

040645

Crafton, Tull & Associates Inc.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	040645		1	30

"A PARTIALLY CONTROLLED ACCESS FACILITY"
 ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 CONSTRUCTION PLANS FOR STATE HIGHWAY

**HWYS. 71 & 271 (SEL. SECS.)
 (CABLE MEDIAN BARRIER) (S)**

SEBASTIAN COUNTY

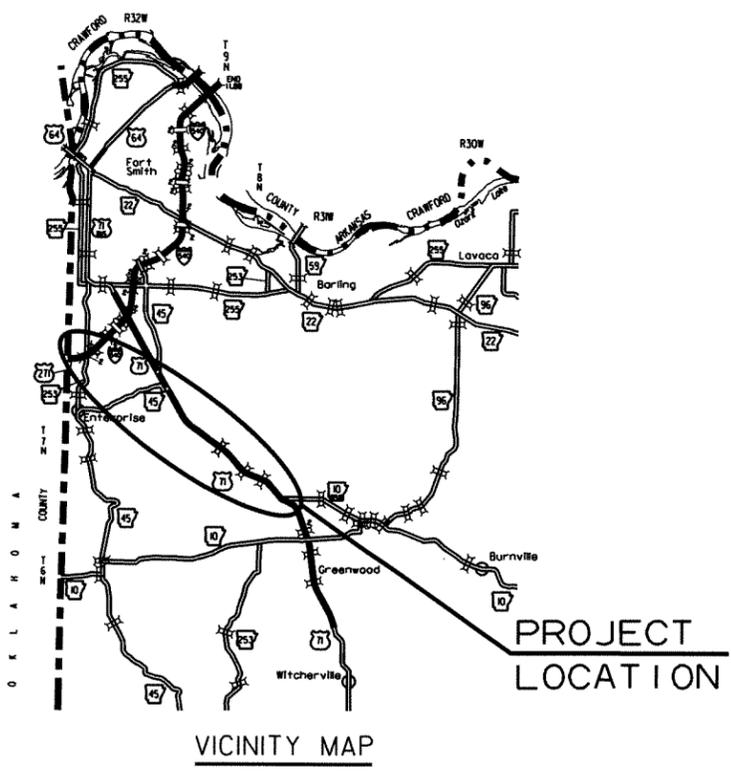
ROUTE 71 SECTION 14
 ROUTE 271 SECTION 1

JOB 040645

FED. AID PROJ. HSIP-0065(47)



ARK. HWY. DIST. NO. 4



VICINITY MAP

PROJECT LOCATION

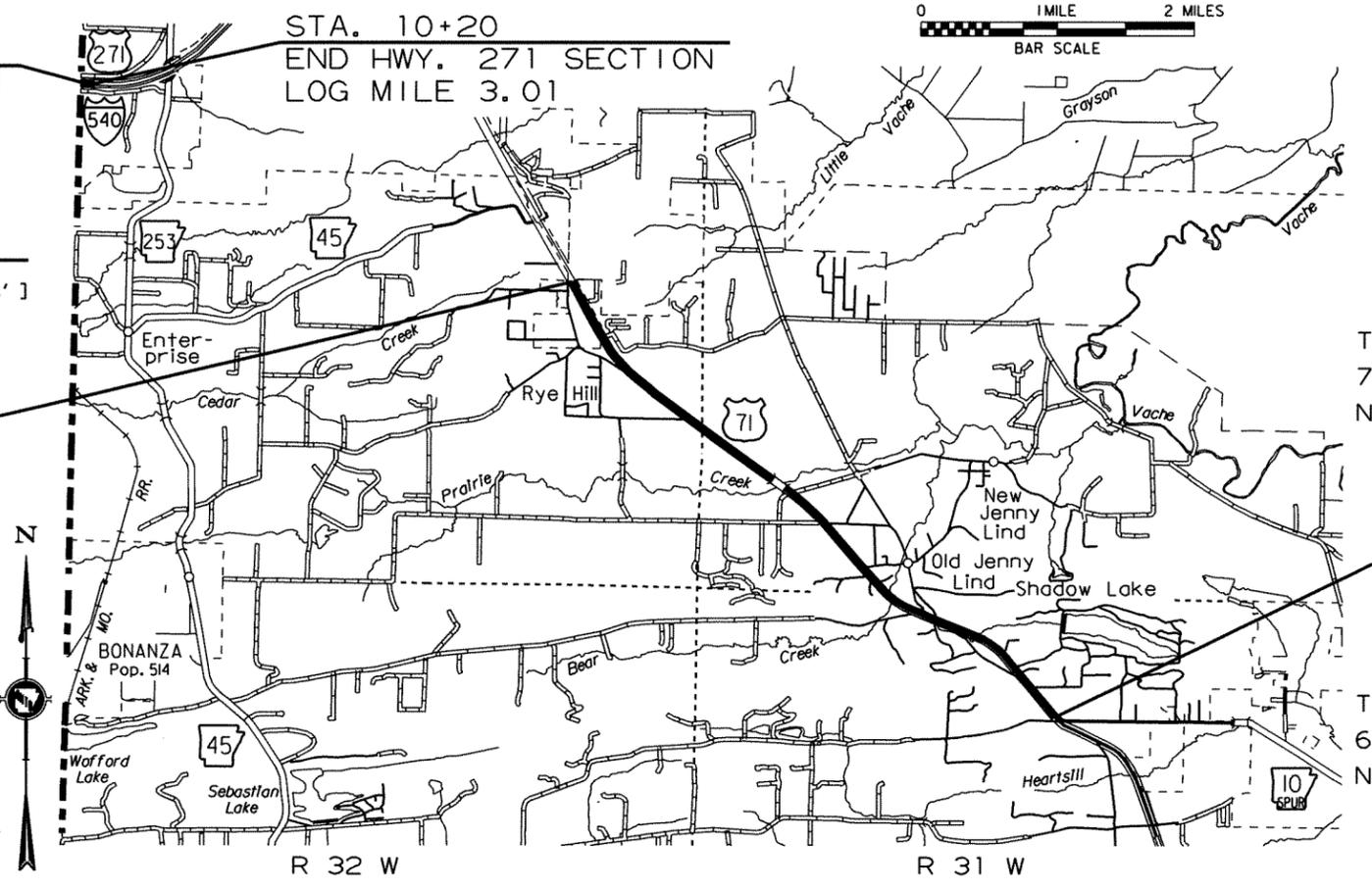
• DESIGN TRAFFIC DATA •

	HWY. 71	HWY. 271
DESIGN YEAR	2033	2033
2013 ADT	25,000	20,000
2033 ADT	33,000	26,500
2033 DHV	3630	2915
DIRECTIONAL DISTRIBUTION	60%	60%
TRUCKS	6%	7%
DESIGN SPEED	60 MPH	65 MPH

STA. 0+05
 BEGIN HWY. 271 SECTION
 LOG MILE 3.20

EXCEPTION
 HWY. 71 STA. 311+20 - STA. 315+68 [448']

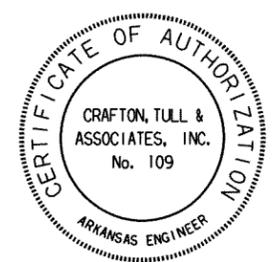
STA. 434+43
 END HWY. 71 SECTION
 LOG MILE 6.55



HWY. 71		HWY. 271	
BEGINNING OF PROJECT	LAT. = N 35°13'22"	BEGINNING OF PROJECT	LAT. = N 35°17'31"
	LONG. = W 94°18'20"		LONG. = W 94°26'06"
MID-POINT OF PROJECT	LAT. = N 35°14'42"	MID-POINT OF PROJECT	LAT. = N 35°17'31"
	LONG. = W 94°20'18"		LONG. = W 94°26'00"
END OF PROJECT	LAT. = N 35°16'16"	END OF PROJECT	LAT. = N 35°17'31"
	LONG. = W 94°22'14"		LONG. = W 94°25'53"

	HWY. 71				HWY. 271				TOTAL			
	FEET	OR	MILES		FEET	OR	MILES	FEET	OR	MILES		
GROSS LENGTH OF PROJECT	26693.00		5.055	1015.00	0.192		27708.00	5.247		5.247		
NET " " ROADWAY	26245.00		4.971	1015.00	0.192		27260.00	5.163		5.163		
NET " " BRIDGES	0.00		0.000	0.00		0.000	0.00	0.000		0.000		
NET " " PROJECT	26245.00		4.971	1015.00	0.192		27260.00	5.163		5.163		

STA. 167+50
 BEGIN HWY. 71 SECTION
 LOG MILE 1.64

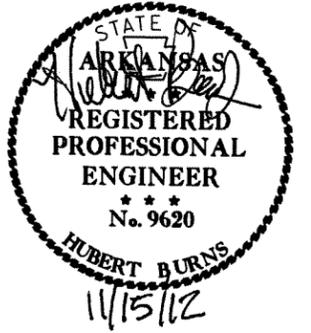


P.E. 040645
 NON-PART.

11/15/12

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040645	2	30

INDEX OF SHEETS, GOV. SPECS, & GEN. NOTES



INDEX OF SHEETS

SHEET NO.	TITLE	DRWG. NO.	DATE
1	TITLE SHEET		
2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES		
3-4	TYPICAL SECTIONS OF IMPROVEMENT		
5-6	SPECIAL DETAILS		
7-12	TEMPORARY EROSION CONTROL DETAILS		
13-15	MAINTENANCE OF TRAFFIC		
16-17	QUANTITIES		
18	SUMMARY OF QUANTITIES AND REVISIONS		
19-24	PLAN SHEETS		
25	CONCRETE DITCH PAVING.....	CDP-1.....	11-17-10
26	DETAILS OF DROP INLETS.....	FPC-9D.....	8-22-02
27	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION.....	TC-1.....	12-15-11
28	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION.....	TC-2.....	3-11-10
29	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION.....	TC-3.....	10-15-09
30	TEMPORARY EROSION CONTROL DEVICES.....	TEC-1.....	12-15-11

GENERAL NOTES

- ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
- THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ANY REQUIRED EROSION CONTROL MEASURES FROM WASTING MATERIAL SHALL BE AT THE CONTRACTOR'S EXPENSE.

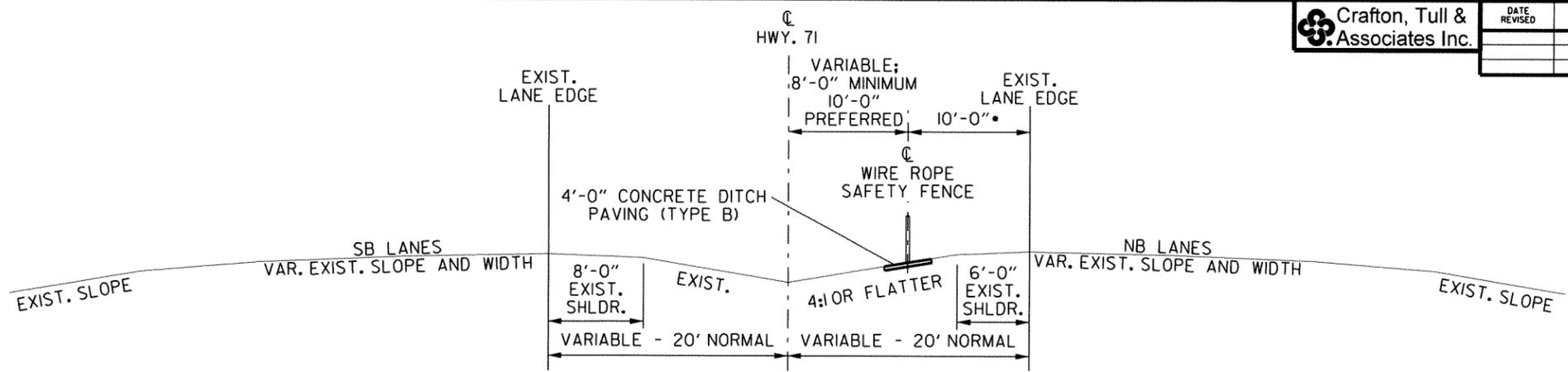
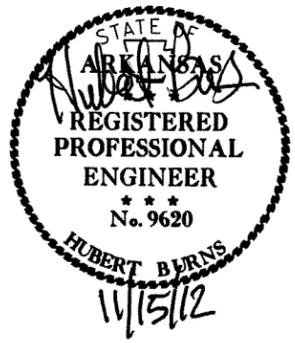
GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-2	MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
102-1	BIDDING REQUIREMENTS AND CONDITIONS
103-1	DETERMINATION OF DBE PARTICIPATION
105-1	CONSTRUCTION CONTROL MARKINGS
105-2	EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
105-3	CONTROL OF WORK
107-1	WORKER VISIBILITY
108-1	LIQUIDATED DAMAGES
600-1	WATER FOR VEGETATION
603-1	MAINTENANCE OF TRAFFIC
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-2	INSPECTION OF TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 040645	CONCRETE DITCH PAVING
JOB 040645	COORDINATION OF WORK
JOB 040645	INTERNET BIDDING
JOB 040645	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 040645	MAINTENANCE OF TRAFFIC
JOB 040645	OFF-SITE RESTRAINING CONDITIONS FOR AMERICAN BURYING BEETLE
JOB 040645	SEQUENCE OF CONSTRUCTION
JOB 040645	SITE USE (A + C METHOD)
JOB 040645	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 040645	UTILITY ADJUSTMENTS
JOB 040645	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS
JOB 040645	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB 040645	WRSF TRAINING WORKSHOP

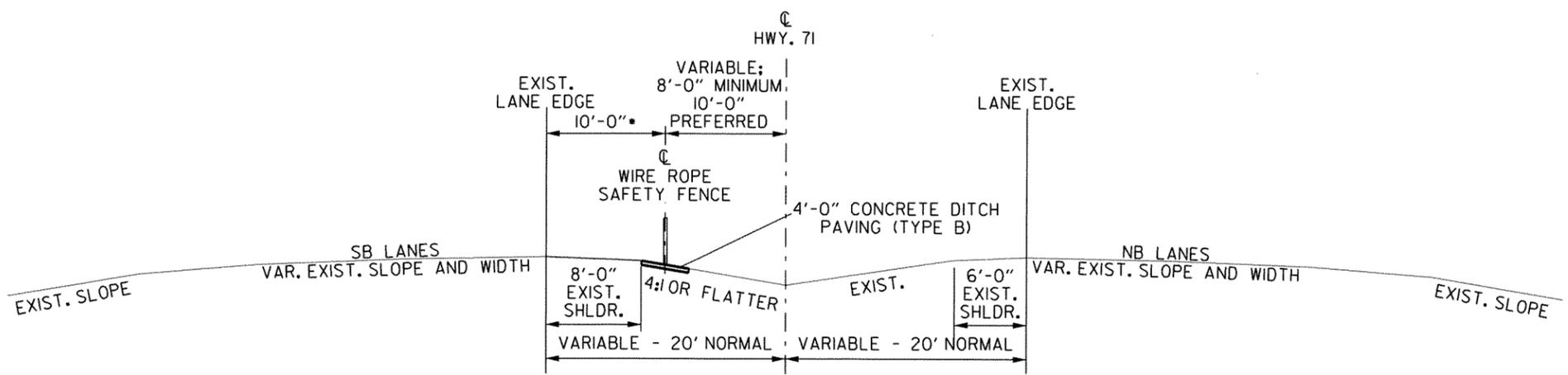
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	040645	3	30	

2 TYPICAL SECTIONS OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON NORTHBOUND LANES FORESLOPE

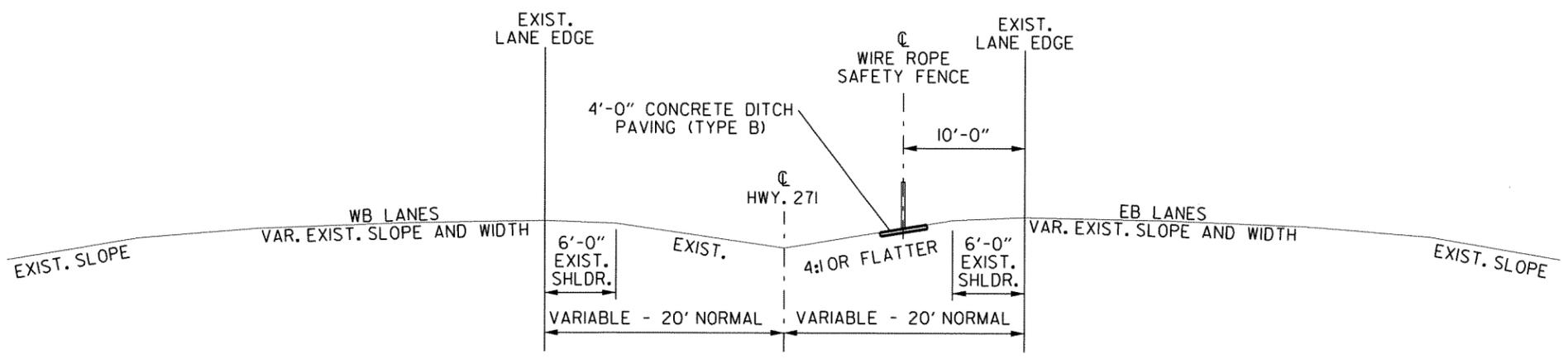
HWY. 71
STA. 172+50 TO 186+25, STA. 222+95 TO 233+65, STA. 236+15 TO 242+91, STA. 245+41 TO 269+67, STA. 272+17 TO 291+12, STA. 315+68 TO 351+45,
STA. 352+70 TO 359+85, STA. 362+35 TO 368+85, STA. 370+30 TO 385+34, STA. 387+84 TO 407+17, STA. 409+67 TO 421+26, STA. 423+76 TO 433+69



TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON SOUTHBOUND LANES FORESLOPE

HWY. 71
STA. 188+75 TO 197+33, STA. 199+83 TO 220+44, STA. 296+86 TO 310+45

NOTE:
*VARIES AT LANE TAPERS

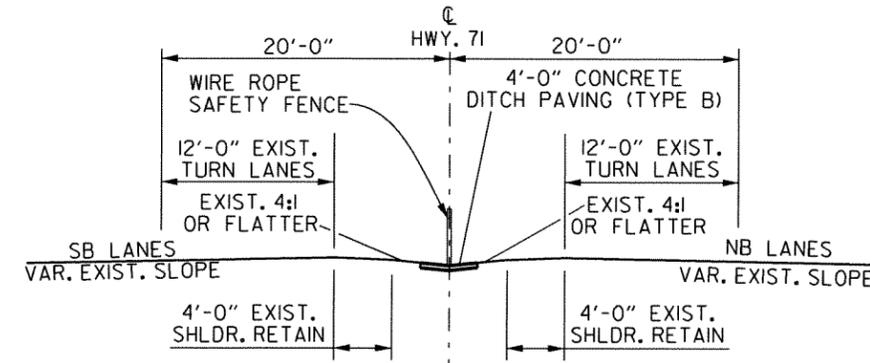


TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON EASTBOUND LANES FORESLOPE

HWY. 271
STA. 0+05 TO 10+20

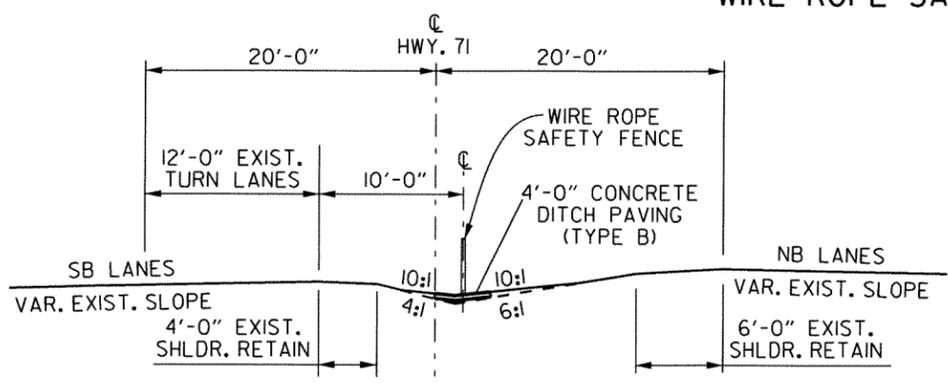
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	040645	4
						TYPICAL SECTIONS OF IMPROVEMENT		



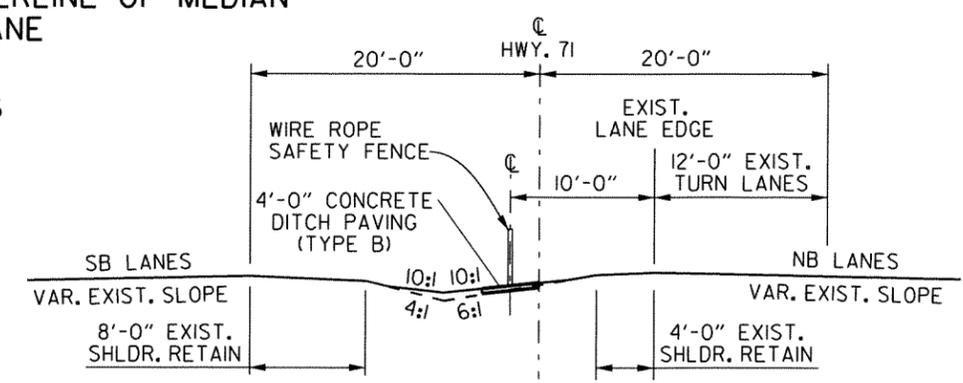
TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON CENTERLINE OF MEDIAN
AT EXISTING TURN LANE

HWY. 71
STA. 292+74 TO 295+25



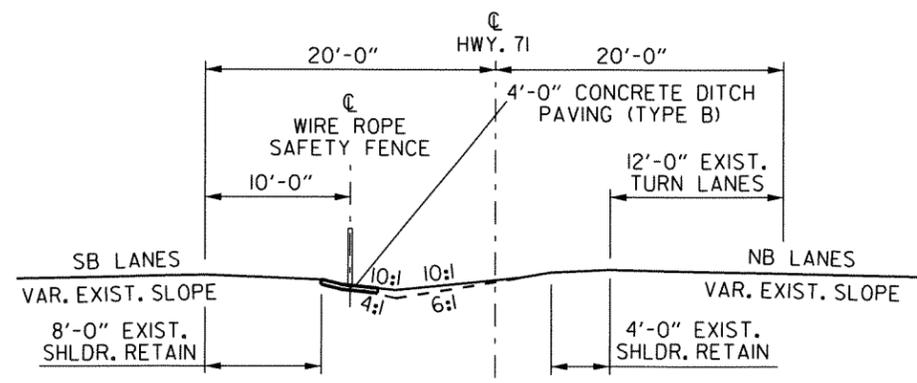
TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON SOUTHBOUND LANES FORESLOPE
AT EXISTING TURN LANE

HWY. 71
STA. 188+00 TO 188+75, STA. 199+08 TO 199+83,
STA. 296+11 TO 296+86



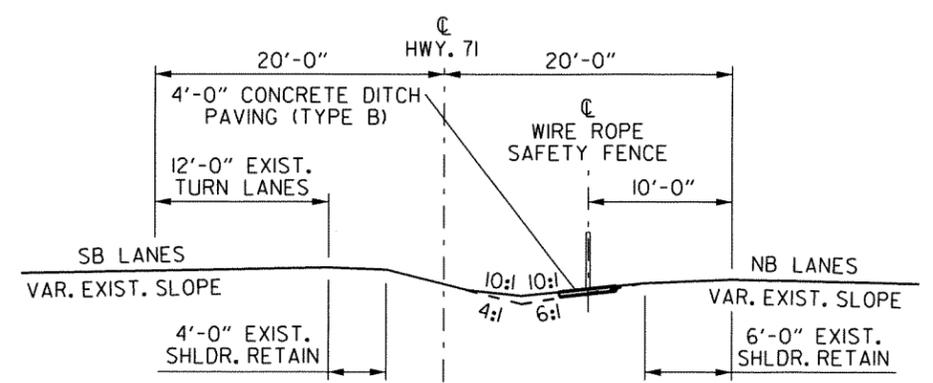
TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON NORTHBOUND LANES FORESLOPE
AT EXISTING TURN LANE

HWY. 71
STA. 170+74 TO 171+45, STA. 186+25 TO 187+00, STA. 233+65 TO 234+40,
STA. 242+91 TO 243+66, STA. 269+67 TO 270+42, STA. 291+12 TO 291+87,
STA. 359+85 TO 360+60, STA. 385+34 TO 386+09, STA. 407+17 TO 407+92,
STA. 421+26 TO 422+01, STA. 433+69 TO 434+43



TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON SOUTHBOUND LANES FORESLOPE
ON OPPOSITE SIDE OF EXISTING TURN LANE

HWY. 71
STA. 197+33 TO 198+08, STA. 220+44 TO 221+20,
STA. 310+45 TO 311+20



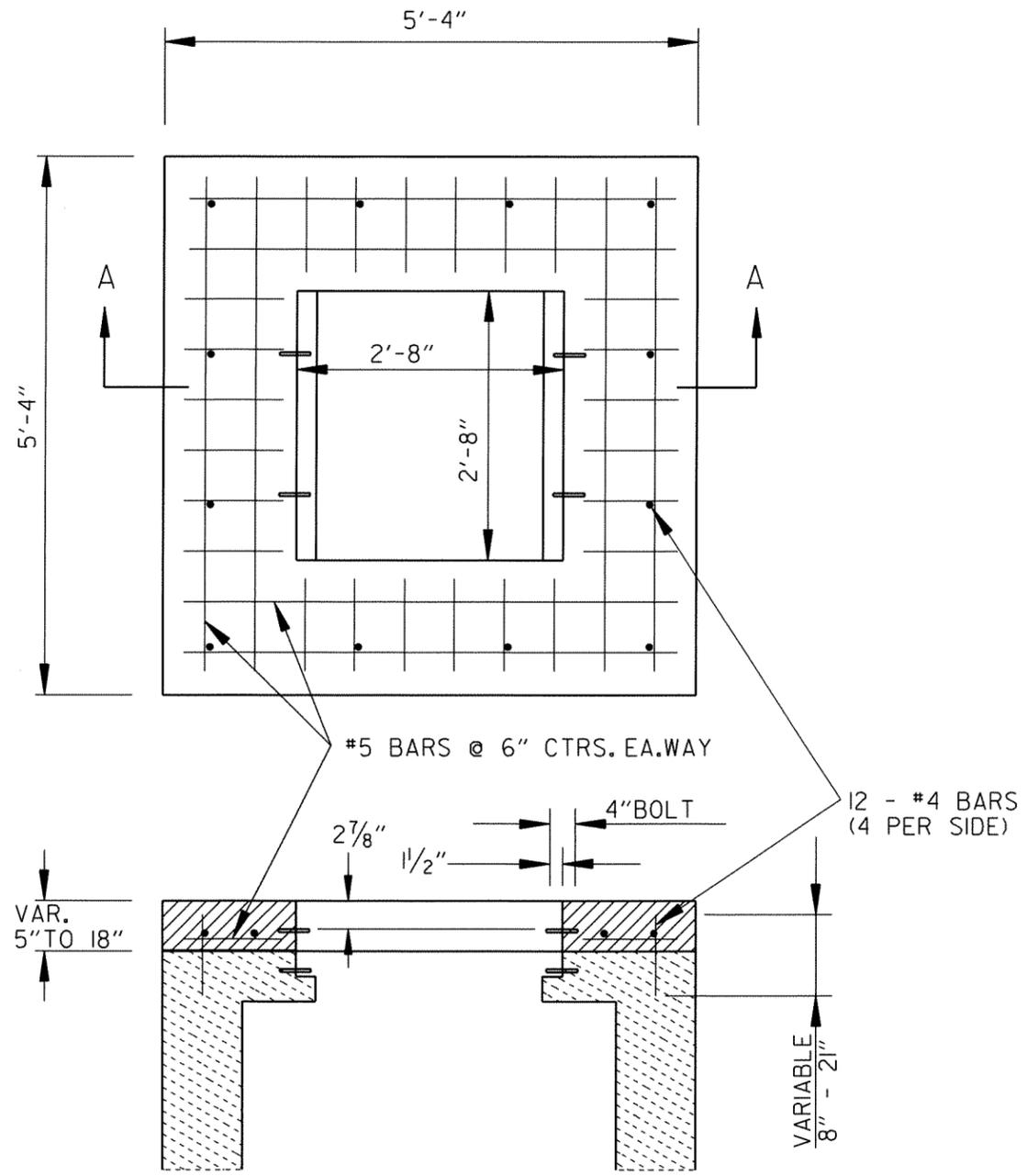
TYPICAL SECTION OF IMPROVEMENT
WIRE ROPE SAFETY FENCE ON NORTHBOUND LANES FORESLOPE
ON OPPOSITE SIDE OF EXISTING TURN LANE

HWY. 71
STA. 167+50 TO 170+74, STA. 222+20 TO 222+95, STA. 235+40 TO 236+15,
STA. 244+66 TO 245+41, STA. 271+42 TO 272+17, STA. 361+60 TO 362+35,
STA. 387+09 TO 387+84, STA. 408+92 TO 409+67, STA. 423+01 TO 423+76



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						040645	6	30

2 SPECIAL DETAILS



NOTE:

ALL #4 AND #5 REINFORCING BARS TO HAVE 1/2" COVER. LARGER SIZES TO HAVE 2" COVER.

ROUGHEN TOP OF EXISTING DROP INLET PRIOR TO PLACEMENT OF NEW TOP.

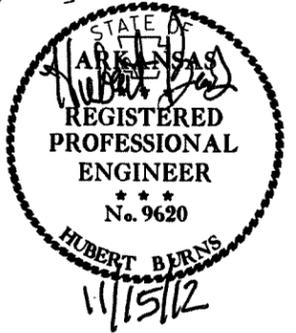
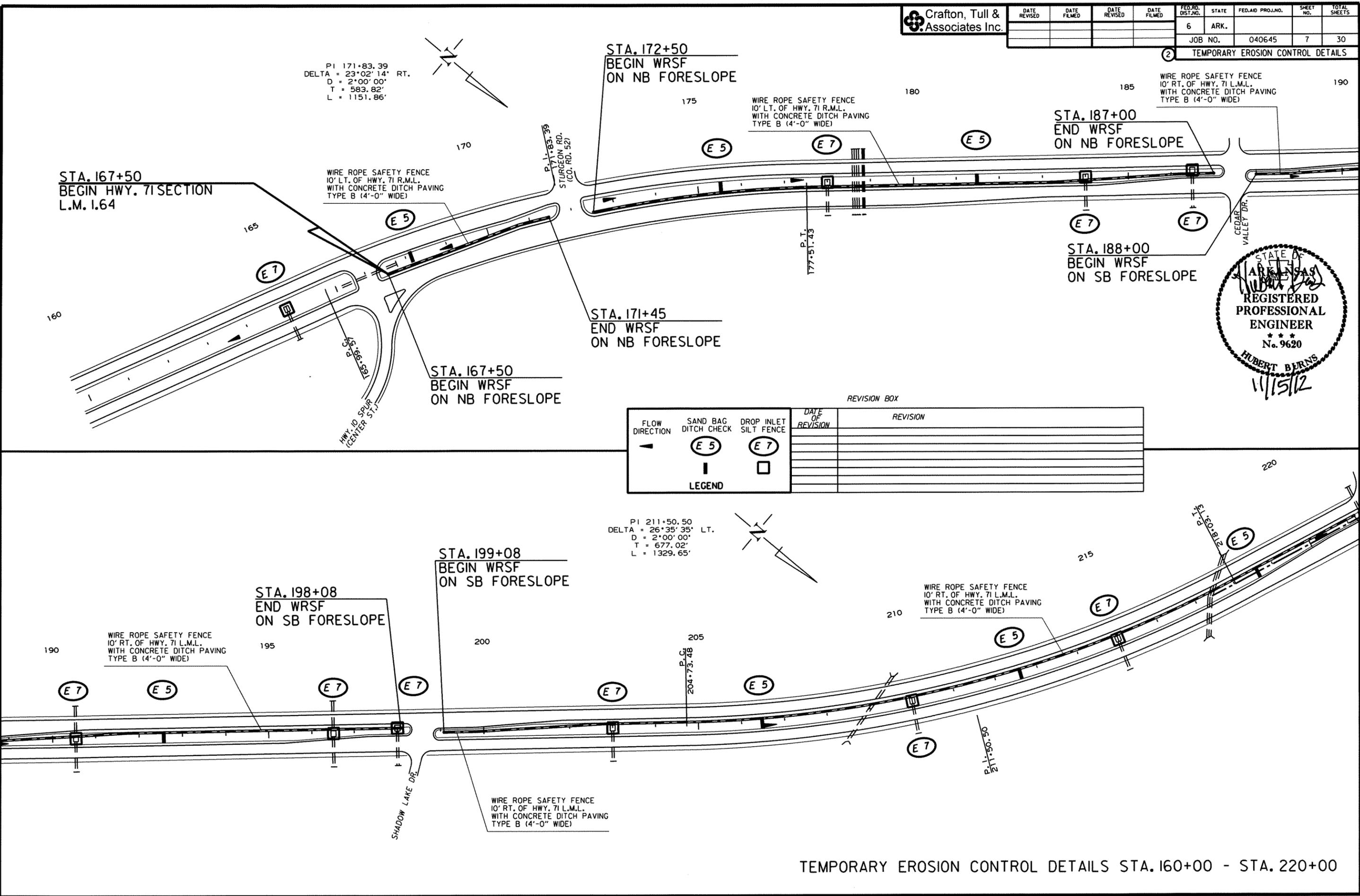
SECTION A-A

ADJUSTING DROP INLET TO GRADE

SPECIAL DETAILS

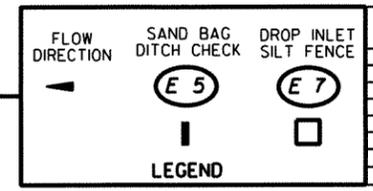
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		7	30
JOB NO. 040645								

② TEMPORARY EROSION CONTROL DETAILS



REVISION BOX

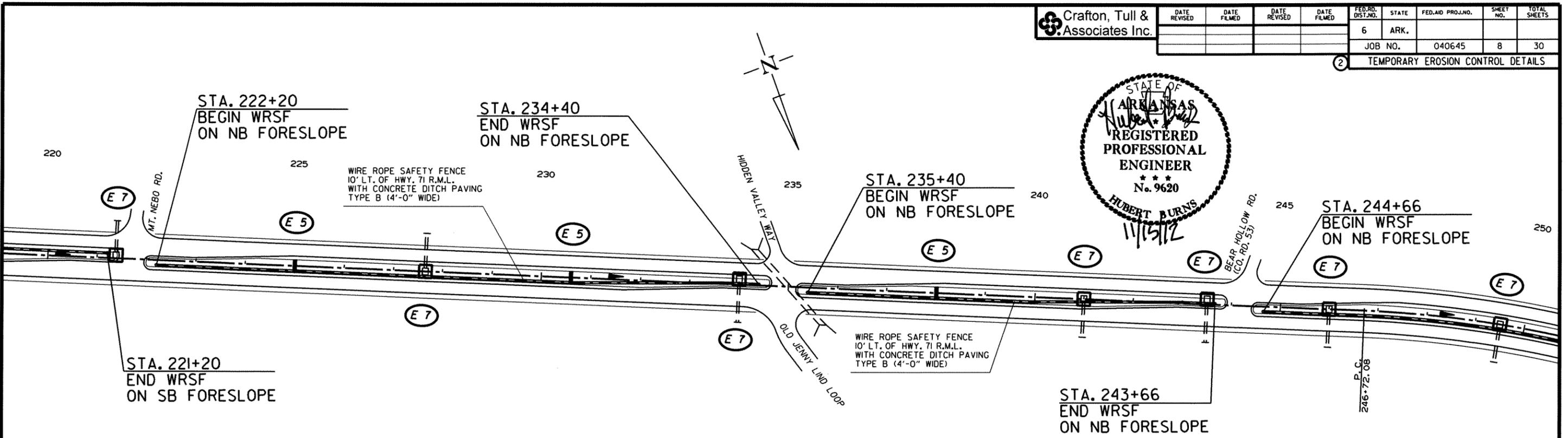
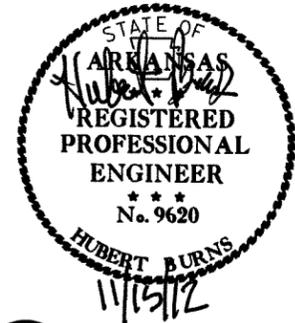
DATE OF REVISION	REVISION



USER: dc5100
 DESIGN FILE: G:\2104803_Hwy71F+Sm\TRANSP\dgn\040645_Base.dgn
 PLOTTED: 11/13/2012 14:25
 SCALE: 200H

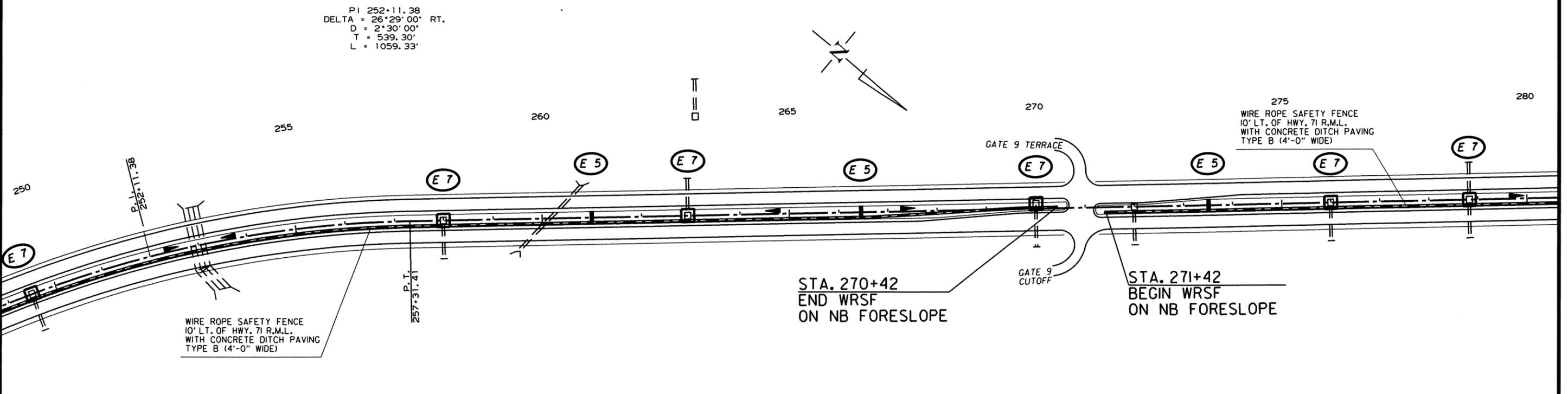
TEMPORARY EROSION CONTROL DETAILS STA. 160+00 - STA. 220+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040645	8	30
				2 TEMPORARY EROSION CONTROL DETAILS				



FLOW DIRECTION	SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
←	(E5)	(E7)		
↓	□	□		
LEGEND				

P.I. 252+11.38
 DELTA = 26°29'00" RT.
 D = 2°30'00"
 T = 539.30'
 L = 1059.33'



TEMPORARY EROSION CONTROL DETAILS STA. 220+00 - STA. 280+00

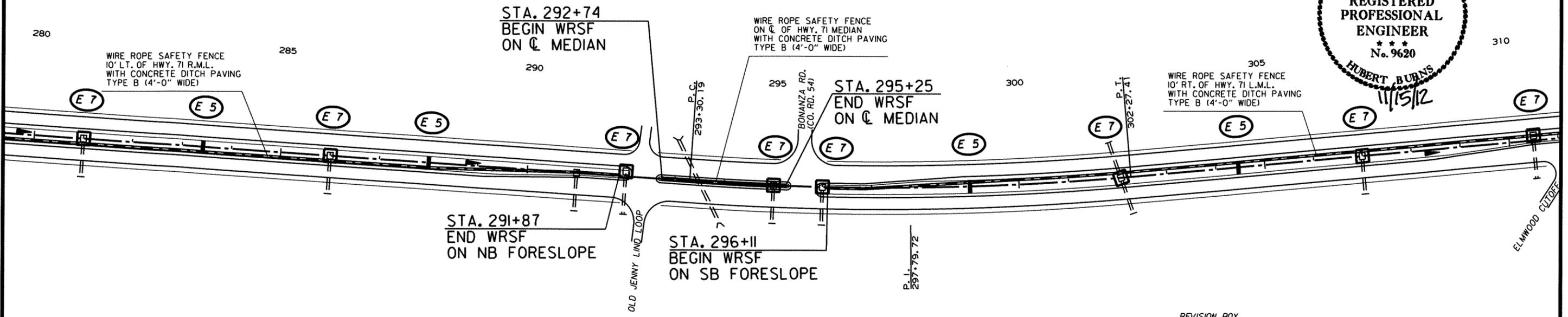
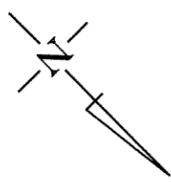
USER: bc5000
 DESIGN FILE: G:\2104803_Hwy7IF+Sm\TRANSP\dgn\040645_Base.dgn
 PLOTTED: 11/13/2012 14:25
 SCALE: 200H

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	040645	9	30

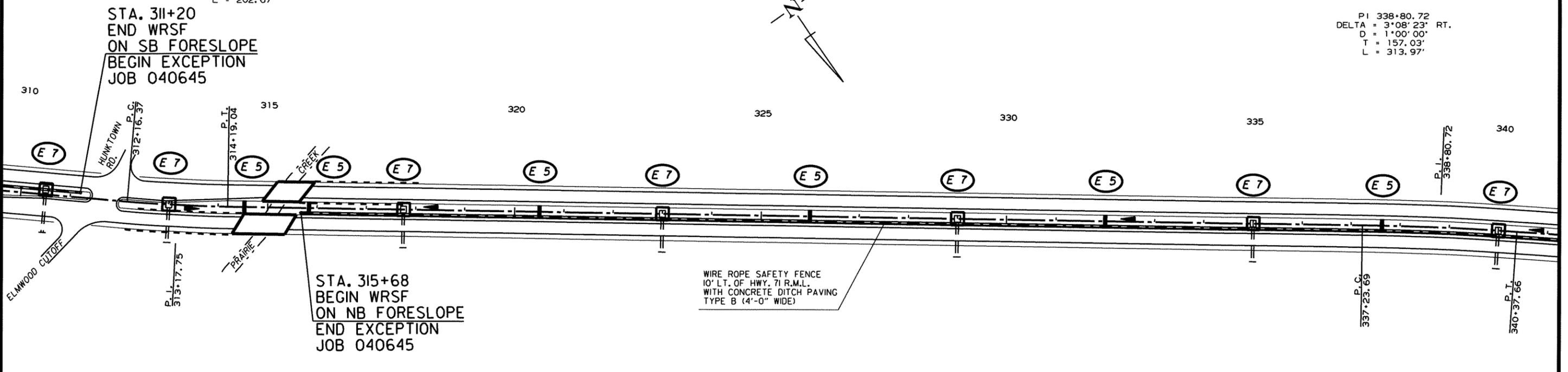
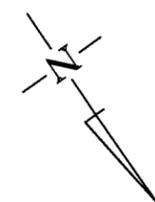
TEMPORARY EROSION CONTROL DETAILS



PI 297+79.72
 DELTA = 8°58'20" LT.
 D = 1°00'00"
 T = 449.53'
 L = 897.22'



PI 313+17.75
 DELTA = 4°03'12" LT.
 D = 2°00'00"
 T = 101.38'
 L = 202.67'



PI 338+80.72
 DELTA = 3°08'23" RT.
 D = 1°00'00"
 T = 157.03'
 L = 313.97'

FLOW DIRECTION		SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
←	→	(E 5)	(E 7)		
		I	□		

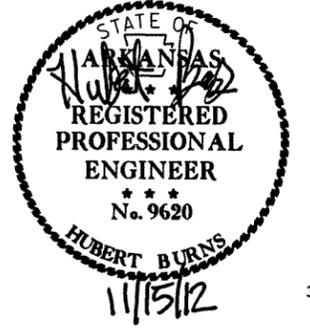
LEGEND

TEMPORARY EROSION CONTROL DETAILS STA. 280+00 - STA. 340+00

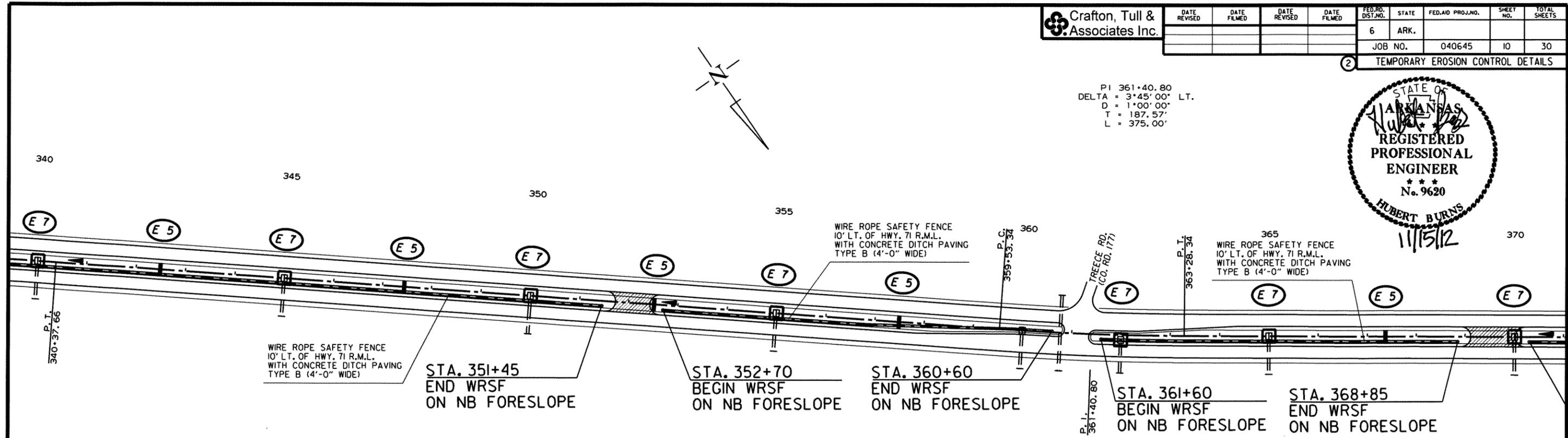
USER: bc5100
 DESIGN FILE: G:\2104803_Hwy71F+Sm\TRANSP\dgn\040645_Base.dgn
 PLOTTED: 11/13/2012 14:25
 SCALE: 200x

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	040645	10 30

TEMPORARY EROSION CONTROL DETAILS



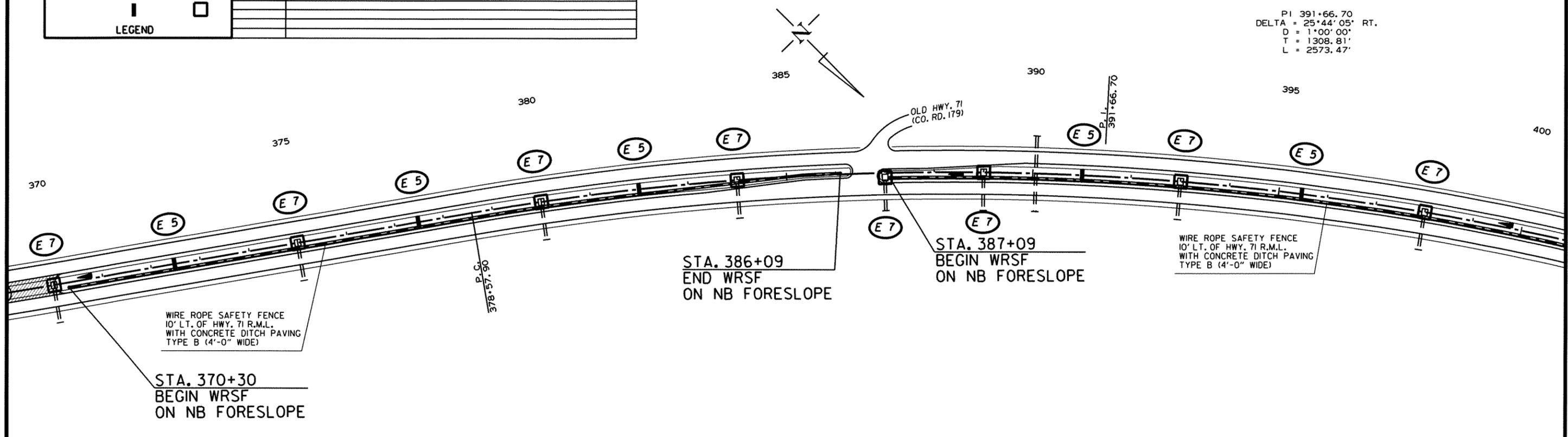
PI 361+40.80
 DELTA = 3°45'00" LT.
 D = 1°00'00"
 T = 187.57'
 L = 375.00'



REVISION BOX

FLOW DIRECTION	SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
←	(E 5)	(E 7)		
		□		
LEGEND				

PI 391+66.70
 DELTA = 25°44'05" RT.
 D = 1°00'00"
 T = 1308.81'
 L = 2573.47'

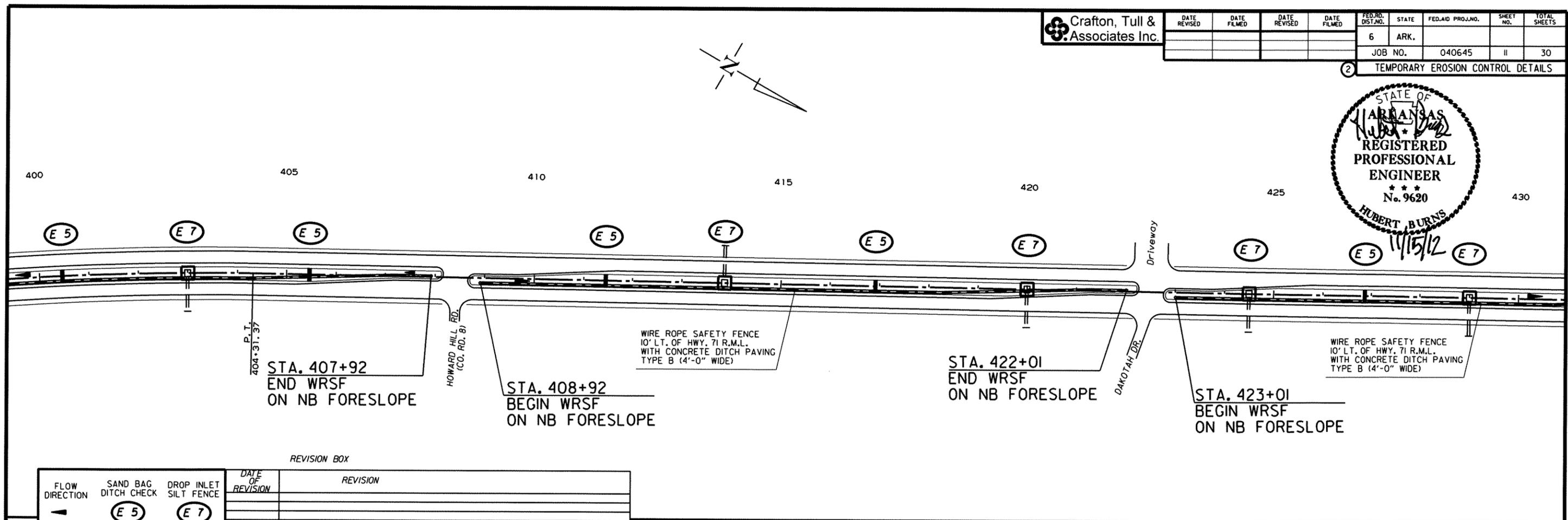


TEMPORARY EROSION CONTROL DETAILS STA. 340+00 - STA. 400+00

USER: bc5100
 DESIGN FILE: G:\12104803_Hwy71F+Sm\TRANSP\dgn\040645_Base.dgn
 PLOTTED: 11/14/2012 14:15 SCALE: 200:1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 040645							II	30

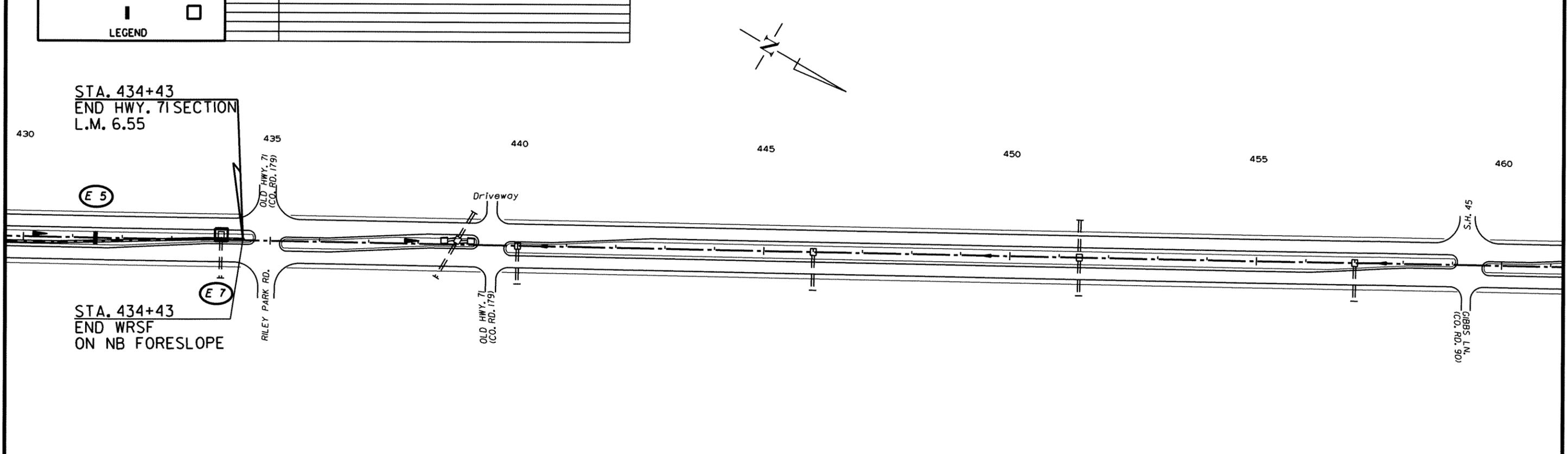
2 TEMPORARY EROSION CONTROL DETAILS



REVISION BOX

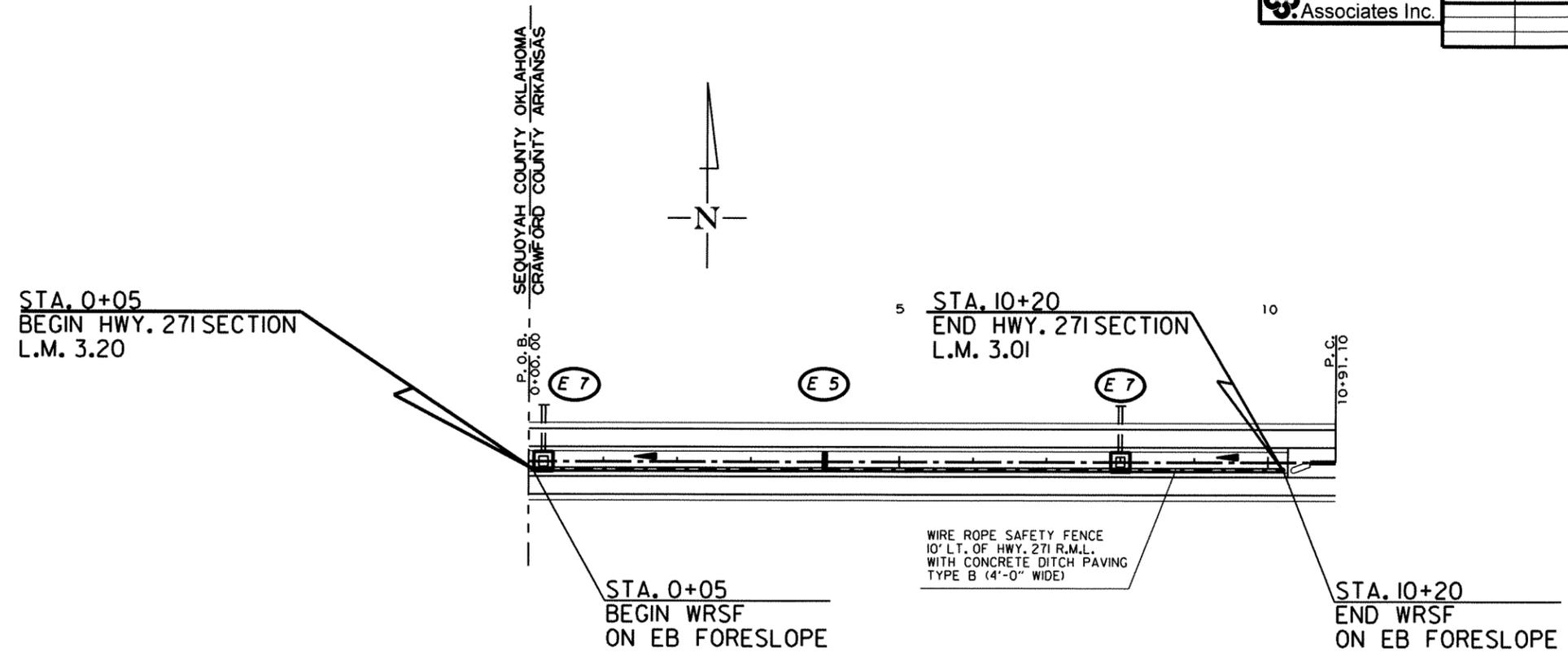
FLOW DIRECTION	SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
←	(E 5)	(E 7)		
↓	□	□		

LEGEND



TEMPORARY EROSION CONTROL DETAILS STA. 400+00 - STA. 460+00

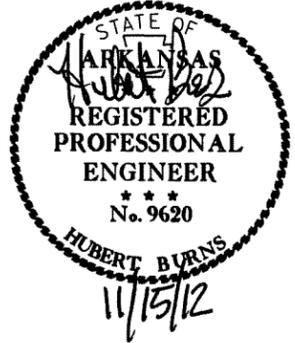
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	040645	12
						TEMPORARY EROSION CONTROL DETAILS		



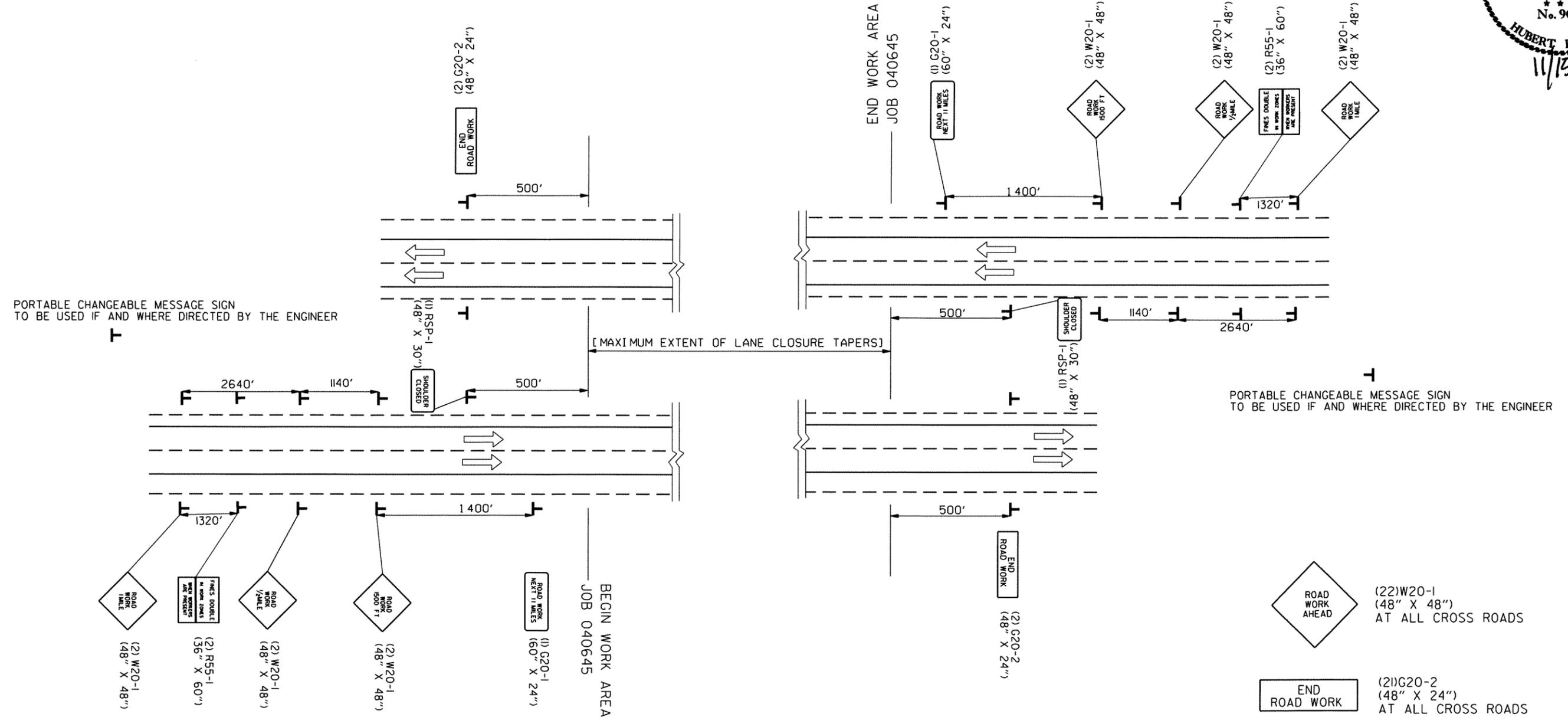
LEGEND			REVISION BOX	
FLOW DIRECTION	SAND BAG DITCH CHECK	DROP INLET SILT FENCE	DATE OF REVISION	REVISION
←	E 5	E 7		
	I	□		

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	040645	13	30	

② MAINTENANCE OF TRAFFIC



NOTE :
W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS
TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS
AS WORKING AREA SHIFTS.



PORTABLE CHANGEABLE MESSAGE SIGN
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

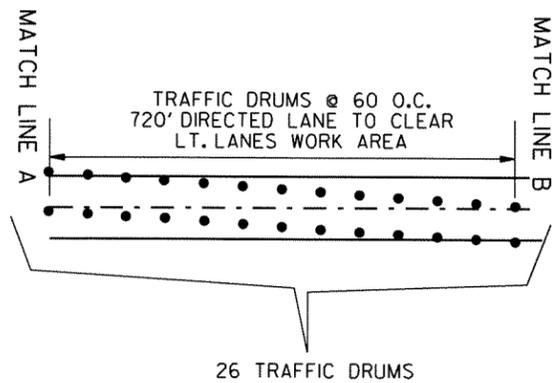
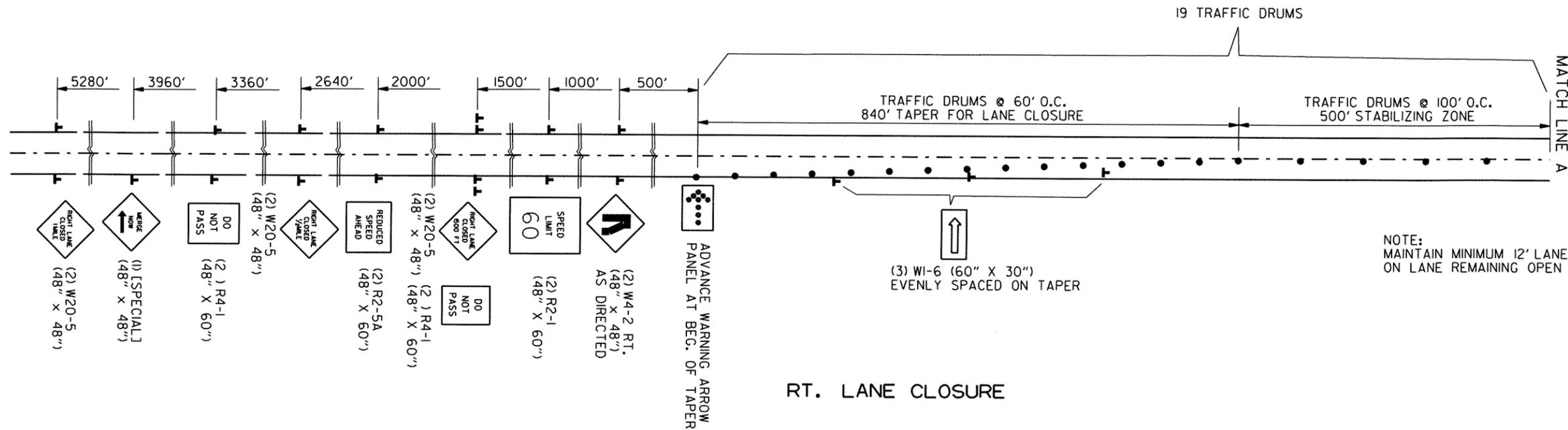
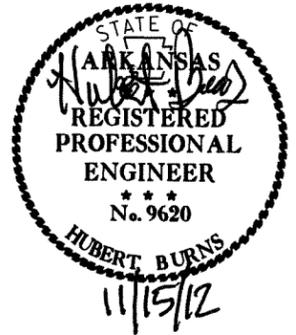
NOTE :
W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS
TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS
AS WORKING AREA SHIFTS.

ADVANCE SIGNS AT BEGINNING AND END OF JOB
ALL STAGES

MAINTENANCE OF TRAFFIC
ADVANCE SIGNS AT JOB ENDS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	040645	14	30	

② MAINTENANCE OF TRAFFIC



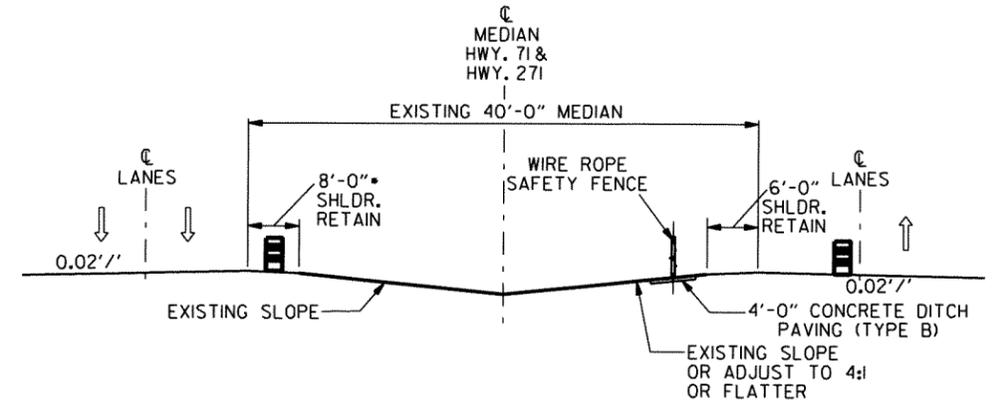
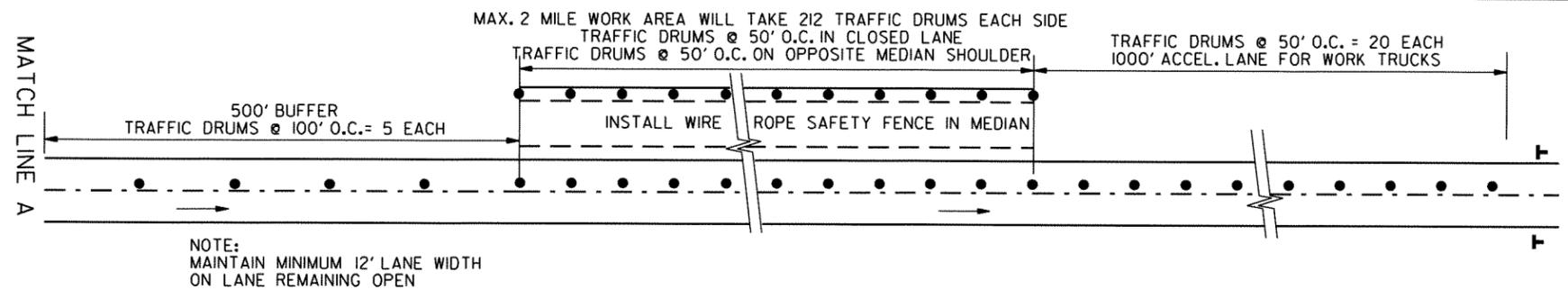
NOTE: ANY WORK ZONE OUTSIDE THE LIMITS OF THE LANE CLOSURE AREA MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER AND ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE DEPARTMENT.

NOTE: REFER TO SP-MAINTENANCE OF TRAFFIC FOR LANE CLOSURE LIMITATIONS AND RESTRICTIONS. QUANTITY OF TRAFFIC DRUMS PROVIDED IN THE CONTRACT IS THE MAXIMUM NUMBER REQUIRED FOR ONE LANE CLOSURE.

CABLE MEDIAN BARRIER
MAINTENANCE OF TRAFFIC
LANE CLOSURE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						040645	15	30

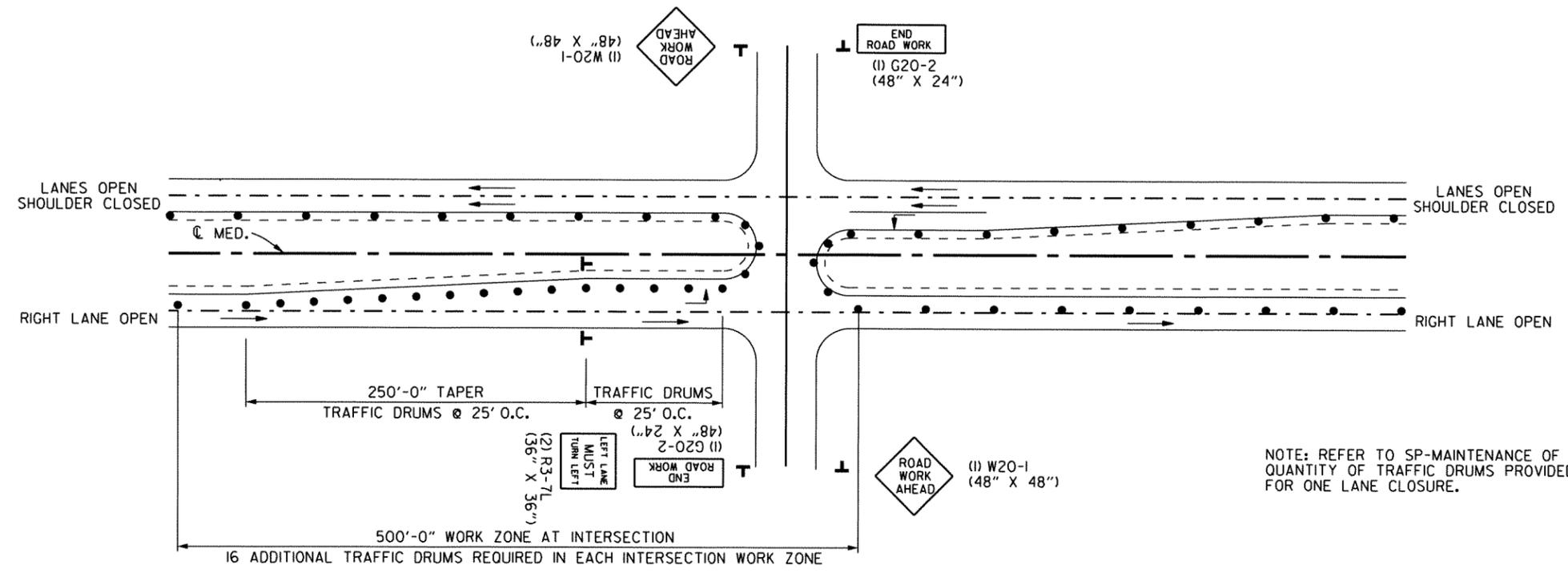
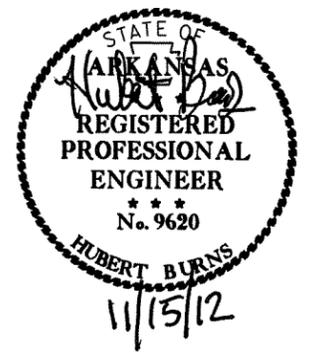
② MAINTENANCE OF TRAFFIC



MOVABLE WORK ZONE FOR WRSF INSTALLATION
*6'-0" AT HWY. 271

NOTE: ANY WORK ZONE OUTSIDE THE LIMITS OF THE LANE CLOSURE AREA MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER AND ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE DEPARTMENT.

SPEED LIMIT
55
(2) R2-1
(48" X 60")



INTERSECTION WITHIN MOVABLE WORK ZONE FOR WRSF INSTALLATION

CABLE MEDIAN BARRIER
MAINTENANCE OF TRAFFIC
WORK AREAS

EARTHWORK

STATION	STATION	LOCATION	COMPACTED EMBANKMENT
			CU. YD.
167+50	171+45	HWY. 71 MEDIAN	86
183+25	187+00	HWY. 71 MEDIAN	45
188+00	191+75	HWY. 71 MEDIAN	50
194+33	198+08	HWY. 71 MEDIAN	45
199+08	202+83	HWY. 71 MEDIAN	50
217+44	221+20	HWY. 71 MEDIAN	45
222+20	225+95	HWY. 71 MEDIAN	50
230+65	234+40	HWY. 71 MEDIAN	45
235+40	239+15	HWY. 71 MEDIAN	50
239+91	243+66	HWY. 71 MEDIAN	45
244+66	248+41	HWY. 71 MEDIAN	50
266+67	270+42	HWY. 71 MEDIAN	45
271+42	275+17	HWY. 71 MEDIAN	50
288+12	291+87	HWY. 71 MEDIAN	45
296+11	299+86	HWY. 71 MEDIAN	50
307+45	311+20	HWY. 71 MEDIAN	45
356+85	360+60	HWY. 71 MEDIAN	45
361+60	365+35	HWY. 71 MEDIAN	50
382+34	386+09	HWY. 71 MEDIAN	45
387+09	390+84	HWY. 71 MEDIAN	50
404+17	407+92	HWY. 71 MEDIAN	45
408+92	412+67	HWY. 71 MEDIAN	50
418+26	422+01	HWY. 71 MEDIAN	45
423+01	426+76	HWY. 71 MEDIAN	50
430+69	434+43	HWY. 71 MEDIAN	45
IF AND WHERE DIRECTED BY THE ENGINEER			500 *
TOTAL:			1721

NOTE: EARTHWORK QUANTITIES AT THE LOCATIONS SHOWN ABOVE SHALL BE PAID FOR AS PLAN QUANTITY.
 * QUANTITIES ARE ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.
 COMPACTION WILL BE AT THE SATISFACTION OF THE ENGINEER.

REMOVAL OF DISPOSAL OF POSTS

STATION	STATION	DESCRIPTION	REMOVAL AND DISPOSAL OF POSTS
			EACH
282+74	295+25	OBJECT MARKERS AND POSTS IN HWY. 71 MEDIAN	41
TOTAL:			41

CONCRETE DITCH PAVING

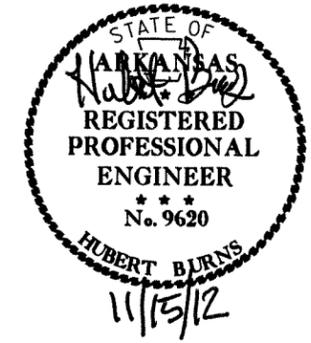
STATION	STATION	LOCATION	LENGTH	WIDTH	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			FEET	FEET	SQ.YD.		M.GAL.
167+50.00	171+45.00	HWY. 71 R.M.L.	395	4	176	88	1.1
172+50.00	187+00.00	HWY. 71 R.M.L.	1450	4	644	322	4.1
188+00.00	198+08.00	HWY. 71 L.M.L.	1008	4	448	224	2.8
199+08.00	221+20.00	HWY. 71 L.M.L.	2212	4	983	492	6.2
222+20.00	234+40.00	HWY. 71 R.M.L.	1220	4	542	271	3.4
235+40.00	243+66.00	HWY. 71 R.M.L.	826	4	367	184	2.3
244+66.00	270+42.00	HWY. 71 R.M.L.	2576	4	1145	572	7.2
271+42.00	291+87.00	HWY. 71 R.M.L.	2045	4	909	454	5.7
292+74.00	295+25.00	HWY. 71 MEDIAN	251	4	112	56	0.7
296+11.00	311+20.00	HWY. 71 L.M.L.	1509	4	671	335	4.2
315+68.00	351+45.00	HWY. 71 R.M.L.	3577	4	1590	795	10.0
352+70.00	360+60.00	HWY. 71 R.M.L.	790	4	351	176	2.2
361+60.00	368+85.00	HWY. 71 R.M.L.	725	4	322	161	2.0
370+30.00	386+09.00	HWY. 71 R.M.L.	1579	4	702	351	4.4
387+09.00	407+92.00	HWY. 71 R.M.L.	2083	4	926	463	5.8
408+92.00	422+01.00	HWY. 71 R.M.L.	1309	4	582	291	3.7
423+01.00	434+43.00	HWY. 71 R.M.L.	1142	4	508	254	3.2
0+05.00	10+20.00	HWY. 271 R.M.L.	1015	4	451	226	2.8
TOTALS:					11429	5715	71.8

BASIS OF ESTIMATE:
 WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.

WIRE ROPE SAFETY FENCE

STATION	STATION	LOCATION	WIRE ROPE SAFETY FENCE	WRSF ANCHOR *	WRSF MAINTENANCE MATERIALS
			LIN. FT.	EACH	LUMP SUM
167+50.00	171+45.00	HWY. 71 R.M.L.	395	2	
172+50.00	187+00.00	HWY. 71 R.M.L.	1450	2	
188+00.00	198+08.00	HWY. 71 L.M.L.	1008	2	
199+08.00	221+20.00	HWY. 71 L.M.L.	2212	2	
222+20.00	234+40.00	HWY. 71 R.M.L.	1220	2	
235+40.00	243+66.00	HWY. 71 R.M.L.	826	2	
244+66.00	270+42.00	HWY. 71 R.M.L.	2576	2	
271+42.00	291+87.00	HWY. 71 R.M.L.	2045	2	
292+74.00	295+25.00	HWY. 71 MEDIAN	251	2	
296+11.00	311+20.00	HWY. 71 L.M.L.	1509	2	
315+68.00	351+45.00	HWY. 71 R.M.L.	3577	2	
352+70.00	360+60.00	HWY. 71 R.M.L.	790	2	
361+60.00	368+85.00	HWY. 71 R.M.L.	725	2	
370+30.00	386+09.00	HWY. 71 R.M.L.	1579	2	
387+09.00	407+92.00	HWY. 71 R.M.L.	2083	2	
408+92.00	422+01.00	HWY. 71 R.M.L.	1309	2	
423+01.00	434+43.00	HWY. 71 R.M.L.	1142	2	
0+05.00	10+20.00	HWY. 271 R.M.L.	1015	2	
ENTIRE PROJECT					1.00
TOTALS:			25712	36	1.00

* THIS ITEM SHOWN FOR INFORMATION ONLY.



QUANTITIES

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	040645	18	30	

2 SUMMARY OF QUANTITIES & REVISIONS



SUMMARY OF QUANTITIES

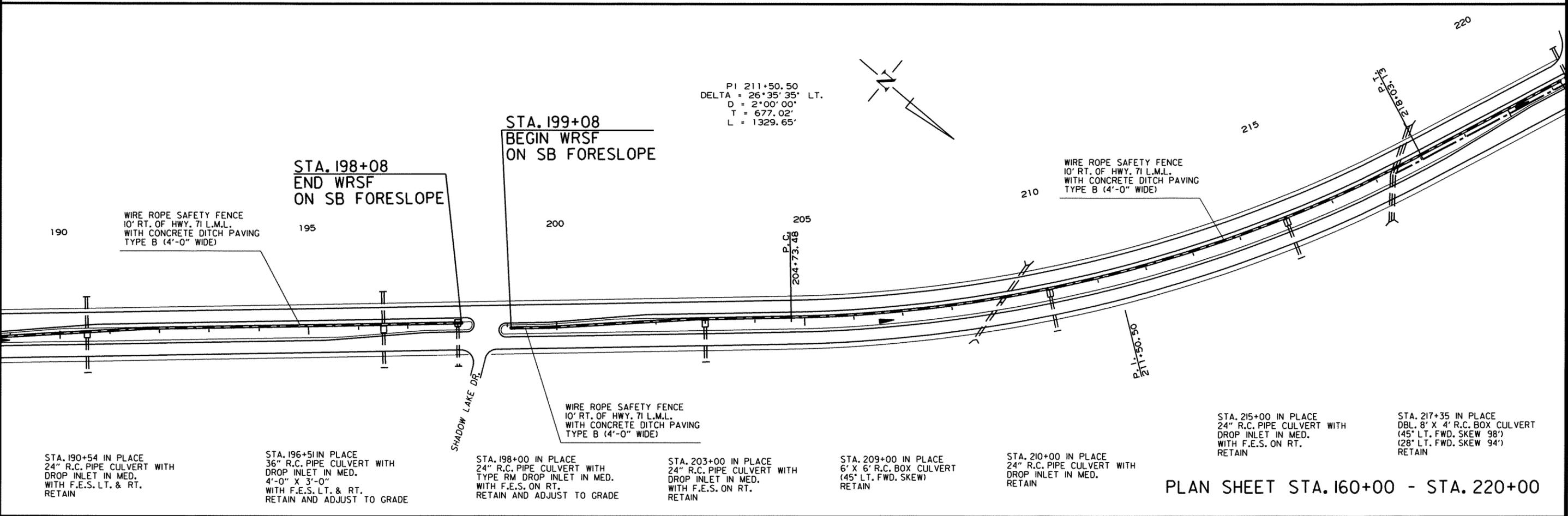
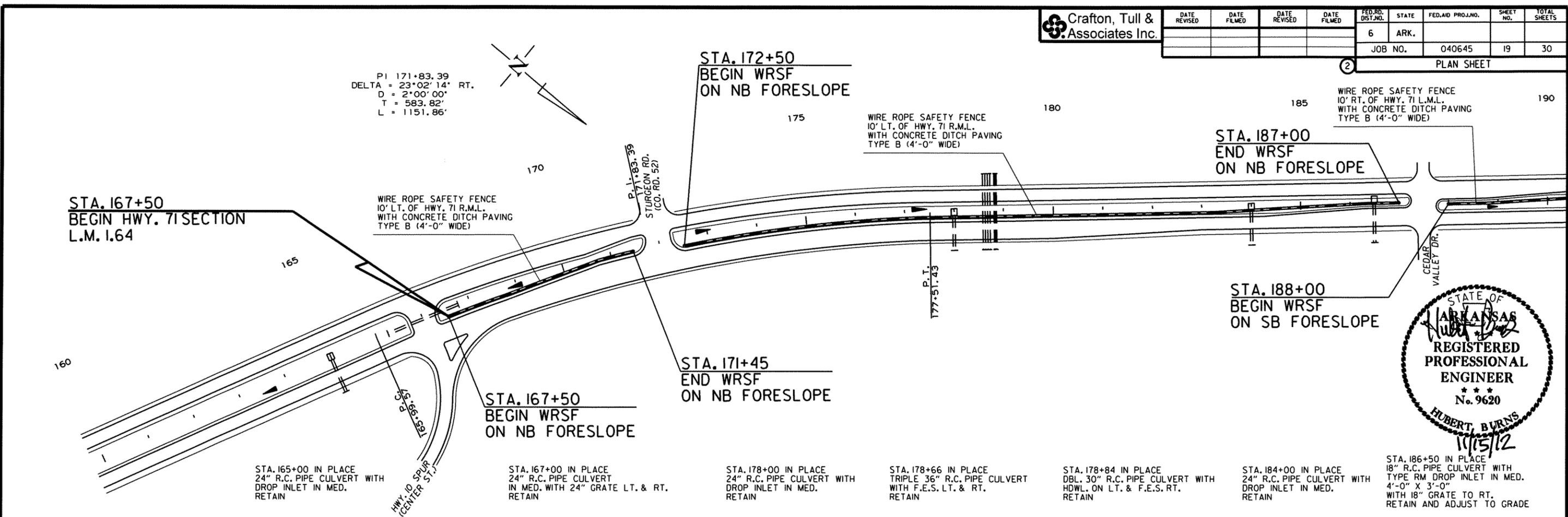
ITEM NUMBER	ITEM	QUANTITY	UNIT
202	REMOVAL AND DISPOSAL OF POSTS	41	EACH
210	COMPACTED EMBANKMENT	1721	CU.YD.
601	MOBILIZATION	1.00	LUMP SUM
SP, SS & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	1851	SQ.FT.
SS & 604	TRAFFIC DRUMS	749	EACH
SS & 604	ADVANCE WARNING ARROW PANEL	47	DAY
SP, SS & 604	PORTABLE CHANGEABLE MESSAGE SIGN	34	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)	11429	SQ.YD.
610	DROP INLETS ADJUSTED TO GRADE	14	EACH
620	LIME	15	TON
620	SEEDING	7.39	ACRE
620	MULCH COVER	11.78	ACRE
SS & 620	WATER	915.2	M.GAL.
621	TEMPORARY SEEDING	4.39	ACRE
621	SAND BAG DITCH CHECKS	1000	BAG
621	DROP INLET SILT FENCE	1260	LIN.FT.
621	SEDIMENT REMOVAL AND DISPOSAL	59	CU. YD.
623	SECOND SEEDING APPLICATION	7.39	ACRE
624	SOLID SODDING	5715	SQ.YD.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
SP	WIRE ROPE SAFETY FENCE	25712	LIN.FT.
SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS	1.00	LUMP SUM

REVISIONS

DATE	REVISION	SHEET NUMBER

SUMMARY OF QUANTITIES & REVISIONS

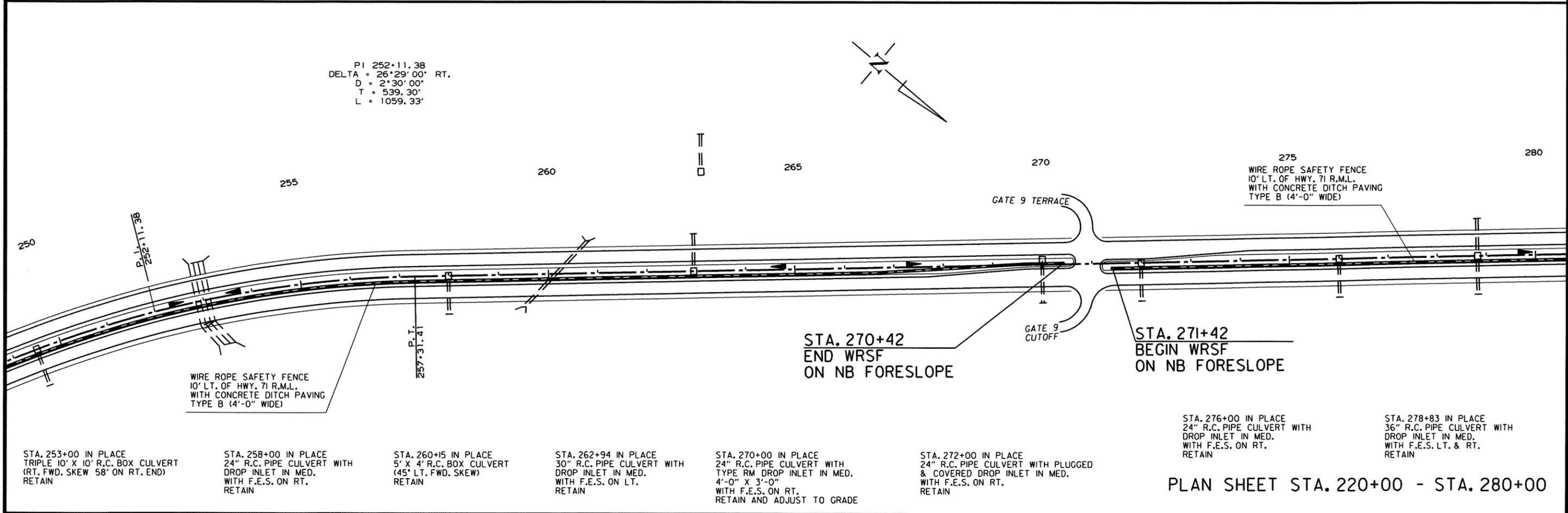
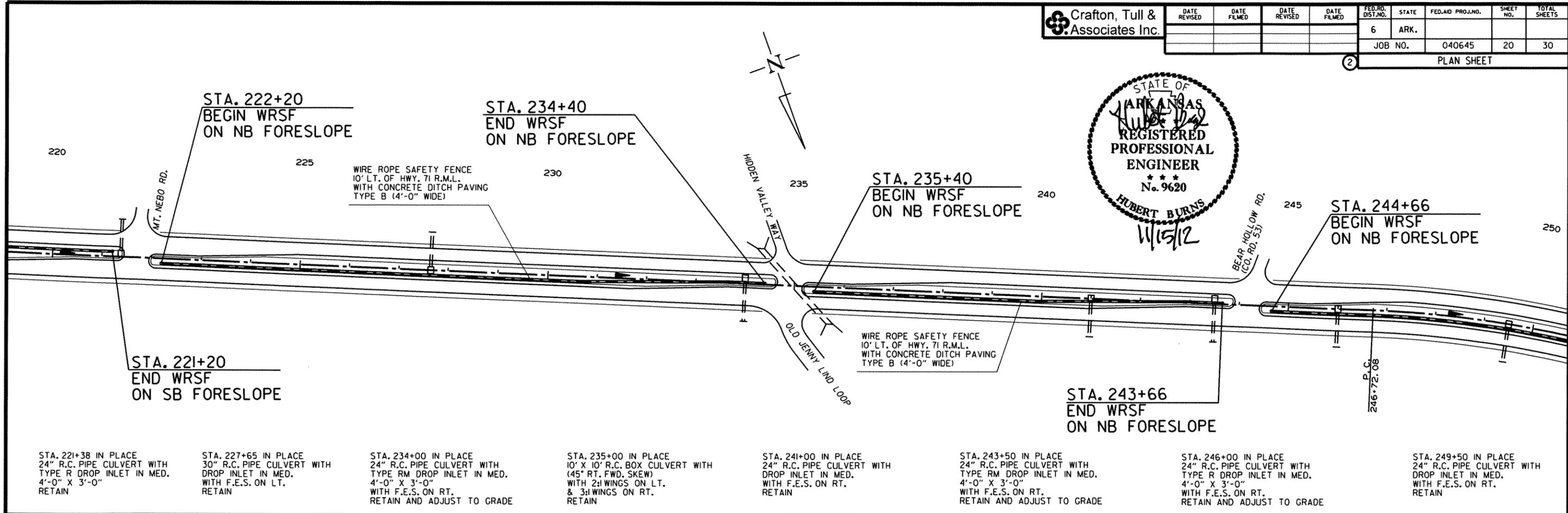
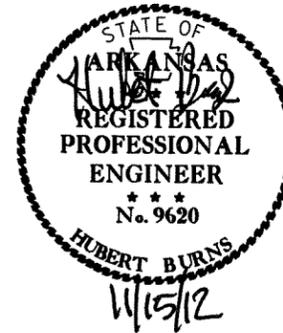
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	040645	19
						PLAN SHEET		



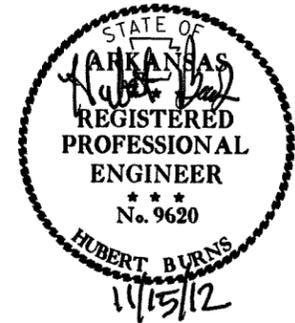
PLAN SHEET STA. 160+00 - STA. 220+00

USER: dc5100
 DESIGN FILE: G:\2104803.Hwy71F+Sm\TRANSP\dgn\040645 Base.dgn
 PLOTTED: 11/14/2012 07:51
 SCALE: 200H

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 040645							20	30
2 PLAN SHEET								



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 040645							21	30
PLAN SHEET								



PI 297+79.72
 DELTA = 8°58'20" LT.
 D = 1°00'00"
 T = 449.53'
 L = 897.22'

STA. 292+74 TO STA. 295+25 IN PLACE
 41 OBJECT MARKERS AND POSTS IN MEDIAN REMOVE

STA. 292+74
 BEGIN WRSF
 ON CL MEDIAN

WIRE ROPE SAFETY FENCE
 ON CL OF HWY. 71 MEDIAN
 WITH CONCRETE DITCH PAVING
 TYPE B (4'-0" WIDE)

STA. 295+25
 END WRSF
 ON CL MEDIAN

WIRE ROPE SAFETY FENCE
 10' RT. OF HWY. 71 L.M.L.
 WITH CONCRETE DITCH PAVING
 TYPE B (4'-0" WIDE)

STA. 291+87
 END WRSF
 ON NB FORESLOPE

STA. 296+11
 BEGIN WRSF
 ON SB FORESLOPE

- STA. 281+00 IN PLACE
24" R.C. PIPE CULVERT WITH
DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN
- STA. 286+00 IN PLACE
24" R.C. PIPE CULVERT WITH
DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN
- STA. 291+00 IN PLACE
24" R.C. PIPE CULVERT WITH PLUGGED
& COVERED DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN
- STA. 292+00 IN PLACE
24" R.C. PIPE CULVERT WITH
TYPE RM DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON RT.
RETAIN AND ADJUST TO GRADE
- STA. 293+49 IN PLACE
6' X 4' R.C. BOX CULVERT
(30° RT. FWD. SKEW)
RETAIN
- STA. 295+00 IN PLACE
24" R.C. PIPE CULVERT WITH
TYPE RM DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON RT.
RETAIN
- STA. 296+00 IN PLACE
24" R.C. PIPE CULVERT WITH
TYPE R DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON RT.
RETAIN AND ADJUST TO GRADE
- STA. 302+07 IN PLACE
24" R.C. PIPE CULVERT
(15° RT. FWD. SKEW) WITH
DROP INLET IN MED.
WITH F.E.S. LT. & RT.
RETAIN
- STA. 307+00 IN PLACE
24" R.C. PIPE CULVERT WITH
DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN
- STA. 310+50 IN PLACE
24" R.C. PIPE CULVERT WITH
TYPE RM DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON RT.
RETAIN AND ADJUST TO GRADE

PI 313+17.75
 DELTA = 4°03'12" LT.
 D = 2°00'00"
 T = 101.38'
 L = 202.67'

GUARDRAIL (TYPE A) IN PLACE		TERMINAL ANCHOR POST (TYPE A) IN PLACE
STA. 312+16 - STA. 314+28 RT. (R.M.L.)	225 LIN.FT.	1 EACH RETAIN
STA. 312+39 - STA. 314+51 LT. (R.M.L.)	225 LIN.FT.	1 EACH RETAIN
STA. 315+64 - STA. 317+76 RT. (L.M.L.)	225 LIN.FT.	1 EACH RETAIN
STA. 315+95 - STA. 318+07 LT. (L.M.L.)	225 LIN.FT.	1 EACH RETAIN

STA. 311+20
 END WRSF
 ON SB FORESLOPE
 BEGIN EXCEPTION
 JOB 040645

PI 338+80.72
 DELTA = 3°08'23" RT.
 D = 1°00'00"
 T = 157.03'
 L = 313.97'

STA. 315+68
 BEGIN WRSF
 ON NB FORESLOPE
 END EXCEPTION
 JOB 040645

WIRE ROPE SAFETY FENCE
 10' LT. OF HWY. 71 R.M.L.
 WITH CONCRETE DITCH PAVING
 TYPE B (4'-0" WIDE)

- STA. 313+00 IN PLACE
24" R.C. PIPE CULVERT WITH
TYPE R DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON RT.
RETAIN
- STA. 317+75 IN PLACE
24" R.C. PIPE CULVERT WITH
DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN
- STA. 323+00 IN PLACE
24" R.C. PIPE CULVERT WITH
DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN
- STA. 329+00 IN PLACE
24" R.C. PIPE CULVERT WITH
DROP INLET IN MED.
WITH F.E.S. ON RT.
RETAIN

STA. 335+00 IN PLACE
 24" R.C. PIPE CULVERT WITH
 DROP INLET IN MED.
 WITH F.E.S. ON RT.
 RETAIN

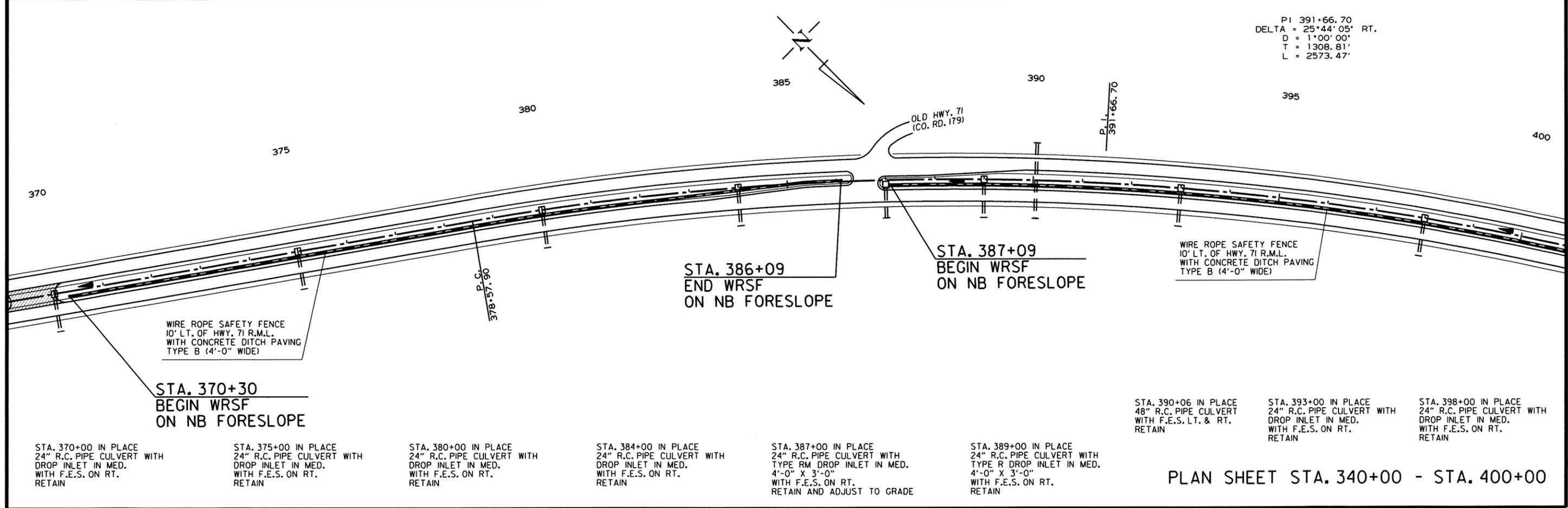
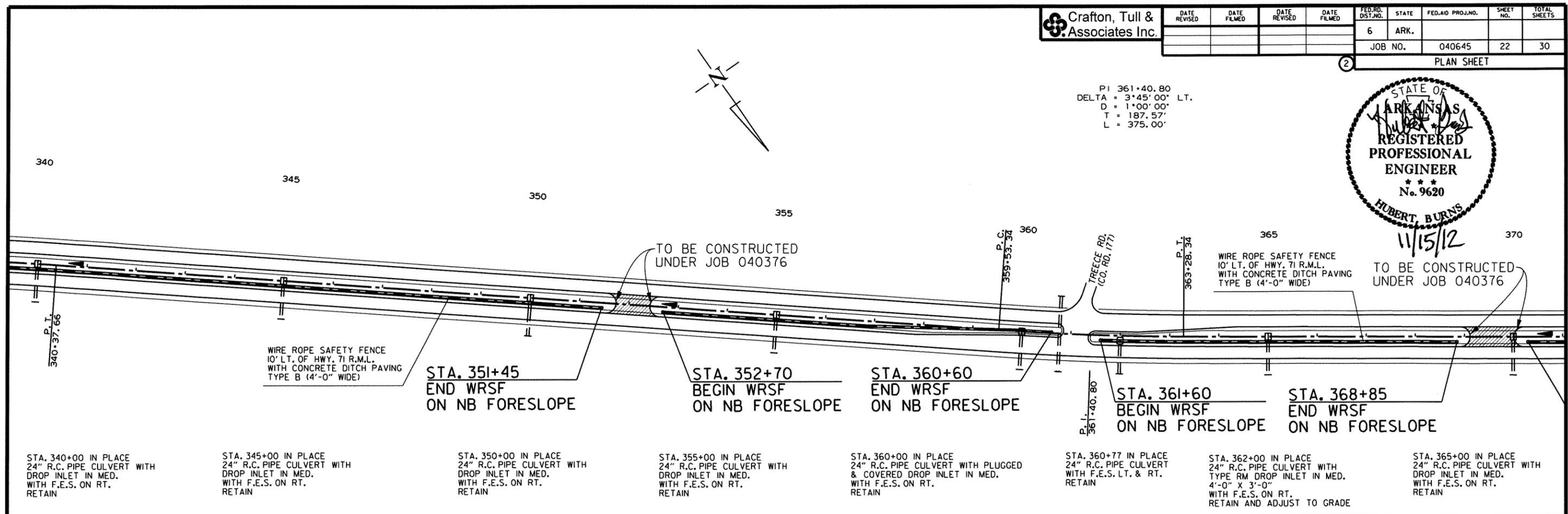
PLAN SHEET STA. 280+00 - STA. 340+00

USER: bc5100
 DESIGN FILE: G:\12104803.Hwy71F+5m\TRANSP\dgn\040645_Base.dgn
 PLOTTED: 11/13/2012 14:26
 SCALE: 200H

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	040645		22	30



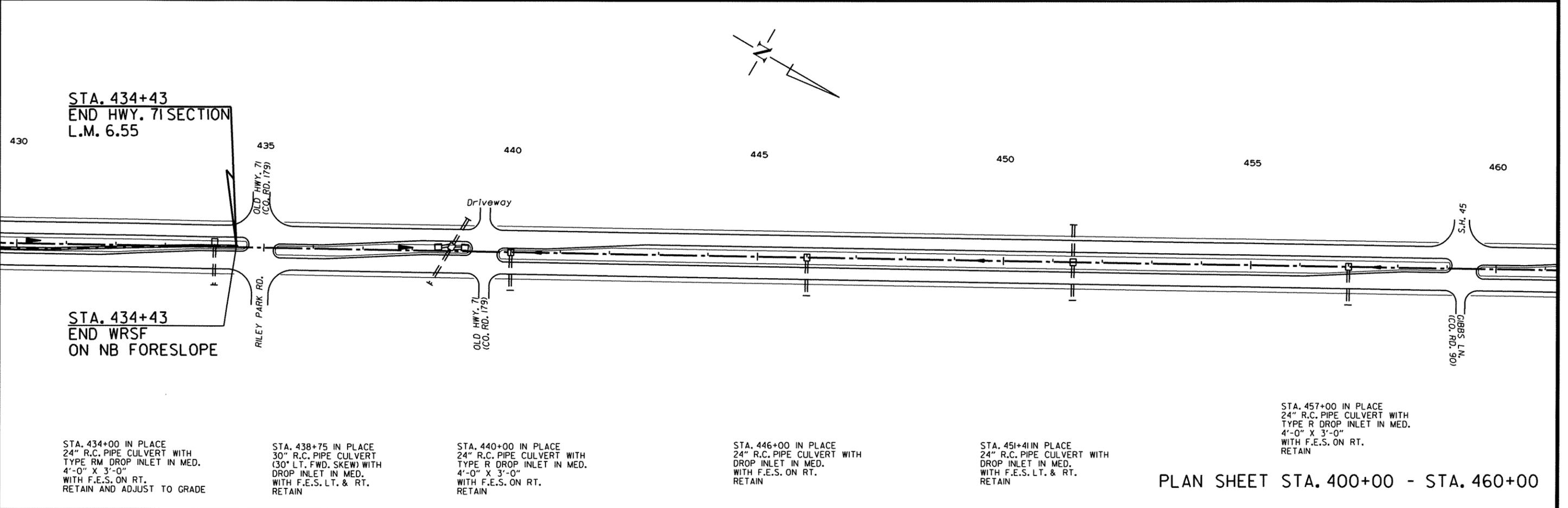
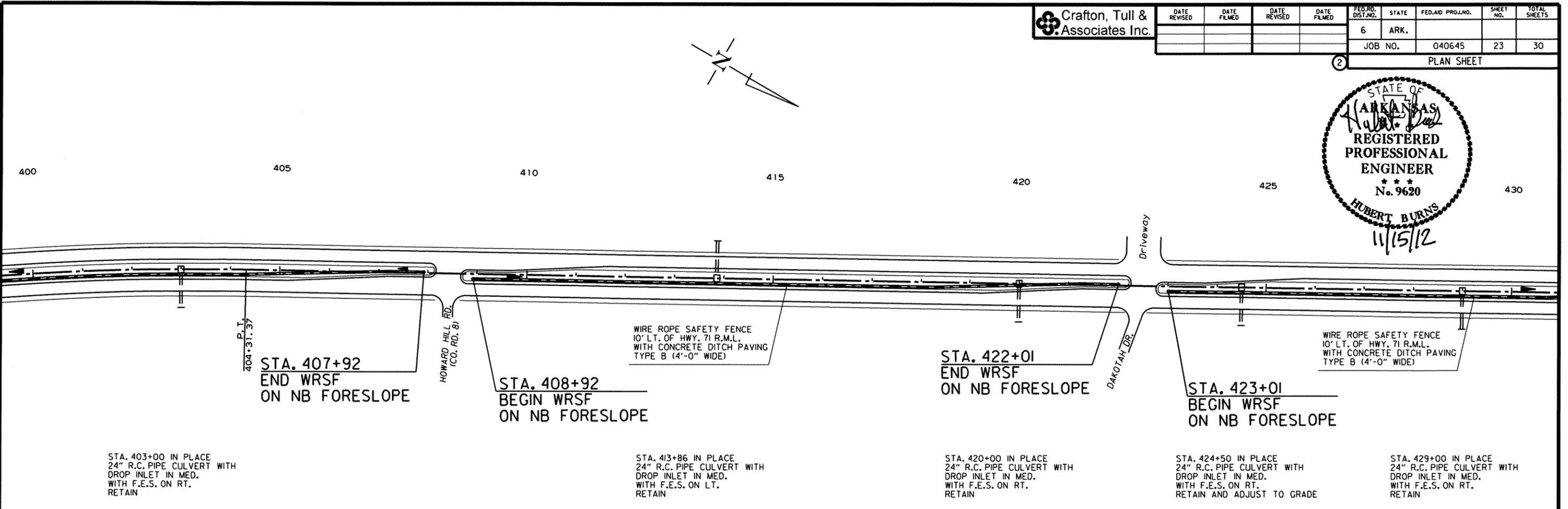
PI 361+40.80
 DELTA = 3°45'00" LT.
 D = 1°00'00"
 T = 187.57'
 L = 375.00'



PLAN SHEET STA. 340+00 - STA. 400+00

USER: bc5100
 DESIGN FILE: G:\12104803_Hwy71F+Sm\TRANSP\dgn\040645 Base.dgn
 PLOTTED: 11/14/2012 13:50
 SCALE: 200H

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
						JOB NO.	040645	23	30
PLAN SHEET									

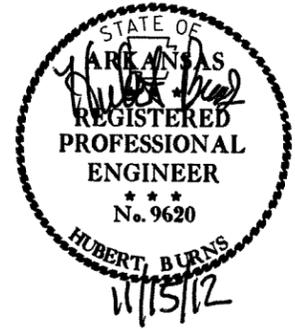


PLAN SHEET STA. 400+00 - STA. 460+00

USER: bc5100
 DESIGN FILE: G:\12104803.Hwy71F+Sm\TRANSP\dgn\040645 Base.dgn
 PLOTTED: 11/13/2012 14:26 SCALE: 200H

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		040645	24	30

2 PLAN SHEET



STA. 0+05
BEGIN HWY. 271 SECTION
L.M. 3.20

5 STA. 10+20
END HWY. 271 SECTION
L.M. 3.01

10

SEQUOYAH COUNTY OKLAHOMA
CRAWFORD COUNTY ARKANSAS

P.O.B.
0+700.00

P.C.
10+91.10

STA. 0+20 IN PLACE
18" R.C. PIPE CULVERT WITH
TYPE R DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON LT.
RETAIN

STA. 8+00 IN PLACE
18" R.C. PIPE CULVERT WITH
TYPE R DROP INLET IN MED.
4'-0" X 3'-0"
WITH F.E.S. ON LT.
RETAIN

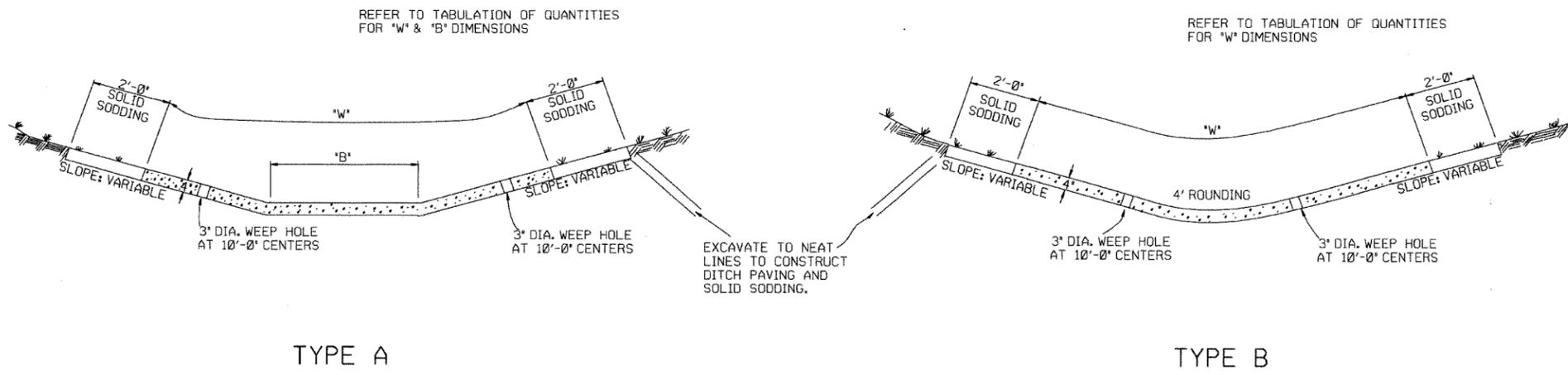
STA. 0+05
BEGIN WRSF
ON EB FORESLOPE

STA. 10+20
END WRSF
ON EB FORESLOPE

WIRE ROPE SAFETY FENCE
10' LT. OF HWY. 271 R.M.L.
WITH CONCRETE DITCH PAVING
TYPE B (4'-0" WIDE)

STA. 10+26.8 IN PLACE
CONCRETE MEDIAN
RETAIN

STA. 10+57 IN PLACE
CONCRETE MEDIAN BARRIER WITH
IMPACT ATTENUATION BARRIER
RETAIN

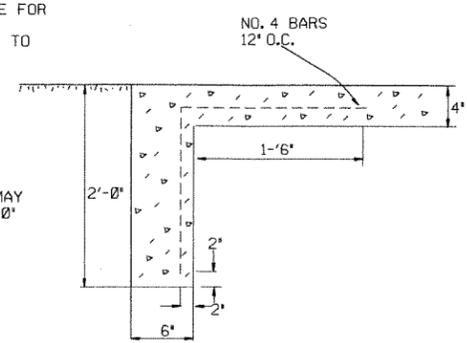


TYPE A

TYPE B

EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.

THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR 'CONCRETE DITCH PAVING.'



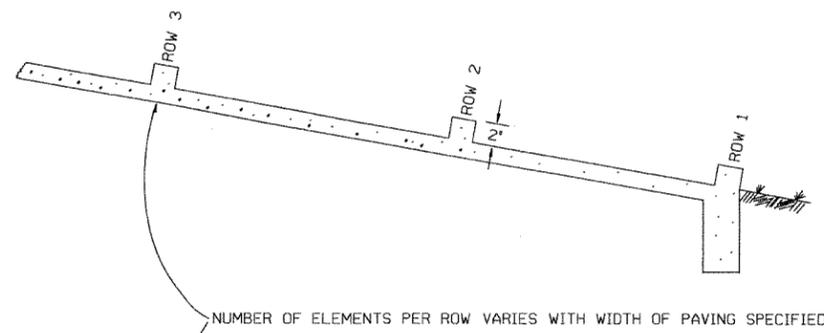
TOE WALL DETAIL FOR CONCRETE DITCH PAVING

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.
TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

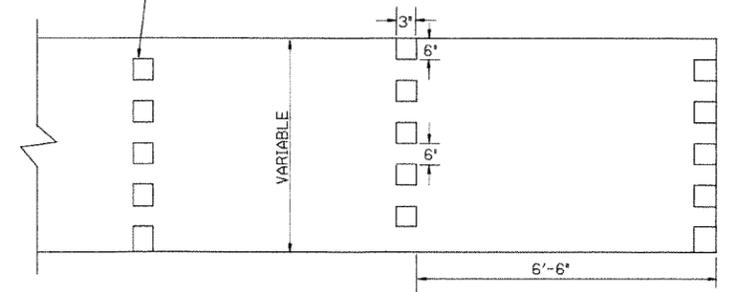
SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

1' WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.



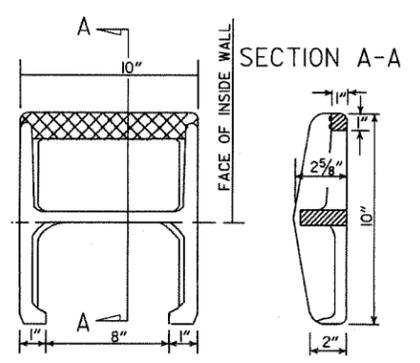
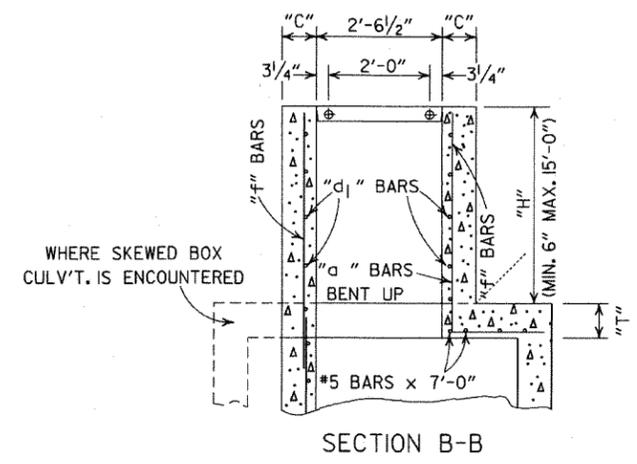
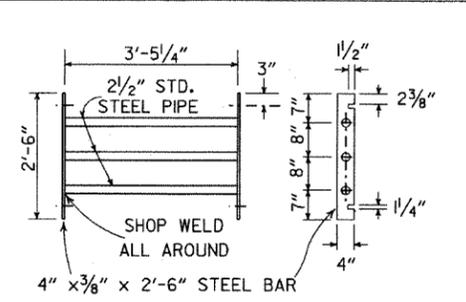
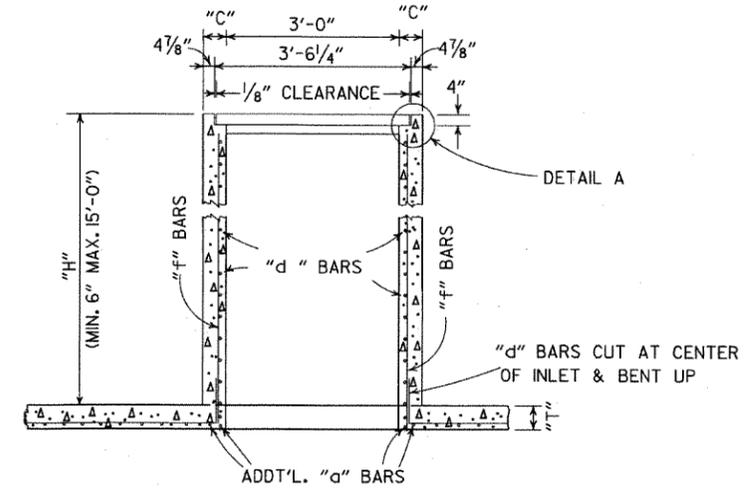
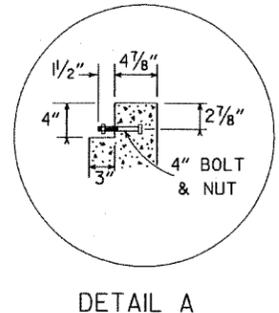
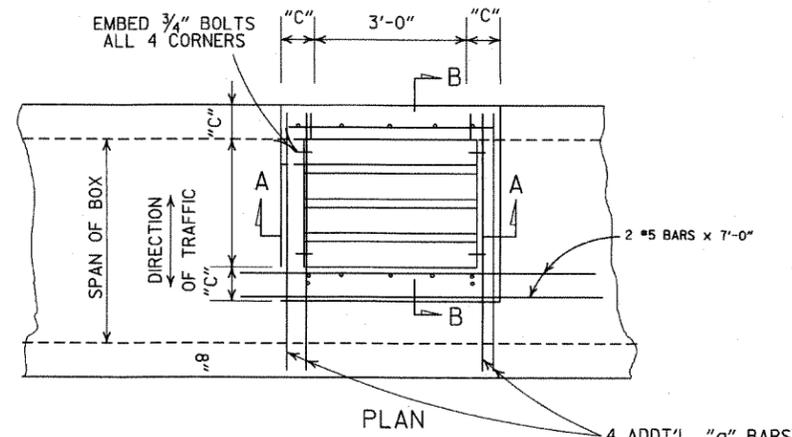
ENERGY DISSIPATORS
(NO SCALE)

11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS	508-11-1-84
11-1-84	ADDED	
11-1-84	EXCAVATION DETAILS ADDED	
	TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72
DATE	REVISION	DATE FILM'D

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

STANDARD DRAWING CDP-1

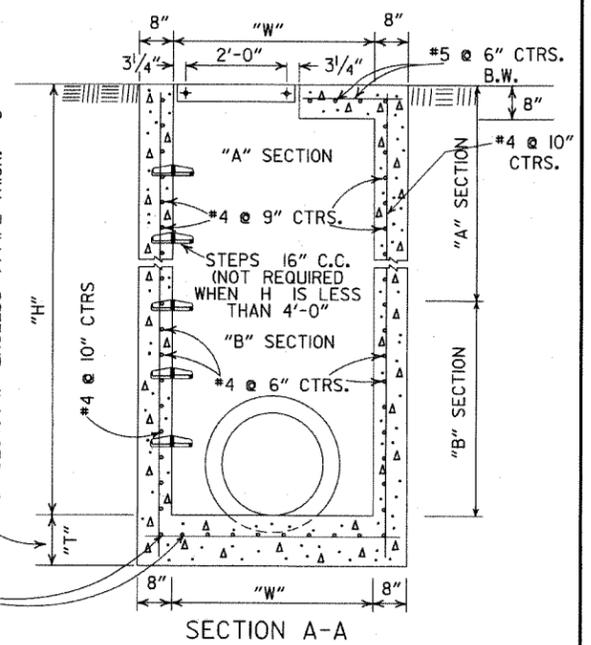
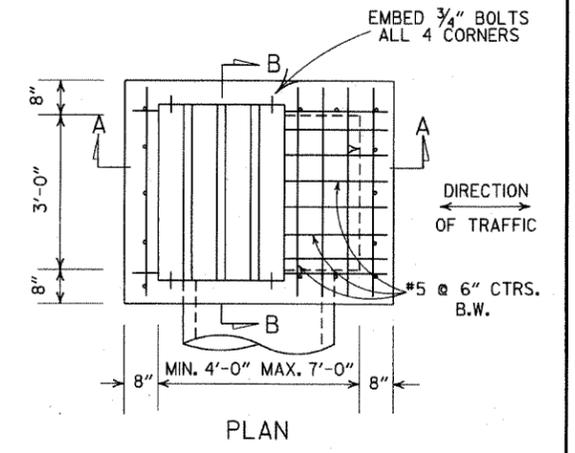
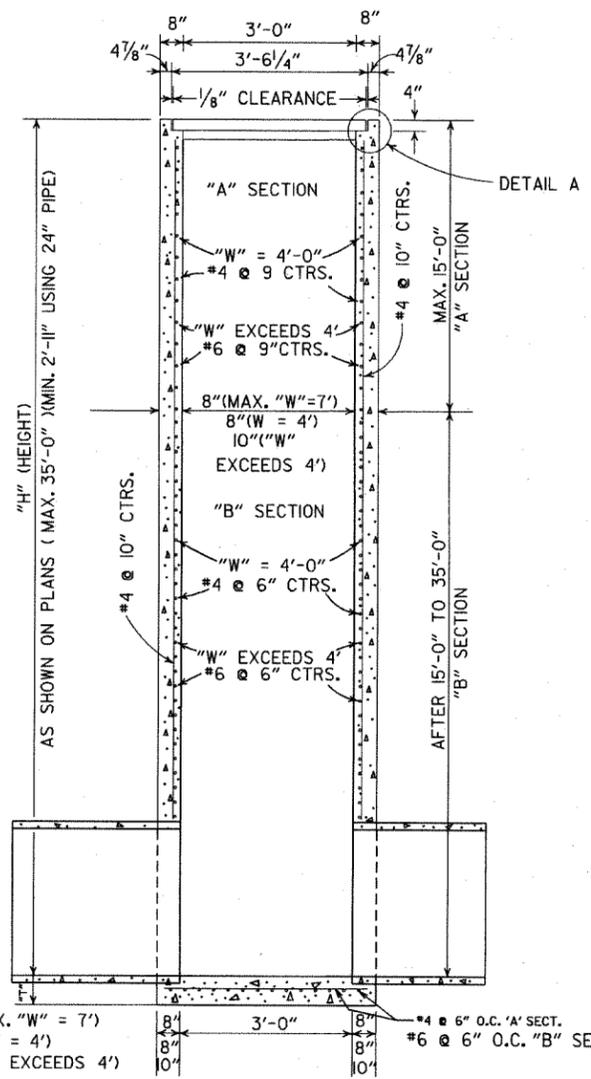


- GENERAL NOTES:
1. STEEL PIPE FOR GRATES AND BOLTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 807. BOLTS SHALL CONFORM TO ONE OF THE FOLLOWING: ASTM A193, GRADE BB CLASS 10R 2, ASTM A307 OR AASHTO M 164.
 2. STEEL PIPE FOR GRATES SHALL BE "STANDARD WEIGHT" PIPE CONFORMING TO ASTM A53 NATIONAL STANDARD PIPE.
 3. BOLTS, NUTS, WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232 OR AASHTO M 298, CLASS 40 OR 50.
 4. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 5. ALL #4 AND #5 REINFORCING BARS TO HAVE 1/2" COVER. LARGER SIZES TO HAVE 2" COVER.
 6. THE COMPLETE PIPE GRATE SHALL BE PAINTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TABLE OF "W" DIMENSIONS

I.D. PIPE	SKEW OF CROSS DRAIN		
	STRAIGHT	30°	45°
24"	4'-0"	4'-0"	4'-0"
30"	4'-0"	4'-0"	4'-5"
36"	4'-0"	4'-3"	5'-3"
42"	4'-3"	4'-11"	6'-1"
48"	4'-10"	5'-7"	6'-11"

NOTE: DIMENSIONS SHOWN ABOVE ARE FOR PIPES INTERSECTING DROP INLET ON ONE SIDE ONLY. FOR SKEWED PIPES INTERSECTING BOTH SIDES OF DROP INLET, "W" WILL NEED TO BE INCREASED OR AXIS OF INTERSECTING PIPES WILL NEED TO BE SHIFTED.



REVISIONS

NO.	DATE	DESCRIPTION	DATE FILMED
8-22-02		ADDED & REVISED DIMENSION TO SECTION A-A	
1-12-00		CORRECTED DIMENSION ON SECTION B-B	
11-06-97		ADDED DIMENSION TO SECTION A-A	
10-18-96		REVISED ASTM REF. TO AASHTO AND ADDED NOTE TO TABLE OF "W" DIMENSIONS	
10-1-92		ADDED DIRECTION OF TRAFFIC	10-1-92
8-15-91		ADDED NOTE ABOUT PAINTING OF GRATE	8-15-91
11-30-89		ALTERED DETAIL A	11-30-89
7-15-88		REVISED STEP DETAIL, TM & RM D.J. & GRATE DETAIL	7-15-88
10-2-72		REVISED AND REDRAWN	542-10-2-72
REVISED			DATE FILMED

NOTE: ADD'L. REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.J.

DIMENSIONS & REINF. BARS FOR D.I. TO BE THE SAME AS THOSE SHOWN ON APPLICABLE STD. BARREL DRAWING FOR R.C. BOX CULVERTS.

DROP INLET TYPE "TM" FOR REINFORCED CONC. BOX CULVERTS

APPROX. WEIGHT = 11 LBS. (CAST IRON)
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

DROP INLET (TYPE RM)

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

STANDARD DRAWING FPC-9D

ADVANCE DISTANCES (XXXX)

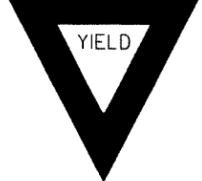
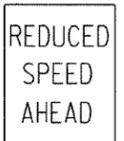
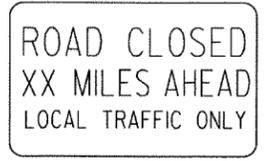
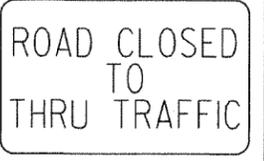
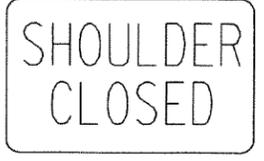
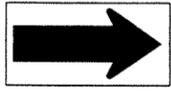
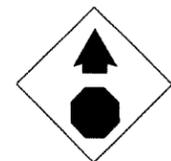
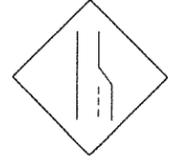
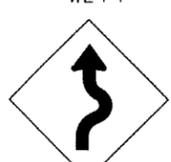
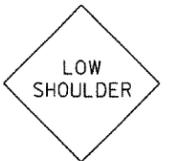
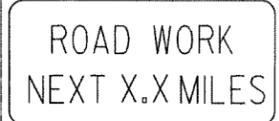
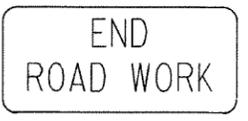
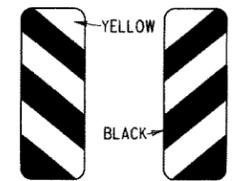
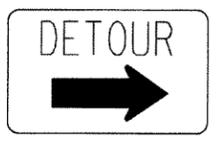
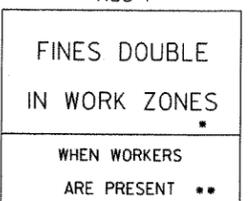
500 FT	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE AHEAD

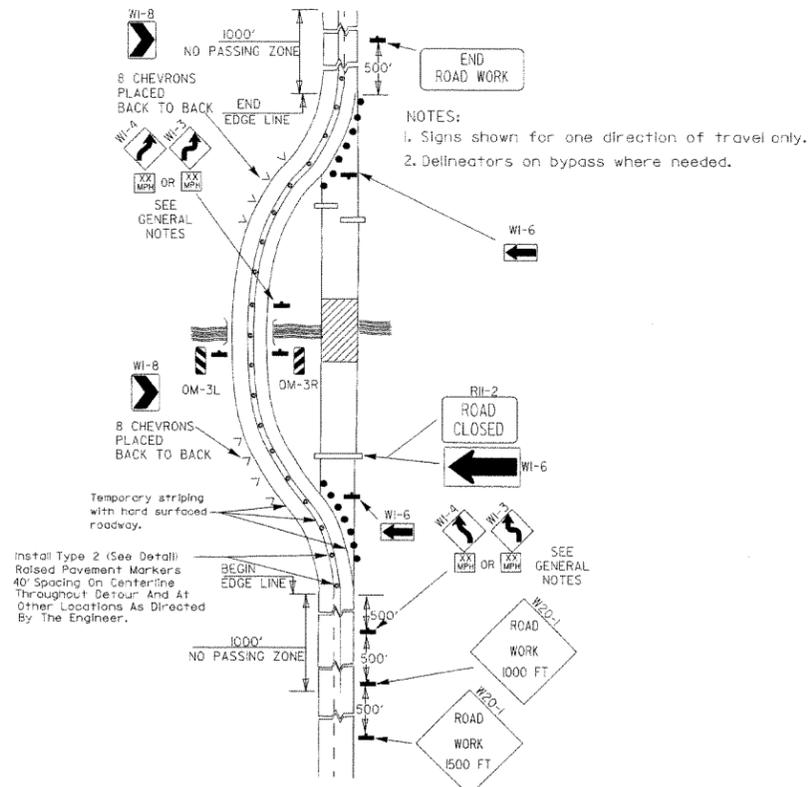
GENERAL NOTES:

- ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
- EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
- POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
- ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
- FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
- MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
- R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

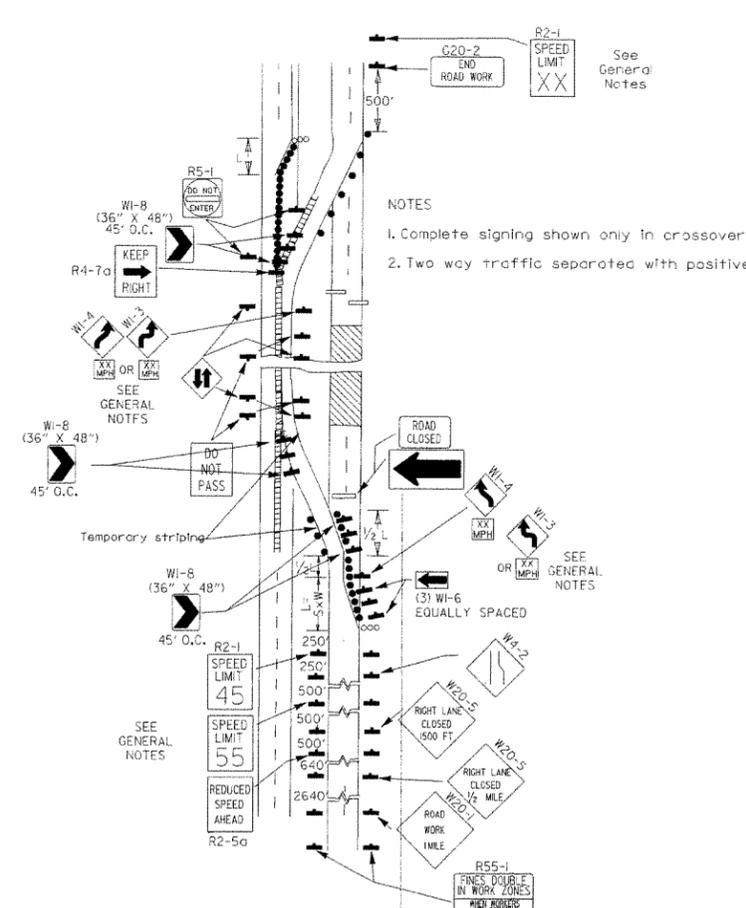
NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	
DATE	REVISION	FILMED

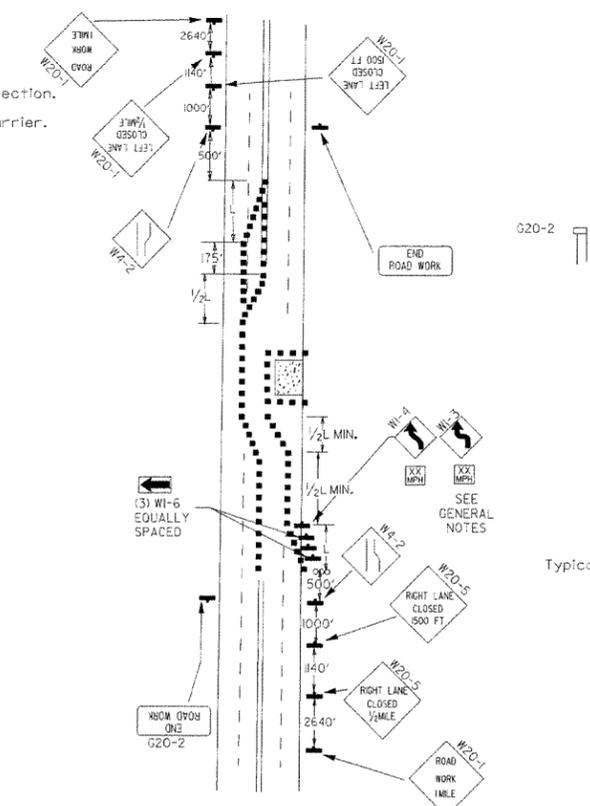
<p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p>	<p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p>	<p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5A</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5C</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	
<p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>R11-2</p>  <p>48"x30"</p>	<p>R11-3A</p>  <p>60"x30"</p>	<p>R11-4</p>  <p>60"x30"</p>	<p>RSP-1</p>  <p>48"x30"</p>	<p>WI-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>WI-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>WI-3</p>  <p>STD. 48"x48"</p>	<p>WI-4</p>  <p>STD. 48"x48"</p>	<p>WI-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>WI-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p>	<p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p>	<p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W13-1</p>  <p>STD. 24"x24"</p>	<p>W20-1</p>  <p>STD. 48"x48"</p>	<p>W20-2</p>  <p>STD. 48"x48"</p>	<p>W20-3</p>  <p>STD. 48"x48"</p>
<p>W20-4</p>  <p>STD. 48"x48"</p>	<p>W20-5</p>  <p>STD. 48"x48"</p>	<p>W20-7a</p>  <p>500 FEET 18" x 24" W6-2</p> <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W24-1</p>  <p>STD. 36"x36"</p>	<p>WI-4b</p>  <p>STD. 48"x48"</p>	<p>R56-1</p>  <p>STD. 18"x18"</p>
<p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>G20-1</p>  <p>60"x24"</p>	<p>G20-2</p>  <p>48"x24"</p>	<p>OM-3L OM-3R</p>  <p>12"x36"</p>	<p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p>	<p>M4-10</p>  <p>48"x18"</p>	<p>R55-1</p>  <p>36"x60"</p> <p>WHEN WORKERS ARE PRESENT **</p> <p>* USE 6" C LETTERS ** USE 4" D LETTERS</p>



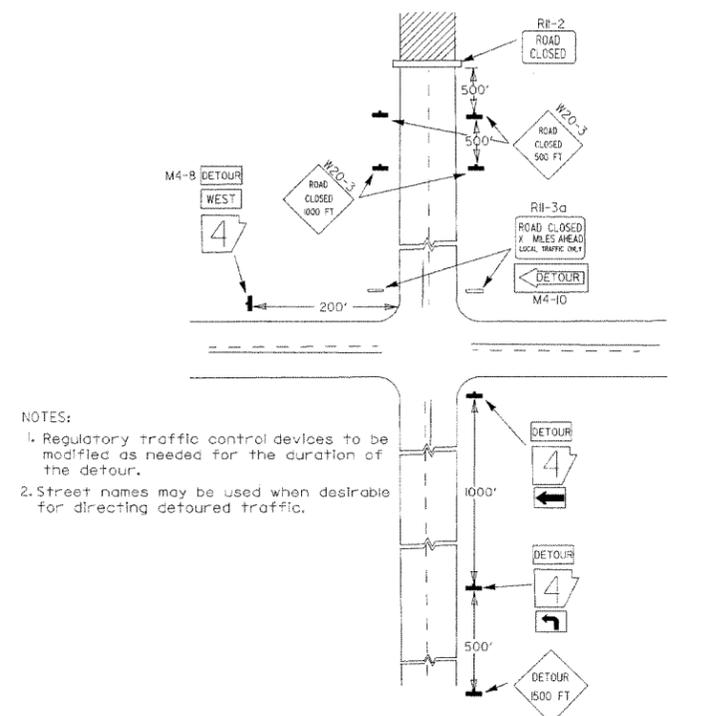
(A) Typical application of traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.



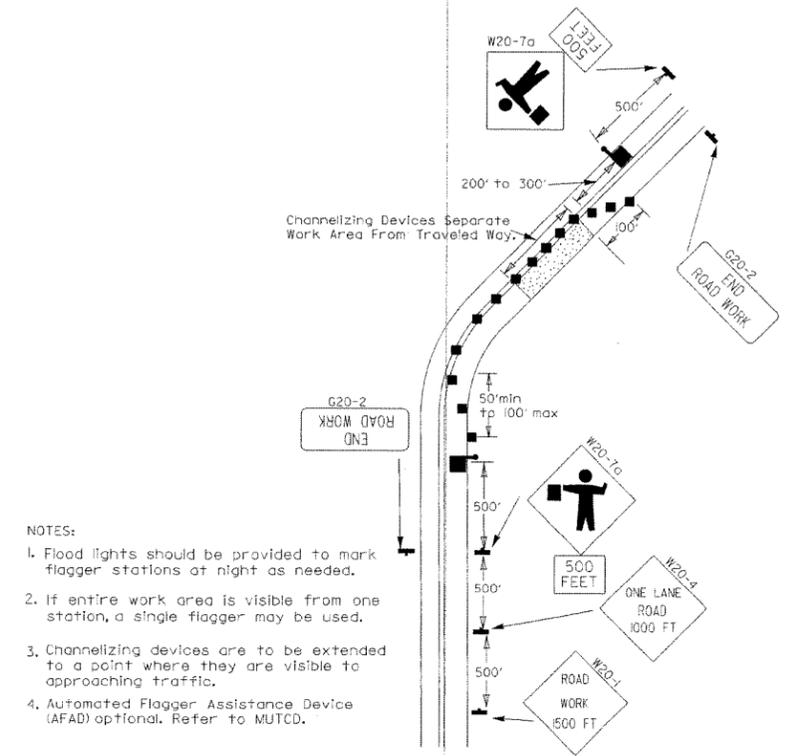
(B) Typical application - 4-lane divided roadway where one roadway is closed.



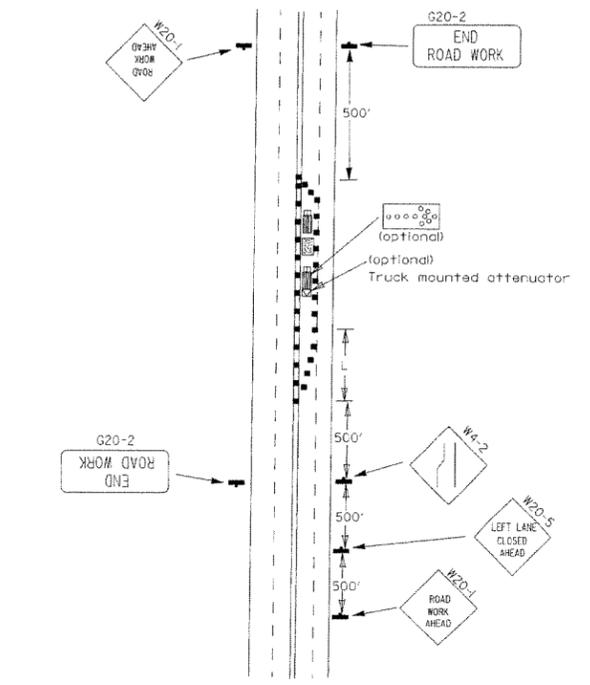
(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.



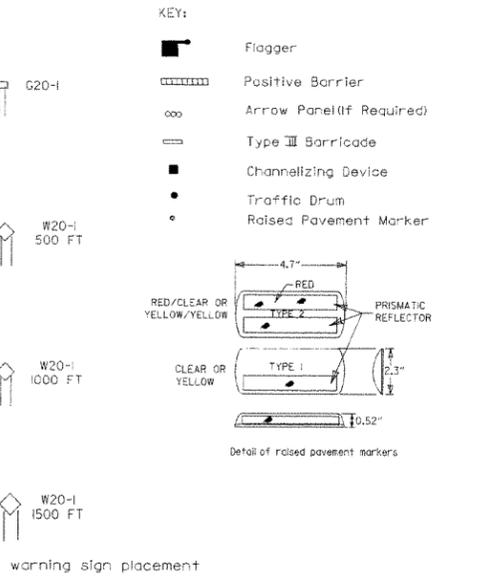
(D) Typical application - roadway closed beyond detour point.



(E) Typical application of traffic control devices on 2-lane highway where one lane is closed and flagging is provided.



(F) Typical application - 4-lane undivided roadway with inside lane closed.



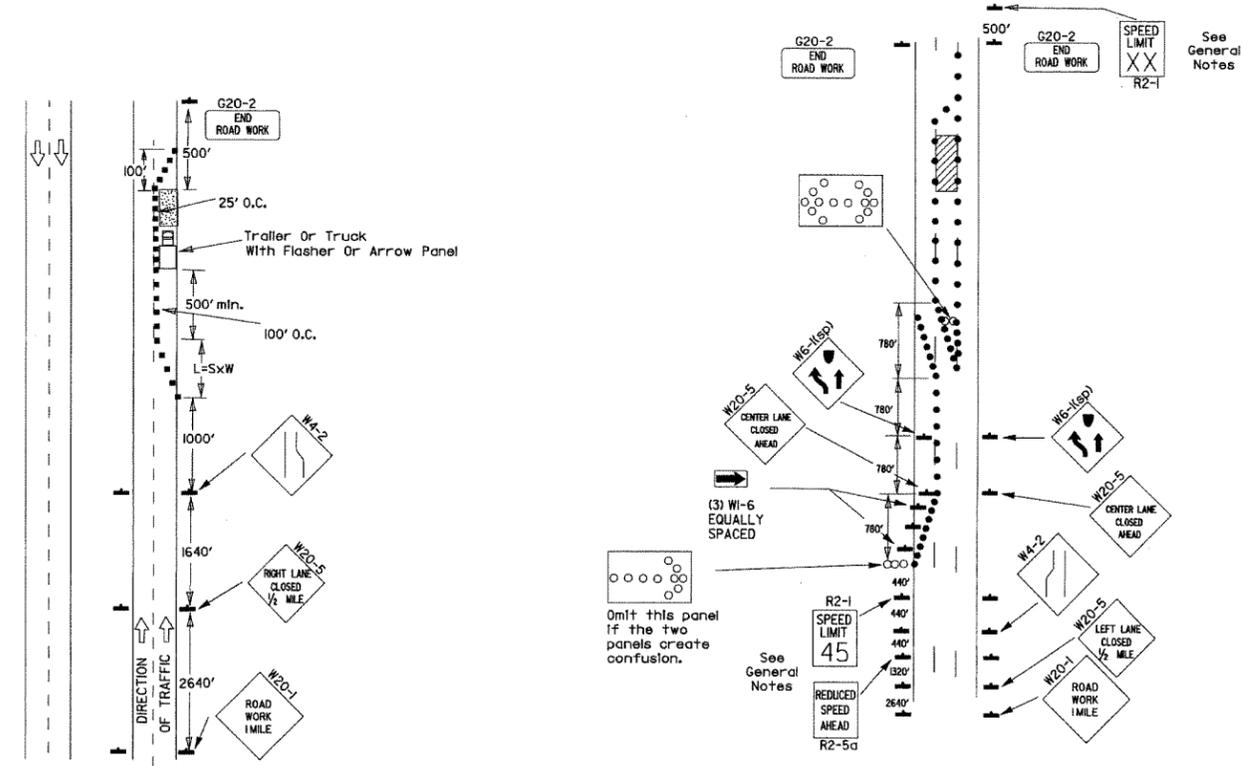
Typical advance warning sign placement

Taper formulae:
L=SxW for speeds of 45mph or more.
 $L = \frac{WS^2}{60}$ for speeds of 40mph or less.
Where:
L= Minimum length of taper.
S= Numerical value of posted speed limit prior to work or 85th percentile speed.
W= Width of offset.

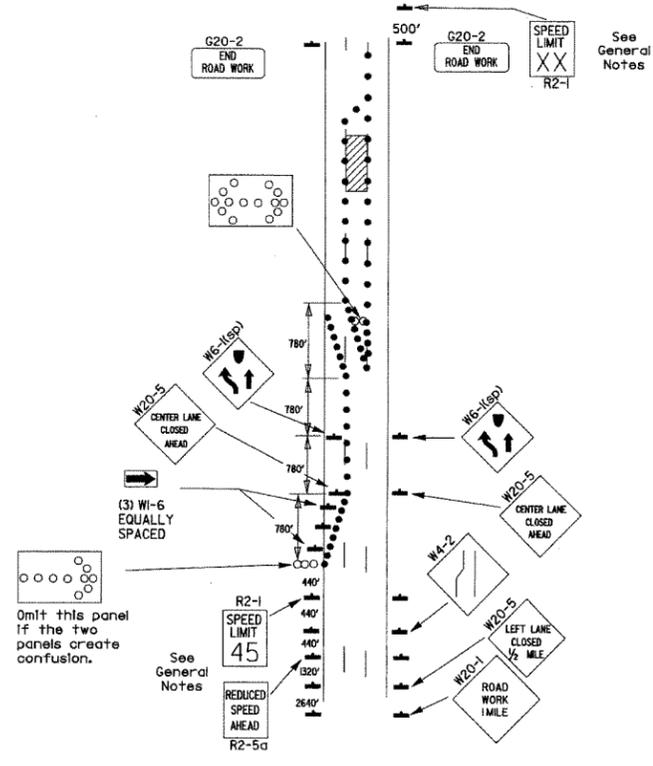
- GENERAL NOTES:
1. Advisory speed posted on W1-3 or W1-4 curve warning signs to be determined at site. Use W1-4 when speed is greater than 30mph and W1-3 when 30mph or less.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1(45) speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1(45) shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(65) shall be omitted. Additional R2-1(55) speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1(55) shall be installed to match original speed limit.
4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit, or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

DATE	REVISION	FILMED
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

Channellizing devices



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.

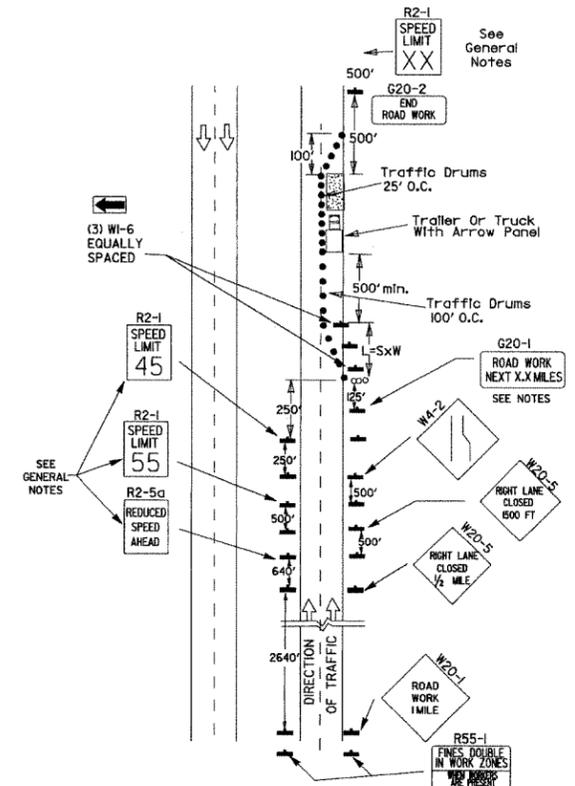


(B) Typical application - 3-lane oneway roadway where center lane is closed.

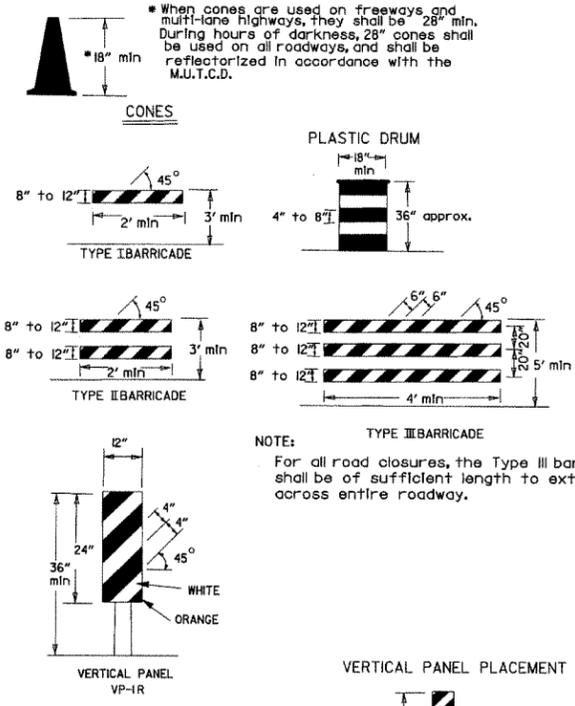
- KEY:
- Arrow Panel (if Required)
 - Channellizing Device
 - Traffic drum

GENERAL NOTES:

1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-145mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1XX shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(65) shall be omitted. Additional R2-155mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1XX shall be installed to match original speed limit.
4. The maximum spacing between channellizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channellizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1 (1 MILE) signs are not required in advance of lane closures that begin inside the project limits.
8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
9. All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual for Assessing Safety Hardware (MASH).
10. Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

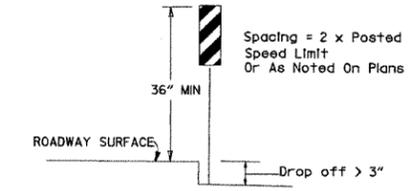


(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.



NOTES:
For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.

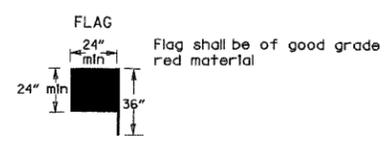
VERTICAL PANEL PLACEMENT



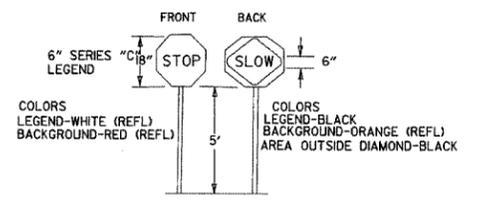
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	W8-11
1" to 3"	Edge of shoulder	W8-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP and vertical panels, drums or concrete barrier
Greater than 3"	Edge of shoulder	*Vertical panels, drums or concrete barrier

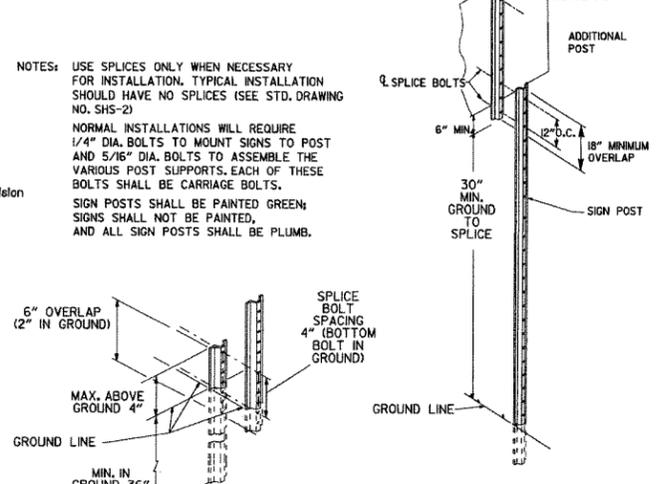
* When shown on the plans concrete barrier will be used.
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.



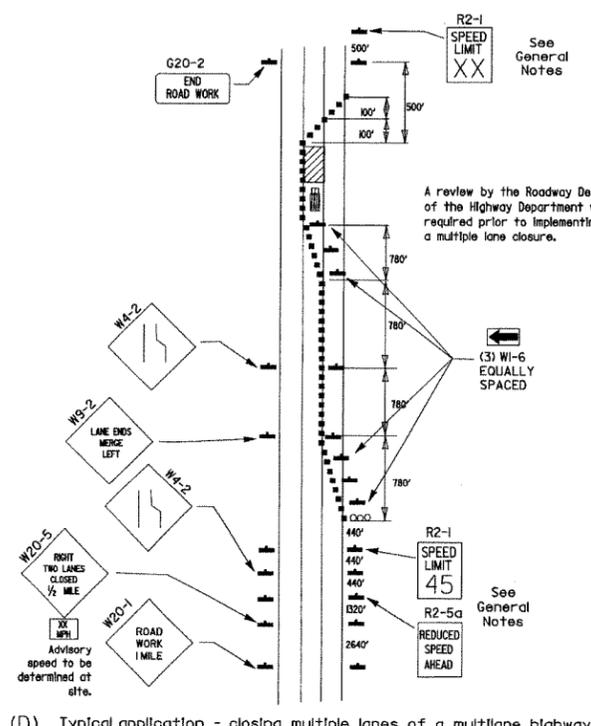
STOP SLOW PADDLE



DETAIL OF SPLICES & SIGN BOLT



NOTES:
USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)
NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS.
SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.

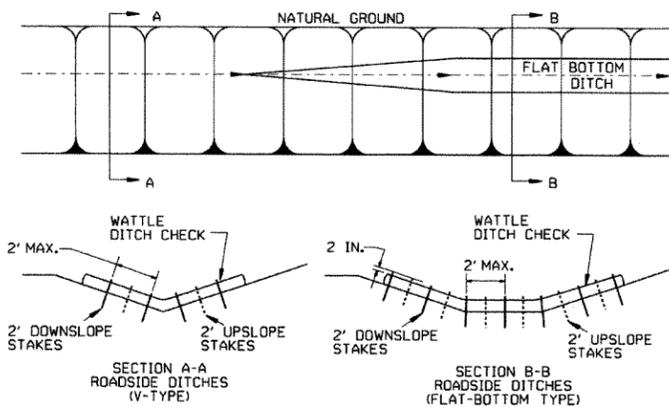


(D) Typical application - closing multiple lanes of a multilane highway.

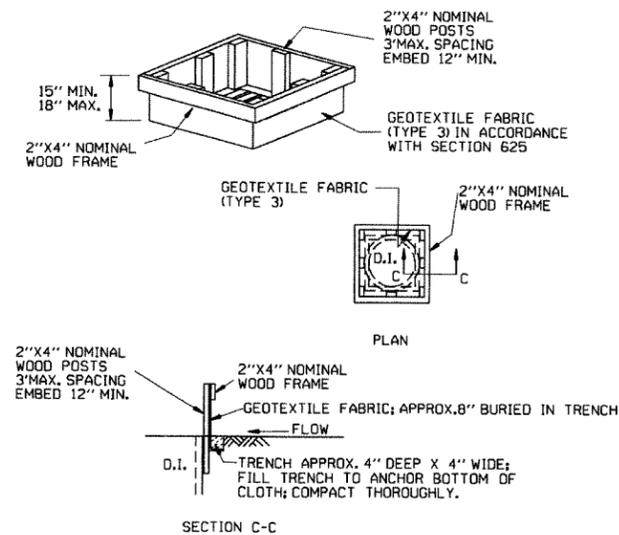
DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-3

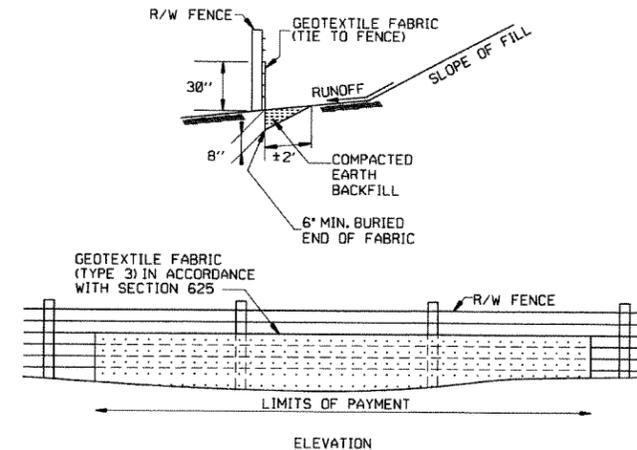
GENERAL NOTES
 INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



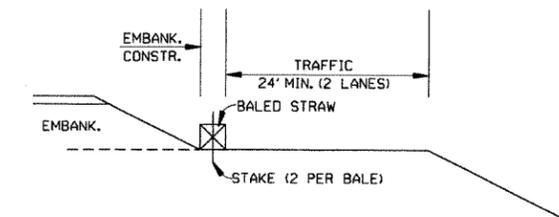
DROP INLET SILT FENCE (E-7)



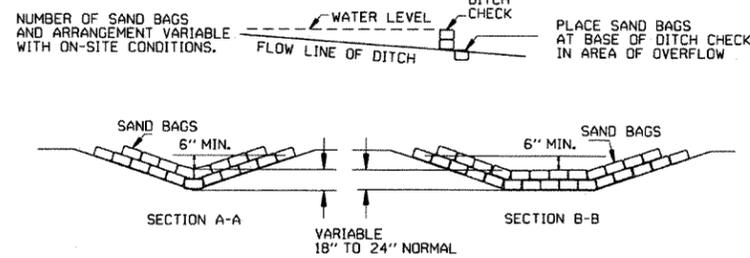
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

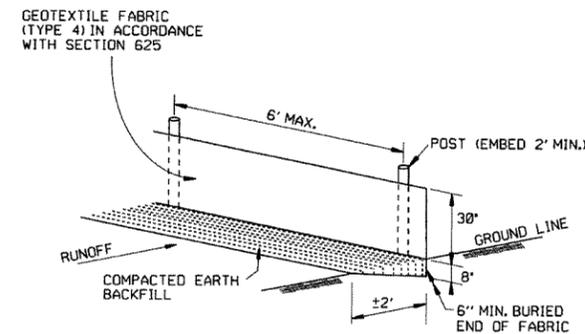
GENERAL NOTES
 1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
 2. NO GAPS SHALL BE LEFT BETWEEN BALES.
 3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)

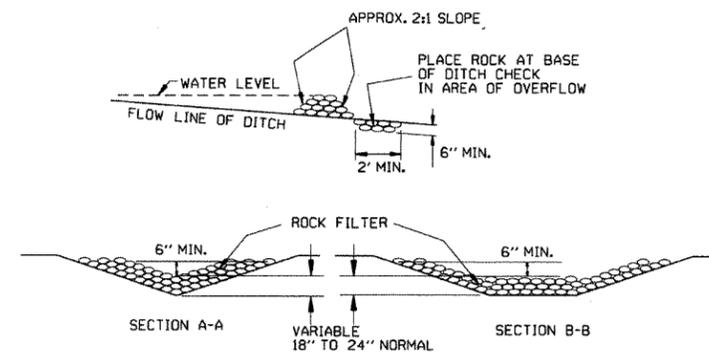


SAND BAG DITCH CHECK (E-5)



SILT FENCE (E-11)

GENERAL NOTES
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



ROCK DITCH CHECK (E-6)

12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION
11-18-98	ADDED NOTES		TEMPORARY EROSION CONTROL DEVICES
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95	STANDARD DRAWING TEC-1
7-15-94	REV. E-4 & E-11 MIN. 13\"/>		
6-2-94	REVISED E-1, 4, 7 & 11; DELETED E-2 & 3	6-2-94	
4-1-93	REDRAWN		
10-1-92	REDRAWN		
8-2-76	ISSUED R.D.M.	298-7-28-76	
DATE	REVISION	FILMED	