1st X

164

INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTIONS (3 Sheets)	2
SUMMARY (Sheet)	2-A
PLAN--PROFILE & B SHEETS	3-10
REFERENCE POINTS	11
SPECIAL SHEETS	12-23
LIGHTING	24-29A
SIGNALS	
SIGNING	30-45
CULVERT SECTIONS	46-58
BRIDGE PLANS	59-123
STANDARDS	42 Sheets
CROSS SECTIONS	1-54

RAMP DESIGN DESIGNATION

A.D.T. (1975) = 6890
A.D.T. (1988) - 8890
D.H.V. (1988) - 889
D=50%
T= 6%
V=40m.p.h.

MISSOURI
STATE HIGHWAY COMMISSION
PLAN AND PROFILE
OF PROPOSED
STATE ROAD

FEDERAL AID PROJECT

CLAY COUNTY

COUNTY
CLAY
STATE ROUTE NO.
I-29
PROJECT NO.
I-29-1(22)6,UA

FINAL PLANS

LIMITED ACCESS HIGHWAY

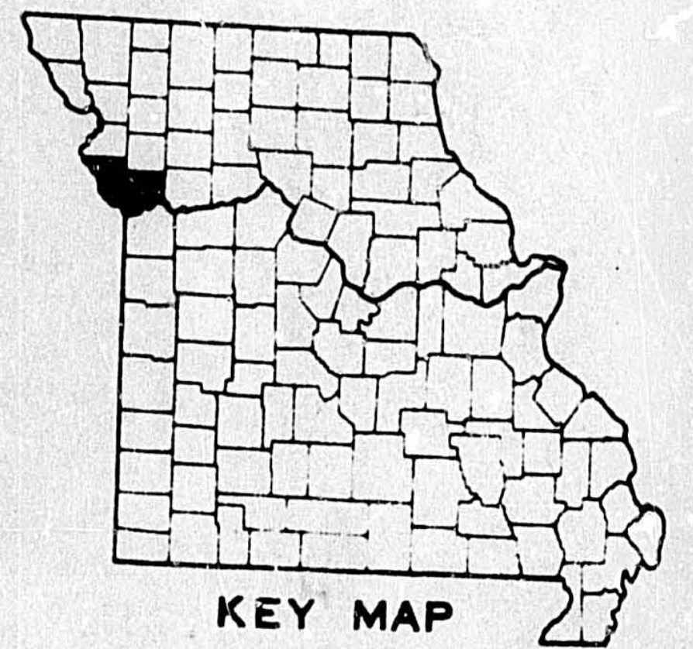
This shall be a limited access highway between Station 79+46.3 and Station 340+10.42 Except at locations and as otherwise specifically shown on these plans, no abutter's rights in or of direct access to, from, or across the highway or its right of way shall attach or belong to any property abutting on said section of highway, or to any person merely because of ownership of such abutting property. There shall be the usual right of access over any location either (1) shown on these plans as a property entrance (P.E.), field entrance (F.E.), or private underpass, or (2) where and when any such entrance, underpass, or an open public highway is being maintained by the governmental agency having authority thereto. Wherever an adjacent outer-roadway is so shown or maintained, there shall be the usual right of direct access between the abutting property and such outer-roadway to which access is not specifically prohibited by the special symbol denoting "No Right of Access" as shown on the plans, and along it to and from the nearest lane of the thruway or a public highway.

LEGEND

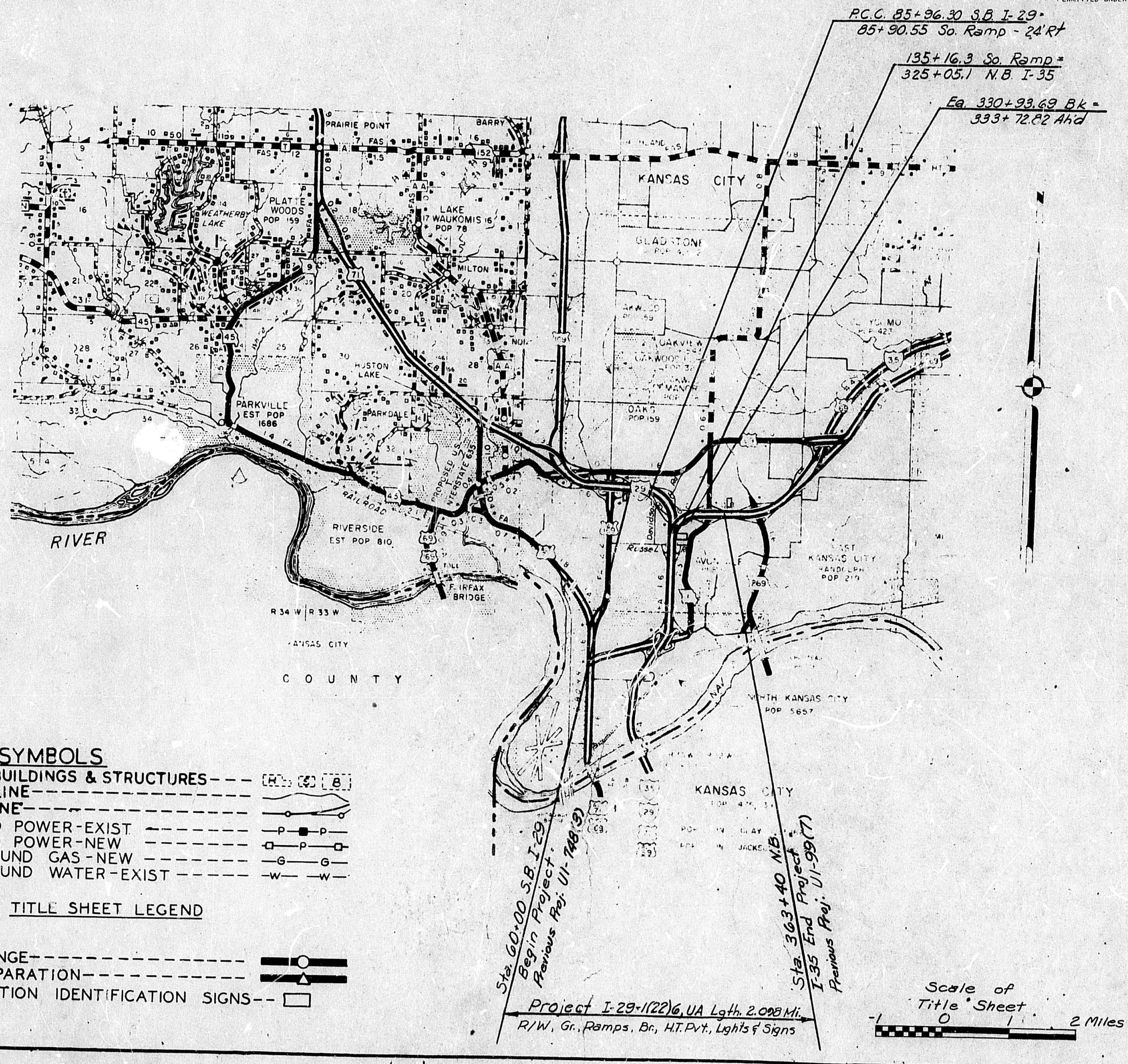
BEGINNING AND ENDING OF LIMITED ACCESS

LIMITED ACCESS

NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.



KEY MAP
SHOWING LOCATION OF COUNTY



P.C.C. 85+96.30 S.B. I-29 =
85+90.55 So. Ramp - 24' Rt
135+16.3 So. Ramp =
325+05.1 N.B. I-35
Eq. 330+93.69 Bk =
333+72.82 Ahd
PRAIRIE POINT
BARRY
KANSAS CITY
GLADSTONE
PLATTE WOODS
LAKE WAUKOMIS
WEATHERBY LAKE
MILTON
HOUSTON LAKE
OAKS
PARKVILLE EST POP 1686
RIVERSIDE EST POP 810
RIVER
FAIRFAX BRIDGE
R 34 W R 33 W
KANSAS CITY
COUNTY
NORTH KANSAS CITY
KANSAS CITY
Sta. 60+00 S.B. I-29
Begin Project
Previous Proj. UI-148(3)
Sta. 363+40 N.B.
I-35 End Project
Previous Proj. UI-99(7)
Project I-29-1(22)6,UA Lgth. 2.098 Mi.
R/W, Gr., Ramps, Br., H.T. Pvt., Lights & Signs
Scale of Title Sheet
-1 0 1 2 Miles

CONVENTIONAL SYMBOLS

STATE LINE
COUNTY LINE
CITY LIMITS
TOWNSHIP OR RANGE LINE
OTHER LAND SURVEY LINES
FENCE LINE
GUARD RAIL
PROPERTY LINE
RIGHT OF WAY LINE
RIGHT OF WAY MARKER
RAILROAD
SURVEY CENTER-LINE
CULVERT
OVERHEAD TELEPHONE NEW
OVERHEAD TELEPHONE EXIST.
EXISTING BUILDINGS & STRUCTURES
GROUND LINE
GRADE LINE
OVERHEAD POWER-EXIST
OVERHEAD POWER-NEW
UNDERGROUND GAS-NEW
UNDERGROUND WATER-EXIST

TITLE SHEET LEGEND

INTERCHANGE
GRADE SEPARATION
CONSTRUCTION IDENTIFICATION SIGNS

M. J. SNIDER
NUMBER
E-623

[redacted]

SUBMITTED BY DATE ________

CHIEF ENGINEER
MISSOURI STATE HIGHWAY COMMISSION

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

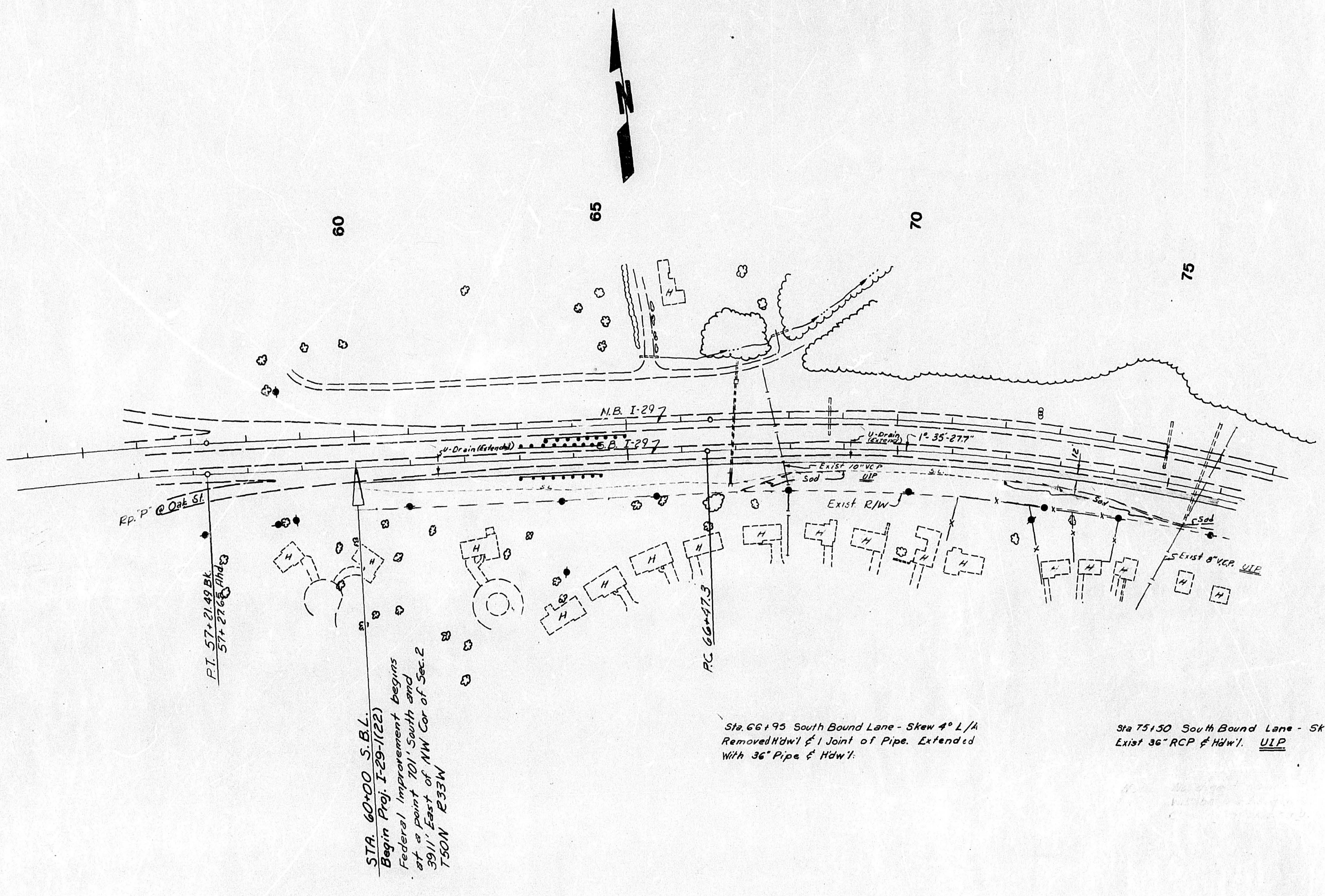
APPROVED:

DIVISION ENGINEER DATE

FED. ROAD DIV. No.	STATE	FEDERAL PROJECT No. & SEC.		SHEET No.
5	MO.	I-29-1(22)		3
DIST. No.	COUNTY		ROUTE	SEC.
4	CLAY		I-29	

FINAL PLANS

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		


N
60
65
70
75
N.B. I-29
S.B. I-29
U-Drain (Extended)
U-Drain (Extend)
1°-35'-27.7"
12'
Exist 10" V.C.P. UIP
Sod
S.L.
Exist R/W
Sod
Sod
Exist 8" V.C.P. UIP
H
Rp. "P" @ Oak St.
P.T. 57+21.49 Bk. 57+27.65 Ahd.
P.C. 66+47.3
STA. 60+00 S.B.L.
Begin Proj. I-29-1(22)
Federal Improvement begins
at a point 701' South and
3911' East of NW Cor of Sec. 2
T50N R33W

Sta. 66+95 South Bound Lane - Skew 4° L/A
Removed H'dw'l & 1 Joint of Pipe. Extended
With 36" Pipe & H'dw'l.

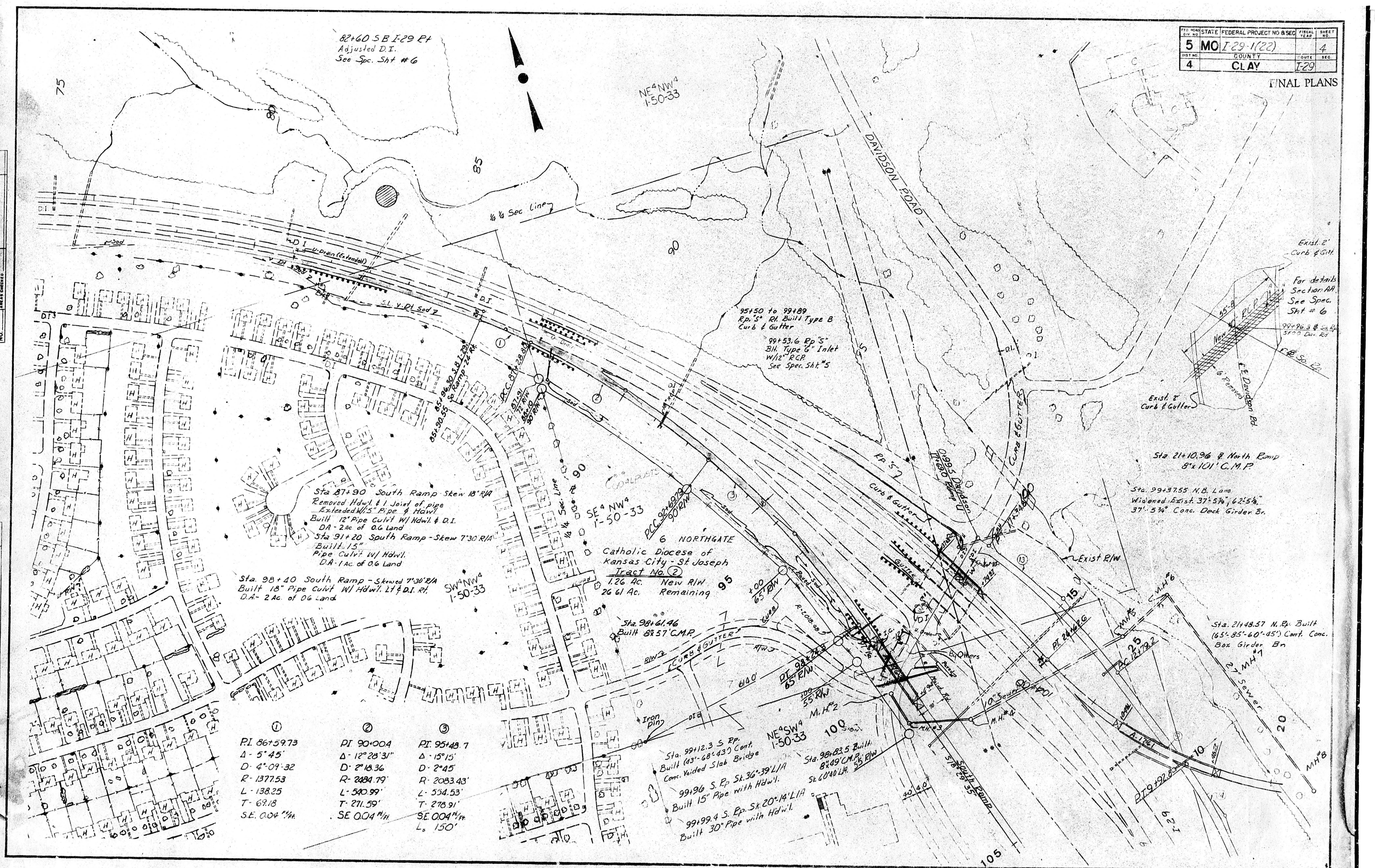
Sta 75+50 South Bound Lane - Skew 11°20' L/A
Exist 36" RCP & H'dw'l. UIP

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED	Bowman	
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

171

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO & SEC	FISCAL YEAR	SHEET NO.
5	MO	I-29-1(22)		4
DIST. NO.	COUNTY		ROUTE	SEC.
4	CLAY		I-29	

FINAL PLANS

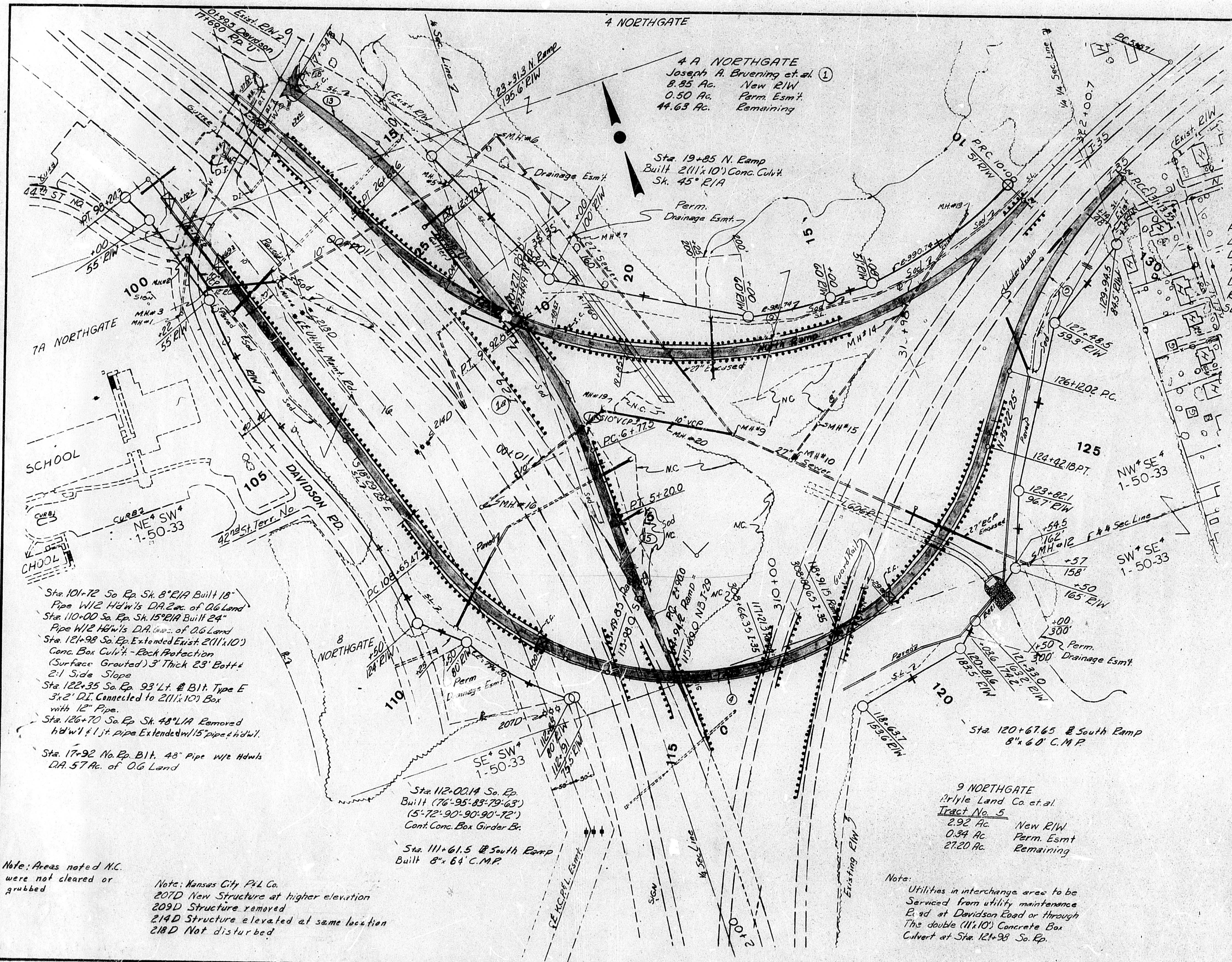


82+60 S.B. I-29 Rt
Adjusted D.I.
See Spc. Sht #6
NE4 NW4
1-50-33
DAVIDSON ROAD
75
80
85
90
95
100
105
15
20
25
10
1/16 Sec Line
D.I.
U-Drain (Extended)
Sod
SLY D.I. Sod
85+90.55 S.B. I-29 Rt.
88+ 90 R/W
P.C. 87+28.8
95+50 to 99+89
Rp. "S" Rt. Built Type B
Curb & Gutter
99+53.6 Rp "S"
Blt. Type "G" Inlet
W/12" R.C.P.
See Spec. Sht. #5
Sta 87+90 South Ramp Skew 18° R/A
Removed Hdw'l. & 1 Joint of pipe
Extended W/15" Pipe & Hdw'l
Built 12" Pipe Culv't W/ Hdw'l. & D.I.
DA - 2 Ac of 0.6 Land
Sta 91+20 South Ramp - Skew 7°30' R/A
Built 15"
Pipe Culv't W/ Hdw'l.
D.A - 1 Ac. of 0.6 Land
Sta. 98+40 South Ramp - Skewed 7°30' R/A
Built 18" Pipe Culv't W/ Hdw'l. Lt & D.I. Rt.
D.A.- 2 Ac. of 0.6 Land
SW4 NW4
1-50-33
1/4 1/4 Sec. Line
SE4 NW4
1-50-33
GOALPOSTS
P.C.C. 92+69.79
90' R/W
6 NORTHGATE
Catholic Diocese of
Kansas City - St. Joseph
Tract No. 2
1.26 Ac. New R/W
26.61 Ac. Remaining
+00
65' R/W
Sta. 98+61.46
Built 8'x 57' C.M.P.
Curb & Gutter
R/W
Paved
R=2018.98
Iron Pin
DI
614.0'
P.T. 98+24.3
65' R/W
+00
55' R/W
M.H. #2
NE4 SW4
1-50-33
Sta. 99+12.3 S Rp.
Built (43'-68'-43') Cont.
Conc. Voided Slab Bridge
99+96 S. Rp Sk. 36°-39' L/A
Built 15" Pipe with Hdw'l.
99+99.4 S. Rp. Sk. 20°-14' L/A
Built 30" Pipe with Hdw'l.
Sta. 98+83.5 Built
8'x 49' C.M.P.
Sk 60°40' L/A.
55' R/W
40' 40'
South Ramp
I-29
Curb & Gutter
Rp "S"
Exist R/W
M.H. #3
M.H. #4
M.H. #5
M.H. #6
MH #7
MH #8
27" Sewer
P.T. 24+62.6
P.C. 12+79.2
P.T. 9+92.8
Exist. 2' Curb & Gtt.
For details
Section AA
See Spec.
Sht # 6
55'-8"
New 30" R.C.P.
99+96.3 ℄ So. Rp
5+00 Dav. Rd.
℄ So. Rp.
℄ Davidson Rd.
6' Removed
Exist. 2' Curb & Gutter
Sta 21+10.96 ℄ North Ramp
8'x 101' C.M.P.
Sta. 99+37.55 N.B. Lane
Widened Exist. 37'-5¾", 62'-5⅛",
37'-5¾" Conc. Deck Girder Br.
Sta. 21+48.57 N. Rp. Built
(65'-85'-60'-45') Cont. Conc.
Box Girder Br.
FINAL
SURVEY
NOTEBOOK
NO.

①	②	③
P.I. 86+59.73	P.I. 90+00.4	P.I. 95+48.7
Δ - 5°45'	Δ - 12°28'31"	Δ - 15°15'
D - 4°-09'-32	D - 2°18.36	D - 2°45'
R - 1377.53	R - 2484.79'	R - 2083.48'
L - 138.25	L - 540.99'	L - 554.53'
T - 69.18	T - 271.59'	T - 278.91'
S.E. 0.04 Ft/Ft.	SE 0.04 Ft/Ft	S.E. 0.04 Ft/Ft
		Ls 150'

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO & SEC	FISCAL YEAR	SHEET NO.
5	MO	I-29-1(22)		5
DIST. NO.	COUNTY		ROUTE	SEC.
4	CLAY		I-29	

FINAL PLANS


4 NORTHGATE
7A NORTHGATE
8 NORTHGATE
SCHOOL
CHOOL
DAVIDSON RD.
42nd St. Terr. No.
44th ST. NO.
NE4 SW4 1-50-33
NW4 SE4 1-50-33
SW4 SE4 1-50-33
SE4 SW4 1-50-33
North Ramp
Drainage Esm't.
Perm. Drainage Esmt.
Existing R/W
Sec. Line
1/4 Sec. Line
100
105
110
115
120
125
130
10
15
20

4 A NORTHGATE
Joseph A. Bruening et. al. ①
8.85 Ac. New R/W
0.50 Ac. Perm. Esm't.
44.63 Ac. Remaining

Sta. 19+85 N. Ramp
Built 2(11'x 10') Conc. Culv't.
Sk. 45° R/A

Sta. 101+72 So Rp. Sk. 8°R/A Built 18" Pipe W/2 Hd'w'ls D.A. 2 ac. of 0.6 Land
Sta. 110+00 So. Rp. Sk. 15°R/A Built 24" Pipe W/2 Hd'w'ls D.A. [illegible] of 0.6 Land
Sta. 121+98 So. Rp. Extended Exist. 2(11'x10') Conc. Box Culv't. - Rock Protection (Surface Grouted) 3' Thick 23' Bott. & 2:1 Side Slope
Sta. 122+35 So. Rp. 93' Lt. ℄ Blt. Type E 3'x2' D.I. Connected to 2(11'x10') Box with 12" Pipe.
Sta. 126+70 So. Rp Sk. 48°L/A Removed hd'w'l & 1 jt. pipe Extended w/15" pipe & hd'w'l.

Sta. 17+92 No. Rp. Blt. 48" Pipe w/2 Hdwls D.A. 57 Ac. of 0.6 Land

Sta. 112+00.14 So. Rp.
Built (76'-95'-83'-79'-63')
(5'-72'-90'-90'-90'-72')
Cont. Conc. Box Girder Br.

Sta. 111+61.5 ℄ South Ramp
Built 8"x 64' C.M.P.

Sta. 120+67.65 ℄ South Ramp
8"x 60' C.M.P.

9 NORTHGATE
Arlyle Land Co. et. al.
Tract No. 5
2.92 Ac. New R/W
0.34 Ac. Perm. Esmt
27.20 Ac. Remaining

Note: Areas noted N.C. were not cleared or grubbed

Note: Kansas City P&L Co.
207D New Structure at higher elevation
209D Structure removed
214D Structure elevated at same location
218D Not disturbed

Note:
Utilities in interchange area to be Serviced from utility maintenance Road at Davidson Road or through The double (11'x10') Concrete Box Culvert at Sta. 121+98 So. Rp.

RAMP "U"

⑬
P.I. 15+09.0
Δ 18°-13'-30"
D 4°
T 229.8'
L 455.6'
R 1432.39'
SE 0.05'/ft.

⑭
P.I. 8+36.6
Δ 18°-55'
D 6°
T 159.1'
L 315.3'
R 954.93
SE. 0.07'/ft.

⑮
P.I. 4+05.0
Δ 2°-18'
D 1°
T 115.0'
L 230.0'
R 5729.58'

NORTH RAMP

⑨
P.I. 20+68.7
Δ 91°26'30"
D 5°30'
R 1041.74'
L 1662.6'
T 1068.7'
S.E 0.06'/ft.

④
P.I. 122+75.23
Δ 126°08'10"
D 8°00'
R 716.20'
L 1576.71'
T 1409.76'
SE. 0.08'/ft.

⑤
P.I. 128+68.71
Δ 30°05'30"
D 6°00'
R 954.93'
L 501.53'
Ls 150
T 256.69
S.E. 0.07'/ft.

Sta. 5+09 Rp. "U" Sk. 11°30' R/A Extended w/18" pipe & Hd'w'l.
Sta. 6+19.4 Rp. "U" Sk. 7° R/A Extended w/30" pipe & Hd'w'l.
Sta. 10+00 Rp. "U" Blt. 3'x2' Type "E" D.I. & 18" Pipe w/ Hd'w'l.
Sta. 11+00.8 Rp. "U" Blt. 3'x3' M.H. & 15" Pipe
Sta. 11+30 Rp. "U" Blt. Cantilever Type Retaining Wall.

FINAL SURVEY
NOTEBOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FINAL SURVEY
NOTEBOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

173

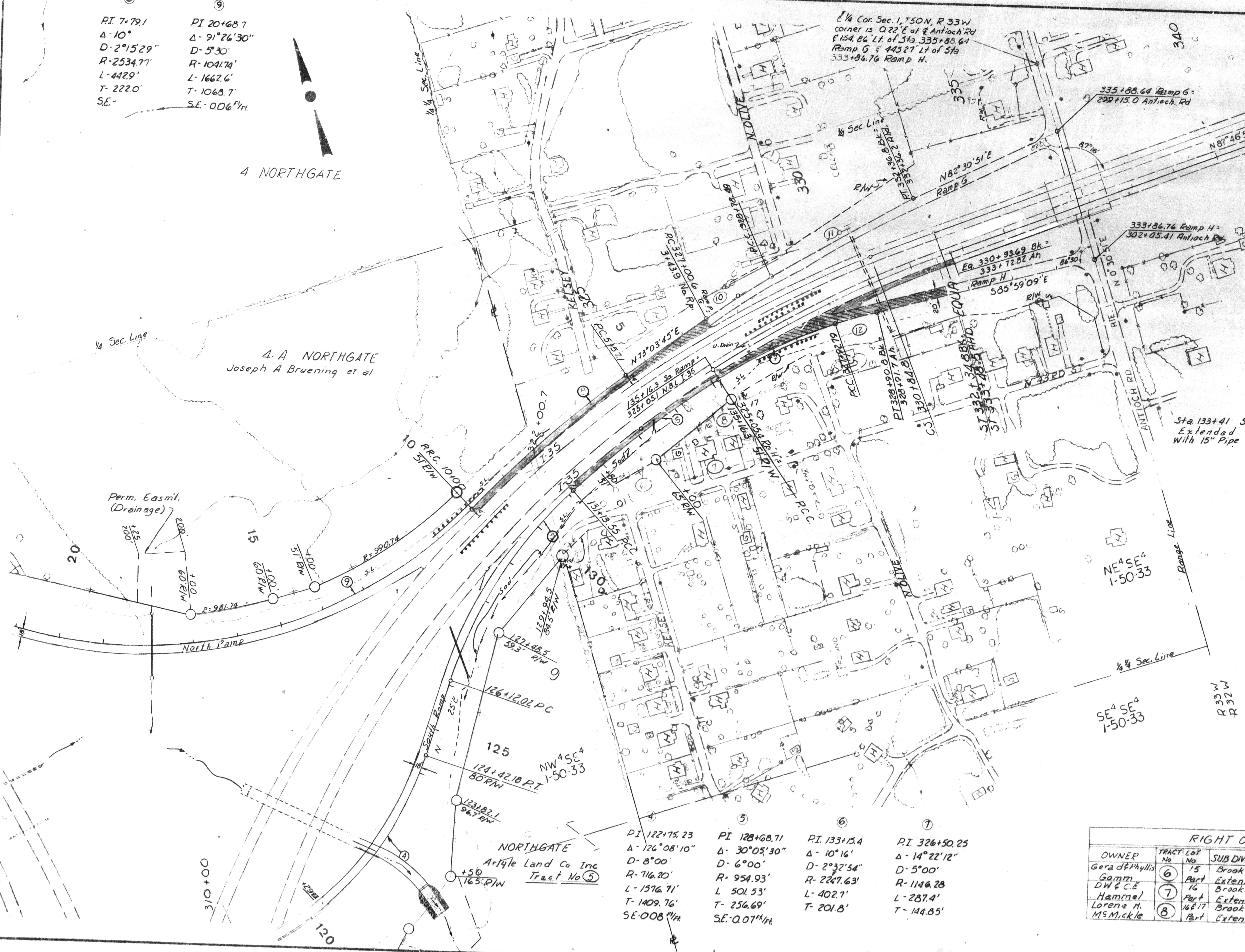
FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO & SEC	FISCAL YEAR	SHEET NO.
5	MO	I-29-1(22)		6
DIST. NO.	COUNTY		ROUTE	SEC.
4	CLAY		I-29	

FINAL PLANS

⑧
P.I. 7+79.1
Δ-10°
D-2°15'29"
R-2534.77'
L-442.9'
T-222.0'
S.E.-

⑨
P.I. 20+68.7
Δ-91°26'30"
D-5°30'
R-1041.74'
L-1662.6'
T-1068.7'
S.E.-0.06 Ft/Ft.

E 1/4 Cor. Sec. 1, T50N, R33W
corner is 0.22' E of ℄ Antioch Rd
& 154.86' Lt. of Sta. 335+88.64
Ramp G & 445.27' Lt of Sta
333+86.76 Ramp H.


4 NORTHGATE
4-A NORTHGATE
Joseph A Bruening et al
1/4 Sec. Line
1/4 1/4 Sec. Line
1/4 1/4 Sec. Line
Perm. Easm't. (Drainage)
North Ramp
South Ramp
I-35
I-35
N 73°03'45"E
N 82°30'51"E
N 87°46'51"E
87°16'
86°30'
Ramp G
Ramp H
S 85°59'09"E
335+88.64 Ramp G = 299+15.0 Antioch Rd
333+86.76 Ramp H = 302+05.41 Antioch Rd
Eq 330+93.69 Bk = 333+72.82 Ah
PT 332+96.8 Bk = 332+34.2 Ah
PI 328+91.7 Ah
328+00.0 Bk
330+84.8
EQUA
ANTIOCH RD
N 0°30' E
N 43RD ST
N OLIVE
N OLIVE
KELSEY
KELSEY
R/W
Range Line
NE4 SE4 1-50-33
SE4 SE4 1-50-33
NW4 SE4 1-50-33
R33W R32W
NORTHGATE
Argyle Land Co Inc
Tract No ⑤
PRC 101+01
PC 327+00.6 No. Rp.
PC 515+71
PCC
135+16.3 So. Ramp = 325+05 N.B.L. I-35
127+48.5 59.3' R/W
126+12.02 PC
124+42.18 P.I. 80' R/W
123+82.1 96.7' R/W
+50 165' R/W
R=990.74
R=981.74
Sod
U. Drain
310+00
120
125
130
15
20
5
9
10
325
330
335
340

Sta. 133+41 South Ramp Skew 32° L/A
Extended
With 15" Pipe & Hdw'l.

⑩
P.I. 327+89.5
Δ-2°-40'-06"
D-1°30'
R-3819.83
L-177.89
T-88.9

⑪
P.I. 330+57.9
Δ-6°-47'
D-1°-53'-36"
R-3376.33
T-179.35
L-358.3

⑫
P.I. 328+41.8
Δ-3°-54'-44"
D-3°-59'-32"
R-1435.39
T-49.03
L 98.01

④
P.I. 122+75.23
Δ-126°08'10"
D-8°00'
R-716.20'
L-1576.71'
T-1409.76'
SE-0.08 Ft/Ft.

⑤
P.I. 128+68.71
Δ-30°05'30"
D-6°00'
R-954.93'
L 501.53'
T-256.69'
S.E.-0.07 Ft/Ft.

⑥
P.I. 133+15.4
Δ-10°16'
D-2°32'54"
R-2247.63'
L-402.7'
T-201.8'

⑦
P.I. 326+50.25
Δ-14°22'12"
D-5°00'
R-1146.28
L-287.4'
T-144.85'

RIGHT OF WAY

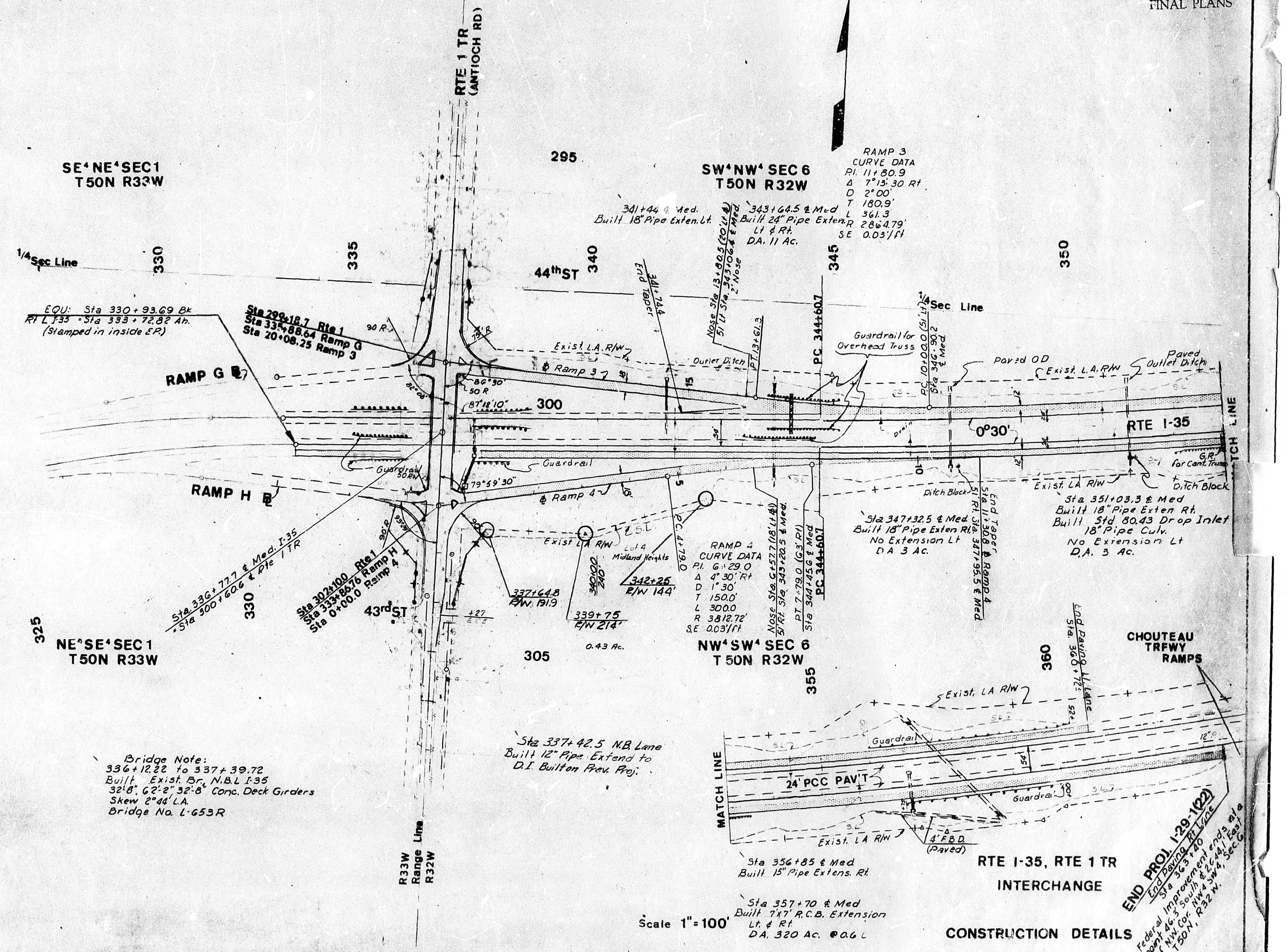
OWNER	TRACT No	LOT No	SUB DIVISION	NEW R/W	TEMP. ESMT.	REMAIN-ING
Gerad & Phyllis Gamm	⑥	15 Part	Brookwood Extension	1493 sf.	4950 sf	8998 sf
DW & C.E Hammel	⑦	16 Part	Brookwood Extension	608 sf.	—	7811 sf.
Lorene H. McMickle	⑧	16 & 17 Part	Brookwood Extension	157 sf.	—	9968 sf.

FINAL SURVEY NOTEBOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY NOTEBOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FED. ROAD DIV. No.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	I-29-1(22)	7
DIST. No.	COUNTY	ROUTE	
4	CLAY	I-29	

FINAL PLANS


N
RTE 1 TR (ANTIOCH RD)
295
SE¼ NE¼ SEC 1
T50N R33W
SW¼ NW¼ SEC 6
T50N R32W
NE¼ SE¼ SEC 1
T50N R33W
NW¼ SW¼ SEC 6
T50N R32W
¼ Sec Line
¼ Sec Line
330
335
340
345
350
325
330
355
360
300
305
44th ST
43rd ST
RAMP G
RAMP H
℄ Ramp 3
℄ Ramp 4
RTE I-35
0°30'
MATCH LINE
MATCH LINE
Exist. L.A. R/W
Exist. LA R/W
Outlet Ditch
Paved OD
Paved Outlet Ditch
Guardrail for Overhead Truss
Guardrail
G.R. for Cant. Truss
Ditch Block
Ditch Block
Drain
90 R
50 R
90'R
86°30'
87°18'10"
79°59'30"
Lot 4 Midland Heights
0.43 Ac.
24' PCC PAV'T
4' F.B.D. (Paved)
CHOUTEAU TRFWY RAMPS
R33W Range Line R32W
Scale 1" = 100'

EQU: Sta 330 + 93.69 Bk
Rt L I-35 = Sta 333 + 72.82 Ah.
(Stamped in inside E.P.)

Sta 299+18.7 Rte 1
Sta 335+88.64 Ramp G
Sta 20+08.25 Ramp 3

Sta 336+77.7 ℄ Med. I-35
= Sta 300+60.6 ℄ Rte 1 TR

Sta 302+100 Rte 1
Sta 333+86.76 Ramp H
Sta 0+00.0 Ramp 4

341+44 ℄ Med.
Built 18" Pipe Exten. Lt.

343+64.5 ℄ Med
Built 24" Pipe Exten.
Lt & Rt.
D.A. 11 Ac.

341+74.4 End Taper

Nose Sta 13+80.5 (20' Lt ℄)
51' Lt Sta. 343+06.4 ℄ Med.
2' Nose

PT 13+61.3

PC 344+60.7

PC 10+00.0 (51' Lt)
Sta 346+90.2 ℄ Med.

RAMP 3
CURVE DATA
P.I. 11+80.9
Δ 7°13'30" Rt
D 2°00'
T 180.9'
L 361.3
R 2864.79'
SE 0.03'/ft

337+64.8
R/W 191.9

340+00
240'

339+75
R/W 214'

342+25
R/W 144'

P.C. 4+79.0

RAMP 4
CURVE DATA
P.I. 6+29.0
Δ 4°30' Rt
D 1°30'
T 150.0'
L 300.0
R 3812.72'
S.E 0.03'/ft

Nose Sta. 6+57.7 (18' Lt ℄)
51' Rt. Sta. 343+20.5 ℄ Med.

PT 7+79.0 (63' Rt)
Sta 344+45.6 ℄ Med
PC 344+60.7

Sta 347+32.5 ℄ Med.
Built 18" Pipe Exten Rt.
No Extension Lt
D.A. 3 Ac.

End Taper
Sta 11+30.8 ℄ Ramp 4
51' Rt. Sta. 347+95.5 ℄ Med.

Sta 351+03.3 ℄ Med
Built 18" Pipe Exten Rt.
Built Std 80.43 Drop Inlet
18" Pipe Culv.
No Extension Lt
D.A. 3 Ac.

End Paving Lt. Lane
Sta. 360+72±

Bridge Note:
336+12.22 to 337+39.72
Built Exist. Br. N.B.L I-35
32'-8", 62'-2", 32'-8" Conc. Deck Girders
Skew 2°44' L.A.
Bridge No. L-653R

Sta 337+42.5 N.B. Lane
Built 12" Pipe Extend to
D.I. Built on Prev. Proj.

Sta 356+85 ℄ Med
Built 15" Pipe Extens. Rt.

Sta 357+70 ℄ Med
Built 7'x7' R.C.B. Extension
Lt. & Rt.
D.A. 320 Ac. @ 0.6 L

END PROJ. I-29-1(22)
End Paving Rt Lane
Sta 363+40
Federal Improvement ends at a point 46.3' South & 2644.1' East of N.W. Cor. NW¼ SW¼, Sec. 6 T50N, R32W.

RTE I-35, RTE 1 TR
INTERCHANGE

CONSTRUCTION DETAILS

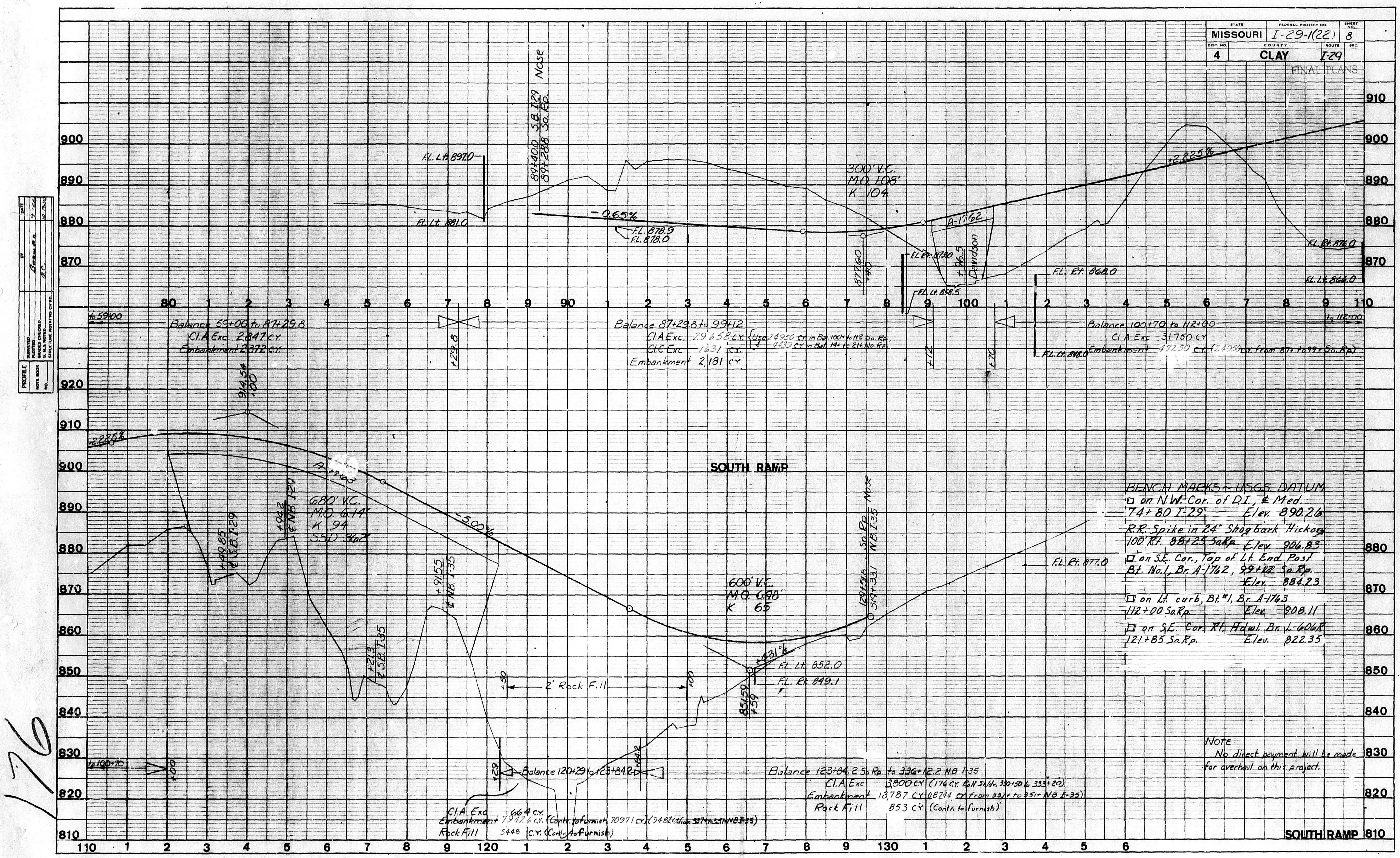
175

520

STATE	FEDERAL PROJECT NO.	SHEET NO.
MISSOURI	I-29-1(22)	8

DIST. NO.	COUNTY	ROUTE	SEC.
4	CLAY	I-29	

FINAL PLANS



PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
S. N. S. NOTED
STRUCTURE NOTATIONS CH'KD.
NOTE BOOK NO.
176
F.L. Lt. 897.0
F.L. Lt. 881.0
89+40.0 S.B. I-29
89+28.8 So. Rp.
Nose
-0.65%
F.L. 878.9
F.L. 878.0
300' V.C.
M.O. 1.08'
K 104
877.60
+40
F.L. Rt. 873.0
F.L. Lt. 858.5
A-1762
+96.5
Davidson
F.L. Rt. 868.0
F.L. Lt. 848.0
+2.25%
F.L. Rt. 876.0
F.L. Lt. 866.0
to 59+00
Balance 59+00 to 87+29.8
Cl. A Exc. 2,847 c.y.
Embankment 2,372 c.y.
+29.8
Balance 87+29.8 to 99+12
Cl. A Exc. 29,658 c.y. {Use 24950 c.y. in Bal. 100+ to 112 So. Rp.
4439 c.y. in Bal. 14+ to 21+ No. Rp.
Cl. C Exc. 1631 c.y.
Embankment 2,181 c.y.
+12
+70
Balance 100+70 to 112+00
Cl. A Exc. 31,750 c.y.
Embankment 47,250 c.y. (24950 c.y. from 87+ to 99+ So. Rp.)
to 112+00
914.54
+00
+2.25%
A-1763
680' V.C.
M.O. 6.14'
K 94
SSD 362'
+90.85
℄ S.B. I-29
+94.2
℄ N.B. I-35
-5.00%
+91.55
℄ N.B. I-35
+21.3
℄ S.B. I-35
SOUTH RAMP
600' V.C.
M.O. 6.98'
K 65
+4.31%
F.L. Lt. 852.0
F.L. Rt. 849.1
851.50
+59
120+54.4 So. Rp.
319+33.1 N.B. I-35
Nose
F.L. Rt. 877.0
+50
2' Rock Fill
+00
to 100+70
+00
+29
Balance 120+29 to 123+84.2
+84.2
Cl. A Exc. 664 c.y.
Embankment 79426 c.y. (Contr. to furnish 70971 c.y.) (9482 c.y. from 337+ to 351+ NB I-35)
Rock Fill 5448 c.y. (Contr. to furnish)
Balance 123+84.2 So. Rp. to 336+12.2 NB I-35
Cl. A Exc. 3,800 c.y. (176 c.y. Roll Shldr. 330+50 to 333+20)
Embankment 18,787 c.y. (18744 c.y. from 337+ to 351+ NB I-35)
Rock Fill 853 c.y. (Contr. to furnish)
SOUTH RAMP

BENCH MARKS ~ USGS DATUM

☐ on N.W. Cor. of D.I., ℄ Med.
74+80 I-29 Elev. 890.26

R.R. Spike in 24" Shagbark Hickory
100' Rt. 88+25 So.Rp. Elev. 906.83

☐ on S.E. Cor., Top of Lt. End Post
Bt. No. 1, Br. A-1762, 99+12 So.Rp.
Elev. 884.23

☐ on Lt. curb, Bt. #1, Br. A-1763
112+00 So.Rp. Elev. 908.11

☐ on S.E. Cor. Rt. Hdwl. Br. L-606R
121+85 So.Rp. Elev. 822.35

Note:
No direct payment will be made for overhaul on this project.

STATE	FEDERAL PROJECT NO.		SHEET NO.
MISSOURI	I-29·1(22)		9
DIST. NO.	COUNTY	ROUTE	SEC.
4	CLAY	I-29	

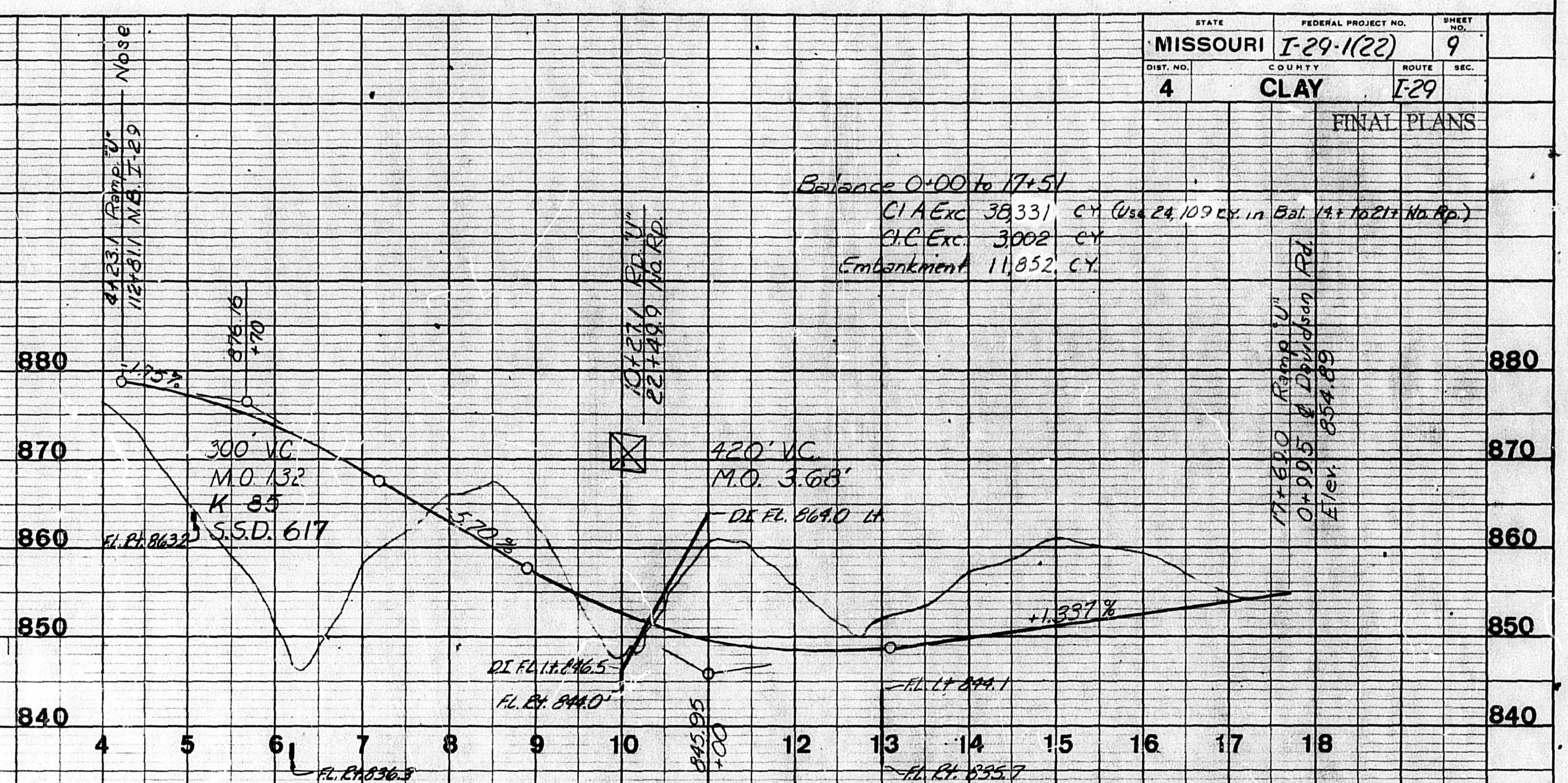
FINAL PLANS

PROFILE		BY	DATE
	SURVEYED		
	PLOTTED	Beeman	9-66
NOTE BOOK	GRADES CHECKED		
NO.	B. M.S NOTED	A.C.	10-29-20
	STRUCTURE NOTAT'NS CH'KD.		

BENCH MARKS ~ U.S.G.S. DATUM

Top Bolt on Top Conc. Wall W. End Bridge 33' Rt. of 99+46 N.B.L. I-29 Elev. 882.17

☐ on S.E. Cor., Top of Ret. Wall Lt. 11+15 Rp. "U". Elev. 849.86



Balance 0+00 to 17+51
Cl. A Exc. 38,331 C.Y. (Use 24,109 c.y. in Bal. 14+ to 21+ No. Rp.)
Cl. C Exc. 3,002 C.Y.
Embankment 11,852 C.Y.

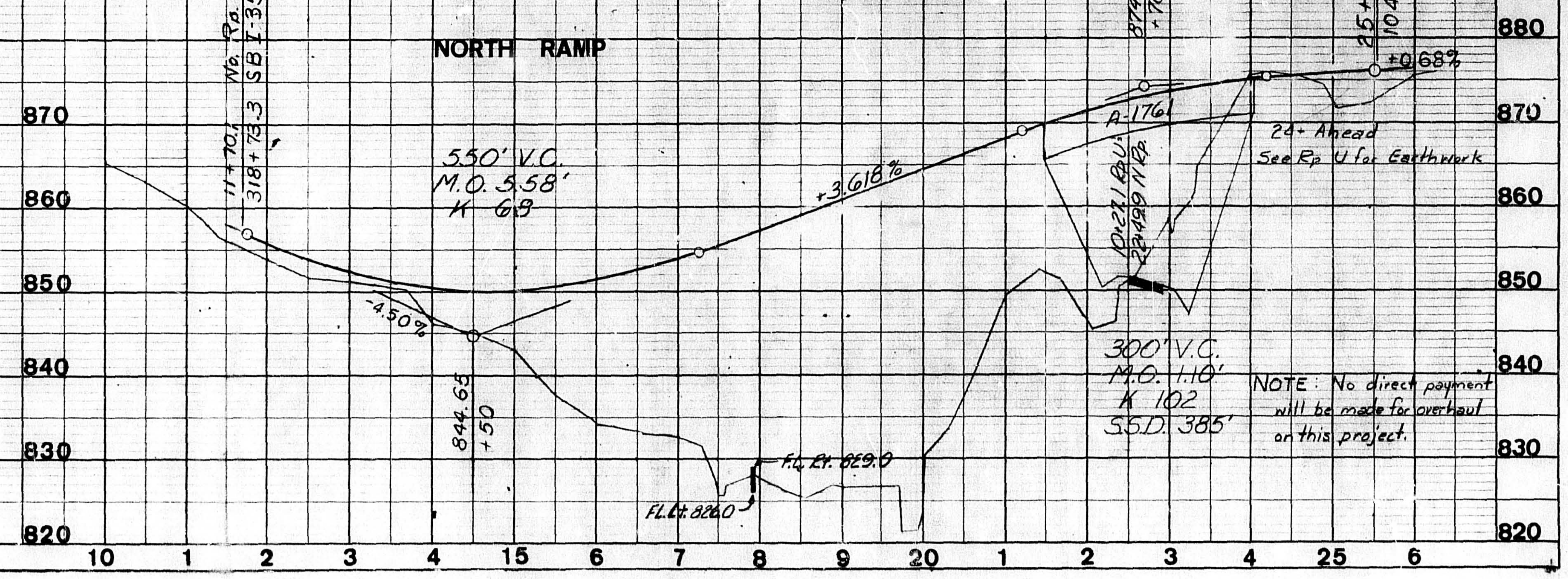
RAMP "U"

Balance 95+00 to 99+36 NB I-29
Cl. A Exc. 144 C.Y.
Embankment 2,667 C.Y. (Contr. to furnish 2548 C.Y.)

Balance 3+43.9 to 14+16
Cl. A Exc. 842 C.Y. (324 from Rp. G & Shldr.)
Embankment 1644 C.Y. (454 from 337+ to 339+ SB I-35)

Balance 14+16 to 21+49
Cl. A Exc. 149 C.Y. (4439 C.Y. from So. Rp.)
Embankment 56286 C.Y. (852 C.Y. from SB I-35 24109 C.Y. from Rp. "U")
(Contr. to furnish 31602 C.Y.)
Rock Fill 4952 C.Y. (3602 C.Y. from Rp. "U"
(Contr. to furnish 1350 C.Y.)

NORTH RAMP



NOTE: No direct payment will be made for overhaul on this project.

BENCH MARKS ~ U.S.G.S. DATUM

R.R. Spike in 36" Sycamore 140' Lt. 16+90 No. Rp. Elev. 827.17

Top Bolt on Top Conc. Wall N. End Bridge 33' Lt. of 99+46 N.B.L. I-29 Elev. 882.17

☐ on curb Rt. of Bt. #5, Br. A-1761 Elev. 876.16

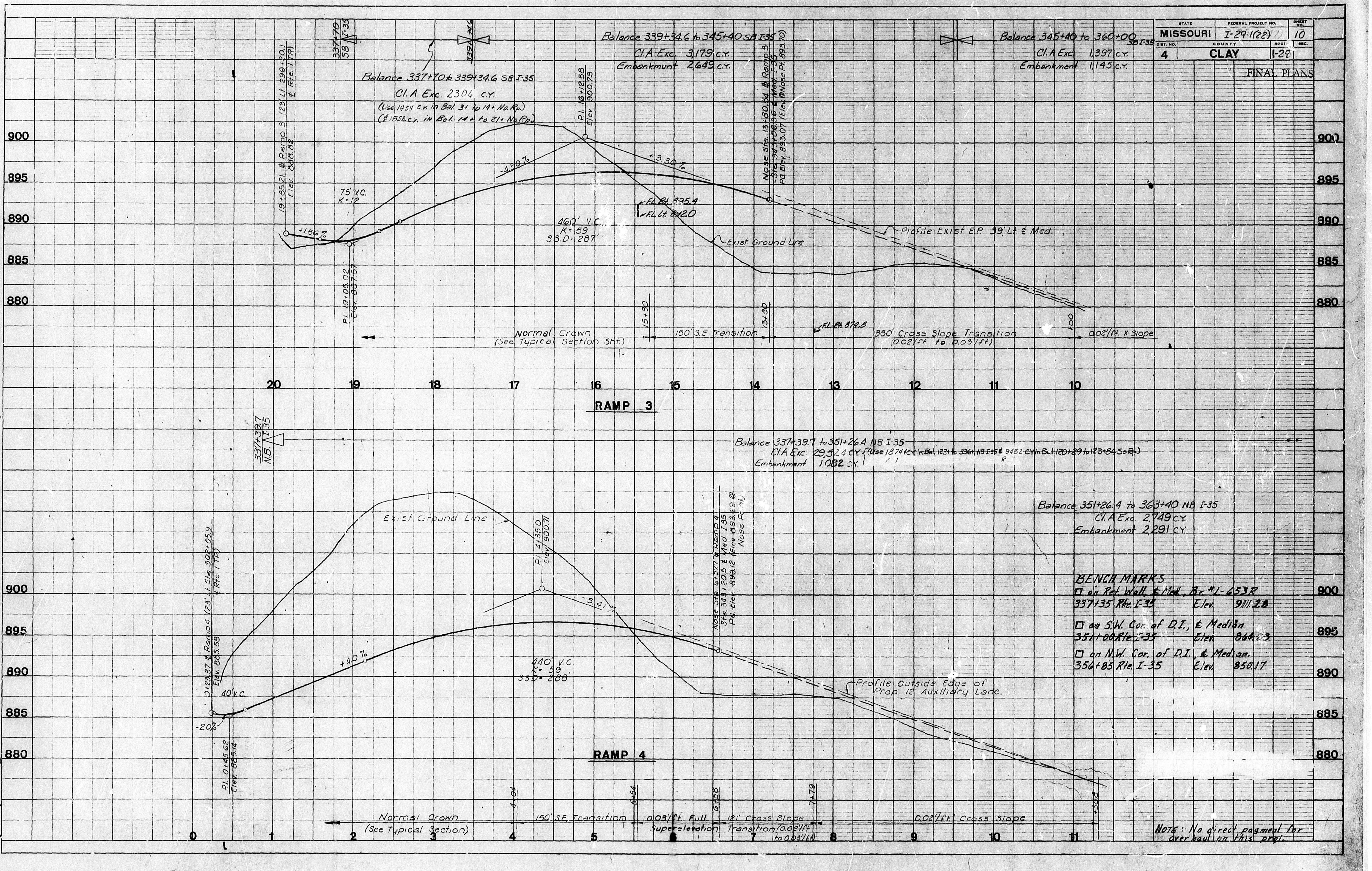
177

STATE	FEDERAL PROJECT NO.	SHEET NO.
MISSOURI	I-29-1(22)	10

DIST. NO.	COUNTY	ROUTE	SEC.
4	CLAY	I-29	

FINAL PLANS

PROFILE		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
NO.	GRADES CHECKED		
	B. M.S NOTED	T.L.C.	11-2-70
	STRUCTURE NOTAT'NS CH'KD.		


900
895
890
885
880
19+85.21 ℄ Ramp 3 (23' Lt. 299+20.1 ℄ Rte. 1 TR)
Elev. 888.82
337+70 SB I-35
339+34.6
75' V.C.
K=12
+1.56%
P.I. 19+05.02
Elev. 887.57
-4.50%
P.I. 16+12.58
Elev 900.73
460' V.C.
K=59
S.S.D.=287'
+3.30%
F.L. Rt. 895.4
F.L. Lt. 892.0
Exist Ground Line
Nose Sta. 13+80.54 ℄ Ramp 3
-Sta. 343+06.36 ℄ Med. I-35
PG Elev. 893.07 (Elev @ Nose Pt. 893.70)
Profile Exist E.P. 39' Lt. ℄ Med.
F.L. Rt. 874.8
15+30
13+80
10+00
Normal Crown
(See Typical Section Sht.)
150' S.E. Transition
330' Cross Slope Transition
(0.02'/ft. to 0.03'/ft.)
0.02'/ft. X-Slope
20
19
18
17
16
15
14
13
12
11
10
RAMP 3
337+39.7 N.B. I-35
0+23.37 ℄ Ramp 4 (23' Lt. Sta. 302+05.9 ℄ Rte 1 TR)
Elev. 885.58
40' V.C.
-2.0%
P.I. 0+45.62
Elev. 885.14
+4.0%
Exist Ground Line
P.I. 4+35.0
Elev. 900.71
-3.41%
440' V.C.
K=59
SSD=288'
Nose Sta. 6+57.7 ℄ Ramp 4
-Sta. 343+20.5 ℄ Med. I-35
P.G. Elev. 893.12 (Elev. 893.69 @ Nose Point)
Profile Outside Edge of Prop. 12' Auxiliary Lane.
RAMP 4
4+04
5+54
6+38
7+79
11+30
Normal Crown
(See Typical Section)
150' S.E. Transition
0.03'/ft. Full Superelevation
121' Cross Slope Transition (0.02'/ft. to 0.03'/ft.)
0.02'/ft. Cross Slope
0
1
2
3
4
5
6
7
8
9
10
11

Balance 337+70 to 339+34.6 SB I-35
Cl. A Exc. 2306 C.Y.
(Use 1454 c.y. in Bal. 3+ to 14+ No. Rp.)
(& 852 c.y. in Bal. 14+ to 21+ No. Rp.)

Balance 339+34.6 to 345+40 SB I-35
Cl. A Exc. 3,179 c.y.
Embankmunt 2,649 c.y.

Balance 345+40 to 360+00 SB I-35
Cl. A Exc. 1,397 c.y.
Embankment 1,145 c.y.

Balance 337+39.7 to 351+26.4 NB I-35
Cl. A Exc. 29,524 C.Y. (Use 18744 C.Y. in Bal. 123+ to 336+ NB I-35 & 9482 C.Y. in Bal. 120+29 to 123+84 So. Rp.)
Embankment 1,082 C.Y.

Balance 351+26.4 to 363+40 NB I-35
Cl. A Exc. 2,749 C.Y.
Embankment 2,291 C.Y.

BENCH MARKS

□ on Ret. Wall, ℄ Med., Br. #L-653R		
337+35 Rte. I-35	Elev.	911.28
□ on S.W. Cor. of D.I., ℄ Median		
351+00 Rte. I-35	Elev.	864.23
□ on N.W. Cor. of D.I., ℄ Median.		
356+85 Rte. I-35	Elev.	850.17

NOTE: No direct payment for overhaul on this proj.

178