MISSOURI

STATE HIGHWAY COMMISSION

PLAN AND PROFILE

OF PROPOSED

STATE ROAD

FEDERAL AID PROJECT

AUDRAIN COUNTY

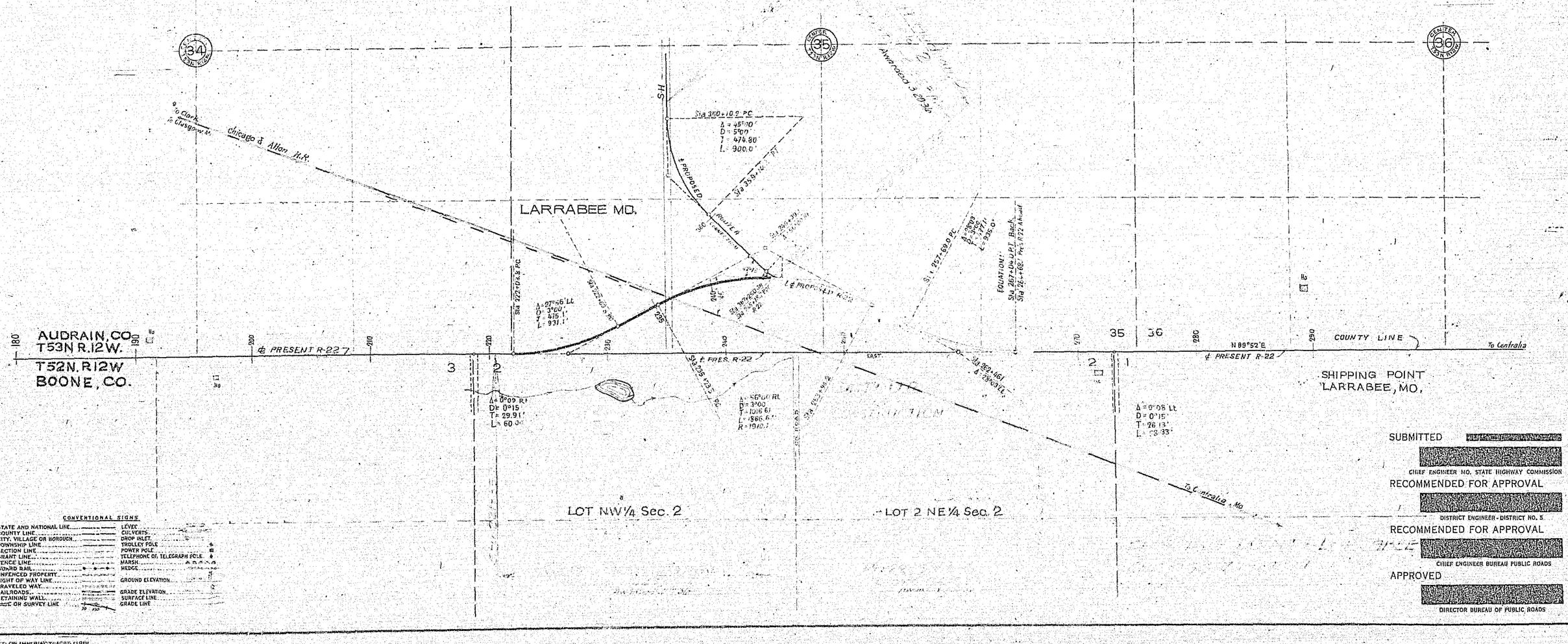
N

Scale 1"=400'

SCALES. PLAN 1 IN. = 100 FT.
PROFILE. HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.
CROSS-SECTIONS 1 IN. = 5 FT.

U.S. WORKS PROGRAM

GRADE CROSSING PROJ. NO. W.P.G.H. 303 G1



CONVENTIONAL SIGNS

STATE AND NATIONAL LINE		LEVEE	
COUNTY LINE		CULVERTS	
CITY, VILLAGE OR BOROUGH		DROP INLET	
TOWNSHIP LINE		TROLLEY POLE	
SECTION LINE		POWER POLE	
GRANT LINE		TELEPHONE OR TELEGRAPH POLE	
FENCE LINE		MARSH	
GUARD RAIL		HEDGE	
UNFENCED PROPERTY			
RIGHT OF WAY LINE		GROUND ELEVATION	
TRAVELED WAY			
RAILROADS		GRADE ELEVATION	
RETAINING WALL		SURFACE LINE	
BASE OR SURVEY LINE		GRADE LINE	

SUBMITTED

CHIEF ENGINEER MO. STATE HIGHWAY COMMISSION

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER - DISTRICT NO. 5.

RECOMMENDED FOR APPROVAL

CHIEF ENGINEER BUREAU PUBLIC ROADS

APPROVED

DIRECTOR BUREAU OF PUBLIC ROADS

PRINTED ON IMPERIAL TRACING CLOTH
A. S. ALOE CO.

Name of Road RTE US 63 TO MEXICO

Type of Improvement 30'G.E. & GRAVEL SURF.

MISSOURI STATE HIGHWAY COMMISSION

ESTIMATE SHEET

County of AUDRAIN - BOONE

Length 0.445 Miles

FED. ROAD DIST. No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	MO.			2A	
DIV. No.	COUNTY			ROUTE	SEC. No.
3	AUD.-BOONE			22	2A

EXCAVATION

	Station to Station	Class A	Borrow Class A	Inlet & Outlet Class A	FE & SE Cl. A	Cuv. Exc.	Fill	FE & SR Fill
	245+0							
	246+50	169					146	
	253+36	775					651	16
	255+16	188					162	
	260+59	720			78		586	100
SUB-TOTALS	266+18	279	2424	445		281	2714	
		2131	2424	445	78	281	4259	116
	Borrow	2424					116	F.E.&S.R.
	Inlet & at	445						
	FE & S.R.	78						
GRAND TOTALS		5078				281	4375	

LIGHT STONE REVETMENT

Station	Side	Sq. Yds.
262+50	Rt	101.0
262+50	Lt	57.0
TOTALS		158.0

REINFORCED CONCRETE BOX CULVERTS

STATION	STANDARD	SIZE	LENGTH	CONCRETE	REINF.	EXCAV.	REMARKS
261+83						233	Removal on Rt.
262+50	C-338	8 x 5	42'	48.50	4659	48	30° Sk. Lt. 3" Hdw. Lt.
TOTALS				48.50	4659	281	

PIPE CULVERTS

Station	Side	15"	Cl. A	Fill	Remarks
255+65	Rt	20'	78	87	F.E. 1.25 Tons Gravel
255+65	Lt	20'	0	13	F.E. 1.25 " "
TOTALS		40'	78	100	2.5 " "

RELAID PIPE CULVERT

Station	Side	18"	Cl. A	Fill	Remarks
247+27	Lt	20'	0	16	1.37 Tons Gravel
TOTALS		20'		16	1.37 " "

LENGTH OF PROJECT

End of Project	Sta.	266+18		
Beginning of Project	Sta.	245+00		
Apparent Length		21.18	Feet	
Equations and Exceptions:				
Sta. 267+64 =	BK.			
Sta. 264+68 =	AH.	+235.9		
Total Corrections		+235.9	Feet	
Net Length of Project		2353.9	Feet	
2353.9 Feet ÷ 5280 =		0.445	Miles	

GRAVEL SURFACING - "A"

Book No.	Station	to Station	Dates	Pounds
1	258+50	252+90	October 18, 1936	258893
2	252+90	247+30	October 18 & 19, 1936	236796
3	247+30	245+0		
	258+50	261+95	October 19 & 24, 1936	268205
4	261+95	263+19	(Additional on Soft Spots)	
	266+18	263+94	October 24, 25 & 28, 1936	269126
5	263+94	261+95	October 28, 1936	79707
	F.Ent.	Approaches	October 28, 1936	7738
			TOTAL	1140465

1,140,465 Lb = 570.2 TONS

STOCK PILE

Book No	Station	Side	Dates	Pounds
1	262+60	Rt	October 22 & 23, 1936	262188
			TOTAL	262188

262,188 Lb = 131.1 TONS

Gravel on Surface = 1,140,465 Lb

Deduct 7738 F.E.

Net on Surface 1,132727 Lb

= 566.3 TONS

Length of Surfacing = 23.539 Stations

566.3 Tons ÷ 23.539 Sta. = 24.06 Tons/Sta.

(Original Plans - 23 Tons/Sta).

SUMMARY

ITEM NO.	DESCRIPTION	UNIT	TOTAL UNITS	NO. UNITS FED. AID ONLY
1-D	Class A Excavation	Cu. Yd.	5078	V
1-I	Culvert Excavation	Cu. Yd.	281	V
13-C	Gravel Surfacing (A)	Ton	570.2	V
13-CC	Gravel (A) in Stock Piles	Ton	131.1	V
16-B	Class B Concrete Masonry	Cu. Yd.	48.50	V
18-D	15" Corr. Metal Pipe Culvts.	Lin. Ft.	40	V
19-A	Reinf. for Concr. Masonry	Lb.	4659	V
25-A	Light Stone Revetment	Sq. Yd.	158	V
	CONTINGENT ITEMS			
18-G	Relaid Pipe Culverts	Lin. Ft.	20	V

Prepared By B.M. Mutersbaugh Date Nov. 27 1936 Checked in Div. Office By Date 193 Checked in Central Office By Date 193

SE¼ SW¼ Sec. 35

Sta 2451+89 L Bl (No Ties)

S61°56'E

Sta 2531+92 PT

Sta 2571+90 PC

Borrow Pit No 3

STA. 0+00 OF END PROJ. 9030-1 BEGIN SEC. 2A

Δ = 56°30' Rt
D = 3°00'
T = 1015.61'
L = 1866.67'
SE = 0.0169 per ft.

BORROW EASEMENT
Palmer
Cultivated

Extra Excavation for Borrow Pit

Sta 2571+90 PC

Δ = 28°03' Lt
D = 3°00'
T = 477.1'
L = 935.0'
SE = 0.0029 per ft.

40'-100' Permanent Easement

Relay Rip Rap

Sta 267+44 P.I. Reloc. Rt. 22 Ah
Sta 264+44 P.I. Present Rt. 22 Ah

EQUATION 10

Ditch Block

Remove Relay Rip Rap

PRESENT RT. 22

D.S. - 267.0 Ck. Roll

Rip Rap

Water Stands

Centerline

Field

Cultivated

Pasture

R/W Mont.

Power line Al.

Co. Tel. Line

Users in Place

EAST

STA. 266+18 END R.T. 22 SEC. NO. 2A

POND

S89°59'E

STRUCTURES UNDER CONTRACT

Station	Sta.	Size	Length Cul. Ft.	Remarks
5+62	5+00	8'12"	40'	90° 20 deg. rein. conc.

SW¼ SE¼ Sec. 35 T. 52 N. R. 12 W.

Sta 2621+61 PI

Tan 2 | 62°-18' | Tan 2 | 33°-42' | FP | FP

PI 1+09'

GOLD Rod Set Cont. Mon.

SE¼ SE¼ Sec. 35

3 MAUDRAIN-BOONE 22 2-A

F. E. & S.R. APPROACHES

Station	Side	Rate	Length	Cl. A	Fill	Grave	Remarks
261+00	Lt.	1:4	60'	56	116	130	12
265+70	Lt.	1:4	50'		?	40	12

LIGHT STONE REVETMENT

Station	Station	Side	Sq. Yds.
261+50	262+50	Rt.	120.0
263+55	263+85	Lt.	30.0

Note:- Contractor will be permitted to use "Rip-rap" shown around old culvert right of Sta 261+83

STRUCTURES IN PLACE

STATION	DESCRIPTION	REMARKS	OLD/EXC
261+83 Lt.	40-STD. C-3310 10'x5'x16' R.A.	Remove & Fill	
265+70	30 STD. C-735 5'x3'x42'	Use in Place	

Sta 2621+61 PI

T. 51 N. R. 12 W.

LOT 2 NE¼ Sec. 2

Cl. B 782. Ac. 59.5

Cl. A 621 A-303

Cl. A - 540
Borrow - 3530
Cu. Yds. - 2 M.
F - 2883

Borrow obtained from East End of Borrow Pit No. 3

Spec. Ditch Lt.
Sec. A Sec. A

Spec. Ditch Rt.
Sec. A Sec. A

200 Vc.

-0.262 %

-1.5 %

0.10 %

EQUATION

Prof. as Staked

BM. Elev. 852.37 Spike & washer in root 20" cotton wood 80' Rt. sta 248+50

BM. Elev. 846.19 Rod in So. flow ll. culv. sta. 259+35.5 (Original Line)

BM. Elev. 854.67 bolt in N. flow ll. rein. culv. sta. 244+00 (Original Line)

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
GRADES CHECKED
R. W.'s NOTED
STRUCTURE NOTATIUS CHKD
NO.
DATE
BY