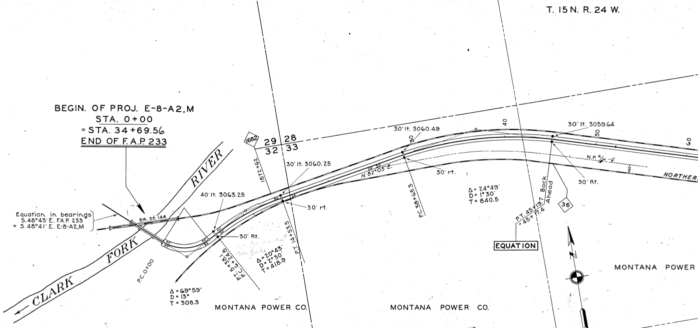
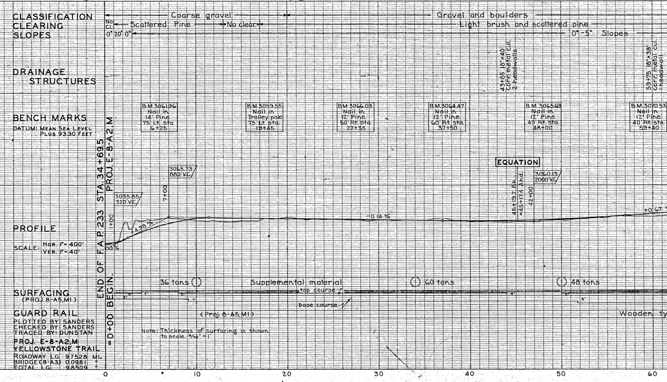
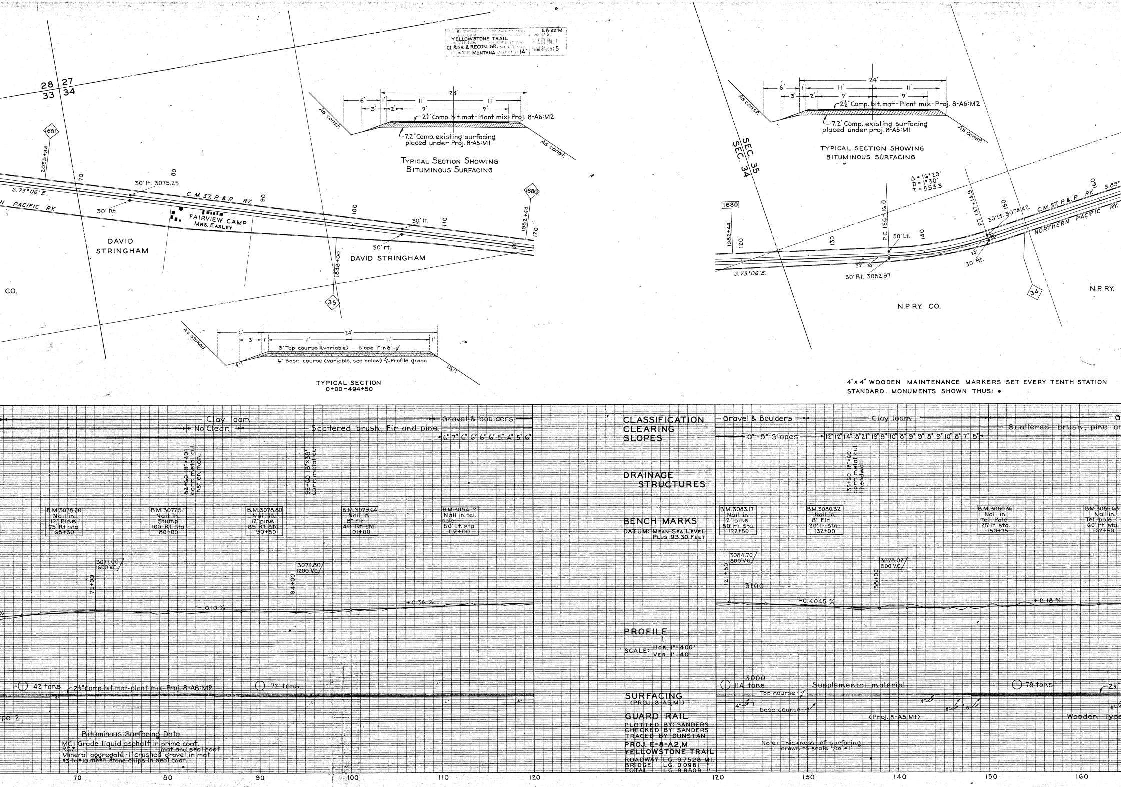

T. 15 N. R. 24 W.
BEGIN. OF PROJ. E-8-A2,M
STA. 0+00
= STA. 34+69.56
END OF F.A.P. 233
Equation in bearings
S.48°43' E. F.A.P. 233
= S.48°41' E. E-8-A2,M
BR. DD 144
CLARK FORK RIVER
P.C. 0+00
Δ = 69°59'
D = 13°
T = 308.3
40' lt. 3063.25
30' Rt.
P.T. 5+38.1
P.C. 6+24.8
Δ = 20°43'
D = 2°30'
T = 418.9
1682
29 28
32 33
1872+62
30' lt. 3060.25
30' rt.
P.T. 14+53.5
MONTANA POWER CO.
MONTANA POWER CO.
N. 82°05' E.
30' lt. 3060.49
30
30' rt.
P.C. 38+65.3
Δ = 24°49'
D = 1°30'
T = 840.5
40
30' lt. 3059.64
50
60
P.T. 45+19.7 Back
= 45+17.4 Ahead
EQUATION
36
30' Rt.
N.P. R/W
NORTHER
N
MONTANA POWER

4"×4" WOODEN MAINTENANCE MARKERS SET EVERY TENTH STATION
STANDARD MONUMENTS SHOWN THUS: •


CLASSIFICATION
CLEARING
SLOPES
No Cl.
Coarse gravel
Gravel and boulders
Scattered Pine
No clear
Light brush and scattered pine
0° 20' 0°
0°-5° Slopes
DRAINAGE STRUCTURES
43+85 18"×40' corr. metal cul. 2 headwalls
59+75 18"×38' corr. metal cul. 1 headwall
BENCH MARKS
DATUM: MEAN SEA LEVEL PLUS 9330 FEET
B.M. 3061.96 Nail in 14" Pine 75' Lt. sta. 6+25
B.M. 3059.55 Nail in Trolley pole 75' Lt. sta. 19+45
B.M. 3066.03 Nail in 12" Pine 50' Rt. sta. 27+35
B.M. 3064.47 Nail in 12" Pine 60' Rt. sta. 37+50
B.M. 3065.69 Nail in 12" Pine 40' Rt. sta. 48+00
B.M. 3070.53 Nail in 12" Pine 40' Rt. sta. 59+40
END OF F.A.P. 233 STA. 34+69.5
= 0+00 BEGIN. PROJ. E-8-A2,M
PROFILE
SCALE: HOR. 1" = 400' VER. 1" = 40'
.00%
1+00
3035.85 320' V.C.
4.98%
7+00
3065.73 880' V.C.
-0.14%
EQUATION
45+19.7 Bk.
= 45+17.4 Ahd.
42+00
3060.13 2000' V.C.
+0.67
SURFACING (PROJ. 8-A5, M1)
36 tons
Supplemental material
top course
base course
60 tons
48 tons
GUARD RAIL
(Proj. 8-A5, M1)
Wooden ty
Note: Thickness of surfacing is shown to scale. 6/20" = 1"
PLOTTED BY: SANDERS
CHECKED BY: SANDERS
TRACED BY: DUNSTAN
PROJ. E-8-A2,M
YELLOWSTONE TRAIL
ROADWAY LG. 9.7528 MI.
BRIDGE (8-A3) 0.0981 "
TOTAL LG. 9.8509 "
0
10
20
30
40
50
60

YELLOWSTONE TRAIL
CL.&GR.& RECON. GR.
MONTANA 14
E8-A2:M
SHEET No. 1
Total Sheets: 5

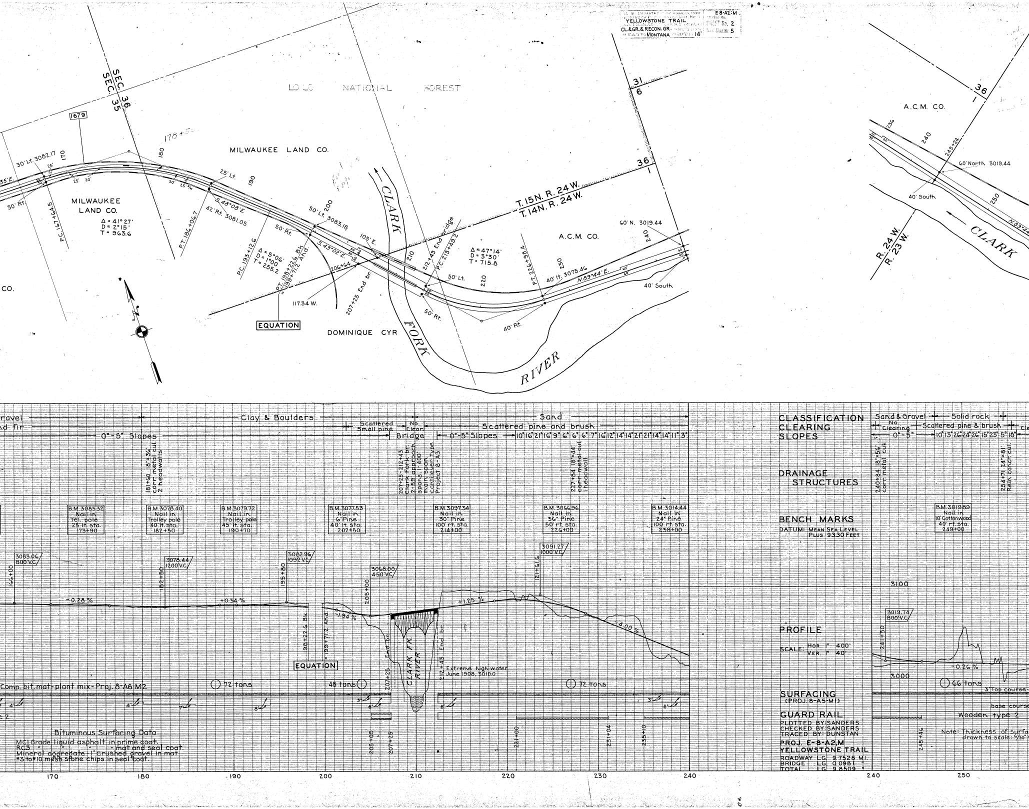

28 27
33 34
2035+34
681
S.73°06'E.
PACIFIC RY.
70
30' Rt.
30' lt. 3075.25
80
C.M. ST. P. & P. RY.
90
FAIRVIEW CAMP
MRS. EASLEY
DAVID STRINGHAM
CO.
100
1848+00
35
30' lt.
30' rt.
110
DAVID STRINGHAM
1982+44
120
1680
As const.
6'
3'
1'
2'
24'
11'
9'
2½" Comp. bit. mat-Plant mix-Proj. 8-A6:M2
7.2" Comp. existing surfacing placed under Proj. 8-A5:M1
Typical Section Showing
Bituminous Surfacing
As staked
3" Top course (variable)
Slope 1" in 8'
6" Base course (variable, see below)
Profile grade
4:1
1½:1
TYPICAL SECTION
0+00-494+50
SEC. 35
SEC. 34
1680
1982+44
S.73°06'E.
130
P.C. 136+16.0
50' Lt.
30' Rt. 3082.97
140
Δ=16°29'
D=1°30'
T=553.3
P.T. 147+14.9
150
30' Lt. 3074.42
30' Rt.
C.M. ST. P. & P. RY.
NORTHERN PACIFIC RY.
160
S.89°
34
N.P. RY. CO.
N.P. RY.
Typical Section Showing
Bituminous Surfacing
Clay loam
No Clear.
Scattered brush, Fir and pine
Gravel & boulders
6" 7" 6" 6" 6" 6" 5" 4" 5" 6"
82+60 18"×40' corr. metal cul. Inst. on man.
95+60 18"×38' corr. metal cul.
B.M. 3078.20 Nail in 12" Pine 75' Rt. sta. 68+30
B.M. 3077.51 Nail in Stump 100' Rt. sta. 80+00
B.M. 3078.80 Nail in 12" pine 85' Rt. sta. 90+50
B.M. 3079.64 Nail in 8" Fir 40' Rt. sta. 101+00
B.M. 3084.12 Nail in tel. pole 50' Lt. sta. 112+00
72+00
3077.00 1600' V.C.
94+00
3074.80 1200' V.C.
-0.10%
+0.36%
42 tons
2½" Comp. bit. mat-plant mix-Proj. 8-A6:M2
72 tons
4"
6"
pe 2
CLASSIFICATION
CLEARING
SLOPES
DRAINAGE STRUCTURES
BENCH MARKS
DATUM: MEAN SEA LEVEL PLUS 93.30 FEET
PROFILE
SCALE: HOR. 1"=400' VER. 1"=40'
SURFACING (PROJ. 8-A5,M1)
GUARD RAIL
Gravel & Boulders
Clay loam
Scattered brush, pine an
0"-5" Slopes
12" 12" 14" 18" 21" 19" 9" 10" 8" 9" 9" 8" 9" 10" 8" 7" 5"
135+60 18"×60' corr. metal cul. 1 headwall
B.M. 3083.17 Nail in 12" pine 50' rt. sta. 122+50
B.M. 3080.32 Nail in 8" Fir 20' lt. sta. 132+00
B.M. 3080.36 Nail in Tel. Pole 25' lt. sta. 150+75
B.M. 3085.68 Nail in Tel. pole 60' rt. sta. 162+50
121+50
3084.70 800' V.C.
3100
138+00
3078.02 500' V.C.
-0.4045%
+0.18%
3000
114 tons
Top course
base course
Supplemental material
78 tons
(Proj. 8-A5,M1)
Wooden Typ
70
80
90
100
110
120
120
130
140
150
160

4"×4" WOODEN MAINTENANCE MARKERS SET EVERY TENTH STATION
STANDARD MONUMENTS SHOWN THUS: •

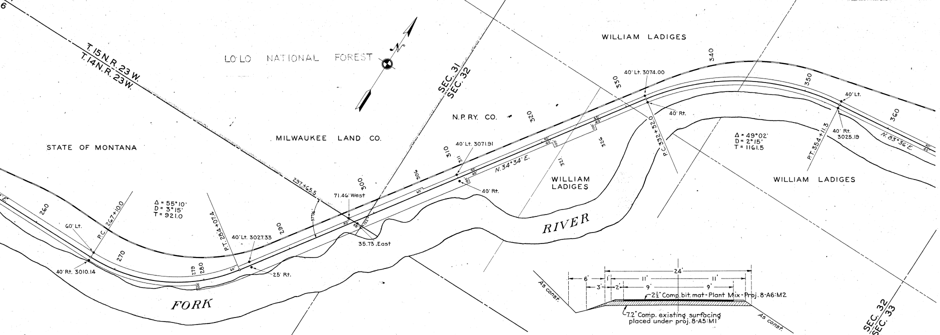
Bituminous Surfacing Data
MC1 Grade liquid asphalt in prime coat.
RC3 " " " " mat and seal coat
Mineral aggregate-1" crushed gravel in mat
#3 to #10 mesh stone chips in seal coat.

Note: Thickness of surfacing drawn to scale 6/20"=1"

PLOTTED BY: SANDERS
CHECKED BY: SANDERS
TRACED BY: DUNSTAN
PROJ. E-8-A2,M
YELLOWSTONE TRAIL
ROADWAY LG. 9.7528 MI.
BRIDGE LG. 0.0981 "
TOTAL LG. 9.8509 "

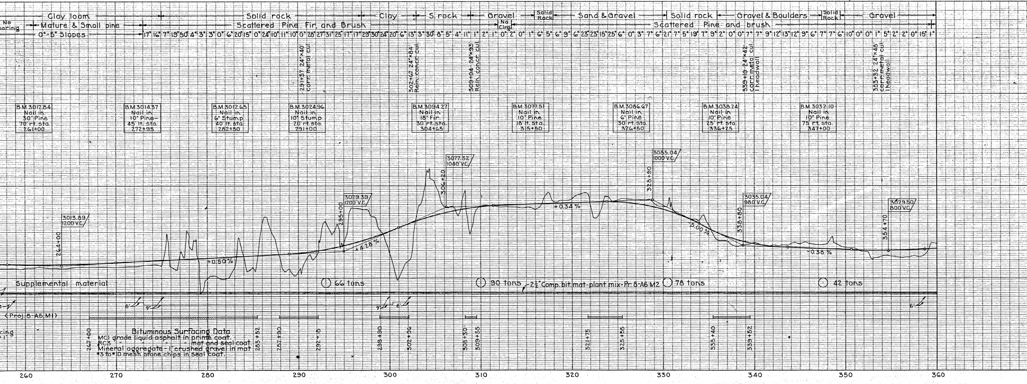

YELLOWSTONE TRAIL
CL.&GR.& RECON. GR.
MONTANA
14'
E8-A2-M
SHEET No. 2
5
SEC. 36
SEC. 35
1679
LOLO NATIONAL FOREST
MILWAUKEE LAND CO.
MILWAUKEE LAND CO.
Δ = 41°27'
D = 2°15'
T = 963.6
30' Lt. 3082.17
30' Rt.
P.C. 167+64.5
P.T. 186+06.7
42' Rt. 3081.05
S.48°08' E.
25' Lt.
P.C. 193+12.6
Δ = 5°06'
D = 1°00'
T = 255.2
P.T. 198+22.6 Bk. = 199+71.2 Ahd.
EQUATION
117.34 W.
206+64
207+25 End br.
50' Rt.
50' Lt. 3083.18
S.43°02' E.
105' E.
CLARK FORK RIVER
DOMINIQUE CYR
212+43 End bridge
P.C. 213+49.2
Δ = 47°14'
D = 3°30'
T = 715.8
50' Lt.
50' Rt.
40' Rt.
P.T. 226+98.4
40' Lt. 3075.46
N.89°44' E.
T.15N. R.24W.
T.14N. R.24W.
A.C.M. CO.
60' N. 3019.44
40' South
31
6
36
1
R.24W.
R.23W.
A.C.M. CO.
243+24
60' North 3019.44
40' South
CLARK
CO.
170
180
190
200
210
220
230
240
250
CLASSIFICATION
CLEARING
SLOPES
Gravel
Clay & Boulders
Sand
Sand & Gravel
Solid rock
Fir
Scattered small pine
No clear
Scattered pine and brush
No Clearing
Scattered pine & brush
0°-5° Slopes
Bridge
10° 16° 21° 16° 9° 6° 6° 6° 7° 16° 12° 14° 14° 21° 21° 14° 14° 11° 3°
0°-5°
10° 13° 26° 24° 26° 15° 23° 5° 18°
DRAINAGE STRUCTURES
181+60 18"×36' corr. metal cul. 2 headwalls
207+25-212+43 Clark Fork br. 2-59' approach spans, 1-400' main span, cantilever type Project 8-A3
227+84 18"×44' corr. metal cul. 1 headwall
240+84 18"×56' corr. metal cul.
254+71 24"×81' Rein. concr. cul.
BENCH MARKS
DATUM: MEAN SEA LEVEL PLUS 93.30 FEET
B.M. 3083.32 Nail in Tel. pole 25' lt. sta. 173+90
B.M. 3078.40 Nail in Trolley pole 40' lt. sta. 182+50
B.M. 3079.72 Nail in Trolley pole 45' lt. sta. 190+70
B.M. 3077.53 Nail in 6" Pine 40' lt. sta. 202+50
B.M. 3097.34 Nail in 30" Pine 100' rt. sta. 214+00
B.M. 3066.96 Nail in 36" Pine 50' rt. sta. 226+00
B.M. 3014.44 Nail in 24" Pine 100' rt. sta. 238+00
B.M. 3019.89 Nail in 10' Cottonwood 40' rt. sta. 249+00
PROFILE
SCALE: HOR. 1" = 400' VER. 1" = 40'
166+00 3083.06 800' V.C.
182+50 3078.44 1200' V.C.
195+80 3082.96 1092' V.C.
205+00 3068.00 450' V.C.
221+61.6 3091.27 1000' V.C.
241+50 3019.74 800' V.C.
-0.28 %
+0.34 %
-1.94 %
+1.25 %
-4.00 %
-0.26 %
198+22.6 Bk.
= 199+71.2 Ahd.
EQUATION
207+25 End br.
212+43 End br.
CLARK FK. RIVER
Extreme high water June 1908, 3010.0
3100
3000
SURFACING (PROJ. 8-A5-M1)
Comp. bit. mat. plant mix - Proj. 8-A6-M2
72 tons
48 tons
72 tons
66 tons
3" Top course
base course
GUARD RAIL
205+05
207+25
221+00
231+04
235+10
245+46
Wooden type 2
Note: Thickness of surfacing drawn to scale
Bituminous Surfacing Data
MC1 Grade liquid asphalt in prime coat.
RC3 " " " - mat and seal coat.
Mineral aggregate - 1" crushed gravel in mat
#3 to #10 mesh stone chips in seal coat.
PLOTTED BY: SANDERS
CHECKED BY: SANDERS
TRACED BY: DUNSTAN
PROJ. E-8-A2,M
YELLOWSTONE TRAIL
ROADWAY LG. 9.7528 MI.
BRIDGE LG. 0.0981 "
TOTAL LG. 9.8509 "

U. S. DEPARTMENT OF AGRICULTURE
YELLOWSTONE TRAIL
CL.&GR.& RECON.GR.
STATE MONTANA 14
PROJECT No. E8-A2:M
SHEET No. 3
TOTAL SHEETS 5


T.15N.R.23W.
T.14N.R.23W.
31
6
LO LO NATIONAL FOREST
N
SEC. 31
SEC. 32
STATE OF MONTANA
MILWAUKEE LAND CO.
N.P.RY. CO.
WILLIAM LADIGES
WILLIAM LADIGES
WILLIAM LADIGES
FORK
RIVER
260
270
279
280
290
297+65.5
300
306
310
311
320
321
326
330
340
350
360
60' Lt.
P.C. 267+10.0
40' Rt. 3010.14
Δ = 55°10'
D = 3°15'
T = 921.0
P.T. 284+07.4
40' Lt. 3027.33
25' Rt.
57°06'
71.46' West
35.73 East
40' Lt. 3071.91
40' Rt.
N. 34°34' E.
40' Lt. 3074.00
40' Rt.
P.C. 332+32.0
Δ = 49°02'
D = 2°15'
T = 1161.5
P.T. 354+11.5
40' Lt.
40' Rt. 3025.19
N. 83°36' E.
SEC. 32
SEC. 33
24'
6'
1'
11'
11'
3'
2'
9'
9'
2½" Comp. bit. mat - Plant Mix - Proj. 8-A6:M2
7.2" Comp. existing surfacing placed under proj. 8-A5:M1
As const.
As const.

TYPICAL SECTION SHOWING
BITUMINOUS SURFACING

4"×4" WOODEN MAINTENANCE MARKERS SET AT EVERY TENTH STATION
STANDARD MONUMENTS SHOWN THUS: ●



Bituminous Surfacing Data
MC1 grade liquid asphalt in prime coat.
RC3 " " " mat and seal coat.
Mineral aggregate - 1" crushed gravel in mat
#3 to #10 mesh stone chips in seal coat.

CLASSIFICATION
CLEARING
SLOPES

DRAINAGE
STRUCTURES

BENCH MARKS
DATUM: MEAN SEA LEVEL
PLUS 93.30 FEET

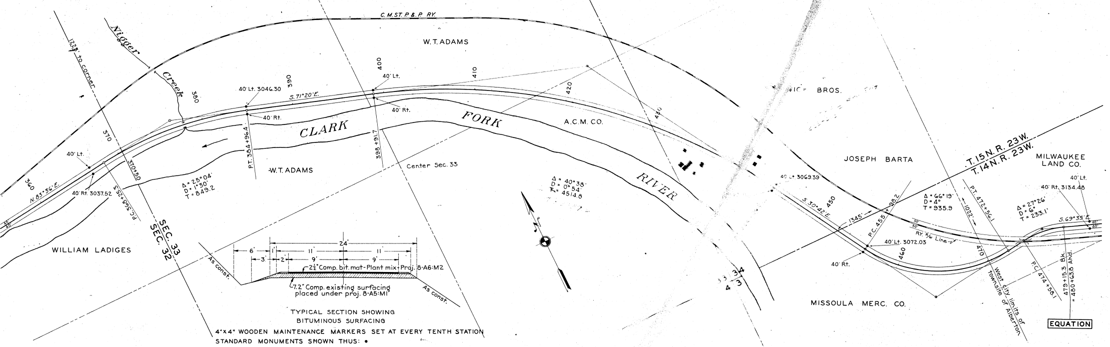
PROFILE
SCALE: HOR. 1" = 400'
VER. 1" = 40'

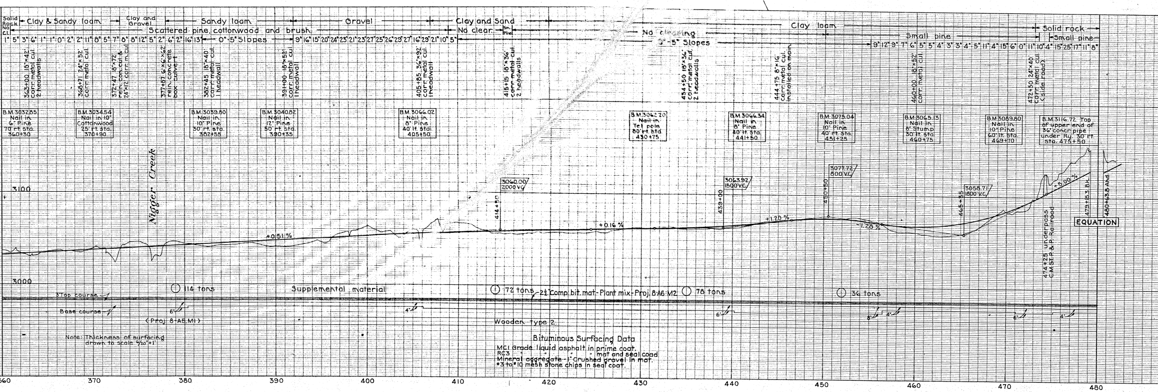
SURFACING
(PROJ. 8-A5,M1)

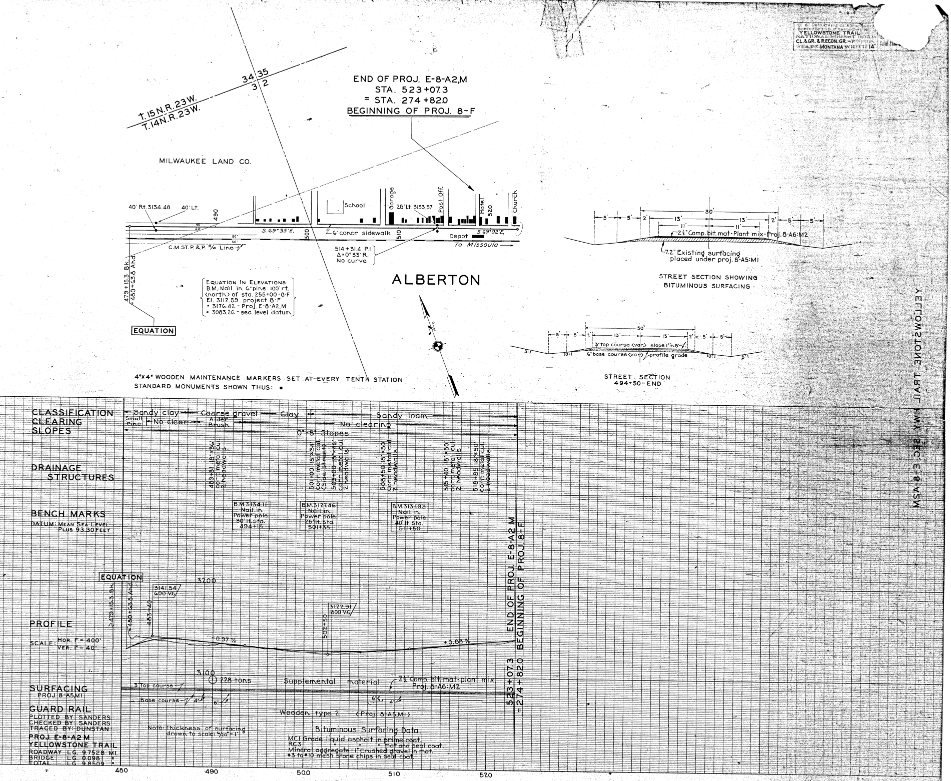
GUARD RAIL

PLOTTED BY: SANDERS
CHECKED BY: SANDERS
TRACED BY: DUNSTAN
PROJ. E-8-A2,M
YELLOWSTONE TRAIL
ROADWAY LG. 9.7528 MI.
BRIDGE LG. 0.0981 "
TOTAL LG. 9.8509 "

YELLOWSTONE TRAIL
CL.&GR.& RECON.GR.
MONTANA 14'
E8-A2:M
SHEET No. 4
Total Sheets 5


C.M.ST.P.&P. RY.
W.T. ADAMS
Nigger Creek
1223' to corner
380
390
400
410
420
430
40' Lt. 3046.30
S. 71°20' E.
40' Rt.
40' Lt.
40' Rt.
CLARK FORK RIVER
A.C.M. CO.
BROS.
370
360
40' Lt.
40' Rt. 3037.52
N. 83°36' E.
370+50
P.C. 368+25.3
P.T. 384+96.4
398+91.7
W.T. ADAMS
Center Sec. 33
Δ = 25°04'
D = 1°30'
T = 849.2
Δ = 40°38'
D = 0°54'
T = 4514.8
SEC. 33
SEC. 32
WILLIAM LADIGES
33 34
4 3
JOSEPH BARTA
T. 15 N. R. 23 W.
T. 14 N. R. 23 W.
MILWAUKEE LAND CO.
40' Lt. 3069.39
S. 30°42' E.
450
460
470
1345'
P.C. 455+98.2
40' Lt. 3072.03
40' Rt.
Δ = 66°19'
D = 4°
T = 935.9
1022'
P.T. 472+56.1
RY. R/W Line
50'
50'
Δ = 27°26'
D = 6°
T = 233.1'
40' Lt.
40' Rt. 3134.48
S. 69°35' E.
40'
40'
P.C. 474+58.1
479+15.3 Bk.
= 480+63.8 Ahd.
West city limits of townsite of Alberton
EQUATION
MISSOULA MERC. CO.
24'
6'
1'
11'
11'
3'
2'
9'
9'
2½" Comp. bit. mat-Plant mix-Proj. 8-A6:M2
7.2" Comp. existing surfacing placed under proj. 8-A5:M1
As const.
As const.
TYPICAL SECTION SHOWING BITUMINOUS SURFACING
4"x4" WOODEN MAINTENANCE MARKERS SET AT EVERY TENTH STATION
STANDARD MONUMENTS SHOWN THUS: ●





U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF PUBLIC ROADS
YELLOWSTONE TRAIL
NATIONAL FOREST ROAD
CL.&GR. & RECON.GR.
MONTANA
14'
Total Sheets
T.15N.R.23W.
T.14N.R.23W.
34
35
3
2
END OF PROJ. E-8-A2,M
STA. 523+07.3
= STA. 274+82.0
BEGINNING OF PROJ. 8-F
MILWAUKEE LAND CO.
40' Rt. 3134.48
40' Lt.
490
40'
40'
50'
50'
School
Garage
28' Lt. 3133.57
Post Off.
Hotel
520
Church
S. 69° 35' E.
500
6' concr. sidewalk
510
Depot
S. 69° 02' E.
To Missoula
C.M.ST.P.&P. R/W Line
514+31.4 P.I.
Δ=0°33' R.
No curve
479+15.3 Bk.
=480+63.8 Ahd.
EQUATION
Equation In Elevations
B.M. Nail in 6" pine 100' rt. (north) of sta. 255+00-8-F
El. 3112.59 project 8-F
= 3176.42 - Proj. E-8-A2,M
= 3083.26 - sea level datum
ALBERTON
N
4"x4" WOODEN MAINTENANCE MARKERS SET AT EVERY TENTH STATION
STANDARD MONUMENTS SHOWN THUS: ●
30'
5'
5'
2'
13'
11'
11'
13'
2'
5'
5'
2½" Comp. bit. mat-Plant mix-Proj. 8-A6:M2
7.2" Existing surfacing placed under proj. 8-A5:M1
STREET SECTION SHOWING BITUMINOUS SURFACING
30'
5'
5'
2'
13'
13'
2'
5'
5'
3" top course (var.) slope 1" in 8'
6" base course (var.)
profile grade
5:1
10:1
10:1
5:1
STREET SECTION 494+50-END
CLASSIFICATION
CLEARING
SLOPES
Sandy clay
Coarse gravel
Clay
Sandy loam
Small Pine
No clear
Alder Brush
No clearing
0°-5° Slopes
DRAINAGE STRUCTURES
489+81 18"x36' corr. metal cul. 2 headwalls
501+00 18"x34' corr. metal cul. (Side street)
503+00 18"x46' corr. metal cul. 2 headwalls
508+50 18"x50' corr. metal cul. 2 headwalls
515+40 18"x50' corr. metal cul. 2 headwalls
518+85 18"x50' corr. metal cul. 2 headwalls
BENCH MARKS
DATUM: MEAN SEA LEVEL PLUS 93.30 FEET
B.M. 3134.11 Nail in Power pole 30' lt. Sta. 494+15
B.M. 3127.46 Nail in Power pole 25' lt. Sta. 501+35
B.M. 3131.93 Nail in Power pole 40' lt. Sta. 511+50
EQUATION
3200
479+15.3 Bk.
=480+63.8 Ahd.
483+40
3141.54
600' V.C.
-0.97 %
502+50
3122.91
1800' V.C.
+0.88 %
PROFILE
SCALE: HOR. 1" = 400' VER. 1" = 40'
3100
① 228 tons
Supplemental material
2½" Comp. bit. mat-plant mix Proj. 8-A6:M2
3" Top course
Base course
4"
6"
6"
4"
SURFACING PROJ. 8-A5,M1
GUARD RAIL
Wooden type 2 (Proj. 8-A5,M1)
PLOTTED BY: SANDERS
CHECKED BY: SANDERS
TRACED BY: DUNSTAN
PROJ. E-8-A2 M
YELLOWSTONE TRAIL
ROADWAY LG. 9.7528 MI.
BRIDGE LG. 0.0981 "
TOTAL LG. 9.8509 "
Note: Thickness of surfacing drawn to scale: 4/20" = 1"
Bituminous Surfacing Data.
MC1 Grade liquid asphalt in prime coat.
RC3 " " " " mat and seal coat.
Mineral aggregate - 1" Crushed gravel in mat.
#3 to #10 mesh stone chips in seal coat.
523+07.3 END OF PROJ. E-8-A2 M
=274+82.0 BEGINNING OF PROJ. 8-F
480
490
500
510
520
YELLOWSTONE TRAIL HWY SEC E-8-A2M