[illegible]

E. H. P. ~ R. G. S. ~ 8 ~ i ~ 1935



COLORADO
 STATE HIGHWAY DEPARTMENT
 RIGHT~OF~WAY MAP
 DELTA~PAONIA~SURVEY
F.A.S. 409~C(1)
 STATE HIGHWAY NO92
 SHEET NO.2 OF 3
 SCALE 1"= 400'

E. H. P. ~ R. G. S. 2 ~ 2 ~ 1938

[illegible]

R.G.S. 8~2~1936'