

COLORADO STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED U.S.P.W. PROJECT N.R.S. 373 B STATE HIGHWAY NO. 74 JEFFERSON COUNTY

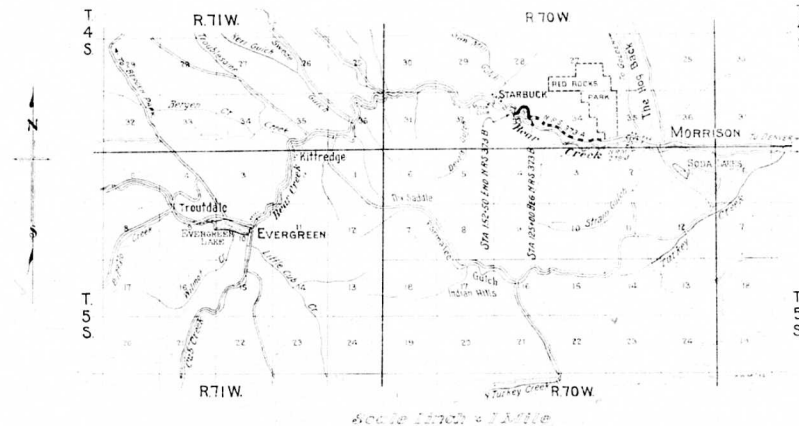
INDEX OF SHEETS

SHEET NO. 1	TITLE SHEET	
2	TYPICAL SECTION & SUMMARY OF QUANTITIES	M-1 A
3	STANDARD SUPERELEVATION SHEET	M-103 D
4	CONCRETE BOX (6 x 6)	M-102 E
5	HEADWALLS	M-102 E
6	MARKER POSTS	M-104 F
7	PLAN & PROFILE SHEET	
10 to 41	CROSS SECTIONS	

CONVENTIONAL SIGNS

ENTER LINE OF SURVEY	-----
BOUNDARY OF WAY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
ONE-QUARTER SECTION LINE	-----
RANGE-WAY LINE	-----

SCALES
 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 25,459 FT. = 0.48 MI.
 NET LENGTH OF PROJECT



Scale 1 inch = 1 mile

RECOMMENDED FOR APPROVAL OF THE BOARD OF STATE ENGINEERS

APPROVED

Charles H. H. H.
STATE ENGINEER

RECOMMENDED FOR APPROVAL

APPROVED

RECOMMENDED FOR APPROVAL

APPROVED

NRS-373-B

SUMMARY OF FINAL QUANTITIES

FINAL CONSTRUCTION SHEET

No.	ITEM	UNIT	AMOUNT	Channel changes	TOTALS
10a	Clearing & grubbing entire proj.	Line item	Nil		Nil
10b	Remove portion of bridge structure	" "	Nil		Nil
11a	Unclassified excavation	Cu. yds.	472.54	472.54	472.54
11b	Dry rock structural	" "	Nil		Nil
11c	Dry common excavation	" "	647.0	647.0	647.0
12a	Station yard overhaul	Sta. yds.	189,920.0	189,920.0	189,920.0
12b	Hard mile overhaul	1/4 mile	15,828.0	15,828.0	15,828.0
30x	Gravel or crushed rock surfy	Tons	5,024.0	5,024.0	5,024.0
14b	Class B concrete	Cu. yds.	6.52	6.52	6.52
42a	4" C.M.P.	Lia ft.	2090	2090	2090
42b	3" C.M.P.	" "	76.0	76.0	76.0
70	Project markers	Each	1	1	1

* Select Material

41724.5 Station yard
61766.0 Hard mile
5089.0 Gravel
10961.0

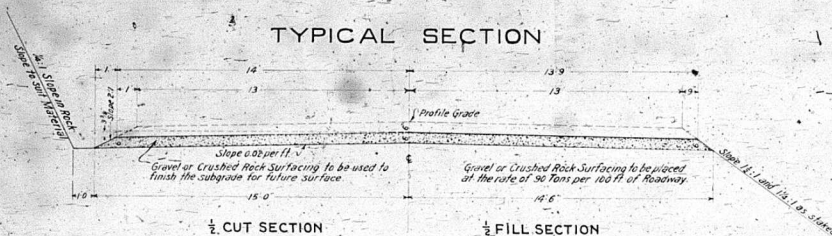
109890.4
24177.2
10961.0
Select Material
paysmaster's

STRUCTURE LIST

LOCATION	DESCRIPTION	Amount	Unit	STRUCTURAL EXCAVATION	ENRANK	CONCRETE	COORDINATED METAL	MISCELLANEOUS
125+00	Project marker	1	Each					Project marker
127+00-128+00	Channel change	1	Line item					Remove portion of bridge
128+00	Remove portion of bridge	1	Line item					" " " "
128+00	C.M.P. cross drain	1	Each					
128+00	Remove portion of bridge	1	Line item					
128+00-129+00	Channel change	1	Line item					
129+00	C.M.P. cross drain	1	Each					
129+00-132+00	Channel change	1	Line item					
132+00	C.M.P. cross drain	1	Each					
Totals								

61766

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES



GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department, adopted January 1, 1930.

All quantities on preliminary plans are to be considered as approximate only. All curves are to be super-elevated as provided for by the Standard Super-elevation Sheet, except as otherwise noted on the plan sheets.

All Roadway excavation required to construct this Project is to be obtained as indicated on the Plans. Quantities involved beyond the limits of the ditch as shown by the Typical Section, either noted on the profile as 'Borrow' or on the List of Structures as 'Embankment', or required as 'Selected Material' to backfill the subgrade, is to be classified and paid for as 'Unclassified Excavation'.

The quantities are to be stated as part of the original excavation at locations indicated on the plans. Stone slopes beyond the limits of the Typical Section as shown are subject to change by the Engineer to fit Embankment requirements actually met in construction.

Clearing and Grubbing shall be of variable width and be held to the minimum required for construction of the road and to accommodate visibility. Ordinarily the Clearing shall not extend more than 6 feet beyond the face of fills or the top of cut banks.

Notes on the plans indicate the approximate locations and character of Clearing and grubbing.

The subgrade is to be finished with the best available material to be selected from cuts and pits along the Project, together with gravel or crushed rock surfacing which is to be placed at the rate of 30 tons per 100 feet of Roadway.

The alignment grades and overhaul plan as shown on Plans are subject to adjustment.

When the alignment is such that the Standard super-elevation and widening can not be used, the super-elevation and widening details will be modified as stated by the Engineer, to meet construction requirements.

Item for Clearing and Grubbing shall include all Clearing and Grubbing required for Channel changes.

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

SUMMARY OF APPROXIMATE QUANTITIES

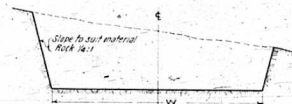
NO.	ITEM	UNIT	ROADWAY	TOTALS
10a	Clearing & Grubbing entire Project	Lump Sum	.	.
11a	Remove Structure Sta 127+00 to Sta 136+00	Lump Sum	.	.
13c	Unclassified Excavation	Cu Yds	109,010.6	109,010.6
14b	Dry Common Excavation (Struct)		84.7	84.7
18a	Station Yard Overhaul	Sta Yd	191,939	191,939
18b	Yard Mfg	16 Mf	582.3	582.3
18c	Gravel or Crushed Rock Surfacing	Tons	302.6	302.6
46b	Class 'B' Concrete	Cu Yd	6.42	6.42
53c	24" Corr Metal Culv Pipe	Lin Ft	209	209
53e	36" "	"	76	76
118	Project Marker	Each		1

STRUCTURE LIST

LOCATION	DESCRIPTION	REMOVE STREET EXCAV. FACH	UNCLASS. EXCAV. CU YDS	STRUCT. EXCAVATION* CU YDS	EMBANK. CU YDS	CONCRETE CU YDS	REIN. STEEL LBS	CORRUGATED METAL CULV PIPE LIN FT	24	36	MISCELLANEOUS
127+00	Project Marker										1 Proj Marker
127+00-139+00	Channel Change		5706.6								
128+50	Remove Portion of Bridge			14.1							Remove portion of Bridge
129+00	C.M.P. Cross Culvert						3.12				
139+00-148+50	Channel Change		3451.3								
136+00	Remove Portion of Bridge			15.4	18.7		180				Remove portion of Bridge
145+00	C.M.P. Cross Culvert Inlet channel						150				
150+00	Channel Change		522.6								
149+00-152+00	C.M.P. Cross Culvert Inlet ditch				5		165				
156+70											
158+00-165+00	Channel Change		10000								
162+60	C.M.P. Cross Culv. Inlet channel				20		65				
169+30	C.M.P. Cross Culv. Inlet channel				10		65				
172+40	C.M.P. Cross Culv. Inlet channel				30		300				
173+00-182+00	Channel Change		21000								
177+80	Cross Culv. Rd. support, Outlet Chas. Remove side drains			10	50	50	300				
182+00	Remove portions of Bridge										Rem portions of Br.
184+00-187+00	Remove S. Bridge from R.O.W.										Rem S. Bridge
182+80	C.M.P. Cross Culv. Inlet channel		20		10		165				
188+13	Approach to Project										
188+13	Project Marker										1 Proj Marker
TOTALS			61796.1	84.7			6.42	209	76		

* Included for payment in Profile quantities.
* Material to be taken from and included for payment in Channel Change quantities at Sta 161+.

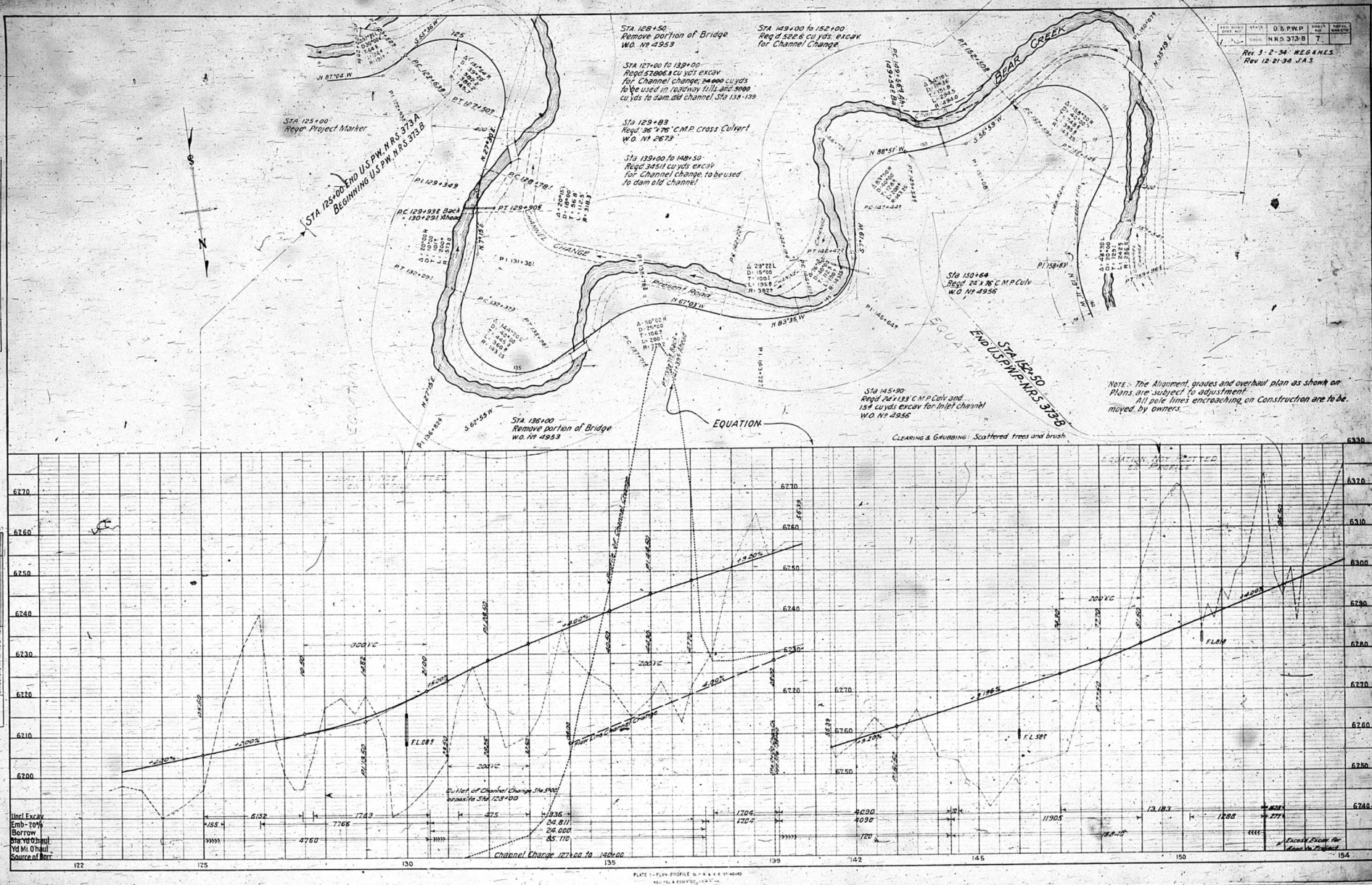
TYPICAL SECTION OF CHANNEL CHANGES



NOTE: The widths (W) of the bottom of Channel changes shall be stated and constructed in conformity with the widths listed below.

LOCATION OF CHANNEL CHANGE	WIDTH IN FT
Sta 127+00 to Sta 139+00	30
139+00 to 148+50	40
149+00 to 152+00	40

PROFILE	SUBMITTED	BY	DATE
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. 149+00 to 152+00
Req'd. 522.6 cu. yds. excav.
for Channel Change

FED. ROAD DIST. NO.	STATE	U.S. P.W.P.	SHEET NO.	TOTAL SHEETS
3	COLO.	N.R.S. 373-B	7	

Rev. 3-2-34 W.E.G. & H.E.S.
Rev. 12-21-34 J.A.S.

cu. yds.
and 5000
138-139

Culvert

ised

6

$\Delta 29^{\circ}22'L$
 $D=15^{\circ}00'$
 $T=100'$
 $L=195.8$
 $R=382^{\circ}$

$N. 83^{\circ}35' W.$

P.I. 143+227

$\Delta 76^{\circ}18'L$
 $D=40^{\circ}00'$
 $T=112.5$
 $L=190.7$
 $R=143.35$

P.I. 145+64.9

Sta. 145+90
Req'd. 24'x133' C.M.P. Culv. and
154 cu. yds. excav. for Inlet channel.
W.O. No 4956

$N. 88^{\circ}51' W.$

$\Delta 83^{\circ}50'R$
 $D=40^{\circ}00'$
 $T=128.6$
 $L=209.6$
 $R=143.25$

PC 149+56.34h
149+54.2 Ba

$\Delta 34^{\circ}10'L$
 $D=11^{\circ}36'$
 $T=151.8$
 $L=294.5$
 $R=494.0$

Chan. Ch.

P.I. 151+08

Sta. 150+64
Req'd. 24'x76' C.M.P. Culv
W.O. No 4956

EQUATION
END U.S.P.W.P.-N.R.S. 373-B

P.I. 158+83

$\Delta 48^{\circ}30'L$
 $D=20^{\circ}00'$
 $T=129.1$
 $L=242.5$
 $R=286.5$

PT. 159+965

$\Delta 158^{\circ}20'R$
 $D=40^{\circ}00'$
 $T=748.6$
 $L=395.8$
 $R=143.25$

PT. 156+548

PC 152+59

$S. 56^{\circ}59' W.$

$N. 35^{\circ}19' E.$

400'

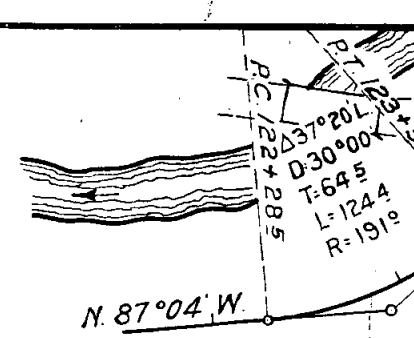
157+54.9

$N. 13^{\circ}11' W.$

PT. 158+83

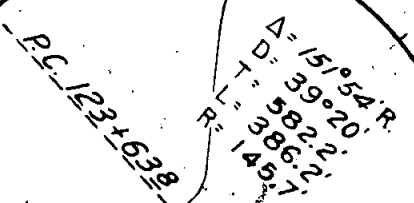
NOTE:- The Alignment, grades and overhaul plan as shown on
Plans, are subject to adjustment.
All pole lines encroaching on Construction are to be
moved by owners.

CLEARING & GRUBBING:- Scattered trees and brush.



N. 87°04' W.

P.I. 122+93.2



P.T. 127+50°

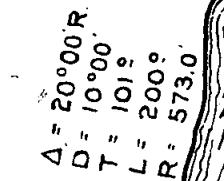
STA. 125+00
Req'd Project Marker

STA. 125+00 END U.S.P.W. N.R.S. 373 A.
BEGINNING U.S.P.W. N.R.S. 373 B.

P.I. 129+349

P.C. 129+932 Back
= 130+29! Ahead

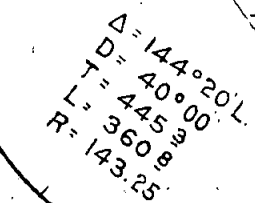
P.T. 129+908



P.T. 132+291

P.I. 131+301

P.C. 132+373



P.T. 135+981

STA. 136+00
Remove portion of Bridge
W.O. No 4953

STA. 128+50
Remove portion of Bridge
W.O. No 4953

STA. 149+00 to
Req'd 522.6 cu
for Channel C

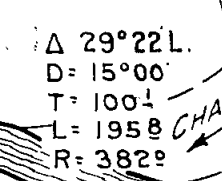
STA. 127+00 to 139+00
Req'd 57,806.8 cu yds excav.
for Channel change; 24,000 cu yds
to be used in roadway fills and 5000
cu yds to dam old channel, Sta. 138-139

Sta. 129+83
Req'd 36"x76' C.M.P. Cross Culvert
W.O. No 2673

Sta. 139+00 to 148+50
Req'd 34513 cu yds excav.
for Channel change, to be used
to dam old channel.

CHANNEL CHANGE

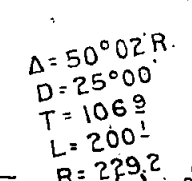
Present Road



P.T. 144+184

P.C. 142+226

P.C. 144+515

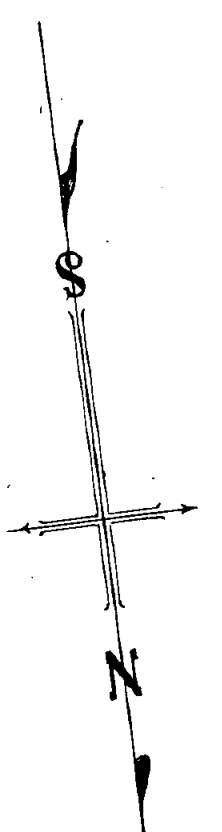


P.T. 139+715 Back =
141+396 Ahead

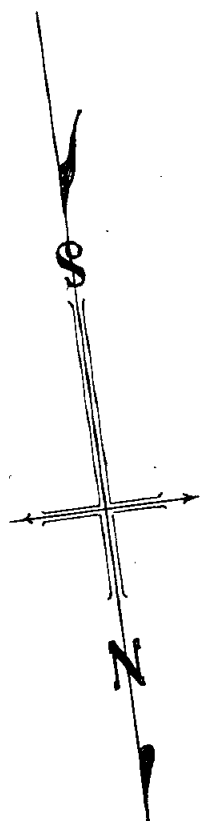
P.I. 143+227

EQUATION

EQUATION



PLAN	DATE		
	BY		
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		



STA. 125+00
Reqd Project Marker

STA. 125+00 END U.S.P.W., N.R.S. 373 A.
BEGINNING U.S.P.W., N.R.S. 373 B.

EQUATION

