

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
6	TEXAS	137-1(50)000	1
STATE DIST. NO.	COUNTY	STATE CONTROL NO.	ROADWAY NO.
16	NUECES	74-6-79	1H-37

FINAL PLANS

AUTHORIZATION DATE DECEMBER 7, 1971
CONSTRUCTION BEGAN APRIL 24, 1972
PROJECT COMPLETED & ACCEPTED MARCH 8, 1973
PLANS CORRECTED AS ACTUALLY CONSTRUCTED

James M. Jones
SUPERVISING RESIDENT ENGINEER

Field Change No. 1 - Reducing Type D Shell HMACP from 200 #/SY to 100 #/SY over entire working area and new Type D, Class A HMACP with minimum polish value of 36 at 100 #/SY to cover the Type D Shell HMACP mentioned above.

200#

STATE OF TEXAS STATE HIGHWAY DEPARTMENT

PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

M 74-6-79
FEDERAL AID PROJECT 137-1(50)000
INTERSTATE HIGHWAY 37
NET LENGTH OF PROJECT 50,618.38 FT. = 9.586 Miles

NUECES COUNTY

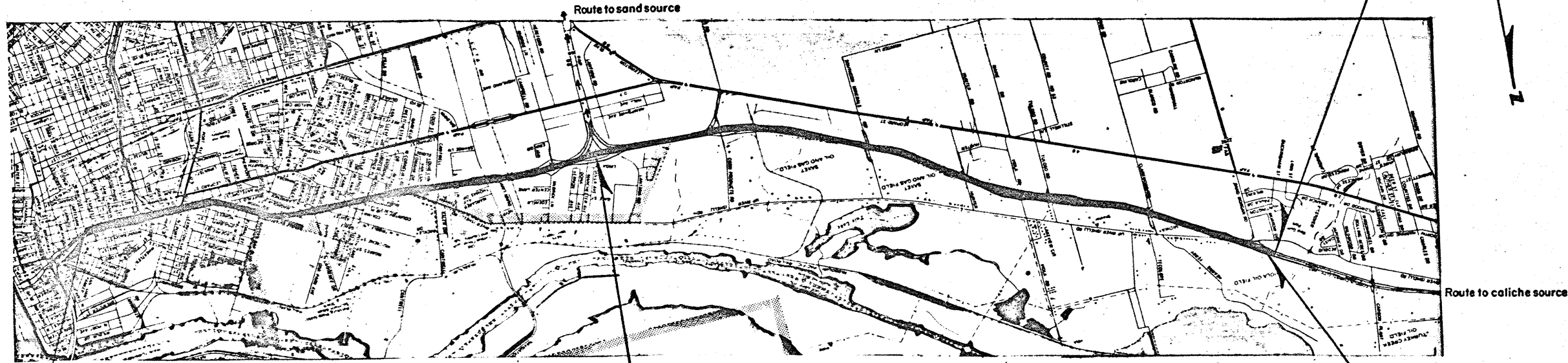
FROM WACO STREET TO RAND MORGAN ROAD

REWORK EXISTING ENTRANCE AND EXIT RAMP WITH GRADING,
STRUCTURES, FLEX BASE, ASPHALT CONCRETE PAVEMENT, REWORK
EXISTING SIGNING AND RELOCATE EXISTING LIGHTING & DELINEATORS

STA. 508+00 END PROJECT M 74-6-79
STA. 508+00 END PROJECT 137-1(50)000 CONTROL 74-6-79 =
STA. 508+00 PROJECT 137-1(35)010 CONTROL 74-6-58

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
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	TEXAS HIGHWAY DEPARTMENT STANDARD SHEETS
41-45	ISG (1), (2), (3), (4) & (5)A
46	ISR (1)
47	ISB (1)
48	ISMW (1)
49-55	SMD - 1, 3, 8C (1) & (2), 11A MOD., & 12 (1) MOD. & (2)
56	TB & PM - 66
57	GF (TD) - 69B
58	OMIT
59-60	SMD - 6A (MOD) (DIST 16) (1) & (2)
61-66	BC (1) - 70 THRU BC (6) - 70
67	CIS - 69
17A	RAMP C REALIGNMENT



Specifications adopted by the State Highway Department of Texas January 2, 1962, and specification items listed and dated as follows shall govern on this project:
Required Contract Provisions all Federal-Aid Construction Contracts (Form PR 1273, OCTOBER 1969)
EQUATION Sta. 267+37.15 Bk. = Sta. 269+18.79 Fwd. (-181.62')
NO EXCEPTIONS
2 RAILROAD CROSSINGS (Frontage Roads)
NOTE:
See special provisions for Detours Barricades & Warning Signs etc.

Limits on 104 (B) 5 Needs Estimate
Begin A1 End A3.2

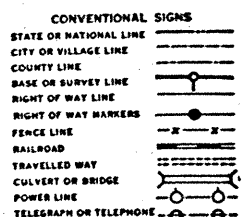
CITY OF CORPUS CHRISTI
INCORPORATED
POPULATION 166,717 1960 CENSUS

STATE HIGHWAY DEPARTMENT
CORRECT: FEB. 20 1970
RECOMMENDED FOR APPROVAL: 4-6-70
James M. Jones
RESIDENT ENGINEER
M. V. Grew
ENGINEER OF TRAFFIC
RECOMMENDED FOR APPROVAL: MAR. 16 1970
APRIL 14 1970
Louis B. Long
DISTRICT ENGINEER
K. F. Hewitt
CHIEF ENGINEER OF HIGHWAY DESIGN

APPROVED 3-13 1970
CITY OF CORPUS CHRISTI
TEXAS
R. Williams Townsend
CITY MANAGER

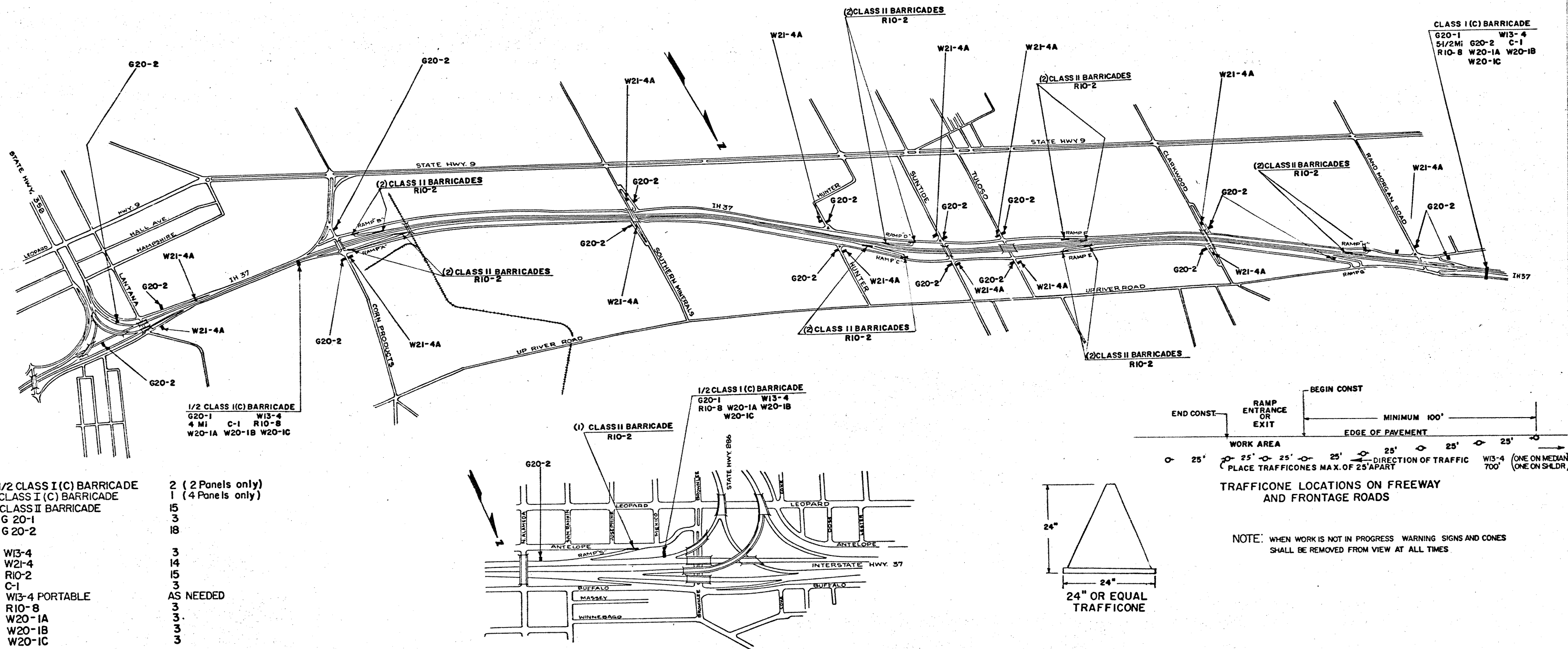
U.S. DEPARTMENT OF TRANSPORTATION
BUREAU OF PUBLIC ROADS
APPROVED: [Signature]
DESIGN ENGINEER
DATE

COUNTY _____ PROJ. NO. _____
HWY. NO. _____ LETTING DATE _____
DATE ACCEPTED _____

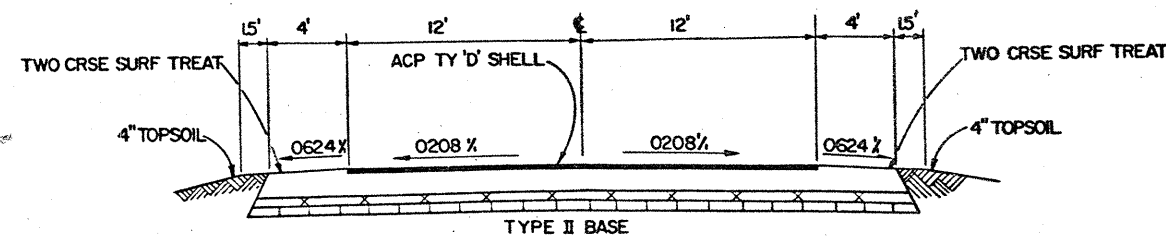


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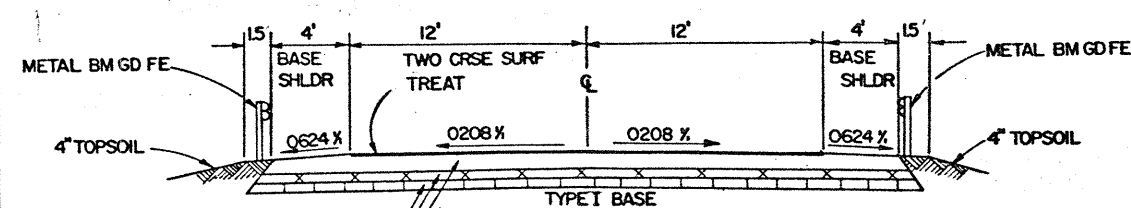




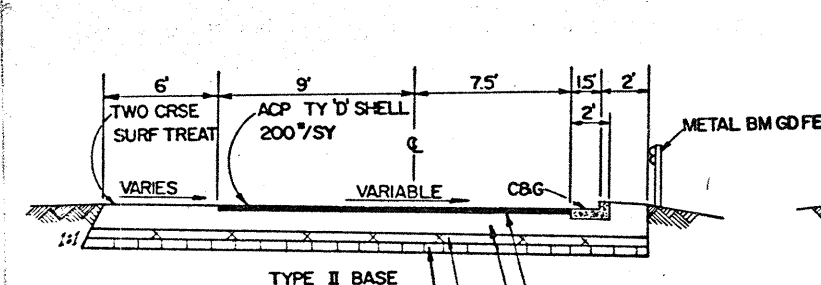
PROJECT LAYOUT SHOWING SUGGESTED
 DETOURS BARRICADES & WARNING SIGNS



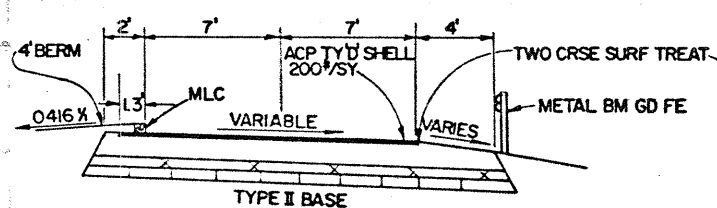
FRONTAGE STREET AT RAMP TERMINALS



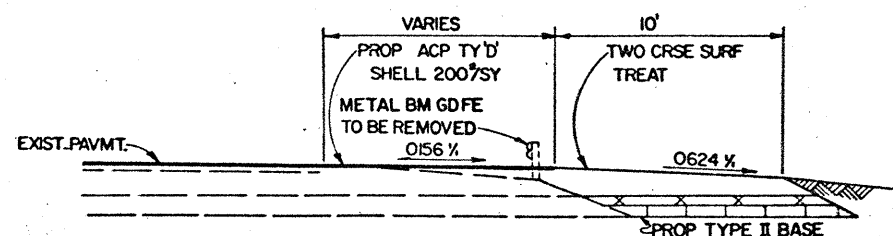
FRONTAGE STREET AT RAILROAD CROSSING



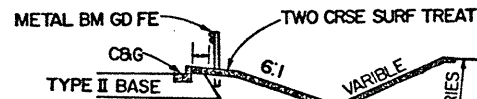
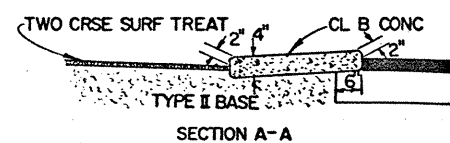
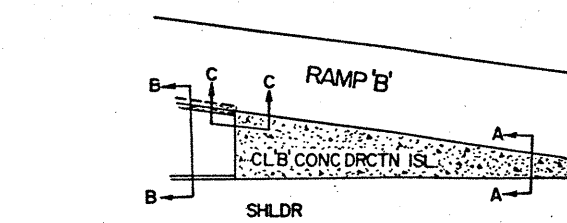
TYPICAL FOR ALL 'OFF' RAMPS



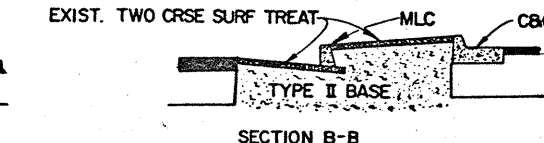
TYPICAL FOR ALL 'ON' RAMPS



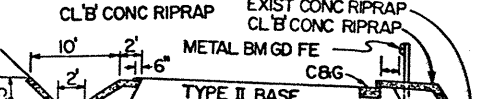
TYPICAL FOR LANTANA REWORK ONLY



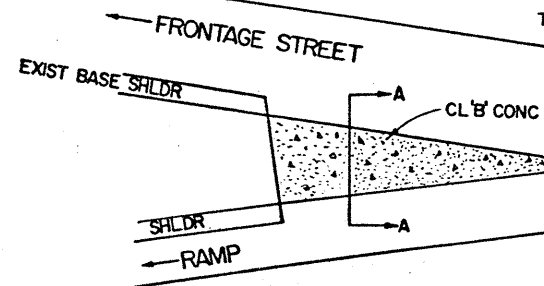
TYPICAL FOR RAMP 'B' ONLY



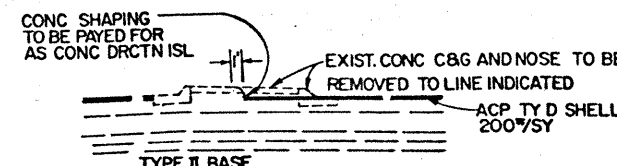
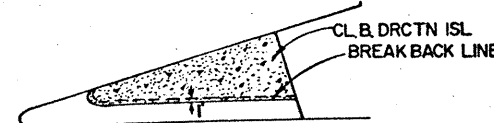
SECTION B-B



BREAK OUT BERM AND TURN REINF. STL. INTO NEW RIPRAP

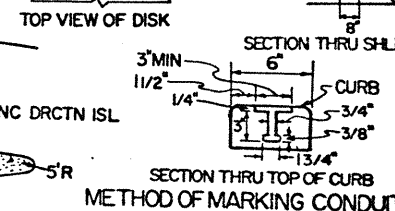
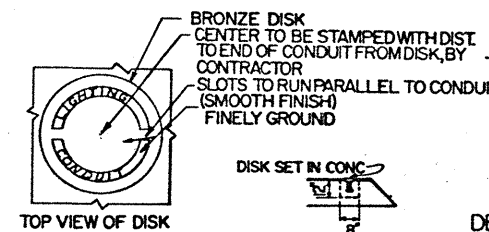


SECTION A-A
CONCRETE DIRECTIONAL ISLAND DETAILS

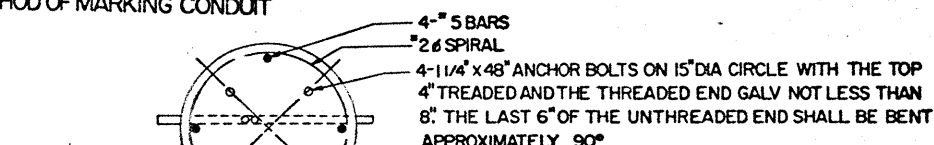


RAMP 'S' NOSE REVISION ONLY

NOTE: CONDUIT SHALL BE MARKED AS FOLLOWS:
"LIGHTING CONDUIT" MARKERS WILL BE PLACED IN CURB OR IN SHLDR OVER THE CONDUIT ON EACH SIDE OF STREET

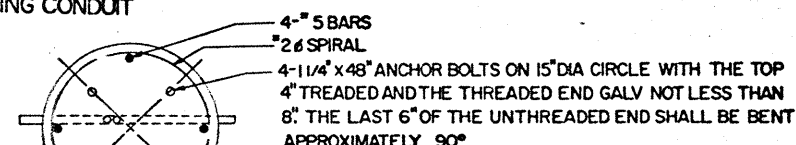


METHOD OF MARKING CONDUIT



DETAILS PRECAST CONCRETE PULL BOX

NOTE: BODY REINFORCING-2 WELDED FRAMES-9 WIRE COVER REINFORCING-WELDED GRID AS SHOWN-3 WIRE COVER LIFT EYES 1/8" GALV STEEL EYES-CAST IN PLACE COVER HOLD DOWNS-3/8" BRASS RODS NUT COVER LETTERING-1" INCISED LETTERING-STREET LIGHTING CONCRETE-CLASS 'A' COVER CAN BE EITHER CONCRETE OR STEEL



FOUNDATION DETAIL

TYPICAL SECTIONS
GENERAL DETAILS
LIGHTING, CURB AND GUTTER
AND MACHINE LAID CURB DETAILS

TYPICAL SECTIONS

Revised 6-29-71

SUMMARY OF SIGNS TO BE SALVAGED, MODIFIED OR RELOCATED-EXISTING

LAYOUT SHEET NO.	SIGN NO.	SIGN TYPE	TEXT	SIGN DIMENSIONS	TYPE OF MOUNT				POST DATA				CONCRETE DRILLED FOOTING TO BE CUT OFF					
					TYPE 5/8 INCH PLYWOOD	TYPE 1/2 INCH PLYWOOD	TYPE ALUM. STEEL	TYPE OF MOUNT	SIZE AND TYPE	LINEAR FEET			APPROX TOTAL WEIGHT	LINEAR FEET				
										NO. 1	NO. 2	NO. 3		LBS	TO BE CUT OFF			
															NON-REINFORCED	18" DIA	18" DIA	24" DIA
28 3	A	R6-5	TWO - WAY - TRAFFIC	24"x30"	S.F.	S.F.	S.F.	A	2.5" Pipe	14.7				12" DIA	18" DIA	18" DIA	24" DIA	
28 4	A	R-148	YIELD	42" Sides	5.00			A	2.5" Pipe	13.2				3.50				
28 6	B	IG-26	Southern Minerals Rd	16"x2'	32.00			D-6-1	3" Pipe	17.2				3.50				
									4" Pipe	28.6					5.50			
28 7	B	IM6-1S	SOUTH	21"x9"		1.31												
				21"x24"		3.19		A	2.5" Pipe	15.9				3.50				
28 8	B	IM4-2L		21"x15"		2.19												
28 9	A	IR-1A	STOP	30"x30"	5.18			A	2.5" Pipe	12.8				3.50				
28 9	A	D-2 Mod	SUNTIDE RD	4.67'x1'	4.67			D-1-1	2" Pipe	4.6				4.50				
									3" Pipe	11.8					5.50			
28 11	A	R5-1	DO NOT - ENTER	24"x28"	4.00			A-2	2" Pipe	11.4				3.50				
				21"x9"		1.31												
28 17	B	IM6-BB	INTERSTATE - TEXAS - 37	24"x24"		3.19		A	2.5" Pipe	14.0				3.50				
				21"x15"		2.19												
28 18	A	R6-5	TWO - WAY - TRAFFIC	24"x30"	5.00			A	2.5" Pipe	14.7				3.50				
28 20	A	D-2 Mod	TULOSO RD	4.33'x1'	4.33			D-1-1	2" Pipe	4.4				4.50				
									3" Pipe	10.6								
28 21	B	IR-1A	STOP	30"x30"	5.18			A	2.5" Pipe	12.0				3.50				
28 23	A	R5-1	DO NOT - ENTER	24"x28"	4.00			A-2	2" Pipe	11.6				3.50				
				21"x9"		1.31												
28 28	B	IM6-BB	INTERSTATE - TEXAS - 37	24"x24"		3.19		A	2.5" Pipe	13.4				3.50				
				21"x15"		2.19												
28 29	A	R6-5	TWO - WAY - TRAFFIC	24"x30"	5.00			A	2.5" Pipe	13.8				3.50				
28 31	B	IR-15	DO NOT - ENTER	48"x48"	16.00			F-2	3" Pipe	11.4	12.1			3.50				
									2.5" Pipe	13.8								
28 32	B	IR-15	DO NOT - ENTER	48"x48"	16.00			F-2	3" Pipe	11.2	11.2			3.50				
									2.5" Pipe	13.9								
28 33	A	R-148	YIELD	42" Sides	5.30			A	2.5" Pipe	13.0				3.50				
28 34	A	IR-17A	TWO - WAY - TRAFFIC	48"x60"	20.00			F-2	3" Pipe	12.9	13.0			3.50				
									2.5" Pipe	13.8								
28 35	B	IG-26	Southern Minerals Rd	16.5'x2'	33.00			120	68 8.5	10.4	10.5			241.1				
28 36	A	R-148	YIELD	42" Sides	5.30			A	2.5" Pipe	12.1				3.50				
28 37	A	R-148	YIELD	42" Sides	5.30			A	2.5" Pipe	12.4				3.50				
28 38	B	IR-15R	DO NOT - ENTER - RAMP	48"x60"	20.00			F-2	3" Pipe	11.0	11.0			183.2				
									2.5" Pipe	13.8								
28 39	B	IR-15R	DO NOT - ENTER - RAMP	48"x60"	20.00			F-2	3" Pipe	11.1	11.1			184.3				
									2.5" Pipe	13.5	13.8			3.50				
28 40	A	IR-17A	TWO - WAY - TRAFFIC	48"x60"	20.00			F-2	3" Pipe	13.5	13.8			213.4				
									2.5" Pipe	12.6				3.50				
28 41	A	R-148	YIELD	42" Sides	5.30			A	2.5" Pipe	12.6				3.50				
28 42	A	IG-26	Tuloso Rd	11'x4'	44.00			120	68 8.5	10.6	10.8			245.3				
			Clarkwood Rd												6.0			
28 43	A	R6-5	TWO - WAY - TRAFFIC	24"x30"	5.00			A	2.5" Pipe	13.0				3.50				
				21"x9"		1.31												
28 46	B	IM6-BB	INTERSTATE - TEXAS - 37	24"x24"		3.19		A	2.5" Pipe	14.7				3.50				
				21"x15"		2.19												
28 51	A	D-2 Mod	SUNTIDE RD	4.67'x1'	4.67			D-1-1	2" Pipe	4.6				4.50				
									3" Pipe	12.4								
28 52	B	IR-1A	STOP	30"x30"	5.18			A	2.5" Pipe	13.0				3.50				
28 53	A	R6-5	TWO - WAY - TRAFFIC	24"x30"	5.00			A	2.5" Pipe	13.7				3.50				
28 54	A	R5-1	DO NOT - ENTER	24"x24"	4.00			A-2	2" Pipe	11.8				3.50				
				21"x9"		1.31												
28 57	B	IM6-BB	INTERSTATE - TEXAS - 37	24"x24"		3.19		A	2.5" Pipe	13.8				3.50				
				21"x15"		2.19												
28 58	A	R6-5	TWO - WAY - TRAFFIC	24"x30"	5.00			A	2.5" Pipe	14.6				3.50				
28 65	A	R5-1	DO NOT - ENTER	24"x24"	4.00			A-2	2" Pipe	11.6				3.50				
28 67	B	IR-1A	STOP	30"x30"	5.18			A	2.5" Pipe	10.9				3.50				
28 68	A	D-2 Mod	TULOSO RD	4.33'x1'	4.33			D-1-1	2" Pipe	4.4				4.50				
									3" Pipe	10.4								
29 1	A	IR-17A	TWO - WAY - TRAFFIC	48"x60"	20.00			F-2	3" Pipe	13.1	13.2			207.7				
									2.5" Pipe	14.6				3.50				
29 2	B	IR-48	YIELD	60" Sides	10.00			F-1	3" Pipe	10.3	10.1			174.1				
									2.5" Pipe	11.6				3.50				
29 3	B	IR-48	YIELD	60" Sides	10.00			F-1	3" Pipe	10.2	10.2			174.1				
									2.5" Pipe	11.2				3.50				
29 4	B	IR-15R	DO NOT - ENTER - RAMP	48"x60"	20.00			F-2	3" Pipe	11.2	11.2			185.5				
									2.5" Pipe	11.2				3.50				
29 5	B	IR-15R	DO NOT - ENTER - RAMP	48"x60"	20.00			F-2	3" Pipe	11.2	11.2			185.5				
									2.5" Pipe	11.2				3.50				
29 6	A	IR-17A	TWO - WAY - TRAFFIC	48"x60"	20.00			F-2	3" Pipe	12.7	12.8			203.2				
									2.5" Pipe	13.1				3.50				
									3" Pipe	17.2								
									4" Pipe	28.6								

GENERAL NOTES
SEE SHEET 1 OF 6

SIGN TABULATION
SHEET 2 OF 6
SUMMARY OF EXISTING SIGNS
TO BE SALVAGED, RELOCATED OR MODIFIED

FED RD DIV. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
6	TEXAS	1-37-1(50)000				5
STATE DIST. NO.	COUNTY	CONT.	SECT.	JOB	HIGHWAY NO.	
16	NUECES	74	6	79	1H-37	

SUMMARY OF SIGNS TO BE SALVAGED, MODIFIED OR RELOCATED-EXISTING

LAYOUT SHEET NO.	SIGN NO.	SIGN TYPE	TEXT	SIGN DIMENSIONS	TYPE			TYPE OF MOUNT	POST DATA				CONCRETE DRILLED FOOTING TO BE CUT OFF							
					TYPE 5/8 INCH PLYWOOD	S.F.	TYPE 5/8 INCH PLYWOOD		S.F.	TYPE ALUM. PIPE STEEL	S.F.	SIZE AND TYPE	LINEAR FEET			LINEAR FEET				
													NO. 1	NO. 2	NO. 3	LBS	NON-REINFORCED		REINFORCED	
																	12" DIA	18" DIA	18" DIA	24" DIA
29	7	IR-48	YIELD	60" Sides			10.00		F-1	3" I 5.7	10.2	10.2		174.1	3.50					
29	8	IR-48	YIELD	60" Sides			10.00		F-1	3" I 5.7	11.1	11.3		185.5	3.50					
29	9	IR-15	DO NOT - ENTER	48"x48"			16.00		F-2	3" I 5.7	13.1	13.6		210.0	3.50					
29	10	IR-15	DO NOT - ENTER	48"x48"			16.00		F-2	3" I 5.7	10.7	11.0		181.5	3.50					
29	16	R-148	YIELD	42" Sides			5.30	1.31	A	2.5" Pipe	13.3				3.50					
29	17	IM-88	INTERSTATE - TEXAS - 37	21"x9"				3.19	A	2.5" Pipe	16.1				3.50					
29	18	R-6-5	TWO-WAY - TRAFFIC	24"x30"			5.00		A	2.5" Pipe	15.0				3.50					
30	2	D-1	CLARKWOOD RD	6.83'x1'			6.83		D-1-1	2" Pipe	5.9				4.50					
30	3	R-6-5	TWO-WAY - TRAFFIC	24"x30"			5.00		A	2.5" Pipe	13.1				3.50					
30	10	R-4-8	KEEP - RIGHT	24"x30"			5.00		A	2.5" Pipe	11.9				3.50					
30	14	R-6-5	TWO-WAY - TRAFFIC	24"x30"			5.00		A	2.5" Pipe	13.9				3.50					
30	20	R-6-5	TWO-WAY - TRAFFIC	24"x30"			5.00		A	2.5" Pipe	13.0				3.50					
30	23	R-4-8	KEEP - RIGHT	24"x30"			5.00		A	2.5" Pipe	12.1				3.50					
30	32	D-1	CLARKWOOD RD	6.83'x1'			6.83		D-1-1	2" Pipe	5.9				4.50					
30	33	R-6-5	TWO-WAY - TRAFFIC	24"x30"			5.00		A	2.5" Pipe	13.3				3.50					
31	2	IM-88	INTERSTATE - TEXAS - 37	21"x9"				3.19	A	2.5" Pipe	14.4				3.50					
31	3	R-148	YIELD	42" Sides			5.30		A	2.5" Pipe	13.5				3.50					
31	5	IM-88	INTERSTATE - TEXAS - 37	21"x9"				3.19	A	2.5" Pipe	16.1				3.50					
31	6	IG-20	Southern Minerals Rd	23'x5'			115.00			8WF 17				268.3	Third Post Only to be Cut Off	8.00				
31	8	R-6-5	TWO-WAY - TRAFFIC	24"x30"			5.00		A	2.5" Pipe	14.5				3.50					
32	6	D-2 Mod	RAND MORGAN RD	6.83'x1'			6.83		D-1-1	2" Pipe	5.9				4.50					
32	8	IR-1A	STOP	30"x30"			5.18		A	2.5" Pipe	12.1				3.50					
			TOTAL				238.09	20.07						1019.4	90.50	0.0	0.0	8.00		
			SHEET TOTALS																	
			A. TO BE SALVAGED				0.00	76.09	13.38	A. TO BE SALVAGED	B. TO BE RELOCATED			185.5	16.0 Ea	0.0 Ea	0.0 Ea	0.0 Ea		
			Galv Pipe Post							1.5" Pipe	0.0			0.0						
			Galv Pipe Post							2" Pipe	17.7			0.0						
			Galv Pipe Post							2.5" Pipe	149.6			42.7						
			Galv Pipe Post							3" Pipe	35.5			0.0						
			Galv Pipe Post							4" Pipe	0.0			0.0						
			B. TO BE RELOCATED				5.18	162.00	6.69			SEE ABOVE		833.9	9.0 Ea	0.0 Ea	0.0 Ea	1.0 Ea		
			C. TO BE MODIFIED				0.0							0.0	0.0	0.0	0.0	0.0		
			PROJECT GRAND TOTALS																	
			A. TO BE SALVAGED				0.00	978.93	20.07	A. TO BE SALVAGED	B. TO BE RELOCATED			5445.7	63.0 Ea	3.0 Ea	0.0 Ea	5.0 Ea		
			Galv Pipe Post							1.5" Pipe	0.0			11.3						
			Galv Pipe Post							2" Pipe	105.0			0.0						
			Galv Pipe Post							2.5" Pipe	511.9			239.5						
			Galv Pipe Post							3" Pipe	106.7			27.5						
			Galv Pipe Post							4" Pipe	39.2			28.6						
			B. TO BE RELOCATED				31.08	446.90	73.90			SEE ABOVE		3290.1	49.0 Ea	2.0 Ea	0.0 Ea	3.0 Ea		
			C. TO BE MODIFIED				3.0 Ea							1028.7	0.0	0.0	0.0	2.0 Ea		

GENERAL NOTES

See Sheet 1 of 6

SIGN TABULATION
SHEET 3 OF 6
SUMMARY OF EXISTING SIGNS*
TO BE SALVAGED, RELOCATED OR MODIFIED

FED RD DIV NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
6	TEXAS	1-37-1 (50) 000			6
STATE DIST. NO.	COUNTY	CONT.	SECT.	JOB	HIGHWAY NO.
16	NUECES	74	6	79	1H-37

SUMMARY OF SIGNS NEW, MODIFIED AND RELOCATED-PROPOSED

LAYOUT SHEET NO.	SIGN NO.	SIGN BLANK C - MODIFIED D - NEW SIGNS	TEXT	SIGN DIMENSIONS	SIGN FACE MATERIAL				TYPE OR MOUNT	"X" DIMENSION (IN FEET)			POST DATA				CONCRETE DRILLED FOOTINGS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
					TYPE "F" ALUM	TYPE "A" ALUM	TYPE "R" ALUM	TYPE "S" ALUM		S.F.	S.F.	S.F.	S.F.	NO. 1	NO. 2	NO. 3	BID ITEM 7221	BID ITEM 7242	BID ITEM 7420	SIZE AND TYPE	LINEAR FEET	STRUCT. STEEL TOTAL POST WEIGHT LBS	LINEAR FEET																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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GENERAL NOTE S:
See Sheet 4 of 6

SIGN TABULATION
SHEET 5 OF 6
SUMMARY OF PROPOSED SIGNS
NEW, MODIFIED OR RELOCATED

FED. PROJ. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	1-37-1(50)000	8
STATE DIST. NO.	COUNTY	CONTRACT SECT.	HIGHWAY NO.
16	NUECES	74	6 179

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SUMMARY OF SIGNS NEW, MODIFIED AND RELOCATED-PROPOSED

[illegible]

GENERAL NOTES:
SEE SHEET 4 OF 6

SIGN TABULATION
SHEET 6 OF 6
SUMMARY OF PROPOSED SIGNS
NEW, MODIFIED OR RELOCATED

FED. RD. DIV. NO. 6	STATE TEXAS	FEDERAL PROJECT NO. 1-37-1(50)000				SHEET NO. 9
STATE DIST. NO. 16	COUNTY NUECES	CONT. 74	SECT. 6	JOB 79	HIGHWAY NO. 1H-3	

ESTIMATE SUMMARY

ROADWAY				ALT.	ITEM-CODE			ITEM DESCRIPTION	UNIT	TOTAL	
					ITEM NO	DESC CODE	SP NO			EST.	FINAL
EST.	FINAL	EST.	FINAL								
					104	003		REMOV OLD CONC (CURB OR C AND G)	LF	3,740	3,406.6
					104	025		REMOV OLD CONC	SY	1,344	1,245
					110	005	001	COM RD EXCAV (ORD COMP)	CY	5,816	4,225
					160	002		SALV AND PLAC TP SL	CY	4,134	3,035
					164	028		ASPH MULCH SEED (TY 7)	SY	38,910	27,235
					166	002		FERT (16-8-8)	TON	24	24
					204	001		SPRINK	MG	1,553	370
					210	001		ROLL (FLAT WHEEL)	HR	51	24.25
					211	001	001	ROLL (TAMP)	HR	62	46.5
					213	002	001	ROLL (MEDM PNEUM TIRE) (TY A)	HR	161	126
					1259	036		FLEX BASE (DEL)(ORD COMP)(TY A, GR 4)	CY	2,027	1,693
					252	003		SALV AND REPL BASE (ORD COMP)	CY	6,978	4,650
					260	003		LIME (TY A OR B)	TON	116	82.071
					260	004		LIME TREAT SUBGR (ORD COMP)	SY	17,221	12,948
					262	003		LIME (TY A OR B)	TON	146	109.774
					320	039		AGGR (TY PB GR 3)	CY	99	108
					320	127		ASPH (RC-2)	GAL	3,125	3,105
					322	041		AGGR (TY PB GR 5)	CY	16	20
					322	005		AGGR (TY A GR 5)	CY	14	12
					322	039		AGGR (TY PB GR 3)	CY	50	51
					322	127		ASPH (RC-2)	GAL	2,538	2,331
				(1)	340	032	067	ASPH (AC)	TON	67.5	33.006
				(1)	340	018	067	AGGR (TY D) (SHELL)	TON	835	469.674
				(1)	340	010	067	TACK COAT (RC-2)	GAL	268	30
					400	001		UNCL STR EXCAV (CULV)	CY	151	151
					400	008		UNCL STR EXCAV (INLET AND MANH)	CY	10	10
					432	003		RIPRAP (CONC) (CL B)	CY	118	61.37
					464	003	015	RC PIPE (CL III) (18 IN)	LF	17	0
					464	007	015	RC PIPE (CL III) (30 IN)	LF	26	32
					470	134		INLET (COMPLXITY K)	EA	2	2
					471	001		GRATE	EA	2	2
					472	001		RELAY CULV PIPE (18 IN DIA AND UNDER)	LF	32	0
					472	002		RELAY CULV PIPE (OVER 18 IN DIA)	LF	138	132
					496	002		REMOV OLD STR (SMALL)	EA	1	1
					496	042	015	REMOV OLD STR (RD SD SIGN, SM FND)	EA	125	123
					521	001	002	MACH LAID CURB	LF	1,851	1,873
					522	001		CONC C AND G	LF	2,332	2,062.1
					560	086	045	TERM-ANCH SECT (CL B)	EA	9	7
					561	001		REMOV METAL BEAM GD FENCE	LF	886.5	1,364.6
					562	001		REMOV AND REPL METAL BEAM GD FENCE	LF	2541	1,803.6
					590	004		CONC DRCN ISL	SY	674	800.49

ESTIMATE SUMMARY

ROADWAY				ALT.	ITEM-CODE			ITEM DESCRIPTION	UNIT	TOTAL	
					ITEM NO	DESC CODE	SP NO			EST.	FINAL
EST.	FINAL	EST.	FINAL								
					630	001		RDWY ILLUM ASSEM FND (TY A)	EA	6	6
					640	004	004	CONDT (RIGID PVC) (2 IN)	LF	75	102
					1002	001		RELOC RDWY ILLUM ASSEM	EA	6	6
					1400	001		REMOV AND REPL DELIN ASSEM	EA	43	37
					1596	003		PAV MARK (REFL) (TY I-R)	EA	228	228
					1761	007		DUCT CABLE (1 IN) (8-2) (2 INSUL)	LF	3,000	2,826
					7005	002		PLY SIGN TY A AND OR TY B	SF	1,145.81	417.12
					7074	001	002	AL SIGN TY F	SF	34.62	0
					7221	002		2 IN GALV PIPE POST	LF	134.89	124.91
					7221	003		2.5 IN GALV PIPE POST	LF	103.47	101.88
					7242	001		GALV STR STL POST	LB	7,247.25	3,527.34
					7411	001		NON-REINF DRILL SHAFT 12 IN DIA	LF	383.5	380
					7411	002		NON-REINF DRILL SHAFT 18 IN DIA	LF	11.0	11
					7411	101		REINF DRILL SHAFT 24 IN DIA	LF	32.0	20
					7420	003		GALV PIPE POST (1.5 IN)	LF	22.5	22.44
					7420	005		GALV PIPE POST (2.5 IN)	LF	233.18	230.09
					7420	006		GALV PIPE POST (3 IN)	LF	40.4	38.76
					7420	010		GALV PIPE POST (4 IN)	LF	28.6	28.51
					7420	008		GALV STR STL POST	LB	3,850.34	3,766.12
					2035	001		MODIFY EXIST GROUND MTD SIGN	EA	3	2
								WORK TO BE DONE BY STATE FORCES			
								Striping, Marking, and Temporary Signing	LS		
								WORK TO BE DONE BY MP RAILROAD FORCES (Non-Partia)			
								Furnish and install 2-36 ft. Plank Crossings.	LS		
								Field Change Quantities			
					340	032	067	ASPH (AC)	TON		51.180
					340	005		AGGR (TY D)	TON		905.220
					340	010		TACK COAT (RC-2)	GAL		640

ALTERNATES

								ALTERNATE 1A			
					330	002		COLD MIX LRA PAV (TY B)	TON	902.5	
					330	006		TACK COAT (RC-2)	GAL	268	
								ALTERNATE 1B			
					350	004	041	HOT MIX-COLD LAID ACP (TY DD)	TON	902.5	
					350	010	041	TACK COAT (RC-2)	GAL	268	

ESTIMATE & QUANTITY SHEET

Revised, 6-29-71

FED NO.	STATE	FED-HAL PROJECT NO.	SHEET NO.
6	TEXAS	1-37-1(50)000	10
STATE DIST NO.	COUNTY	CONT. SECT.	JOB
16	NUECES	74 6 79	1H 37

SPECIFICATION DATA																
Test to be in accordance with Texas Highway Department Standard Test Methods																
ITEM	DESCRIPTION	GRADING REQUIREMENTS								TRI-AXIAL CLASS	SOIL CONSTANTS				WET BALL MILL	SEE NOTE
		Percent Retained, Sieves									L.L.		P. I.			
		2 1/2"	2"	1 3/4"	1"	1/2"	#4	10	#40		Min.	Max.	Max.	Min.	Max.	
1259	FLEX BASE (DEL)(ORD COMP)(TY A GR 4)		0	0-2					60-85		45	12			A.C. D.E.	

- A FLEX BASE APPROX 10" OR 14" CAL ADMIX (1 1/2% LIME)
- B THE ONE COURSE SURFACE TREATMENT SHALL BE APPLIED TO THE FINISHED BASE AS SOON AS IT IS PRACTICAL AFTER THE CURING OF THE LIME STABILIZED BASE IS COMPLETED. IT IS INTENDED THAT THE FLEXIBLE BASE SHALL BE PLACED AND SURFACED IN INCREMENTS OF LENGTH TO PRECLUDE THE NECESSITY OF REWORKING THE LIME STABILIZED BASE AFTER CURING IS COMPLETED. IN THE EVENT THAT WEATHER CONDITIONS ARE SUCH AS TO REQUIRE REWORKING OF THE LIME STABILIZED BASE, ADDITIONAL LIME, AS DETERMINED BY THE ENGINEER, SHALL BE ADDED AND MIXED WITH BASE AS DIRECTED. ADDITIONAL LIME WILL BE PAID FOR AT THE UNIT PRICE BID
- C CALICHE SHALL BE STOCKPILED PRIOR TO DELIVERY TO THE ROAD.
- D TESTS FOR INFORMATIONAL PURPOSES ONLY WILL BE MADE FROM THE STOCKPILED MATERIAL IN ADDITION TO THOSE TESTS MADE PRIOR TO COMPACTION OPERATIONS.
- E AFTER DELIVERY ON THE ROAD, CALICHE SHALL BE WINDROWED AND TESTED. THE LIQUID LIMIT OF THE RAW CALICHE SHALL NOT EXCEED 45 AND THE PLASTIC INDEX SHALL NOT EXCEED 20. SOIL CONSTANTS SHOWN IN CHART ABOVE ARE AFTER ADDITION OF LIME.

ASPHALTIC CONCRETE DATA

- A ASPHALTIC CONCRETE PAVEMENT SHALL HAVE A MINIMUM STABILITY OF 35
- B THE SAND EQUIVALENT TEST WILL NOT BE REQUIRED
- C ITEMS 340 AND 350 SAMPLES FOR TEST, TEST METHOD TEX 217-F (PARTS I & II) (REVISED IN NOV 1968) SHALL BE FROM STOCKPILE.

SPECIFICATION DATA

Sheet A

FED. DIST. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	1-37-1(50)000	11
STATE DIST. NO.	COUNTY	CONT. SECT.	JOB HIGHWAY NO.
16	NUECES	74 6	79 IH-37

Revised 6-29-71

BASIS OF ESTIMATE			
ITEM		BASIS	
SPRINKLING	DUST CONTROL		50 MG
	EMBANKMENT		30 GAL / CU YD
	SUBGRADE		80 GAL / CU YD
	FLEX BASE		70 GAL / CU YD
	ASPH SEEDING		12 GAL / SQ YD.
ROLLING	TAMP	SUBGRADE (LIME TREATED)	1 HR/1000 SQ YD
		FLEX BASE	1 HR/200 CU YD
	FLATWHEEL	FLEX BASE	1 HR/200 CU YD
		ONE CRSE SURF TREAT	1 HR/2500 SQ YD
		TWO CRSE SURF TREAT	1 HR/1500 SQ YD
	PNEUMATIC	SUBGRADE (LIME TREATED)	1 HR/500 SQ YD
		FLEX BASE	1 HR/75 CU YD
COMPLETED SURF TREAT		1 HR/2000 SQ YD	
FERTILIZER		1/8LB/SY SEEDING	
LIME	SOIL STABILIZATION	SOIL WEIGHT 100 LB/CU FT 3%LIME BY WEIGHT	
LIME	BASE STABILIZATION	BASE WEIGHT 118LB/CUFT 1-1/2% LIME BY WEIGHT (TY I&II)	
LIME	SALVAGE BASE STABILIZATION	BASEWEIGHT 118LB/CUFT 1-1/2% LIME BY WEIGHT	
SEEDING		8%AC BERMUDA GR.HULLED 5%AC SIDE OATS GRAMA RC-2 4%AC GREEN SPRANGLE TOP 10%AC K.R. BLUESTEM 0.3 GAL/SY	
TACK COAT (RC-2)		0.03 GAL /SY	
ASPHALT TYPE 'D'		75% HOT MIX BY WEIGHT	
AGGREGATE TYPE 'D'		92.5% HOT MIX BY WEIGHT	

SURFACE TREATMENT DATA

ITEM	APPLICATION		
	FIRST	SHOULDER SECOND	FRONT RD. SECOND
1 & 2 COURSE SURFACE TREATMENT			
ASPHALT, TYPE	RC-2	RC-2	RC-2
ASPHALT, RATE (GAL / SY)	0.35	0.25	0.25
AGGREGATE, TYPE	PB	A	PB
AGGREGATE, GRADE	3	5	5
AGGREGATE, RATE (CY / SY) 1-CRSE	1/90		
AGGREGATE, RATE (CY / SY) 2-CRSE	1/85	1/140	1/140

SURFACE TREATMENT AREA:

ONE COURSE	8,928 SY
TWO COURSE	4,231 SY
TOTAL	13,159 SY

TRAFFIC BUTTON TABULATION
WRONG WAY MOVEMENT ARROWS

SHEET NUMBER	CROSS RD.	FRONT RD.	NO. OF ARROWS	NO. OF BUTTONS PER ARROW	TOTAL
	CORN PRODUCTS RD.	SOUTH	2	19	38
	SUNTIDE RD.	NORTH	2	19	38
	SUNTIDE RD.	SOUTH	2	19	38
	TULOLO RD.	NORTH	2	19	38
	TULOLO RD.	SOUTH	2	19	38
	UP RIVER RD.	NORTH	2	19	38
TOTAL			12		228

SPECIFICATION DATA

Sheet B

FED. DIST. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	1-37-1(50)000	11
STATE DIST. NO.	COUNTY	CONT. SECT.	JOB HIGHWAY NO.
16	NUECES	74 6	79 IH-37

Revised 6-29-71

GENERAL NOTES

Roadway Notes:

- 1. Item 110: Any excess excavation not needed on this project will be declared waste and will be stockpiled within the limits of the project, at a location as directed by the Engineer. Payment will not be direct, but will be subsidiary to the various items.
- 2. Item 110. The fill material necessary for the frontage road work at the railroad crossings will come from the area shown on Ramp "F". See Sheet No.20.
- 3. Item 252. The base for the rework of the frontage roads at the railroad crossing will be salvaged from these frontage roads in their existing location, stockpiled and used to rebuild the frontage roads at the railroad grade crossings.
- 4. Item 260, 252, and 262. Lime shall be placed by the "Slurry Method" (if road mixed).
- 5. Item 260. In earth cuts on through lanes where secondary grade is below natural ground and on frontage roads, the material to be lime treated shall be excavated to the secondary grade (proposed bottom of lime treatment) and removed or windrowed to expose the secondary grade. Material below the secondary grade shall then be scarified to a depth of at least 6" and the scarified material shall then be mixed and reshaped by blading, and then sprinkled and rolled in accordance with requirements outlined for earth embankment. The work required to remove or windrow material to be lime treated shall be paid for in accordance with Item 260.
- 6. Item 260, 262, 252, and 1259 (Type A Grade 4). The use of mechanical road mixer will be required to obtain proper mixture of both the lime treated subgrade and flexible base material. After mixing with the mechanical mixer, the material shall be bladed into windrows and the mechanical road mixer shall again be used to mix the windrows prior to compaction of layers as specified. An approved central mixing plant may be used in lieu of road mixing.
- 7. Item 340 and 350: Samples for tests, Test Method Tex-217-F (Parts I & II) shall be taken at the stockpile. The sand equivalent test will not be required.
- 8. Item 464 and 472. The Contractor will not use Portland cement mortar for making the joints of concrete pipe.
- 9. Item 521. Before placing the machine laid curb, an approximate 8" wide strip of AC 10 Asphalt will be spread under the area immediately to be covered by the curb, payment for which will be subsidiary to Item 521.
- 10. Item 561. There are approximately 117± feet of straight rail in 12'-6" lengths or less, and 787± feet of special bend sections that will be in excess of that needed in rail relocation areas. The excess rail will be stockpiled on the job at a location designated by the Engineer and become the property of the State.
- 11. Item 562. There are 11 posts on the section of guard fence at the sign bridge foundation on Ramp "B" that are mounted on concrete foundations. These posts will have to be reset on concrete as shown on Sheet No.15. These concrete foundations will have to be set, so the top of the rail in its new position will be 2'-3½" from the ground line as shown in the guard fence standard.
- 12. Item 640. See Sheet No. 3 for details of precast concrete pullbox and bronze disks which will be furnished and installed by the Contractor as shown on the plans. The payment for precast concrete pullboxes and bronze disks will be subsidiary to the item of Rigid PVC Conduit. There are 4 lighting concrete pullboxes, 2 lighting bronze disks on the project.
- 13. Item 1259. Caliche shall be stockpiled in not less than 5 layers, each layer not to exceed 2 feet in depth.

All conditions of stockpiling and methods of removal shall meet the approval of the Engineer.
- 14. Item 1259. Flexible Base Courses shall be placed in approximately equal layers with compacted depth of each layer not to exceed 6".
- 15. Items 541 and 542. The specific rail elements to be replaced shall be selected by the Engineer during construction and shall be taken from rail elements removed under the items.

GENERAL NOTES

SHEET C

FED RD	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	I 37-1(50)000	12
STATE DIST NO.	COUNTY	CONT SECT	JOB HIGHWAY NO.
16	NUECES	74 6	79 IH 37

Revised 6-29-71

GENERAL NOTES

- 16. Item 1400. There are approximately 84 delineators to be removed, that are in excess of the amount that are to be replaced. After the ramps have been closed to traffic and barricaded, the State Maintenance Section is to be notified to remove and keep these excess delineators. There are approximately the following amount of each type: 23 Type I, 47 Type II, 2 Type III, and 12 Type IV.
- 17. Item 1400. All delineators mounted on concrete shall use breakaway channel as shown on plans. There are approximately four breakaway delineator mounts required for this project.
- 18. One copy of the design cross section data will be furnished the Contractor for this project. If additional copies are needed by the Contractor, they will be furnished at his own expense.
- 19. A copy of the plan sheet showing the limits of the top soil to be removed and replaced will be furnished the Contractor for this project. If additional copies are needed by the Contractor, they will be furnished at his own expense.
- 20. The Contractor will not excavate a permanent pit or build a permanent stockpile which will remain in place after completion of project, within 600 feet of the project right of way, without written approval of the Engineer.
- 21. No heavy duty hauling or track mounted equipment will be permitted on the roadway sections that are not to be re-worked. Any damage by the Contractor to the existing roadways outside the limits to be re-worked will be repaired at his expense.
- 22. A suggested method of detouring traffic during construction operations is shown in the plans. The Contractor shall secure the Engineer's approval of any other proposed methods of detouring traffic before such methods are placed in operation.
- 23. The sequence of work shall be presented to and approved by the Engineer prior to beginning construction operations.
- 24. In those instances where fixed features require, the governing slopes indicated on the plans may be varied between the limits and to the extent determined by the Engineer.
- 25. All superelevation and widening of pavements on this project shall be in accordance with provisions of "Plan and Profile Sheets."
- 26. The raised asphalt at the gores of Ramp "B", Ramp "S", and Recovery Lane at Lantana will be removed by blading with a maintainer and the area repaired as necessary. This work will not be paid for directly, but will be subsidiary to the various bid items.
- 27. SIGNING NOTES:
All work, materials, and services not shown on the plans which may be necessary for complete and proper construction shall be performed, furnished, and rendered by the Contractor at his entire expense and shall be considered subsidiary to the bid item of work. Signs on the highway which are not shown on the plans have been installed by T. H. D. Maintenance Forces and will be removed by them at the direction of the Engineer.
- 28. All testing will be done in accordance with the Texas Highway Department Manual of Testing Procedures.
- 29. Faulty fabrication or poor workmanship evidenced in any material or work will be considered justification for rejection.
- 30. Item 496, 7005, 7242 and 7411. Sheet 33, Sign No. 11A: The Contractor will be required to remove and salvage the present sign and erect a new sign, to cut off existing drilled shaft foundation No. 1. Existing drilled shaft foundations No. 2 and No. 3 will become proposed foundations No. 1 and No. 2. The Contractor will be required to install proposed drilled shaft foundation No. 3, furnish new sign posts without stub posts for proposed foundations No. 1 and No. 2, furnish new sign posts with stub post for new foundation No. 3. New sign posts are to be furnished without hinge joint and fuse plate (See Sign Tabulation Sheet-Summary of Proposed Signs). Post spacing is shown on the Guide Sign Layout sheet.

Item 496, 7005, 7242
Sheet 33, Sign No. 11B: The Contractor will be required to remove and salvage the present sign and erect a new sign, to furnish new sign posts without stub posts and erect the posts on the existing stub posts in the foundations. New posts are to be furnished without hinge joint and fuse plate (See Sign Tabulation Sheet - Summary of Proposed Signs). Post spacing is shown on the Guide Sign Layout Sheet.

Item 7411, 7420
Sheet 33, Sign No. 16: The Contractor will be required to remove and relocate the sign. The sign shall be modified by changing the direction of the B-1 Arrow from a horizontal position to a vertical position, centered on the space between the message and the border. Modification will not be paid for directly, but shall be considered subsidiary to the Bid Item 7420.

Item 2035
Sheet 33, Sign No. 18: The Contractor will be required to modify the sign by reducing the sign length to 15'-6" by the removal of three 4'-0" x 8'-0" plywood panels, their wind beams and splice plates and the necessary border and sign message. The required sign message and border shall be placed on the modified sign as shown on the Guide Sign Layout Sheet. The message Tulsa Rd. shall be provided by the Contractor.
The third drilled shaft foundation shall be cut off and the completed modified sign centered and erected on posts and foundations No. 1 and No. 2.

GENERAL NOTES

SHEET D

FED RD	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	I 37-1(50)000	12
STATE DIST NO.	COUNTY	CONT SECT	JOB HIGHWAY NO.
16	NUECES	74 6	79 IH 37

Revised 6-29-71

GENERAL NOTES

Item 2035
Sheet 33, Sign No. 19: The Contractor will be required to modify the sign by salvaging the first line of the message and by respacing the second line of the message so as to center it between the border and bottom line of message as shown on the Guide Sign Layout Sheet.

Item 2035
Sheet 35, Sign No. 7: The Contractor will be required to modify the sign by reducing the sign length to 15'-6" by the removal of three 4'-0" x 10'-6" plywood panels, their wind beams and splice plates and the necessary border and sign message. The required sign message and border shall be placed on the modified sign as shown on the Guide Sign Layout Sheet. New letters must be provided for the message Tuloso Rd. The first drilled shaft foundation shall be cut off and the completed modified sign centered and erected on posts and foundations No. 2 and No. 3.

Item 7411 and 7420
Sheet 38, Sign No. 1: The Contractor will be required to remove and relocate the sign closer to the highway. Existing drilled shaft foundations No. 1 and No. 2 will become proposed foundations No. 2 and No. 3. The Contractor will be required to install proposed drilled shaft foundation No. 1 and furnish a new sign post with stub posts for this foundation (See Sign Tabulation Sheet-Summary of Proposed Signs). This foundation shall be 8.0' from foundation No. 2. Existing drilled foundation No. 3 shall be cut off.

Explanation of Signing Work on Plan Sheets:

DESCRIPTION	METHOD OF PAYMENT
A. Signs to be Removed & Salvaged	Item 496
B. Signs to be Removed & Relocated	Item 7411 & 7420
C. Signs to be Modified	Item 2035
D. New Signs	Item 7005, 7074, 7221, 7242, & 7411

Materials under these items shall be handled and stored at the job site in such a manner that they will not be damaged. All materials such as sign panels, sign connections, and post(s) which the Engineer deems as salvage for reuse shall be carefully placed along the right of way at convenient loading points which will not interfere with traffic or construction. All these materials shall be the property of the Texas Highway Department.

31. Item 1596. All traffic button arrows shall be staked by the Engineer.
32. Item 7005, 7011, 7022, 7221, 7242, and 7420. The Contractor will not begin putting up the breakaway sign posts until he has the signs and crew available to immediately follow up with the erection of the signs. The Contractor shall schedule his work so as to keep the down time of signs to be relocated and/or modified to a minimum.
33. Item 7163. Dimensions for corner radii above 3 inches may vary plus or minus 1 inch. Dimensions for border width may vary as much as plus ½ inch. Borders and corner radii must be matching widths.
34. Item 7221, 7242, 7411, and 7420. The Contractor shall take adequate precaution by probing or uncovering by hand before placing materials under these items to prevent injury to the roadway illumination system, storm sewer system, and the sprinkler system. Should damage occur as a result of the Contractor's operations, he shall repair same at his entire expense. The locations of the above systems, lines, and cables have been located from the only available source of information.

At curved alignments, the angle of placement should be determined by the course of approaching traffic approximately 1,000 feet ahead rather than by the roadway edge at the point where the sign is located.

The left edge of signs erected on Roadside Sign Mounts shall be 2'-0" from the face of unmountable curb for warning, regulatory, and small guide signs and as shown on the plans for large guide signs.

35. Item 7411. If, in the opinion of the Engineer, presence of excess (ground) water and/or an unstable condition in subgrade soils prevent excavation to the lines and depths indicated on the plans for "Reinforced Concrete Drilled Shafts," the Contractor shall provide expendable casing to assure conformity to the required lines and depths. Where casing is used, excavating procedures shall be limited to the interior of the casing. All loose material shall be removed from the excavation before the concrete is placed. Any water shall be removed by pumping or bailing. The use of explosives will not be permitted.
36. Item 7420. It is intended in relocating signs under this item that new posts and foundations will be required.

GENERAL NOTES

SHEET E

Revised 6-29-71

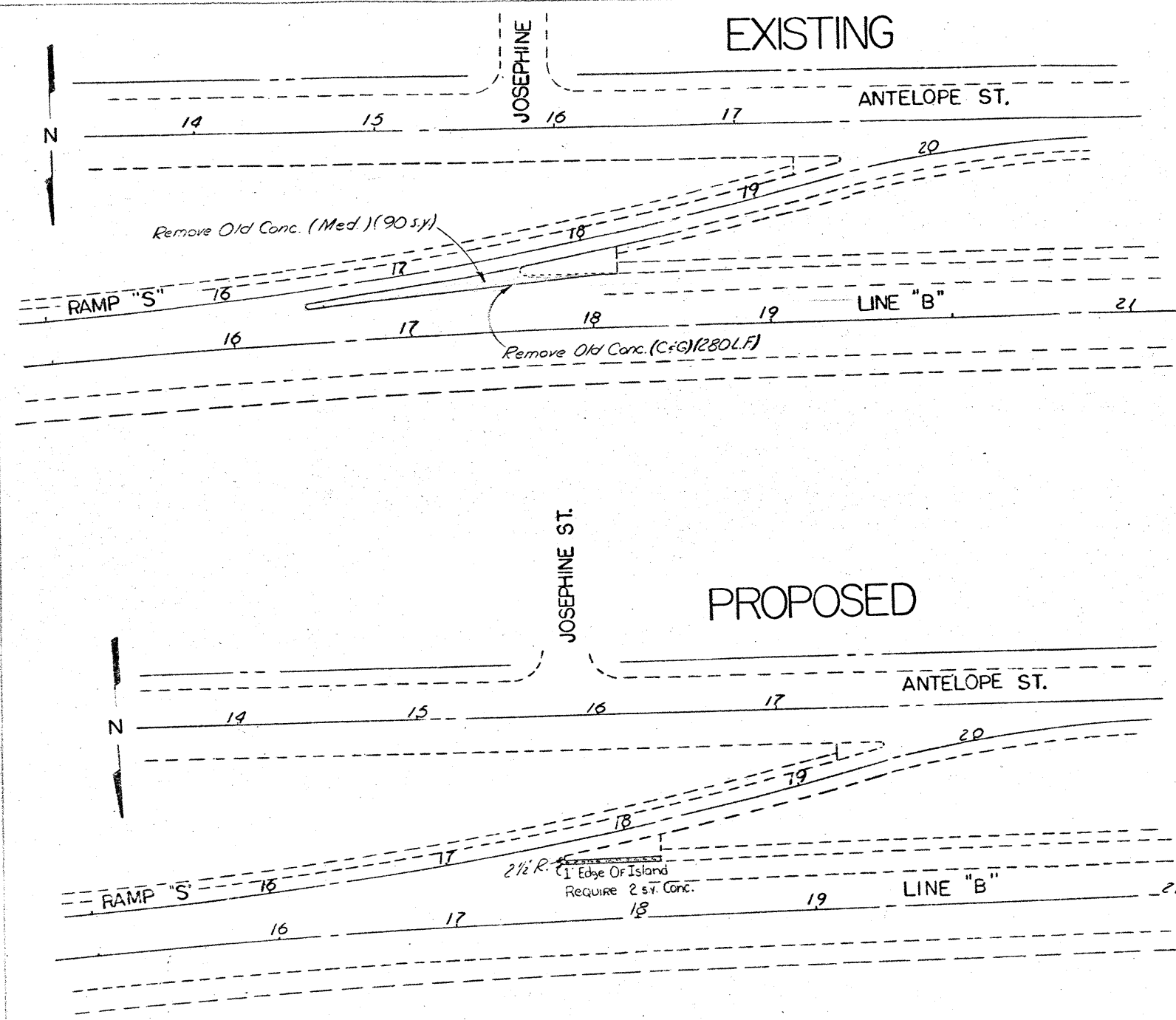
FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	I 37-1 (50) 000	13
STATE DIST. NO.	COUNTY	CONT. SECT.	JOB HIGHWAY NO.
16	NUECES	74 6 79	14 37

GENERAL NOTES

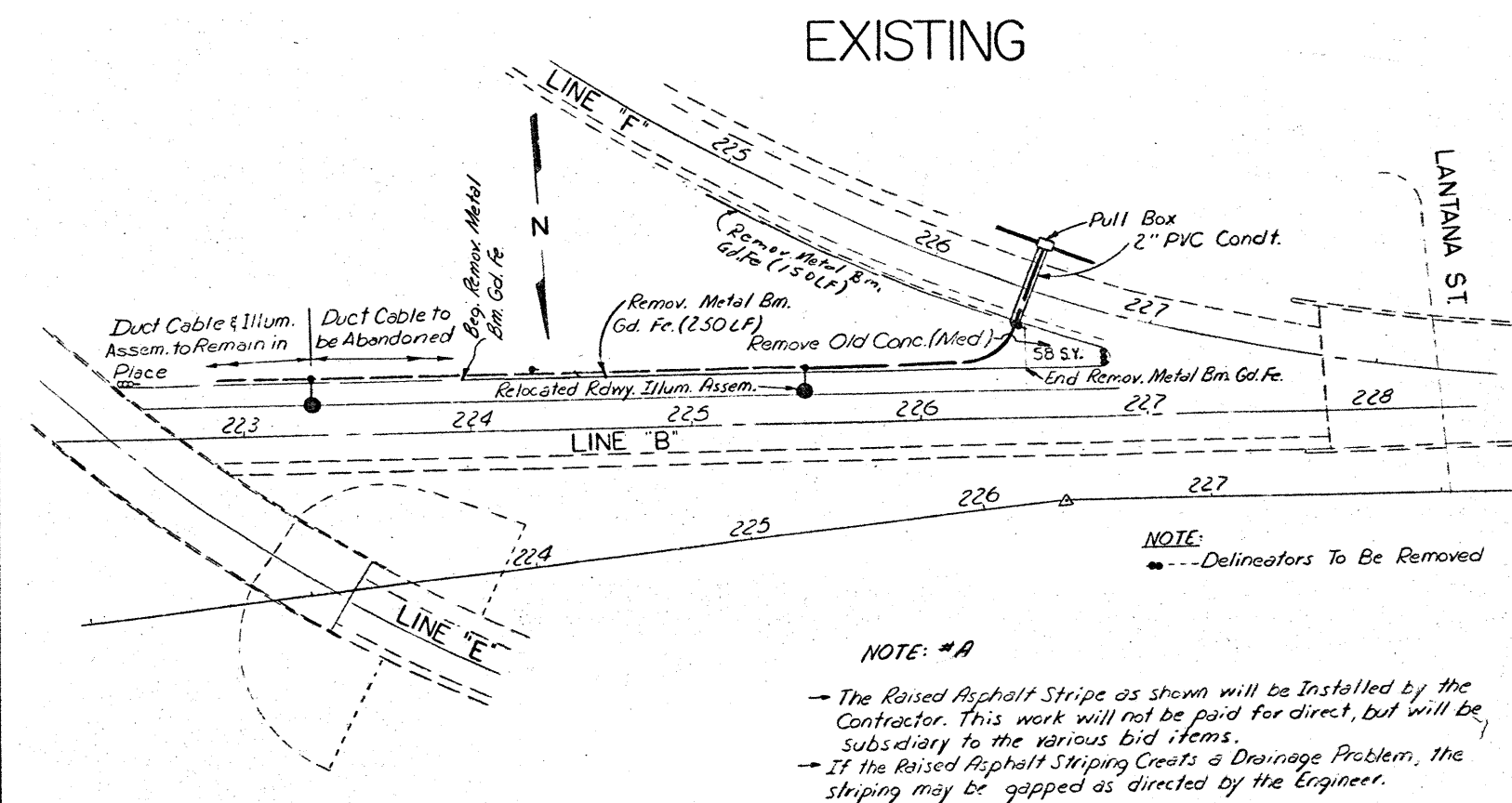
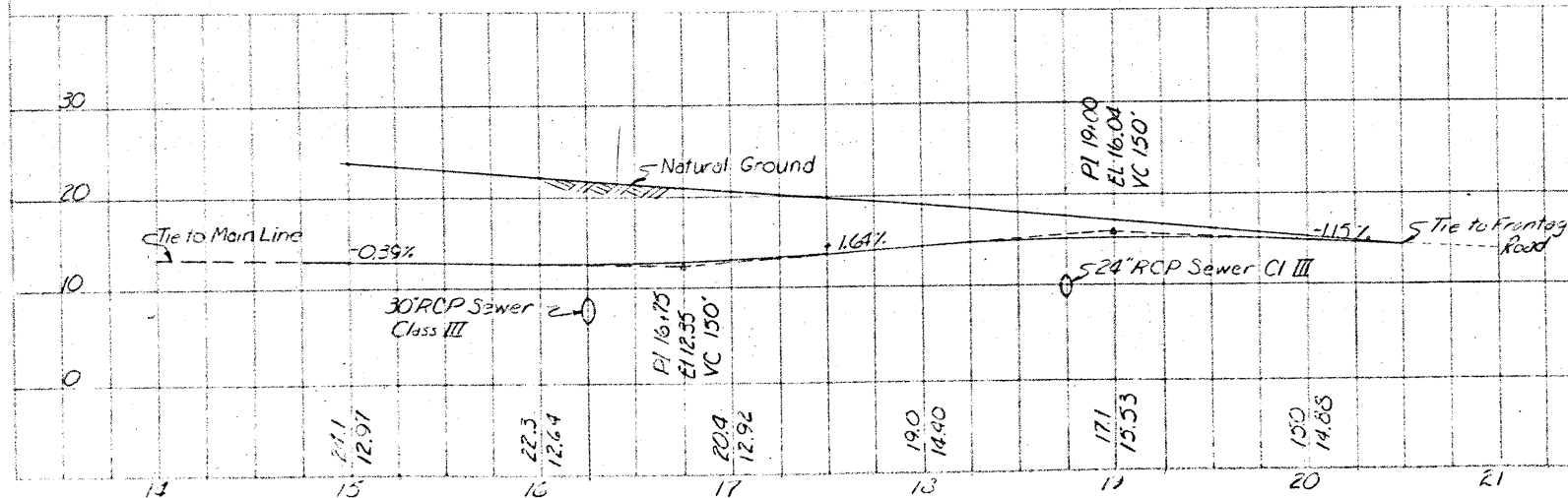
GENERAL NOTES

SHEET

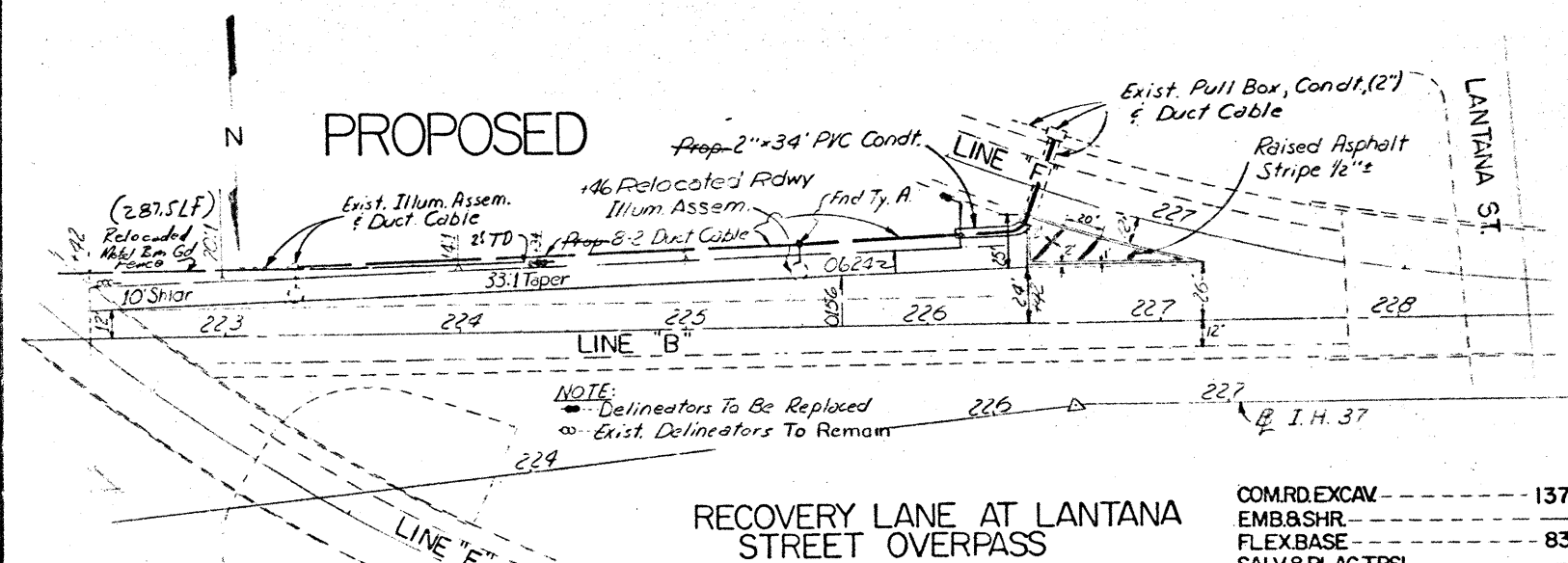
FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	I 37-1 (50) 000	13
STATE DIST. NO.	COUNTY	CONT. SECT.	JOB HIGHWAY NO.
16	NUECES	74 6 79	14 37



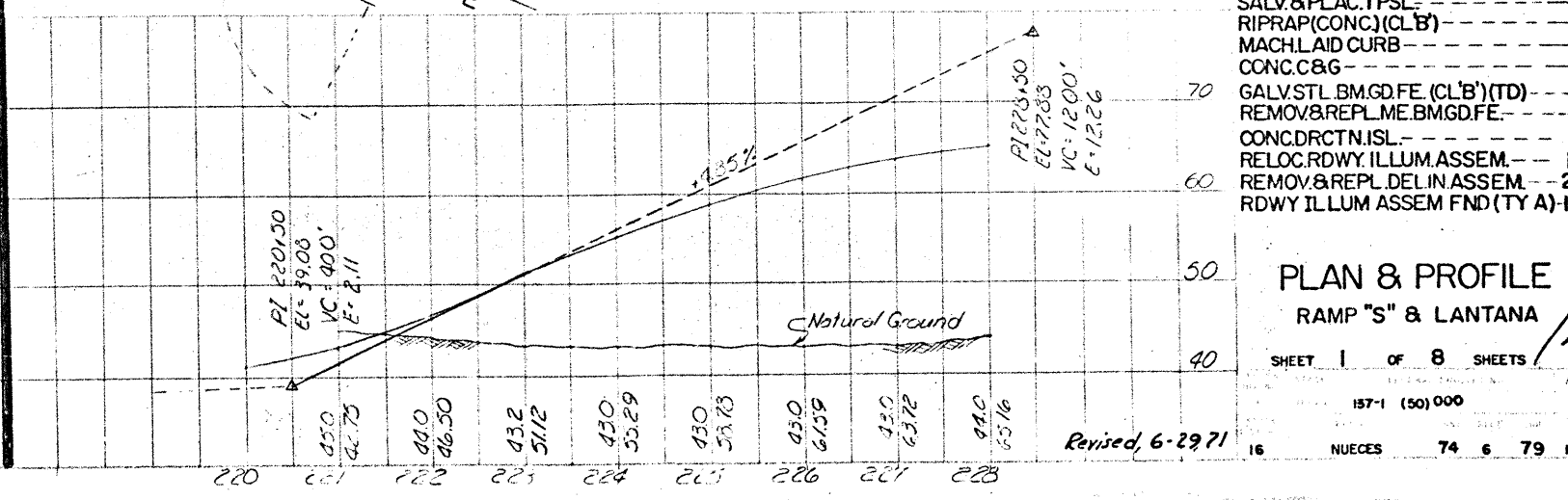
RAMP "S" NOSE REVISION AT
286-I.H. 37 INTERCHANGE



NOTE: #A
→ The Raised Asphalt Stripe as shown will be installed by the Contractor. This work will not be paid for direct, but will be subsidiary to the various bid items.
→ If the Raised Asphalt Striping Creates a Drainage Problem, the striping may be gapped as directed by the Engineer.



RECOVERY LANE AT LANTANA
STREET OVERPASS



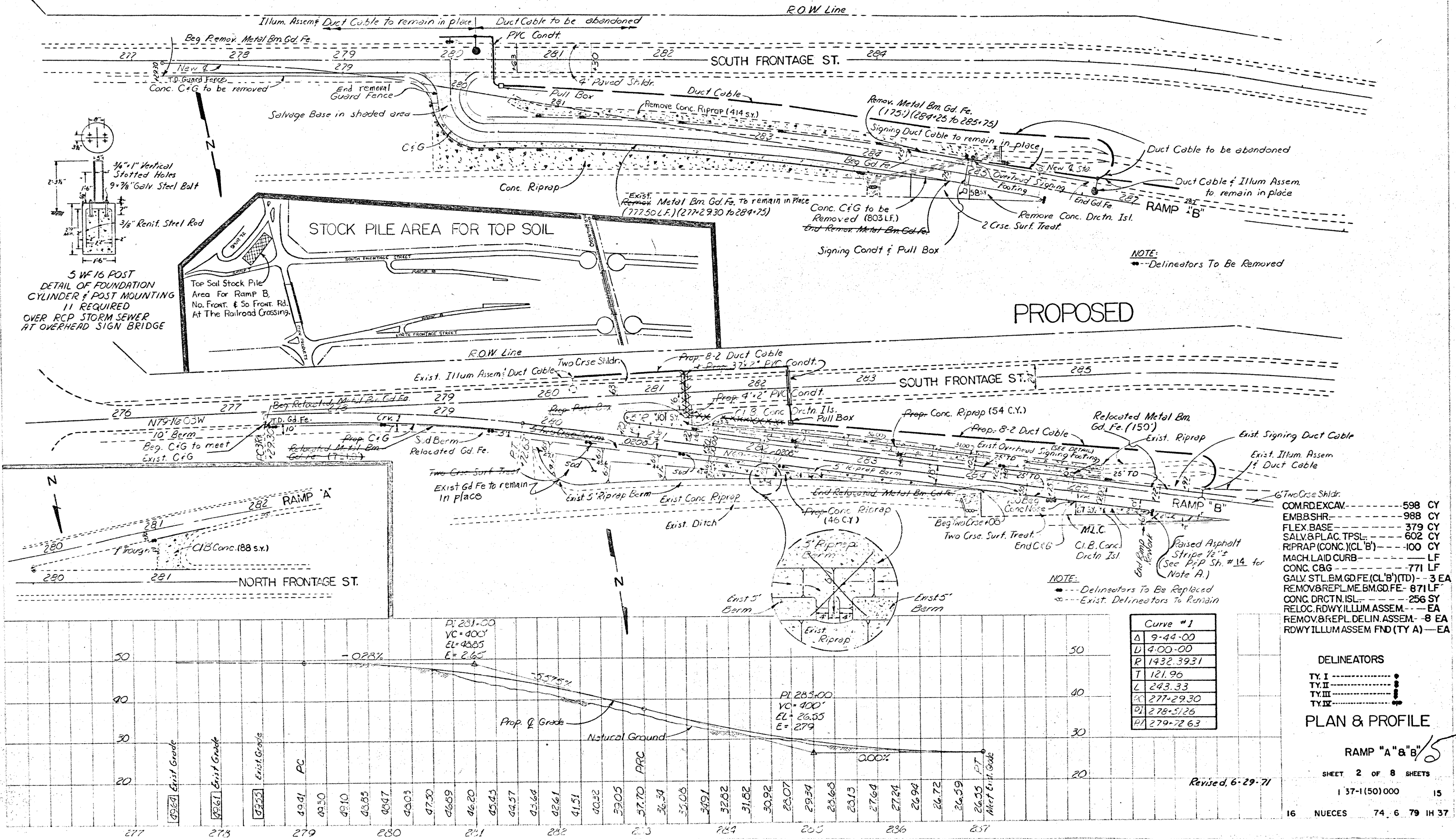
COM. RD. EXCAV.	137 CY
EMB. & SHR.	CY
FLEX. BASE	83 CY
SALV. & PLAC. T.P.S.L.	CY
RIPRAP (CONC.) (CL. B)	CY
MACH. LAID CURB	LF
CONC. C&G	LF
GALV. STL. BM. G.D. FE. (CL. B) (TD)	EA
REMOV. & REPL. ME. BM. G.D. FE.	LF
CONC. DRCTN. ISL.	SY
RELOC. RDWY. ILLUM. ASSEM.	1 EA
REMOV. & REPL. DELIN. ASSEM.	2 EA
RDWY. ILLUM. ASSEM. FND (TY. A)	1 EA

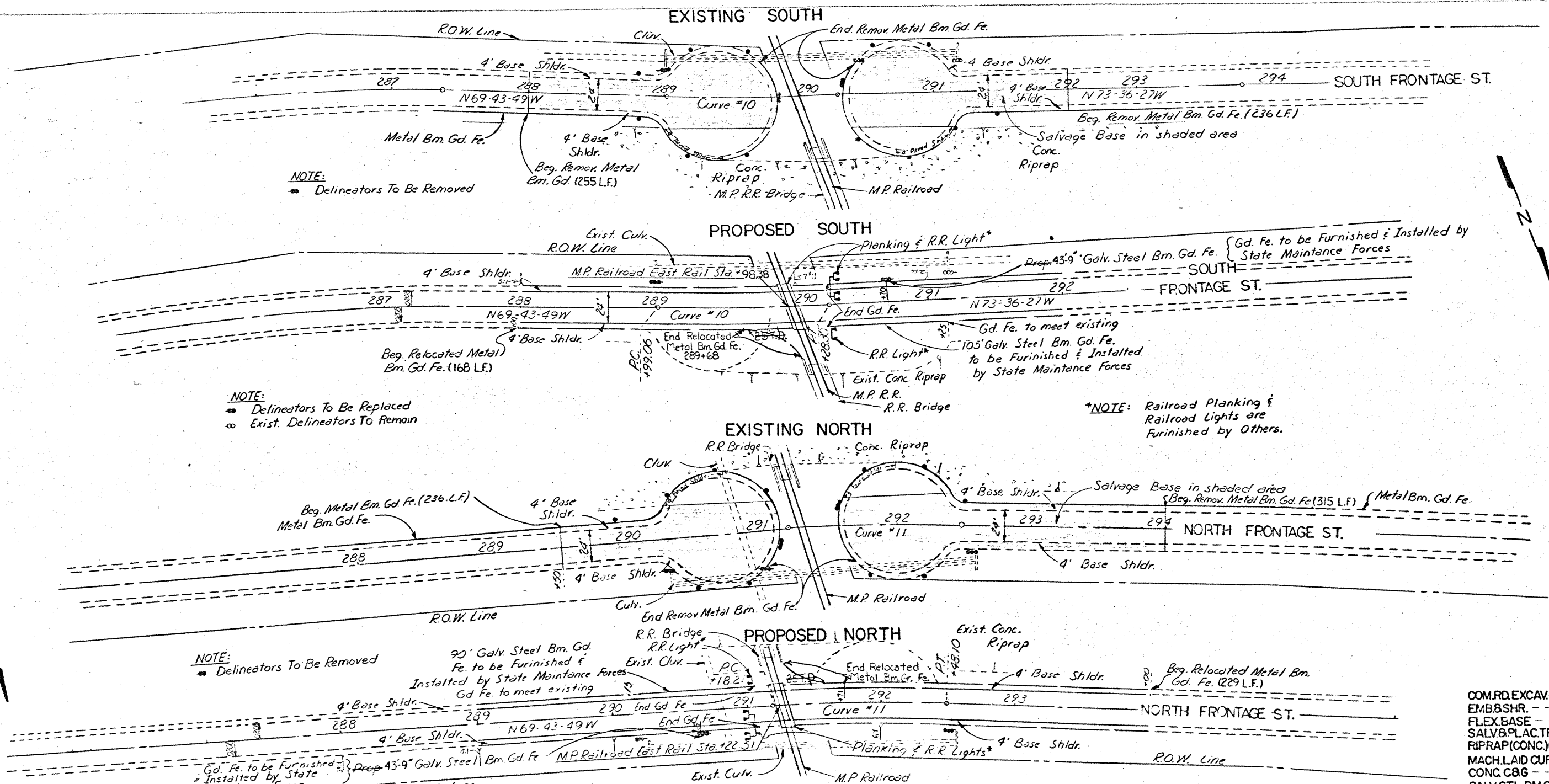
PLAN & PROFILE
RAMP "S" & LANTANA

SHEET 1 OF 8 SHEETS

Revised, 6-29-71

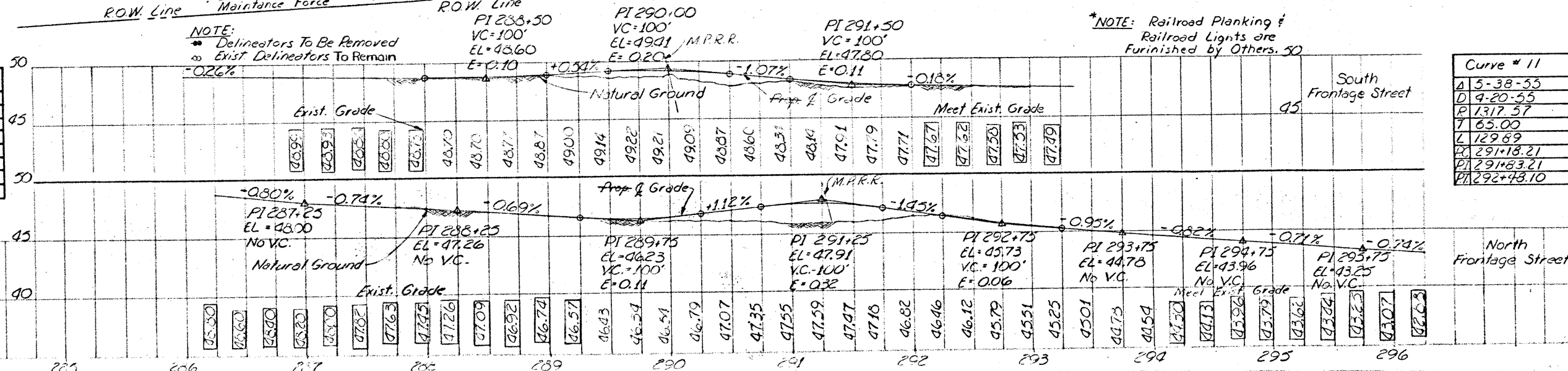
EXISTING





Curve #10
Δ 3-52-38
Δ 3-00-00
Δ 1909.86
Δ 64.65
Δ 129.24
Δ 288+99.06
Δ 289+63.71
Δ 290+28.30

Curve #11
Δ 5-38-55
Δ 4-20-55
Δ 1317.57
Δ 65.00
Δ 129.89
Δ 291+18.21
Δ 291+83.21
Δ 292+48.10



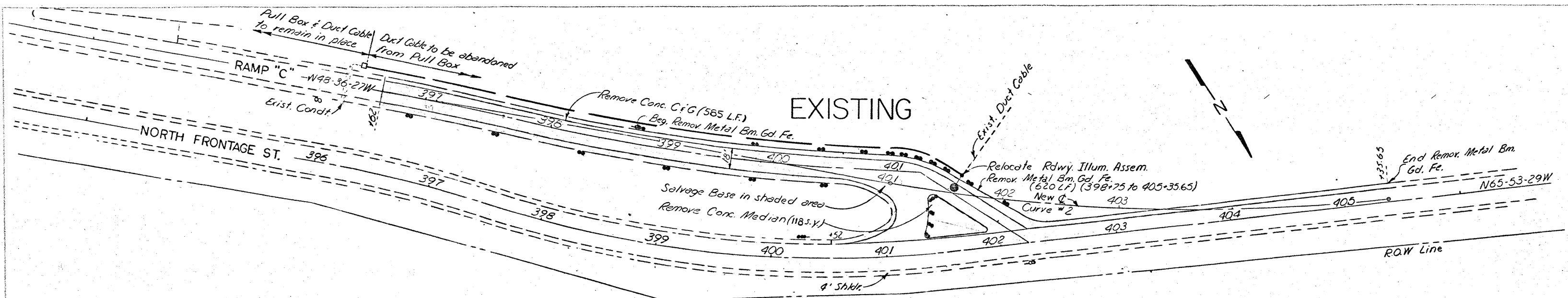
COM. RD. EXCAV.	78 CY
EMB. & SHR.	933 CY
FLEX. BASE	— CY
SALV. & PLAC. T.P.S.L.	198 CY
RIPRAP (CONC.) (CL' B')	— CY
MACH. LAID CURB	— LF
CONC. C&G	— LF
GALV. STL. BM. G.D. FE. (CL' B') (TD)	2 EA
REMOV. & REPL. ME. BM. G.D. FE.	397 LF
CONC. DRCTN. ISL.	— SY
RELOC. RDWY. ILLUM. ASSEM.	— EA
REMOV. & REPL. DELIN. ASSEM.	— EA
RDWY. ILLUM. ASSEM. FND (TYA)	— EA

PLAN & PROFILE

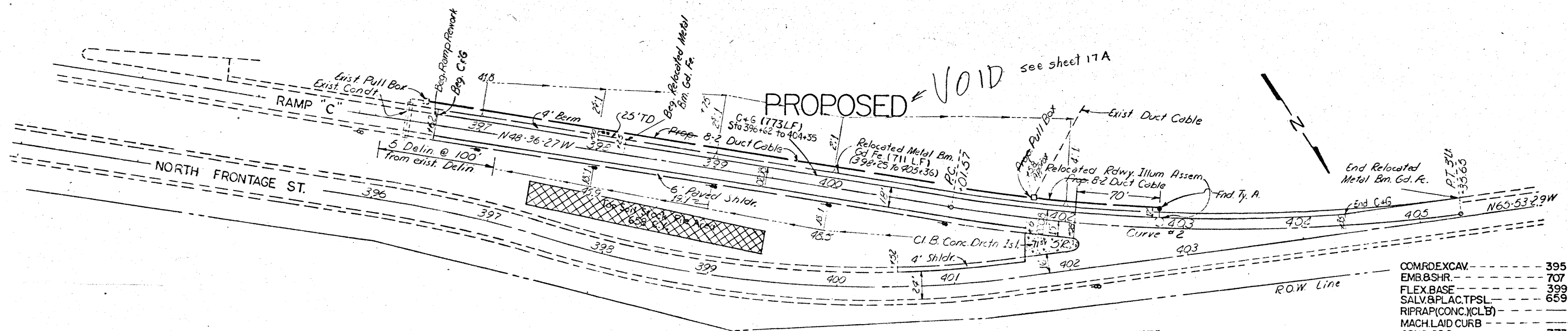
FRONTAGE ROADS ACROSS
M.P. RAILROAD
SHEET 3 OF 8 SHEETS

1 37-1(50)000 16

16 NUECES 74 6 79 IH 37

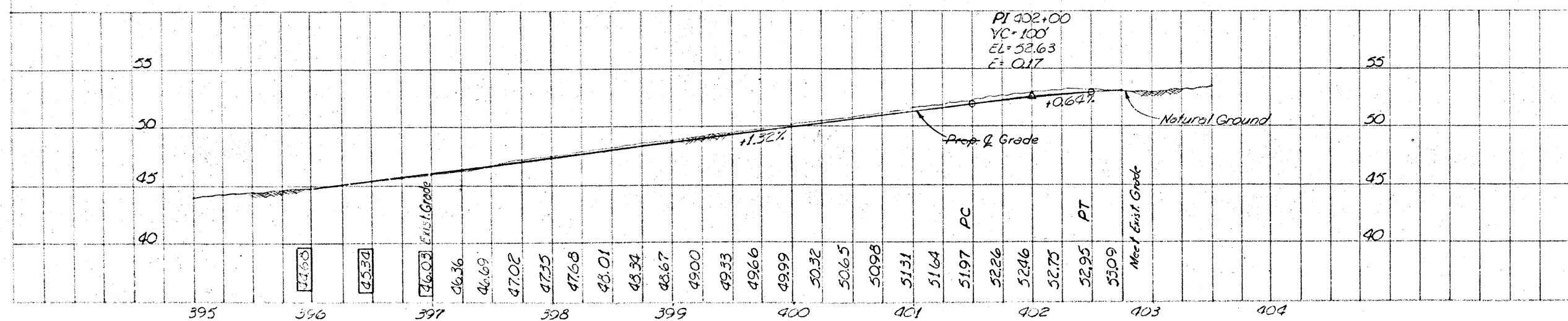


NOTE:
---Delineators To Be Removed



NOTE:
---Delineators To Be Replaced
---Exist. Delineators To Remain

COMDEXCAV.	395 CY
EMB.BSHR.	707 CY
FLEX.BASE	399 CY
SALV.&PLAC.TPSL	659 CY
RIPRAP(CONC.) (CLB)	CY
MACH.LAID CURB	LF
CONC.C&G	773 LF
GALV.STL.BMGD.FE.(CLB)(TD)	1 EA
REMOV.&REPL.ME.BMGD.FE.	711 LF
CONCDRCTN.ISL.	71 SY
RELOC.RDWY.ILLUM.ASSEM.	1 EA
REMOV.&REPL.DELIN.ASSEM.	7 EA
RDWY.ILLUM.ASSEM.FND(TYA)	1 EA



Curve # 2	
Δ	17-17-0.2
D	3-58-54
R	1438.96
T	218.70
L	434.08
PC	401+21.57
PT	403+30.27
PI	405+35.65

Note: See Sheet 17A for realignment and grade change

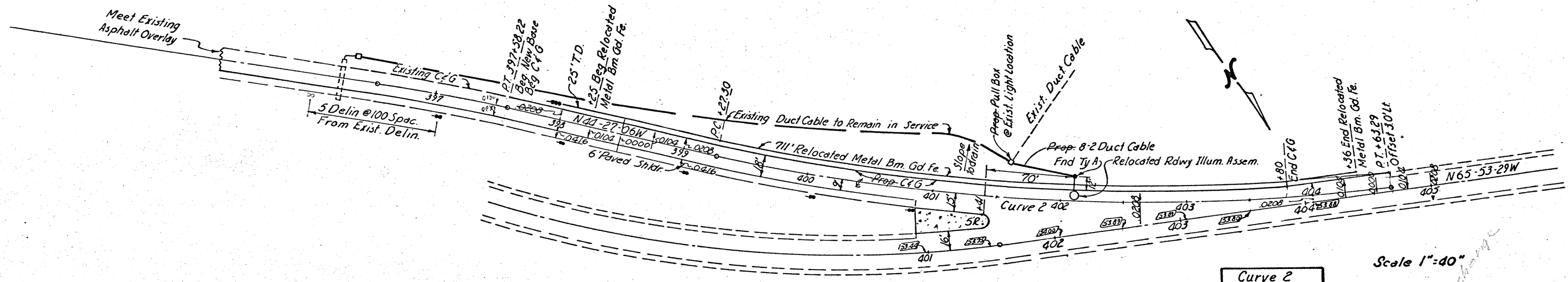
PLAN & PROFILE

RAMP "C"

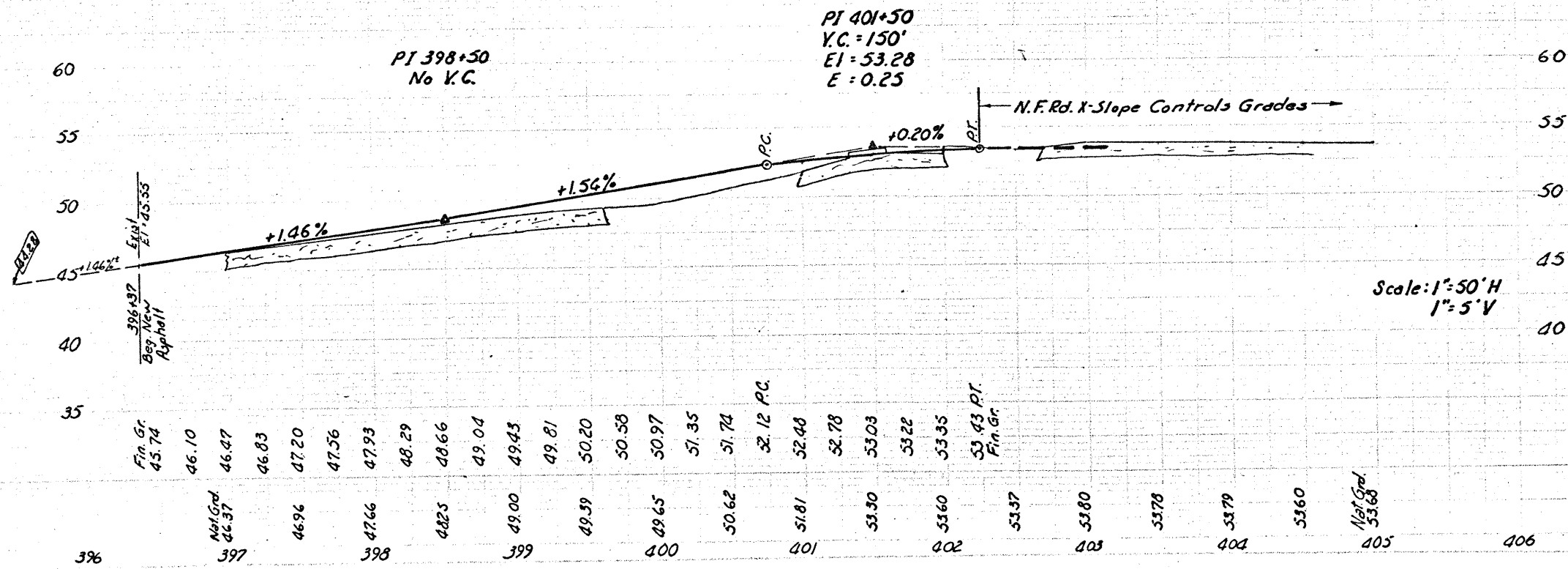
SHEET 4 OF 8 SHEETS

1 37-1(50)000 17

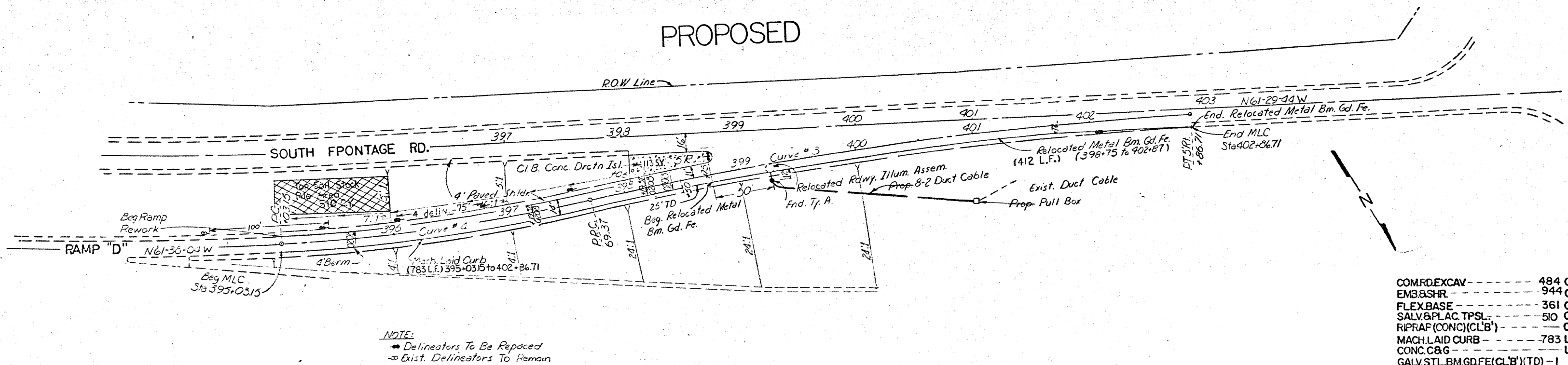
16 NUECES 74 6 79 IH37



PROPOSED RAMP "C" REVISED 9-21-72



PROPOSED



Curve #3		Curve #4	
Δ	10-30-35	Δ	10-38-55
D	2-01-53	D	4-00-00
R	2820.40	R	1432.39
T	259.40	T	133.49
L	517.34	L	266.22
PC	397+69.37	PC	395+03.15
PI	400+23.77	PI	396+36.64
PT	402+86.71	PT	397+69.37

PI 399+50
 VC=150'
 EL=51.94
 E=0.18

+1.32%
 +2.06%

PC PT PC
 PT

Natural Ground
 Prop. G. Grade

42.23 42.23 42.61 43.23 43.58 43.95 44.26 44.80 45.27 45.77 46.25 46.80 47.51 47.83 48.34 48.86 49.37 49.89 50.40 50.92 51.43 51.91 52.045 52.15 52.25 52.35

393 394 395 396 397 398 399 400 401

40 45 50 55

```
COMF.DEXCAV-----484 CY
EMB.8.SHR-----944 CY
FLEX.BASE-----361 CY
SALV.&PLAC.TPSL-----510 CY
RIPRAF.(CONC)(CL'B')-----CY
MACH.LAID CURB-----783 LF
CONC.C&G-----LF
GALV.STL.BM.GD.FE.(CL'B')(TD)-1 EA
REMOV.&REPL.ME.BM.GD.FE.-412 LF
CONC.DRCT.NJSL-----113 SY
RELOC.RDWY.ILLUM.ASSEM--1 EA
REMOV.&REPL.DELIN.ASSEM--5 EA
RDWY.ILLUM.ASSEM.FND(TY A)-1 EA
```

Revised, 6-29-71

PLAN & PROFILE

RAMP "D"

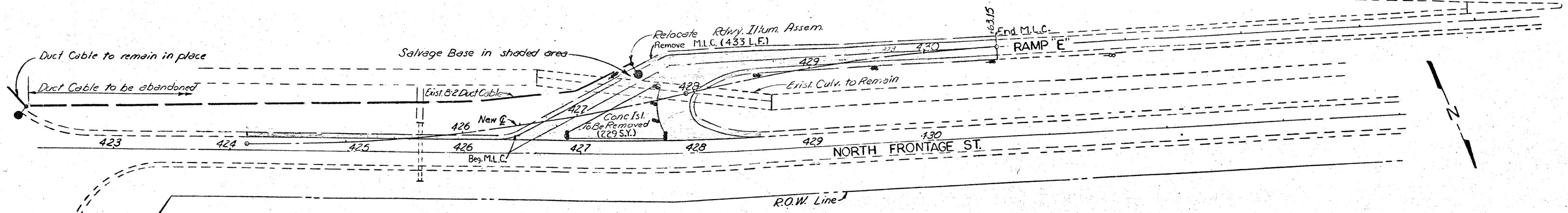
SHEET 5 OF 8 SHEETS

137-1(50)000

18

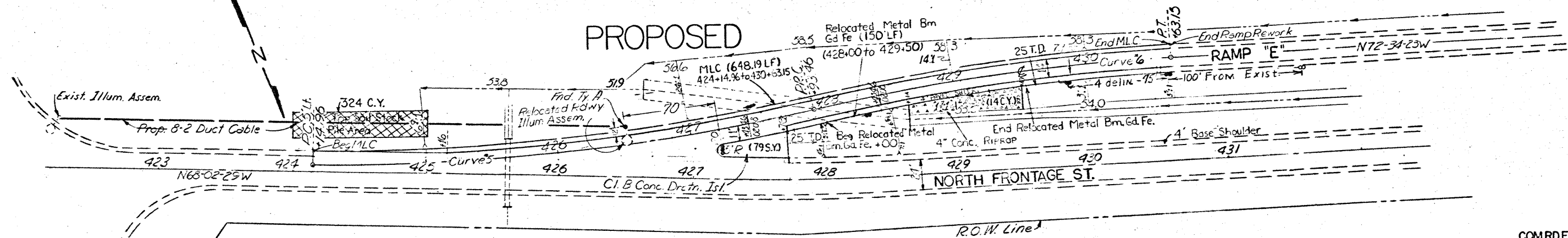
16 NUCES 74 6 79 IH 37

EXISTING



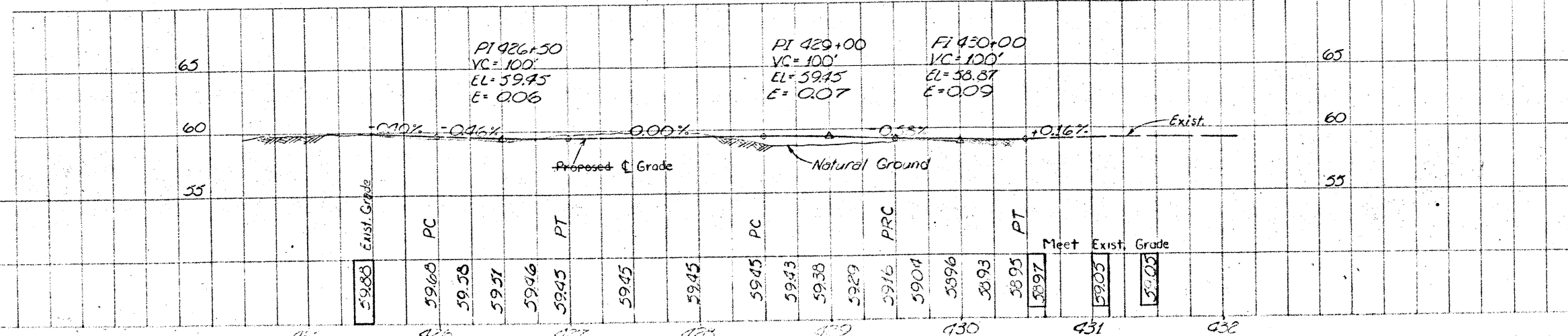
NOTE:
• Delineators To Be Removed

PROPOSED



NOTE:
• Delineators To Be Replaced
• Exist. Delineators To Remain

Curve #5	Curve #6
Δ 15-08-24	Δ 10-36-30
D 4-00-00	D 3-56-01
R 1432.39	R 1456.58
T 190.36	T 135.23
L 378.50	L 269.69
PC 424+14.96	PC 427+93.46
PT 426+05.32	PT 429+28.69
PT 427+93.46	PT 430+63.15



COM. RD EXCAV.-----165 CY
EMB&SHR-----639 CY
FLEX. BASE-----233 CY
SALV&PLAC. TPSL-----324 CY
RIPRAP (CONC. XCL'B')-----14 CY
MACH. LAID CURB-----648 LF
CONC. C&G-----LF
GALV. STL. BM. GD. FE. (CL'B') (TD)-----2 EA
REMOV&REPL. ME. BM. GD. FE.-----150 LF
CONC. DRCTN. ISL.-----79 SY
RELOC. RDWY. ILLUM. ASSEM.-----1 EA
REMOV&REPL. DELIN. ASSEM.-----6 EA
RDWY. ILLUM. ASSEM. FND (TY A)-----1 EA

Revised, 6-29-71

PLAN & PROFILE

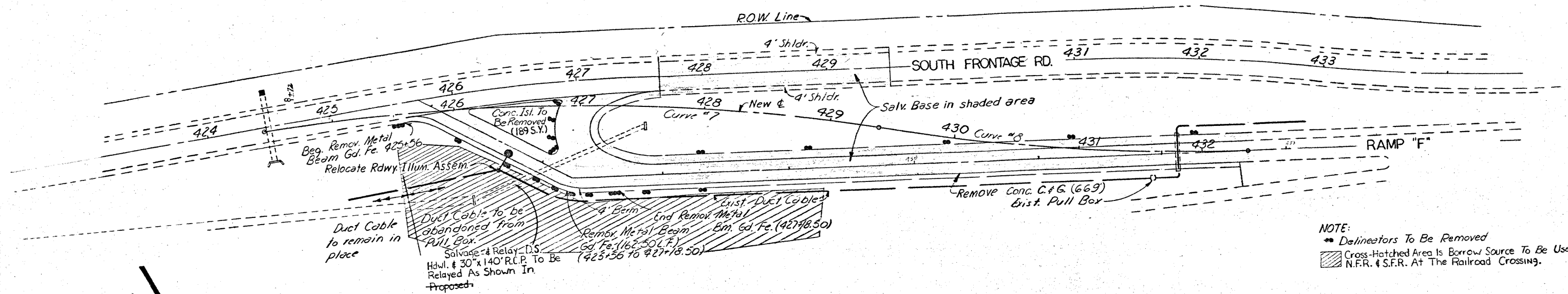
RAMP "E" 19

SHEET 6 OF 8 SHEETS

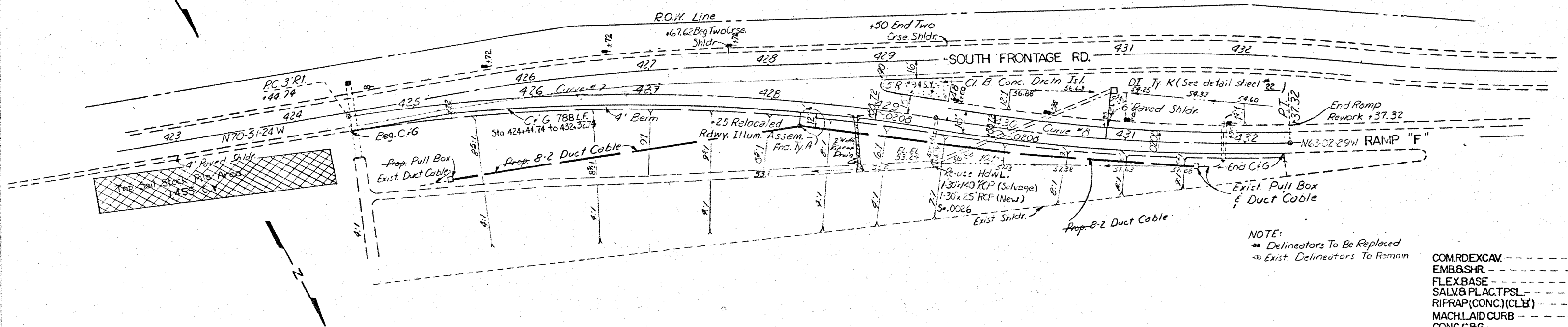
1 37-1(50)000 19

16 NUECES 74 6 79 1H 37

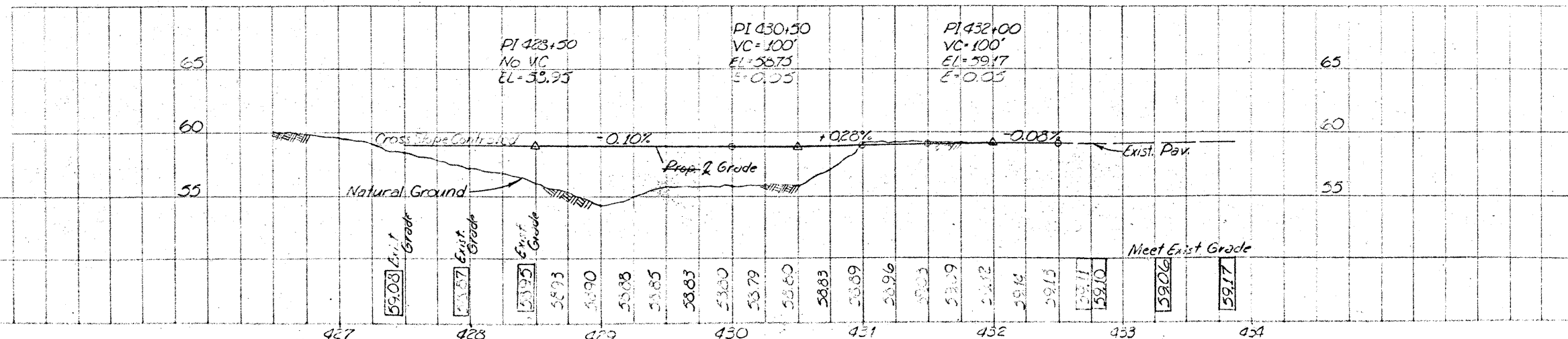
EXISTING



PROPOSED



Curve #7	Curve #8
Δ 19-45-33.03	Δ 11-56-38.03
D 4-00-00	D 4-00-00
R 1432.3915	R 1432.3945
T 249.4670	T 149.8417
L 493.3194	L 293.5974
PC 424.4474	PC 429.3872
PI 426.9421	PI 430.8856
PT 429.3872	PT 432.3732



COM. REXCAV.	3872	CY
EMB. & SHR.	1113	CY
FLEX. BASE	424	CY
SALV. & PLAC. T.P.S.L.	1455	CY
RIPRAP (CONC.) (CLB)	2	CY
MACH. LAID CURB		LF
CONC. C&G	788	LF
GALV. STL. BM. G.D.F.E. (CLB) (TD)		EA
REMOV. & REPL. ME. BM. G.D.F.E.		LF
CONC. DRCTN. ISL.	94	SY
RELOC. RDWY. ILLUM. ASSEM.	1	EA
REMOV. & REPL. DELIN. ASSEM.	7	EA
RDWY. ILLUM. ASSEM. FND (TY A)	1	EA

Revised, 6-29-71

PLAN & PROFILE

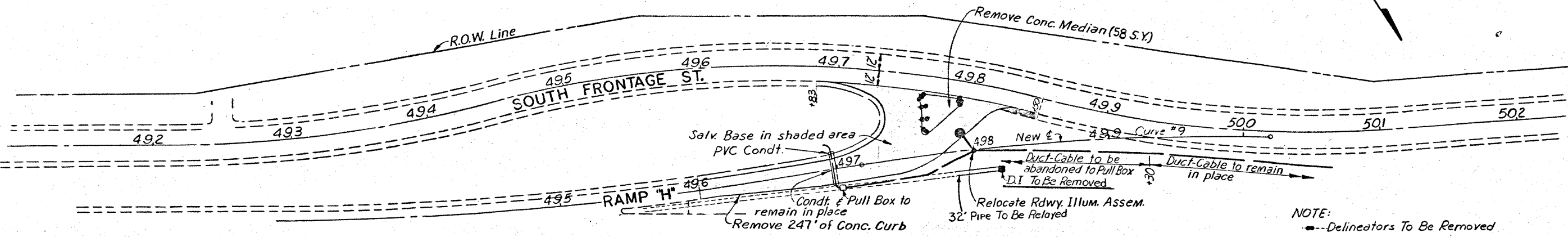
RAMP "F" 20

SHEET 7 OF 8 SHEETS

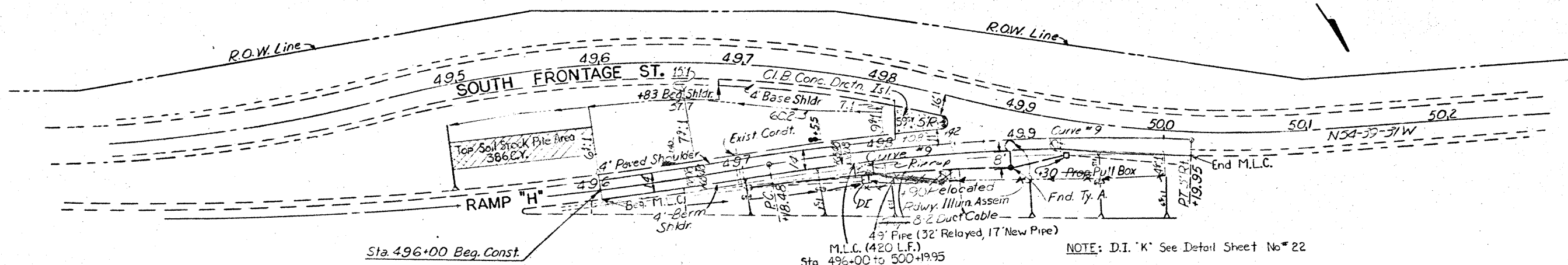
137-1(150)000 20

16 NUECES 74 6 79 1H37

EXISTING



PROPOSED

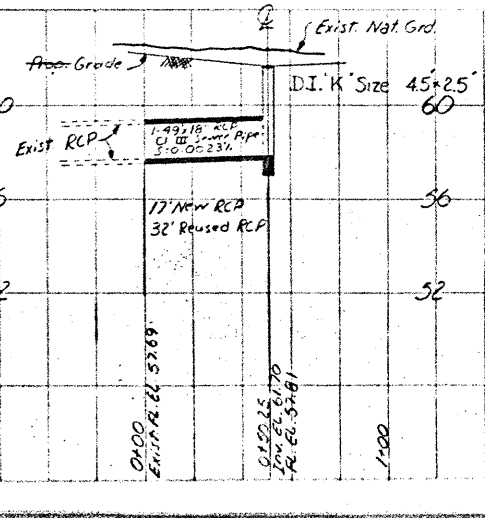
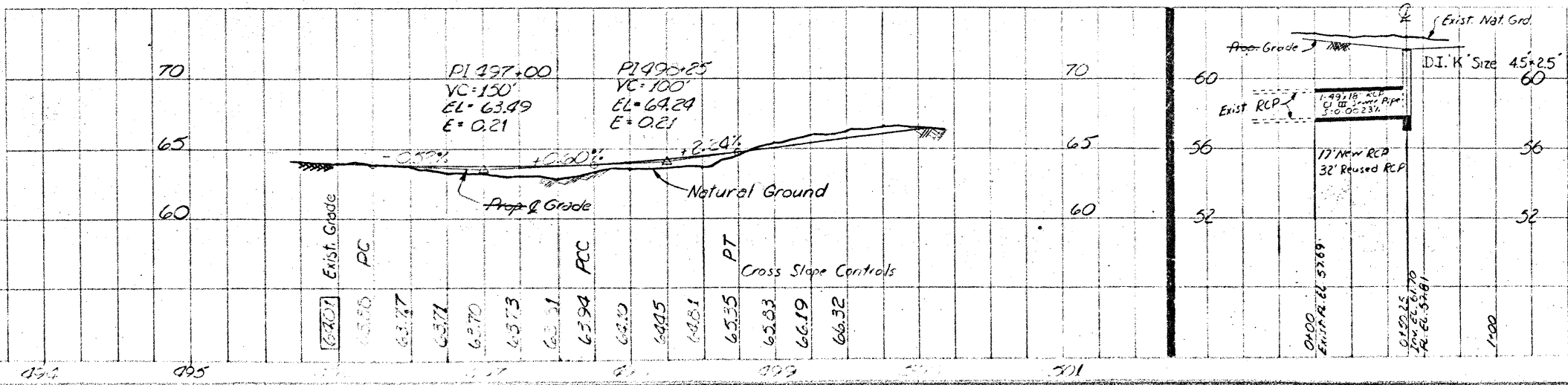


NOTE:
• Delineators To Be Replaced
∞ Exist. Delineators To Remain

NOTE: D.I. 'K' See Detail Sheet No. 22

COM.RDEXCAV	87 CY
EMB&SHR	554 CY
FLEX.BASE	148 CY
SALV.&PLAC.TPSL	386 CY
RIPRAP(CONC.)(CL'B)	2 CY
MACH.LAID CURB	420 LF
CONC.C&G	LF
GALV.STL.BMGD.FE.(CL'B)(TD)	EA
REMOV.&REPL.ME.BMGD.FE	LF
CONC.DRCTN.ISL	59 SY
RELOC.RDWY.ILLUM.ASSEM	1 EA
REMOV.&REPL.DELIN.ASSEM	3 EA
RDWY.ILLUM.ASSEM.FND(TYA)	1 EA

Curve # 9	
Δ	12-25-55
D	4-07-25
R	1389.41
T	151.33
L	301.47
PC	497+18.48
PI	498+69.81
PT	500+19.95



Revised, 6-29-71

PLAN & PROFILE

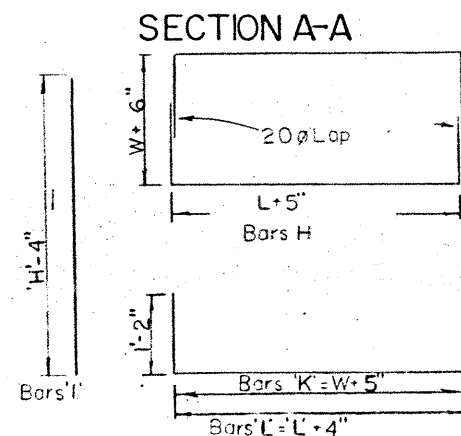
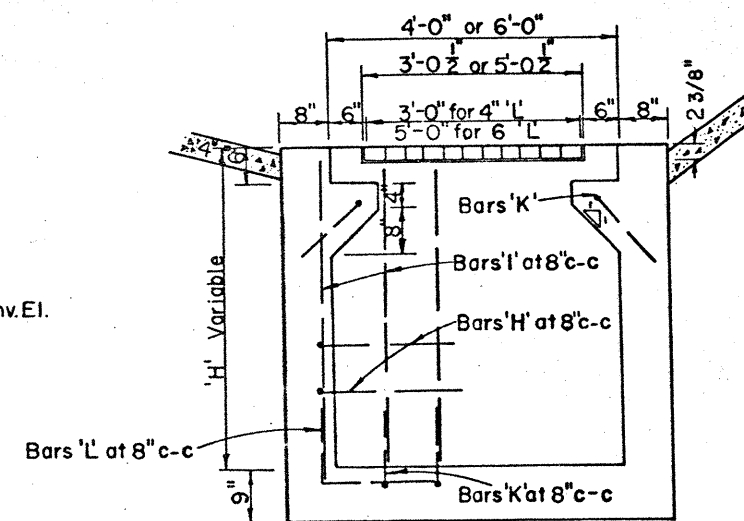
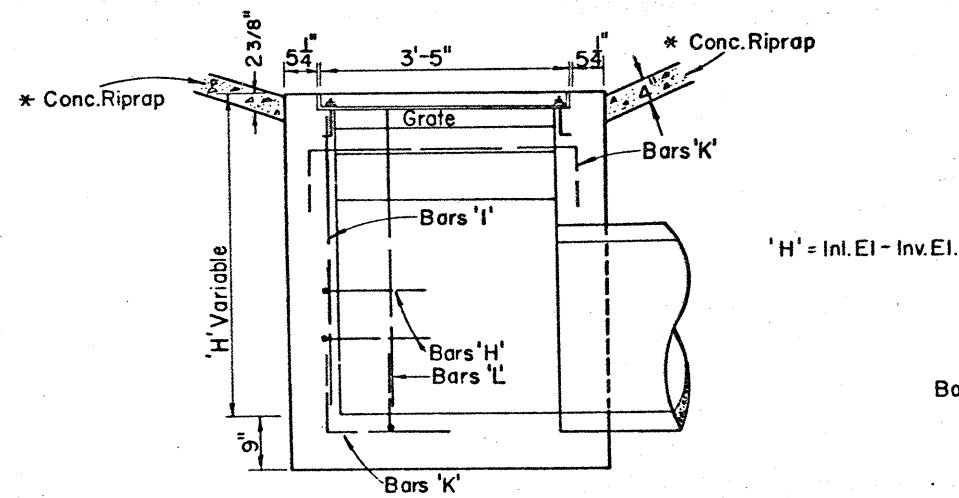
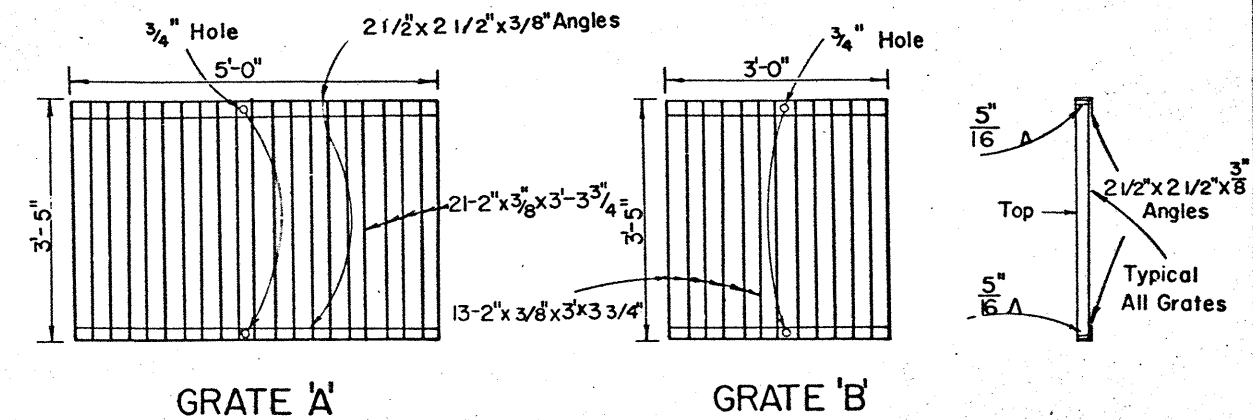
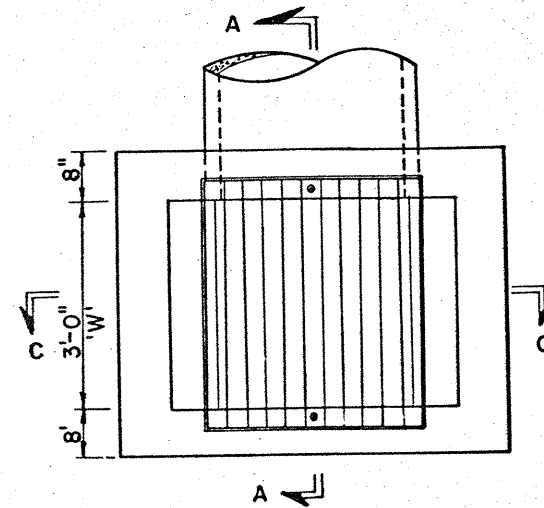
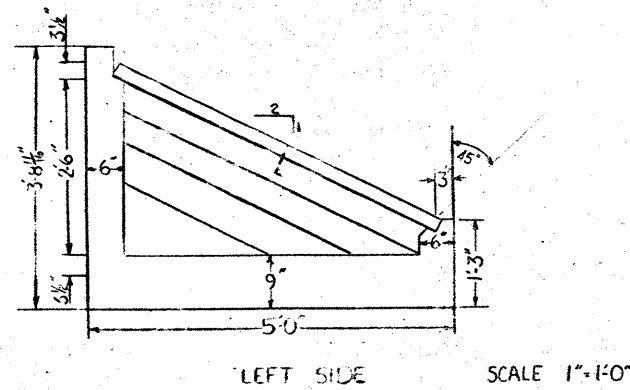
RAMP "H" 21

SHEET 8 OF 8 SHEETS

137-1(50) CDD 21

16 NUECES 74 6 79 IH 37

D.I. AT RAMP "F"
UP-STREAM END OF CULVERT

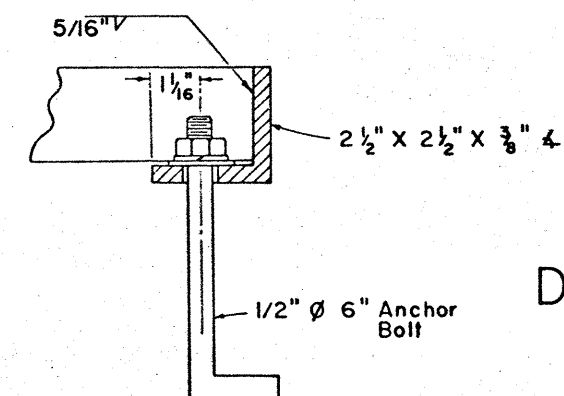


* 2 cu. yd. riprap will be used for shapping around perimeter of each inlet in sod and two course areas.

GENERAL NOTES

All concrete shall be class "C". Chamfer all exposed corners $\frac{3}{4}$ ". All concrete surfaces exposed to view after backfilling shall receive a Type I surface finish. DROP INLETS shall be in accordance with ITEM 470, "MANHOLES & INLETS". GRATES shall be in accordance with ITEM 471, "FRAMES, GRATES, RINGS & COVERS". For installation on box culverts, adjustments may be made by the Engineer to fit unusual condions.

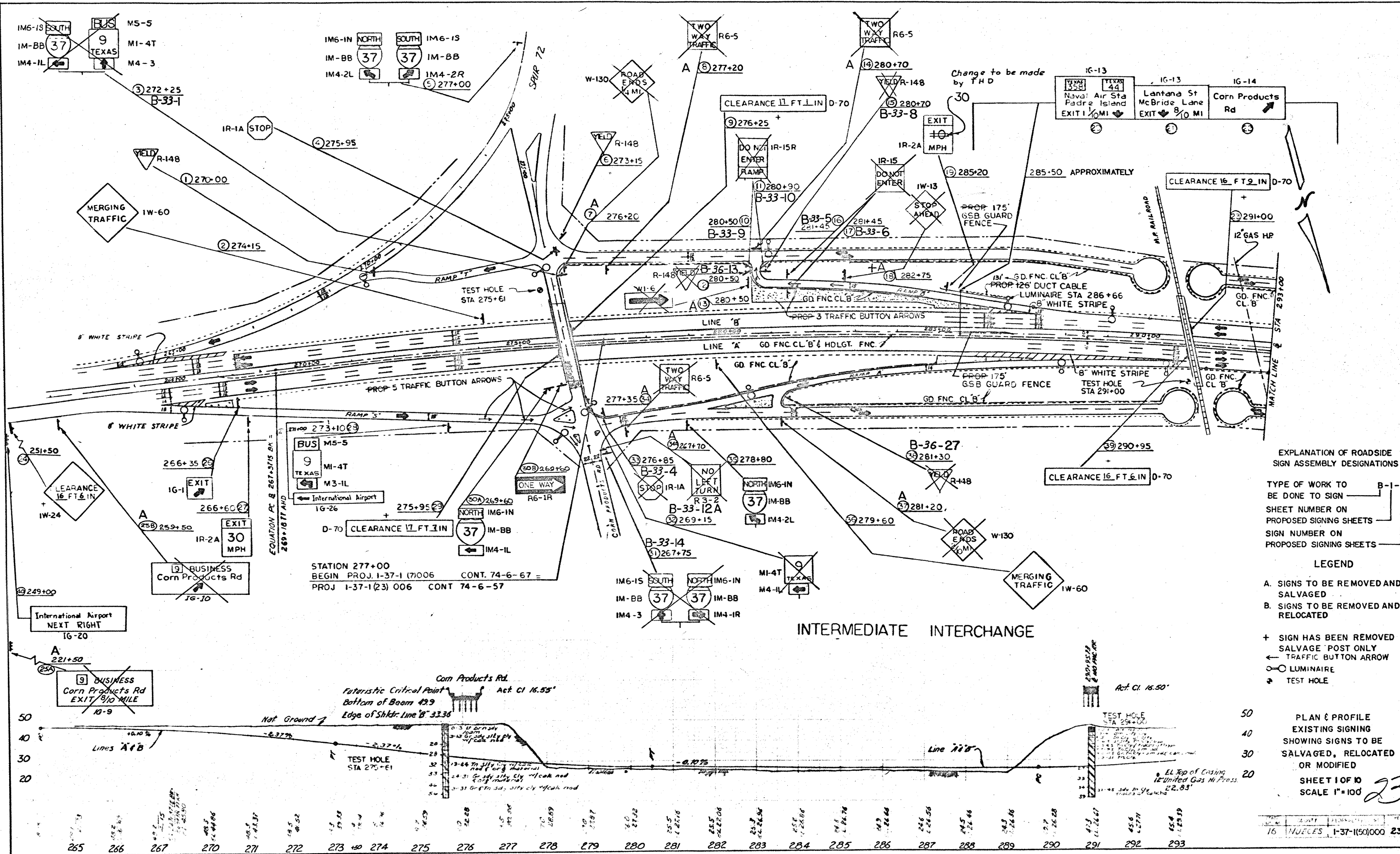
* Payment for CONCRETE RIPRAP shall be in accordance with ITEM 432, "RIPRAP".



DROP INLET DETAILS

TYPE "K"

STATE	COUNTY	CDIST	SECT	JOB	DATE
16	NUECES	74	6	79	11-37



EXPLANATION OF ROADSIDE
SIGN ASSEMBLY DESIGNATIONS

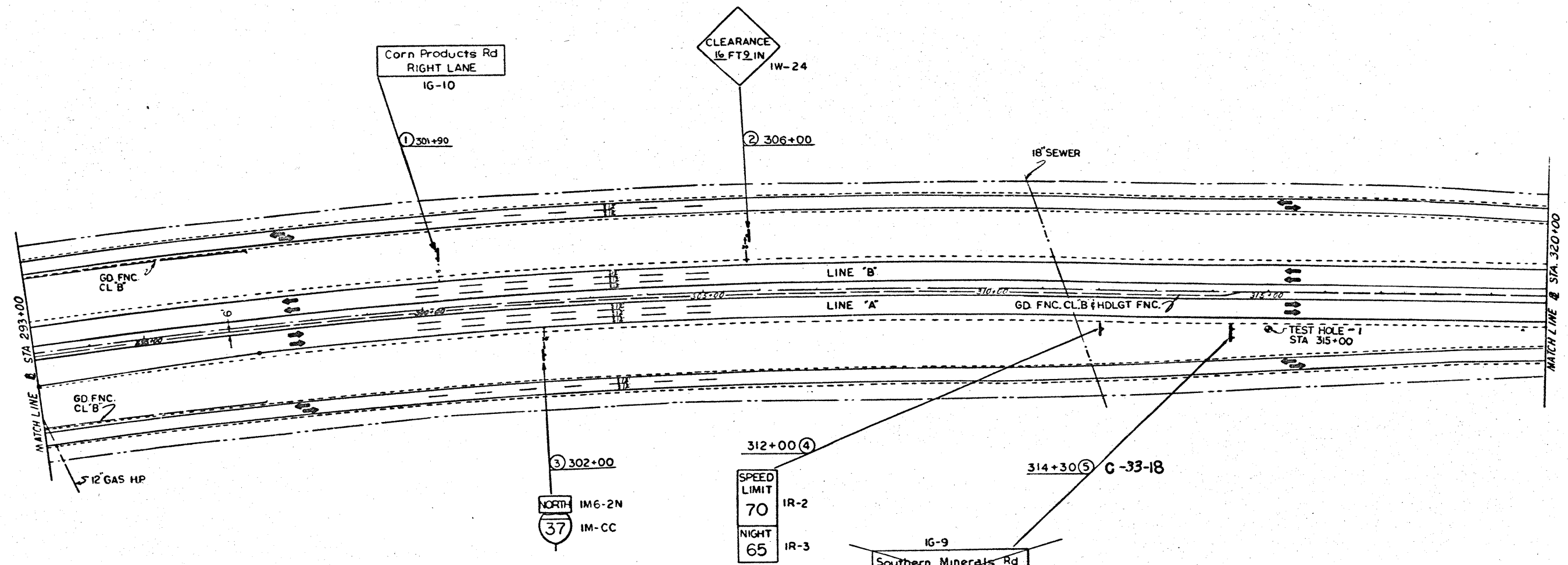
TYPE OF WORK TO
BE DONE TO SIGN — B-1-1
SHEET NUMBER ON
PROPOSED SIGNING SHEETS
SIGN NUMBER ON
PROPOSED SIGNING SHEETS

LEGEND

A. SIGNS TO BE REMOVED AND
SALVAGED
B. SIGNS TO BE REMOVED AND
RELOCATED

+ SIGN HAS BEEN REMOVED
SALVAGE POST ONLY
← TRAFFIC BUTTON ARROW
○ LUMINAIRE
• TEST HOLE

PLAN & PROFILE
EXISTING SIGNING
SHOWING SIGNS TO BE
SALVAGED, RELOCATED
OR MODIFIED
SHEET 1 OF 10
SCALE 1"=100'



312+00 ④
 SPEED LIMIT
 70 IR-2
 NIGHT
 65 IR-3

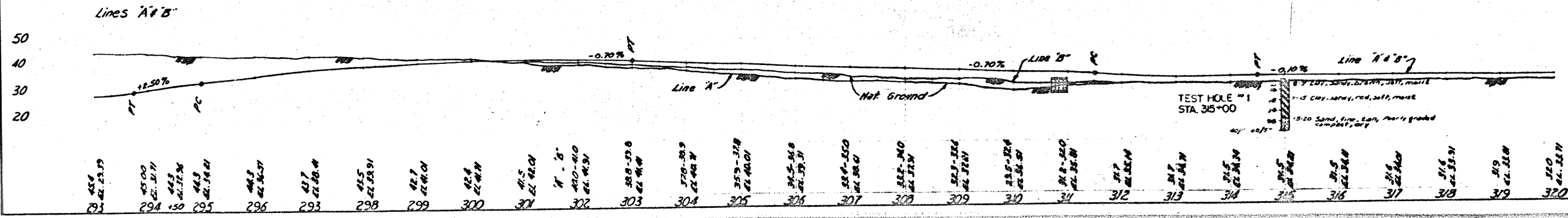
IG-9
 Southern Minerals Rd
 Suttle Rd
 EXIT 1 1/2 MILE

EXPLANATION OF ROADSIDE SIGN ASSEMBLY DESIGNATIONS

TYPE OF WORK TO BE DONE TO SIGN — B-1-1
 SHEET NUMBER ON PROPOSED SIGNING SHEETS —
 SIGN NUMBER ON PROPOSED SIGNING SHEETS —

LEGEND

C. SIGNS TO BE MODIFIED
 • TEST HOLE

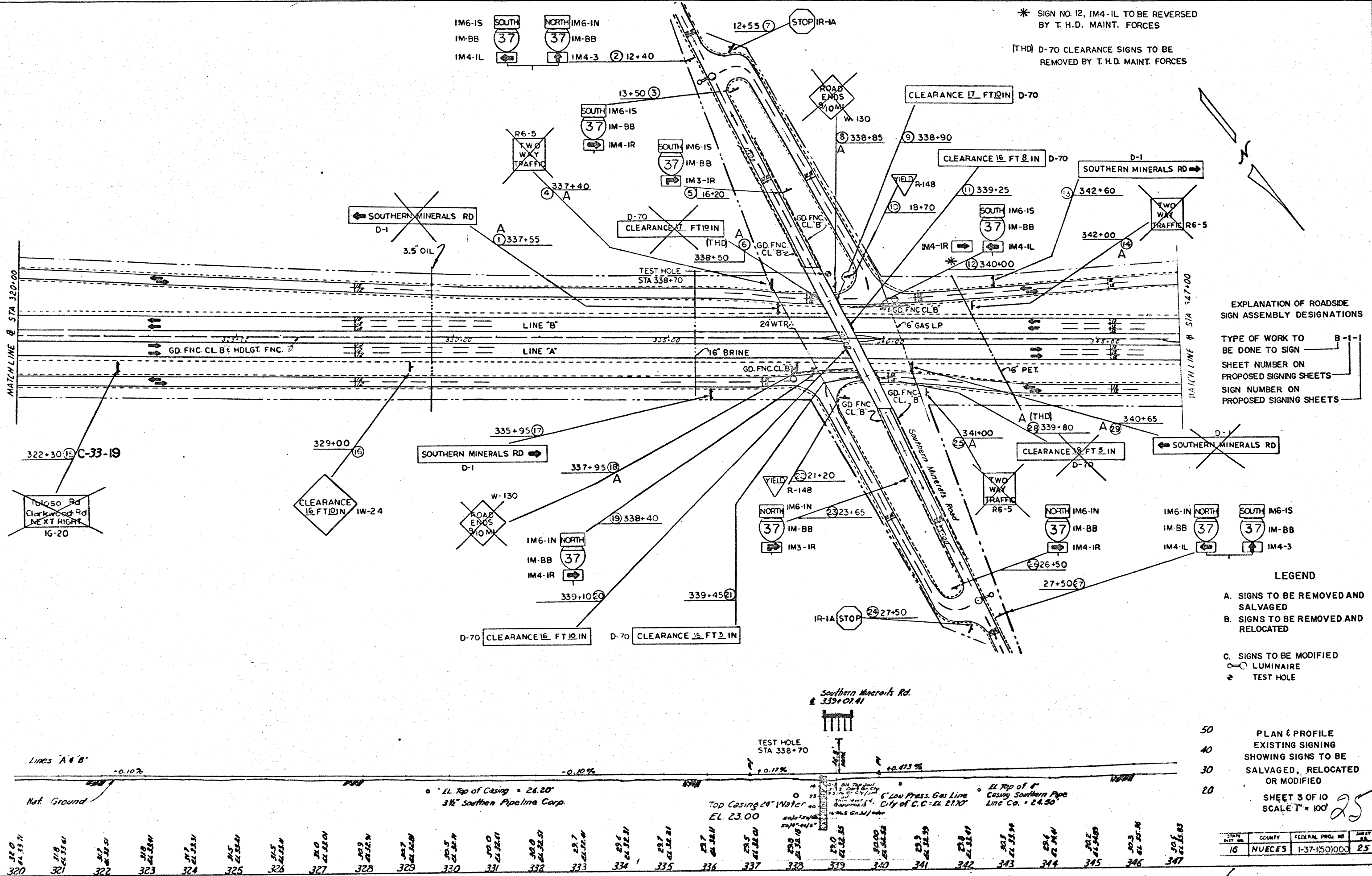


PLAN & PROFILE
 EXISTING SIGNING
 SHOWING SIGNS TO BE
 SALVAGED, RELOCATED
 OR MODIFIED
 SHEET 2 OF 10
 SCALE 1" = 100'

STATE DIST NO	COUNTY	FEDERAL PROJ NO	SHEET NO
16	NUECES	1-37-1(50)00	24

IM6-IS SOUTH 37 NORTH IM6-IN
IM-BB 37 IM-BB
IM4-IL 37 IM4-3 ② 12+40

* SIGN NO. 12, IM4-IL TO BE REVERSED
BY T.H.D. MAINT. FORCES
(THD) D-70 CLEARANCE SIGNS TO BE
REMOVED BY T.H.D. MAINT. FORCES



EXPLANATION OF ROADSIDE
SIGN ASSEMBLY DESIGNATIONS

TYPE OF WORK TO
BE DONE TO SIGN

SHEET NUMBER ON
PROPOSED SIGNING SHEETS

SIGN NUMBER ON
PROPOSED SIGNING SHEETS

LEGEND

A. SIGNS TO BE REMOVED AND
SALVAGED

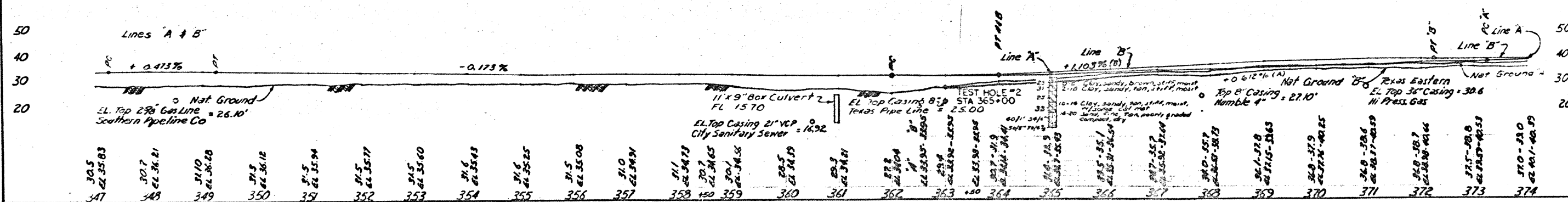
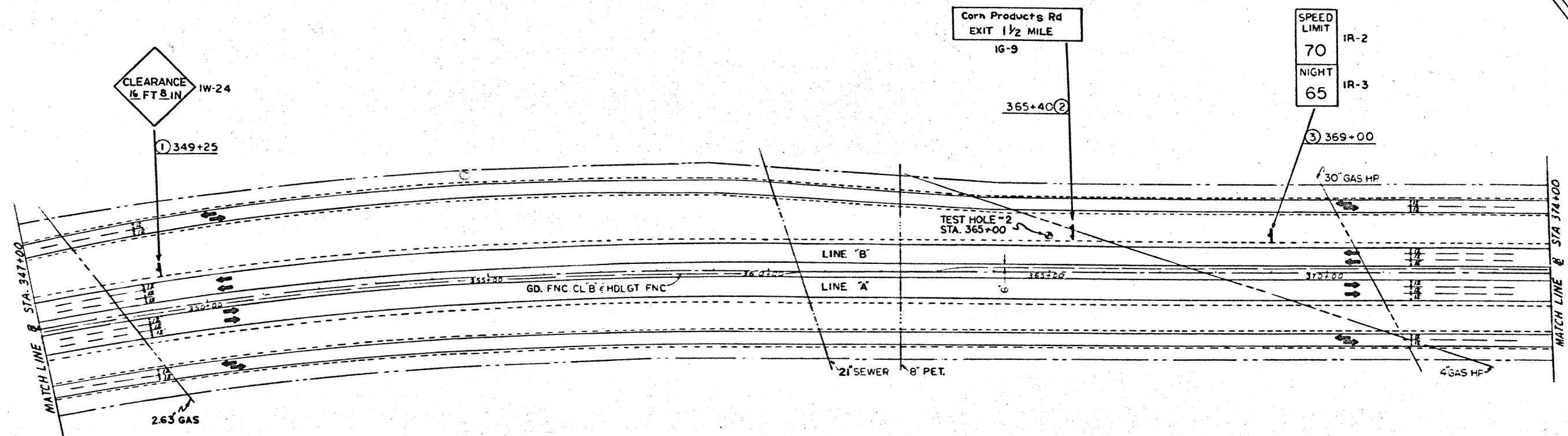
B. SIGNS TO BE REMOVED AND
RELOCATED

C. SIGNS TO BE MODIFIED

○ LUMINAIRE

● TEST HOLE

PLAN & PROFILE EXISTING SIGNING SHOWING SIGNS TO BE SALVAGED, RELOCATED OR MODIFIED			
SHEET 3 OF 10 SCALE 1" = 100'			
STATE 16	COUNTY NUECES	FEDERAL PROJ. NO. 1-37-1501000	SHEET 25



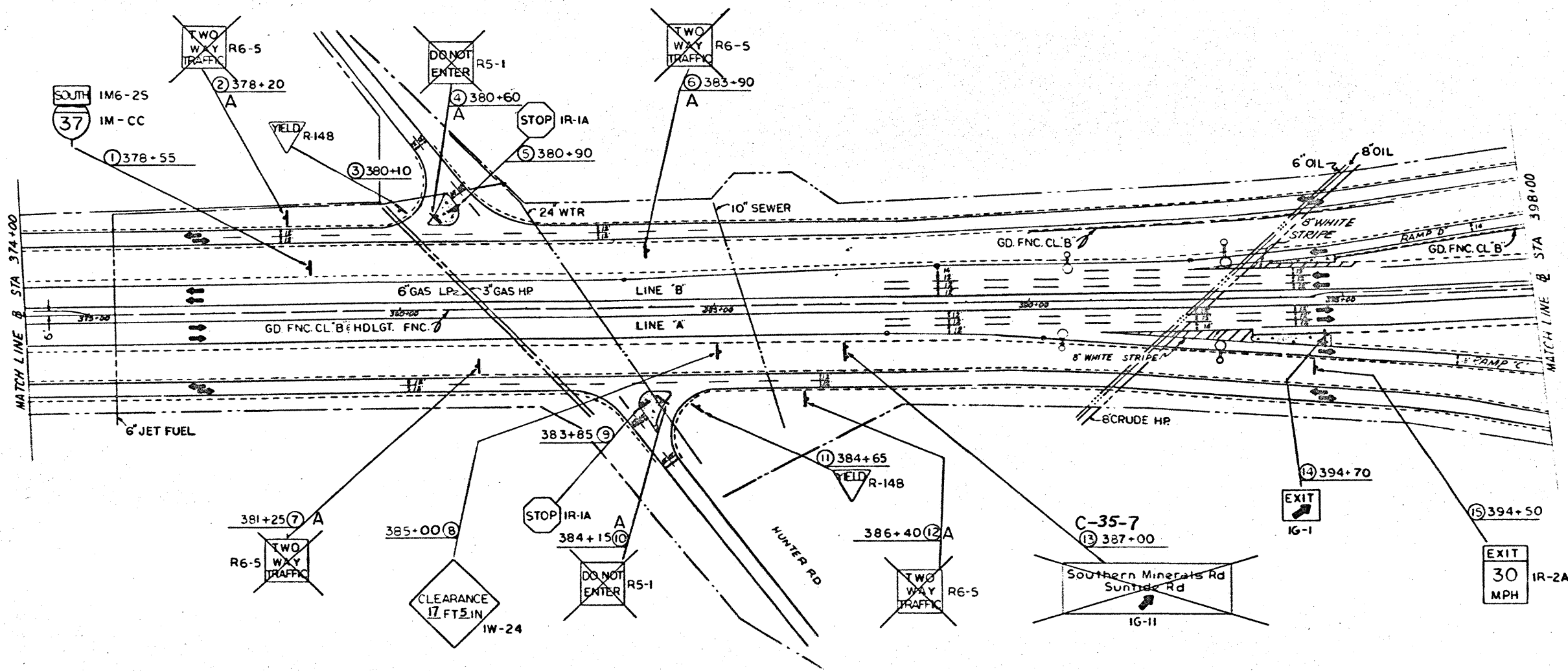
● TEST HOLE

PLAN & PROFILE
EXISTING SIGNING
SHOWING SIGNS TO BE
SALVAGED, RELOCATED
OR MODIFIED

SHEET 4 OF 10
SCALE 1" = 100'

26

STATE	COUNTY	FEDERAL PROJ. NO.	SHEET NO.
TX	NUECES	1-37-1(50X00)	26

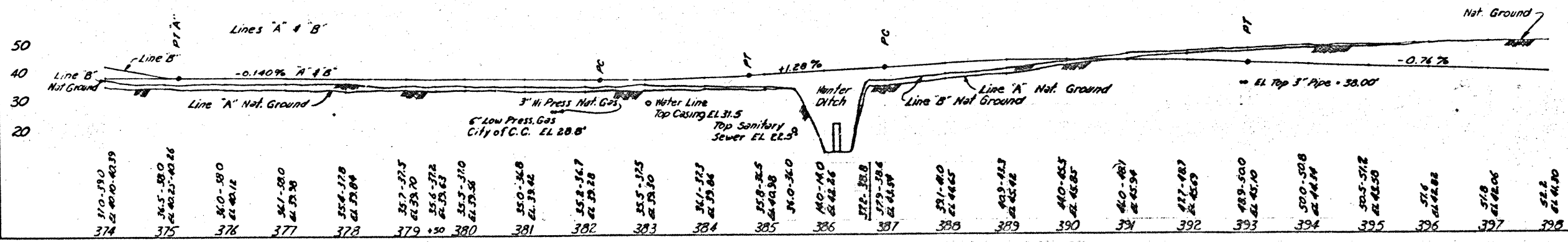


EXPLANATION OF ROADSIDE
SIGN ASSEMBLY DESIGNATIONS

TYPE OF WORK TO BE DONE TO SIGN — B-1-1
SHEET NUMBER ON PROPOSED SIGNING SHEETS —
SIGN NUMBER ON PROPOSED SIGNING SHEETS —

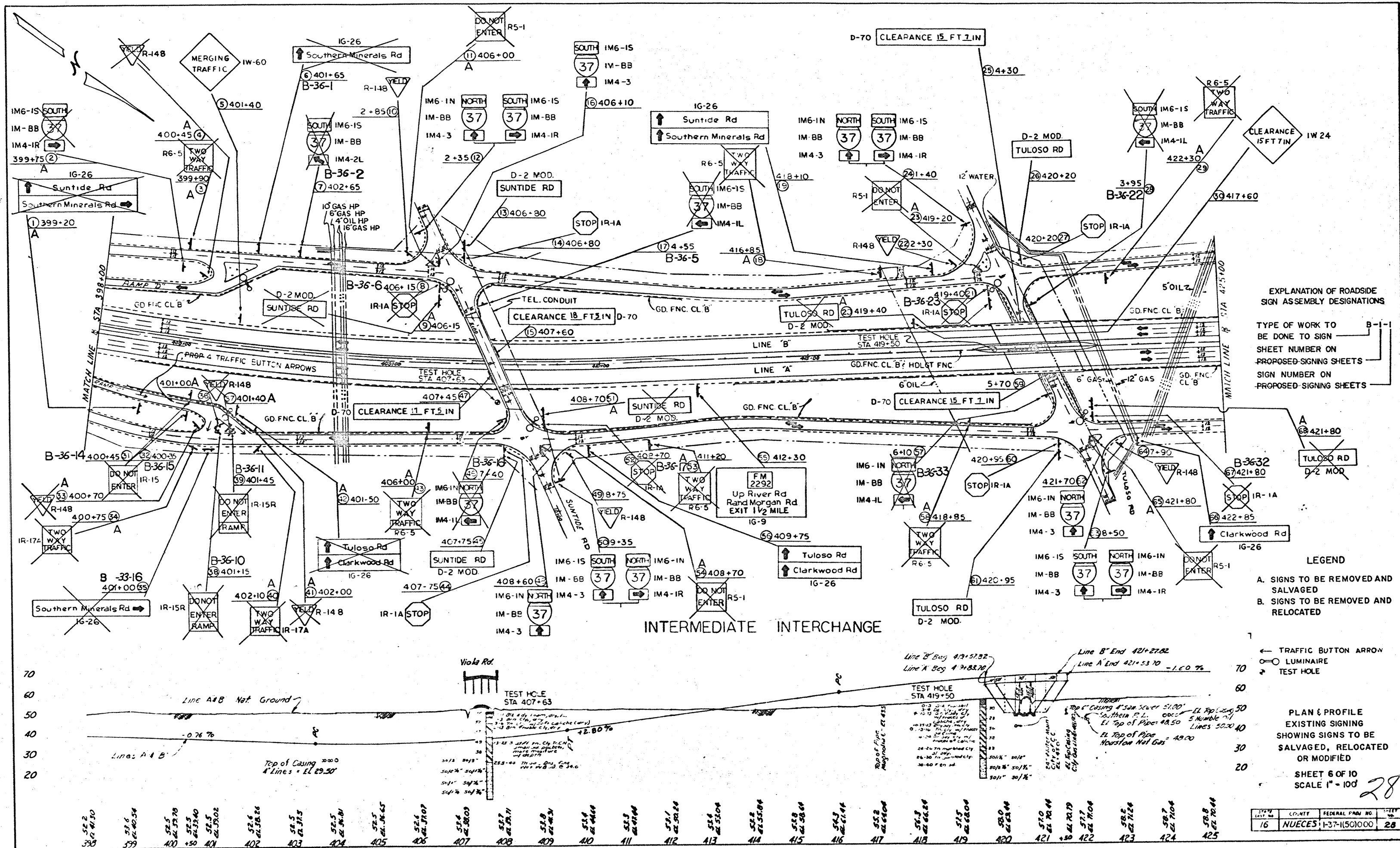
LEGEND

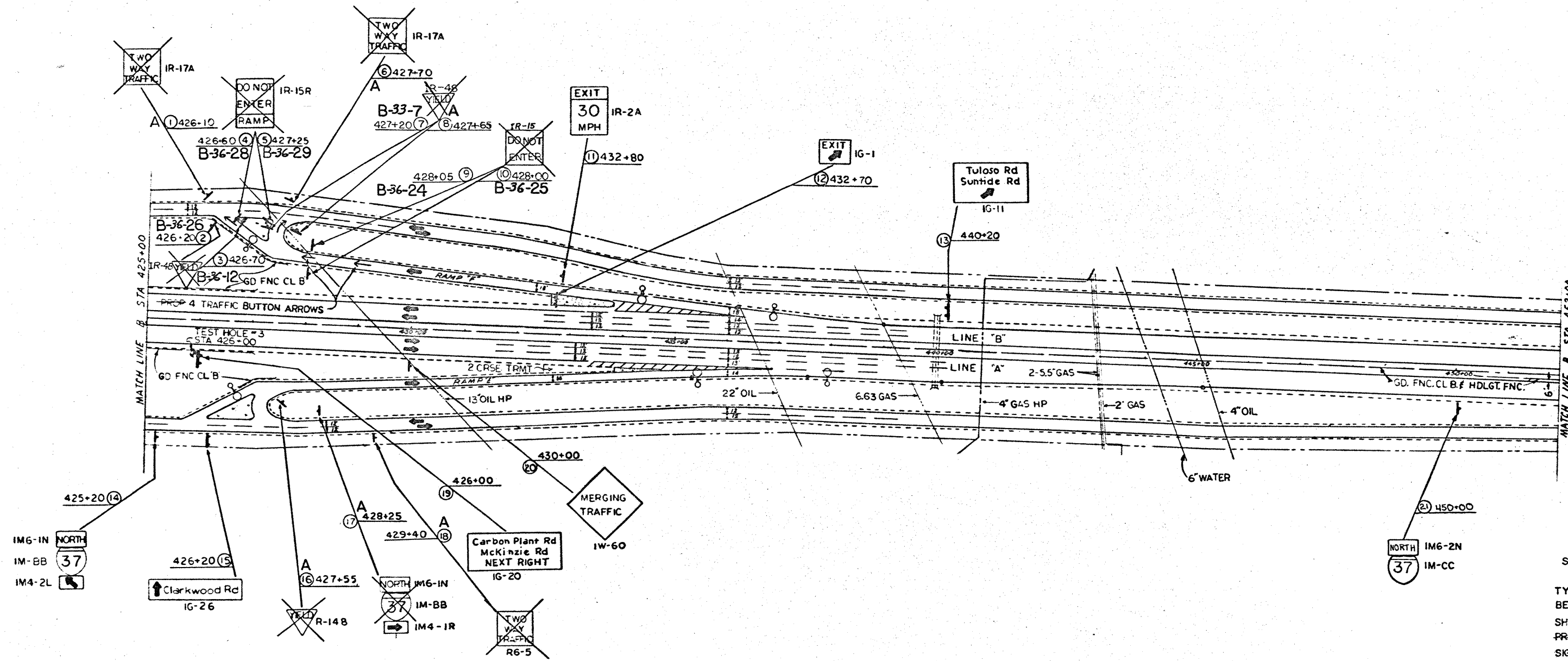
- A. SIGNS TO BE REMOVED AND SALVAGED
- B. SIGNS TO BE REMOVED AND RELOCATED
- C. SIGNS TO BE MODIFIED
- LUMINAIRE



PLAN & PROFILE
EXISTING SIGNING
SHOWING SIGNS TO BE
SALVAGED, RELOCATED
OR MODIFIED
SHEET 5 OF 10
SCALE 1" = 100'

STATE	COUNTY	FEDERAL PROJ. NO.	SHEET NO.
16	NUECES	1-37-115(1000)	27





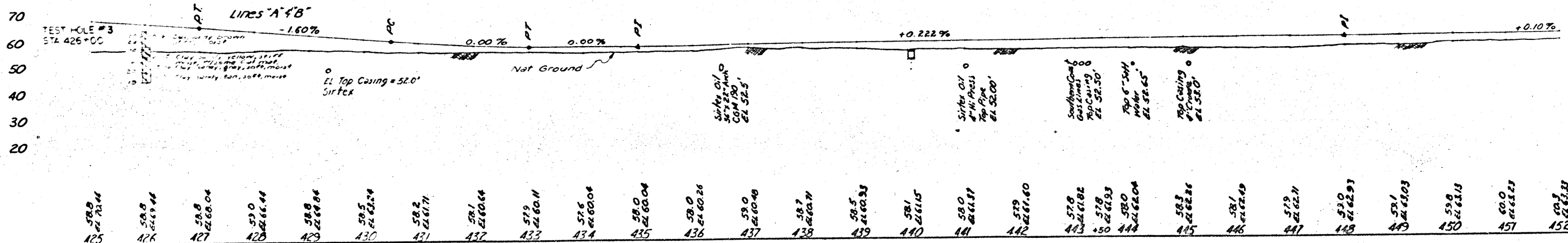
EXPLANATION OF ROADSIDE SIGN ASSEMBLY DESIGNATIONS

TYPE OF WORK TO BE DONE TO SIGN
 SHEET NUMBER ON PROPOSED SIGNING SHEETS
 SIGN NUMBER ON PROPOSED SIGNING SHEETS

LEGEND

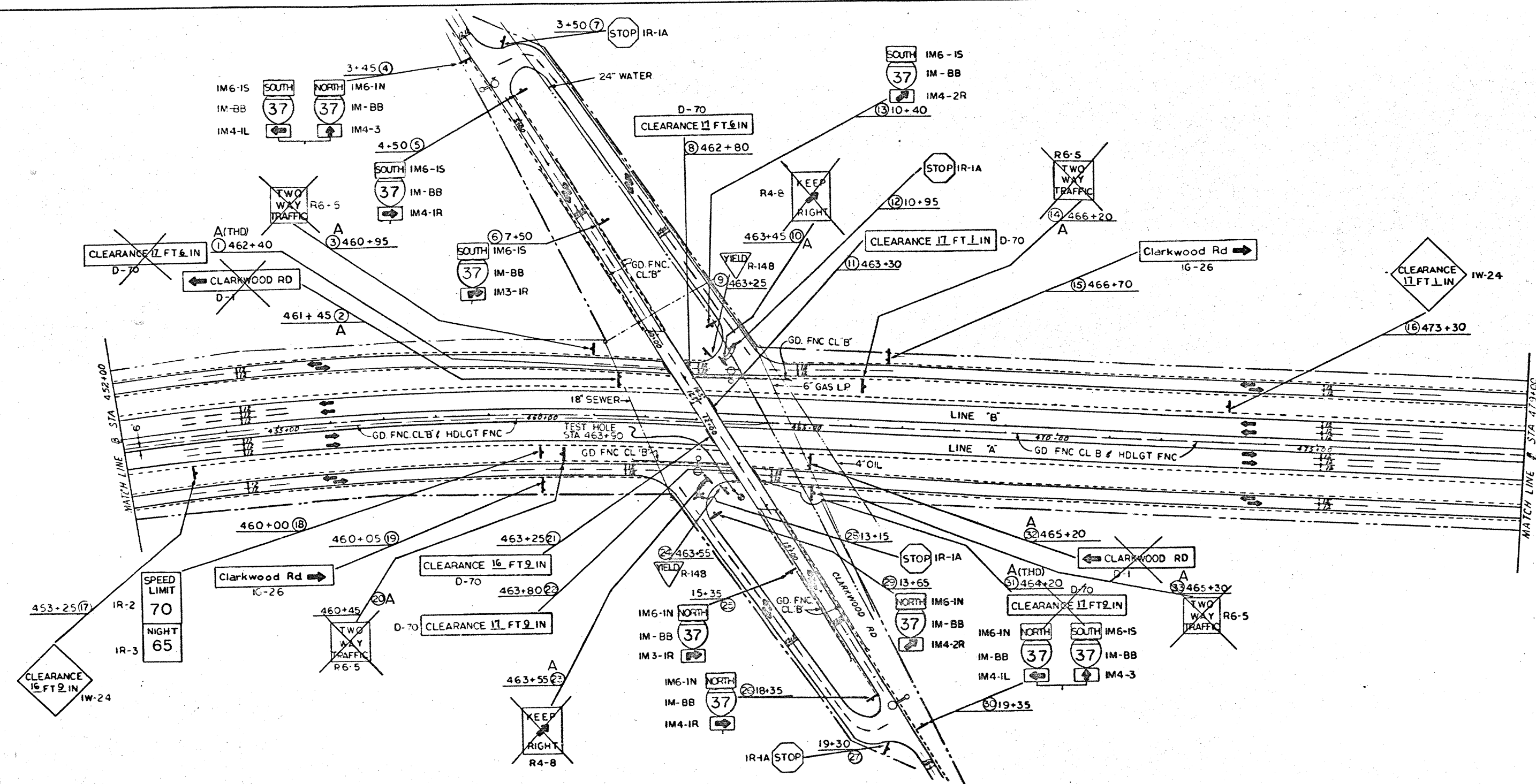
- A. SIGNS TO BE REMOVED AND SALVAGED
- B. SIGNS TO BE REMOVED AND RELOCATED

- ← TRAFFIC BUTTON ARROWS
- LUMINAIRE
- TEST HOLE



PLAN & PROFILE EXISTING SIGNING SHOWING SIGNS TO BE SALVAGED, RELOCATED OR MODIFIED
 SHEET 7 OF 10
 SCALE 1" = 100'

STATE	COUNTY	FEDERAL PROJ. NO.	SHEET NO.
16	NUECES	1-37-1(50)000	29



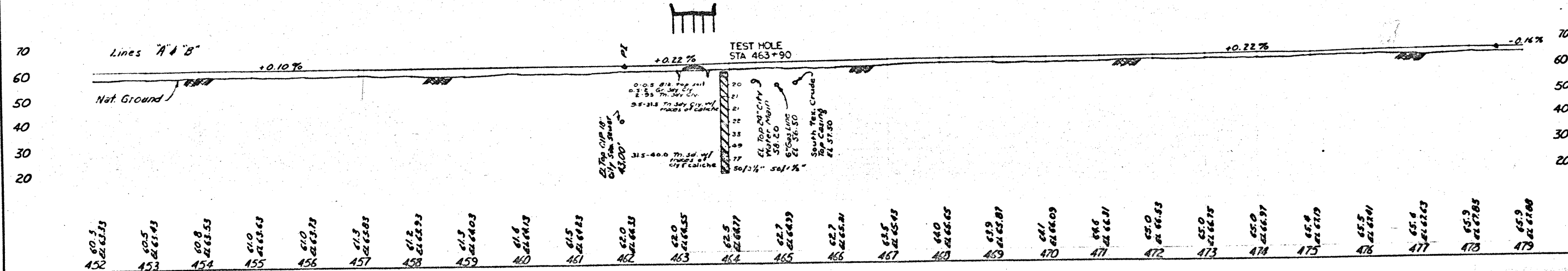
(THD) D-70 CLEARANCE SIGNS TO BE REMOVED BY T.H.D. MAINT. FORCES

EXPLANATION OF ROADSIDE SIGN ASSEMBLY DESIGNATIONS

TYPE OF WORK TO BE DONE TO SIGN
SHEET NUMBER ON PROPOSED SIGNING SHEETS
SIGN NUMBER ON PROPOSED SIGNING SHEETS

LEGEND
A. SIGNS TO BE REMOVED AND SALVAGED
B. SIGNS TO BE REMOVED AND RELOCATED

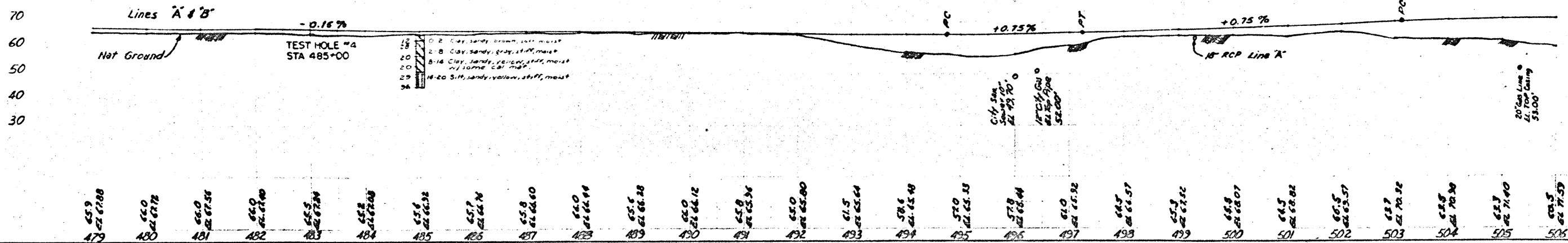
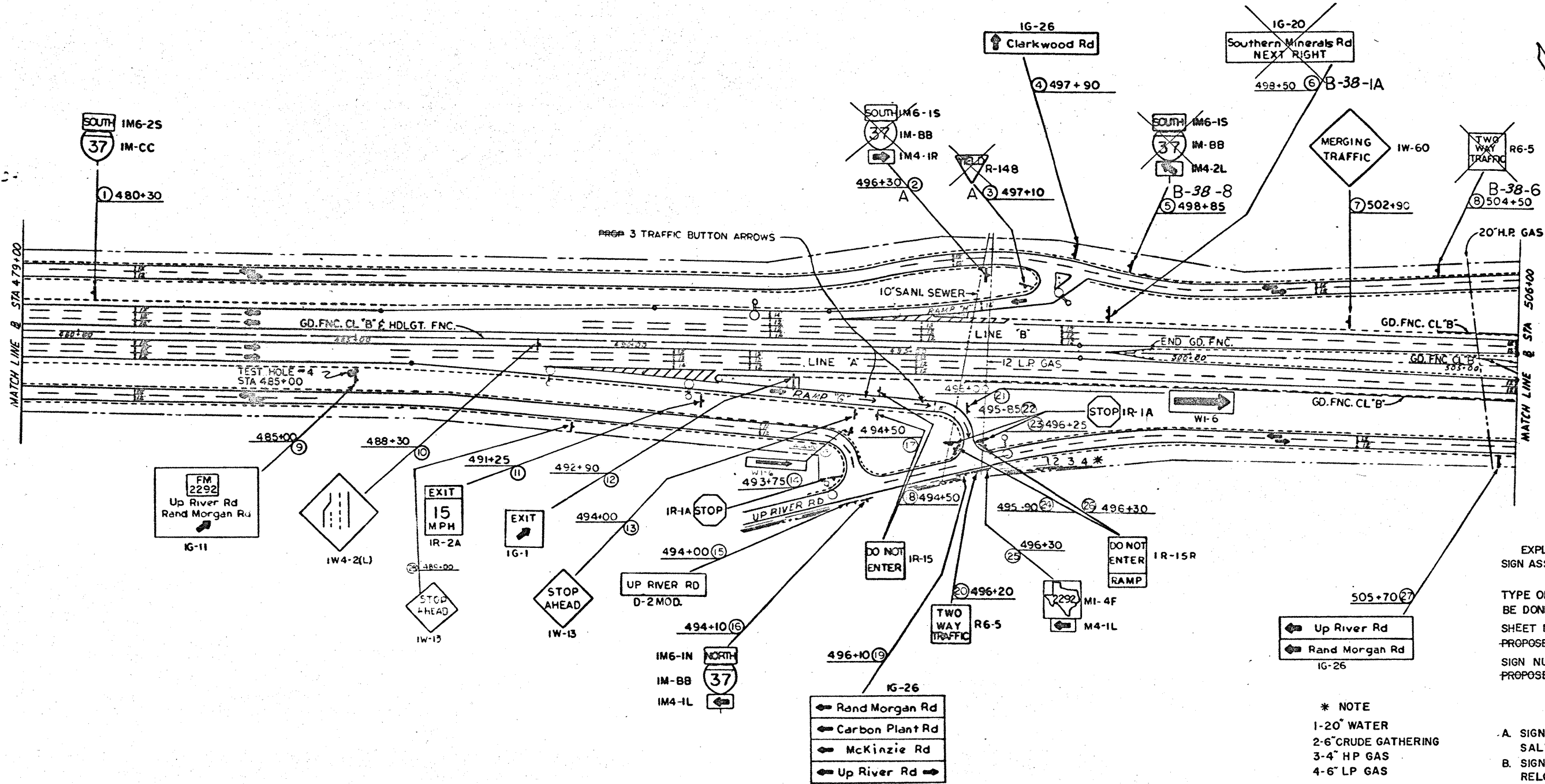
○ LUMINAIRE
● TEST HOLE



PLAN & PROFILE
EXISTING SIGNING
SHOWING SIGNS TO BE
SALVAGED, RELOCATED
OR MODIFIED

SHEET 8 OF 10
SCALE 1" = 100'

STATE	COUNTY	FEDERAL PROJ. NO.	SHEET NO.
16	NUECES	1-37-K(50)000	30



EXPLANATION OF ROADSIDE SIGN ASSEMBLY DESIGNATIONS

TYPE OF WORK TO BE DONE TO SIGN
 SHEET NUMBER ON PROPOSED SIGNING SHEETS
 SIGN NUMBER ON PROPOSED SIGNING SHEETS

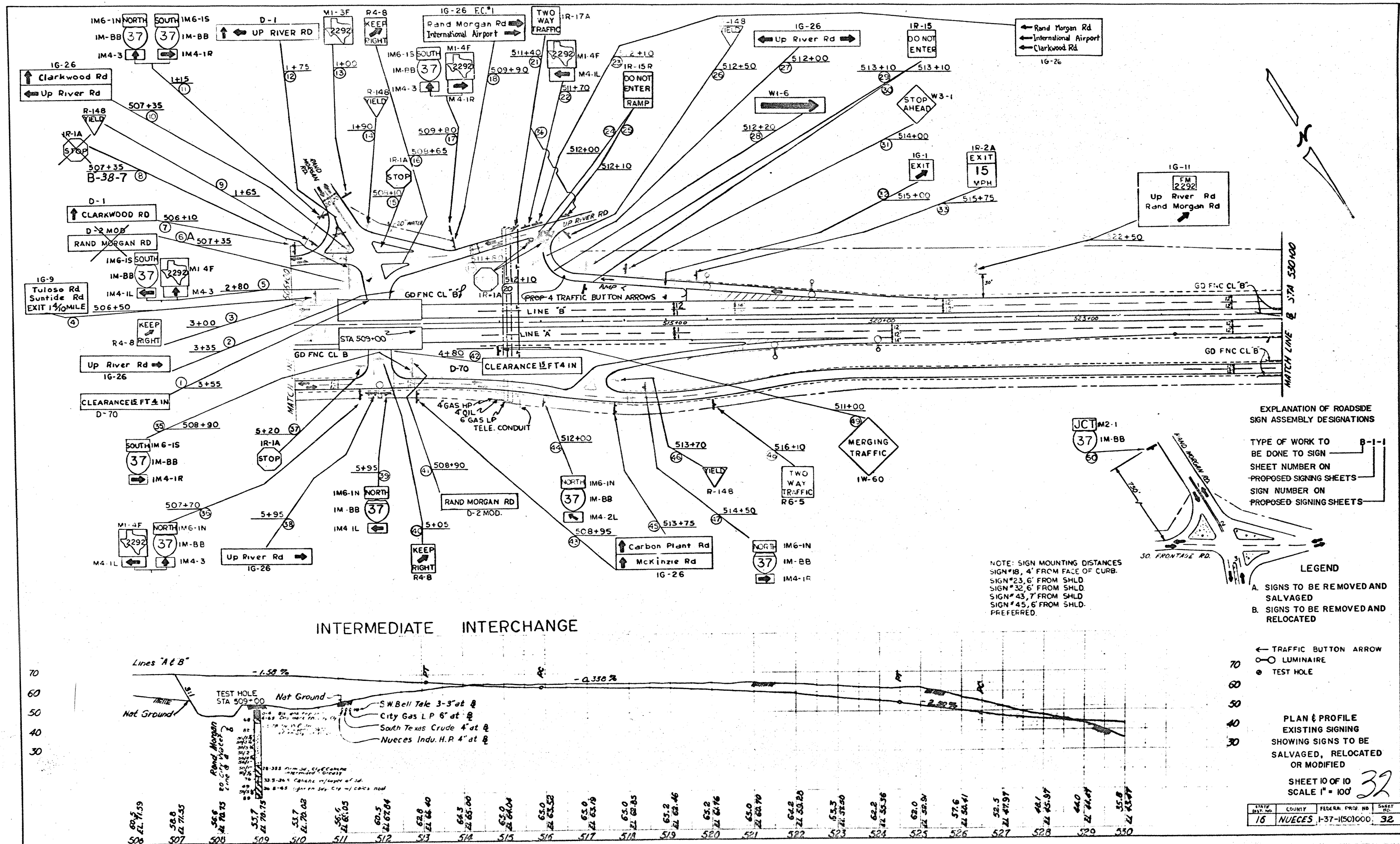
LEGEND
 A. SIGNS TO BE REMOVED AND SALVAGED
 B. SIGNS TO BE REMOVED AND RELOCATED

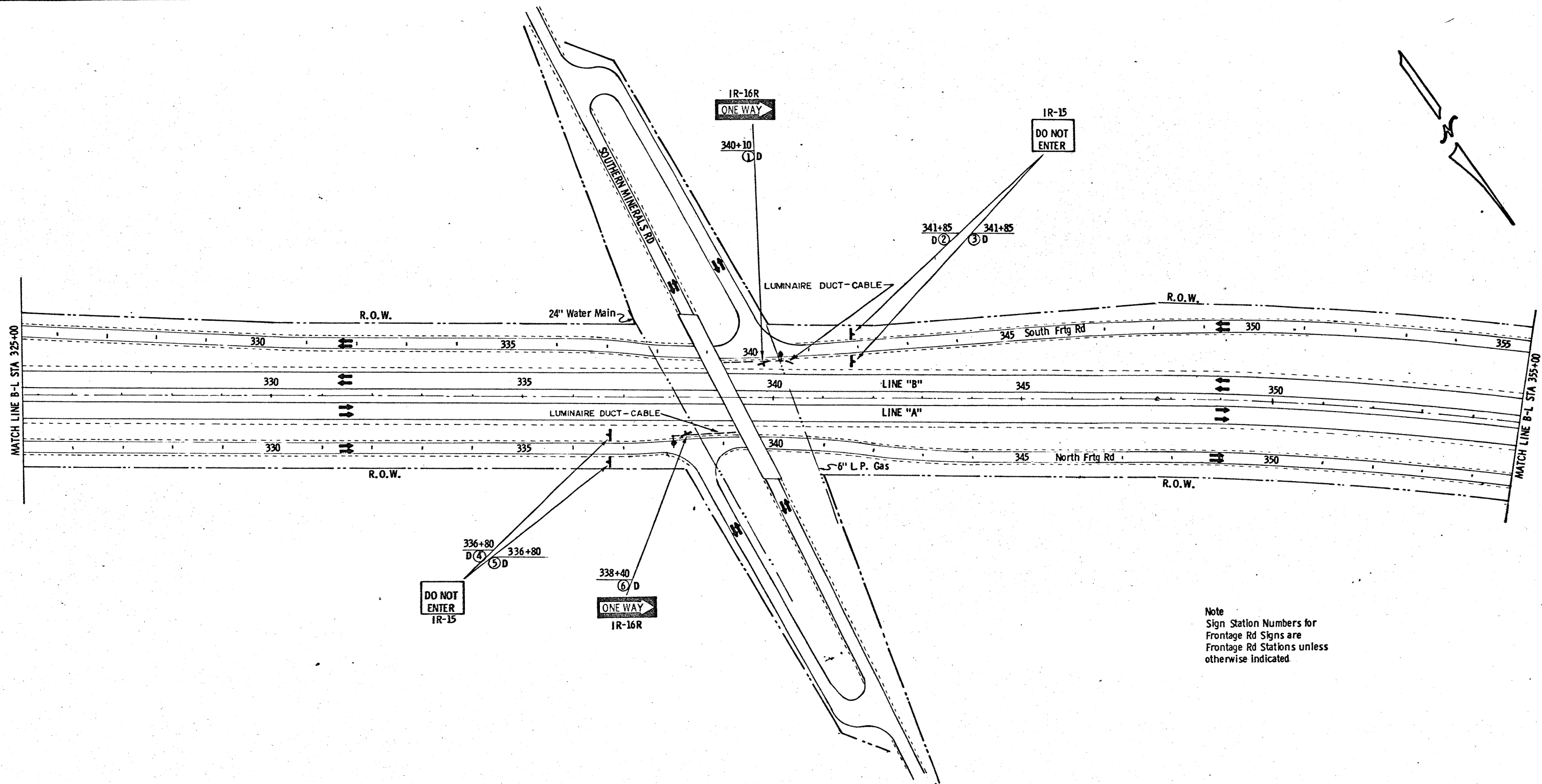
C. SIGNS TO BE MODIFIED
 ← TRAFFIC BUTTON ARROW
 ○ LUMINAIRES
 + TEST HOLE

PLAN & PROFILE EXISTING SIGNING SHOWING SIGNS TO BE SALVAGED, RELOCATED OR MODIFIED
 SHEET 9 OF 10
 SCALE 1" = 100'

STATE	COUNTY	FEDERAL PROJ. NO.	SHEET NO.
16	NUECES	1-37-1(50)000	31

479+00 to 506+00
 479+00 to 506+00
 479+00 to 506+00





Note
 Sign Station Numbers for
 Frontage Rd Signs are
 Frontage Rd Stations unless
 otherwise indicated

LEGEND
 D - New Sign

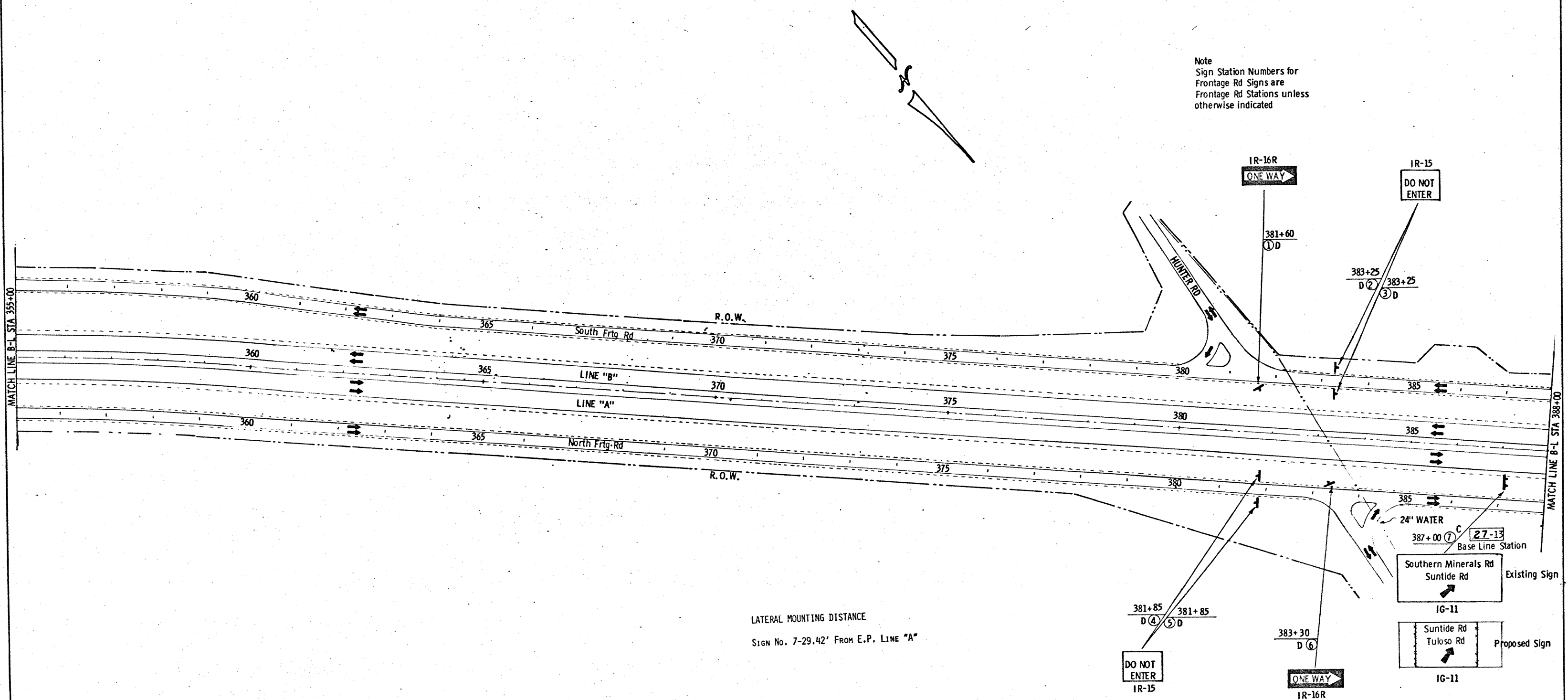
PLAN SHEET SHOWING
 PROPOSED SIGNING
 NEW, MODIFIED OR
 RELOCATED SIGNS
 SHEET 2 OF 6
 SCALE 1" = 100'

34

FED. RD. DIST. NO.	STATE	PROJECT NO.	SHEET NO.
16	TEXAS	1-37-(50)000	34
STATE DIST. NO.	COUNTY	POST MILE	SECTION
16	NUECES	74	6



Note
Sign Station Numbers for
Frontage Rd Signs are
Frontage Rd Stations unless
otherwise indicated



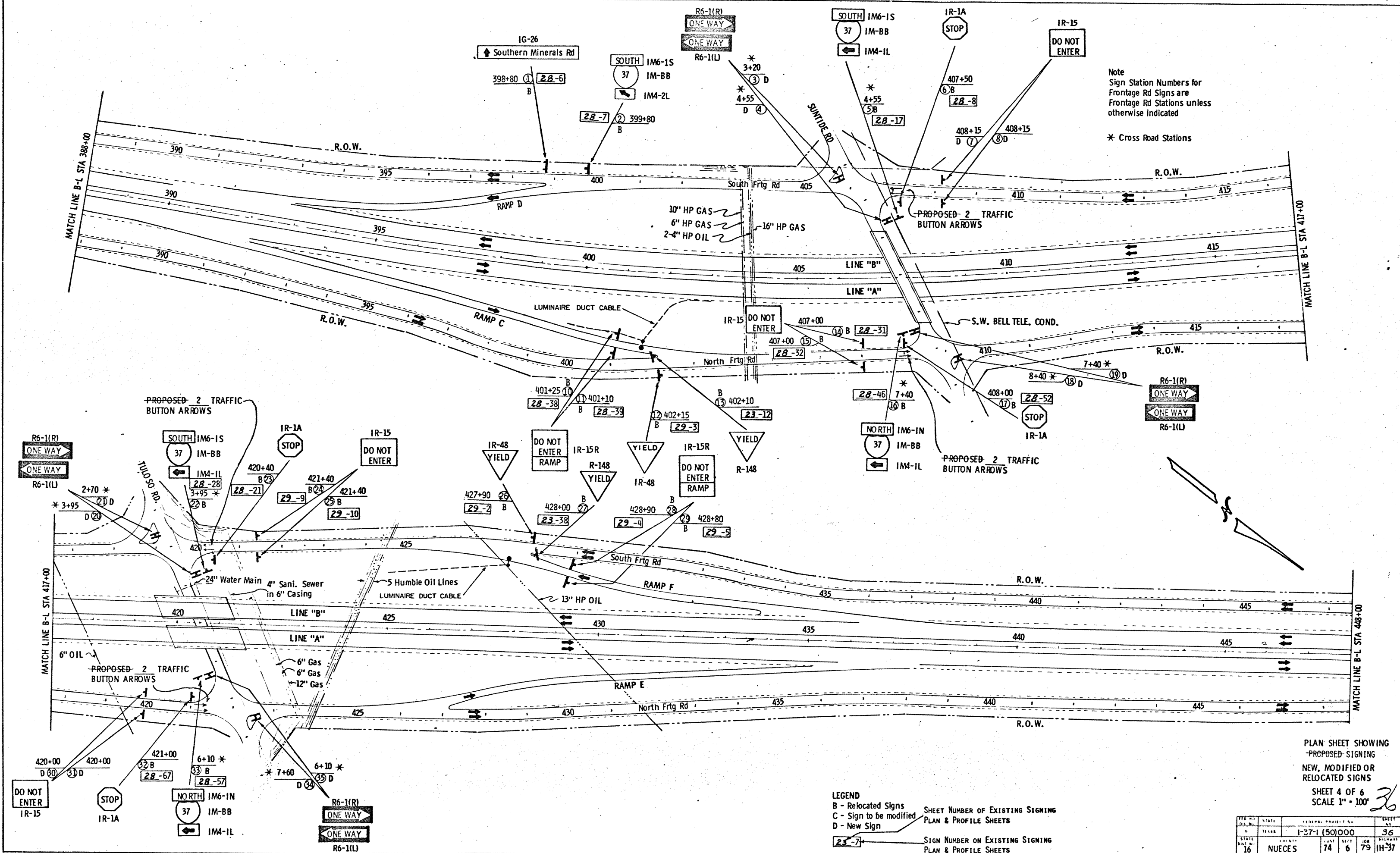
LATERAL MOUNTING DISTANCE
SIGN No. 7-29.42' FROM E.P. LINE "A"

LEGEND
B - Relocated Signs
C - Sign to be modified
D - New Sign
SHEET NUMBER OF EXISTING SIGNING
PLAN & PROFILE SHEETS
SIGN NUMBER ON EXISTING SIGNING
PLAN & PROFILE SHEETS

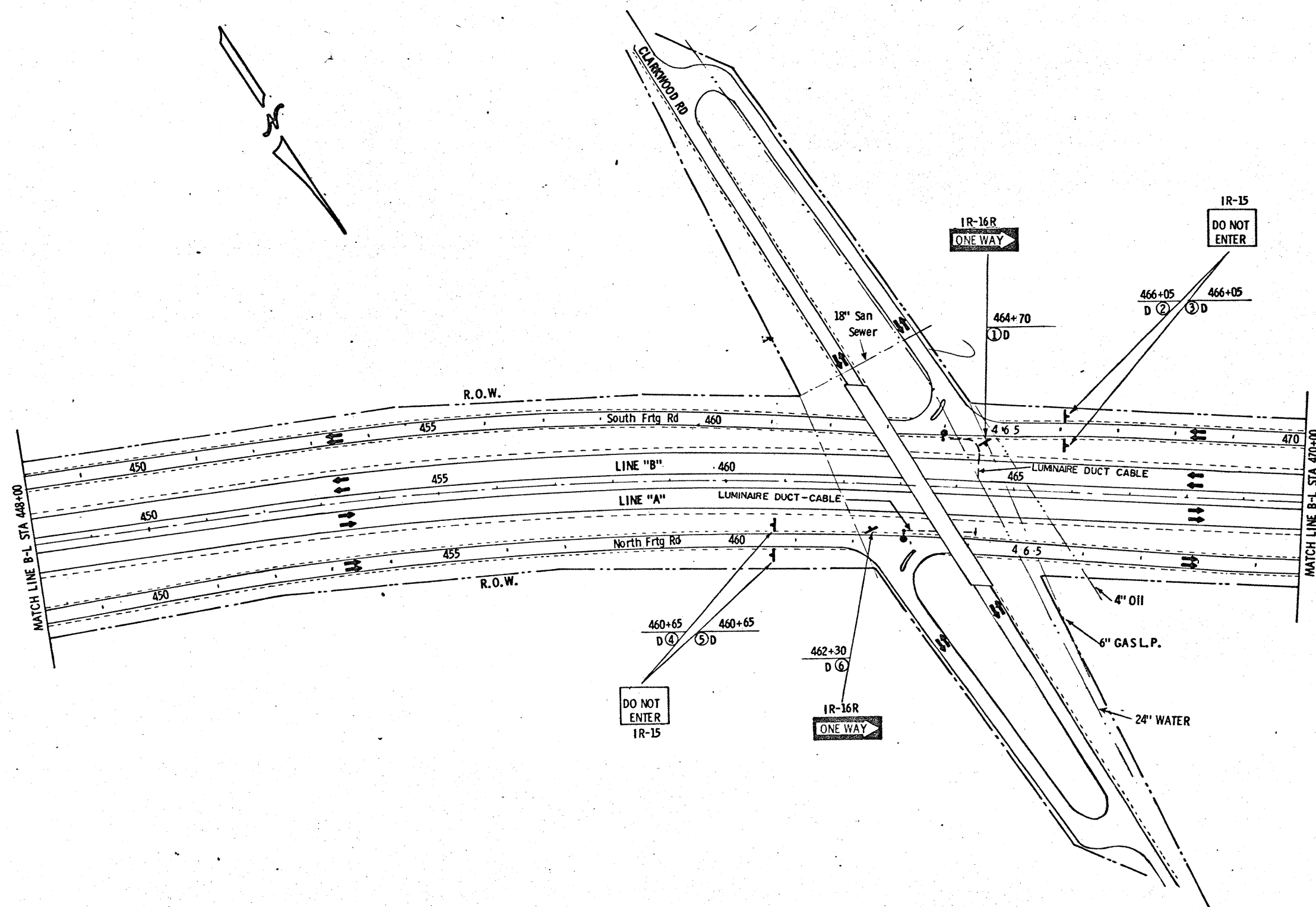
Existing Sign
Suntide Rd
IG-11
Proposed Sign
Suntide Rd
Tuloso Rd
IG-11

PLAN SHEET SHOWING
PROPOSED SIGNING
NEW, MODIFIED OR
RELOCATED SIGNS
SHEET 3 OF 6
SCALE 1" = 100'

FED. RD. DIST. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
16	TEXAS	1-37-1 (50) 000	35
COUNTY	CONTRACT NO.	SECTION	JOB
NUECES	74	6	79
			1H-37



FED. RD. DIST. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
6	TEXAS	1-37-1 (50)000				36
STATE DIST. NO.	COUNTY	TOWNSHIP	SECTION	RANGE	HIGHWAY NO.	
16	NUECES	74	6	79	1H-37	



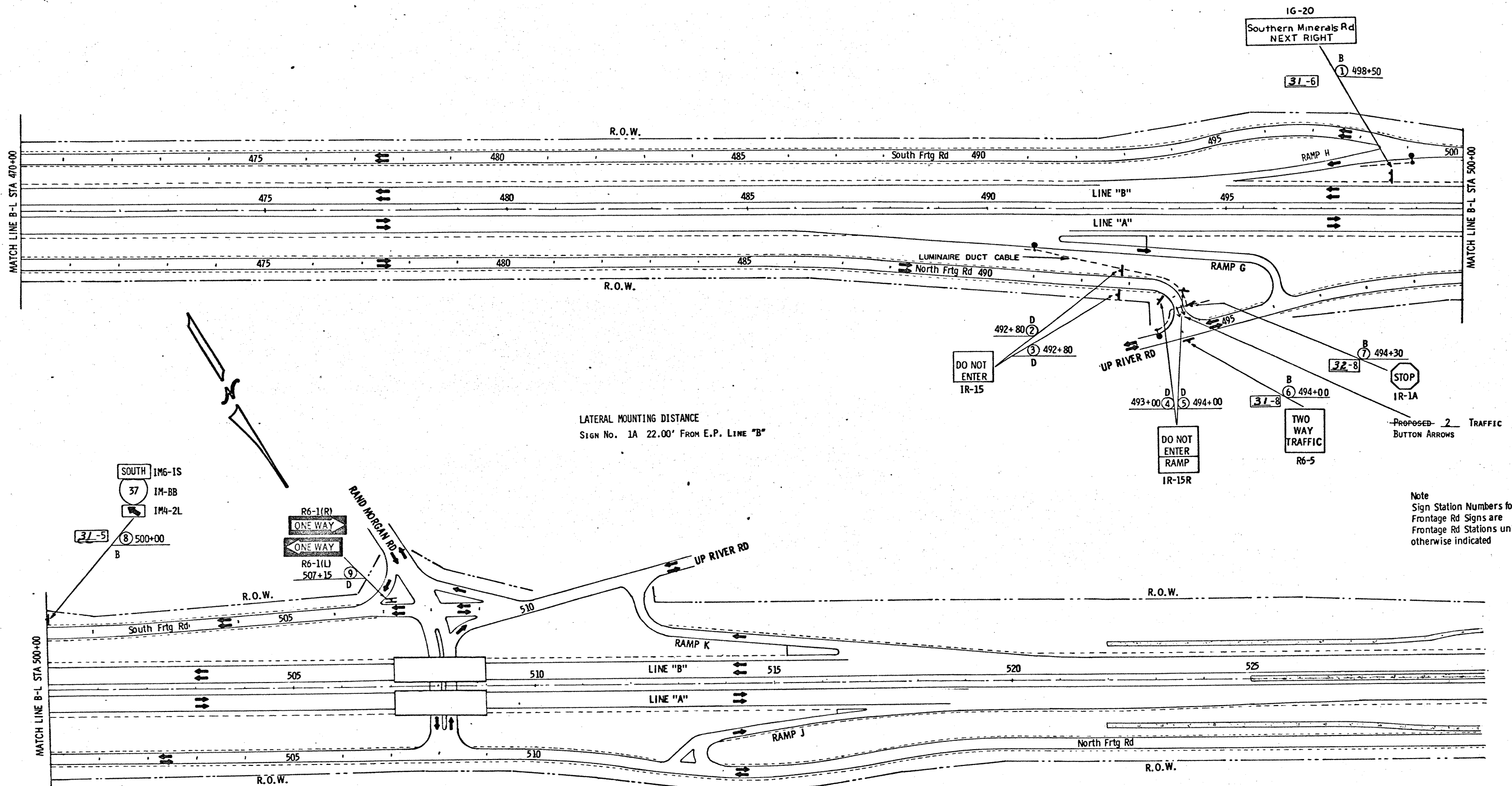
Note
Sign Station Numbers for
Frontage Rd Signs are
Frontage Rd Stations unless
otherwise indicated

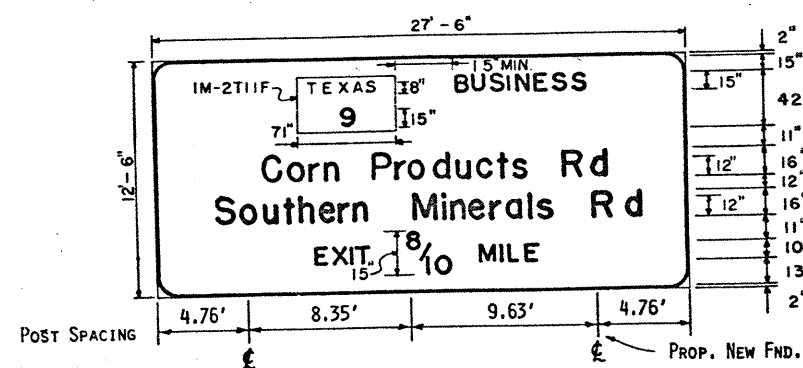
LEGEND
B - Relocated Signs
C - Sign to be modified
D - New Sign
•• LUMINAIRE

PLAN SHEET SHOWING
PROPOSED SIGNING
NEW, MODIFIED OR
RELOCATED SIGNS
SHEET 5 OF 6
SCALE 1" = 100'

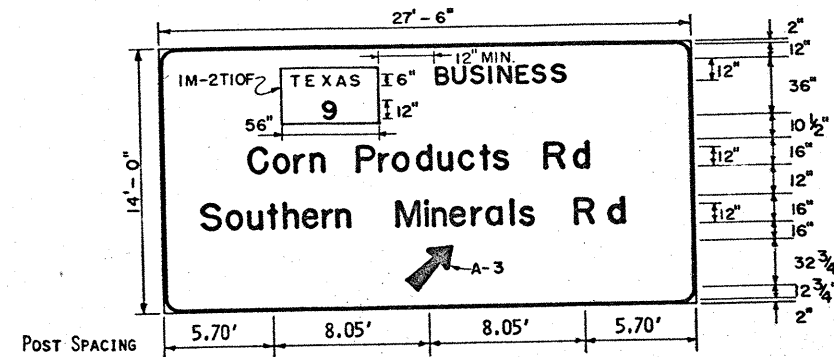
37

FED. RD. DIST. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	1-37-1(50)000	37
STATE DIST. NO.	COUNTY	CONT. SECT. JOB	HIGHWAY NO.
16	NUECES	74 6 79	1H-37

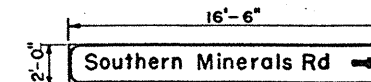




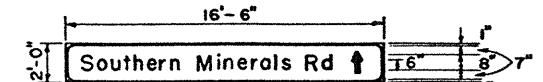
NEW 1G-9
SHEET 33 SIGN 11A
LINE "A" STA. 221+50



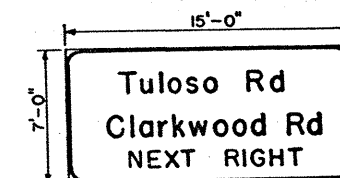
NEW 1G-11
SHEET 33 SIGN 11B
LINE "A" STA. 259+50



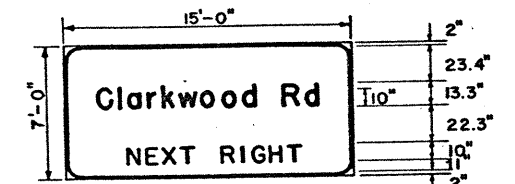
EXISTING 1G-26
SHEET 28 SIGN 35
NORTH FRONTAGE RD.
AND RAMP "C" STA. 401+00



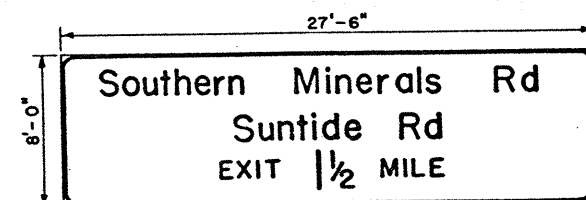
PROPOSED MODIFIED 1G-26
SHEET 33 SIGN 16
NORTH FRONTAGE RD. STA. 279+80
FROM RAMP "C" STA. 401+00



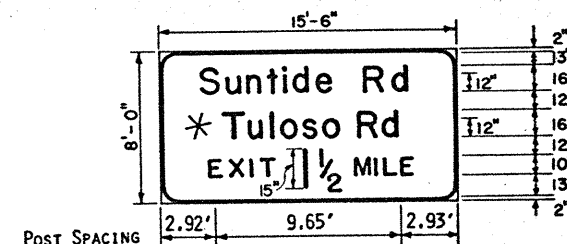
EXISTING 1G-20
SHEET 25 SIGN 15
LINE "A" STA. 322+30



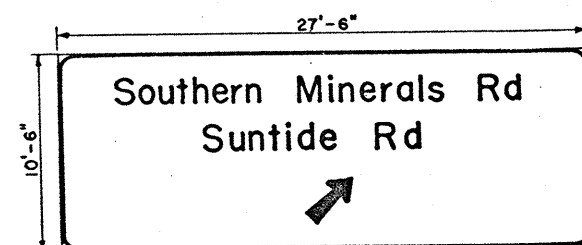
PROPOSED MODIFIED 1G-20
SHEET 33 SIGN 19
LINE "A" STA. 322+30



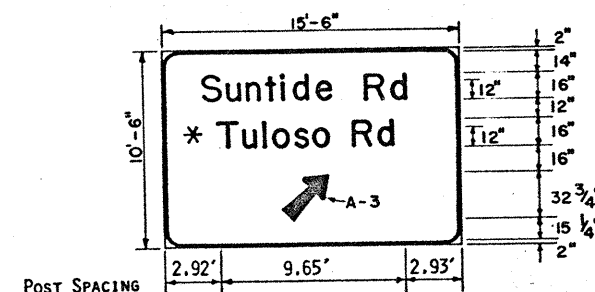
EXISTING 1G-9
SHEET 24 SIGN 5
LINE "A" STA. 314+30



PROPOSED MODIFIED 1G-9
SHEET 33 SIGN 18
LINE "A" STA. 314+30



EXISTING 1G-11
SHEET 27 SIGN 13
LINE "A" STA. 387+00



PROPOSED MODIFIED 1G-11
SHEET 35 SIGN 7
LINE "A" STA. 387+00

* NEW LETTERS MUST BE PROVIDED FOR TULOSO RD.

GENERAL NOTES - GUIDE SIGNS

The alphabets and lateral spacing between letters and words shall conform with the U. S. Bureau of Public Roads Standard Rounded Capital Letter Alphabets with any applicable modifications stated in the American Association of State Highway Officials Manual for Signing and Pavement Marking of the National System of Interstate and Defense Highways - 1961, and/or subsequent revisions thereto. Lateral spacing of text shall be such as to provide a balanced appearance.

All letters, numerals, arrows, symbols, and borders shall be white reflectorized removable copy conforming with the specifications and except for signs which are independently illuminated, the background shall be Interstate Green reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting or paint and beads conforming with the specifications. For signs which are independently illuminated, the background shall be Interstate Green porcelain enamel conforming with the specifications.

All removable copy letters, numerals, arrows, symbols, and borders used on signs for this contract shall be of the same manufacture.

The sign area outside the corner radius need not be trimmed.

The sign blanks for all signs which are not independently illuminated shall be 5/8" thick Type A as specified in the contract award.

When reflectorized sheeting is used for background reflectorization, the plywood shall be Type A, High Density.

NOTE:
ALL SIGNS ON THIS SHEET
HAVE A CORNER BORDER
RADIUS OF 12 INCHES UNLESS
NOTED OTHERWISE.
1G-26 SIGN USES B-1 ARROW

NEW & MODIFIED
GUIDE SIGN LAYOUT
SHEET 1 OF 1

FED. PROJ. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
1-37-1(50)000	TEXAS		39
STATE	COUNTY	CON. SECT.	JOB HIGHWAY NO.
16	NUECES	74	6 79 IH-37

Alphabets and lateral spacing between letters and words shall conform with the U. S. Bureau of Public Roads standard capital letter alphabets. Lateral spacing of text shall be as to provide a balanced appearance.

Unless otherwise stated all letters, numbers, arrows, and borders shall be applied direct to the surface of the reflective material by the silk screen process.

[illegible]

Technical drawing of a 'ONE WAY' street sign. The sign is rectangular with a white background and a black border. It features a black arrow pointing left and the text 'ONE WAY' in black capital letters. Dimensions and callouts are as follows:

- Overall width: 36"
- Overall height: 12"
- Top-left corner: 3/4" x 1"
- Top-right corner: 1 1/2"
- Bottom-left corner: 3/8"
- Bottom-right corner: 3"
- Left side: 4 1/4" (top section), 4 1/4" (bottom section)
- Right side: 1 1/2" (top section), 1 1/2" (bottom section)
- Internal dimensions (from left edge): 2", 7 1/2", 8 1/2", 15", 3"
- Internal dimensions (from top edge): 1 1/8" (to center of arrow), 2" (to center of 'ONE WAY' text)
- Callouts: 11/16" R (top-left corner), 3/8" HOLES (top-right corner), 2" (center of arrow), 2" (center of 'ONE WAY' text)

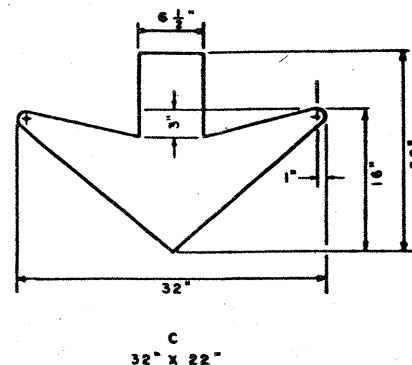
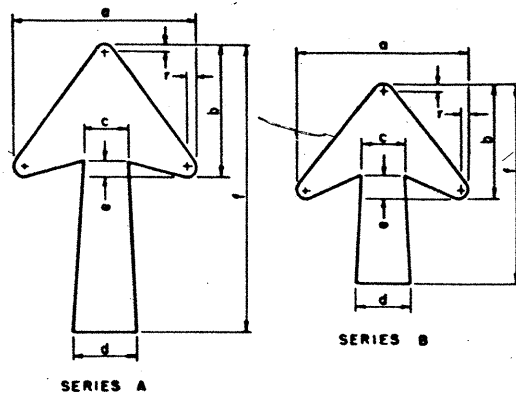
Technical drawing of a 'ONE WAY' traffic sign. The sign is rectangular with rounded corners and a white background. It features the text 'ONE WAY' in bold, black, sans-serif capital letters. A large, black, right-pointing arrow is positioned to the right of the text. The drawing includes various dimensions and specifications:

- Overall width: 36"
- Overall height: 12"
- Top-left corner: $1\frac{1}{2}" R$
- Top-right corner: $1\frac{1}{16}" R$
- Top edge: 3" from the left corner to the start of the arrow.
- Arrow: 8 1/8" wide at the base, 7 1/8" high at the base, and 2" thick at the tip.
- Text 'ONE WAY': 15" wide, 5 1/2" high.
- Mounting holes: 3/8" diameter holes, 3" apart.
- Bottom edge: 3" from the left corner to the start of the arrow.
- Bottom edge: 8 1/8" from the left corner to the start of the arrow.
- Bottom edge: 7 1/8" from the left corner to the start of the arrow.
- Bottom edge: 2" from the left corner to the start of the arrow.

TEXAS HIGHWAY DEPARTMENT
STANDARD SIGNS
SHEET A 40

FED. RD. DIV. NO.	STATE	②	FEDERAL PROJECT NO.				SHEET NO.
0	TEXAS						
STATE DIST. NO.	COUNTY		CONT.	SECT.	JOB	HIGHWAY NO.	

FED RD DIST NO	STATE	FEDERAL PROJECT NO				SHEET NO
6	TEXAS	I-37-1(50)000				40
STATE DIST NO	COUNTY	CONT	SILT	SDR	WET WAY NO	
16	NUECES	74	6	79	IH-37	

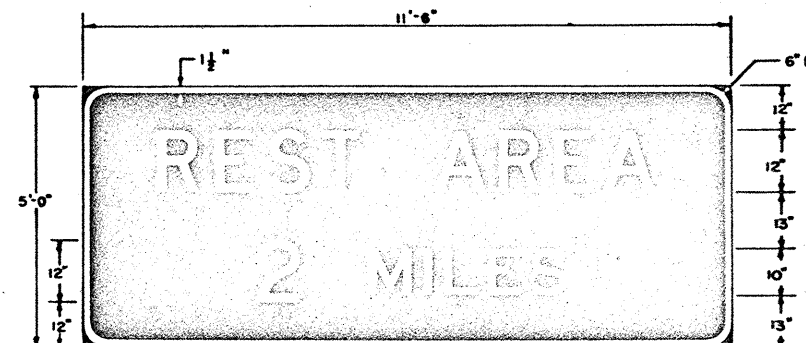


DIMENSIONS OF ARROW WHEN USED WITH VARIOUS LETTER SIZES

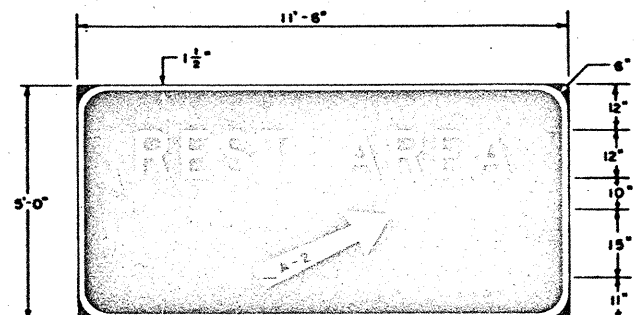
CODE	LETTER SIZE	ARROW DIMENSIONS IN INCHES
		a b c d e f g
A-1	8" Cop	15 1/2 11 1/2 3 1/2 5 1 1/2 2 1/2 1 1/2
A-2	13 1/2" U.C., 10-12" Cop	18 1/2 14 4 1/2 6 1 1/2 2 1/2 1 1/2
A-3	16" U.C.	22 1/2 17 5 1/2 7 1/2 1 1/2 3 1/2 1
B-1	8"-10" Cop	14 1/2 9 1/2 3 1/2 4 1/2 1 1/2 1 1/2 1/2
B-2	13 1/2" U.C., 12" Cop	17 1/2 11 1/2 4 1/2 5 1/2 1 1/2 2 1/2 1/2
B-3	16" U.C.	21 1/2 14 1/2 5 6 1 1/2 2 1/2 1

* RECOMMENDED DIMENSIONS. TAPER SHOULD BE HELD CONSTANT FOR LONGER OR SHORTER SHAFT LENGTHS.

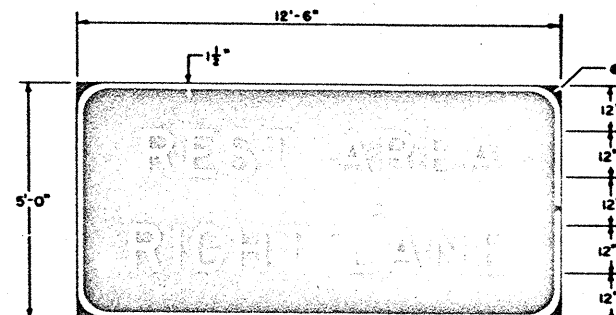
Where a removable reflectorized arrow is required on a green guide sign which has a depth of 2'-0" and which is usually erected on ramps and crossroads at interchanges, (often referred to as IG-25 or IG-26) the arrow shall be a Series B-1.



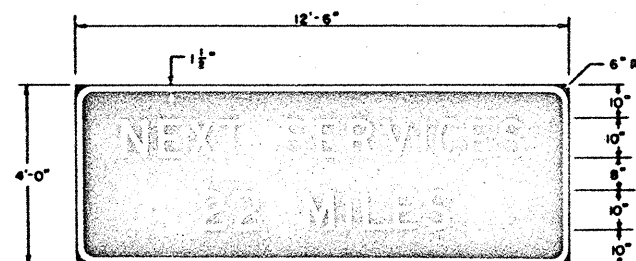
IG-4A
11'-6" x 5'-0"



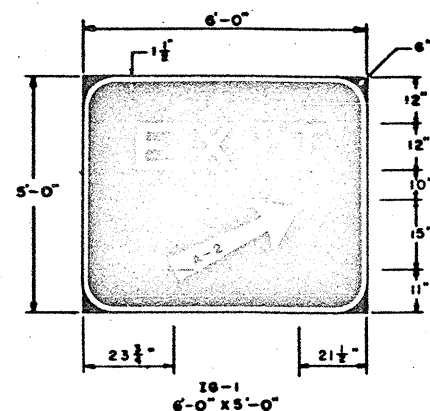
IG-5
11'-6" x 5'-0"



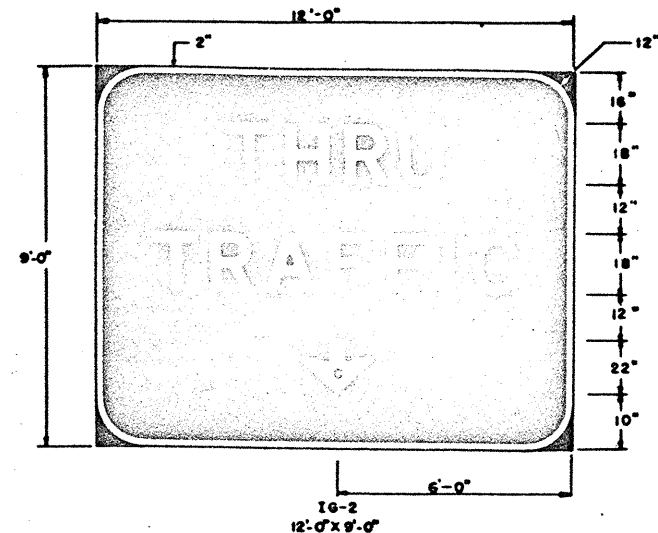
IG-5A
12'-6" x 5'-0"



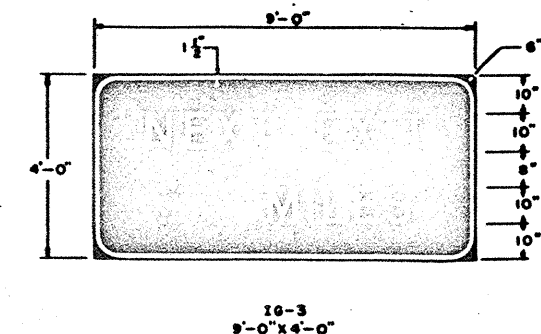
IG-8
12'-6" x 4'-0"



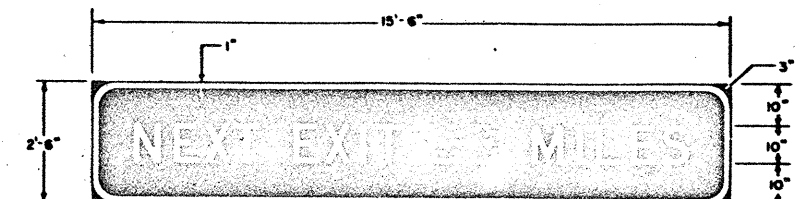
IG-1
6'-0" x 5'-0"



IG-2
12'-0" x 9'-0"



IG-3
9'-0" x 4'-0"



IG-3A
15'-6" x 2'-6"

GENERAL NOTES

The alphabets and lateral spacing between letters and words shall conform with the U. S. Bureau of Public Roads standard rounded capital letter alphabets with any applicable modifications stated in the American Association of State Highway Officials Manual for Signing and Pavement Marking of the National System of Interstate and Defense Highways - 1961, and/or subsequent revisions thereto. Lateral spacing of text shall be such as to provide a balanced appearance.

For IG-1, IG-2, IG-3, and IG-3A signs, the letters, borders, numerals, and arrows shall be reflectorized removable copy conforming with the specifications, and except for signs which are independently illuminated, the background shall be an Interstate Green reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting or paint and beads conforming with the specifications. For signs which are independently illuminated, the background shall be Interstate Green porcelain enamel conforming with the specifications.

For IG-4, IG-5, IG-5A, and IG-8 signs, the letters, borders, numerals, and arrows shall be reflectorized removable copy conforming with the specification, and the background shall be flat surface reflective sheeting having an Interstate Blue Color.

All removable copy letters, numerals, arrows, and borders used on signs for this contract shall be of the same manufacture.

The sign blanks for all signs which are independently illuminated shall be extruded aluminum, multi-increment aluminum panels, or 1 (one) inch honeycomb aluminum panels as specified in the contract award. Should the contract award specify the use of extruded aluminum alloy panels, the aluminum alloy shall conform with the Item, "Aluminum Signs Type B." Should the contract award specify 1 (one) inch honeycomb panels, the aluminum alloy shall conform with the Item, "Aluminum Signs Type C." Should the contract award specify multi-increment panels, the aluminum alloy shall conform with the Item, "Aluminum Signs Type D." The aluminum alloy shall be a minimum of 0.109 inch thick for the face section of extruded panels, 0.040 inch thick for 1 (one) inch honeycomb panels, and 0.125 inch thick for multi-increment panels. The sign blanks for all signs shown on this sheet which are not independently illuminated shall be 5/8 inch thick plywood or 2 1/2 inch honeycomb panels. Plywood signs shall conform to Standard Sheet SMD-8 and the specifications. The 2 1/2 inch honeycomb panels shall be aluminum alloy conforming with the Item, "Aluminum Signs Type E" and Standard Sheet SMD-10. The aluminum alloy shall be a minimum of 0.063 inch thick for the front face of the panel, and a minimum of 0.040 inch thick for the back face of the panel. The sign area outside the corner radius need not be trimmed.

When reflective sheeting is used for background reflectorization, the plywood shall be Type A, High Density. When paint and beads are used for background reflectorization, the plywood shall be Type B, Medium Density.

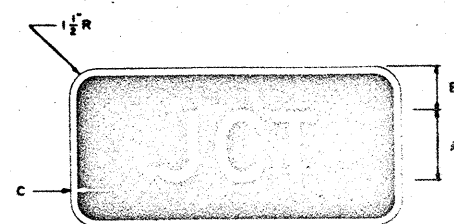
TEXAS HIGHWAY DEPARTMENT STANDARD INTERSTATE SIGNS GUIDE

SHEET 1 of 6

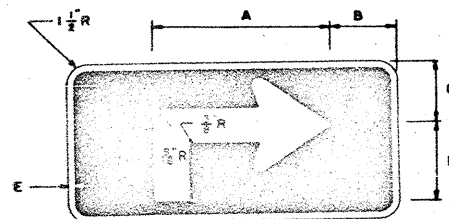
ISG(1)

REVISED	DATE	BY	STATE	FEDERAL PROJECT NO.	SHEET NO.
REVISED	5/62 J.G.	7/64CH	TEXAS	137-1(50)000	41
REVISED	6/62 W.L.D.	7/64CH	TEXAS	137-1(50)000	41
REVISED	7/62 W.L.D.	7/64CH	TEXAS	137-1(50)000	41
12/65 T.K.	REVISED	8/63 CH	7/65 TA	16	NUECES 24 6 20 137

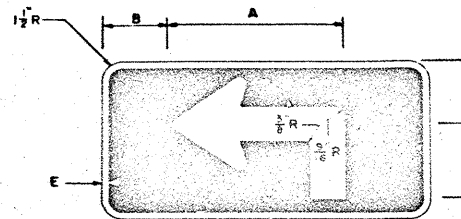




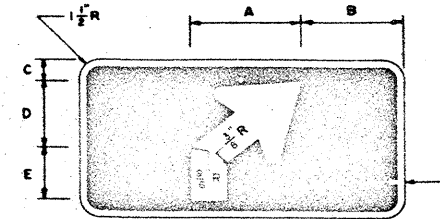
IM2-1
21" X 15"
A = 9"
B = 3"
C = 1/2"



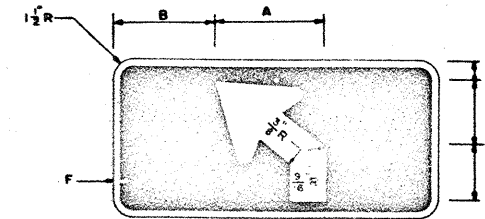
IM3-1R
21" X 15"
A = 12 1/8"
B = 3 3/8"
C = 5 1/8"
D = 7 1/8"
E = 1/2"



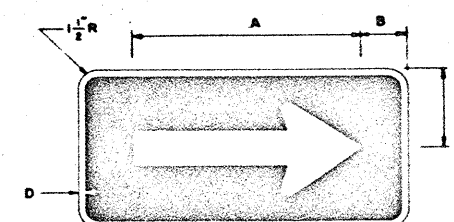
IM3-1L
21" X 15"
A = 12 1/8"
B = 3 3/8"
C = 5 1/8"
D = 7 1/8"
E = 1/2"



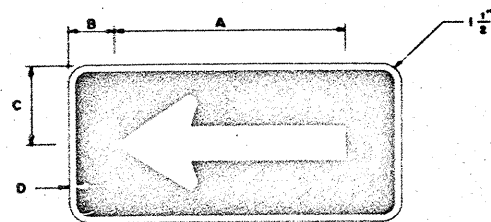
IM3-2R
21" X 15"
A = 8 1/4"
B = 6"
C = 2 1/2"
D = 4 1/4"
E = 5 7/8"
F = 1/2"



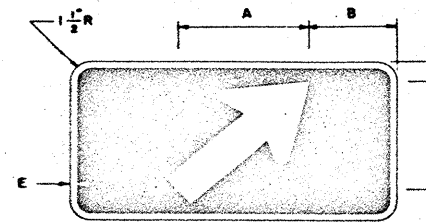
IM3-2L
21" X 15"
A = 8 1/4"
B = 6"
C = 2 1/2"
D = 4 1/4"
E = 5 7/8"
F = 1/2"



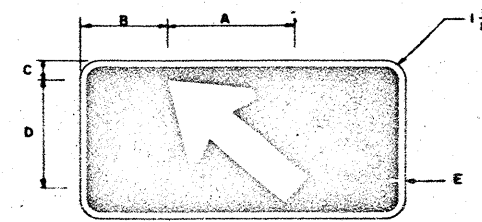
IM4-1R
21" X 15"
A = 14 1/2"
B = 3"
C = 7 1/2"
D = 1/2"



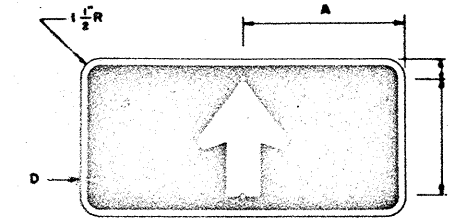
IM4-1L
21" X 15"
A = 14 1/2"
B = 3"
C = 7 1/2"
D = 1/2"



IM4-2R
21" X 15"
A = 10 11/16"
B = 4 1/4"
C = 2 1/8"
D = 9 3/8"
E = 1/2"

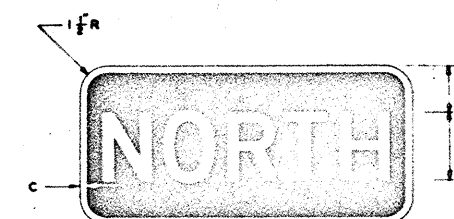


IM4-2L
21" X 15"
A = 10 11/16"
B = 4 1/4"
C = 2 1/8"
D = 9 3/8"
E = 1/2"



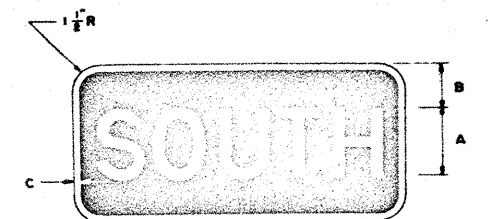
IM4-3
21" X 15"
A = 10 1/2"
B = 2 3/4"
C = 9 1/2"
D = 1/2"

JUNCTION AND DIRECTIONAL MARKERS



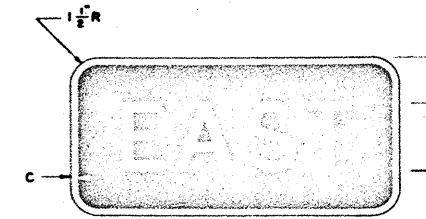
IM6-1N
21" X 9"
A = 5"
B = 2"
C = 1/2"

IM6-2N
30" X 15"
A = 7"
B = 4"
C = 1/2"



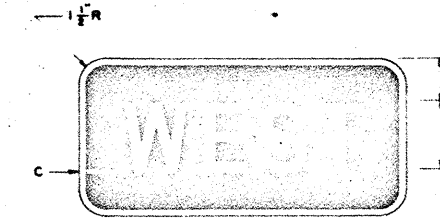
IM6-1S
21" X 9"
A = 5"
B = 2"
C = 1/2"

IM6-2S
30" X 15"
A = 7"
B = 4"
C = 1/2"



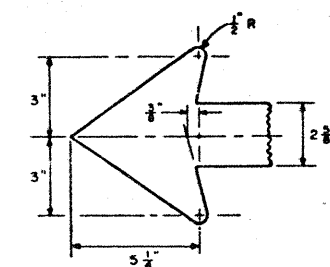
IM6-1E
21" X 9"
A = 5"
B = 2"
C = 1/2"

IM6-2E
30" X 15"
A = 7"
B = 4"
C = 1/2"



IM6-1W
21" X 9"
A = 5"
B = 2"
C = 1/2"

IM6-2W
30" X 15"
A = 7"
B = 4"
C = 1/2"



FOR 21" X 15" BLANK

CARDINAL DIRECTION MARKERS

GENERAL NOTES:

Alphabets and lateral spacing between letters shall conform with the U. S. Bureau of Public Roads standard rounded capital letter alphabets. Lateral spacing of text shall be such as to provide a balanced appearance.

The letters, arrows, and borders shall be white reflective, and the background shall be Interstate Blue reflectorized with blue transparent ink on a white reflectorized flat surface. Letters, arrows, and borders shall be reverse screened.

The sign blanks shall be one piece sheet aluminum alloy 0.125 inch thick conforming with the item, "Aluminum Signs Type A," or one piece 12 gauge sheet steel conforming with the item, "Sheet Steel Signs Type A."

For sign blank punching details, see sheet on "Sign Blank Punching Details."

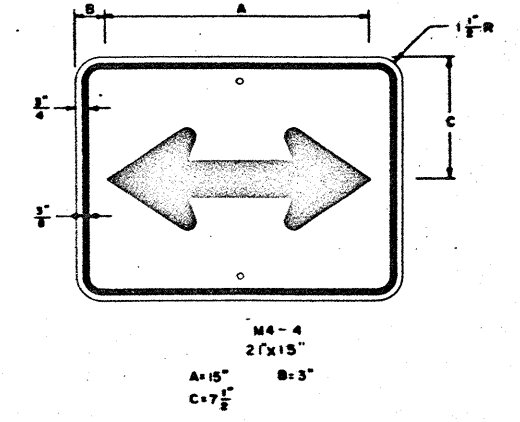
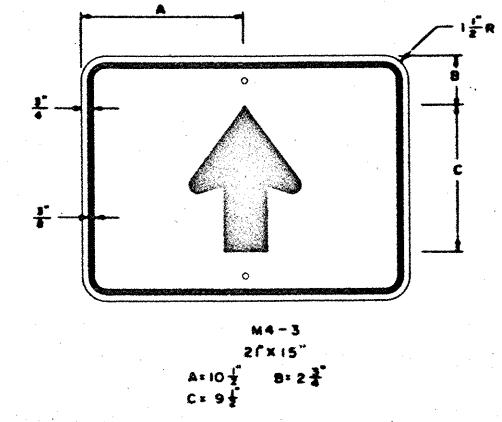
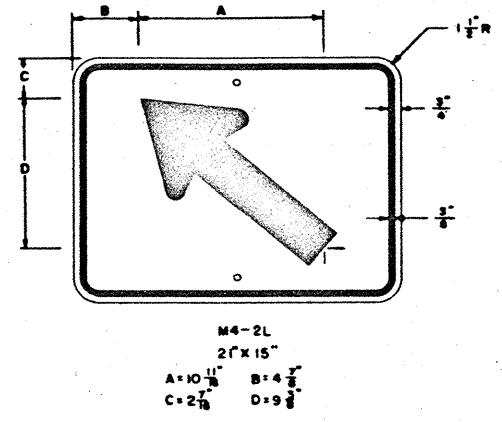
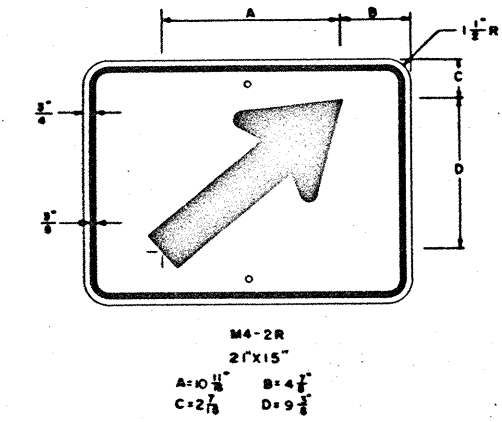
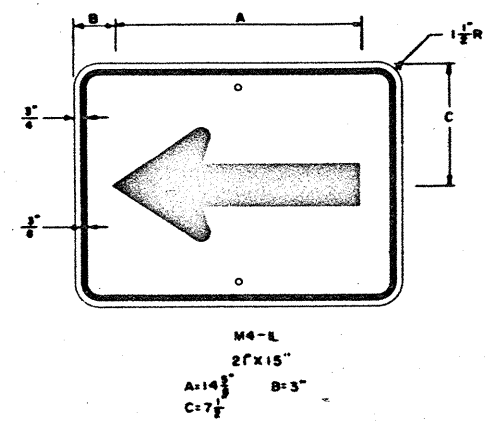
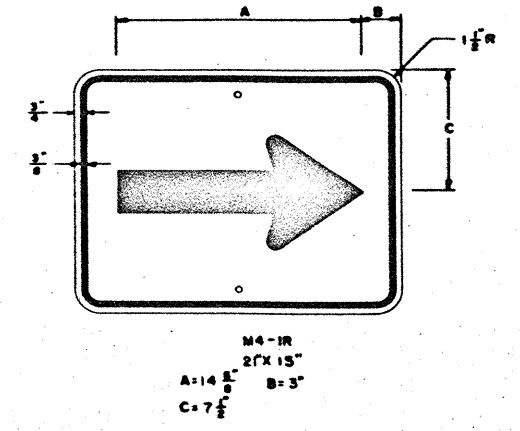
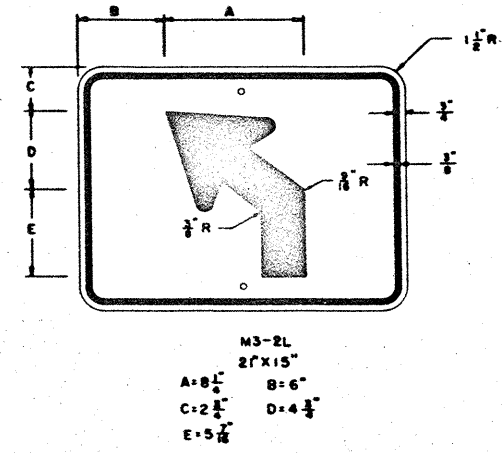
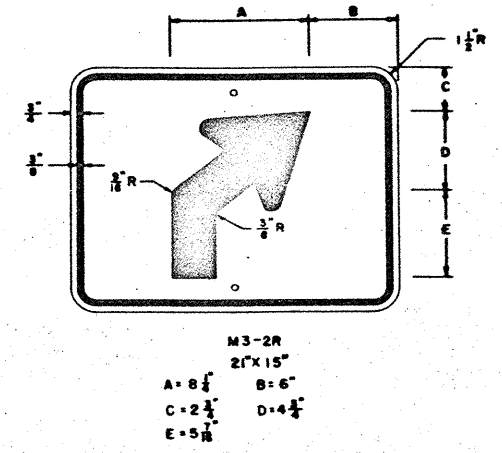
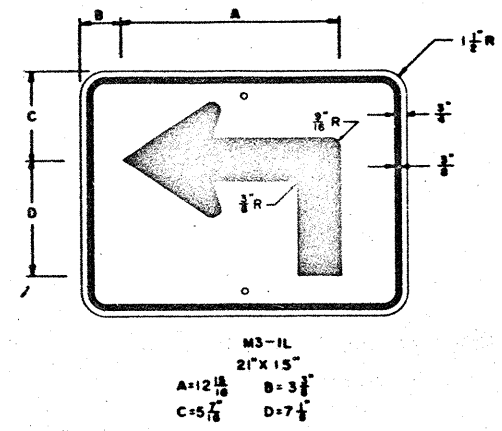
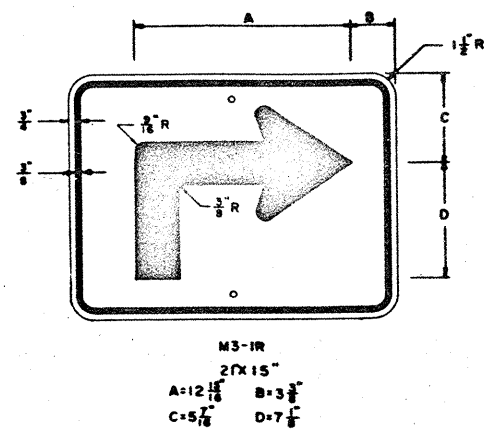
TEXAS HIGHWAY DEPARTMENT STANDARD INTERSTATE SIGNS

SHEET 2 of 6

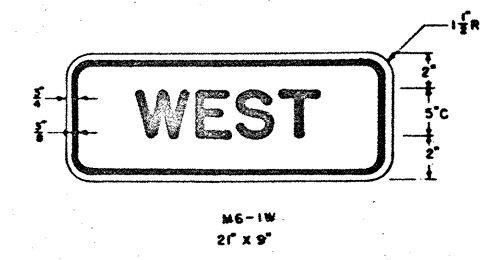
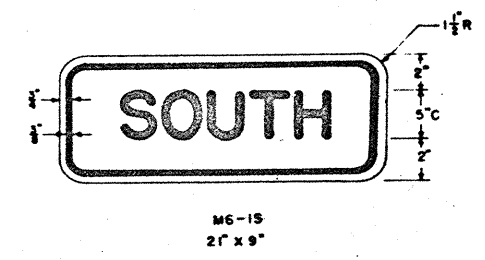
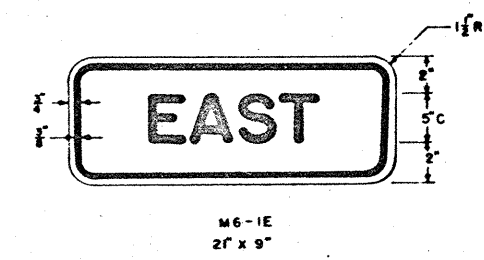
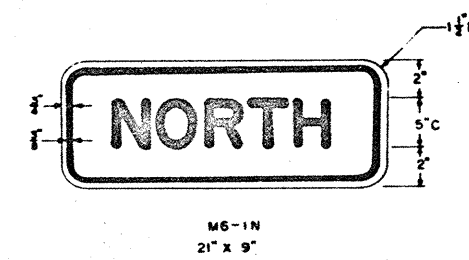
ISG(2)

REVISED	DATE	BY	CHKD	STATE	FEDERAL PROJECT NO.	SHEET NO.
6/62	BD			TEXAS	I 37-1(50) 000	42
7/62	JG			COUNTY	COUNTY	SECT. 200
7/64	CH			16	NUECES	74 6 79 137

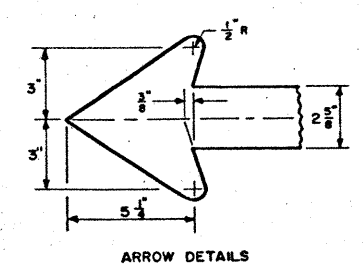
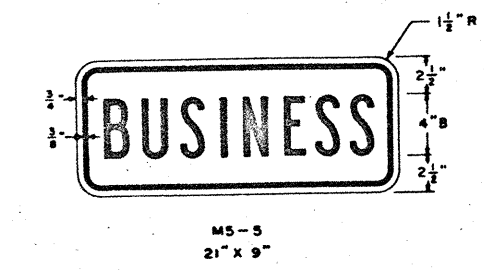
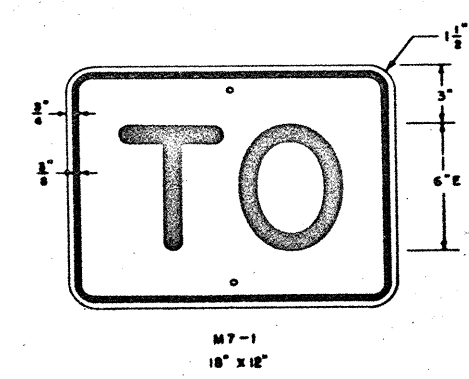
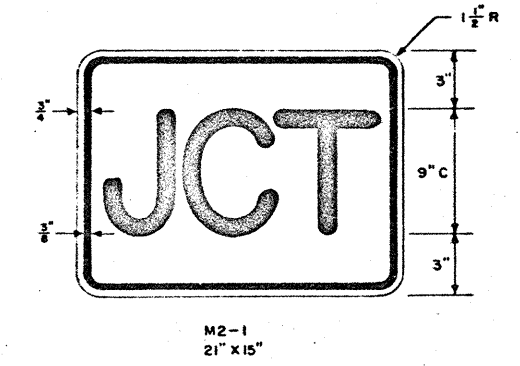




DIRECTIONAL ARROW MARKERS



CARDINAL DIRECTION MARKERS



GENERAL NOTES FOR DIRECTIONAL ARROW MARKERS AND CARDINAL DIRECTION MARKERS

Alphabets and lateral spacing between letters shall conform with the U. S. Bureau of Public Roads standard roadside capital letter alphabets. Lateral spacing of text shall be such as to provide a balanced appearance.

The letters, arrows, and borders shall be black, and the background shall be a white reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting or paint and beads conforming with the specifications.

The letters, arrows, and border shall be applied directly to the surface of the reflective material by the silk screen process.

The sign blanks shall be one piece sheet aluminum alloy 0.125 inch thick conforming with the Item, "Aluminum Signs Type A," or one piece 12 gauge sheet steel conforming with the Item, "Sheet Steel Signs Type A."

For sign blank punching details, see sheet on "Sign Blank Punching Details."

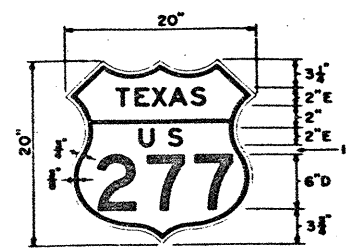
TEXAS HIGHWAY DEPARTMENT
STANDARD INTERSTATE SIGNS

SHEET 3 of 6

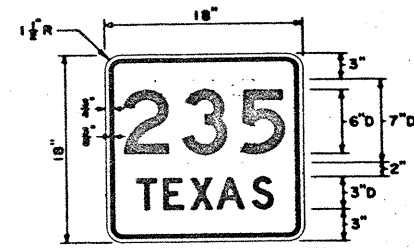
ISG(3)

REVISED	DATE	BY	STATE	FEDERAL PROJECT NO.	SHEET NO.
7/62	JG	7/64 CH	TEXAS	I 37-1(50) 000	41
8/62	CH				
8/63	CH				
12/63	BD	16	NUECES	74 6 79	I 37

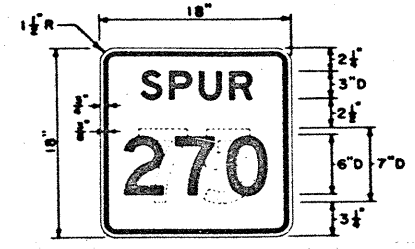
43



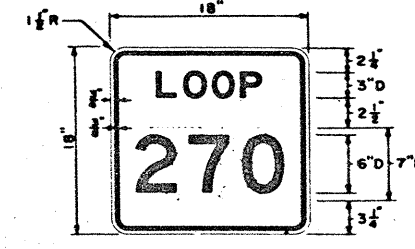
MI-1A



MI-3T



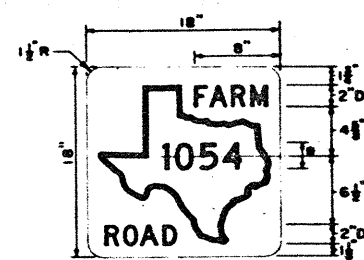
MI-3S



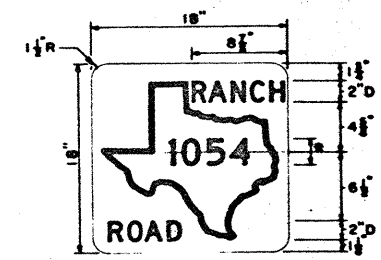
MI-3L



MI-3P



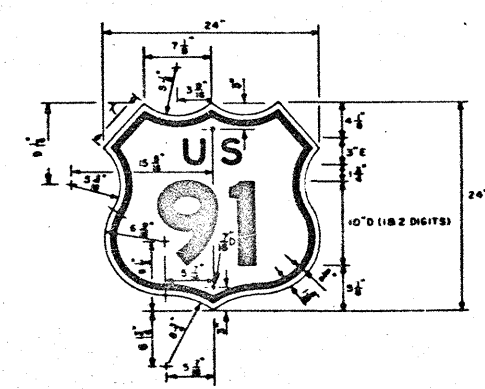
MI-3F



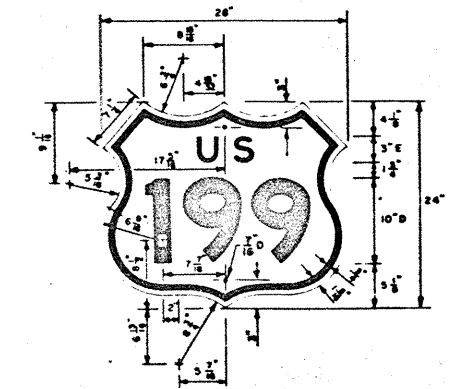
MI-3R

* No. of Digits				
1	2	3	4	
5"D	4"D	3-1/2"D	2-1/2"D	

The MI Series Route Markers shown on this sheet (20"x20" & 18"x18" blanks) are to be used only as Confirming Route Markers except that they will not be used as such on the Main Lanes of Controlled Access Facilities.

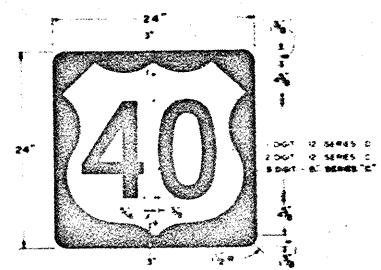


IMI-1

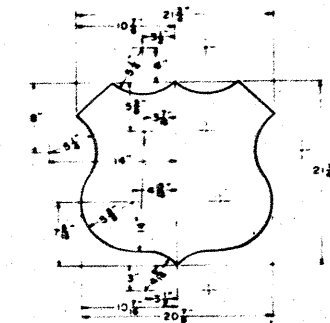


IMI-1A

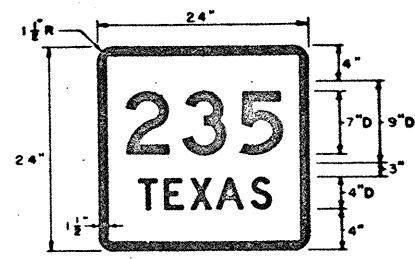
The IMI-1 and IMI-1A Route Markers are to be used only as Confirming Route Markers on the Main Lanes of Controlled Access Facilities.



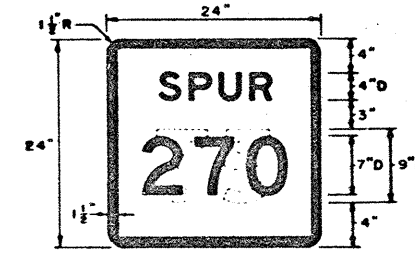
MI-2



DETAIL OF SHIELD SYMBOL



MI-4T



MI-4S

GENERAL NOTES FOR U. S. AND STATE HIGHWAY ROUTE MARKERS

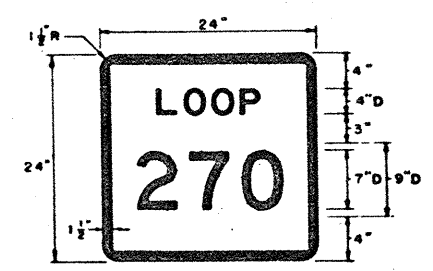
For the MI-3F, MI-3R, MI-4F, and MI-4R Route Markers a print of the Texas State outline shall be obtained from the TEXAS HIGHWAY DEPARTMENT to be used for making a stencil.

For all Route Markers on this sheet, except MI-2, MI-4F, and MI-4R, letters, numerals, and border shall be black and the background shall be a white reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting, or paint and beads conforming with the specifications. The letters, numerals, and border shall be applied direct to the surface of the reflective material by the silk screen process.

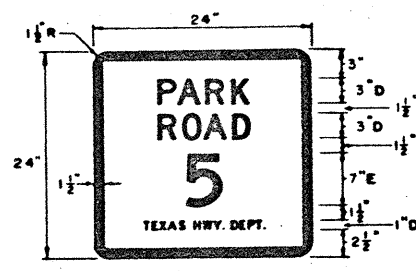
For the MI-2, MI-4F, and MI-4R Route Markers, the U. S. and State outline shall be white reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting, or paint and beads conforming with the specifications. The numerals and background shall be black and applied by the reverse screen process.

The sign blanks shall be one piece sheet aluminum alloy 0.125 inch thick conforming with the Item, "Aluminum Signs Type A," or one piece 12 gauge sheet steel conforming with the Item, "Sheet Steel Signs Type A."

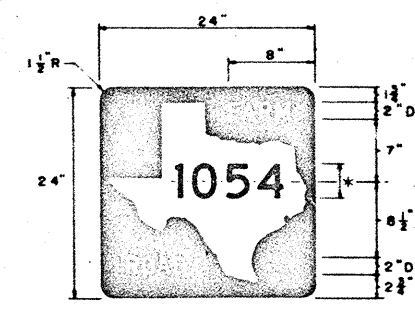
For sign blank punching details see sheet on "Sign Blank Punching Details."



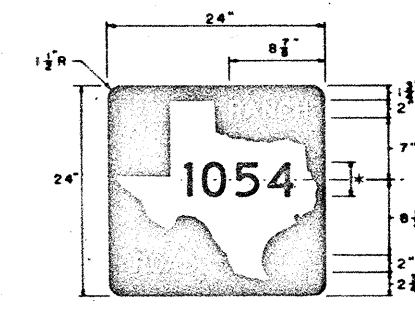
MI-4L



MI-4P



MI-4F



MI-4R

* No. of Digits				
1	2	3	4	
6"D	6"D	5"D	4"D	

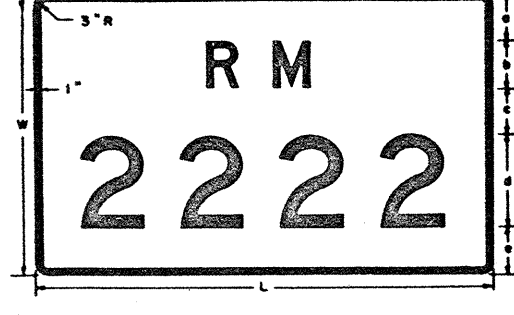
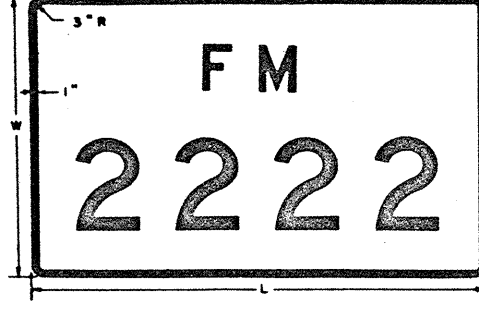
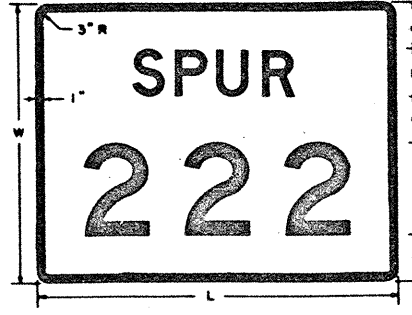
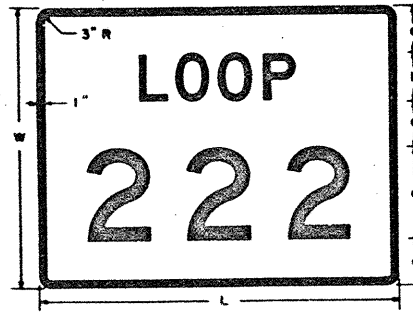
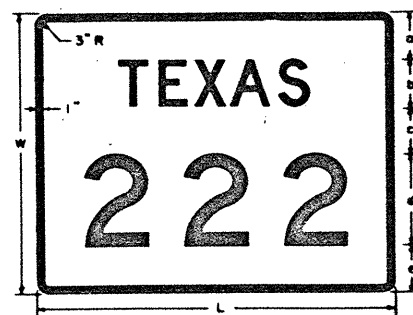
The MI Series Route Markers shown on this sheet (24"x24" blanks) are to be used in Route Turn Assemblies, Advance Turn Assemblies, Directional Assemblies and Junction Assemblies. The MI-4L and MI-4T Route Markers shall also be used as Confirming Markers on the Main Lanes of Controlled Access Facilities when applicable.

STANDARD U. S. AND STATE HIGHWAY ROUTE MARKERS

TEXAS HIGHWAY DEPARTMENT STANDARD INTERSTATE SIGNS

SHEET 4 of 6		ISG(4)		44	
REVISED	7/62 JG	STATE	TEXAS	FEDERAL PROJECT NO.	I 37-1(50) 000
	10-63 WLD	STATE	TEXAS	COUNTY	COM. SECT. NO.
	7/64 CH	STATE	TEXAS	COUNTY	COM. SECT. NO.
		STATE	TEXAS	COUNTY	COM. SECT. NO.





Sign Type	Digits	W	a	b	c	d	e
IM-2T1F	4	36	6	6	6	12	6
IM-2T2F	4	42	6	8	6-1/2	15	6-1/2
IM-2T3F	4	48	7	8	8	18	7
IM-2T4F	3	36	6	6	6	12	6
IM-2T5F	3	42	6	8	6-1/2	15	6-1/2
IM-2T6F	3	48	7	8	8	18	7
IM-2T7F	2	36	6	6	6	12	6
IM-2T8F	2	42	6	8	6-1/2	15	6-1/2
IM-2T9F	2	48	7	8	8	18	7
IM-2T10F	1	36	6	6	6	12	6
IM-2T11F	1	42	6	8	6-1/2	15	6-1/2
IM-2T12F	1	48	7	8	8	18	7

Sign Type	Digits	W	a	b	c	d	e
IM-2L1F	4	36	6	6	6	12	6
IM-2L2F	4	42	6	8	6-1/2	15	6-1/2
IM-2L3F	4	48	7	8	8	18	7
IM-2L4F	3	36	6	6	6	12	6
IM-2L5F	3	42	6	8	6-1/2	15	6-1/2
IM-2L6F	3	48	7	8	8	18	7
IM-2L7F	2	36	6	6	6	12	6
IM-2L8F	2	42	6	8	6-1/2	15	6-1/2
IM-2L9F	2	48	7	8	8	18	7
IM-2L10F	1	36	6	6	6	12	6
IM-2L11F	1	42	6	8	6-1/2	15	6-1/2
IM-2L12F	1	48	7	8	8	18	7

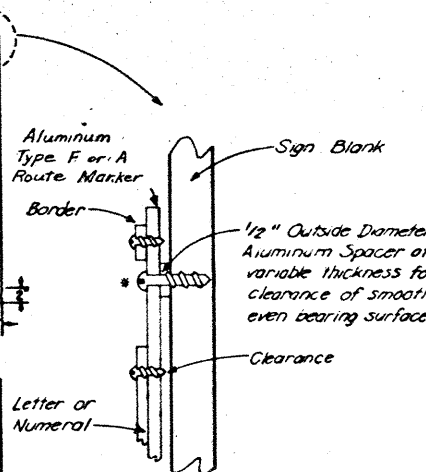
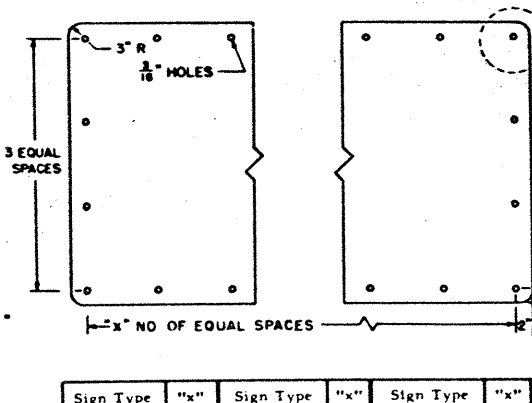
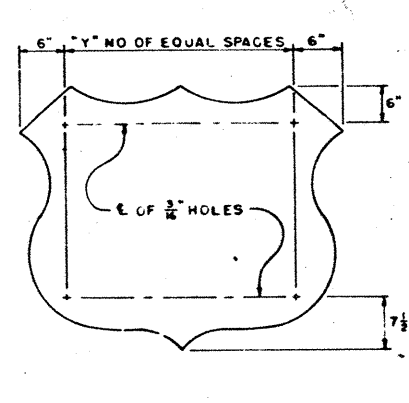
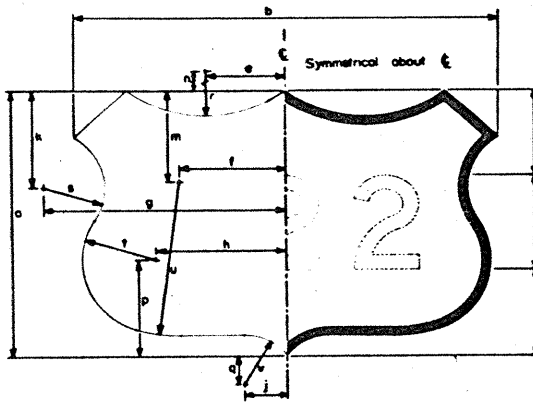
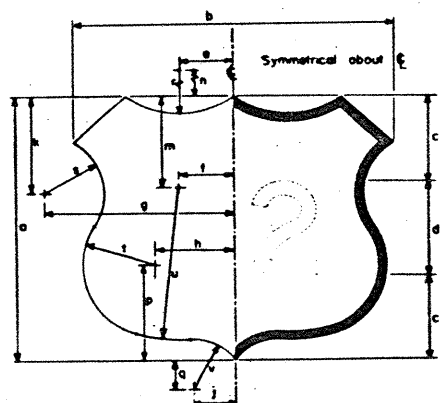
Sign Type	Digits	W	a	b	c	d	e
IM-2S1F	4	36	6	6	6	12	6
IM-2S2F	4	42	6	8	6-1/2	15	6-1/2
IM-2S3F	4	48	7	8	8	18	7
IM-2S4F	3	36	6	6	6	12	6
IM-2S5F	3	42	6	8	6-1/2	15	6-1/2
IM-2S6F	3	48	7	8	8	18	7
IM-2S7F	2	36	6	6	6	12	6
IM-2S8F	2	42	6	8	6-1/2	15	6-1/2
IM-2S9F	2	48	7	8	8	18	7
IM-2S10F	1	36	6	6	6	12	6
IM-2S11F	1	42	6	8	6-1/2	15	6-1/2
IM-2S12F	1	48	7	8	8	18	7

Sign Type	Digits	W	a	b	c	d	e
IM-2P1F	4	36	6	6	6	12	6
IM-2P2F	4	42	6	8	6-1/2	15	6-1/2
IM-2P3F	4	48	7	8	8	18	7
IM-2P4F	3	36	6	6	6	12	6
IM-2P5F	3	42	6	8	6-1/2	15	6-1/2
IM-2P6F	3	48	7	8	8	18	7
IM-2P7F	2	36	6	6	6	12	6
IM-2P8F	2	42	6	8	6-1/2	15	6-1/2
IM-2P9F	2	48	7	8	8	18	7
IM-2P10F	1	36	6	6	6	12	6
IM-2P11F	1	42	6	8	6-1/2	15	6-1/2
IM-2P12F	1	48	7	8	8	18	7

Sign Type	Digits	W	a	b	c	d	e
IM-2F1F	4	36	6	6	6	12	6
IM-2F2F	4	42	6	8	6-1/2	15	6-1/2
IM-2F3F	4	48	7	8	8	18	7
IM-2F4F	3	36	6	6	6	12	6
IM-2F5F	3	42	6	8	6-1/2	15	6-1/2
IM-2F6F	3	48	7	8	8	18	7
IM-2F7F	2	36	6	6	6	12	6
IM-2F8F	2	42	6	8	6-1/2	15	6-1/2
IM-2F9F	2	48	7	8	8	18	7
IM-2F10F	1	36	6	6	6	12	6
IM-2F11F	1	42	6	8	6-1/2	15	6-1/2
IM-2F12F	1	48	7	8	8	18	7

Sign Type	Digits	W	a	b	c	d	e
IM-2R1F	4	36	6	6	6	12	6
IM-2R2F	4	42	6	8	6-1/2	15	6-1/2
IM-2R3F	4	48	7	8	8	18	7
IM-2R4F	3	36	6	6	6	12	6
IM-2R5F	3	42	6	8	6-1/2	15	6-1/2
IM-2R6F	3	48	7	8	8	18	7
IM-2R7F	2	36	6	6	6	12	6
IM-2R8F	2	42	6	8	6-1/2	15	6-1/2
IM-2R9F	2	48	7	8	8	18	7
IM-2R10F	1	36	6	6	6	12	6
IM-2R11F	1	42	6	8	6-1/2	15	6-1/2
IM-2R12F	1	48	7	8	8	18	7

STATE ROUTE MARKERS



GENERAL NOTES FOR U. S. AND STATE ROUTE MARKERS FOR ATTACHMENT TO GUIDE SIGNS

The alphabets and lateral spacing between letters and numerals shall conform with the U. S. Bureau of Public Roads standard rounded capital letter alphabets and any applicable modifications stated in the AASHTO Manual for Signing and Pavement Marking of the National System of Interstate and Defense Highways - 1961 edition, and/or subsequent revisions thereto. Lateral spacing of text shall be such as to provide a balanced appearance.

The face of all U. S. and State Route Markers shall be white porcelain enamel conforming with the Item, "Aluminum Signs Type F." The letters, numerals, borders, corner radii and the outline for the U. S. and State Route Markers will be removable reflectorized cutout copy. The aluminum frames which house the white reflector buttons of the removable reflectorized cutout copy shall be finished in black porcelain enamel conforming with the Item, "Removable Reflecterized Cutout Letters, Numbers, Corner Radii for Sign Borders, Borders and Reflecterized Outlines for U. S. and State Route Markers."

The sign blanks shall be one piece sheet aluminum alloy 0.125 inch thick conforming with the Item, "Aluminum Signs Type F." The sign blank shall be attached to the guide sign by screws of stainless steel, galvanized steel, or aluminum.

For sign blank punching details, see "Sign Blank Punching Details" of this sheet.

The U. S. and State Route Markers shown on this sheet shall be used only when attached to Green Guide Signs.

TYPICAL ATTACHMENT OF ROUTE MARKER TO SIGN BLANK

* Route Markers shall be attached to Aluminum Sign Type C by 1/4" diameter slotted round head bolts which pass through the guide sign blank and are secured with washers and nuts on the back side. Projecting threads shall be burred to prevent loosening of the nut.

12" NUMERALS		15" NUMERALS		18" NUMERALS	
30" BLANK		36" BLANK		42" BLANK	
2 DIGIT	3 DIGIT	2 DIGIT	3 DIGIT	2 DIGIT	3 DIGIT
IM-1A1F	IM-1A2F	IM-1A3F	IM-1A4F	IM-1A5F	IM-1A6F
a 30	30	36	36	42	42
b 35	45	42	54	49	63
c 9	9	10-1/2	10-1/2	12	12
d 12	12	15	15	18	18
e 5-15/16	8-9/16	7-1/8	10-1/4	8-5/16	11-15/16
f 5-1/2	10-1/2	6-9/16	12-9/16	7-5/8	14-5/8
g 20-13/16	25-13/16	24-15/16	30-15/16	29-1/8	36-1/8
h 8-3/4	13-3/4	10-1/2	16-1/2	12-1/4	19-1/4
i 4-9/16	4-9/16	5-1/2	6-3/8	6-3/8	6-3/8
j 11	11	13-3/16	13-3/16	15-3/8	15-3/8
k 10-5/16	12-5/16	12-3/8	14-1/2	14-1/2	14-1/2
l 8-3/16	10-13/16	9-13/16	11-7/16	17-1/4	17-1/4
m 10-13/16	10-13/16	13	15-3/16	15-3/16	15-3/16
n 3-5/16	3-5/16	4	4-11/16	4-11/16	4-11/16
o 10-3/16	15	12-3/16	18	14-1/4	21
p 6-5/8	6-5/8	7-15/16	7-15/16	9-5/16	9-5/16
q 7-15/16	7-15/16	9-9/16	11-1/8	11-1/8	11-1/8
r 17-3/8	17-3/8	20-2/8	20-7/8	24-3/8	24-3/8
s 5-5/8	5-5/8	6-3/4	6-3/4	7-7/8	7-7/8

Dimensions for the U. S. Route Marker outlines shown on this sheet are scale dimensions and may be adjusted slightly where necessary for closure of outlines.

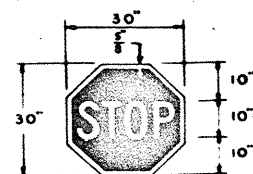
Sign Type	Y"
IM-1A1F	2
IM-1A2F	3
IM-1A3F	3
IM-1A4F	4
IM-1A5F	3
IM-1A6F	5

BORDER WIDTHS
30" Blank - 1"
36" Blank - 1"
42" Blank - 1"

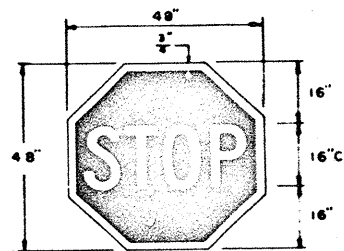
U. S. ROUTE MARKERS

SIGN BLANK PUNCHING DETAILS

SHEET 6 OF 6		ISG(5) A	
DR. F.	DATE	STATE	FEDERAL AID PROJECT NO.
DR. F.	5-62	TEXAS	137-1(30)000
DR. F.	Revised 10/24/62	COUNTY	COUNTY
DR. F.	Revised 10/24/62	SECTION	SECTION
DR. F.		NO.	NO.
DR. F.		16	74

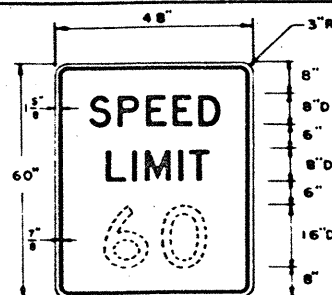


IR-1A
30" x 30"



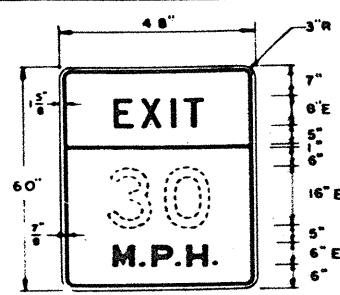
IR-1B
48" x 48"

LETTERS, BORDERS—WHITE REFLECTIVE SHEETING
BACKGROUND—FLAT SURFACE WHITE REFLECTIVE SHEETING,
REVERSE SCREENED WITH STOP SIGN RED
TRANSPARENT INK.



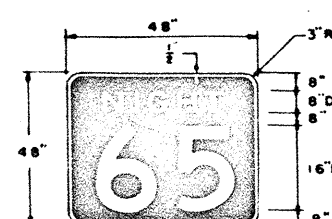
IR-2
48" x 60"

WHEN USED IN CONJUNCTION WITH
AN IR-3 SIGN, ONLY THAT PART OF
THE WHITE BACKGROUND BEARING
THE WORDS "SPEED LIMIT" SHALL
BE REFLECTORIZED.



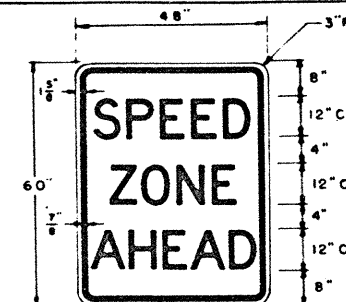
IR-2A
48" x 60"

LETTERS, BORDERS, NUMERALS—BLACK
BACKGROUND—INTERSTATE YELLOW
REFLECTIVE MATERIAL

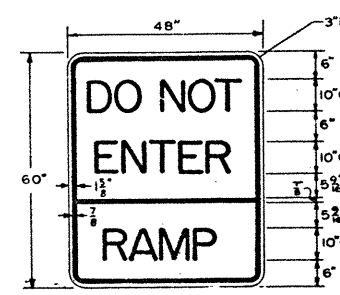


IR-3
48" x 48"

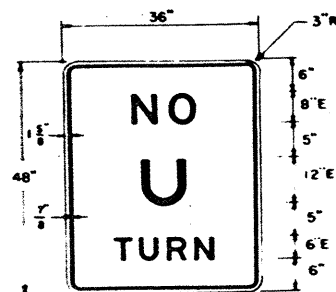
LETTERS, NUMERALS, BORDERS—
WHITE REFLECTIVE MATERIAL
BACKGROUND—BLACK
(REVERSE SCREENED)



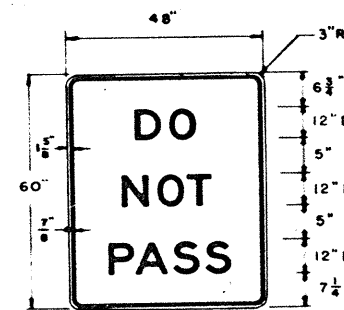
IR-4
48" x 60"



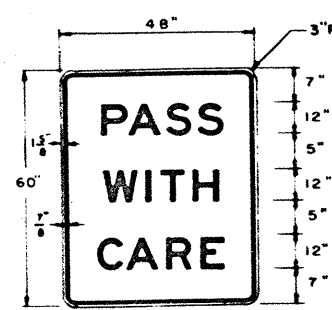
IR-15R
48" x 60"



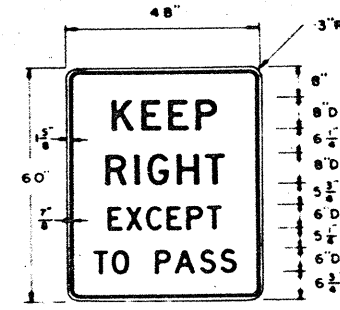
IR-8
36" x 48"



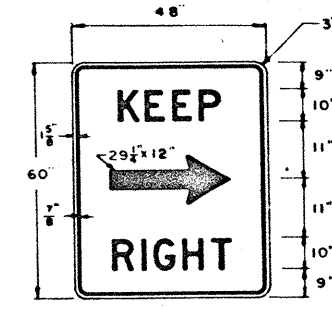
IR-11
48" x 60"



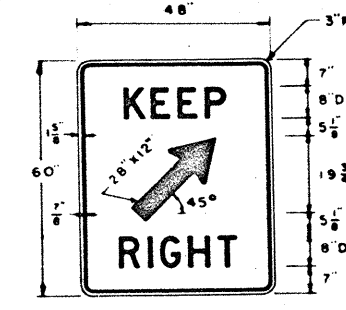
IR-12
48" x 60"



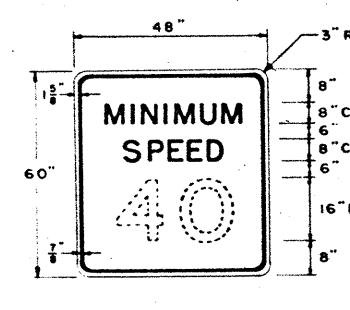
IR-13
48" x 60"



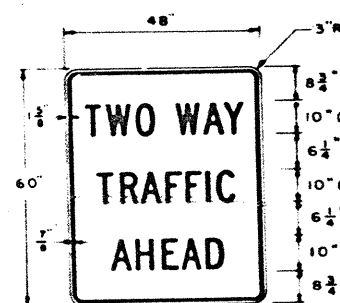
IR-14
48" x 60"



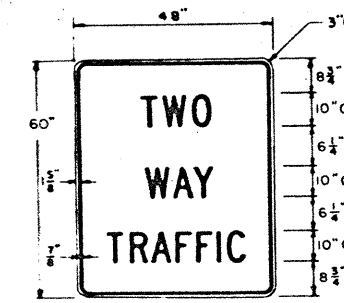
IR-14A
48" x 60"



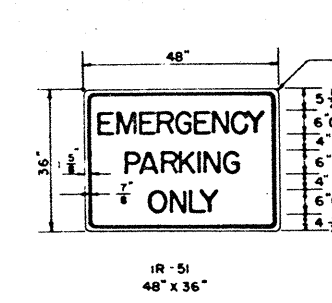
IR-2F
48" x 60"



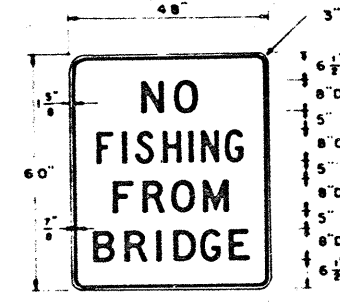
IR-17
48" x 60"



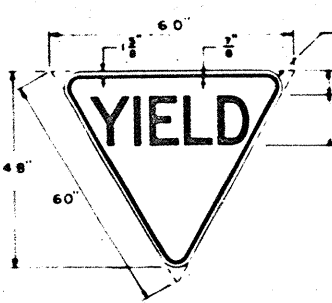
IR-17A
48" x 60"



IR-51
48" x 36"

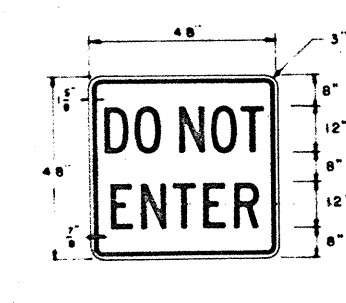


IR-41
48" x 60"

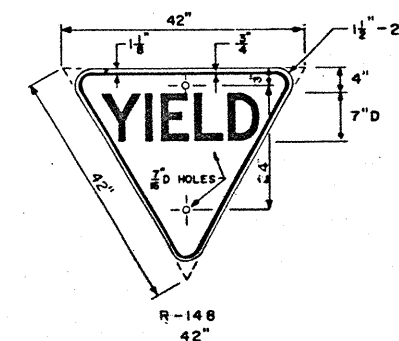


IR-48
60" x 48"

LETTERS, BORDERS—BLACK
BACKGROUND—INTERSTATE YELLOW
REFLECTIVE MATERIAL



IR-15
48" x 48"



IR-148
42" x 42"

BORDERS, LETTERS—BLACK
BACKGROUND—INTERSTATE YELLOW
REFLECTIVE MATERIAL

GENERAL NOTES FOR REGULATORY SIGNS

Alphabets and lateral spacing between letters and words shall conform with U. S. Bureau of Public Roads standard rounded capital letter alphabets. Lateral spacing of text shall be such as to provide a balanced appearance.

Unless otherwise noted under specific signs, all letters, numerals, arrows, and borders shall be black, and the background shall be a white reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting, or paint and beads, conforming with the specifications. Reflective sheeting for STOP signs shall have a flat surface.

Unless otherwise stated all letters, numerals, arrows and borders shall be applied direct to the surface of the reflective material by the silk screen process.

The sign blanks shall be one piece, 5/8 inch thick plywood conforming with the specifications. When reflective sheeting is used for background reflectorization, the plywood shall be Type A, High Density. When paint and beads are used for background reflectorization, the plywood shall be Type B, Medium Density.

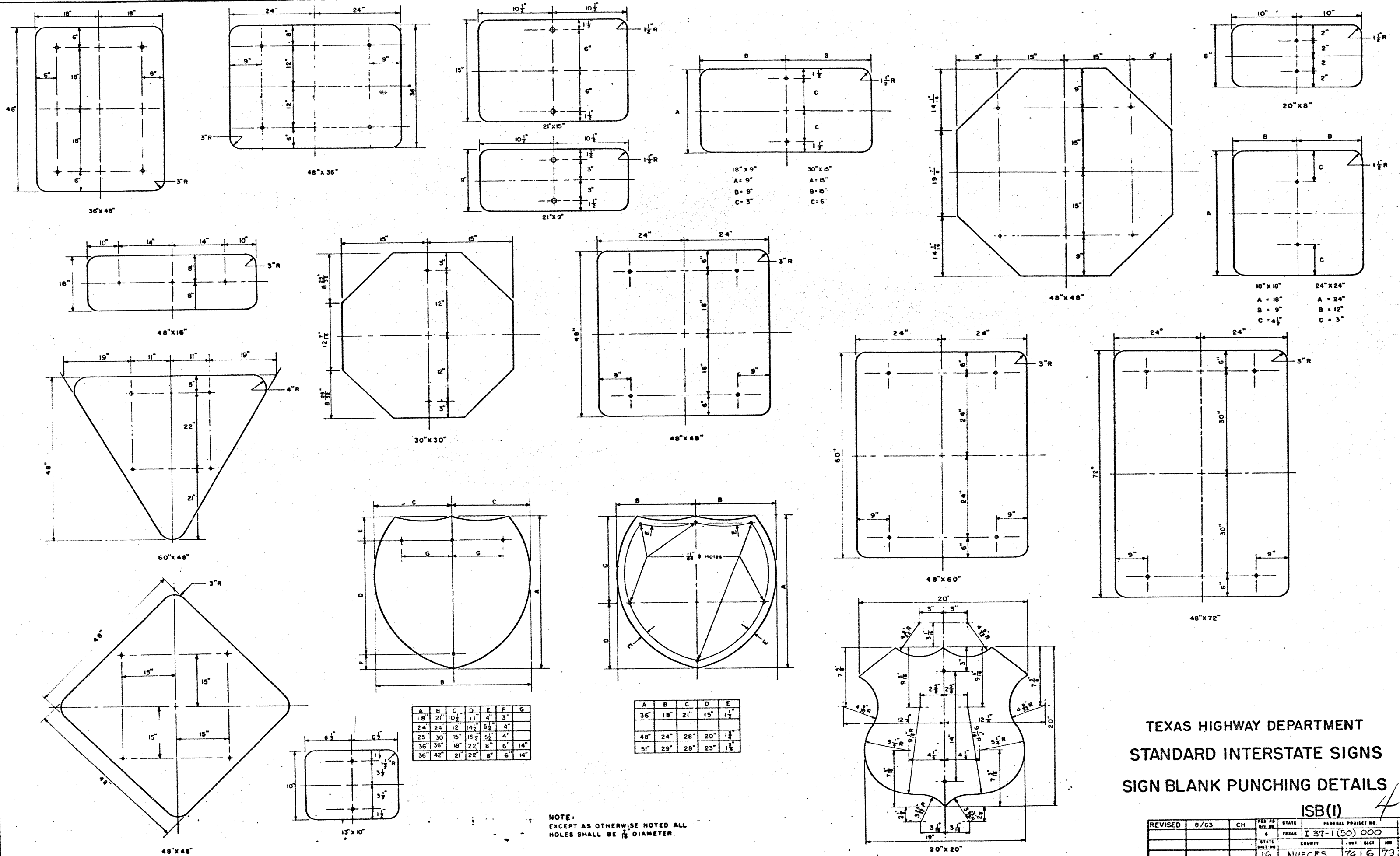
For sign blank punching details, see sheet on "Sign Blank Punching Details."

TEXAS HIGHWAY DEPARTMENT STANDARD INTERSTATE SIGNS

REGULATORY ISR(I)

REVISED	6/62 JG	2/64 BD	7/65 BD	STATE	FEDERAL PROJECT NO.	SHEET NO.
	7/62 JG	9/64 CH	8	TEXAS	I 37-1 (50) 000	46
	8/63 CH	3/30 CH	16	STATE	COUNTY	CONTRACT NO.
	1/64 CH			16	NUECES	74 6 79 I 37

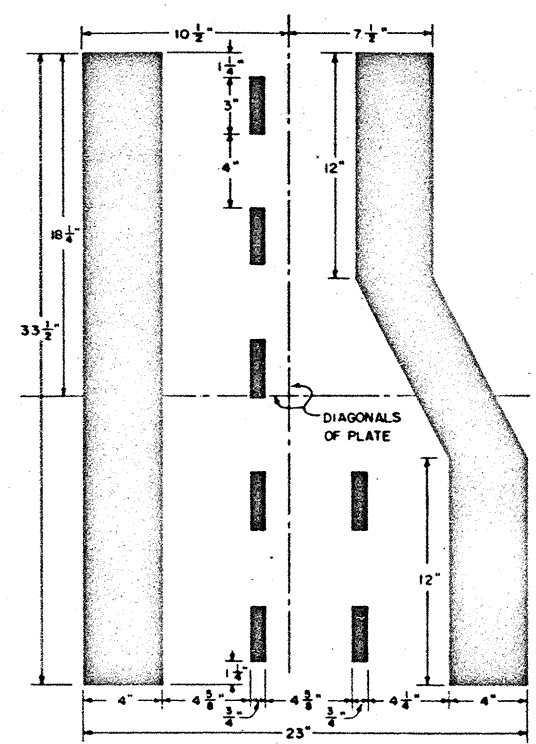
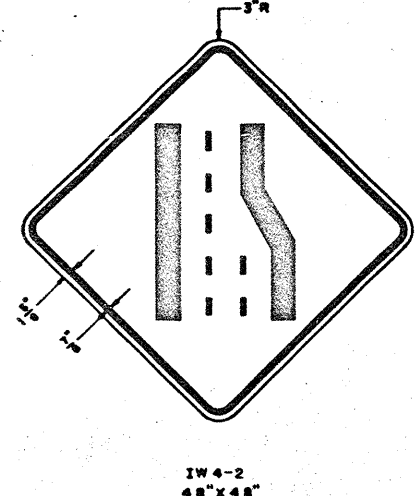
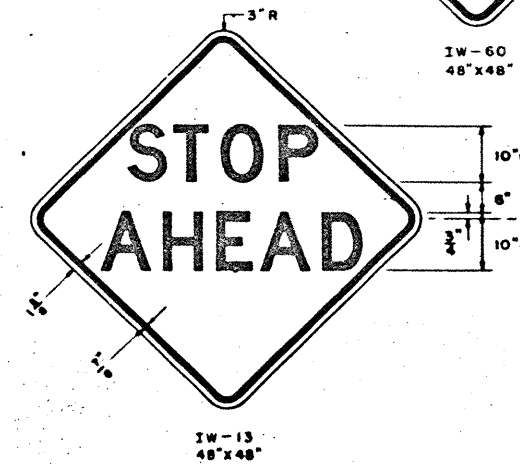
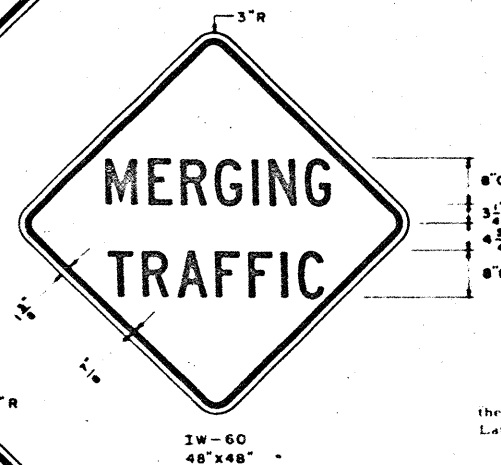
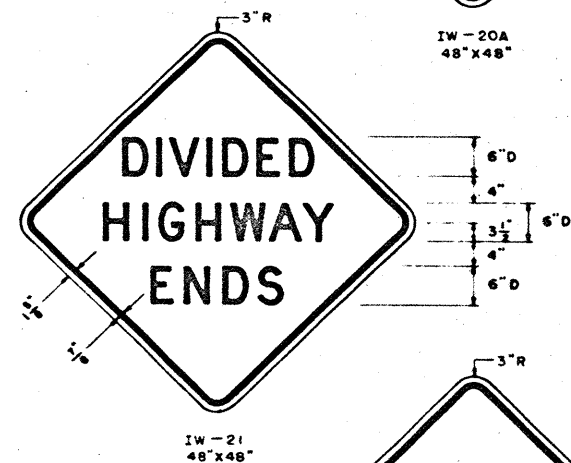
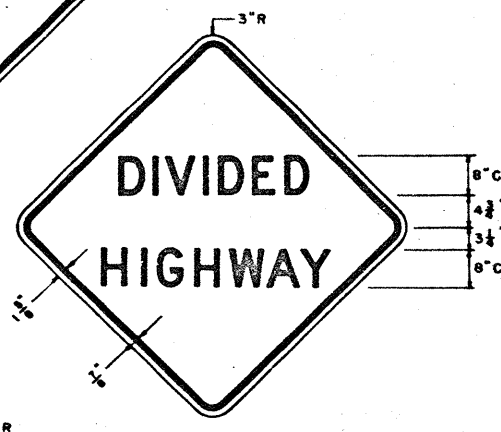
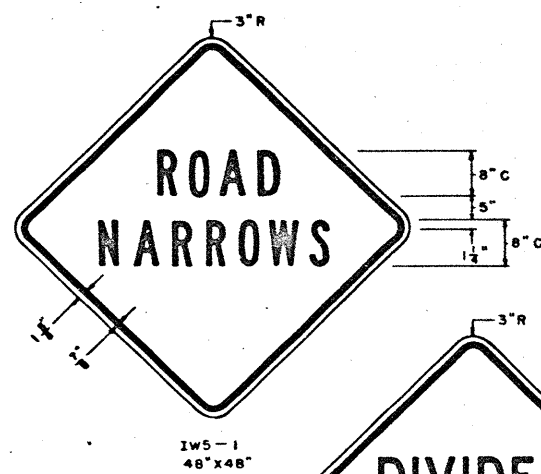




TEXAS HIGHWAY DEPARTMENT
STANDARD INTERSTATE SIGNS
SIGN BLANK PUNCHING DETAILS
ISB(I)

REVISED	8/63	CH	FED. RD. DIST. NO.	STATE	FEDERAL PROJECT NO.	DATE
			6	TEXAS	I 37-1(50) 000	47
STATE	COUNTY	DIST.	SECT.	JOB	HIGHWAY NO.	
16	NUECES	74	6	79	I 37	





GENERAL NOTES FOR WARNING SIGNS

The alphabets and lateral spacing between letters shall conform with the U. S. Bureau of Public Roads standard rounded capital letter alphabets. Lateral spacing of text shall be such as to provide a balanced appearance.

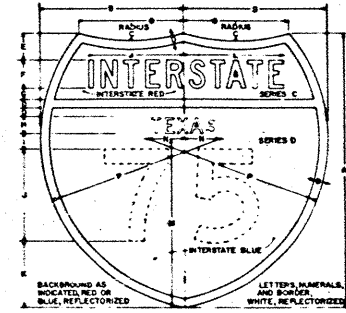
The letters, symbols, and borders shall be black, and the background shall be an interstate yellow reflective material of either flat surface reflective sheeting, exposed lens reflective sheeting or paint and beads conforming with the specifications.

Letters, symbols, and borders shall be applied direct to the surface of the reflective material by the silk screen process.

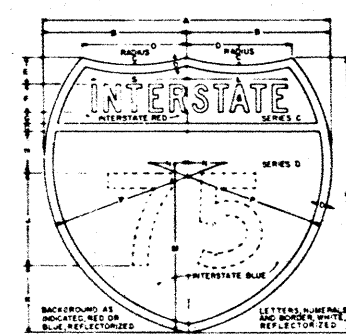
The sign blanks shall be one piece, 5/8 inch thick plywood conforming with the specifications. When reflective sheeting is used for background reflectorization, the plywood shall be Type A, High Density. When paint and beads are used for background reflectorization, the plywood shall be Type B, Medium Density.

For sign blank punching details, see sheet on "Sign Blank Punching Details."

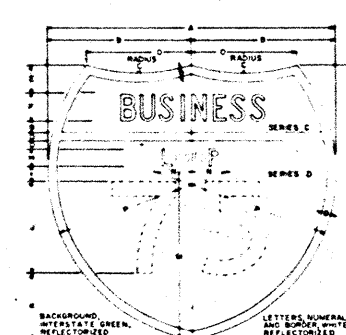
WARNING



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IM-AA	18	10	13	1	1	1	1	1	1	1	1	1	1	1	1	1
IM-BB	24	12	15	2	2	2	2	2	2	2	2	2	2	2	2	2
IM-CC	36	18	22	3	3	3	3	3	3	3	3	3	3	3	3	3

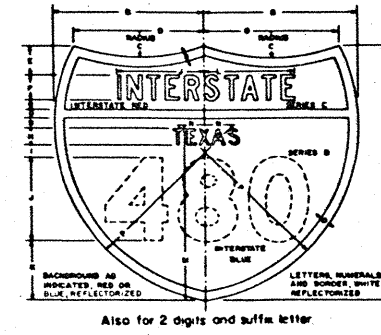


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IM-BB	24	12	15	2	2	2	2	2	2	2	2	2	2	2	2	2
IM-CC	36	18	22	3	3	3	3	3	3	3	3	3	3	3	3	3

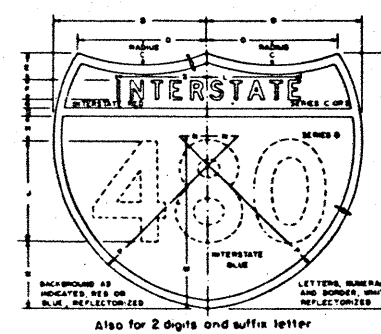


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IM-CC	36	18	22	3	3	3	3	3	3	3	3	3	3	3	3	3
IM-DD	48	24	30	4	4	4	4	4	4	4	4	4	4	4	4	4

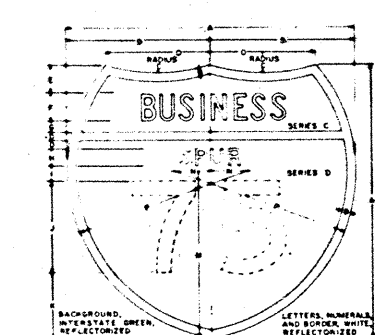
INTERSTATE ROUTE MARKERS



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IM-DD	48	24	30	4	4	4	4	4	4	4	4	4	4	4	4	4
IM-EE	60	30	36	5	5	5	5	5	5	5	5	5	5	5	5	5



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IM-EE	60	30	36	5	5	5	5	5	5	5	5	5	5	5	5	5
IM-FF	72	36	42	6	6	6	6	6	6	6	6	6	6	6	6	6



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
IM-FF	72	36	42	6	6	6	6	6	6	6	6	6	6	6	6	6
IM-GG	84	42	48	7	7	7	7	7	7	7	7	7	7	7	7	7

GENERAL NOTES FOR INTERSTATE ROUTE MARKERS

The alphabets and lateral spacing between letters and numerals shall conform with the U. S. Bureau of Public Roads standard rounded capital letter alphabets.

Colors of letters, numerals, border and background shall be as shown on the Route Marker design details. Reflective material shall be flat surface reflective sheeting. Letters, numerals, and border shall be reverse screened.

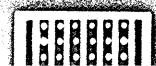
The sign blanks shall be one piece sheet aluminum alloy 0.125 inch thick conforming with the Item, "Aluminum Signs Type A," or one piece 12 gauge sheet steel conforming with the Item, "Sheet Steel Signs Type A" when used on Ground Signs, independently mounted.

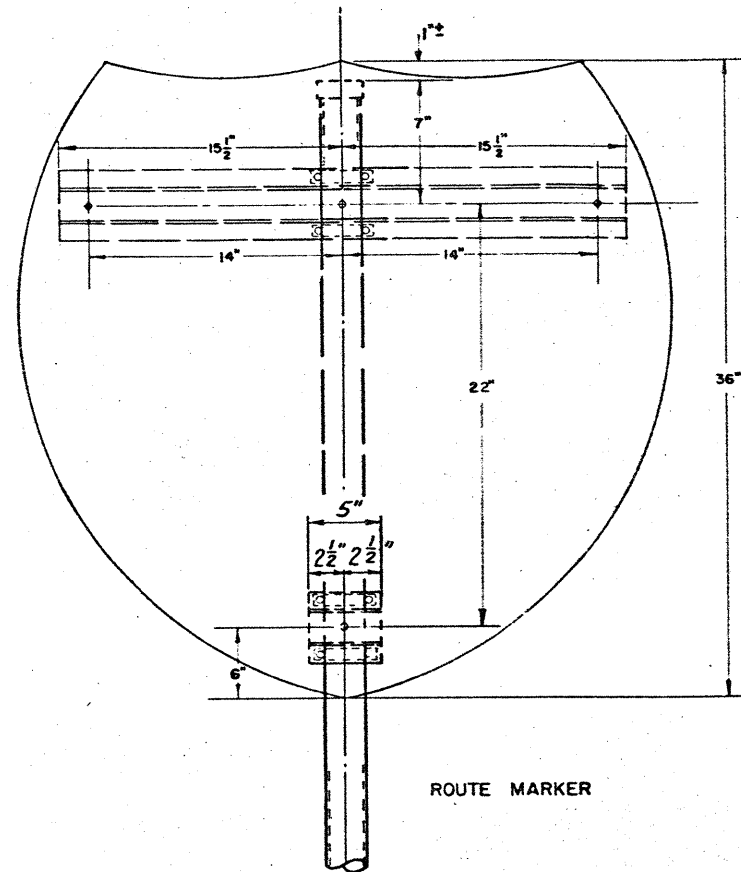
For sign blank punching details, see sheet on "Sign Blank Punching Details."

TEXAS HIGHWAY DEPARTMENT STANDARD INTERSTATE SIGNS

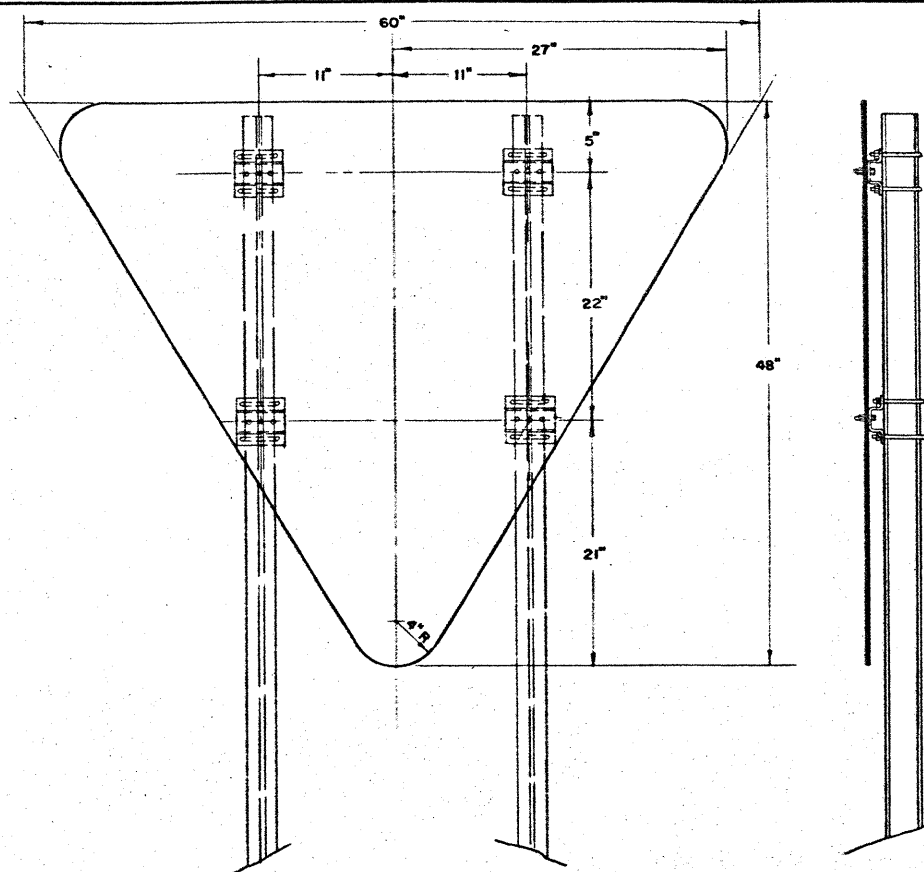
ISMW(I)

REVISED	6/62	JG	PER AS	STATE	FEDERAL PROJECT NO.	SHEET NO.
	7/62	JG	6	TEXAS	I 37-1 (50) 000	48
	12/62	JG	STATE	COUNTY	COUNTY	DISSEMINATION
	7/64	CH	6	NUECES	74 6 79	I 37

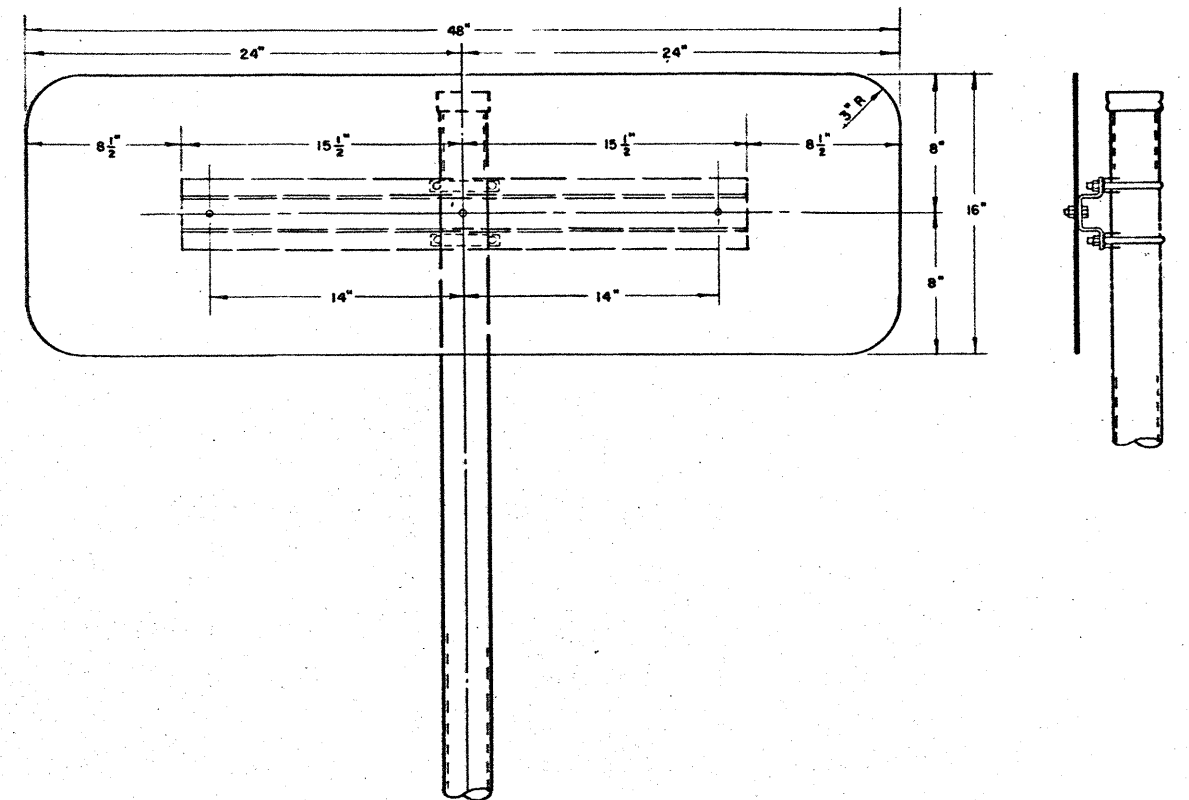




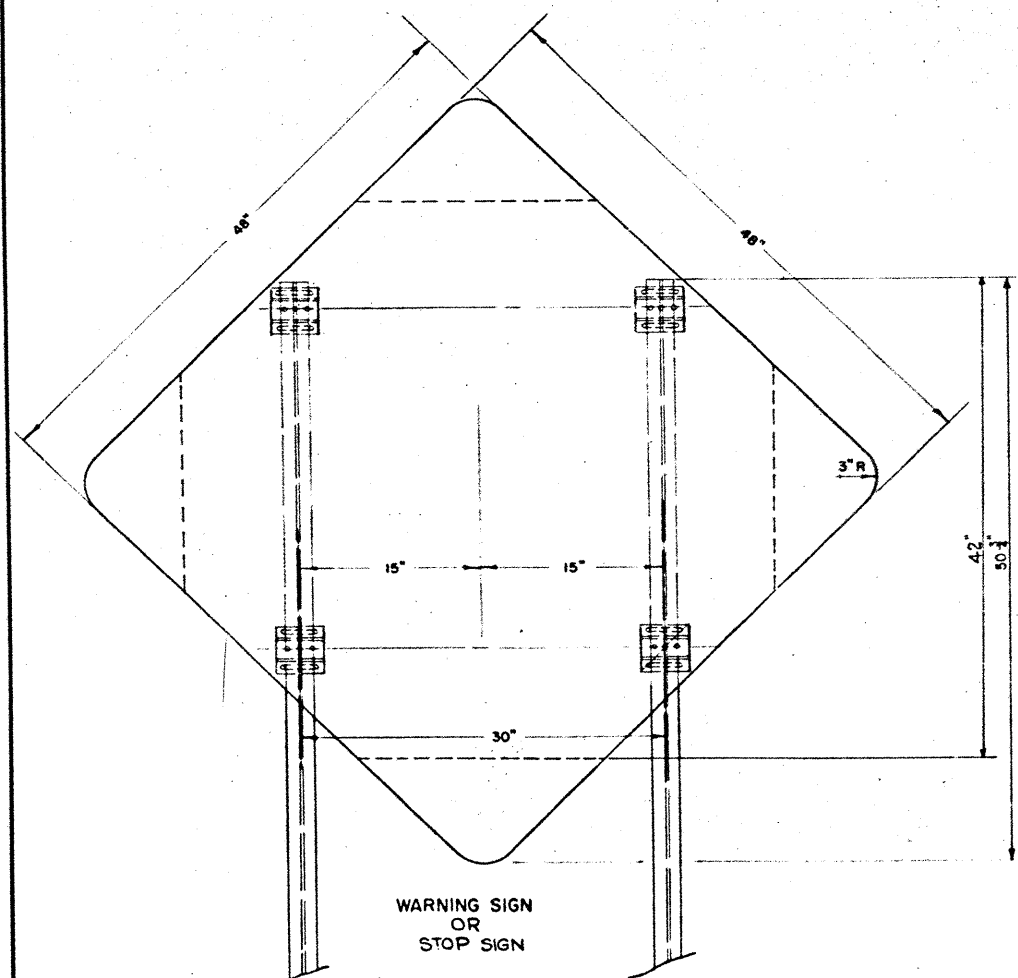
ROUTE MARKER



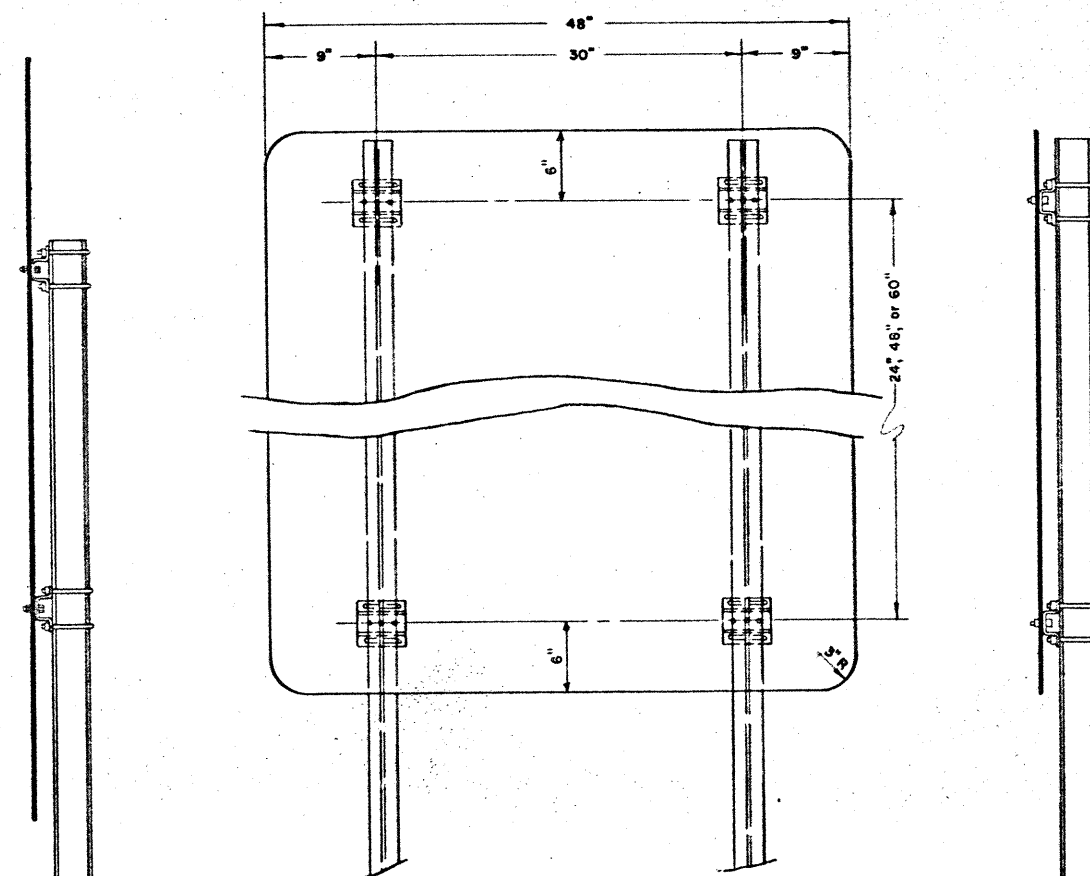
YIELD SIGN



1R-16 ONE WAY SIGN



WARNING SIGN
OR
STOP SIGN



REGULATORY SIGN

NOTE:
SEE SHEET SMD-3 FOR CLAMP DETAILS.

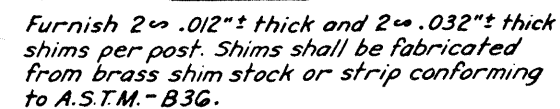
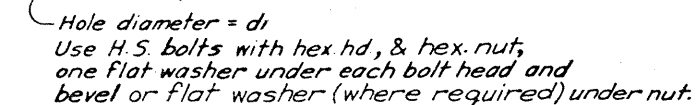
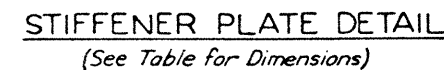
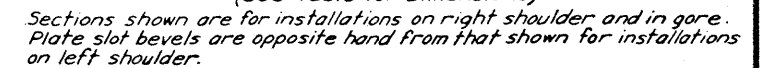
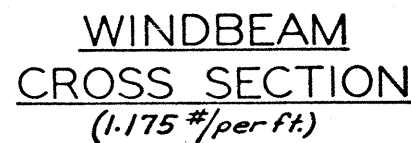
TEXAS HIGHWAY DEPARTMENT
INTERSTATE
STANDARD ROADSIDE SIGN
MOUNTING DETAILS
ROUTE MARKERS, WARNING, AND REGULATORY SIGNS

49
SMD-1

SHEET 1 OF 8

REVISED	DATE	BY	CHKD	STATE	FEDERAL PROJECT NO.	SHEET NO.
6/62	JD	7/65	TR	TEXAS	I 37-1(50) 000	49
7/62	BD	6/67	SR	STATE	COUNTY	CONTRACT NO.
8/63	CH			16	4UECES	74 6 79 I 37

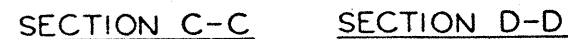




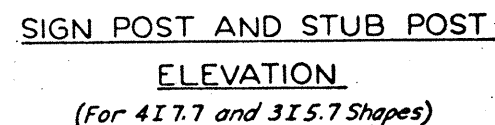
PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

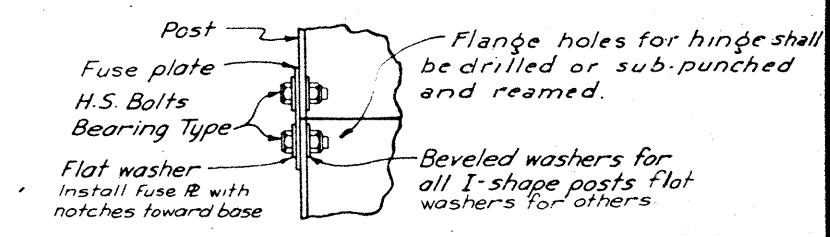
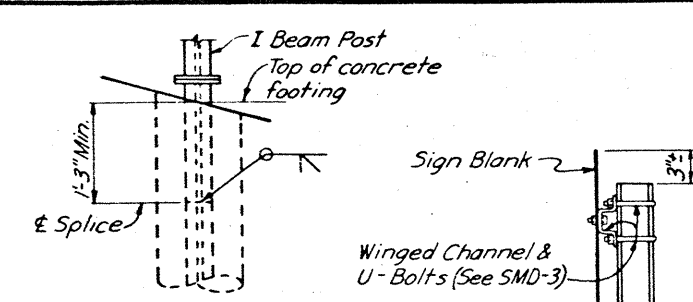
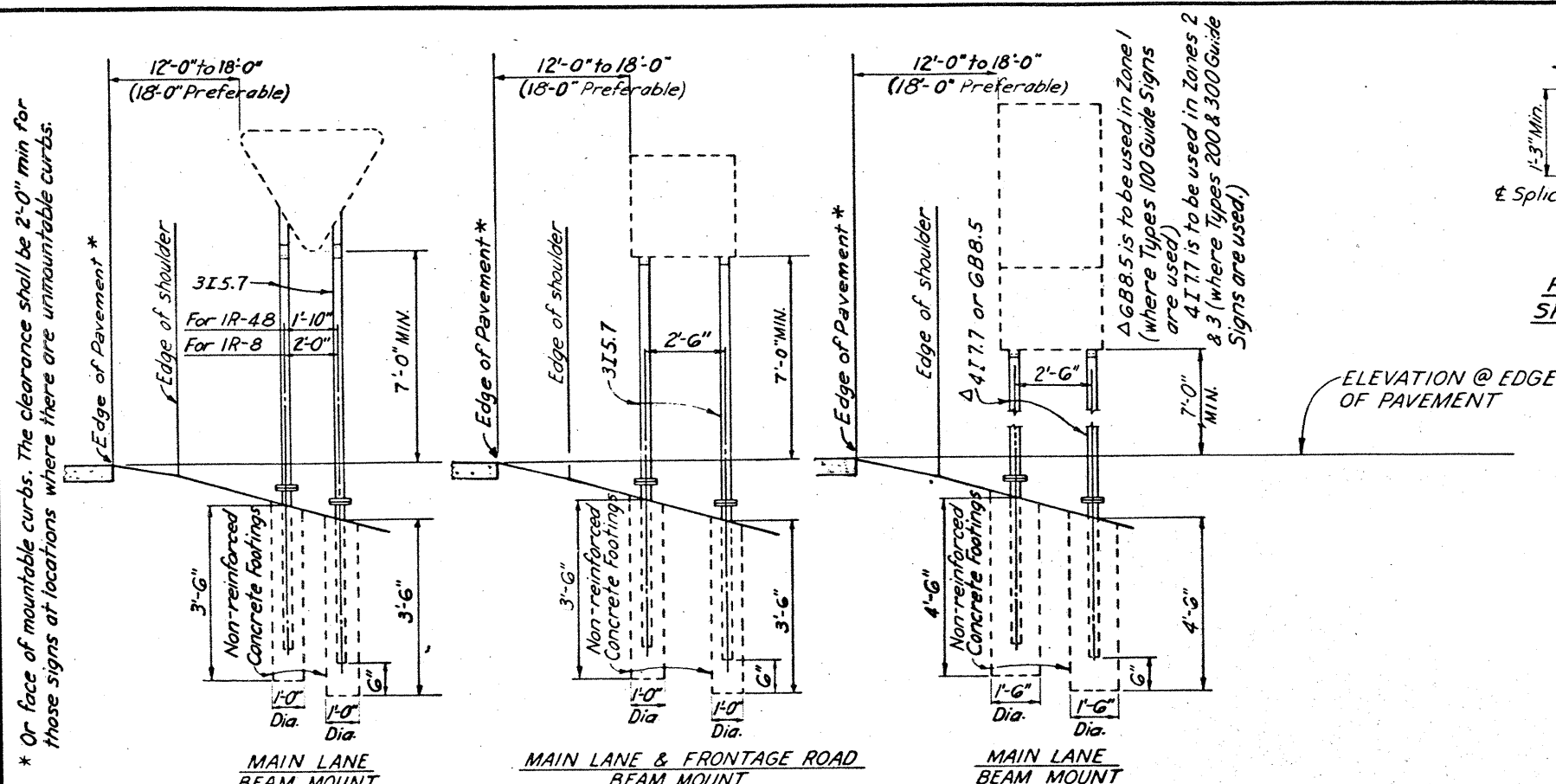
1. Assemble post to stub with bolts and WITH ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES.

2. Shim as required to plumb post.
3. Tighten all bolts the maximum possible with 12" to 15" wrench to bed washers and shims and to clean bolt threads then loosen each bolt in turn and retighten in a systematic order to the prescribed torque. (See Table)
4. Burr threads at junction with nut using a center punch to prevent nut loosening.



Sections shown are for installations on right shoulder and in gore.
Plate slot bevels are opposite hand from that shown for installations
on left shoulder.

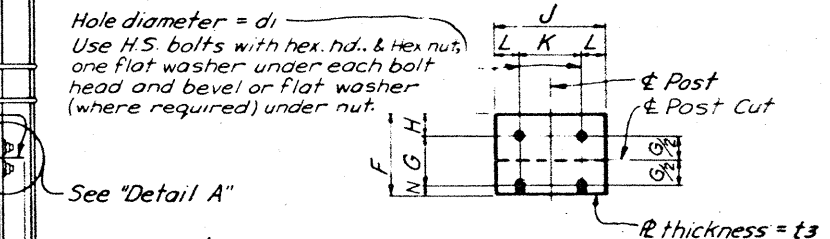




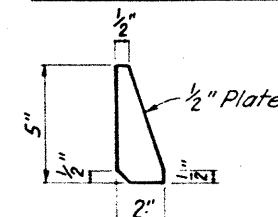
Post shall be saw cut after galvanizing and the cut surface treated with an approved zinc solder meeting the Federal Spec. 0-6-93 (Stick only)

Post cut @ bottom of sign ±1"

Hole diameter = d_i
Use H.S. bolts with hex. hd. & Hex nuts, one flat washer under each bolt head and bevel or flat washer (where required) under nut.



TYPICAL SIDE VIEW

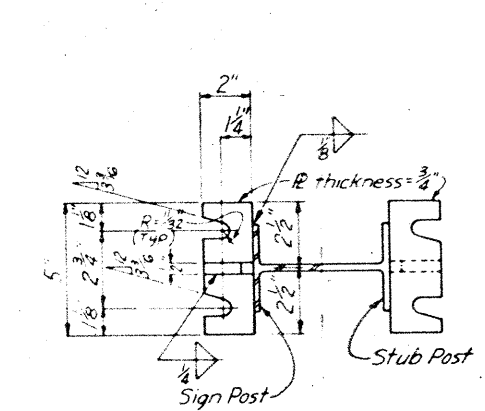
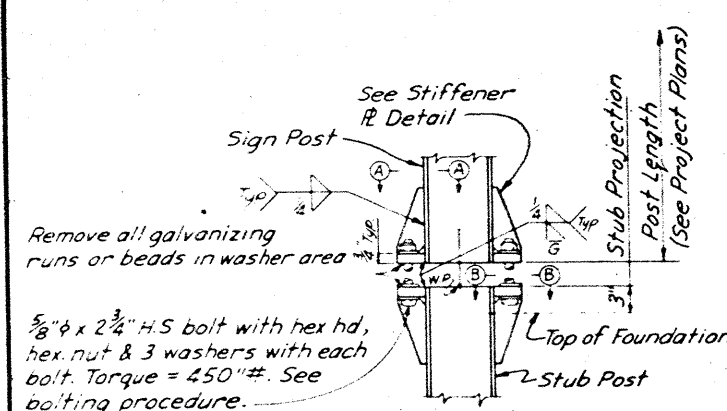


FUSE PLATE DATA TABLE												
Dimension	F	G	H	J	K	L	N	d _i	t ₃	Bolt Dia	Wt. of Each Fuse R	
GBB.5	3 5/8"	2"	1 1/8"	4"	2 1/4"	1 1/8"	1/2"	9/16"	1/4"	1/2"	0.94 #	
315.7	3 1/8"	1 1/2"	1 1/8"	2 5/8"	1 1/2"	9/16"	1/2"	9/16"	1/4"	1/2"	0.49 #	
417.7	3 8"	1 1/2"	1 1/8"	2 5/8"	1 1/2"	9/16"	1/2"	9/16"	1/4"	1/2"	0.49 #	

STIFFENER R DETAIL

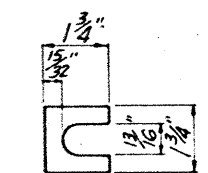
GENERAL NOTES:
Design conforms with AASHTO Specifications for the design and Construction of Structural Supports for Highway Signs.
Materials and Fabrication shall conform to the requirements of Texas Highway Department Standard Specifications and Special Specifications.
All high strength bolts, nuts, and washers shall conform to ASTM-A325.
Notched steel fuse plates shall conform to the requirements of ASTM-A441. All holes shall be drilled. All plate cuts shall preferably be saw cuts, however; flame cutting will be permitted provided all edges are ground. Metal projecting beyond the plane of the plate face will not be tolerated.
Tighten the high strength bolts in the base connection only to the torque shown, DO NOT OVERTIGHTEN.
All bolts other than high strength bolts shall conform to ASTM-A307.

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:
1. Assemble post to stub with bolts and WITH ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES.
2. Shim as required to plumb post.
3. Tighten all bolts the maximum possible with 12 to 15" wrench to bed washers and shims. Do not clean bolt threads then loosen each bolt in turn and retighten bolts in a systematic order to the prescribed torque. (See Table)
4. Burr threads at junction with nut using a center punch to prevent nut loosening.

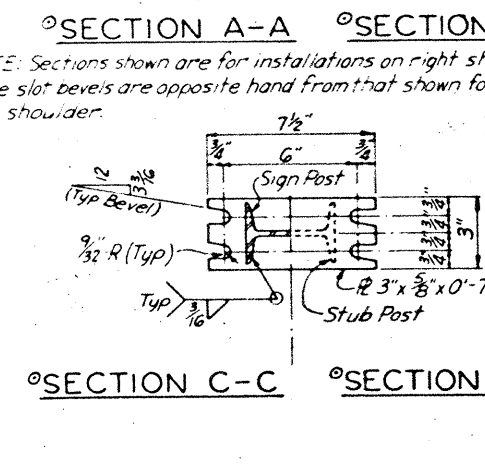
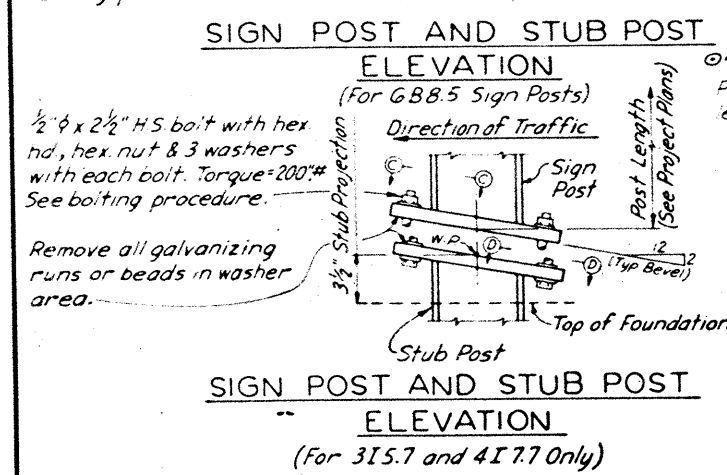


POST WEIGHT DATA		* Last figures = post wt. per ft.
Post Size	Weight	
GBB.5	135.7 #	
315.7	85.9 #	
417.7	119.9 #	

POST WEIGHT DATA



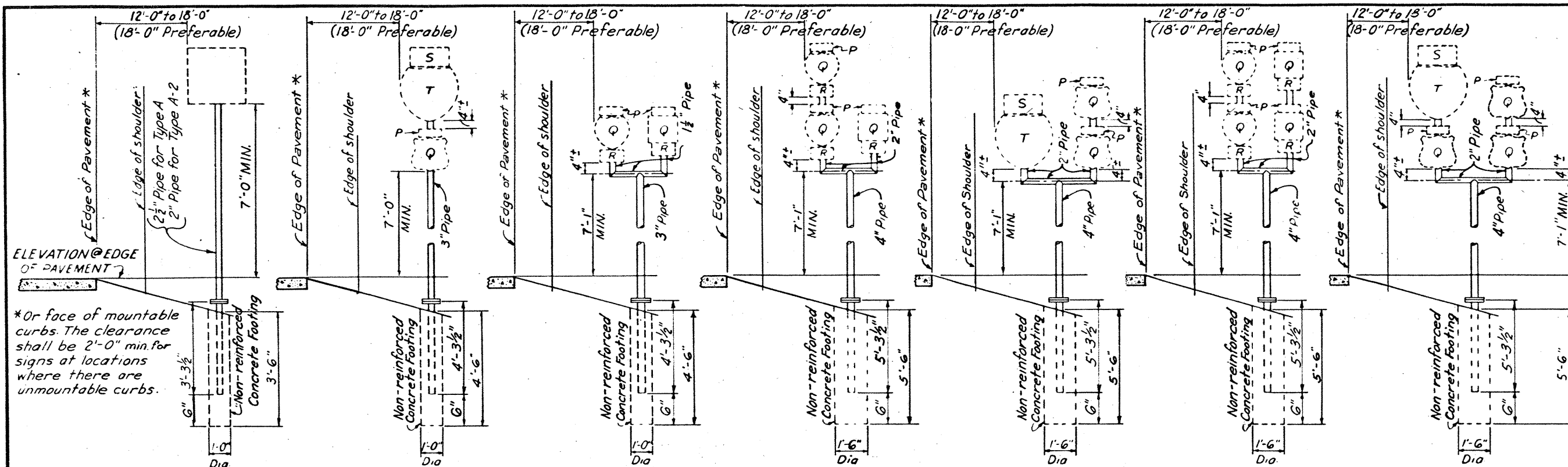
SHIM DETAIL



TEXAS HIGHWAY DEPARTMENT
INTERSTATE
STANDARD ROADSIDE SIGNS
BREAK-AWAY TYPE POSTS
WARNING AND REGULATORY
SIGNS

SMD - 11A MOD.

ORIGINAL DRAWING DATE	June, 1965	STATE	FEDERAL	FEDERAL AID PROJECT	SHEET
DN - DLM	2/66 - Flange Holes	16	6	1-37-11501000	53
CK - FDK	1/65 - Bolting Procedure				
DW - J.K.	1/66 - Fuse				
CK - DLM	5-27-66 - Clearance to Post Edge				
	5-27-66 - DIST. 16 Vert. Clear.				
		NUECES	74	6	79
					16



FRONTAGE ROAD PIPE MOUNTS

TYPES A & A-2

TYPE A-1

TYPE B

TYPE C

TYPE C-1

TYPE D

TYPE D-1

TYPE A - This type pipe mount to be used when one Route Marker is required, for IR-1A, IR-1G signs and other sign areas not exceeding 8 square feet.

TYPE A-2 - This type pipe mount to be used for any sign or combination of signs not exceeding a total of 4 square feet in area.

TYPE A-1 - This type pipe mount to be used for a 36" Interstate Route Marker with a 24" Route Marker on Main Lanes or as a specified optional substitute for Type B.

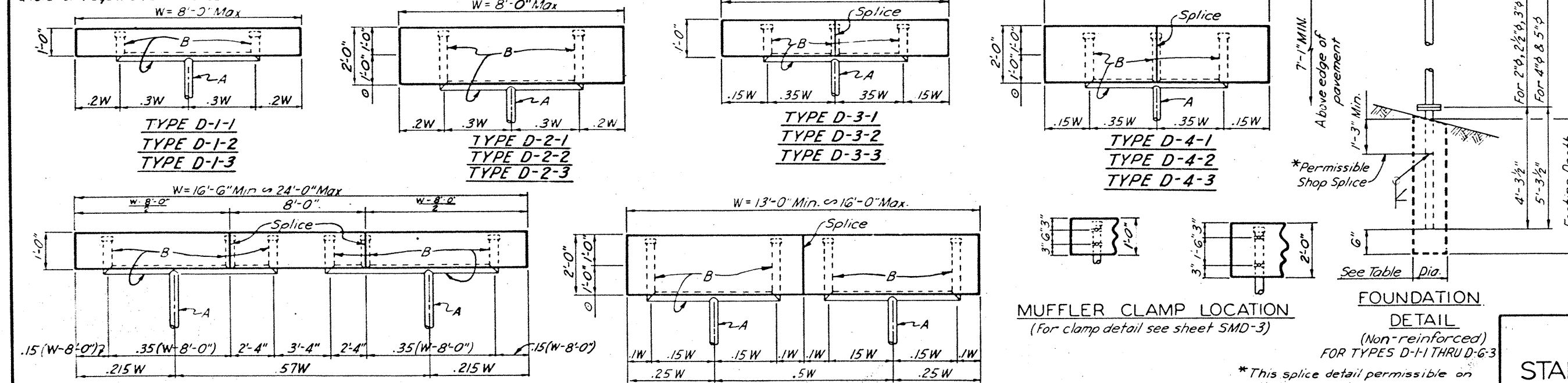
TYPE B - This type pipe mount to be used when 2 Route Markers of the same type or 2 Route Markers of different types are required.

TYPE C - This type pipe mount to be used when 3 Route Markers are required.

TYPE C-1 - This type pipe mount to be used for a 36" Interstate Route Marker with two 24" Route Markers.

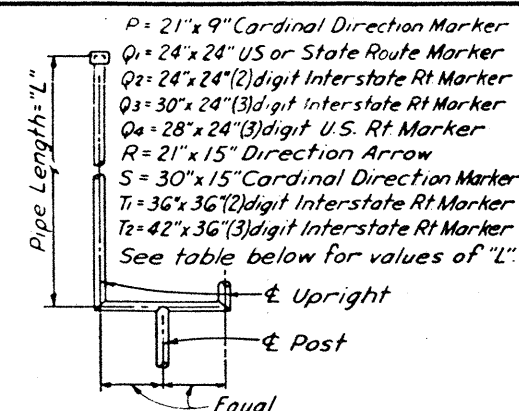
TYPE D - This type pipe mount to be used when 4 Route Markers are required.

TYPE D-1 - This type pipe mount to be used for a 36" Interstate Route Marker with three 24" Route Markers.



NOTE: (For Types D-1-1, 2 & 3 thru D-6-1, 2 & 3)
The last number in Type designation denotes zone for which structure is to be used.
Plywood shall be 3/8" thick.
Double destination DI-A signs for mount types D-2-1, D-2-2, D-2-3, D-4-1, D-4-2, D-4-3, D-6-1, D-6-2 & D-6-3 shall be combined on a single panel without a horizontal joint.

NOTE:
DI-A signs with a vertical dimension of 11 1/2" in compliance with the Texas Highway Department Manual on Traffic Sign Design Standards may be used in lieu of DI-A signs having a vertical dimension of 12" as shown on the plans, where a sign manufacturer has screens already made for the 11 1/2" vertical dimension but not for the 12" vertical dimension. Measurement for payment, however, shall be made on the basis of the dimensions for the signs as actually erected.



MARKER COMBINATIONS	"L"
2P+2Q+2R+7"	8'-7"
P+2Q+2R+7"	7'-10"
2Q+2R+7"	7'-1"
Q+R+3"	3'-6"
S+T+3"	4'-6"
P+Q+R+3"	4'-3"
P+Q+S+T+7"	7'-7"

DIMENSION "S"

"S" = 1'-4 1/2" for Q1 or Q2
"S" = 1'-7 1/2" for Q3
"S" = 1'-6 1/2" for Q4
"S" = 1'-10 1/2" for T1
"S" = 2'-1 1/2" for T2

Dimension "S" equals the distance from the & of Upright to the & of clearance between sign group.

TYPE OF MOUNT	PIPE A	PIPE B	FOOTING Dia.	FOOTING Depth
D-1-1	3"φ	2"φ	1'-0"	4'-6"
D-1-2	2 1/2"φ	1 1/2"φ	1'-0"	4'-6"
D-1-3	2"φ	1 1/2"φ	1'-0"	4'-6"
D-2-1	4"φ	3"φ	1'-6"	5'-6"
D-2-2	3 1/2"φ	2 1/2"φ	1'-6"	4'-6"
D-2-3	3"φ	2"φ	1'-6"	4'-6"
D-3-1	4"φ	3"φ	1'-6"	5'-6"
D-3-2	3 1/2"φ	2 1/2"φ	1'-6"	4'-6"
D-3-3	3"φ	2"φ	1'-6"	4'-6"
D-4-1	5"φ	3"φ	1'-6"	5'-6"
D-4-2	4"φ	3"φ	1'-6"	5'-6"
D-4-3	3 1/2"φ	2 1/2"φ	1'-6"	4'-6"
D-5-1	3 1/2"φ	2 1/2"φ	1'-6"	4'-6"
D-5-2	3"φ	2"φ	1'-6"	4'-6"
D-5-3	2 1/2"φ	1 1/2"φ	1'-6"	4'-6"
D-6-1	4"φ	3"φ	1'-6"	5'-6"
D-6-2	3 1/2"φ	2 1/2"φ	1'-6"	4'-6"
D-6-3	3"φ	2"φ	1'-6"	4'-6"

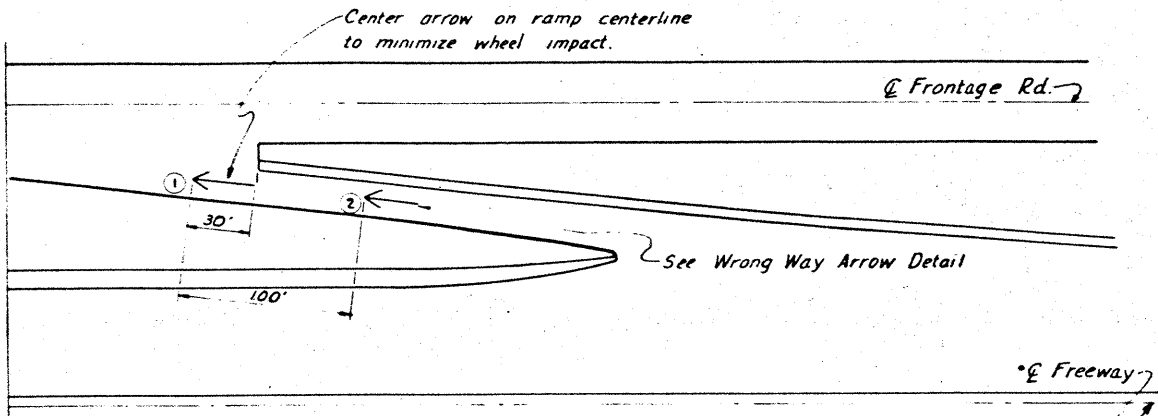
TEXAS HIGHWAY DEPARTMENT
INTERSTATE

STANDARD ROADSIDE SIGNS
WARNING, REGULATORY AND
SMALL GUIDE SIGNS
BREAK-AWAY TYPE POSTS
SMD-12 MOD.

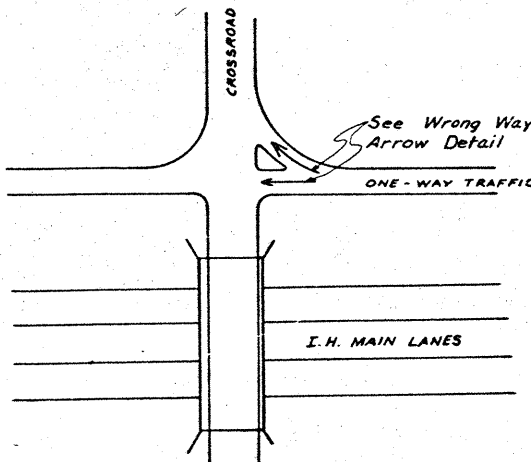
Sheet 1 of 2

ORIGINAL DRAWING DATE	June, 1965	STATE	TEXAS	FEDERAL AID PROJECT	16	6	1-37-1(50)000	SHEET	54
REVISIONS	1. 10/65 1/2" Dia. 3" & 3 1/2" Dia.	DATE	10/65	BY	CH	CHK	CH	APP	CH
5/66 Clearance to Pav. Edge									
9/68 Dist. 16 Vert. Clear.									
COUNTY	NUECES	DISTRICT	74	SECTION	6	79	INCHES	11-37	

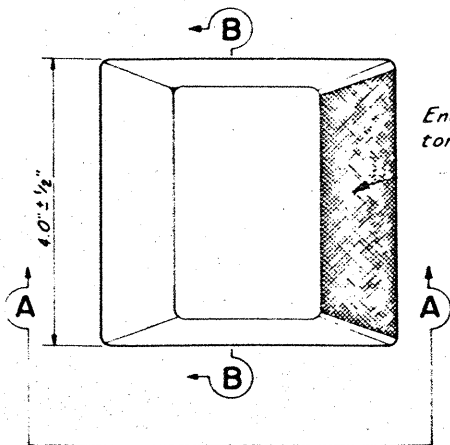
Reflectorized arrow(s) not to exceed two shall be placed on all exit ramps within the limits of the project. Location of arrow ① shall be as shown. A second arrow shall be placed at location ②.



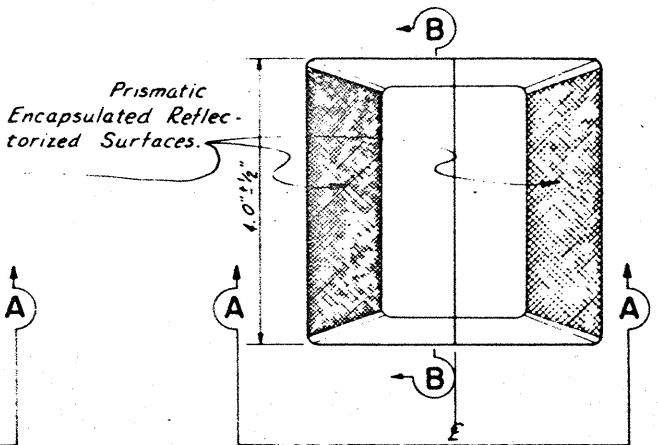
WRONG WAY ARROW PLACEMENT ON EXIT RAMP



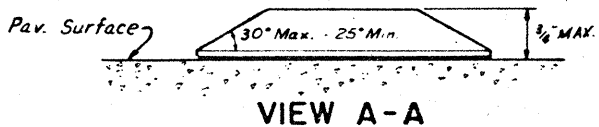
WRONG WAY ARROW PLACEMENT ON ONE-WAY EXIT RAMP AT ITS INTERSECTION WITH A CROSSROAD



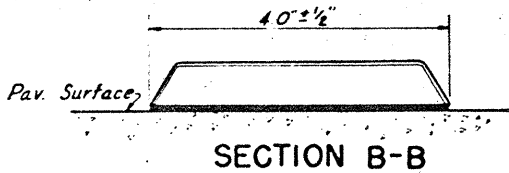
TOP VIEW Type I



TOP VIEW Type II



VIEW A-A

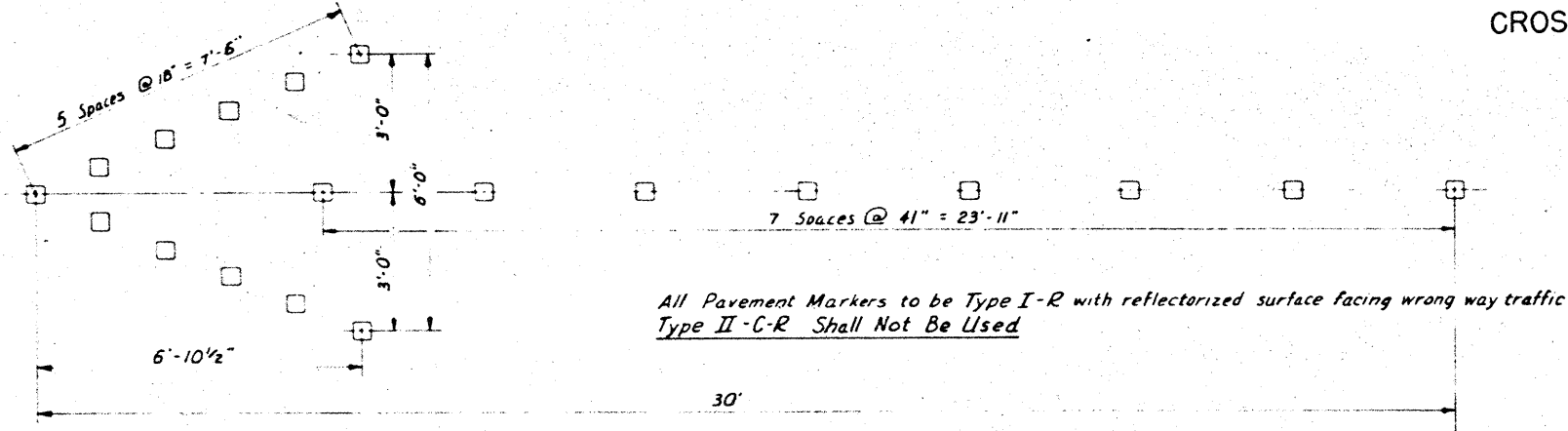


SECTION B-B

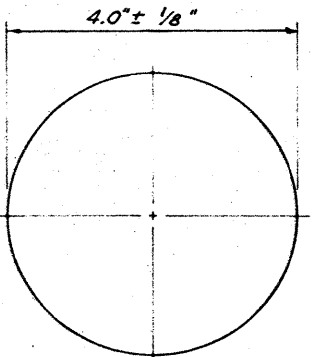
Minimum area of markers shall be not less than 12.5 square inches.

Marker shown is for illustrative purposes only and is not intended to specify any particular product.

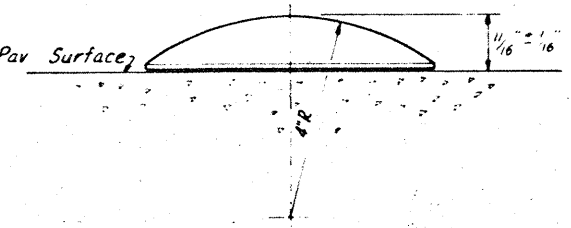
PAVEMENT MARKERS (REFLECTORIZED) Types I & II



WRONG WAY ARROW DETAIL

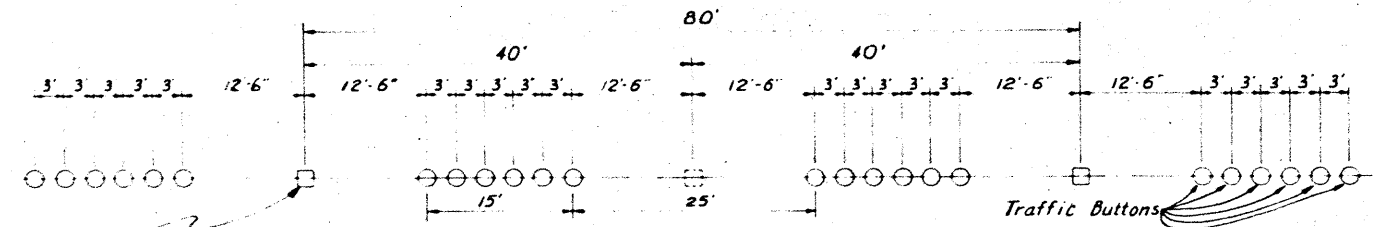


TOP VIEW



ELEVATION

TRAFFIC BUTTONS



TRAFFIC BUTTON AND PAVEMENT MARKER LANE LINE DETAIL

TEXAS HIGHWAY DEPARTMENT
TRAFFIC BUTTONS
(NON - REFLECTORIZED)
&
PAVEMENT MARKERS
(REFLECTORIZED)
FOR LANE LINES AND WRONG WAY ARROWS
INTERSTATE AND OTHER CONTROLLED
ACCESS HIGHWAYS
TB & PM-66

ORIGINAL DRAWING DATE	7-26-66	STATE	FEDERAL	FEDERAL AID PROJECT	SHEET
DN - 12 A	REVISIONS	16	I 37-1(50) 000	56	
CR -	3-27-67 - 8' P. 4	COUNTY	CONTROL SECTION	JOB	HIGHWAY
CR -	5-15-67 - D-187 - R.L.A	NUECES	74	6	79
CR -	9-15-69 - D-187 - C.H.				69

56

TYPICAL PLAN VIEW OF
MONODIRECTIONAL MOUNTING
DELINEATORS - TYPES I & II
CLEARANCE MARKER-TYPE III

directed

carriage bolts resistant to shear for each delineator

ker

TIMBER POST

TYPICAL PLAN VIEW OF
MONODIRECTIONAL MOUNTING
DELINEATORS - TYPES I & II
CLEARANCE MARKER - TYPE III

Top
refl

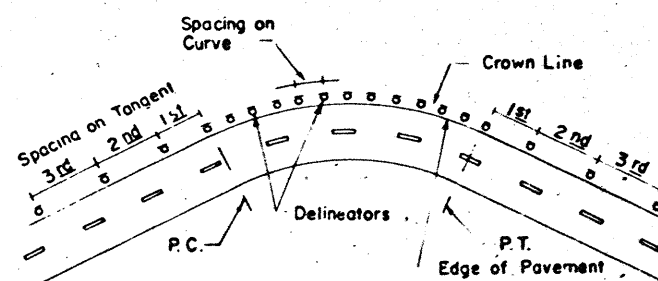
TYPICAL REAR VIEW
WINGED CHANNEL
TYPICAL HAZARD MARKER
TYPE IV
(Independently Housed Units)

TYPICAL REAR VIEW
TIMBER POST
TYPICAL HAZARD MARKER
TYPE IV
(Independently Housed Units)

TYPICAL ELEVATION OF
MILEPOST MARKER

TYPICAL ELEVATION OF
MOUNTING
DELINEATORS - TYPES I & II
CLEARANCE MARKER - TYPE III

TYPICAL ELEVATION OF
MOUNTING
DELINEATORS - TYPES I & II
CLEARANCE MARKER - TYPE III



Degree of Curve ($\frac{1}{2}$ Roadway)	Spacing Between Delineators	Spacing in Advance of and Beyond Curve		
		First Space	Second Space	Third Space
	Feet	Feet	Feet	Feet
1 I.M. Only	151	200	200	200
2	107	193	200	200
3	87	157	200	200
4	75	135	200	200
5	67	121	200	200
6	61	110	183	200
8	53	95	159	200
10	47	85	141	200

Other spacing as indicated elsewhere in these plans

The spacing S on the curve is found from the formula $S = 2\sqrt{R-50}$ where R is the radius of the curve in feet. The spacing to the first delineator in advance of and beyond the curve is $1.8 S$, to the next delineator $3 S$, and to the next $6 S$, but not to exceed 200 feet.

Minimum Spacing = 10 feet.

TYPICAL PLAN VIEW OF
BIDIRECTIONAL MOUNTING
DELINEATORS - TYPES I&II
ONLY

TYPICAL PLAN VIEW OF
BIDIRECTIONAL MOUNTING
DELINEATORS - TYPES I & II
ONLY

(Depicting Independently Housed or Center Mount Units)

TYPICAL PLAN VIEWS HAZARD MARKERS-TYPE V

GENERAL NOTES:

LOCATION of Delineators, Types I & II, and Milepost Markers: facing on-coming traffic, two feet from edge of shoulder or two feet from face of unmountable curb or line with guard fence where guard fence is used.

LOCATION of Clearance Markers, Type III, and Hazard Markers, Types IV and V, to be at points designated on plan sheets.

HARDWARE shall be galvanized steel, stainless steel or aluminum; except as noted.

POSTS for supporting reflector units shall be in accordance with the applicable specification items for delineator posts.

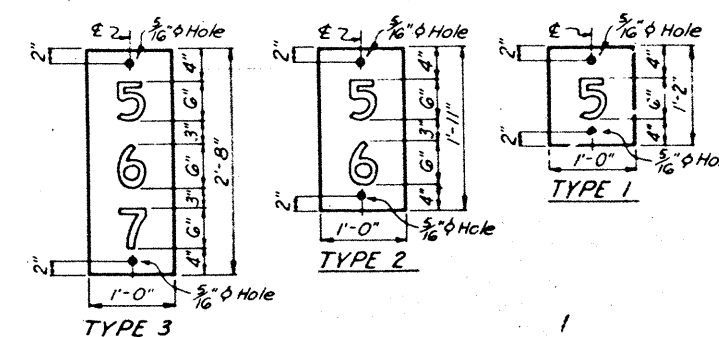
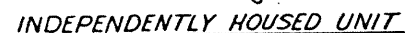
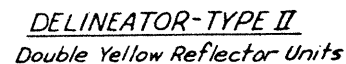
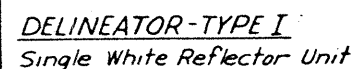
TEXAS HIGHWAY DEPARTMENT

STANDARD ROADSIDE SIGN MOUNTING DETAILS FOR

DELINEATORS, CLEARANCE MARKERS, HAZARD MARKERS, & MILEPOST MARKERS

SMD-6A (MOD) (DIST 16) SHEET 1 OF 2

ORIGINAL DRAWING DATE		Jan. 1967		SHEET NO.		SHEET	
DR	CH	REVISIONS		16	6	1-37-1(50) 000	59
CR		4-67 Delete center mount details and add Spacing Details		COUNT		TOTAL	SET ON
DW	JK			NICES		74	79
CR						79	79



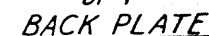
MILEPOST
MARKER DETAILS

MILEPOST numerals shall be G" Series D white reflective with Interstate Green reflective background, made with green transparent ink on a white flat surface reflective sheeting, using the reverse screen process. Milepost marker blanks shall be $\frac{3}{8}$ " Type A, High Density plywood.

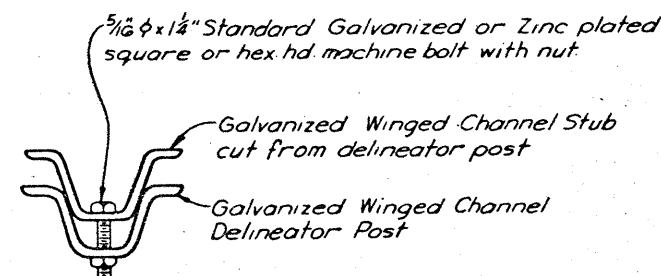


Triple Yellow Reflector Units

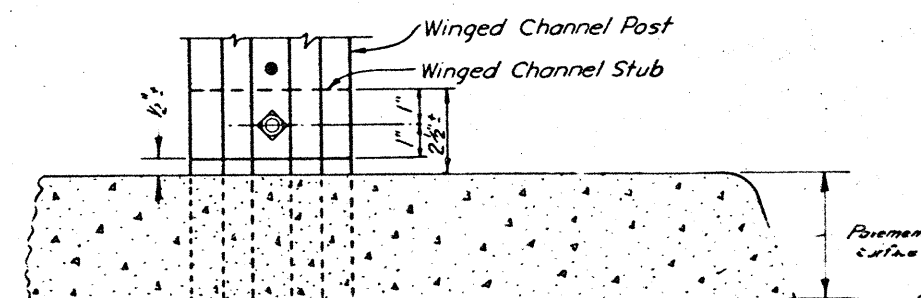
ACRYLIC PLASTIC REFLECTOR UNIT MARKERS
(Independently Housed)



BIDIRECTIONAL BRACKET
FOR DELINEATORS - TYPES I & II ONLY
(Obtainable from the Texas Highway Department)

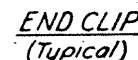
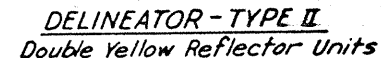
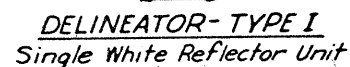


PLAN VIEW



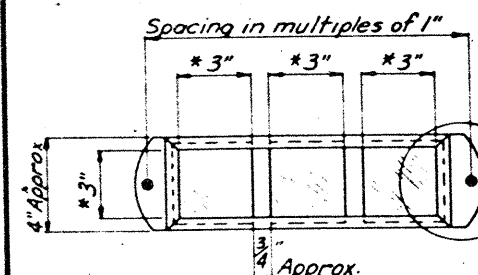
BREAK AWAY CHANNEL POST
(For use on Concrete Medians and Islands.)

4" min. clear height
no minimum clearance
to off.



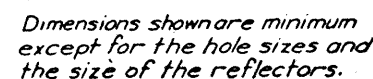
* Exposed area of reflector shall comply with the specifications.

$\frac{7}{32}$ " Sq Hole required for Type IV
Marker Optional for other types.



CLEARANCE MARKER-TYPE III & HAZARD MARKER-TYPE IV
Triple Yellow Reflector Units

ENCAPSULATED REFLECTIVE SHEETING MARKERS
(Illustrative only - see specifications for limitations)



HAZARD MARKER-TYPE V

NOTE: With Center Mount Reflector Units, the "Type V" Hazard Marker blank shall be 0.125" thick sheet aluminum conforming with A.S.T.M. Specification B209 alloy G0G1-T6, or 12 gauge sheet steel conforming with A.S.T.M. Specification A-415.

GENERAL NOTES: See sheet 1 of 2.

TEXAS HIGHWAY DEPARTMENT

STANDARD ROADSIDE SIGN MOUNTING DETAILS FOR

DELINEATORS, CLEARANCE MARKERS,
HAZARD MARKERS, & MILEPOST MARKERS
SMD-6A (MOD) (DIST 16) SHEET 2 OF 2

ORIGINAL DRAWING DATE <u>Jan, 1967</u>		STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
DR - <u>CH</u>	REVISIONS	16	6	1-37-1	(50) 000 -	60
CR -	4-67 Rev to show Break Away Channel Post on Concrete Islands and Medians.	COUNTY		COUNTY	SECTION	JOB
DR - <u>JK</u>		NINECES		74	6	79-11-3
CR -						

7128
24

60